ank=20250618-20250619907820

ÅRSREDOVISNING
för
Robert Bosch AB
Org. nr 556047-1194

Räkenskapsåret
2024-01-01 - 2024-12-31

Innehållsförteckning **Sida**

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Fastställelseintyg

Undertecknad styrelseledamot i Robert Bosch AB intygar att resultaträkningen och balansräkningen i årsredovisningen har fastställts på bolagsstämman den 22 maj 2025.
Bolagsstämman beslutade att godkänna styrelsens förslag till hur vinsten ska fördelas.
Jag intygar också att innehållet i årsredovisningen och revisionsberättelsen stämmer överens med originalen.
Kista den 12 juni 2025

Thore Pedersen
Styrelseledamot, vd

ank=20250618-20250619070821

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FÖRVALTNINGSBERÄTTELSE

Styrelsen och verkställande direktören för Robert Bosch AB får härmed avge årsredovisning för räkenskapsåret 2024.

Bolagets verksamhet
Robert Bosch Aktiebolag ingår i den företagsgrupp vars moderbolag är Robert Bosch GmbH, Tyskland. Bosch marknadsför i Sverige bl.a. komponenter till bilindustrin, bilreservdelar och tillbehör, elektriska handverktyg samt säkerhets-och kommunikationsprodukter.
Robert Bosch AB tillhandahåller även FoU-tjänster till andra bolag inom koncernen.

Bolagets säte
Stockholm län, Stockholms kommun.

Redovisningsvaluta
Svenska kronor (kr).

Väsentliga händelser under räkenskapsåret
Nettoomsättningen 2024 ökade med 1,8% jämfört med 2023, med viss variation mellan bolagets olika affärsområden. Försäljnings- och applikationstjänster gentemot bilindustrin ökade betydligt. Building Technologies som säljer säkerhetsrelaterade produkter på den Nordiska marknaden hade ett rekordår med en stor omsättningsökning från en redan hög omsättning föregående år. Även Automotive Aftermarket med eftermarknaden på bilsidan bilsidan ökade sin omsättning markant, så även Vintertestcentret för fordon i Arjeplog.
Power Tools, som omsättningsmässigt är den största avdelningen med sin försäljning av verktyg och trädgårdsmaskiner, hade också en ökning jämfört med föregående år.
Efter en stadig tillväxt varje år sedan starten 2015 såg bolaget det första året med en nedgång för FoU-verksamheten i Lund.
Slutligen har värdet på dotterbolaget Bosch Rexroth AB efter utfört nedskrivningstest skrivits ned med 160.000 mkr.

Förväntad framtida utveckling samt väsentliga risker och osäkerhetsfaktorer
Robert Bosch AB ser med tillförsikt på framtiden och är förvissad om en fortsatt positiv utveckling av företagets verksamhet, givet den diversifiering, kompetens och kapacitet som finns såväl inom företaget som inom koncernen.
Det föreligger dock alltjämt en risk kring det säkerhetspolitiska och makroekonomiska läget i omvärlden, med osäkerhet kring bland annat tullsatser, vilket påverkar varukostnader såväl som efterfrågan från företagets kunder.

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Hållbarhetsredovisning
Robert Bosch AB refererar till moderbolaget Robert Bosch GmbH:s hållbarhetsredovisning för Boschkoncernen, publicerad på https://www.bosch.com/company/annual-report/. Denna omfattar samtliga dotterbolag inklusive Robert Bosch AB.

Forskning och utveckling
Robert Bosch AB bedriver produktutveckling inom flera affärsområden för den multinationella bil-industrin, cykeltillverkare och diverse elektronikprodukter. Bolaget driver även en anläggning för test av fordonskomponenter i vinterförhållanden.
Totalt sysselsätter FoU-verksamheten 69% (62%) av bolagets anställda och står för ca 16% (19%) av de totala rörelsekostnaderna samt 17% (20%) av bolagets totala omsättning.

Resultat och ställning (kkr)

	2024	**2023**	**2022**	**2021**	**2020**
Nettoomsättning	2.336.845	2.295.491	1.843.606	1.763.954	1.447.148
Rörelseresultat	90.745	122.045	100.377	77.077	55.889
Resultat efter finansiella poster	136.049	615.124	756.336	77.572	56.761
Årets Resultat	139.926	595.789	731.969	55.367	43.884
Eget kapital och obeskattade reserver	2.930.434	2.811.906	2.213.494	3.973.182	3.911.349
Balansomslutning	4.729.122	4.568.051	4.153.970	4.376.084	4.210.154
Medeltalet anställda	350	350	295	265	264

Förändringar i eget kapital (kkr)

	Bundet eget kapital		**Fritt eget kapital**	
	Aktie-kapital	**Reserv-fond**	**Övrigt fritt eget kapital**	**Summa eget kapital**
Eget kapital 2024-01-01	**40.000**	**8.000**	**2.613.282**	**2.661.282**
Årets resultat			139.926	139.926
Utdelning			0	0
Eget kapital 2024-12-31	**40.000**	**8.000**	**2.753.208**	**2.801.208**

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Styrelsens förslag till beslut om vinstutdelning

Förslag till vinstdisposition (kr)
Till bolagsstämmans förfogande står följande vinstmedel :

Balanserade vinstmedel	2.613.281.996
Årets resultat	139.925.984
	2.753.207.980

Styrelsen föreslår att vinstmedlen disponeras enligt följande:

Till aktieägarna utdelas 0 kr/aktie, totalt	0
I ny räkning överföres	2.753.207.980
	2.753.207.980

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RESULTATRÄKNING

	Not	2024 (kkr)	2023 (kkr)
Rörelsens intäkter			
Nettoomsättning	3,4	2.336.845	2.295.491
Övriga intäkter	4,6	90.584	81.518
Summa rörelsens intäkter		**2.427.429**	**2.377.009**
Rörelsens kostnader			
Handelsvaror	5	-1.481.772	-1.359.086
Övriga externa kostnader	6,7	-415.042	-451.963
Personalkostnader	8,9,23	-419.376	-420.583
Avskrivning av materiella anläggningstillgångar	13	-20.388	-18.950
Övriga rörelsekostnader		-105	-4.382
Summa rörelsens kostnader		**-2.336.684**	**-2.254.964**
Rörelseresultat		**90.745**	**122.045**
Resultat från finansiella poster	10		
Ränteintäkter och liknande resultatposter		19.792	4.162
Räntekostnader och liknande resultatposter		-65.415	-63.061
Resultat från andelar i koncernföretag	14, 19	90.926	551.978
Resultat efter finansiella poster		**136.049**	**615.124**
Bokslutsdispositioner	11	21.398	-2.623
Skatt på årets resultat	12	-17.521	-16.712
ÅRETS RESULTAT		**139.926**	**595.789**

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BALANSRÄKNING

	Not	2024 (kkr)	2023 (kkr)
TILLGÅNGAR			
Materiella anläggningstillgångar	13		
Byggnader och mark		86.891	93.139
Maskiner och tekniska anläggningar		4.955	6.139
Inventarier, verktyg och installationer		25.106	28.915
Summa materiella anläggningstillgångar		**116.952**	**128.193**
Finansiella anläggningstillgångar	14		
Andelar i dotterföretag		3.400.320	3.560.320
Långfristiga fordringar hos koncernföretag		186	0
Andra långfristiga fordringar		3	3
Summa finansiella anläggningstillgångar		**3.400.509**	**3.560.323**
Summa anläggningstillgångar		**3.517.461**	**3.688.516**
Omsättningstillgångar			
Varulager m m			
Färdiga varor och handelsvaror		1.549	1.397
Summa varulager m m		**1.549**	**1.397**
Kortfristiga fordringar			
Kundfordringar		489.176	397.902
Fordringar hos koncernföretag		697.397	462.522
Skattefordran		8.412	9.979
Övriga fordringar		6.213	1.225
Förutbetalda kostnader och upplupna intäkter	15	8.914	6.510
Summa kortfristiga fordringar		**1.210.112**	**878.138**
Kassa och bank	16	**0**	**0**
Summa omsättningstillgångar		**1.211.661**	**879.535**
SUMMA TILLGÅNGAR		**4.729.122**	**4.568.051**

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BALANSRÄKNING

	Not	2024 (kkr)	2023 (kkr)
EGET KAPITAL OCH SKULDER			
Eget kapital			
Bundet eget kapital			
Aktiekapital	17	40.000	40.000
Reservfond		8.000	8.000
Summa bundet eget kapital		**48.000**	**48.000**
Fritt eget kapital			
Balanserad vinst		2.613.282	2.017.493
Årets resultat		139.926	595.789
Summa fritt eget kapital	20	**2.753.208**	**2.613.282**
Summa eget kapital		**2.801.208**	**2.661.282**
Obeskattade reserver			
Avskrivningar utöver plan		3.546	5.824
Periodiseringsfond	18	125.680	144.800
Summa obeskattade reserver		**129.226**	**150.624**
Avsättningar			
Övriga avsättningar	21	99.626	74.229
Summa avsättningar		**99.626**	**74.229**
Långfristiga skulder	24		
Skulder till moderbolag		900.000	1.410.000
Skulder till dotterbolag		103	103
Övriga skulder		92	218
Summa långfristiga skulder		**900.195**	**1.410.321**
Kortfristiga skulder			
Leverantörsskulder		77.074	65.200
Skulder till koncernföretag		599.522	81.285
Övriga skulder	23	17.167	25.890
Upplupna kostnader och förutbetalda intäkter	15	105.104	99.220
Summa kortfristiga skulder		**798.866**	**271.595**
SUMMA EGET KAPITAL OCH SKULDER		**4.729.122**	**4.568.051**

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KASSAFLÖDESANALYS
(Indirekt metod)

	2024 (kkr)	**2023 (kkr)**
Den löpande verksamheten		
Rörelseresultat	90.745	122.045
Återläggning av avskrivningar	20.388	18.950
Förändring övriga avsättningar	25.397	9.021
Realisationsvinst (-)/ -förlust (+) på sålda anläggningstillgångar	-526	34
Erhållen ränta	19.792	4.162
Erhållna utdelningar	250.926	551.978
Erlagd ränta	-65.415	-63.061
Betald skatt	-15.953	-20.370
Kassaflöde från den löpande verksamheten före förändringar av rörelsekapital	**325.355**	**622.759**
Kassaflöde från förändringar i rörelsekapital		
ökning(-) / minskning(+) av varulager	-152	286
ökning(-) / minskning(+) av kortfristiga fordringar	-333.540	-406.745
ökning(+) / minskning(-) av kortfristiga skulder	527.271	-193.569
Kassaflöde från den löpande verksamheten	**518.933**	**22.731**
Investeringsverksamheten		
Förvärv av materiella anläggningstillgångar	-9.253	-23.212
Försäljning av materiella anläggningstillgångar	631	112
Förändring av övriga finansiella anläggningstillgångar	-186	151
Kassaflöde från investeringsverksamheten	**-8.807**	**-22.949**
Finansieringsverksamheten		
Utbetald utdelning	0	0
Långfristiga skulder	-510.126	218
Kassaflöde från finansieringsverksamheten	**-510.126**	**218**
ÅRETS KASSAFLÖDE	**0**	**0**
Likvida medel vid räkenskapsårets början	0	0
Likvida medel vid periodens utgång	**0**	**0**

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NOTER

Not 1 Redovisnings- och värderingsprinciper

Årsredovisningen har upprättats enligt årsredovisningslagen och Bokföringsnämndens allmänna råd BFNAR 2012:1 *Årsredovisning och koncernredovisning (K3).*
Redovisningsprinciperna är oförändrade i jämförelse med föregående år om inte annat anges nedan.

Fordringar
Fordringar upptas till det belopp som efter individuell prövning beräknas bli betalt.

Fordringar och skulder i utländsk valuta
Fordringar och skulder i utländsk valuta värderas till balansdagens kurs.

Varulager
Varulagret värderas till det lägsta av anskaffningsvärdet och nettoförsäljningsvärdet på balansdagen. Anskaffningsvärdet fastställs med användning av först in, först-ut metoden.

Avsättningar och skulder
Skulder har, om ej annat anges nedan, upptagits till anskaffningsvärden med sedvanliga reserveringar för upplupna kostnader. Avsättningar har gjorts för kända eller befarade risker efter individuell prövning.

Avskrivningar
Materiella anläggningstillgångar redovisas till anskaffningsvärde minskat med avskrivningar.
I anskaffningsvärdet ingår utgifter som direkt kan hänföras till förvärvet av tillgången.
När en komponent i en anläggningstillgång byts ut, utrangeras eventuell kvarvarande del av komponenten och den nya komponentens anskaffningsvärde aktiveras.
Utgifter för löpande reparation och underhåll redovisas som kostnader.
Realisationsvinst respektive realisationsförlust vid avyttring av en anläggningstillgång redovisas som Övrig intäkt respektive Övrig rörelsekostnad.

Materiella anläggningstillgångar skrivs av systematiskt över tillgångens bedömda nyttjandeperiod. När tillgångarnas avskrivningsbara belopp fastställs, beaktas i förekommande fall tillgångens restvärde. Avskrivningarna ingår i rörelsens kostnader.

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Följande avskrivningstider tillämpas:

Kontorsbyggnader	
Stommar	100 år
Stommekompletteringar och innerväggar	50 år
Fasader, yttertak, VVS, El	40 år
Hissar	25 år
Ventilation	20 år
Övrigt	10 år
Industribyggnader	
Stommar	25 år
Stommekompletteringar och innerväggar	25 år
Fasader, yttertak, VVS, El	25 år
Hissar	25 år
Ventilation	25 år
Övrigt	10 år
Markanläggningar	20 år
Kontorsinventarier	3-10 år
Verkstadsmaskiner	6 år
Tekniska anläggningar	12 år
Fordon	4 år

Intäkter
Försäljning av varor redovisas vid leverans av produkter till kunden i enighet med försäljnings-villkoren. Försäljning av tjänster redovisas vid den tidpunkt som tjänsten har tillhandahållits. All försäljning redovisas netto efter moms, rabatter och kursdifferenser vid försäljning i utländsk valuta.

Leasing
Samtliga leasingavtal där företaget är leasetagare redovisas som operationell leasing (hyresavtal), oavsett om avtalen är finansiella eller operationella. Leasingavgiften redovisas som en kostnad linjärt över leasingperioden. Företagets uthyrning av kontorslokaler klassificeras som operationell leasing. Leasingintäkterna redovisas linjärt under leasingperioden.

Ersättningar till anställda
Kortfristiga ersättningar utgörs av lön, sociala avgifter, betald semester, betald sjukfrånvaro och bonus. Dessa redovisas som en kostnad och en skuld då det finns en legal förpliktelse att betala ut en ersättning.
Företaget betalar in avgiftsbestämda respektive förmånsbestämda pensionspremier till de anställda via tredje part och företagets resultat belastas för kostnader i takt med att de anställdas pensions-berättigande tjänster utförts.
I företaget förekommer långfristiga ersättningar till anställda som har varit anställda i koncernen en lång tid.

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Aktier och andelar i dotterföretag
Aktier och andelar i dotterföretag redovisas till anskaffningsvärde efter avdrag för eventuella nedskrivningar. I anskaffningsvärdet ingår köpeskilling som erlagts för aktierna samt förvärvskostnader. Eventuella kapitaltillskott läggs till anskaffningsvärdet när de lämnas.
Utdelning från dotterföretag redovisas som intäkt.

Obeskattade reserver
Obeskattade reserver redovisas med bruttobelopp i balansräkningen, inklusive den uppskjutna skatteskuld som är hänförlig till reserverna.

Inkomstskatt
Redovisade inkomstskatter innefattar skatt som skall betalas eller erhållas avseende aktuellt år, justeringar avseende tidigare års aktuella skatt, förändringar i uppskjuten skatt samt andel i intresseföretags skatt.
Värdering av samtliga skatteskulder/-fordringar sker till nominella belopp och görs enligt de skatteregler och skattesatser som är beslutade eller som är aviserade och med stor säkerhet kommer att fastställas.
För poster som redovisas i resultaträkningen, redovisas även därmed sammanhängande skatteeffekter i resultaträkningen.
Skatteeffekter av poster som redovisas direkt mot eget kapital, redovisas mot eget kapital.

Kassaflödesanalys
Kassaflödesanalysen upprättas enligt indirekt metod. Det redovisade kassaflödet omfattar endast transaktioner som medför in- eller utbetalningar.

Koncernen
Robert Bosch AB är ett dotterbolag till Robert Bosch GmbH, Tyskland.
Den svenska koncernen består av moderbolaget och dotterbolagen Bosch Rexroth AB, Bosch Thermoteknik AB samt de icke rörelsedrivande dotterbolagen AB Bosch och HB Bosch.
Koncernredovisning har ej upprättats i enlighet med årsredovisningslagen 7 kap 2§.
Koncernredovisning upprättas av Robert Bosch GmbH med säte i Stuttgart, Tyskland.
Koncernredovisning kan erhållas hos Robert Bosch AB.

Hållbarhetsredovisning
Hållbarhetsredovisning för hela Boschkoncernen upprättas av moderbolaget Robert Bosch GmbH, org.nr HRB 14000, säte i Stuttgart, Tyskland. Hållbarhetsredovisningen finns publicerad på https://www.bosch.com/company/annual-report/

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Not 2 Uppskattningar och bedömningar

Robert Bosch AB gör uppskattningar och bedömningar om framtiden. De uppskattningar för redovisningsändamål som blir följden av dessa kommer, definitionsmässigt, sällan att motsvara det verkliga resultatet.
Bolagets bedömning är att det ej finns uppskattningar och antaganden som innebär en betydande risk för väsentliga justeringar i redovisade värden för tillgångar och skulder.

Not 3 Nettoomsättning per rörelsegren

Nettoomsättningen fördelar sig på rörelsegrenar enligt följande:

	Nettoomsättning	
	2024	**2023**
	(kkr)	**(kkr)**
Handelsförsäljning	1.819.113	1.735.479
Tjänster inom fordonsindustrin	517.732	560.012
Summa	**2.336.845**	**2.295.491**

Not 4 Koncernintern försäljning

Av nettoomsättningen hänför sig 517 913 kkr (558 506 kkr) till koncernintern försäljning av främst säljstöd och FoU-tjänster. I övriga intäkter ingår 78 350 kkr (70 732 kkr) koncernintern försäljning, främst avseende diverse administrativa tjänster.

Not 5 Koncerninterna inköp

Av bolagets varuinköp svarar det tyska moderbolaget och dess koncernbolag för 100% (100%).

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ank=20250618-20250619907827

Not 6 Operationella leasingavtal

Företaget har ingått leasingavtal avseende hyra av kontorsfastigheter, tomträtt och mark.

Robert Bosch AB som leasetagare

	2024	2023
Framtida minimileaseavgifter som ska erläggas avseende icke uppsägningsbara leasingavtal:		
Förfaller till betalning inom ett år	10.141	9.821
Förfaller till betalning senare än ett men inom 5 år	11.194	20.889
Förfaller till betalning senare än 5 år	0	0
Under perioden kostnadsförda leasingavgifter	15.482	15.611
Under perioden kostnadsförda rörliga avgifter leasingkontrakt	1.389	1.387

Robert Bosch AB som leasegivare

Förfaller till betalning inom ett år	3.521	2.229
Förfaller till betalning senare än ett men inom 5 år	5.289	1.760
Förfaller till betalning senare än 5 år	0	0
Under perioden erhållna leasingavgifter	3.543	6.720

Not 7 Ersättning till revisorer

Årets revisionsarvode uppgår till:

	2024 (kkr)	2023 (kkr)
Ernst & Young AB	378	457
Revisionsverksamhet utöver revisionsuppdraget	175	161
	553	**618**

Not 8 Medelantalet anställda

	2024		2023	
	Anställda	varav män	Anställda	varav män
Medelantalet anställda	350	82%	350	83%

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Not 9 Personalkostnader, pensioner och övrigt

	2024 (kkr)		2023 (kkr)	
	Styrelse och VD	**Övriga anställda**	**Styrelse och VD**	**Övriga anställda**
Löner och andra ersättningar	0	292.499	0	284.692

Nuvarande VD är anställd av Robert Bosch AS i Norge. Kostnad för VD redovisas i övriga externa kostnader.

	Samtliga anställda (varav pensionskostnader)	
	2024 (kkr)	**2023 (kkr)**
Sociala kostnader	120.267 *	122.073 *
	(47.341)	(40.238)

Inga pensionskostnader avser gruppens styrelse och VD. Ej heller föreligger några pensionsförpliktelser eller avtal om avgångsvederlag till dessa.

Styrelseledamöter och VD

	2024		2023	
	Totalt antal	**Varav män**	**Totalt antal**	**Varav män**
Styrelseledamöter	4	3	4	3
VD ingår i styrelsen				

Not 10 Resultat från finansiella poster

	2024 (kkr)	**2023 (kkr)**
Ränteintäkter och liknande resultatposter:		
Ränteintäkter	19.792	4.162
Summa	**19.792**	**4.162**
Varav avseende koncernföretag	19.330	3.672
Räntekostnader och liknande resultatposter:		
Räntekostnader	-65.415	-63.061
Summa	**-65.415**	**-63.061**
Varav avseende koncernföretag	-65.476	-63.063

*Se även not 23.

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ank=20250618:20250619007828

Not 11 Bokslutsdispositioner	**2024 (kkr)**	**2023 (kkr)**
Periodiseringsfond	19.120	-1.800
Skattemässig överavskrivning	2.278	-823
Summa	**21.398**	**-2.623**

Not 12 Skatt på årets resultat	**2024 (kkr)**	**2023 (kkr)**
Redovisat resultat före skatt	157.447	612.501
Skatt beräknad enligt gällande skattesats 20,6%	32.434	126.175
Skatteeffekt av ej avdragsgilla kostnader	2.150	3.037
Skatteeffekt ej skattepliktig finansiell intäkt	-51.691	-113.707
Skatteeffekt ej avdragsgill finansiell kostnad	32.960	0
Skatteeffekt av schablonränta på periodiseringsfond	782	572
Skatteeffekt av upplösning av p-fond ny skattesats	473	305
Skatteeffekt från tidigare år	-302	-351
Skatteeffekt av utländska skatter	715	530
Skatteeffekt uppskjuten skatt - investeringar 2021	0	151
Redovisad skattekostnad	**17.521**	**16.712**

Not 13 Materiella anläggningstillgångar	**2024 (kkr)**	**2023 (kkr)**
Byggnader och mark		
Ingående anskaffningsvärde	224.924	223.322
Inköp	1.261	1.602
Försäljningar	0	0
Utgående ackumulerade anskaffningsvärden	**226.185**	**224.924**
Ingående avskrivningar	-131.785	-124.290
Försäljningar	0	0
Årets avskrivningar	-7.509	-7.495
Utgående ackumulerade avskrivningar	**-139.294**	**-131.785**
Bokfört värde	**86.891**	**93.139**

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Maskiner och tekniska anläggningar	**2024 (kkr)**	**2023 (kkr)**
Ingående anskaffningsvärde	69.283	68.215
Inköp	275	1.068
Försäljningar/utrangeringar	0	0
Utgående ackumulerade anskaffningsvärden	**69.558**	**69.283**
Ingående avskrivningar	-63.144	-61.704
Försäljningar/utrangeringar	0	0
Årets avskrivningar	-1.459	-1.440
Utgående ackumulerade avskrivningar	**-64.603**	**-63.144**
Bokfört värde	**4.955**	**6.139**

Inventarier, verktyg och installationer	**2024 (kkr)**	**2023 (kkr)**
Ingående anskaffningsvärde	101.509	89.179
Inköp	7.717	20.542
Försäljningar/utrangeringar	-3.715	-8.212
Utgående ackumulerade anskaffningsvärden	**105.511**	**101.509**
Ingående avskrivningar	-72.594	-70.645
Försäljningar/utrangeringar	3.610	8.066
Årets avskrivningar	-11.420	-10.015
Utgående ackumulerade avskrivningar	**-80.405**	**-72.594**
Bokfört värde	**25.106**	**28.915**

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ank=20250618907829

Not 14	**Finansiella anläggningstillgångar**	**2024 (kkr)**	**2023 (kkr)**
Andelar i dotterföretag			
AB Bosch (556022-5582), Stockholm			
Kapital- och röstandel 100%			
Anskaffningsvärde (1.000 st aktier)		100	100
Eget Kapital: 103 kkr (2024)			
Resultat: 0 kkr (2024)			
Bosch Rexroth AB (556309-8481), Stockholm			
Kapital- och röstandel 100%			
Anskaffningsvärde (10.000 st aktier)		4.091.000	4.091.000
Nedskrivning		-948.780	-788.780
Eget Kapital: 342.407 kkr (2024)			
Resultat: 212.413 kkr (2024)			
Bosch Thermoteknik AB (556262-9062), Tranås			
Kapital- och röstandel 100%			
Anskaffningsvärde (5.993.600 st aktier)		258.000	258.000
Eget Kapital: 168.154 kkr (2024)			
Resultat: 1 837 kkr (2024)			
Utgående bokfört värde		**3.400.320**	**3.560.320**
Andra långfristiga fordringar			
Ingående värde		3	3
Utgående värde andra långfristiga fordringar		**3**	**3**

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Not 15 Periodiseringsposter	**2024 (kkr)**	**2023 (kkr)**
Förutbetalda kostnader och upplupna intäkter		
Hyra	6.457	5.300
Övriga poster	2.456	1.210
Summa	**8.914**	**6.510**

Upplupna kostnader och förutbetalda intäkter		
Upplupna lönekostnader	66.207	63.666
Upplupna sociala avgifter	23.918	23.376
Övriga poster	14.980	12.178
Summa	**105.104**	**99.220**

Not 16 Kassa och bank

Bolaget har tillgång till likvida medel i form av en koncerngemensam cash pool, ingår i posten "Fordringar hos koncernföretag".

Not 17 Eget kapital

Aktiekapital

Aktiekapitalet består av 400.000 st aktier med kvotvärdet 100 kr.

Not 18 Periodiseringsfond	**2024 (kkr)**	**2023 (kkr)**
Avsättning räkenskapsår 2024	27.680	0
Avsättning räkenskapsår 2023	26.500	26.500
Avsättning räkenskapsår 2022	25.600	25.600
Avsättning räkenskapsår 2021	26.200	26.200
Avsättning räkenskapsår 2020	19.700	19.700
Avsättning räkenskapsår 2019	0	25.700
Avsättning räkenskapsår 2018	0	21.100
Summa	**125.680**	**144.800**

Not 19 Resultat från andelar i koncernföretag		
Utdelningar	250.926	551.978
Nedskrivningar	-160.000	0
Summa	90.926	551.978

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ank=20250618-20250619907830

Not 20 Vinstdisposition

Förslag till vinstdisposition (kr)
Till bolagsstämmans förfogande står följande vinstmedel :

Balanserade vinstmedel	2.613.281.996
Årets resultat	139.925.984
	2.753.207.980

Styrelsen föreslår att vinstmedlen disponeras enligt följande:

Till aktieägarna utdelas 0 kr/aktie, totalt	0
I ny räkning överföres	2.753.207.980
	2.753.207.980

Not 21 Övriga avsättningar	**2024 (kkr)**	**2023 (kkr)**
Kundbonus		
IB	60.567	58.665
Taget i anspråk	-60.567	-58.665
Ny avsättning	92.965	60.567
UB	92.965	60.567
Retur stommar		
IB	10.528	5.153
Taget i anspråk	-10.528	-3.452
Ny avsättning	0	8.827
UB	0	10.528
Garantier		
IB	1.332	1.363
Taget i anspråk	-1.332	-1.363
Ny avsättning	1.162	1.332
UB	1.162	1.332
Övriga poster		
IB	1.802	27
Taget i anspråk	-189	-27
Ny avsättning	3.887	1.802
UB	5.499	1.802
Summa övriga avsättningar	**99.626**	**74.229**

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Not 22 Eventualförpliktelser och ställda säkerheter	**2024 (kkr)**	**2023 (kkr)**
Eventualförpliktelser		
Ansvar för skulder i HB Bosch	4.390	4.390
Bankgaranti	167	167
Summa	**4.557**	**4.557**
Ställda säkerheter		
Fastighetsinteckning	5.000	5.000
Summa	**5.000**	**5.000**

Not 23 Offentliga bidrag

Bolaget har under 2024 fortsatt erhållit bidrag i form av ersättning för arbetsgivaravgifter för ett antal anställda inom FoU-verksamheten, s.k. Forskningsavdrag. Det erhållna FoU-bidraget uppgick totalt till 25.063 kkr (13.707 kkr) och redovisas som reducering av arbetsgivaravgifter. Betydligt högre än föregående år p g a att maxnivån höjdes fr o m 1 jan 2024.

Not 24 Långfristiga skulder

	2024 (kkr)	**2023 (kkr)**
Skuld till moderbolag - Långfristigt lån	900.000	1.410.000
Skuld till dotterbolag - Skuld till AB Bosch	103	103
Summa	**900.103**	**1.410.103**
Varav förfaller till betalning senare än 5 år	103	103

Not 25 Väsentliga händelser efter räkenskapsårets slut

Bolaget har den 1 maj 2025 avyttrat större delen av affärsområdet Building Technologies som en del i en större affär inom Boschkoncernen.
Ytterligare turbulens på världsmarknaden i och med presidentskiftet i USA, framförallt med tanke på tullavgifter, som förväntas påverka varukostnader och efterfrågan från kunder.

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ank=20250618:20250619078311

Stockholm, den dag som framgår av elektronisk underskrift

Thore Pedersen Verkställande direktör	Klaus Bohler Styrelseordförande
Jeanette Paulsson Styrelseledamot	Urban Stake Styrelseledamot/personalrep.

Vår revisionsberättelse har avgivits den dag som framgår av elektronisk underskrift

Ernst & Young AB

Magnus Johansson
Auktoriserad revisor

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Signaturcertifikat

Dokumentnamn:
Årsredovisning Robert Bosch AB 2024 - Slutlig version 2025-05-16

Unikt dokument-id:
2fc72c9c-6dbc-4a48-9469-171c4df8991b

Dokumentets fingeravtryck:
2bf1eee02d9a0e21513b51b02b55a6a2b74b688d53c0c77a9d289f5729d4d5c04395e969f501fd3f8
c97d7b3738ad654c23409425f145bc7b0b7646b2f448908

Undertecknare

Jeanette Paulsson

E-post: jeanette.paulsson@boschrexroth.se
Enhet: Firefox 128.0 on Unknown Windows 10.0 (desktop)
IP nummer: 194.39.218.23

Signerad med BankID: JEANETTE PAULSSON (196708263501)

Betrodd tidsstämpel:
2025-05-19 13:04:40 UTC

Thore Pedersen

E-post: thore.pedersen@no.bosch.com
Enhet: Edge 136.0.3240.71 on iPhone iOS 18.5.0 (smartphone)
IP nummer: 89.8.48.220

Verifierad med BankID: Thore Henjum Pedersen (1968-01-04)

Betrodd tidsstämpel:
2025-05-19 13:22:54 UTC

Urban Stake

E-post: urban.stake@se.bosch.com
Enhet: Chrome 136.0.0.0 on Unknown Windows 10.0 (desktop)
IP nummer: 194.39.218.21

Signerad med BankID: Bengt Urban Anders Stake (196607035570)

Betrodd tidsstämpel:
2025-05-19 14:02:48 UTC

Klaus Bohler

E-post: klaus.bohler@gmail.com
Enhet: Chrome 136.0.0.0 on K Android 10 (smartphone)
IP nummer: 185.212.169.199

Signerad med BankID: KLAUS BOHLER (195205253536)

Betrodd tidsstämpel:
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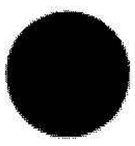

Magnus Johansson

E-post: larsmagnus.johansson@se.ey.com
Enhet: Edge 136.0.0.0 on Unknown Windows 10.0 (desktop)
IP nummer: 147.161.188.120

Signerad med BankID: Lars Magnus Ingemar Johansson (196506241071)

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Aktivitetslogg

Betrodd tidsstämpel	Aktivitet med insamlade uppgifter
2025-05-20 10:09:32 UTC	Dokumentet signerades av Magnus Johansson (larsmagnus.johansson@se.ey.com) Enhet: Edge 136.0.0.0 on Unknown Windows 10.0 (dator) IP nummer: 147.161.188.120 - IP Plats: Stockholm, Sweden
2025-05-20 10:09:31 UTC	Dokumentet verifierades genom BankID av Magnus Johansson (larsmagnus.johansson@se.ey.com) Enhet: Edge 136.0.0.0 on Unknown Windows 10.0 (dator) IP nummer: 130.176.223.11 - IP Plats: Frankfurt am Main, Germany
2025-05-20 10:08:59 UTC	Dokumentet lästes igenom av Magnus Johansson (larsmagnus.johansson@se.ey.com) Enhet: Edge 136.0.0.0 on Unknown Windows 10.0 (dator) IP nummer: 147.161.188.120 - IP Plats: Stockholm, Sweden
2025-05-20 10:06:17 UTC	Dokumentet laddades ner av Magnus Johansson (larsmagnus.johansson@se.ey.com) Enhet: Edge 136.0.0.0 on Unknown Windows 10.0 (dator) IP nummer: 147.161.188.120 - IP Plats: Stockholm, Sweden
2025-05-20 10:06:02 UTC	Dokumentet öppnades av Magnus Johansson (larsmagnus.johansson@se.ey.com) Enhet: Edge 136.0.0.0 on Unknown Windows 10.0 (dator) IP nummer: 147.161.188.120 - IP Plats: Stockholm, Sweden
2025-05-19 15:42:17 UTC	Dokumentet skickades till Magnus Johansson (larsmagnus.johansson@se.ey.com) Enhet: ()
2025-05-19 15:42:16 UTC	Dokumentet signerades av Klaus Bohler (klaus.bohler@gmail.com) Enhet: Chrome 136.0.0.0 on K Android 10 (smartmobil) IP nummer: 185.212.169.199 - IP Plats: Copenhagen, Denmark
2025-05-19 15:42:15 UTC	Dokumentet verifierades genom BankID av Klaus Bohler (klaus.bohler@gmail.com) Enhet: Chrome 136.0.0.0 on K Android 10 (smartmobil) IP nummer: 18.68.51.196 - IP Plats: Amsterdam, The Netherlands
2025-05-19 15:40:55 UTC	Dokumentet öppnades av Klaus Bohler (klaus.bohler@gmail.com) Enhet: Chrome 136.0.0.0 on K Android 10 (smartmobil) IP nummer: 185.212.169.199 - IP Plats: Copenhagen, Denmark
2025-05-19 14:03:47 UTC	Dokumentet kommenterades av Urban Stake (urban.stake@se.bosch.com) Enhet: () Kommentar: Inga frågor och har signerat dokumentet. Mvh Urban
2025-05-19 14:02:48 UTC	Dokumentet signerades av Urban Stake (urban.stake@se.bosch.com) Enhet: Chrome 136.0.0.0 on Unknown Windows 10.0 (dator) IP nummer: 194.39.218.21 - IP Plats: Stuttgart, Germany
2025-05-19 14:02:48 UTC	Dokumentet verifierades genom BankID av Urban Stake (urban.stake@se.bosch.com) Enhet: Chrome 136.0.0.0 on Unknown Windows 10.0 (dator) IP nummer: 130.176.223.18 - IP Plats: Frankfurt am Main, Germany

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2025-05-19 13:22:54 UTC	Dokumentet signerades av Thore Pedersen (thore.pedersen@no.bosch.com) Enhet: Edge 136.0.3240.71 on iPhone iOS 18.5.0 (smartmobil) IP nummer: 89.8.48.220 - IP Plats: Stavanger, Norway
2025-05-19 13:22:12 UTC	Dokumentet verifierades genom BankID (eid:bankid-no) av Thore Pedersen (thore.pedersen@no.bosch.com) Enhet: Edge 136.0.3240.71 on iPhone iOS 18.5.0 (smartmobil) IP nummer: 130.176.182.44
2025-05-19 13:21:20 UTC	Dokumentet öppnades av Thore Pedersen (thore.pedersen@no.bosch.com) Enhet: Edge 136.0.3240.71 on iPhone iOS 18.5.0 (smartmobil) IP nummer: 89.8.48.220 - IP Plats: Stavanger, Norway
2025-05-19 13:04:40 UTC	Dokumentet signerades av Jeanette Paulsson (jeanette.paulsson@boschrexroth.se) Enhet: Firefox 128.0 on Unknown Windows 10.0 (dator) IP nummer: 194.39.218.23 - IP Plats: Stuttgart, Germany
2025-05-19 13:04:40 UTC	Dokumentet verifierades genom BankID av Jeanette Paulsson (jeanette.paulsson@boschrexroth.se) Enhet: Firefox 128.0 on Unknown Windows 10.0 (dator) IP nummer: 130.176.223.42 - IP Plats: Frankfurt am Main, Germany
2025-05-19 13:04:22 UTC	Dokumentet lästes igenom av Jeanette Paulsson (jeanette.paulsson@boschrexroth.se) Enhet: Firefox 128.0 on Unknown Windows 10.0 (dator) IP nummer: 194.39.218.23 - IP Plats: Stuttgart, Germany
2025-05-19 13:01:17 UTC	Dokumentet öppnades av Jeanette Paulsson (jeanette.paulsson@boschrexroth.se) Enhet: Firefox 128.0 on Unknown Windows 10.0 (dator) IP nummer: 194.39.218.23 - IP Plats: Stuttgart, Germany
2025-05-19 12:43:24 UTC	Dokumentet skickades till Urban Stake (urban.stake@se.bosch.com) Enhet: Edge 136.0.0.0 on Unknown Windows 10.0 (dator) IP nummer: 185.176.246.89 - IP Plats: Stockholm, Sweden
2025-05-19 12:43:23 UTC	Dokumentet skickades till Thore Pedersen (thore.pedersen@no.bosch.com) Enhet: Edge 136.0.0.0 on Unknown Windows 10.0 (dator) IP nummer: 185.176.246.89 - IP Plats: Stockholm, Sweden
2025-05-19 12:43:22 UTC	Dokumentet skickades till Klaus Bohler (klaus.bohler@gmail.com) Enhet: Edge 136.0.0.0 on Unknown Windows 10.0 (dator) IP nummer: 185.176.246.89 - IP Plats: Stockholm, Sweden
2025-05-19 12:43:21 UTC	Dokumentet skickades till Jeanette Paulsson (jeanette.paulsson@boschrexroth.se) Enhet: Edge 136.0.0.0 on Unknown Windows 10.0 (dator) IP nummer: 185.176.246.89 - IP Plats: Stockholm, Sweden
2025-05-19 12:43:20 UTC	Dokumentet förseglades av Camilla Witt-Rudström (camilla.rudstrom.witt@aspia.se) Enhet: Edge 136.0.0.0 on Unknown Windows 10.0 (dator) IP nummer: 185.176.246.89 - IP Plats: Stockholm, Sweden

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Vidimeras!

Viktoria Vomberg
0735-538374

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EY
Building a better working world

Revisionsberättelse

Till bolagsstämman i Robert Bosch Aktiebolag, org.nr 556047-1194

Rapport om årsredovisningen

Uttalanden

Vi har utfört en revision av årsredovisningen för Robert Bosch AB för räkenskapsåret 2024.

Enligt vår uppfattning har årsredovisningen upprättats i enlighet med årsredovisningslagen och ger en i alla väsentliga avseenden rättvisande bild av Robert Bosch ABs finansiella ställning per den 31 december 2024 och av dess finansiella resultat och kassaflöde för året enligt årsredovisningslagen. Förvaltningsberättelsen är förenlig med årsredovisningens övriga delar.

Vi tillstyrker därför att bolagsstämman fastställer resultaträkningen och balansräkningen.

Grund för uttalanden

Vi har utfört revisionen enligt International Standards on Auditing (ISA) och god revisionssed i Sverige. Vårt ansvar enligt dessa standarder beskrivs närmare i avsnittet *Revisorns ansvar*. Vi är oberoende i förhållande till Robert Bosch AB enligt god revisorssed i Sverige och har i övrigt fullgjort vårt yrkesetiska ansvar enligt dessa krav.

Vi anser att de revisionsbevis vi har inhämtat är tillräckliga och ändamålsenliga som grund för våra uttalanden.

Styrelsens och verkställande direktörens ansvar

Det är styrelsen och verkställande direktören som har ansvaret för att årsredovisningen upprättas och att den ger en rättvisande bild enligt årsredovisningslagen. Styrelsen och verkställande direktören ansvarar även för den interna kontroll som de bedömer är nödvändig för att upprätta en årsredovisning som inte innehåller några väsentliga felaktigheter, vare sig dessa beror på oegentligheter eller misstag.

Vid upprättandet av årsredovisningen ansvarar styrelsen och verkställande direktören för bedömningen av bolagets förmåga att fortsätta verksamheten. De upplyser, när så är tillämpligt, om förhållanden som kan påverka förmågan att fortsätta verksamheten och att använda antagandet om fortsatt drift. Antagandet om fortsatt drift tillämpas dock inte om styrelsen och verkställande direktören avser att likvidera bolaget, upphöra med verksamheten eller inte har något realistiskt alternativ till att göra något av detta.

Revisorns ansvar

Våra mål är att uppnå en rimlig grad av säkerhet om att årsredovisningen som helhet inte innehåller några väsentliga felaktigheter, vare sig dessa beror på oegentligheter eller misstag, och att lämna en revisionsberättelse som innehåller våra uttalanden. Rimlig säkerhet är en hög grad av säkerhet, men är ingen garanti för att en revision som utförs enligt ISA och god revisionssed i Sverige alltid kommer att upptäcka en väsentlig felaktighet om en sådan finns. Felaktigheter kan uppstå på grund av oegentligheter eller misstag och anses vara väsentliga om de enskilt eller tillsammans rimligen kan förväntas påverka de ekonomiska beslut som användare fattar med grund i årsredovisningen.

Som del av en revision enligt ISA använder vi professionellt omdöme och har en professionellt skeptisk inställning under hela revisionen. Dessutom:

- identifierar och bedömer vi riskerna för väsentliga felaktigheter i årsredovisningen, vare sig dessa beror på oegentligheter eller misstag, utformar och utför granskningsåtgärder bland annat utifrån dessa risker och inhämtar revisionsbevis som är tillräckliga och ändamålsenliga för att utgöra en grund för våra uttalanden. Risken för att inte upptäcka en väsentlig felaktighet till följd av oegentligheter är högre än för en väsentlig felaktighet som beror på misstag, eftersom oegentligheter kan innefatta agerande i maskopi, förfalskning, avsiktliga utelämnanden, felaktig information eller åsidosättande av intern kontroll.
- skaffar vi oss en förståelse av den del av bolagets interna kontroll som har betydelse för vår revision för att utforma granskningsåtgärder som är lämpliga med hänsyn till omständigheterna, men inte för att uttala oss om effektiviteten i den interna kontrollen.
- utvärderar vi lämpligheten i de redovisningsprinciper som används och rimligheten i styrelsens och verkställande direktörens uppskattningar i redovisningen och tillhörande upplysningar.
- drar vi en slutsats om lämpligheten i att styrelsen och verkställande direktören använder antagandet om fortsatt drift vid upprättandet av årsredovisningen. Vi drar också en slutsats, med grund i de inhämtade revisionsbevisen, om det finns någon väsentlig osäkerhetsfaktor som avser sådana händelser eller förhållanden som kan leda till betydande tvivel om bolagets förmåga att fortsätta verksamheten. Om vi drar slutsatsen att det finns en väsentlig osäkerhetsfaktor, måste vi i revisionsberättelsen fästa uppmärksamheten på upplysningarna i årsredovisningen om den väsentliga osäkerhetsfaktorn eller, om sådana upplysningar är otillräckliga, modifiera uttalandet om årsredovisningen. Våra slutsatser baseras på de revisionsbevis som inhämtas fram till datumet för revisionsberättelsen. Dock kan framtida händelser eller förhållanden göra att ett bolag inte längre kan fortsätta verksamheten.
- utvärderar vi den övergripande presentationen, strukturen och innehållet i årsredovisningen, däribland upplysningarna, och om årsredovisningen återger de underliggande transaktionerna och händelserna på ett sätt som ger en rättvisande bild.

Vi måste informera styrelsen om bland annat revisionens planerade omfattning och inriktning samt tidpunkten för den. Vi måste också informera om betydelsefulla iakttagelser under revisionen, däribland de eventuella betydande brister i den interna kontrollen som vi identifierat.

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Building a better working world

Rapport om andra krav enligt lagar och andra författningar

Uttalanden

Utöver vår revision av årsredovisningen har vi även utfört en revision av styrelsens och verkställande direktörens förvaltning av Robert Bosch AB för räkenskapsåret 2024 samt av förslaget till dispositioner beträffande bolagets vinst eller förlust.

Vi tillstyrker att bolagsstämman disponerar vinsten enligt förslaget i förvaltningsberättelsen och beviljar styrelsens ledamöter och verkställande direktören ansvarsfrihet för räkenskapsåret.

Grund för uttalanden

Vi har utfört revisionen enligt god revisionssed i Sverige. Vårt ansvar enligt denna beskrivs närmare i avsnittet *Revisorns ansvar*. Vi är oberoende i förhållande till Robert Bosch AB enligt god revisorssed i Sverige och har i övrigt fullgjort vårt yrkesetiska ansvar enligt dessa krav.

Vi anser att de revisionsbevis vi har inhämtat är tillräckliga och ändamålsenliga som grund för våra uttalanden.

Styrelsens och verkställande direktörens ansvar

Det är styrelsen som har ansvaret för förslaget till dispositioner beträffande bolagets vinst eller förlust. Vid förslag till utdelning innefattar detta bland annat en bedömning av om utdelningen är försvarlig med hänsyn till de krav som bolagets verksamhetsart, omfattning och risker ställer på storleken av bolagets egna kapital, konsolideringsbehov, likviditet och ställning i övrigt.

Styrelsen ansvarar för bolagets organisation och förvaltningen av bolagets angelägenheter. Detta innefattar bland annat att fortlöpande bedöma bolagets ekonomiska situation och att tillse att bolagets organisation är utformad så att bokföringen, medelsförvaltningen och bolagets ekonomiska angelägenheter i övrigt kontrolleras på ett betryggande sätt. Verkställande direktören ska sköta den löpande förvaltningen enligt styrelsens riktlinjer och anvisningar och bland annat vidta de åtgärder som är nödvändiga för att bolagets bokföring ska fullgöras i överensstämmelse med lag och för att medelsförvaltningen ska skötas på ett betryggande sätt.

Revisorns ansvar

Vårt mål beträffande revisionen av förvaltningen, och därmed vårt uttalande om ansvarsfrihet, är att inhämta revisionsbevis för att med en rimlig grad av säkerhet kunna bedöma om någon styrelseledamot eller verkställande direktören i något väsentligt avseende:

- företagit någon åtgärd eller gjort sig skyldig till någon försummelse som kan föranleda ersättningsskyldighet mot bolaget, eller
- på något annat sätt handlat i strid med aktiebolagslagen, årsredovisningslagen eller bolagsordningen.

Vårt mål beträffande revisionen av förslaget till dispositioner av bolagets vinst eller förlust, och därmed vårt uttalande om detta, är att med rimlig grad av säkerhet bedöma om förslaget är förenligt med aktiebolagslagen.

Rimlig säkerhet är en hög grad av säkerhet, men ingen garanti för att en revision som utförs enligt god revisionssed i Sverige alltid kommer att upptäcka åtgärder eller försummelser som kan föranleda ersättningsskyldighet mot bolaget, eller att ett förslag till dispositioner av bolagets vinst eller förlust inte är förenligt med aktiebolagslagen.

Som en del av en revision enligt god revisionssed i Sverige använder vi professionellt omdöme och har en professionellt skeptisk inställning under hela revisionen. Granskningen av förvaltningen och förslaget till dispositioner av bolagets vinst eller förlust grundar sig främst på revisionen av räkenskaperna. Vilka tillkommande granskningsåtgärder som utförs baseras på vår professionella bedömning med utgångspunkt i risk och väsentlighet. Det innebär att vi fokuserar granskningen på sådana åtgärder, områden och förhållanden som är väsentliga för verksamheten och där avsteg och överträdelser skulle ha särskild betydelse för bolagets situation. Vi går igenom och prövar fattade beslut, beslutsunderlag, vidtagna åtgärder och andra förhållanden som är relevanta för vårt uttalande om ansvarsfrihet. Som underlag för vårt uttalande om styrelsens förslag till dispositioner beträffande bolagets vinst eller förlust har vi om förslaget är förenligt med aktiebolagslagen.

Stockholm den 20 maj 2025

Ernst & Young AB

Magnus Johansson
Auktoriserad revisor

Ambitions
BOSCH

02 Ambitions

If we want to set things in motion, change them for the better, whether globally or locally, we have to set goals that motivate, inspire, and create purpose. Goals that benefit the individual and society as a whole.

In this context, "Invented for life" provides the focus for Bosch. It is our passion and our motivation. To achieve it, we develop products and technology, embrace partnerships and acquisitions, continuously improve our competitiveness.

We aim to play a leading role in the growing HVAC market, to enter the electrolysis business for the sake of a climate-friendly power supply, to invest billions in the chips that keep the world turning. And we are stepping up our operations in software solutions and services for more safety, security, and convenience.

In all this, Bosch deliberately preserves its diversification: the biggest automotive supplier, a leading supplier of equipment for manufacturers and tradespeople, the first choice for solutions for buildings and homes. We don't just want to hold this position, but to extend it: it's our ambition to be among the three leading companies in all our fields of business, to create an even better regional and economic balance in our operations, and in this way to unlock our full potential as a diversified technology group. We can do even better.

"Ambitions," the title of this year's annual report, illustrates our aspiration and determination, even in a difficult economic environment. Ambitions formulated by people, for people. Ambitions for people and the environment. So that technology "Invented for life" can flourish. Technology made by Bosch.

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04

The Bosch Group

Key data

in millions of euros

	2024	2023
Sales revenue	**90,345**	**91,596**
percentage change from previous year	–1.4	3.8
Research and development cost	**7,807**	**7,331**
as a percentage of sales revenue	8.6	8.0
EBIT	**2,796**	**4,503**
as a percentage of sales revenue	3.1	4.9
EBIT from operations	**3,121**	**4,824**
as a percentage of sales revenue	3.5	5.3
Profit after tax	**1,332**	**2,640**
Capital expenditure	**5,122**	**5,499**
as a percentage of depreciation	137	161
Balance-sheet total	**112,766**	**108,330**
Equity	**49,993**	**47,894**
as a percentage of total assets	44	44
Dividend of Robert Bosch GmbH	**186**	**170**
Headcount at Dec. 31, 2024	**417,859**	**429,416**

Bosch at a glance

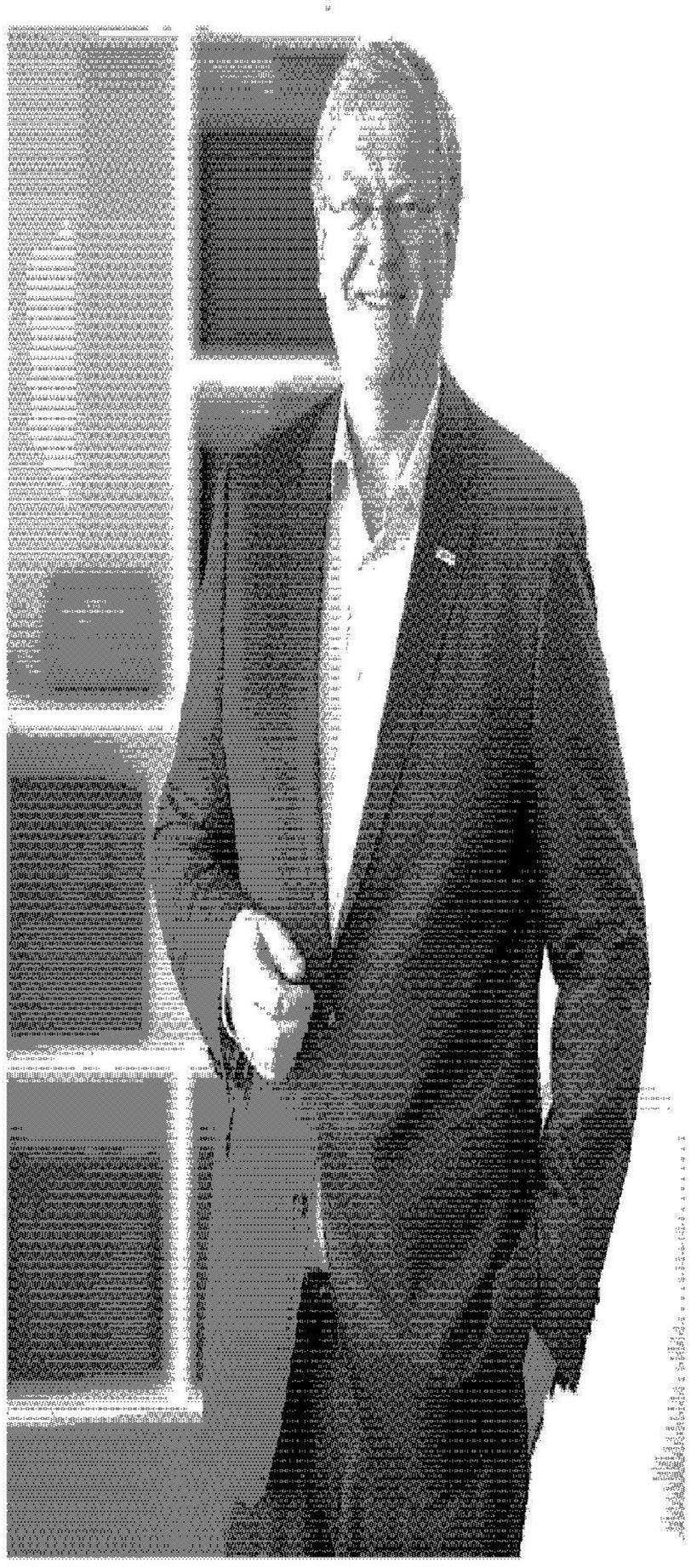
The Bosch Group is a leading global supplier of technology and services. It employs roughly 417,900 associates worldwide (as of December 31, 2024). The company generated sales of 90.3 billion euros in 2024. Its operations are divided into four business sectors: Mobility, Industrial Technology, Consumer Goods, and Energy and Building Technology. Universal trends such as automation, electrification, digitalization, and connectivity, as well as an orientation to sustainability, are increasingly determining the group's business operations. In this context, Bosch's broad footprint as a global and diversified technology company strengthens its innovativeness and robustness.

Bosch uses its proven expertise in sensor technology, software, and services to offer customers cross-domain solutions from a single source. It also applies its expertise in connectivity and artificial intelligence in order to develop and manufacture user-friendly, sustainable products. With technology that is "Invented for life," Bosch wants to help improve quality of life and conserve natural resources.

The Bosch Group comprises Robert Bosch GmbH and its roughly 490 subsidiary and regional companies in over 60 countries. Including sales and service partners, Bosch's global manufacturing, engineering, and sales network covers nearly every country in the world. Bosch's innovative strength is key to the company's further development. At 136 locations across the globe, Bosch employs some 86,800 associates in research and development, of which nearly 48,000 are software engineers.

The company was set up in Stuttgart in 1886 by Robert Bosch (1861–1942) as "Workshop for Precision Mechanics and Electrical Engineering." The special ownership structure of Robert Bosch GmbH guarantees the entrepreneurial freedom of the Bosch Group, making it possible for the company to plan over the long term and to undertake significant upfront investments in the safeguarding of its future. Ninety-four percent of the share capital of Robert Bosch GmbH is held by Robert Bosch Stiftung GmbH, a limited liability company with a charitable purpose. The remaining shares are held by Robert Bosch GmbH and by a corporation owned by the Bosch family. The majority of voting rights are held by Robert Bosch Industrietreuhand KG.

Foreword



DR. STEFAN HARTUNG

Ladies and gentlemen,

"Ambitions," the title of our annual report, is intended as a strong message. Even in times of global economic weakness, difficult market conditions, and business and political uncertainty, we have the future in our sights. We are pursuing our long-term growth strategy, even if sales revenue and result did not make headway in the 2024 fiscal year. We are determined to press ahead with the technologies that will be decisive in tomorrow's world. But we also have to adjust if the technological trends we are pushing are not so fast to arrive, or if regional priorities shift. Fundamentally, however, we believe we are on the right track with our business focus on mobility, industrial technology, consumer goods, and energy and building technology. As before, there are considerable opportunities for growth here.

Digitalization, electrification, electronification, automation, sustainability, and emerging markets are still the main forces driving developments. They are subjects that have been on our radar for quite some time now. In addition, we want to continue to extend our global presence, which even now creates significant local value. Europe is our home base. But we are also strengthening the Bosch Group's operations in regions such as North America and Asia. Not least, this is our response to the imminent changes in global trade relations, as well as to the differing speeds at which regions are currently adopting technologies of the future such as electromobility and automated driving. A better regional balance was also one of the reasons behind a major strategic move in 2024 – the acquisition we plan in the heating, ventilation, and air-conditioning segment.

"Even in times of business and political uncertainty, we are pursuing our ambition of helping to shape markets as a major technology company."

To be able to seize our opportunities, we are working intensively on our costs and structures. Our aim is to make the Bosch Group robust in the face of longer-term challenges. We are doing so in the knowledge that the measures this requires will initially burden our earnings. That also applies to the year ahead. To strengthen our profitability, putting these measures into practice is a top priority. High profitability and sound finances will give us the entrepreneurial freedom we need to secure a strong and meaningful development for our company over the long term, as our company founder Robert Bosch would have wanted. The adjustments this calls for will mean sacrifices for the associates affected. We want to find ways of shaping the necessary transformation responsibly. This also applies to the divestment of parts of the company. Especially a diversified company like Bosch has to regularly examine its portfolio and, where necessary, adjust it. Only if it does so can we reap the benefits of diversification, and thus make the company more robust. In 2025, for example, we want to sell off major parts of the Building Technologies division's product business. Under their new owner, they will have additional opportunities for development.

Our task, then, is a demanding one. We have to push forward with our strategy and, as a major technology company, help shape markets – on the basis of robust and competitive structures. This also includes taking even greater advantage of the potential offered by artificial intelligence, whether in our products or in our processes.

We are well aware that we will have to overcome some considerable obstacles. We will tackle them with great determination. We owe our more than 400,000 associates, as well as our business partners and customers, our thanks. In publishing our annual report, we want not only to present our business figures, but also to convey an idea of why we are so sure of our ambitions, and of how we want to tackle the challenges that come with them.

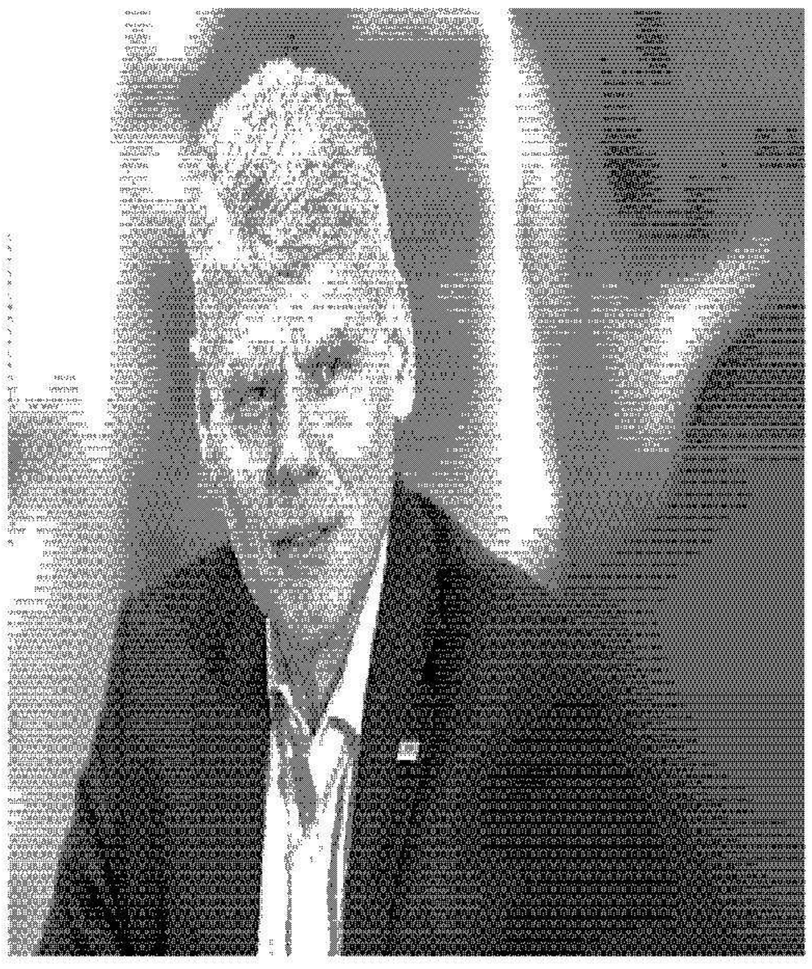
With best regards,

Dr. Stefan Hartung
Chairman of the board of management

The Bosch board of management

Dr. Stefan Hartung
Chairman of the board of management

Dr. Christian Fischer
Deputy chairman of the board of management



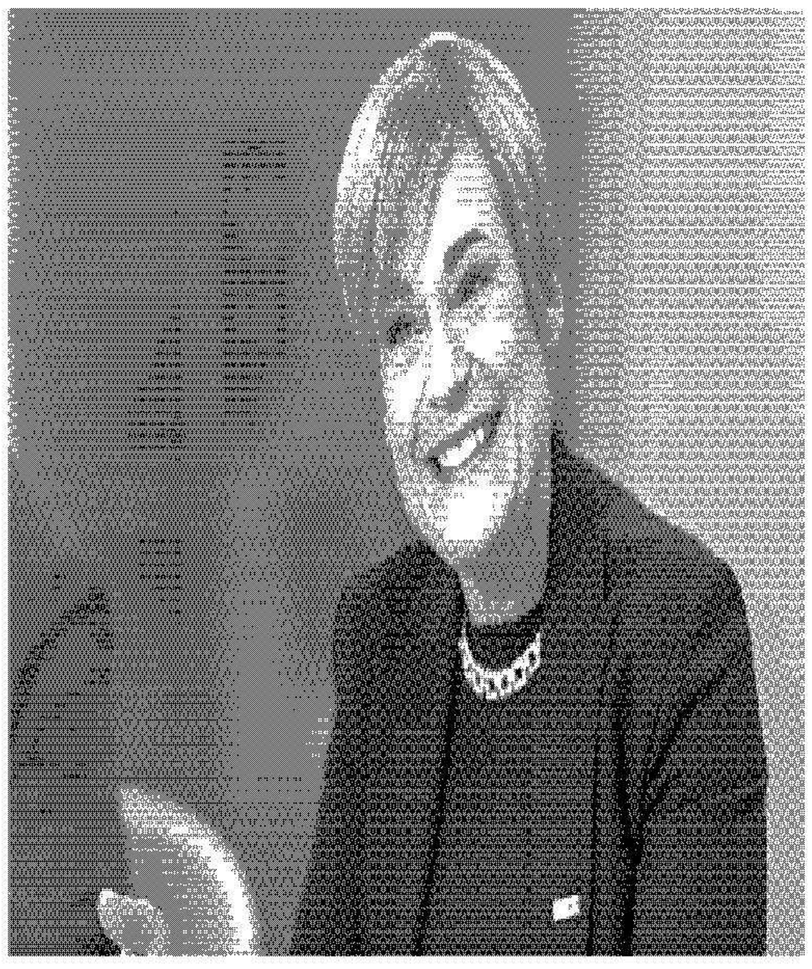
Dr. Markus Forschner
Member of the board of management

Stefan Grosch
Member of the board of management

The Bosch board of management

Dr. Markus Heyn
Member of the board of management

Dr. Frank Meyer
Member of the board of management



Katja von Raven
Member of the board of management

Dr. Tanja Rückert
Member of the board of management

Board of management

Dr. Stefan Hartung

Chairman of the board of management

Technology, Innovation, and Quality

Functions and services
- Communications and Governmental Affairs
- Corporate Affairs
- Field Quality Board
- Human Resources Senior Management Personnel
- Intellectual Property
- Quality Management
- Research and Advance Engineering
- Strategy, Organization, and Business Development
- Technology Manufacturing

Business areas
- Health Care Solutions
- Bosch Business Innovations SINCE JANUARY 1, 2025

Region
China

Dr. Christian Fischer

Deputy chairman of the board of management

Consumer Goods business sector
Energy and Building Technology business sector UNTIL JANUARY 31, 2024

Functions and services
- Growth Acceleration 2030 SINCE FEBRUARY 1, 2024
- Inhouse Consulting SINCE FEBRUARY 1, 2024

Business areas
- BSH – Home Appliances
- Building Technologies UNTIL JANUARY 31, 2024
- Home Comfort UNTIL JANUARY 31, 2024
- Power Tools UNTIL SEPTEMBER 30, 2024
- Smart Home UNTIL JANUARY 31, 2024

Regions
Africa, Southeast Asia UNTIL JANUARY 31, 2024

Dr. Markus Forschner

Finance and Performance
Industrial Technology business sector UNTIL JANUARY 31, 2024

Functions and services
- Finance, Reporting, and Treasury
- Global Real Estate
- Internal Auditing UNTIL FEBRUARY 29, 2024
- Performance Controlling, Risk Management, Mergers and Acquisitions
- Performance Management UNTIL FEBRUARY 29, 2024
- Real Estate and Facilities
- Supply Chain Management
- Tax and Customs Duties UNTIL JANUARY 31, 2024
- Transformation and Performance Consulting UNTIL JANUARY 31, 2024

Business areas
- Bosch Manufacturing Solutions UNTIL JANUARY 31, 2024
- Drive and Control Technology UNTIL JANUARY 31, 2024

Regions
Europe 1, Türkiye

Stefan Grosch

Human Resources, Legal, Compliance, and Sustainability

Functions and services

- Bosch Management Support
- Compliance Management
- Human Resources
- Human Resources Transformation
  UNTIL DECEMBER 31, 2024
- Internal Auditing SINCE FEBRUARY 1, 2024
- Legal
- Sustainability, Environment, Health and Safety
- Taxes, Export Control, and Customs
  SINCE FEBRUARY 1, 2024

Regions

India, Southeast Asia SINCE FEBRUARY 1, 2024

Dr. Markus Heyn

Mobility business sector
Chairman of the Mobility sector board

Functions and services

- Mobility sector board
  Commercial Affairs
  Operations
  Sales and Customers
  Technology
- Mobility sector functions
  Communications and Governmental Affairs
  Human Resources, People, and Culture
  Purchasing Direct Materials
  Strategy, Go-to-Market, and Business Excellence
- Mobility regional board
  Americas
  China
  India
  South and East Asia
- Software Development Services

Business areas

- BEG – Automotive Engineering Solutions
- Bosch eBike Systems
- Cross-Domain Computing Solutions
- Electrified Motion
- ETAS
- Mobility Aftermarket
- Mobility Electronics
- Mobility Platform and Services
- Power Solutions
- Two-Wheeler and Powersports
- Vehicle Motion

Dr. Frank Meyer SINCE FEBRUARY 1, 2024

Energy and Building Technology business sector SINCE FEBRUARY 1, 2024

Business areas

- Building Technologies SINCE FEBRUARY 1, 2024
- Home Comfort SINCE FEBRUARY 1, 2024
- Smart Home SINCE FEBRUARY 1, 2024

Katja von Raven SINCE OCTOBER 1, 2024

Business areas

- Power Tools SINCE OCTOBER 1, 2024
- Bosch Global Service Solutions SINCE OCTOBER 1, 2024

Dr. Tanja Rückert

Digital Business and Services
Industrial Technology business sector SINCE FEBRUARY 1, 2024

Functions and services

- Bosch Digital
- Cybersecurity
- Global Business Services
- Information Technology and Digitalization
- Software and Digital Solutions
- Software Next

Business areas

- Bosch Manufacturing Solutions SINCE FEBRUARY 1, 2024
- Bosch Connected Industry
- Drive and Control Technology SINCE FEBRUARY 1, 2024
- Bosch Global Service Solutions
  UNTIL SEPTEMBER 30, 2024

Regions

- Europe 2, Japan, Korea, North America, Oceania UNTIL JANUARY 31, 2025, South America

Mobility sector board

Dr. Markus Heyn
Chairman

Volker Schilling
Commercial

Klaus Mäder
Operations

Andreas Dempf
Sales and Customers

Dr. Mathias Pillin
Technology

Presidents of the divisions

Claus Fleischer
Bosch eBike Systems

Henning von Boxberg
Bosch Global Service Solutions

Thomas Quante
Building Technologies

Christoph Hartung
Cross-Domain Computing Solutions

Steffen Haack
Drive and Control Technology

Marco Zehe
Electrified Motion

Jan Brockmann
Home Comfort

Rupert Hoellbacher
Mobility Aftermarket

Michael Budde
Mobility Electronics

Dr. Thomas Pauer
Power Solutions

Thomas Donato
Power Tools

Dr. Gerta Marliani
Vehicle Motion

Supervisory board report

PROF. STEFAN ASENKERSCHBAUMER

Ladies and gentlemen,

In 2024, despite a difficult business environment, the Bosch Group continued to rigorously orient its strategy to changing technologies, markets, and competitive environments. One significant strategic move was the announcement of a major acquisition in the heating, ventilation, and air-conditioning segment. At the same time, the focus was on strengthening competitiveness. Across the globe, however, major areas of future importance, such as electromobility and automated driving, are developing more slowly and with different regional intensity than the industry expected.

This is creating additional challenges. These called for adjustments in our setup, and thus for additional structural adjustments. Initially, these present a burden for result. The lower-than-expected 2024 figures for sales revenue and earnings reflect this challenging situation. The supervisory board monitored these developments closely. It devoted particularly close attention to the macroeconomic and business situation, as well as to the measures designed to improve competitiveness. From 2026, these measures are expected to lead to a considerably improved result. In addition, it kept a very close eye on major strategic decisions. The supervisory board would like to thank the board of management and associates of the Bosch Group for their great efforts in a very challenging environment.

The supervisory board once again fulfilled its legal and regulatory obligations with great care in 2024. In additional meetings, the supervisory board discussed the announced acquisition of the worldwide heating, ventilation, and air-conditioning business for residential and light commercial buildings from the U.S. company Johnson Controls International plc and

"On the supervisory board, we keep a very close eye on major strategic decisions as well as on the measures needed to strengthen competitiveness."

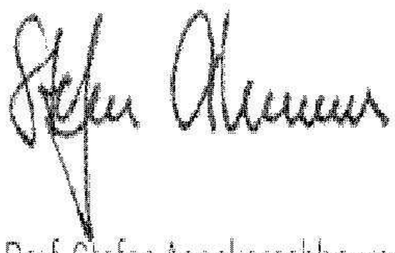
gave its approval to the intended purchase. Other focal points of its work were the growing demands made of cybersecurity and the Bosch Group's future personnel strategy. In addition, the board informed itself in detail about developments in the mobility market and the prospects for the Mobility business sector.

The board of management reported regularly on its growth strategy with respect to potential in existing, adjacent, and new fields of business, as well as on necessary adjustment measures. In summer 2024, the supervisory board traveled to China, where it gained an impression of the Bosch Group's operations there. The supervisory board also obtained information about the measures taken with respect to compliance, to the risk management system, and to the findings of risk and sustainability reporting, which were discussed in depth in its audit committee. The main items on its agenda also included financial and investment planning, as well as the 2025 business plan. Outside of board meetings, the chairman of the supervisory board was regularly informed by the chairman of the board of management about current developments and significant events in the company.

EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft audited the Robert Bosch GmbH annual financial statements and consolidated financial statements, as well as the accompanying management reports, as of and for the year ended December 31, 2024. It furnished all these reports with an unqualified audit opinion. The audit committee and the supervisory board discussed these documents at length and subjected them to their own examination; all members of both bodies had access to the auditor's reports. Moreover, the auditor met with the audit committee and the supervisory board to report on the main findings of the audit. The supervisory board raised no objections, concurred with the results of the audit, and approved the Robert Bosch GmbH annual financial statements and the Bosch Group consolidated financial statements. Following its own review, the supervisory board endorsed the board of management's proposal for the appropriation of net profit.

Stuttgart, March 2025

For the supervisory board



Prof. Stefan Asenkerschbaumer

Chairman

Supervisory board

Prof. Stefan Asenkerschbaumer

Stuttgart

Chairman

Managing partner of Robert Bosch Industrietreuhand KG, formerly deputy chairman of the board of management of Robert Bosch GmbH

Frank Sell

Pleidelsheim

Deputy chairman

Deputy chairman of the works council of the Feuerbach plant, and chairman of the central works council of the Mobility business sector as well as deputy chairman of the combined works council of Robert Bosch GmbH

Nadine Boguslawski

Hattersheim am Main

Chief treasurer of Industriegewerkschaft Metall, Frankfurt am Main

Dr. Christof Bosch

Königsdorf

Spokesperson for the Bosch family

Dr. Arne Fischer

Gemmrigheim

Director of strategic projects, Power Solutions division, and chairman of the combined executives committee of the Bosch Group in Germany

Prof. Elgar Fleisch

St. Gallen

Professor of information and technology management at the University of St. Gallen (HSG) and ETH Zürich

Klaus Friedrich

Würzburg

Chairman of the works council of Bosch Rexroth AG, Lohr am Main, and chairman of the central works council of Bosch Rexroth AG and member of the combined works council of Robert Bosch GmbH

Mario Gutmann

Bamberg

Chairman of the works council of the Bamberg plant, and member of the central works council of the Mobility business sector as well as chairman of the economic committee of the Mobility business sector

Adrian Hermes

Hattersheim am Main

Representative of the chairman of Industriegewerkschaft Metall

Prof. Michael Kaschke

Oberkochen

Chairman of the supervisory board of Karlsruhe Institute of Technology and President of Stifterverband

Prof. Renate Köcher

Konstanz

Managing director, Allensbach Institute for Public Opinion Research

Martina Koederitz

Stuttgart

Member of the supervisory board

Matthias Georg Madelung

Munich

Member of the board of trustees of Robert Bosch Stiftung GmbH

Kerstin Mai

Hildesheim

Chairwoman of the works council of the Cross-Domain Computing Solutions division, Hildesheim, and chairwoman of the combined works council of Robert Bosch GmbH

Dr. Raphael Menez

Stuttgart

Secretary of the regional directorate of the Industriegewerkschaft Metall trade union, Baden-Württemberg

Oliver Simon

Dunzweiler

Chairman of the works council of the Homburg plant, and member of the central works council of the Mobility business sector

Karin Solda

Filderstadt

Chairwoman of the works council at the Leinfelden-Echterdingen location and of the central works council of Robert Bosch Power Tools GmbH

Peter Spuhler

Weiningen

Majority shareholder and president of the supervisory board of Stadler Rail AG

Dr. Eberhard Veit

Göppingen

Managing partner of Robert Bosch Industrietreuhand KG

Prof. Beatrice Weder di Mauro

Blonay

Professor of international economics at the Geneva Graduate Institute, president of the Centre for Economic Policy Research (CEPR), and research professor at INSEAD

HONORARY CHAIRMAN OF THE BOSCH GROUP

Prof. Hermann Scholl

Stuttgart

Formerly chairman of the supervisory board of Robert Bosch GmbH

Formerly managing partner of Robert Bosch Industrietreuhand KG

Formerly chairman of the board of management of Robert Bosch GmbH

Industrial Trust and International Advisory Committee

Robert Bosch Industrietreuhand KG

GENERAL PARTNERS

Prof. Stefan Asenkerschbaumer
Stuttgart
Chairman of the shareholders' meeting

Dr. Eberhard Veit
Göppingen

LIMITED PARTNERS

Dr. Christof Bosch
Königsdorf

Dr. Christian Fischer
Stuttgart

Prof. Elgar Fleisch
St. Gallen

Prof. Lino Guzzella
Uster

Dr. Stefan Hartung
Ludwigsburg

Prof. Michael Kaschke
Oberkochen

Prof. Renate Köcher
Konstanz

Peter Spuhler
Weinfelden

Robert Bosch International Advisory Committee

Prof. Stefan Asenkerschbaumer
Stuttgart
Chairman

Natarajan Chandrasekaran SINCE JAN. 1, 2024
Mumbai

Prof. Sigmar Gabriel
Goslar

Dr. Christoph Heusgen
Berlin

Baba N. Kalyani UNTIL DEC. 31, 2023
Pune

Yumiko Murakami
Tokyo

HRH Prince Mired Raad Zeid SINCE MAR. 1, 2023
Amman

Paul Ryan
Janesville

Prof. Marcos Troyjo SINCE FEB. 1, 2024
São Paulo

Jing Ulrich
New York

Prof. Igor Yurgens UNTIL DEC. 31, 2023
Moscow

Business sectors

Industrial Technology

— **Drive and Control Technology**[1]

— Bosch Connected Industry
— Robert Bosch Manufacturing Solutions GmbH

Consumer Goods

— **Power Tools**
— **BSH Hausgeräte GmbH**

Mobility

— **Bosch eBike Systems**
— **Cross-Domain Computing Solutions**
— **Electrified Motion**
— **Mobility Aftermarket**
— **Mobility Electronics**
— **Power Solutions**
— **Vehicle Motion**

— Bosch Engineering GmbH
— ETAS GmbH
— ITK Engineering GmbH
— Mobility Platform and Services
— Two-Wheeler and Powersports

Energy and Building Technology

— **Building Technologies**
— **Home Comfort**
— **Bosch Global Service Solutions**

— Robert Bosch Smart Home GmbH

Other activities

— Bosch Healthcare Solutions GmbH
— Bosch Business Innovations GmbH (until Dec. 31, 2024: grow platform GmbH)
— Robert Bosch Venture Capital GmbH

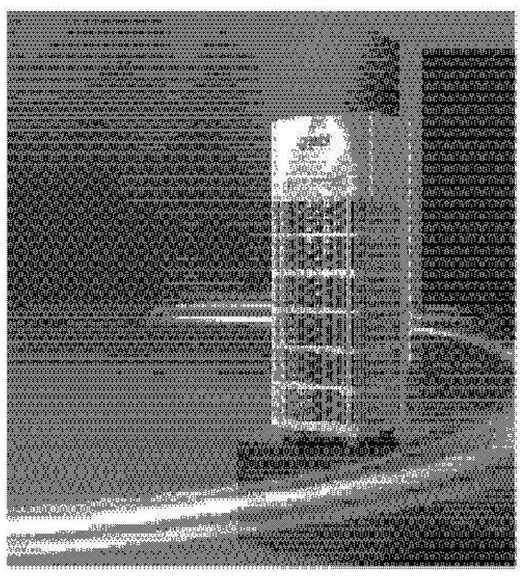
1. Bosch Rexroth AG (100 % Bosch-owned)

Highlights 2024

January

United States: Bosch develops heat pump for extreme conditions

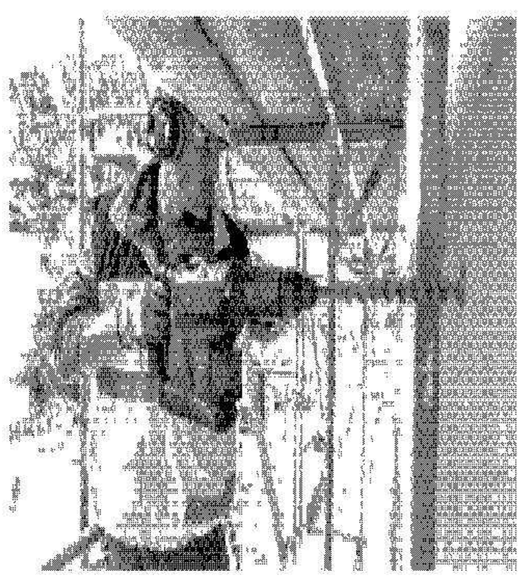
At the CES, Bosch presents a cold-climate heat pump designed for extreme weather conditions, such as those found in North America. At an outdoor temperature of minus 15 degrees Celsius, the heat pump delivers 100 percent heating capacity, and still works even when temperatures hit minus 25 degrees. With this energy-efficient cold-climate heat pump, homes can now be heated and cooled in nearly every region of the United States.



February

Power tools: Bosch opts for new battery technology

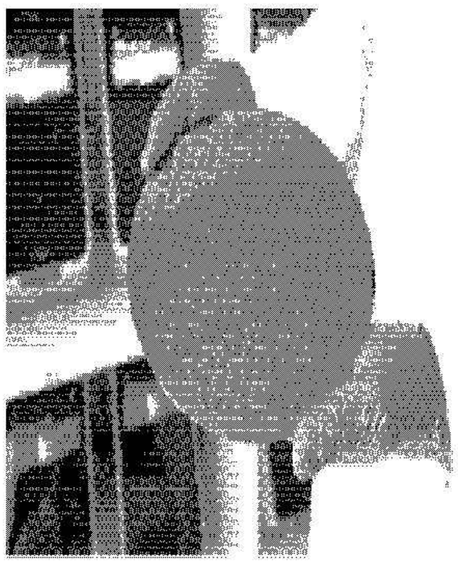
Bosch is the world's first supplier to exploit the advantages of "tabless" design in rechargeable battery cells. This design now features in its 18-volt cordless power tools. The new technology reduces bottlenecks in cell design, and allows batteries to run up to 71 percent longer than conventional lithium-ion ones. The new rechargeable batteries are not only more powerful, but also last longer.



April

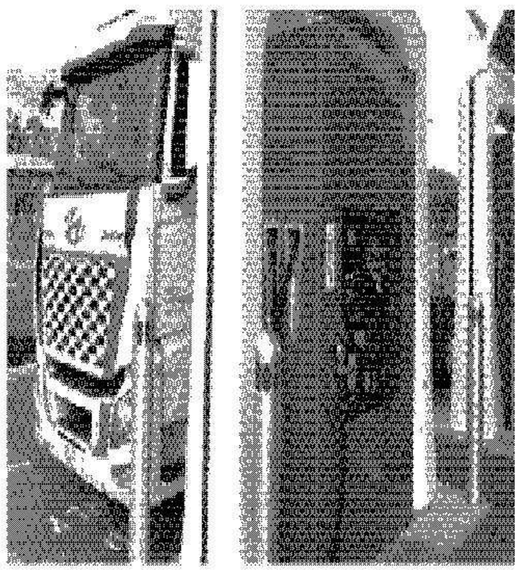
Medical technology: novel Bosch BioMEMS technology

Bosch debuts a powerful BioMEMS chip for use in Vivalytic, its fully automatic, molecular-diagnostic analysis platform. The chip adds a further innovative analysis method to the Vivalytic test cartridge, enabling it to test simultaneously for up to 250 genetic characteristics. In this way, pathogens such as bacteria, viruses, and fungi can be identified fully automatically in less than 15 minutes. Point-of-care molecular diagnostics is expected to become a market worth billions. Bosch aims to achieve a leading position in this market.



Hydrogen: Bosch Rexroth supplies technology for hydrogen filling stations

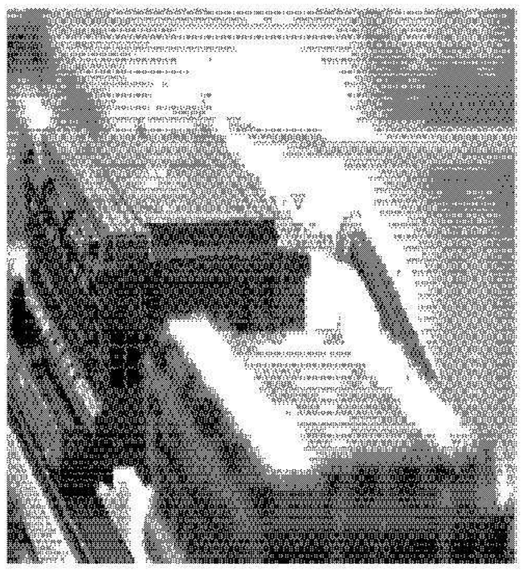
Together with partners in the hydrogen business, Bosch Rexroth is developing a scalable portfolio of servohydraulic drives for compressors. One example is a new cryopump that compresses liquid hydrogen to 875 bar, making it possible to directly refuel heavy trucks within just a few minutes. Starting in 2025, the first filling stations are to be equipped with these cryopumps. Its engineering partner is FirstElement Fuel, the market leader for hydrogen filling stations in the United States.



May

Investor: Bosch supports battery-recycling startups

Bosch Ventures, the company's corporate venture capital unit, is investing in the German startup cylib. In an investment round to which several investors contribute, cylib is granted 55 million euros in order to scale up its resource-conserving and climate-friendly process for recycling raw materials from battery packs. In addition, Bosch is supporting the U.S. battery-recycling company Li Industries. In a financing round led by Bosch Ventures, the company is provided with funds worth some 33 million euros.



June

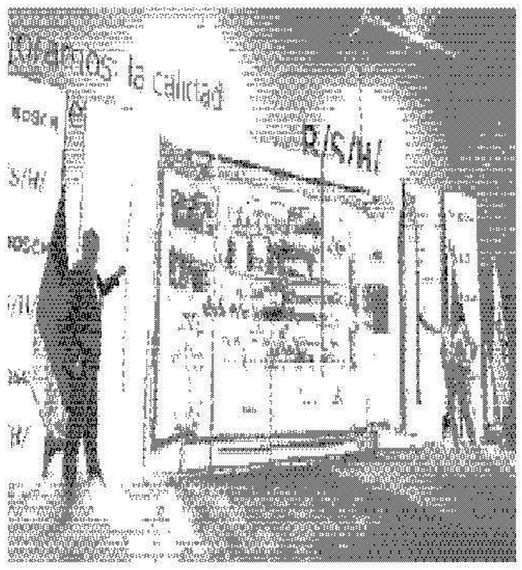
Vehicle Motion management: braking softly with software

At the Bosch TechDay, the company presents its eBrake to Zero software. This function prevents the irksome jolt that occurs shortly after a vehicle comes to a stop. As a result, braking in situations such as stop-and-go traffic is a much more pleasant experience, and travel sickness can be avoided. The function also noticeably improves vehicle noise during braking.

July

BSH: first refrigerator plant in Mexico goes into operation

BSH Hausgeräte GmbH is expanding its global manufacturing network. In the future, it will be manufacturing in Mexico as well. In Monterrey, Nuevo León province, French door bottom-mount fridges will now start rolling off the production lines. BSH is investing some 240 million euros there, and expects that the plant will create roughly 1,500 skilled jobs in the region.

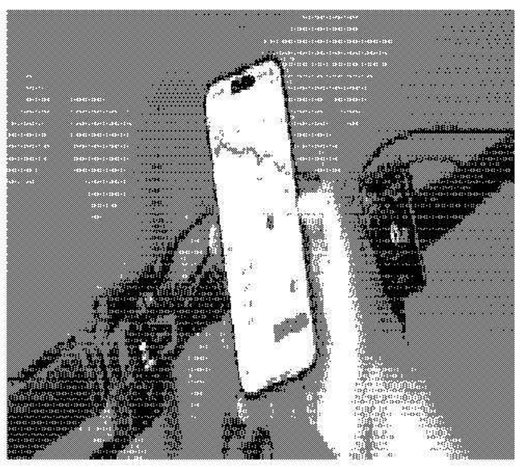


Acquisition: Bosch expands its HVAC business

The company plans to acquire the residential and light commercial HVAC business from Johnson Controls. The acquisition is subject to approvals from the antitrust authorities. For the acquired businesses, the purchase price is 8 billion dollars (7.4 billion euros). The transaction is the biggest acquisition in Bosch history.

Mobility: artificial intelligence for e-bikes

With the digital Range Control function, Bosch is adding to its smart system for e-bikes. With the help of AI, battery range is computed. This allows riders to choose how much battery charge they want to be left with when they arrive at their destination. Then, during the ride, assistance from the motor is adapted to ensure that the desired residual range remains when the destination is reached. In this process, the AI learns from real-time data, so that its estimates become ever more precise.



23

August

ESMC: groundbreaking ceremony for new wafer fab

In Dresden, Germany, the TSMC, Bosch, Infineon, and NXP joint venture lays the foundation stone for a shared plant. The new ESMC fab is planned to have a monthly production capacity of 40,000 300-millimeter wafers. Start of production is planned for the end of 2027. The new plant will create roughly 2,000 high-tech jobs.

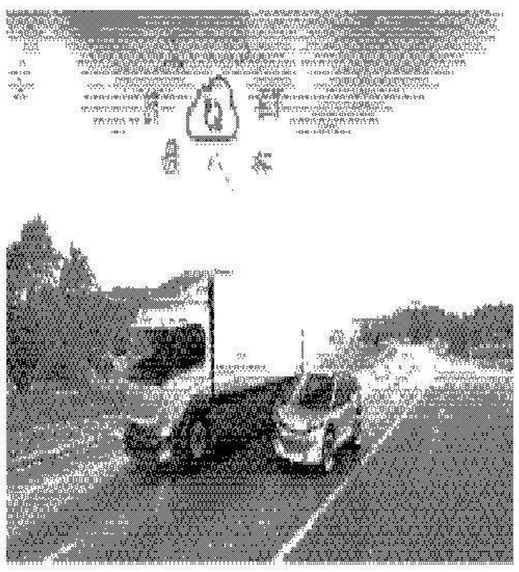
Japan: new national headquarters opened

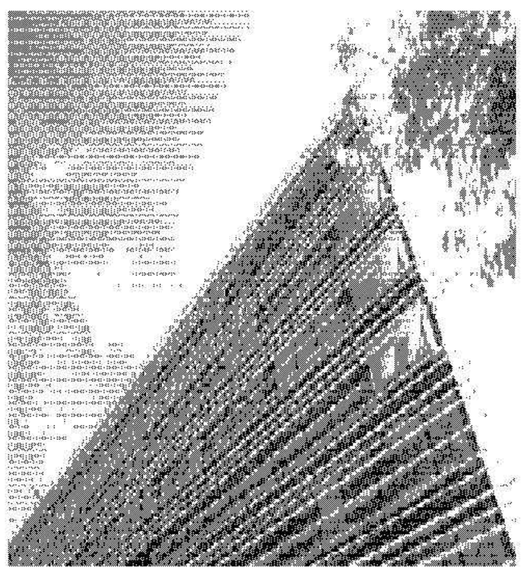
The new building in Yokohama covers just under 53,000 square meters. In the future, some 2,000 associates from eight locations in the Tokyo and Yokohama metropolitan areas will work together in the new headquarters. The focus of engineering activities in the new building is on driver assistance systems and automated driving. Bosch is investing 270 million euros in the new location – the biggest single investment in the history of Bosch in Japan.

September

IAA Commercial Vehicles: Bosch rolls out safety technology for trucks

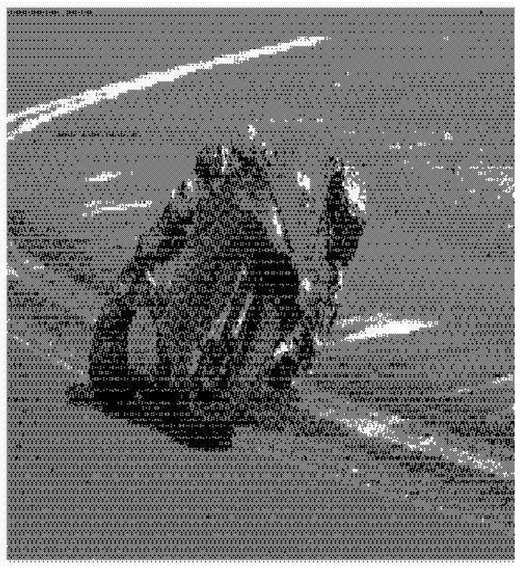
The Bosch Road Hazard service gives drivers early warning of possible hazards on the road ahead, such as cloudbursts, ice, poor visibility, accidents, breakdowns, and construction zones. After debuting this service for passenger cars, Bosch is now also providing it for trucks. This real-time service has been available in Mercedes-Benz trucks since December 2024.





Road safety: new assistance systems for motorbikes

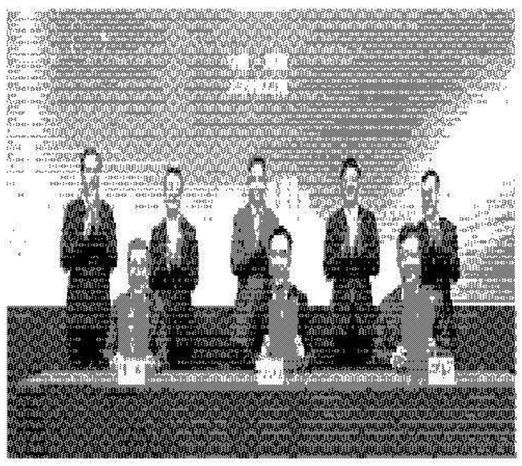
At EICMA, the leading trade fair for motorcycles, Bosch presents six new radar-based assistance systems, five of them world premieres. Bosch accident research suggests that one in six accidents on German roads alone can be prevented by the new assistance systems, instead of one in seven up to now. With its research and technology, Bosch is pursuing the aim of accident-free mobility.



October

Joint venture: Bosch partners with Jiangling Motors

The two companies plan to set up a joint venture to develop and market e-axles for light trucks. To this venture, Bosch will contribute its core competencies in the development of solutions for electromobility, and Jiangling Motors its expertise in the vehicle sector and knowledge of the local market. Bosch intends to hold 60 percent of the shares in the joint venture, Jiangling Motors 40 percent.



China: Bosch opens new R&D center

On an area of roughly 300,000 square meters, associates at the new Bosch location in Suzhou will focus on the research into and development of core components for passenger cars and trucks. Construction work on the campus began in March 2023. In the years ahead, it is planned to invest some 950 million euros in the new location.

November

AI research: Federal President Steinmeier visits Bosch

As part of his "Workshop of Change" tour, Federal German President Frank-Walter Steinmeier visits the Bosch research campus in Renningen, Germany. The federal president's aim is to draw attention to places where transformation has been successful. On the research campus, he gains insights into the rapidly changing way AI is used in engineering and manufacturing, as well as in Bosch products.

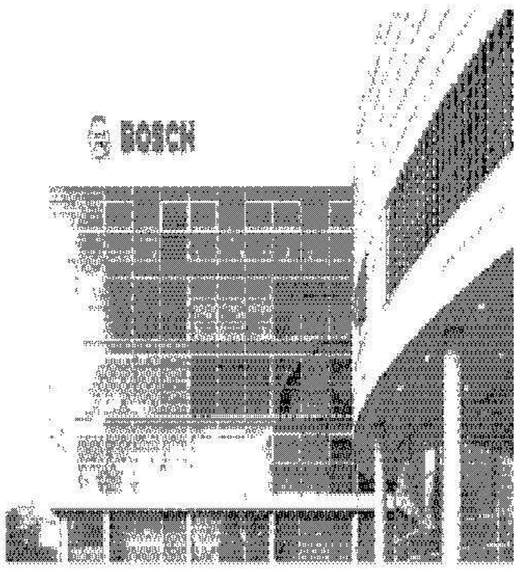
December

Semiconductors: Bosch to refurbish its first wafer fab in the U.S.

Under the CHIPS and Science Act, Bosch and the U.S. Department of Commerce have signed a preliminary memorandum of terms. This proposes up to 225 million dollars in direct funding to help finance the refurbishment of the Bosch plant in Roseville, California. Bosch plans to invest as much as 1.9 billion dollars to transform the Roseville plant into a manufacturing facility for silicon-carbide semiconductors. Start of production is planned for 2026.

Divestment: Bosch sells product business with security systems

Bosch signs agreements to sell its Video, Access and Intrusion, and Communication business units to the European private equity company Triton. The business units' 4,300 associates at more than 90 locations worldwide will be taken over. The transaction is subject to approval by the authorities. In the future, the Bosch Building Technologies division will focus on its regional integrator business, with solutions and services for building security, energy efficiency, and building automation.



25

Stories

Improving road safety

Thailand's roads are a hazardous challenge: dense traffic, unusual driving habits, high accident rates. Scarcely any other country records so many road fatalities each year. And of these victims, 80 percent are two-wheeler riders. The problem of traffic accidents is well known, as are their consequences. But their causes are varied, and by no means clear-cut. A team of Bosch accident researchers is currently working with the Central Institute of Forensic Science to establish an accident database for Thailand. From this, the aim is to define measures for improving road safety in the country. In this work, Bosch can draw on its decades-long experience in accident research, as well as in the development of safety and assistance systems for drivers. A road trip through Thailand with the Bosch accident researcher Thomas Lich.

Click here for the full story

Reinventing braking

Brakes are among the most vital components for vehicle safety. Bosch has been developing braking technology for nearly 100 years. In 1927, the company revolutionizes braking when it premieres the power-assisted brake, which significantly reduces braking distances. In 1978, Bosch takes its ABS antilock braking system into volume production, and in 1995 it launches the ESP® electronic stability program. Now, with the development of brake-by-wire, Bosch is opening a new chapter. Comprising a by-wire brake actuator and ESP®, this system does away with the mechanical connection between brake pedal and braking system. This opens up new possibilities for the interior design of vehicles, as well as permitting highly dynamic braking in all conditions. Really in all conditions? Prior to market launch, Bosch engineers put it through its paces in Arjeplog, northern Sweden.

Click here for the full story

The nucleus of hydrogen production

Without green hydrogen, there can be no climate-neutral economy. Such green hydrogen is produced by electrolysis, using green electricity. With its PEM electrolysis stack, Bosch is developing the core element of an electrolyzer. This stack comprises more than 100 electrolysis cells that use green electricity to split water into oxygen and hydrogen. Bosch will be launching the stack in 2025. Bosch is "H2-ready." It will become a household name not only for hydrogen engines, but also for hydrogen production. From the construction of the first stack, to installation in the electrolyzer, to the debut of the technology at the Hannover trade fair – for the Bosch project manager Christina Krick-Calderon, this means a lot of work, as well as quite a few premieres. Project stages on the path to ramp-up.

Click here for the full story

Making new out of old

Smartphones, tablets, laptops: more and more devices are being refurbished. But it's not only here that new is being made out of old. This approach is also used for machinery and industrial plant. Over the past 15 years, Bosch Rexroth has overhauled several hundred thousand controls, servo drives, and electronic parts for drives, generating sales revenue running into hundreds of millions. Thanks to remanufacturing, roughly 75 percent of parts can be reused, reducing the carbon footprint of products by more than 50 percent. Costs are also halved. Customers using remanufactured parts can save up to 50 percent compared with new products. The mechanical engineering company JYGA and the major animal-feed producer Normandise, both based in France, rely on this service from Bosch Rexroth.

Click here for the full story

Innovation, production, biker nation

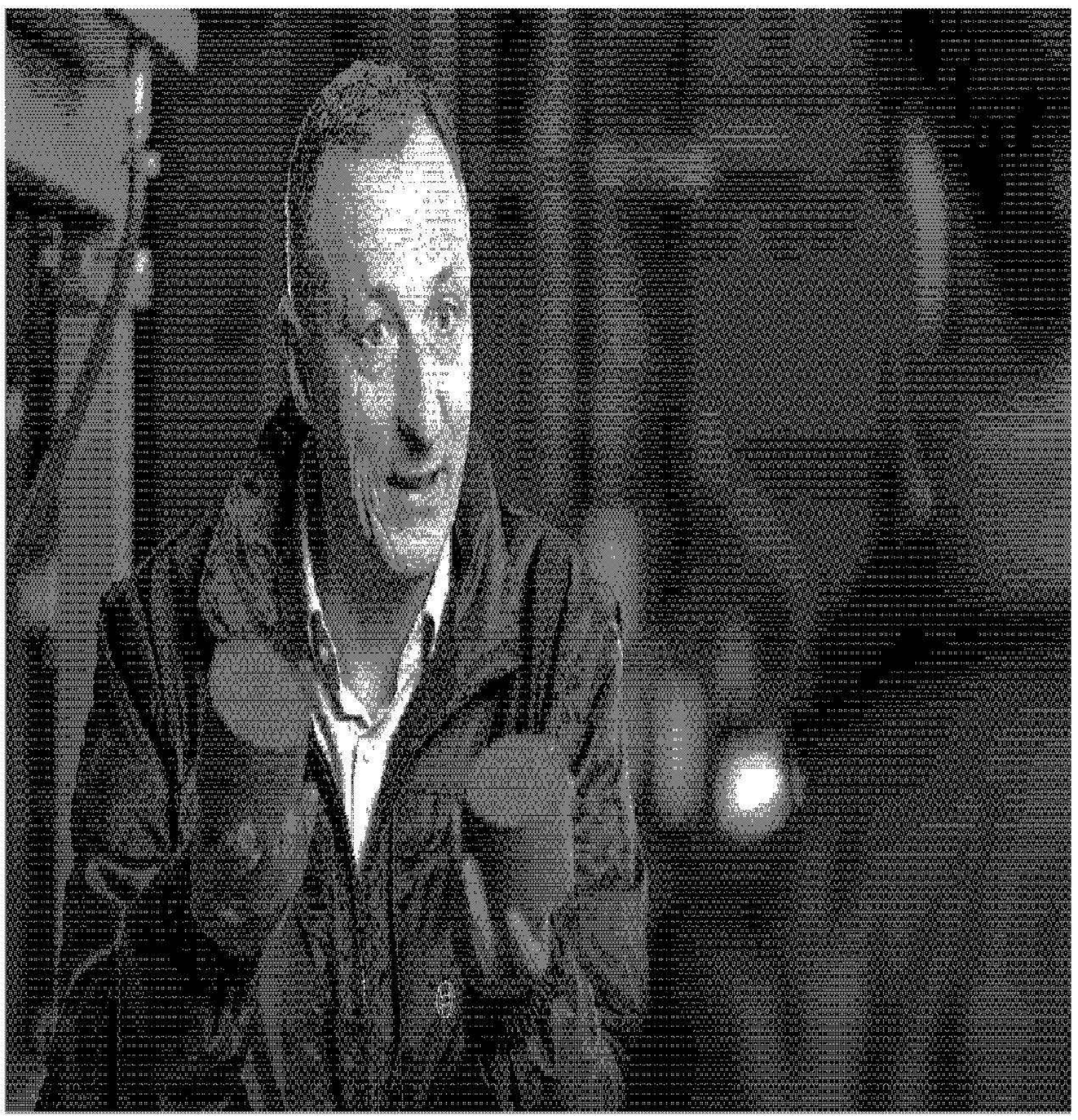
Visitors to Japan, the world's fourth-largest economy, are struck by its meticulousness, thirst for progress, and high tech. This island state is a trendsetter. It is the world's biggest robot manufacturer, and is home to the world's biggest automaker and biggest motorcycle producer. Modern production methods were invented here and copied the world over. Japan is a byword for innovation. Bosch and Japan go back a long way: Bosch has been present in the country since 1911. There, it develops solutions for mobility, industry, energy and buildings, and the home. In September 2024, Bosch opened a new national headquarters in Japan, which also serves as a research center. At 270 million euros, this is the biggest single investment in the 114-year history of Bosch in Japan. A visit to a country that combines tradition and modernity.

Click here for the full story

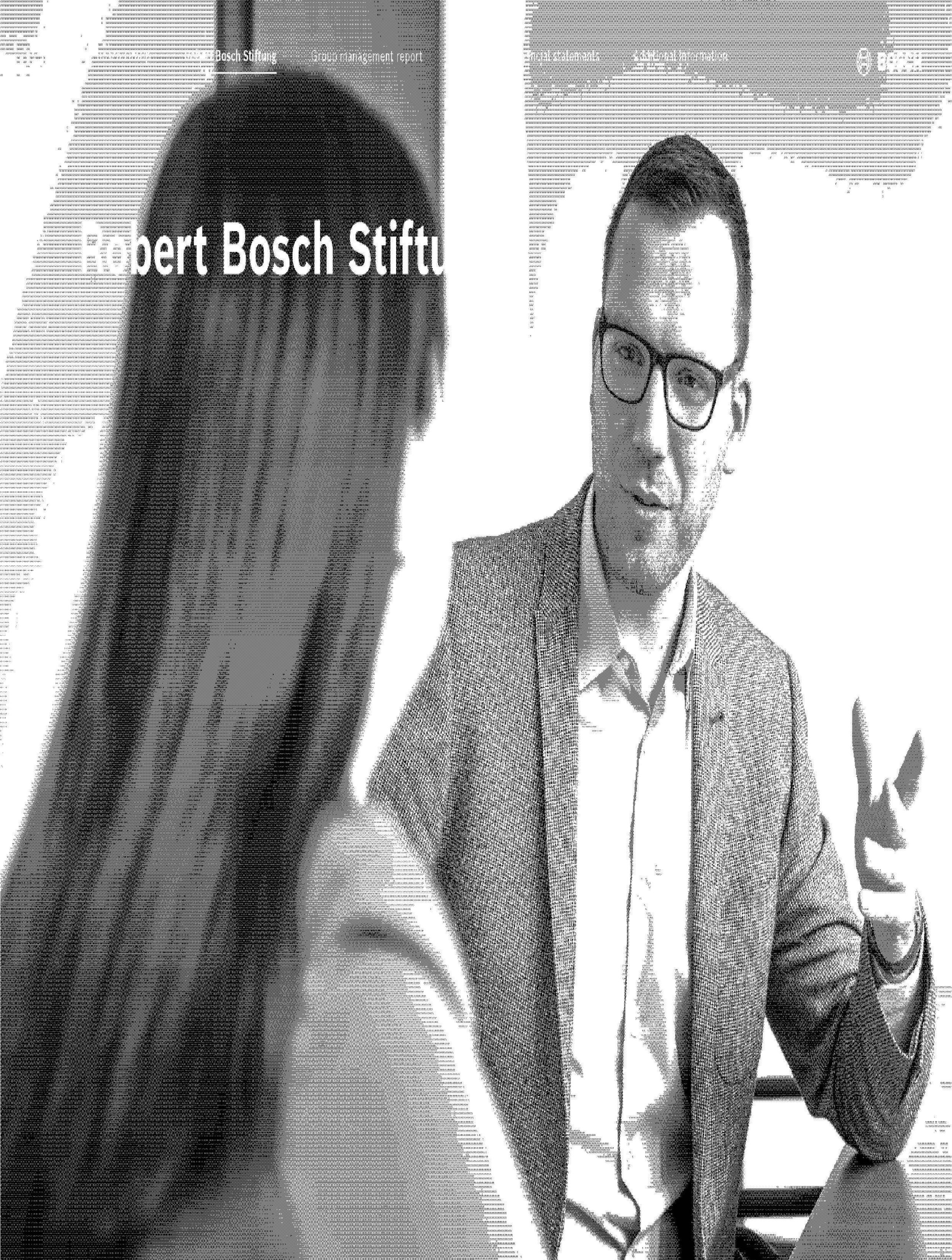
The raw materials cycle

At Bosch, carefully using scarce resources and reusing them wherever possible is a central aim of product development. The Power Tools division has set up a network in which recyclable materials are collected from plants and recycled in order to make new products. Carbide left over from its own manufacturing operations, for example, is used as a raw material for new power-tool accessories, such as drill bits and saw blades. In this way, the division reduces products' carbon footprint, decreases its dependence on critical metals, and cuts waste from plants. Economically and ecologically, the project is worthwhile. Some 20 Bosch plants have now joined the initiative, which began ten years ago at the Bosch Power Tools plant in Udine, Italy.

Click here for the full story



...bert Bosch Stiftu...



Since it was established in 1964, Robert Bosch Stiftung GmbH, a limited liability company with a charitable purpose, has been carrying on the company founder's public welfare endeavors. For 60 years, it has been making a contribution to a just and sustainable future with the funding it provides. It is non-profit, independent, and non-partisan. Its origins go back to the legacy of Robert Bosch. The entrepreneur and philanthropist formulated a dual mission of securing the company's future and continuing his social commitment. The Stiftung funds projects relating to global issues, health, and education, acting both locally and globally.

Global Issues

Promoting peace locally

In 2024, more people died in armed conflicts than in any year since 1994. In an age of increasing violence across the globe, the Stiftung considers how lasting peace can be built. "We have to involve the local populace," Dylan Matthews says. Matthews is CEO of the peacebuilding organization Peace Direct, which has received funding from Robert Bosch Stiftung since 2021. It calls its approach "local peacebuilding." The idea behind this is that conflicts are best solved by the people most affected by them. The organization works together with partners in 14 countries that are severely affected by conflicts, including Pakistan, Sudan, and Myanmar. Peace Direct works to give the local populace more political influence and access to important resources. It also provides opportunities for interaction with other groups. In all this, the aim is to empower local people to build peace themselves. Despite the growing number of global conflicts, Dylan Matthews is optimistic for the future. Even though he also finds the never-ending tide of negative posts on social media depressing, he firmly believes peace is possible – with the right mindset, pinpointed investment, and the necessary staying power. Robert Bosch Stiftung shares this conviction, which is why it supports many local peace initiatives such as this one.

Joint commitment to Ukraine

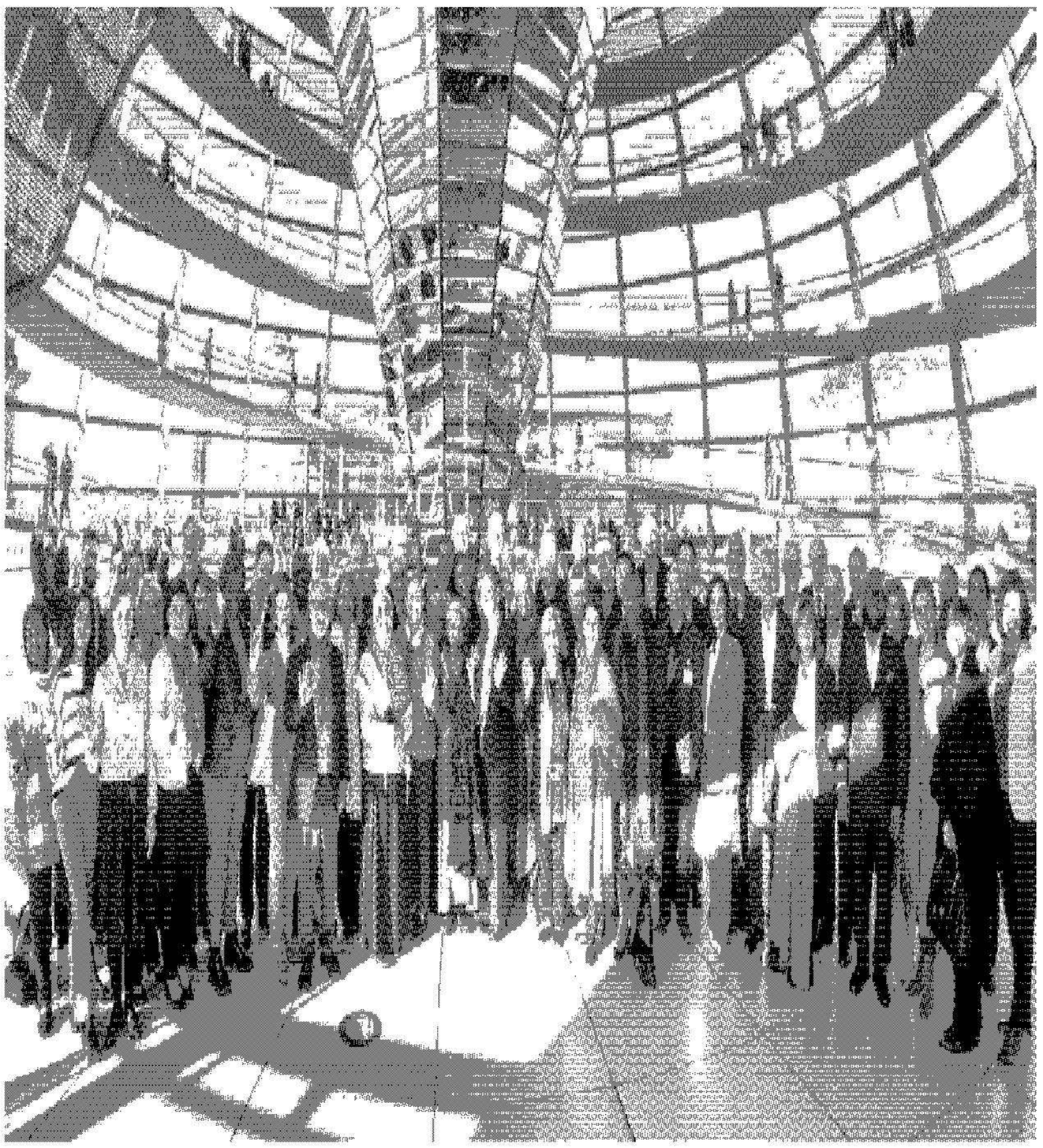
In 2024, Ukraine is one of the war zones that is again especially in the public eye, as well as a focus of our funding. The war there is also an attack on European values such as peace and stability – values that were central for the entrepreneur and philanthropist Robert Bosch. In mid-June, many heads of government, international organizations, and finance institutions gather for the Ukraine Recovery Conference in Berlin, Germany. Even on the eve of the conference, the atmosphere is electric. At the invitation of Robert Bosch Stiftung, 80 representatives of civic organizations have come together – united in their desire to strengthen Ukraine's civic society in order to shape the country's recovery. But they have serious concerns. "There is no money for humanitarian aid in 2025," the spokesperson of a Ukrainian NGO warns. International commitments are lacking, and uncertainty is growing. This prompts

Robert Bosch Stiftung to continue its support in the years ahead, and to focus more on strong networks and collaboration – as in the case of the "Foundations for Ukraine" initiative, which is initiated in 2024 together with the Charles Stewart Mott Foundation, one of the major U.S. foundations. Its aim is to bring together philanthropic organizations from around the world in order to better coordinate aid for Ukraine and make more purposeful use of funding.

Sparking global debate and injecting ideas

For the Robert Bosch Academy, or RBA, 2024 is a special year: its tenth anniversary. Since it was set up, the academy has admitted 118 fellows from 49 countries. It provides a forum for constructive exchange and interdisciplinary work on issues of global significance. In this way, the academy coalesces perspectives from all around the world in the German capital, and brings the world a little closer to Berlin. "Over the course of my political and academic career, I've attended many forums, but the Bosch Academy's work is truly unique," says Carlos Alvarado Quesada, an academy fellow and former president of Costa Rica. The academy brings together voices from different sectors and countries. Only through shared dialogue can the great challenges of our age be addressed. To mark its anniversary, the academy invites some 70 current and former fellows, as well as high-caliber guests from science, politics, and society to the 10th Richard von Weizsäcker Forum in Berlin.

Speaking at the ceremony, the former fellow and ex-president of the UN General Assembly, Maria Fernanda Espinosa, says: "The world needs more formats like this – more room for reflection and dialogue." The RBA has initiated numerous discussions, study trips, and op-eds in the press this year.



Welcoming the world to Berlin: at the 10th Richard von Weizsäcker Forum, the Robert Bosch Academy brings together fellows and high-caliber guests from science, politics, and society.

Their focus has been on the changing global order, the issues arising from multipolarity, and the role of non-governmental players.

Making parliaments more diverse

"In politics, people with a migrant background frequently have to overcome a burden of doubt," says Iftikhar Malik, a lawyer and member of the Hamburg parliament. Malik was born in Germany, and his parents come from Pakistan. Again and again, he has the irksome task of allaying misgivings: accusations of misogyny, for example, or of being undemocratic. He is not alone in this. The RepChance study commissioned by Robert Bosch Stiftung shows that people from a migrant background are still underrepresented in

German parliaments, and frequently encounter discrimination there. While more than one-quarter of the German population has a migrant background, they only make up 11.4 percent of the federal parliament, and just 7.3 percent of state parliaments. In the east German state parliaments, their share is just 1.5 percent. The authors of the study found that there is a lack of detailed knowledge about political processes, as well as of access to informal networks.

For the Bundestag representative Dr. Karamba Diaby, networks are an especially important way of opening doors and sparking enthusiasm for a career in politics among people with a migrant background.

It is precisely this that Malik wants to change, so that people with a migrant background can enter politics more easily. Since entering the Hamburg parliament, he has already offered nearly 60 internships to young people. "Many of them tell me that I have opened doors for them," Malik says. For the Stiftung, participation such as this is an important signal. There is clear evidence that the feeling of not being represented politically leads to mistrust and dissatisfaction with democracy.

Apart from Germany, the RepChance study analyzes the situation in the Netherlands, Switzerland, Spain, and the United Kingdom. The findings of this comparative study are to be published in early 2025.

Migrant workers' rights

Europe attracts migrant workers like no other region. Nearly one-quarter of the working population in northern, southern, and western Europe comes from outside Europe. They are the backbone of many industries: nursing, agriculture, meat-processing. But their living and working conditions are often appalling. Overdependence on employers, poor pay, unpaid overtime, inhuman working conditions – many migrant workers are barely able to defend themselves against exploitation. Irene Jagoba has experienced these precarious working conditions for herself. For many years, she had no residence permit, working hard but without security. But then she joined a high-profile campaign of the Migrant Rights Centre Ireland (MRCI), which works to protect the rights of workers with and without documentation. The campaign is a success. Looking back, she says that the campaign was a rollercoaster for her. There were ups and downs, but it was worthwhile: "It got 9,200 people a permanent residence permit," she proudly says. Jagoba is finally also granted documented status, and can be joined by her family.

The MRCI has been fighting for the rights of migrant workers for 15 years now, drawing public attention to grievances and giving people a voice. But this work doesn't stop at national borders. Through the PICUM network supported by the Stiftung, the center has also brought its concerns to the attention of EU policymakers – for a future in which fair working conditions are a matter of course for all.

The future of nursing

In certain industries and countries, a new career in a foreign country can mean not only an uncertain legal status but also other unexpected problems. Shibina Jose has experienced this for herself. Full of expectations, the 37-year-old nurse came from India to Germany in August 2023. Since then, she has been working in the St. Ludwig nursing home in Schwäbisch Gmünd. But starting out a new life isn't easy. The German language is an obstacle, and German culture and daily life are foreign.

She finds help with Sigrid Hegele. Now a pensioner, Hegele works as a mentor in the Bosch Health Campus's StaF (social inclusion of foreign nursing personnel) project. With her patience and experience, she helps Shibina Jose find her bearings in her new home – whether when learning German or filling out official forms. Sigrid Hegele is there to help Shibina Jose with any problems she encounters in daily life: How does public transport work? How do I use a library? How can I get involved in society, or find new personal interests? At ten locations in Germany, staff receive support through civic engagement and personal assistance during the integration process.

Through the StaF mentoring program, Sigrid Hegele and Shibina Jose became firm friends. They now meet up regularly.

Bosch Health Campus as a driver of innovation

Apart from cutting-edge research and patient-centered healthcare, pilot projects such as StaF are typical of the Bosch Health Campus. Through this campus, which includes the Robert Bosch Hospital, several research institutes, a training center, and the Robert Bosch Center for Innovative Health, the Stiftung aims to promote solutions that benefit people directly. What such solutions may look like is shown by the "Ideas for Impact Award," which is conferred for the first time in 2024. The winner is the "Stay@Home – Treat@Home" project, which uses innovative telehealth applications to monitor and treat people in need of care in their own homes. This frees up hospital beds and eases the burden on the health system.

Digitalization, technological innovation, and the breaking down of sectoral barriers open up completely new possibilities in treatment and care. To actively play a part in shaping this change, the Stiftung will be investing more than half a billion euros in the Bosch Health Campus over the next five years, with the aim of creating healthcare that is fit for the future.

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Education

Artificial intelligence in the classroom

Whether in medicine, GPS, or fridges, artificial intelligence (AI) is regarded as the new industrial revolution, and has already made inroads into many areas of our lives. But what about schools? "In the case of past technological developments, teachers could still choose whether to integrate them into their classrooms," says Christine Bywater, associate director of the Stanford Graduate School of Education's Center to Support Excellence in Teaching (CSET). But with AI, she says, the situation is different. It is already a part of children's and adolescents' daily lives.

Digitalization in the classroom: teachers learn how they can help their students use AI safely and confidently.

Bywater heads up the "M.E.T.A. – Maximizing Effective Teaching AI" program. Since September 2024, this train-the-trainer program involving Robert Bosch Stiftung and Stanford University has been instructing teacher-trainers how to deal with AI. The Stanford researchers' focus is on AI maturity: What do students need to know and understand in order to deal maturely with AI? What do teachers need to learn in order to pass on the necessary skills to their students? And what does this mean for teacher-trainers and school principals?

For a year, the Stanford experts will train the participants before they themselves train teachers in the use of AI. In this way, the Stiftung is helping to initiate meaningful changes in the education system and to improve the quality of teaching.

Teaching democracy in schools

It is not only structural challenges that schools have to react to. The increasing polarization of society also presents teachers with new challenges. And the classroom door is no barrier against fake news, hate, and exclusion. Susanne Gehlen is the principal of the Genoveva high school in Cologne, Germany. The days following the Hamas attack on Israel in October 2023 are still fresh in her memory. Her colleagues were unsure how these events should be dealt with at a school attended by many children and adolescents from a Muslim background. "There was a fear of conflicts that we, as teachers, might not be able to handle," Gehlen says.

With its *#IchStehAuf – Schulen für Demokratie und Vielfalt* (I stand up – schools for democracy and diversity) initiative, Robert Bosch Stiftung wants to allay this fear. Together with ARD, Germany's biggest public-service broadcaster, and the prestigious ZEIT publishing group, the Stiftung is helping teachers make democracy a subject in their lessons. More than 100 organizations are supporting this initiative, whose patron is the German Federal President Frank-Walter Steinmeier.

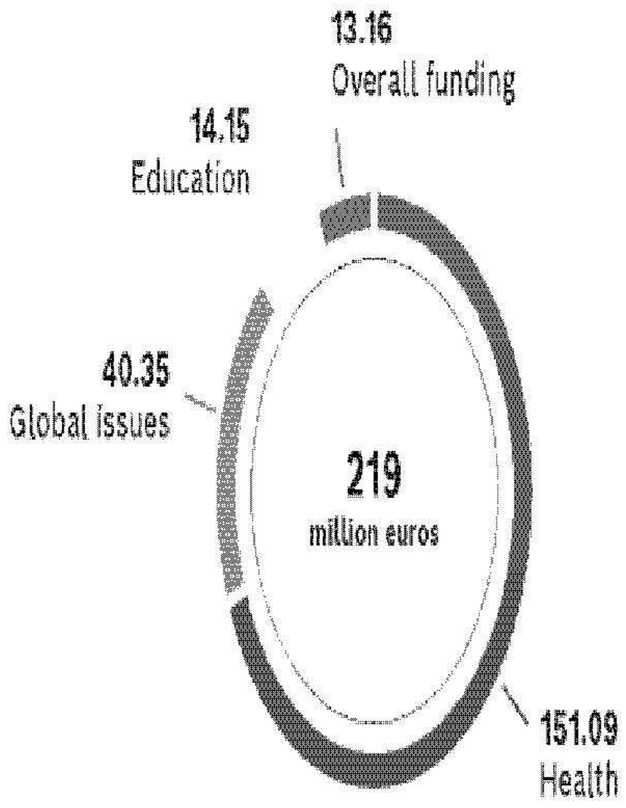
The initiative culminates in a nationwide day of action in June 2024, where more than 1,700 schools with over 300,000 students take a stand for democracy and diversity. In the years ahead, the Stiftung will further extend its funding to promote democracy education for students and teachers.

Summer 2024: under the **#IchStehAuf** motto, students from the Waldpark school in Heidelberg take a stand for democracy and diversity – together with more than 1,700 schools across Germany.

G 01

Total funding 2024

in millions of euros



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The Bosch Group continued to pursue its ambitious strategy of strengthening its global market position, even though conditions in 2024 slowed business developments and were even tougher than expected. One significant strategic step is the acquisition announced in the heating, ventilation, and air-conditioning technology business, which is intended to significantly expand our global presence and product portfolio in this segment. Global economic growth was again subdued. Above all, the Bosch Group's core markets failed to provide any stimuli. It was not only global vehicle production that fell. In addition, important technologies in which considerable upfront investments have been made, particularly in the mobility domain, have either yet to take off or are developing differently from region to region, and this is causing additional burdens. The situation was also especially challenging in the mechanical engineering market and the construction industry. Against this backdrop, it was not possible to realize our sales revenue and earnings expectations for 2024, which cannot be satisfactory for us. Sales revenue of the Bosch Group declined by 1.4 percent to 90.3 billion euros in nominal terms and by 0.5 percent after adjusting for exchange-rate effects. EBIT margin from operations comes to 3.5 percent, compared with 5.3 percent in the previous year. This decline was driven not only by market developments but also by additional structural measures. These measures, taken in light of the difficult business environment over the course of 2024, initially have a negative impact on result. The business sectors were affected to varying degrees. With the exception of Consumer Goods, all business sectors had to cope with declining sales revenue. However, all business sectors disclose a positive result for 2024.

The 2025 fiscal year will also be challenging, partly due to the uncertainties in global trade and economic relations. The aim is to grow Bosch Group sales revenue in the range of at least 1 to 3 percent and to improve the margin from operations. Our forecasts do not yet include the effects of the portfolio changes resulting from the planned acquisition in the heating, ventilation, and air-conditioning business and from the divestment of major parts of the Building Technologies division's product business. These transactions are expected to be completed in the course of 2025, subject to the necessary regulatory approvals. Extensive measures will also help increase competitiveness in 2025. Some of the planned structural adjustments will not have an impact on result until the 2026 fiscal year. Despite these burdens, we are committed to continuing our ambitious long-term growth strategy.

Fundamental information about the group

The group and organization

The Bosch Group is a global supplier of technology and services. It generates just under half its sales revenue outside Europe. The group encompasses around 490 fully consolidated subsidiaries and regional companies in more than 60 countries. The parent company is Robert Bosch GmbH, which is domiciled in Stuttgart, Germany. It started out as "Workshop for Precision Mechanics and Electrical Engineering," founded in Stuttgart in 1886 by Robert Bosch (1861–1942). Robert Bosch Stiftung GmbH has been the majority shareholder in Robert Bosch GmbH since 1964.

Despite holding roughly 94 percent of the share capital, this limited liability company with a charitable purpose has no influence on the strategic or business orientation of the Bosch Group. A further roughly 5 percent of the share capital is held by the not-for-profit ERBO II GmbH, established by the founder's descendants, and some 1 percent by Robert Bosch GmbH itself. Of the voting rights, some 93 percent are held by Robert Bosch Industrietreuhand KG, which itself holds a capital share of 0.01 percent. The approximately 7 percent of voting rights remaining are held by the founder's descendants. This ownership structure guarantees the Bosch Group's entrepreneurial independence.

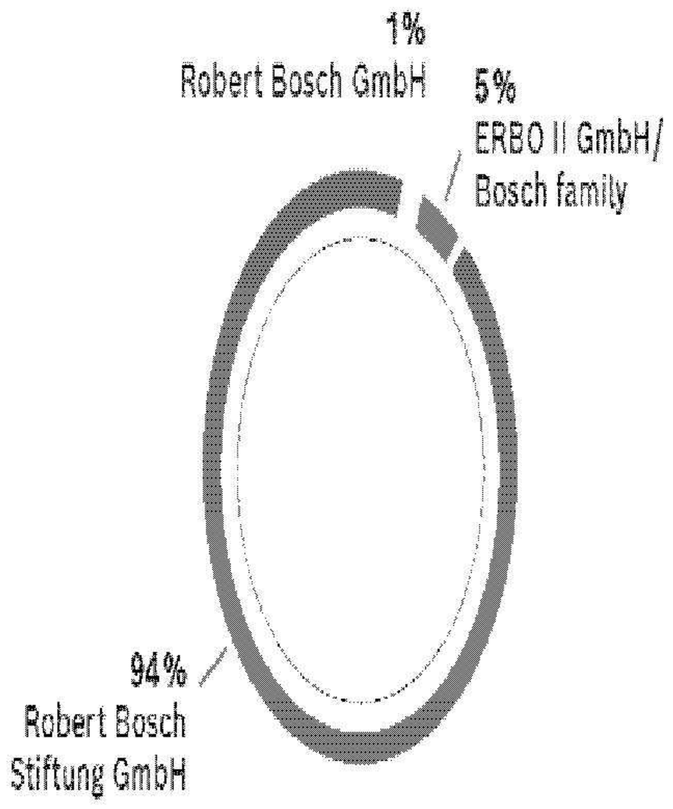
With a workforce of more than 417,850 associates worldwide at year-end 2024, the Bosch Group is divided into four business sectors: Mobility, Industrial Technology, Consumer Goods, and Energy and Building Technology. Reporting is segmented in the same way.

G 02

Shareholders of Robert Bosch GmbH

Shareholding

Percentage figures



G 03

Shareholders of Robert Bosch GmbH

Voting rights

Percentage figures

Corporate governance

The members of the board of management of Robert Bosch GmbH define the strategy for the entire company and lead the company as a whole. In the 2024 fiscal year, the board of management comprised eight members. Effective February 1, 2024, Frank Meyer became the seventh member of the board of management. He assumed responsibility for the Energy and Building Technology business sector's Building Technologies and Home Comfort divisions. Katja von Raven was appointed the eighth member of the board of management effective October 1, 2024. She is responsible for the Power Tools division in the Consumer Goods business sector and the Bosch Global Service Solutions division in the Energy and Building Technology business sector.

The Robert Bosch GmbH supervisory board appoints, monitors, and advises the board of management. In making appointments to the supervisory board, Robert Bosch GmbH is subject to the German "Mitbestimmungsgesetz" (Codetermination Act). In view of the company's size, the supervisory board has 20 members. Ten members are appointed by the shareholders with voting rights; the other ten members are elected by the employee representatives. Robert Bosch Industrietreuhand KG acts as a shareholder. In line with the mission handed down in the will of the company's founder, Robert Bosch, it is responsible for safeguarding the company's long-term existence and in particular its financial independence. The latter is intended to guarantee that the company remains entrepreneurially independent and able to act at all times.

Under German law, the supervisory board of a company subject to codetermination must set targets for the proportion of women in management positions. In December 2021, the supervisory board of Robert Bosch GmbH set such targets for Robert Bosch GmbH. These targets, which are to be met by the end of 2025, are 30.0 percent on the supervisory board and 16.67 percent on the board of management of Robert Bosch GmbH. As of December 31, 2024, the proportion of women on the supervisory board was 30.0 percent. On the board of management of Robert Bosch GmbH, the proportion of women was 25 percent as of December 31, 2024. This means both boards met their respective targets in 2024.

In December 2021, the board of management of Robert Bosch GmbH adopted specific targets for the proportion of women on the two management levels below the board of management. These targets apply to Robert Bosch GmbH in Germany. They are 10.0 percent for the proportion of women on the first management level and 17.0 percent on the second management level. The deadline for achieving both targets was set for December 31, 2025. At the end of 2024, the proportion had reached 12.8 percent on the first management level (previous year: 10.4 percent) and 15.7 percent on the second management level (previous year: 15.4 percent).

In addition, subsidiaries in Germany that are subject to statutory codetermination set their own targets for the proportion of women on their respective supervisory boards, management bodies, and first two management levels, as well as deadlines for achieving them. Globally, the share of women executives across all management levels within the group rose to 20.4 percent in 2024 (previous year: 20.0 percent). We intend to continue to increase this percentage. At present, our aim is 25.0 percent, which we intend to reach by 2030.

Description of business sectors

G 04

Business sectors and divisions, other businesses

Mobility	Industrial Technology	Consumer Goods	Energy and Building Technology
Bosch eBike Systems	Drive and Control Technology (Bosch Rexroth)	Power Tools	Building Technologies
Electrified Motion		BSH Hausgeräte	Home Comfort
Mobility Aftermarket			Bosch Global Service Solutions
Mobility Electronics			
Power Solutions			
Vehicle Motion			
Cross-Domain Computing Solutions			

Other businesses in the Mobility business sector
Bosch Engineering GmbH
ETAS GmbH
Two-Wheeler and Powersports

Mobility business sector

Following the reorganization that took effect on January 1, 2024, the Mobility business sector focuses on collaboration across the company's divisions that is adapted to market requirements, with the aim of being a preferred partner for vehicle systems, software, and hardware.

Bosch eBike Systems

Bosch eBike Systems offers a comprehensive portfolio for manufacturers, specialist dealers, and riders of e-bikes. This portfolio comprises drives, batteries, and on-board computers. The coordinated product range also includes various versions of the Bosch e-bike ABS antilock braking system. To connect e-bikes with the online world, the division integrates AI-based solutions for improved navigation, route planning, and anti-theft protection. It provides specialist dealers and riders with customized services such as training, diagnostic tools, and software updates.

Electrified Motion

Electrified Motion offers electrical powertrain solutions for passenger cars and commercial vehicles. The product portfolio includes power electronics and electric motors, and, as a combination of these two components with the transmission in a compact system housing, complete e-axles. In addition, the division offers electromechanical components and drives for e-bikes and e-scooters, for thermal management, and for wiper and steering/braking systems. The product range also includes drive systems for convenience features such as window lifters, seat adjustment mechanisms, and sunroofs.

Mobility Aftermarket

The automotive spare parts market is Mobility Aftermarket's main area of business, where it serves the aftermarket and workshops. The range of spare parts includes components for diesel, gasoline, and electrical powertrains, brake pads and discs, batteries, as well as wiper blades, filters, and spark plugs. In addition to wiper blades, Mobility Aftermarket also supplies automakers with wiper systems for the original equipment business. The division offers workshops assistance with vehicle repairs and maintenance, including diagnostic equipment and software as well as test benches and special tools. The range of services includes training, remote diagnostics, and digital catalogs. In addition, Mobility Aftermarket is responsible for the concept behind two independent workshop franchises: Bosch Car Service and AutoCrew.

Mobility Electronics

Mobility Electronics comprises the business with electronic control units as well as semiconductors and sensors. The division develops, commercializes, and manufactures these for in-house partners. It is also a semiconductor supplier for third parties in the mobility and consumer goods industries. Bosch-manufactured semiconductor components include application-specific integrated circuits (ASICs), microelectromechanical systems (MEMS sensors), and power semiconductors (silicon-carbide power semiconductors and low-voltage switches). Bosch Sensortec GmbH, Kusterdingen, Germany, develops and sells a broad portfolio of MEMS sensors and solutions in the field of consumer electronics.

Power Solutions

The Power Solutions division's portfolio focuses on combustion engines, the hydrogen economy, and thermal systems, as well as on software, services, and control units. Depending on the type of fuel, it manufactures components such as injectors, pumps, ignition systems, and injection systems, as well as transmissions, sensors, exhaust-gas treatment systems, and 48-volt batteries. For the hydrogen economy, Power Solutions offers components, systems, and services

for mobile and stationary applications such as fuel cells and electrolysis stacks. For thermal systems in passenger cars and light commercial vehicles with different types of powertrain, the core business is the production of components for water-, coolant-, and air-based thermal circuits. The division's portfolio also includes control units, software, and services for all powertrain types as well as for hydrogen and thermal systems. Power Solutions also develops engine control units and exhaust-gas treatment solutions.

Vehicle Motion

The Vehicle Motion division develops and produces steering and braking systems, sensors, software-based and cross-domain vehicle dynamics control systems, service solutions, and occupant protection systems. In the steering business, Vehicle Motion offers various electric steering systems for passenger cars as well as hydraulic and electrohydraulic steering systems for heavy trucks. The braking systems portfolio includes braking control systems such as the ABS antilock braking system and the ESP® electronic stability program. ESP® can be combined with vacuum-based and electromechanical brake boosters and – depending on the braking system – integrated into a single piece of hardware. In the case of act-by-wire technology, electrical signal lines replace mechanical connections in the steering and braking system. In addition, a software systems solution integrating the brakes, steering, powertrain, and chassis helps make software-defined vehicles possible. The portfolio also includes occupant protection systems such as airbag control units and sensors for impact detection as well as vehicle dynamics sensors.

Cross-Domain Computing Solutions

Cross-Domain Computing Solutions brings together the cross-application development of control units and network components (Compute business) with driver assistance systems and automated driving (ADAS (advanced driver assistance systems) business). The Compute portfolio includes solutions for the integration of entertainment, navigation, telematics, and driver assistance functions. There are also solutions for cross-domain and centralized electric/electronic architectures. The ADAS portfolio includes functions for visualizing the vehicle's surroundings as well as assistance systems. In addition, it develops sensors with an integrated control unit and embedded software as well as pure hardware sensors for indoor and outdoor use such as camera, radar, and ultrasonic sensors.

Other businesses

The **Bosch Engineering GmbH** subsidiary in Abstatt, Germany, offers customized software development and engineering services for a wide range of customers, also from outside the automotive sector. Its tailored solutions are essentially based on Bosch platforms and products. Bosch's motor racing activities are also based at Bosch Engineering.

ETAS GmbH, based in Stuttgart, Germany, develops and distributes products and solutions for the development and operation of software platforms for the software-defined vehicle. In addition to basic software, this includes solutions for measurement and calibration, as well as middleware and solutions for diagnostics and cybersecurity.

The **Two-Wheeler and Powersports** business unit's portfolio includes safety and assistance systems, displays, connectivity functions, control units, and components for both combustion engines and electric motors for two-wheelers, three-wheelers, and powersports vehicles.

Industrial Technology business sector

The Industrial Technology business sector comprises the Drive and Control Technology division (Bosch Rexroth), other activities in the field of special-purpose mechanical engineering, and Industry 4.0 software solutions and services.

Drive and Control Technology

Bosch Rexroth AG specializes in drive and control technologies for machines and systems of any type and size. Its application expertise covers various market segments worldwide. The division's portfolio includes mobile and stationary hydraulics, electric drive and control technology, and linear motion and assembly technology for factory automation. With intelligent components, customized systems solutions, and services, Bosch Rexroth creates the environment that applications need for full connectivity.

Consumer Goods business sector

The Consumer Goods business sector comprises the Power Tools and BSH Hausgeräte divisions.

Power Tools

This division's extensive product range serves both professional users in trade and industry and do-it-yourselfers. It offers power tools (such as hammer drills, cordless screwdrivers, jigsaws), garden tools (such as lawn mowers, hedge trimmers, high-pressure cleaners), measuring technology (such as measuring, leveling, locating, and thermal devices), and power tool accessories (such as abrasive systems, drill bits, and saw blades). These are marketed not only under the Bosch brand but also under the Diablo, sia abrasives, and Freud brands. Precision rotary tools for DIY applications are also sold under the Dremel brand.

BSH Hausgeräte

The BSH Hausgeräte product portfolio ranges from washing machines and tumble dryers through refrigerators and freezers, stoves and ovens, and dishwashers, to small appliances such as vacuum cleaners, automatic coffee makers, and food processors. The division brings together the global Bosch, Siemens (under license), and Gaggenau brands. BSH also uses regional and local brands such as Balay, Neff, Profilo, and Thermador. There is also the Home Connect ecosystem brand and service brands including WeWash and BlueMovement.

Energy and Building Technology business sector

The Energy and Building Technology business sector comprises the Building Technologies, Home Comfort, and Bosch Global Service Solutions divisions.

Building Technologies

The Building Technologies division specializes in the regional systems integration business, offering solutions and customized services for building security, energy efficiency, and building automation in selected countries. The focus is on commercial buildings and infrastructure projects. The portfolio also includes fire-alarm systems. Agreements for the divestment of the division's remaining product business, which had already been planned in 2023, were signed at the end of 2024.

Home Comfort

Home Comfort offers its customers a wide range of solutions for heating, cooling, and well-being in buildings. The portfolio includes electric heat pumps and heat pump-hybrid solutions, condensing boiler technology, water heaters, air-conditioning systems, and ventilation technology for residential and commercial buildings, as well as systems for process heat. Within a partner network of installers, architects, planners, and wholesalers, Home Comfort markets its solutions under international and regional brands such as Bosch, Buderus, IVT, Vulcano, and Worcester. We are also preparing for the integration of the acquisition announced in the heating, ventilation, and air-conditioning business.

Bosch Global Service Solutions

The Bosch Global Service Solutions division focuses on technology-based services for customers in the areas of mobility (such as emergency call services for cars), fleet management (such as allocating parking spaces for trucks), logistics (such as cold-chain monitoring), and building management (such as emergency call services for lifts). The division also offers customer experience solutions (such as customer support) and business services (such as IT service desks) across all industries, as well as within the Bosch Group.

Prospects for the Bosch Group

Group-wide topics

Fundamental strategic orientation

The group's fundamental orientation, objectives, and strategy remain valid despite major challenges and the adjustments resulting from them. For a broadly diversified technology company like Bosch, considerable opportunities are emerging from universal trends such as electrification, electronification, automation, digitalization, and sustainability, as well as from the further expansion of its international footprint. We have therefore aligned our overall strategy with these circumstances. The starting point for our goals and strategy is the objective of securing the company's future, as enshrined in the will of the company's founder Robert Bosch. In other words, the objective is to ensure the company's strong and meaningful development and secure its financial independence. One further important point is sustainability. Our long-term ambition is to continue offering products that are "Invented for life" – products that fascinate, that improve quality of life, and that help conserve natural resources. In this respect, "products" are not only physical products and services, but also software-based solutions and services. By digitalizing our products, we are giving them additional qualities in order to enhance customer benefit. Through connectivity, we also want to generate additional software and service sales and increase the efficiency of our processes.

We aim to position the Bosch Group as a leading technology company. We want this aspiration to be reflected in our financial targets as well. With regard to sales, our aim is average annual growth of 6 to 8 percent between now and 2030, given normal inflation rates of 2 to 3 percent. In this context, we take our lead from the European Central Bank's medium-term inflation target of 2 percent. A further strategic goal is to achieve stronger growth in markets such as China, India, ASEAN, and Africa, but especially also in North America. In Europe, we want to develop our market position further. Especially in light of geopolitical changes, a broad regional presence is intended to contribute to the group's robustness and secure market opportunities. In some cases, our regional orientation is to be strengthened.

We intend to grow primarily by innovating and by opening up these new markets, as well as by acquiring companies and entering into partnerships. In our existing businesses, we aim to achieve an overall EBIT margin from operations of at least 7 to 7.5 percent. The opening-up of high-margin areas of business, both adjacent and new, is intended to further increase this margin.

As a rule, we are committed to our broad diversification. However, we are stepping up our efforts to strengthen our profitability and our company's overall competitiveness. The focus is on improving cost efficiency and on extensive measures to adapt structures to changing requirements, on intensifying portfolio management, on increasing productivity in research and development, and on strengthening business in selected regions. In 2024, we announced a raft of additional structural adjustments that we want to implement in the years ahead. These will affect all business sectors and regions. One key example of portfolio streamlining is the intended sale of the Building Technologies division's product business for security and communication technology (Energy and Building Technology business sector) to funds advised by Triton Investments Advisers LLP, United Kingdom.

Ample opportunities

For the Bosch Group, there are considerable growth opportunities in both existing areas of business as well as adjacent and new ones. Our strategy is oriented to this. The fundamental condition for entering new fields of business is that the activities in question be compatible with our own skills and expertise. Specifically, these are commercialization and high-quality volume production, broad domain and industry knowledge, as well as technological expertise, also in complex and intelligent systems such as electronic and electromechanical systems with embedded software. Future developments will continue to be driven by the trends of digitalization, connectivity, electrification and electronification, automation, emerging markets, and sustainability, which we address with our "Invented for life" ethos. We expect technological developments in the field of generative AI (GenAI) to have an impact on our divisions' activities. Our focus here is twofold: productivity and growth. We believe artificial intelligence has the potential to improve productivity and achieve cost savings, and thus to increase competitiveness. Other aspects include additional customer benefit and sustainability. The newly established GenAI Center of Excellence will act as a catalyst to support the organization in the systematic use of this new technology.

We are prepared to make considerable upfront financial investments in order to participate in and help shape these trends. Apart from these general trends, the business sectors' markets and competitive environments vary, in some cases considerably so. In all areas, however, we face intense competition.

Electrification is of particular importance for Mobility, our biggest business sector. Despite regional differences in the speed of developments, emissions standards aimed at complying with climate targets and improving urban air quality will reinforce the trend toward electromobility over the medium to long term. In our Industrial Technology business sector, the new solutions arising from the convergence of electrical and hydraulic systems are presenting us with opportunities. In building technology, especially in heating and air-conditioning, the use of heat pumps and renewables is becoming increasingly prominent, and this is leading to market opportunities.

In addition to its significance for the Industrial Technology and Energy and Building Technology business sectors, automation – in the shape of partially and highly automated driving – especially affects the Mobility business sector. Especially in partially automated driving, we expect continued strong market growth. Where industrial technology is concerned, ample opportunities are arising from the increasing flexibility and connectivity of manufacturing operations. This offers new ways of enhancing product quality and productivity, adding functionality, and improving energy efficiency. In the Consumer Goods and Energy and Building Technology business sectors as well, new services arising from connectivity and increasingly smart products, such as app-based control, are creating additional potential for growth.

In view of our expertise in many product segments and our know-how in software and sensor technology, we see huge potential for the development of Bosch's business operations over the long term, also attuned to differing customer needs in different regions. We are also relying on our proficiency in the areas of connectivity and artificial intelligence, which we view as fundamental for the design of intelligent and user-friendly products, services, and processes. In general, we believe that sustainably manufactured products offer prospects for future market success. We want to further expand our presence in sales and manufacturing operations in the emerging markets of Asia, South America, central and eastern Europe, and Africa.

A key example of the opportunities – and hence of our growth ambitions – in our existing and adjacent businesses is the announced acquisition of the U.S. company Johnson Controls' worldwide heating, ventilation, and air-conditioning business for residential and light commercial buildings. In taking this strategic step, we want not only to significantly expand our position in the North American and Asian markets, but also to strengthen our technological position in the field of air-conditioning. The practical implementation of our strategy continues to be based on our high level of innovativeness – also in relation to our research and development expenditure – on quality, on our broad diversification and regional footprint, and on the Bosch corporate culture.

Further growth areas include semiconductors and the hydrogen economy, whether in mobile fuel cells or electrolysis. To make the upfront investments here manageable, we are also seeking partnerships in these areas. Partnerships in the area of medical technology are intended to enable further innovations and make access to new markets easier for Bosch Healthcare Solutions GmbH, based in Waiblingen, Germany, which supplies the medical technology market with sensors, software, and services. Robert Bosch Venture Capital GmbH, based in Gerlingen, Germany, invests in start-ups outside the company, while Bosch Business Innovations GmbH (formerly grow platform GmbH), based in Ludwigsburg, Germany, fosters in-house startups.

Sustainability

Sustainability is an important part of the Bosch values, which form the basis of our actions. To give you some examples, measures include: (1) Future and result focus, (2) Initiative and determination, (3) Openness and trust, (4) Reliability, credibility, legality, (5) Fairness and respect, (6) Diversity, equity, inclusion, and (7) Responsibility and sustainability.

For Bosch, sustainability is the balance between the economic, ecological, and social elements of our business activities as part of responsible corporate governance. The highest specialist body for sustainability at Bosch is the corporate sustainability board, which is headed up by the chairman of the board of management and the member of the board of management responsible for sustainability. The board's main task is to define the Bosch Group's sustainability goals and strategy.

Bosch's overall objective for sustainability covers six strategic themes: Climate action, water, circular economy, people, human rights, and health. In the programs based on them, we are increasingly going beyond our direct sphere of influence to include supply chains and use of products sold. With its more than 450 locations worldwide, the Bosch Group has been carbon-neutral overall since 2020 – both in scope 1 (direct emissions) and scope 2 (indirect emissions from procured power). We achieve carbon neutrality by applying four levers: increasing energy efficiency, generating our own

energy from renewable sources (new clean power), purchasing electricity from renewable sources (green electricity), and – as a last resort – offsetting the remaining CO_2 emissions. In 2024, residual emissions of roughly 531,300 metric tons of CO_2 were offset through carbon credits. The terms "scope 1, 2, 3" (scope 3: upstream and downstream emissions in the value chain) are used in accordance with the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard. Our goal is to continuously improve the above-mentioned mix of measures so as to further reduce our impact on the climate. In 2024, we achieved this primarily by further decarbonizing our energy supply and increasing energy efficiency at our locations.

We want to shape climate action beyond our immediate sphere of influence (scopes 1 and 2) and systematically reduce upstream and downstream emissions (scope 3) as well. In 2024, we decided to raise our scope 3 reduction target to 30 percent in absolute terms (compared to the baseline year of 2018). This target was set independently of 2030 sales revenue. As the company grows in the future, in other words, the reduction amount will increase in absolute terms. Upstream emissions in the Bosch value chain relate mainly to purchased goods and services as well as logistics, while downstream emissions arise mostly from the use of our products.

Bosch takes its lead from the United Nations Guiding Principles on Business and Human Rights. It also implements the requirements of the German Supply Chain Act ("Lieferkettensorgfaltspflichtengesetz"), which came into effect in 2023. The risk management system that we have set up to ensure that our human rights and environmental due diligence obligations are upheld applies both to our own actions and to those of our suppliers. Bosch also places great importance on occupational safety. We regard preventing accidents and ensuring workplace safety as part of our responsibility. By 2025, we want to reduce the number of workplace accidents to 1.45 per 1 million hours worked. Bosch is also preparing for the EU taxonomy for classifying products and services according to their sustainability, as well as for the increased scope of sustainability reporting obligations (EU Corporate Sustainability Reporting Directive).

Competitive environment and strategy

Mobility

Fundamental positioning

Our vision is to shape a new era of mobility – mobility that is sustainable, safe, and exciting. We aim to maintain our role as automakers' go-to partner for automotive systems and the associated hardware and software, and to become a leading provider of technology for the business of developing components, software, and systems – from operation through to the end of service life. We operate around the world. As a result of divergent customer requirements and regional differences in regulations and infrastructure, it is becoming clear that new technologies are becoming established at different speeds, particularly in the areas of electromobility, hydrogen, software-defined vehicles, and automated driving. With regard to our regional positioning, our strategic considerations also take account of political developments and economic trends toward greater emphasis of regional interests, which may require operations to become more localized.

Our ambitions are based on our expertise relating to the interaction between software and hardware, as well as to vehicle-specific subjects such as powertrain technology, vehicle dynamics, and safety. They are also based on our generally high level of electronics expertise. Our activities in software and services also play an important role. Customer needs are changing ever more quickly, and sometimes differ; our aim is to serve those needs with customized technologies and solutions from a single source. This is why one of our strategic focal points for 2024 was the realignment of the Mobility business sector as an integrated business sector with its own management team and P&L responsibility across its business areas. The business sector is organized along horizontal and vertical domains in order to simplify collaboration in areas such as electrification, vehicle dynamics, driver assistance systems, vehicle computers, and software. At the beginning of 2025, in order to be able to address all customers' requirements, we also brought together our commercial-vehicle and off-highway applications business in the Power Solutions division. The products we offer here are developed together with the other Mobility divisions.

Our goals and our strategy have to be seen in the context of market developments and future market prospects. Global vehicle production, including heavy commercial vehicles, is significantly below its 2017 peak of around 99 million units. The result is overcapacity in the global automotive industry. It remains our assumption that 2017 production levels will not be regained before the end of the present decade at the earliest. The Chinese market is becoming an important driver of growth and innovation in technologies of the future, such as electromobility, software-defined vehicles, and automated driving, as well as hydrogen. In this context, Chinese manufacturers and suppliers are growing in prominence. In contrast, these technologies are taking longer than previously expected to become established in the European and North American markets. The sluggish development of electromobility is also acting as a brake on the market launch of platforms featuring new electric/electronic architectures, and this in turn is affecting areas such as driver assistance systems and automated driving. In areas of future importance for the automotive sector, we are also encountering new providers and competitors from other industries, such as software and semiconductors.

In the Mobility business sector, our target is to achieve average annual sales revenue growth of 5 percent by 2030. In other words, we have lowered our growth target by around 1 percentage point due to the growth expectations for global vehicle production. We have also taken into account the expected shifts in future technologies. Nonetheless, we believe our international presence offers our company attractive prospects. We are aiming for a higher share of vehicle-related value creation, given the greater role that features such as electronics will play. We see growth opportunities in the areas of battery-electric vehicles and mobile fuel cells, software-defined vehicles, driver assistance systems, vehicle dynamics, and semiconductors. However, other important activities such as the aftermarket and e-bike businesses also offer long-term opportunities. Our aim is also to improve EBIT margin from operations while maintaining a high level of upfront investments and taking the necessary adjustment measures.

To achieve these targets, we are working on a range of measures. These are intended to strengthen our competitiveness through cost and capital efficiency, and to systematically align our portfolio with future changes in the market and competitive environment. Our far-reaching measures relate to areas such as purchasing, our global manufacturing network, administration, and sales. They are also concerned with improving productivity and efficiency in research, development, and product management. We also expect artificial intelligence methods to become increasingly important along the entire value chain and to play a part in increasing effectiveness and efficiency, also in development, production, and customer services. Examples include AI-assisted software development through the use of AI-based programming tools and the use of AI-assisted engineering and scaling for automatic optical inspection in production-related quality assurance.

With a view to competitiveness, the phasing out of combustion engine technology in key markets, the necessary restructuring of steering systems, and adjusted market expectations for technologies of the future such as electromobility and automated driving, we announced a series of structural adjustments in 2024, primarily at European locations. We are also continuing to focus our product portfolio, for example by discontinuing our automated valet parking activities and charging services. Moreover, in 2024 we sold our shareholdings in Buderus Guss GmbH and Robert Bosch Lollar Guss GmbH. They were part of our brake disc activities and were acquired by the AEQUITA SE & Co. KGaA private equity fund, Munich, Germany.

Outlook for powertrain technology

As a company, we are committed to the ambitious Paris climate targets. In line with these targets, we continue to pursue all technology paths and offer our customers a broad portfolio. With the overall aim of contributing to low-carbon mobility, we are continuously working to improve our existing technologies and develop new ones. Our innovations are aimed at further reducing emissions from combustion engines. We are also working intensively to develop components and systems for battery-electric vehicles, hybrid vehicles, and mobile fuel cells. For passenger cars and light trucks, our fundamental expectation is that the long-term trend toward battery-electric vehicles will continue. However, this trend is faltering in Europe and North America; the leading market is China. At the same time, there is an increasing trend toward hybrid vehicles. Range-extender hybrids are now playing a growing role in China. These are battery-electric vehicles whose battery is also recharged by an alternator that is driven by a combustion engine.

It is not only in battery-electric vehicles that electric machines and inverters can be used. They are also fundamentally suitable for vehicles powered by fuel cells. Moreover, for the fuel-cell powertrain, which we believe will primarily be used in commercial vehicles, we also offer a comprehensive portfolio ranging from individual components to stacks (combinations of fuel cells that are connected with each other electrically) and entire fuel-cell systems. The ramp-up of fuel-cell technology therefore depends heavily on the expansion of hydrogen infrastructure, and thus also on government policy. In the case of fuel cells as well, the Chinese market is playing a leading role, so we are initially focusing on this market and pooling activities in China and Germany. We also see opportunities in components and systems for the pure hydrogen engine, and we are preparing these for market entry.

In addition, we are looking into polymer electrolyte membrane (PEM) electrolysis and investing in the development of the associated components. Electrolysis uses electricity to split water into hydrogen and oxygen, thereby producing hydrogen. We are preparing to enter the market here. However, market developments are heavily dependent on the policy framework. In February 2025, we decided to discontinue our operations relating to the industrialization and preparation for production of decentralized power supply systems based on solid-oxide fuel cells (SOFC).

Software-defined vehicles

Software-defined vehicles, in which the software can be updated and optimized within the limits of the hardware during the vehicle's life cycle, require a new centralized software and electric/electronic architecture. Even today's compact-class vehicles feature 30 to 50 individual control units, and premium vehicles may feature more than 100. In the future, it will be possible to reduce the number of control units by replacing them with powerful central vehicle computers for the various vehicle domains, such as powertrain, cockpit, and infotainment functions. Until the end of the decade, the initial focus is likely to be on domain-centered architectures and not, as was once expected, on vehicle-centered architectures. We see this as a growth market for us. We are developing a universal software and electric/electronic architecture for the entire vehicle and increasingly offering hardware-agnostic software that runs on chips from different manufacturers. For future vehicle software architectures, moreover, we must adapt to automakers' different approaches and position ourselves flexibly. European and North American manufacturers in particular have also postponed new platforms in light of the slower take-up of electromobility.

Driver assistance and automated driving

We are systematically improving our driver assistance systems for SAE Levels 0 (such as lane-departure warning systems) to 2 (such as a combination of lane-keeping support systems and automatic cruise control). For example, we are working on automated driving functions that significantly relieve drivers of their tasks on freeways and in congested traffic. In addition, we are developing automated driving in stages in line with SAE Levels 3 and 4. Initially, we expect to see a trend to expand Level 2 functions and a delay in the introduction of Levels 3 and 4 functions. We are adjusting our structures accordingly. We also use partnerships in our development work, such as the engineering alliance with the Volkswagen Group subsidiary Cariad. The aim of this partnership is to make automated driving suitable for volume production. More specifically, these functions are Level 2 hands-free systems for urban, extra-urban, and freeway driving, as well as a Level 3 function for freeway driving. In China, we have been working in a strategic partnership with WeRide since 2022. Together with our partner, we started production of a Level 2++ function at the end of 2023. In the course of the Chinese company's recent IPO in the U.S., Bosch increased its stake in WeRide Inc., Cayman Islands, to just under 4 percent.

Vehicle dynamics

As we believe that the combination of steering, braking, and safety systems with sensors offers additional opportunities, we brought these vehicle dynamics components and systems together under the umbrella of the Vehicle Motion division in 2024. We are working to systematically adapt current products to the requirements of the software-defined vehicle and cross-application systems to create integrated and connected vehicle dynamics control. Thanks to a new control concept, this software can intervene not only in the braking system, but also in the electrical powertrain, electric steering system, and suspension. This allows the vehicle's driving stability and agility to be enhanced and significantly accelerates development times.

Semiconductor activities

We are continuing to systematically expand our semiconductor activities and carry out projects in this field. This includes the expansion of the clean-room space in Reutlingen, Germany, which will increase our processing capacity for 200-millimeter wafers. The further expansion of the Reutlingen plant will primarily serve the growing demand for MEMS sensors in the automotive and consumer goods segments, as well as for silicon-carbide power semiconductors, which play a key role in electromobility. We are also upgrading the Roseville plant in California, USA, which we acquired in 2023, for the manufacture of silicon-carbide power semiconductors. We have been promised funding for this under the U.S. CHIPS and Science Act. The capacity of our semiconductor location in Dresden, Germany, is being systematically expanded. There, we manufacture ASICs and low-voltage switches, and plan to start manufacturing MEMS over the medium term. In addition, construction has started on a new 300-millimeter wafer fab for semiconductor production for European Semiconductor Manufacturing Company (ESMC) GmbH in Dresden. We have invested in this together with TSMC, Infineon, and NXP, and hold a 10 percent stake. The project is receiving funding under the European Chip Act. In view of worldwide geopolitical challenges, local semiconductor production is becoming increasingly important and is a focal point of industrial policy worldwide.

Growth opportunities in additional areas

In the Mobility Aftermarket business, we see the greatest opportunities for growth in diagnostic software, services, spare parts for the electrical powertrain, and powertrain-agnostic spare parts, as well as in the further expansion of our workshop concepts. The e-bike market has still not recovered from the slump following the end of the coronavirus pandemic. Market consolidation continues. Over the longer term, however, we expect that changes in mobility in many regions, as well as in leisure behavior, will cause the market to grow. Mid-priced segments are likely to become increasingly important. Overall, we are expanding our portfolio in areas such as drives and digital products for e-bikes – such as new anti-theft and range functions – as well as our services for specialist bicycle dealers. The focal point of our activities is our core European market. There is additional growth potential in North America and in certain countries in Asia Pacific, where we are already represented by our own sales organizations.

Industrial Technology

Drive and Control Technology

The Drive and Control Technology division (Bosch Rexroth), which supplies hydraulics and factory-automation components and systems, operates in markets with many competitors and customers. The nature of these competitors and customers is changing as a result of trends such as mobile machinery electrification, of the inroads being made by

digital solutions, and of increased price pressure due to the growing significance of Asian suppliers, including emerging Chinese companies.

Against this backdrop, and despite today's challenging economic environment, our Drive and Control Technology division is continuing to expand its activities as a provider of solutions for mobile and industrial hydraulics and of factory automation. The main pillars of these efforts are the further development of existing products, innovations in software-based services, and the broadening of our international presence, also through sales partners.

The markets for the division's two segments, hydraulics and factory automation, differ markedly. In the hydraulics segment, Bosch Rexroth has a strong position in a market that will grow moderately over the long term. In factory automation, by contrast, the division is a niche provider in a large, dynamic growth market. In both segments, we want to grow faster than our respective markets. Cost and structural competitiveness, a strong product portfolio, and a balanced regional footprint are important factors here. We are systematically expanding our global footprint with growth initiatives in countries such as the U.S., India, and China. At the same time, adjustments are required in Europe. The weak construction and mechanical engineering segments in key sales markets mean that additional measures are required.

In the area of innovation, Bosch Rexroth's focus includes new technologies, such as the electrification of mobile hydraulics, and solutions for hydrogen infrastructure. Industrial Hydraulics, for example, offers solutions for the compression of liquid or gaseous hydrogen for the direct refueling of vehicles. The business unit works together with partners in this area. We also continue to develop software-based solutions for all segments, making connectivity possible. To simplify engineering tasks, for example, more than one million digital twins have already been created. Bosch Rexroth uses artificial intelligence methods in products such as industrial hydraulic valves, mobile hydraulics control systems, and factory automation to make them better and more efficient. Better energy efficiency will also continue to play an important role in the development of products and services. In the 2024 fiscal year, further important partners were acquired for a hardware-agnostic operating system developed by Bosch Rexroth which includes digital services. In 2024, moreover, we launched an initiative to grow our e-commerce business.

Apart from innovation, Bosch Rexroth's strategy also focuses on its international footprint. The local-for-local strategy (local value creation and supplier base) and improvements to competitiveness require both investment and the optimization of structures. The aim is to further increase the share of value creation in China, India, and North America. In Europe, our regional footprint will be improved by moving further operations to more cost-effective locations where necessary.

In China, a strong local presence and a customized product portfolio are crucial. To increase the independence, speed, and market proximity of operations in China, the organizational structure of our China business will be gradually adjusted. Parts of the business will be driven forward under the brands of the Le-HydrauliX BoWei (Shanghai) Co., Ltd. and Le-ElectriX (Shanghai) Co., Ltd. joint ventures, China. To take advantage of growth opportunities in India, it is planned to further expand the manufacturing capacity of our plant in Ahmedabad. We are also continuing our growth strategy in North America. The integration of the hydraulics specialist HydraForce Inc., Lincolnshire, Illinois, USA, acquired in 2023, continues.

Consumer Goods

Power Tools

Following the end of the pandemic-related boom, the weak global demand for consumer goods continued in 2024. Power Tools was confronted with a difficult market situation, particularly in Europe. This was exacerbated by weakness in the construction industry. In addition, demand is increasingly shifting toward price-sensitive segments, in which the division is in intense competition with global and regional suppliers.

Power Tools is strategically adapting to changing market and customer requirements. The aim is to become a full-line supplier for tradespeople, construction, and garden design and maintenance. Regionally, Power Tools is continuing to expand its business in North America, also with the Bosch and Diablo brands, and is part of a cross-consumer goods marketing campaign for the Bosch brand that was launched at the start of 2025. The division is also optimizing its processes and structures so as to adapt its organization to the challenges it faces and thus to strengthen its competitiveness. The focus here is on continuously reducing costs by increasing efficiency, as well as on ensuring customer satisfaction.

The drivers for long-term growth are solutions that are tailored to the needs of user groups, as well as innovations that open up new business areas and set Power Tools apart from the competition. The expansion of the cordless range continues to play a central role. In 2024, the number of product launches in this area increased considerably. The range of manufacturer-independent cordless platforms in the 18-volt class is being systematically expanded. Here, the division has come up with innovations that prolong these batteries' runtime by as much as 70 percent.

To increase efficiency and further optimize its range of services, Power Tools is testing the use of artificial intelligence at the customer interface, as well as for content generation. Pilot projects were launched in 2024, including a chatbot for customers, retailers, and service technicians that uses artificial intelligence to answer questions about the products and their use.

With its circular economy strategy, the division aims to achieve a level of sustainability along the entire product life cycle that is as high as possible. To this end, an initiative has been launched to produce new accessories for power tools – such as drill bits and saw blades – from industrial waste such as carbide residues, sludge, and powder. The focus is also on health and user protection, as in hammer-drill control functions that are designed to prevent unexpected kickbacks and thus reduce the risk of injury.

BSH Hausgeräte

The focus of the BSH Hausgeräte division is on addressing the changing needs and wishes of consumers and trading partners in its markets and offering them appropriate products and solutions. The division competes with global and regional providers. Market conditions are characterized by economic challenges worldwide and real-estate markets that remain very difficult. These developments are having a considerable impact on the home appliance market. Moreover, demand is increasingly shifting toward more price-sensitive segments, which is primarily benefiting Asian competitors and online retailers. In Europe, it is mainly the fitted-kitchen business that is affected.

BSH Hausgeräte's 2030 growth and value-creation strategy remains its strategic response to current and future challenges in the market and competitive environment. The aim is to gain market share in order to consolidate and expand its position in the home appliance industry worldwide, as well as to improve its cost structure and competitiveness in Europe. This also includes a stronger focus on regional growth opportunities. To address customer needs and trends at an early stage, BSH focuses on regional presence with a local-for-local approach. In addition, it will further strengthen its manufacturing network for large home appliances in North America, including additional production capacity for the large refrigerators this market demands. At the beginning of 2025, moreover, an extensive brand campaign was launched in North America to increase awareness of the Bosch brand.

Innovations focus on consumer demands for quality, convenience, performance, and sustainability. Technologies such as sensors, automation, and artificial intelligence make this possible. For example, the Matter connection standard paves the way for manufacturer-independent connectivity and integration into existing smart home ecosystems. In the future, Matter will enable appliances from a new refrigerator series to be controlled using various apps, as well as to be connected with other compatible appliances. A second example is an oven series that uses artificial intelligence and integrated sensor technology to set the optimum preparation method.

When it comes to sustainability as well, BSH Hausgeräte relies on innovative solutions. Such solutions include retrofittable, easy-to-maintain washing machine filters that remove microplastic particles from wastewater. In addition, the Home Connect app can be used to call up comprehensive statistics about power consumption and to start appliances automatically.

Energy and Building Technology

Building Technologies

The Building Technologies division offers systems, solutions, and services in the areas of building security, energy efficiency, and building automation. The competition it faces is characterized by a small number of international suppliers and many regional ones.

The division is continuing to strategically expand its systems integration business and aiming for a leading position in selected markets. This is also intended to strengthen the services business with its annually recurring revenue, and this in turn should improve the division's cyclical robustness. The product business with fire-alarm systems, which is to

be part of the systems integration business in the future, is operating in a growing market. Integrated solutions are increasingly making Building Technologies a software-agnostic and manufacturer-independent provider.

To achieve further growth, Building Technologies is taking advantage of ongoing digitalization and increasing demand for integrated and cross-domain solutions. The focus is on the European and North American markets. Building Technologies is also expanding its portfolio through acquisitions. In the 2024 fiscal year, for example, it acquired DMS Digitale Mess- und Steuerungssysteme AG, headquartered in Ettlingen, Germany, and the business operations of Engineered Control Solutions, Inc., Fuquay-Varina, North Carolina, USA. In addition to these strategic acquisitions, Building Technologies is driving innovation through new connected services. In 2024, it started offering a control center-based drone service for emergency services. This can provide crucial information on situations such as natural disasters, and thus save valuable time.

In October 2023, as part of its portfolio strategy, the division announced its intention to sell its product business, comprising the three business units Video, Access and Intrusion, and Communication. An agreement to this effect was signed with the funds advised by Triton Investments Advisers LLP, United Kingdom, at the end of 2024. The transaction is subject to approval by the authorities and further closing conditions. It is planned to close the transaction in mid-2025.

Home Comfort

The Home Comfort division is in competition with a small number of international suppliers and many regional ones. We are currently seeing trends toward consolidation, especially in the heating and air-conditioning market. Despite a declining market in 2024, particularly in Europe due to the uncertainties surrounding government subsidies, heating technology is moving away from fossil fuels such as oil and gas toward electric heat pumps and heat pump-hybrid solutions. As heat pumps will be a key technology in Europe's long-term efforts to meet the Paris climate targets, we expect to see a gradual market recovery starting in 2026. At the same time, air-conditioning technology is growing in importance both in Europe and worldwide.

To expand its presence in the North American and Asian markets, the Bosch Group plans to take over the global HVAC business for residential and light commercial buildings from Johnson Controls International plc, Ireland. As part of this transaction, Bosch also intends to acquire 100 percent of the joint venture between Johnson Controls and Hitachi Global Life Solutions, Inc., Japan. With this transaction, Bosch intends to expand its position in the cooling segment and create added impetus for its global heat pump business. The acquisition is scheduled for completion in the course of 2025.

While heat pumps are used in new buildings and in existing buildings that have been insulated, heat pump-hybrid systems comprising a heat pump and a condensing boiler are an alternative when improving the energy consumption of poorly insulated structures. To expand our heat pump business, we are investing in our European development and manufacturing network. In parallel with the planned expansion of our production lines, the speed of ramp-up is guided by the current market situation.

Adjustments are also being made to the product portfolio for fossil-fuel-based heating technology. In the future, the business unit concerned will focus in particular on hybrid solutions and sustainable fuels, such as hydrogen for residential and commercial buildings. In the course of these realignments, adjustments will be made in administrative areas and at research and development locations. Moreover, internal processes are to be simplified and duplicated tasks at locations reduced. This will also lead to personnel adjustments.

Our Home Comfort division is also pursuing a systematic digitalization strategy. A Bosch energy manager makes it possible to link up the heat pumps and photovoltaic systems in the home. It controls the heat pump according to the photovoltaic power available, thus increasing the amount of locally produced electricity used for heating, cooling, and hot-water generation.

Home Comfort is also using partnerships with new market players to broaden its customer base in the heat pump business. Moreover, it is helping heating companies build up expertise in these new technologies and offering additional services. Specialist heating companies are provided with comprehensive packages for more efficiency in their day-to-day work, from digital tools to training and education. In its online business, Home Comfort products such as air purifiers and mobile air-conditioning units help improve well-being.

Bosch Global Service Solutions

The Bosch Global Service Solutions division offers technology-based services in a market environment featuring major international competitors and more minor local providers. The major players are driving market consolidation. Bosch Global Service Solutions is continuing to develop its portfolio in the direction of "Connected Services for Life" within the four segments Mobility, Fleets, Logistics, and Buildings. This technology-based service focuses on linking sensor data, data platforms, customer interfaces, and intervention services. An important strategic focus here is the integration of artificial intelligence. Numerous AI-assisted applications are already in use, and are being continuously added to. Examples include AI-assisted language processing, which makes emergency calls more efficient, as well as live translation of foreign languages in elevator emergency calls.

This focus on technology-based services has helped the division to grow faster than its competitors, and to successfully develop from a niche provider into a recognized market player. In addition to Europe, the division is looking to expand its regional presence in the Americas in particular. Moreover, it is seeking to generate growth in collaboration with partners and through acquisitions.

Report on economic position

For the Bosch Group, it proved impossible to sidestep the difficult market situation in its main areas of business and the weak global economy. The year 2024 was an outlier, with all our core markets underperforming at the same time. This particularly affected business in Europe. Against this backdrop, Bosch Group sales revenue and result are down on the previous year. We cannot be satisfied with this. Our expectations for 2024 were therefore not fulfilled. Sales revenue declined by 1.4 percent to 90.3 billion euros in nominal terms and by 0.5 percent after adjusting for exchange-rate effects. Market developments affected all our business sectors. With the exception of the Consumer Goods business sector, sales revenue is down year on year, and below expectations in all business sectors. The Industrial Technology business sector was hit particularly hard by market developments. For 2024, the Bosch Group discloses an EBIT margin from operations of 3.5 percent. This contrasts with our forecast of roughly 5 percent, more or less on a par with the previous year. In addition to lower sales revenue and the idle capacity that goes with it, this is also due to necessary additional structural adjustments. Despite some considerable declines in sales revenue, all business sectors disclose positive EBIT from operations, but EBIT margin is below both expectations and the previous year. At 0.9 billion euros, Bosch Group free cash flow is positive despite the decline in EBIT, and meets the expectation formulated in the previous year. For the internal KPI of average NWC, only Consumer Goods and Energy and Building Technology met our expectations of a significant decline across all business sectors.

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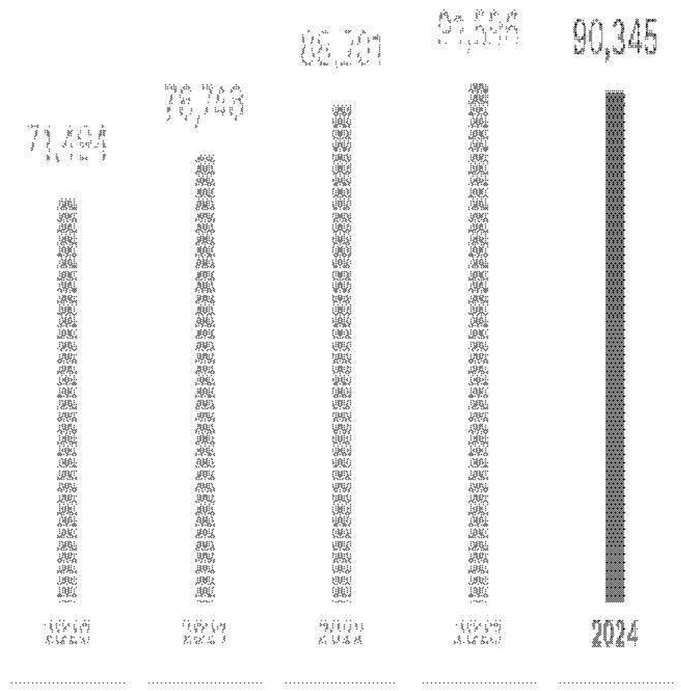
Sales revenue, 2020–2024

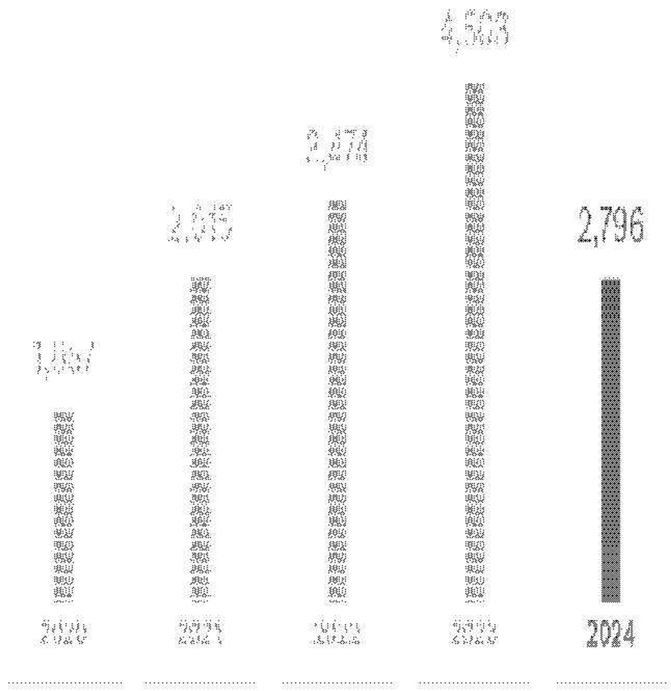
in millions of euros



G 06

EBIT, 2020–2024

in millions of euros



Key performance indicators

For an unlisted company such as the Bosch Group, profitability and efficient use of capital resources are crucial for financing future growth. Accordingly, we use the key performance indicators EBIT margin (earnings before interest and taxes as a percentage of sales revenue; essentially corresponds to the EBIT margin from operations disclosed in the group management report), free cash flow (FCF) at the Bosch Group level as a percentage of sales revenue, the internal indicator of average net working capital (NWC) as a percentage of sales revenue at the business-sector level (as an internal performance indicator), and sales revenue growth.

Unlike EBIT as per income statement, the calculation of EBIT from operations disregards the earnings impact of higher depreciation and amortization from the remeasurement of assets at the former Automotive Steering division and BSH Hausgeräte following the complete acquisition of these former joint ventures in 2015. We therefore distinguish between EBIT and EBIT from operations on the level of the Bosch Group and of the Mobility and Consumer Goods business sectors. In the Industrial Technology and Energy and Building Technology business sectors, the two EBIT indicators are identical.

FCF is determined essentially from the development of EBIT, NWC, and investments in property, plant, and equipment and intangible assets. NWC is calculated from inventories, trade receivables, and contract assets, in each case before valuation allowances, plus capitalized deferred consideration to customers and contract performance costs, and minus trade payables and contract liabilities.

The main basis for monitoring this is our internal reporting, which takes its lead from the International Financial Reporting Standards (IFRSs). A monthly business report, which contains an up-to-date overview of the operating units' performance indicators, serves as the central reporting tool. It provides a year-on-year comparison and a plan-versus-actual comparison of selected performance indicators. The report is based on the business plan, which is embedded into longer-term strategic corporate planning. The planning method used is strongly geared toward targets and measures. The focus is on developing and carrying out measures designed to achieve the planning targets.

Competitor-oriented benchmark values are used to define targets for the relevant performance indicators. They form the basis for the Bosch performance bonus – the short-term variable portion of specialists' and executives' remuneration, from section-manager level to the board of management. In 2024, the bonus was determined on the basis of EBIT margin (weighted at 60 percent), year-on-year organic sales revenue growth (weighted at 10 percent), and either FCF at the Bosch Group level or the relevant NWC at the business-sector or divisional level (both weighted at 30 percent). The Bosch performance bonus is complemented by VALUE, a variable bonus program for long-term corporate success at senior executive and board of management level. It is calculated from the average Bosch performance bonus factor of the preceding three years.

Macroeconomic and sector-specific environment

In 2024, the global economy proved to be somewhat more robust than originally expected, although the situation in the Bosch focus markets of automotive production, mechanical engineering, the construction industry, and consumer goods was difficult. Nonetheless, at 2.8 percent, growth of global economic output was again lower than the long-term trend. This persistent economic weakness is a result of a reluctance to invest in many industries as well as of consumer restraint in the face of stubbornly high interest rates and economic uncertainty. Central banks cautiously lowered their key interest rates over the course of the year. Inflation rates have fallen, primarily due to significantly lower energy prices. However, the widespread wage increases suggest that inflationary pressure will remain high. We had assumed a global inflation rate of 3½ to 4 percent for 2024. At 4.3 percent, this expectation was slightly exceeded. This means that the inflation rate was higher than the ten-year average.

Even though the growth in global economic output was only modest compared to the long-term trend, it was slightly above our forecast range of 2 to 2½ percent. Developments in Europe were again weak, even though economic growth of 1.2 percent slightly exceeded our expectation of 1.0 percent. In Germany, our fears of continued stagnation have been borne out, with value creation falling again by 0.2 percent. At 2.6 percent, GDP growth in North America significantly exceeded our forecast range of 1½ to 2 percent. This is due in particular to the U.S., where GDP grew by 2.8 percent. This was mainly due to a robust labor market and significantly lower inflation, together with a continuation of expansionary fiscal policies such as the subsidies under the Inflation Reduction Act. Growth in Asia Pacific reached 4.0 percent, compared with our forecast of 3.5 percent. Although this means the region once again recorded the highest growth, it did not achieve the growth rates of previous years. China reports a 5.0 percent increase in GDP, which is stronger than the originally forecast growth of 4.0 percent. Nonetheless, growth fell short of the previous year. The stronger than expected GDP growth is due to fiscal policy, including

purchase stimuli for consumer goods. At least temporarily, this offset the negative impact of ongoing weakness in the construction and real-estate markets. With an increase of 6.6 percent according to figures available to date, India recorded the strongest growth in the region. However, growth slowed here as well. The data for economic output is taken from Macrobond and the International Monetary Fund. Due to subsequent revisions, some of the abovementioned previous-year figures differ slightly from the figures in the 2023 group management report.

The situation in our focus markets was significantly more difficult. Global vehicle production (including heavy trucks) declined. In our forecasts for 2024, we had expected it to remain on the same level as 2023. In 2024, however, global vehicle production reached only 93 million units, following 94 million in the previous year. The previous-year figure has been revised since the 2023 group management report as a result of automobile associations filing late reports in the course of 2024. Regionally, the picture is a mixed one. While production in China rose 2.6 percent year on year to 31.3 million units, it fell 6.7 percent to 14.9 million units in the European Union and the United Kingdom. Production in North America fell 0.8 percent to 16.2 million units. The sources of the data for global automotive production are the third-party forecasts of S&P Global Mobility and of Bosch in-house marketing analyses in the regions and at headquarters.

Among newly registered passenger cars and light trucks, the shift toward electromobility in powertrain technology continued. The driving force behind this shift is the Chinese market, where government subsidies are reinforcing the trend. In contrast, registrations of electric vehicles in Europe and North America were sluggish. In China, the share of battery-electric vehicles came to 25.5 percent in 2024, compared with 21.6 percent the previous year. Models with range extenders were particularly popular; unit sales of plug-in hybrids also increased. In the European Union and the United Kingdom, however, battery-electric vehicles as a proportion of new registrations fell 0.3 percentage points to 13.1 percent, and plug-in hybrids fell 0.2 percentage points to 3.9 percent. While the share of battery-electric vehicles in North America rose 0.7 percentage points to 7.9 percent, this is significantly lower than in China and Europe. In the European Union and the United Kingdom, the share of newly registered vehicles powered solely by diesel fell overall to around 15 percent, down from roughly 16 percent the previous year. In the equally important Indian market, the proportion of newly registered diesel vehicles was 18 percent, unchanged from the previous year.

Global production in the machinery sector fell significantly more steeply than expected in 2024. The weakening of the market had already become apparent in 2023 due to a decline in order intake. In 2024, we again experienced weak order intake. This began to recover slightly in the second half of the year. The effects were most pronounced in countries and regions of particular importance to our operations: Europe, North America, and China. Moreover, the situation in the construction industry, which influences developments in the Industrial Technology, Consumer Goods, and Energy and Building Technology business sectors, remained difficult in countries important for us in 2024. This is evidenced

by the trend in construction investment. In China, the ongoing financing problems at construction companies and the reluctance of potential real-estate buyers are having an impact, which is also reflected in the low level of apartment sales. In Europe, weakness was driven by interest rates and high construction costs. In contrast, an increase was recorded in the United States. In addition, the global weakness in construction activity once again impacted demand for home appliances. However, as the pickup in retail sales over the course of 2024 shows, the downturn in this demand following the extraordinary boom during the peak phase of the coronavirus pandemic appears to be coming to an end.

Business developments

Development of sales

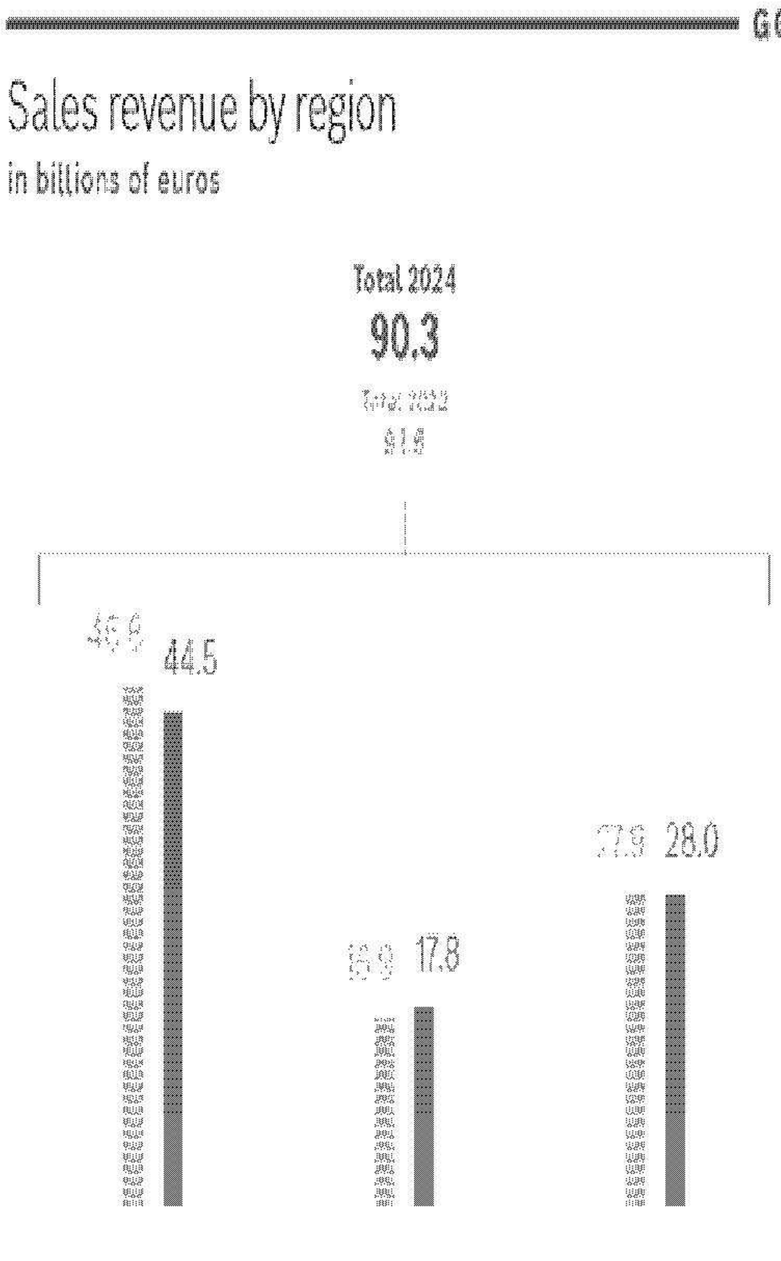
Bosch Group sales revenue

In the Bosch Group, we achieved sales revenue of 90.3 billion euros in 2024, compared with 91.6 billion euros in the previous year. Year on year, sales revenue fell a nominal 1.4 percent, or 0.5 percent after adjusting for exchange-rate effects. The development of sales revenue thus fell significantly short of the 5 to 7 percent growth forecast for 2024. Here, the pivotal factor was the weakness of our core markets, which developed more weakly than global economic output as a whole. The total negative impact of exchange-rate effects on sales revenue is some 0.8 billion euros. These effects were primarily due to the movement of the euro against the Chinese renminbi, the Turkish lira, and the Japanese yen. To determine the exchange-rate-adjusted development of sales revenue, the percentage allocation of sales revenue to individual currencies is calculated in the first quarter of each year, on the basis of a foreign exchange balance plan drawn up at that time. To calculate the annual exchange-rate effect, the individual items of sales revenue

G 07

Sales revenue by region

in billions of euros

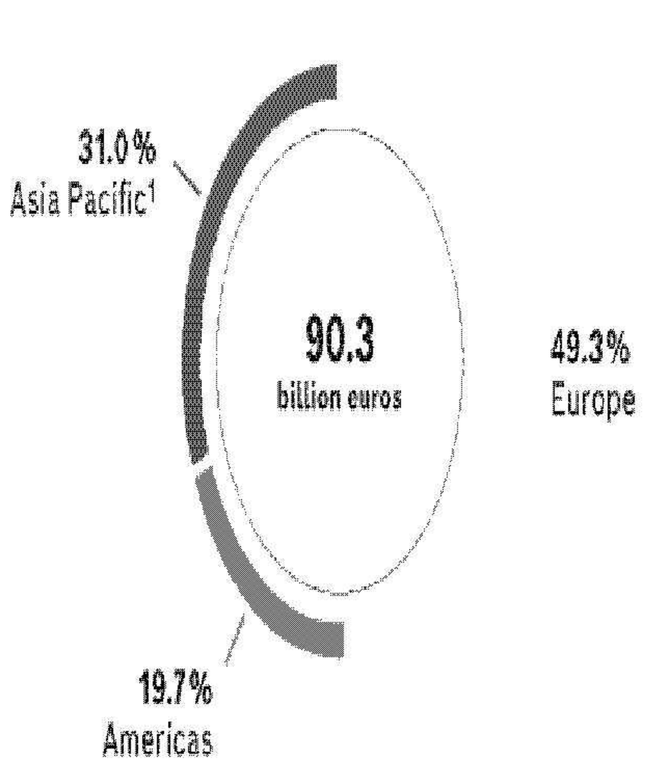


1. Including other countries and Africa.

G 08

Sales revenue by region, 2024

percentage figures



1. Including other countries and Africa.

for each currency are valued at the average rates of the previous year. In the case of sales revenue in hyperinflationary economies – i.e., Turkey and Argentina – valuation is done at year-end rates, pursuant to IAS 29. For the 2024 fiscal year, there are no material effects from changes in the consolidated group.

Sales revenue by region

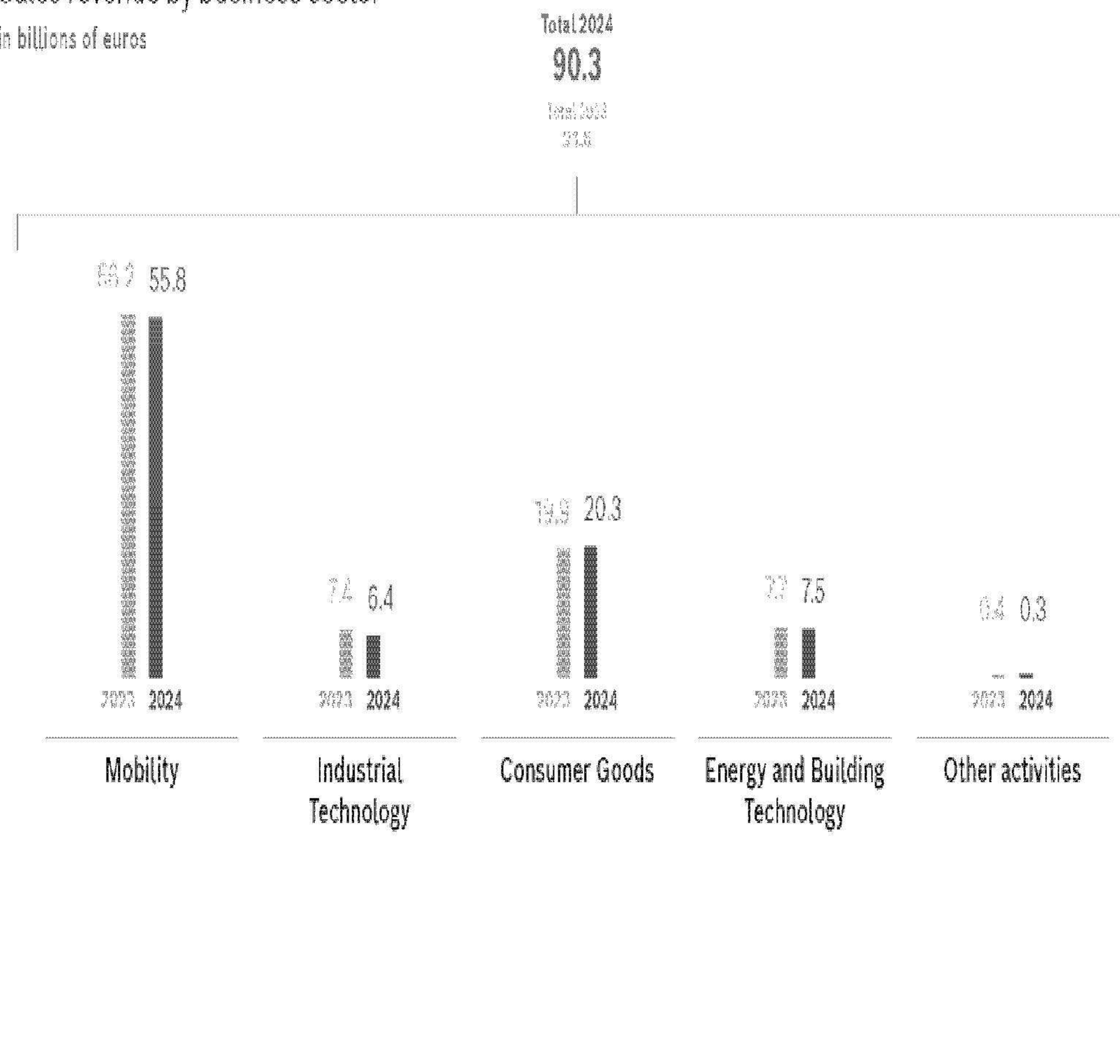
The weakness in our core markets hit our operations in Europe hardest. While sales revenue in Europe declined, we recorded growth in the other regions of the world. We generated sales revenue of 44.5 billion euros in Europe, following 46.8 billion euros the previous year. This is a nominal drop in sales revenue of 4.9 percent. The exchange-rate-adjusted figure is 4.6 percent. Germany was affected to a greater degree than other countries. In contrast, sales revenue in the Americas rose by a nominal 4.8 percent to 17.8 billion euros, up from the previous-year figure of 16.9 billion euros. Adjusted for exchange-rate effects, the increase was 5.7 percent. Sales revenue in Asia Pacific (including other countries and Africa) rose only slightly. At 28.0 billion euros, sales revenue was a nominal 0.7 percent above the previous year's level of 27.9 billion euros. After adjusting for exchange-rate effects, sales revenue grew by 2.8 percent. While we were able to increase sales revenue in China and India, sales revenue fell in both South Korea and Japan.

From a regional perspective, the share of sales revenue generated in Europe decreased to 49.3 percent, from 51.1 percent the previous year. The share attributable to the Americas rose to 19.7 percent, up from 18.5 percent the previous year. The share generated by Asia Pacific (including other countries and Africa) increased to 31.0 percent, following the previous year's 30.4 percent.

G 09

Sales revenue by business sector

in billions of euros



Sales revenue by business sector

All business sectors felt the effects of weak developments in their core markets, albeit to varying degrees. The business sectors did not reach the forecasts for sales revenue growth.

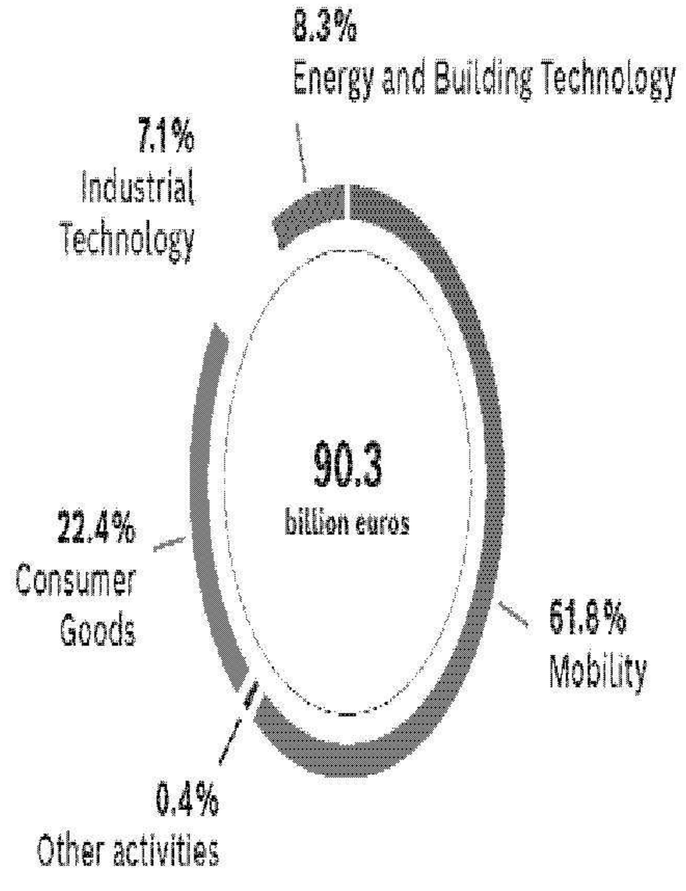
In light of the global decline in vehicle production, sales revenue in the Mobility business sector was 55.8 billion euros, and thus a nominal 0.7 percent below the previous year's 56.2 billion euros. Adjusted for exchange-rate effects, sales revenue grew 0.2 percent. The business sector thus fell significantly short of its forecast growth corridor of 7 to 9 percent. One main reason for this was weak market developments, especially in Europe. This region accounts for 42 percent of our sales revenue. In addition, sales revenue growth in areas of future importance such as electromobility and automated driving fell significantly short of our own plans. This also applies in particular to the European market, where demand for these technologies is developing more slowly than expected. Moreover, our forecasts for the Americas were not met, also in the market for trucks. The e-bike business felt the effects of persistent weakness in the consumer goods markets.

At 6.4 billion euros, sales revenue in the Industrial Technology business sector was significantly below the previous year's figure of EUR 7.4 billion. This corresponds to a nominal decline of 13.0 percent, or 12.5 percent after adjusting for exchange-rate effects. A key role in this was played by the steeper than expected decline in the construction and machinery sectors in the main markets of Europe, North America, and China. This affected the mobile hydraulics unit in particular. All in all, we had expected slight growth of up to 1 percent.

G10

Sales revenue by business sector, 2024

percentage figures



In the Consumer Goods business sector, demand appears to be stabilizing after the sharp slump that followed the coronavirus pandemic-related boom. For example, retail sales picked up again over the course of 2024. However, the situation in the construction industry remains unsatisfactory across the globe. Against this backdrop, the business sector was able to increase its overall sales revenue by a nominal 1.6 percent to 20.3 billion euros, from the previous year's figure of 19.9 billion euros. Adjusted for exchange-rate effects, sales revenue increased by 2.9 percent and was thus only slightly below the forecast range of 3 to 5 percent. Looked at by division, sales revenue at BSH Hausgeräte developed better than at Power Tools.

T01

Most important items of the income statement

in millions of euros

	2024	2023
Sales revenue	90,345	91,648
Cost of sales	–62,591	–62,876
Gross profit	**27,754**	28,772
Distribution cost and administrative expenses	–18,531	–18,283
Research and development cost	–7,807	–7,991
Other operating income and expenses	1,377	1,511
Result from companies included at equity	3	6
Earnings before interest and taxes (EBIT)	**2,796**	4,015
Financial result	–68	–577
Profit before tax	**2,728**	3,438
Income tax expenses	–1,396	–1,398
Profit after tax	**1,332**	2,040

The Energy and Building Technology business sector reported a nominal decrease in sales revenue of 2.7 percent to 7.5 billion euros, compared with the previous-year figure of 7.7 billion euros. Adjusted for exchange-rate effects, sales revenue fell 2.6 percent. The expected 2 to 4 percent growth in sales revenue was not achieved, therefore. The decline in sales revenue is the result of the market slump in the European heating business, which was felt by the Home Comfort division. By contrast, the Building Technologies division was able to increase its sales revenue.

When determining sales revenue by business sector, "Other sales revenue" is reported separately for the first time, and no longer included under Consumer Goods. The differences in our business sectors' fortunes mean that our sales revenue structure has changed. The share of sales revenue attributable to the Mobility business sector rose to 61.8 percent, and was thus higher than the previous year's 61.3 percent. The share of Industrial Technology fell to 7.1 percent, following the previous-year figure of 8.1 percent. The Consumer Goods business sector's share rose to 22.4 percent. The comparable previous-year share, without other activities, was 21.8 percent. The share contributed by the Energy and Building Technology business sector was 8.3 percent, following 8.4 percent in the previous year.

Results of operations

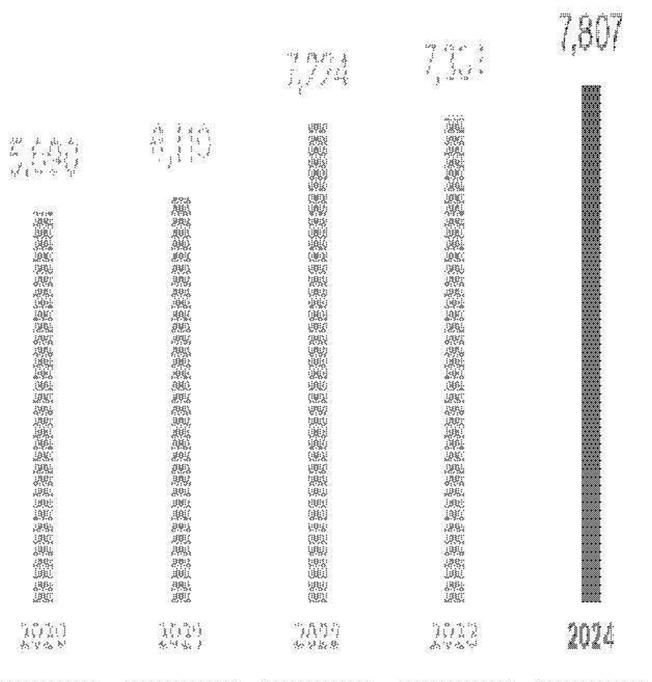
Bosch Group result

In the Bosch Group, we report EBIT of 2.8 billion euros in 2024, compared with 4.5 billion euros the previous year. EBIT from operations comes to 3.1 billion euros, following the previous-year figure of 4.8 billion euros. Unlike the EBIT

G 11

Research and development cost, 2020–2024

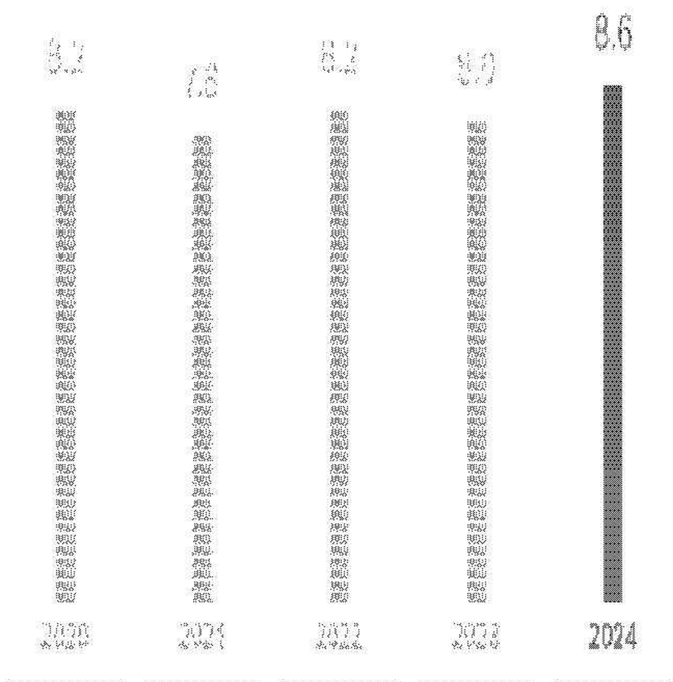
in millions of euros



G 12

Research and development cost, 2020–2024

as a percentage of sales revenue



disclosed in the income statement, and as in previous years, the calculation of the result from operations disregards the earnings impact resulting from the complete acquisition of the former joint ventures Automotive Steering and BSH Hausgeräte in 2015. This comes to 325 million euros, compared with the previous year's figure of 321 million euros. A distinction therefore has to be made between EBIT and EBIT from operations – which is also an internal performance indicator – on the level of the Bosch Group and of the Mobility and Consumer Goods business sectors. At 3.5 percent, the EBIT margin from operations is significantly below our expectation of a figure roughly on a par with the previous year, at approximately 5 percent. The actual previous-year figure for EBIT margin from operations was 5.3 percent.

Two burdening factors above all played a role in this deviation from forecast. Due to volumes that were considerably lower than expected and shifts in the product mix, the contribution margin needed to cover structural costs is insufficient. Instead of a 1.4 percent drop in sales, we had assumed sales revenue growth of 5 to 7 percent for the Bosch Group. The unsatisfactory developments in our markets also require additional structural adjustments, which will not ease the burden on result until they are put into practice. These also include additional provisions for personnel measures. Despite considerable additional countermeasures in business operations, such as cost reductions, and despite improvements with respect to raw materials and energy, these burdens could only be offset to a limited extent.

When comparing this with the previous year, the lack of volumes, a changed product mix, and additional adjustment measures are also decisive for the considerable drop in result. The fiscal year was also burdened by higher personnel expenses and price increases, even if the cost of raw materials fell. A greater number of measures on both the

cost and price side were not able to offset these burdening factors. Year on year, moreover, a number of special effects had negative repercussions. As in the previous year, there are similarly positive effects on result resulting from the reversal of provisions.

The effects that play a major role in the picture for result – volume of sales revenue, changes in the product mix, and additional structural measures – have negative repercussions for the functional cost items in the income statement. Personnel expenses rose 9.8 percent to 29.5 billion euros. The ratio of personnel expenses to sales revenue thus increased to 32.6 percent, from 29.3 percent the previous year. Depreciation of property, plant, and equipment rose 9.2 percent to 3.7 billion euros. These factors mean that EBIT (earnings before interest and taxes) disclosed in the income statement fell significantly to 2.8 billion euros, from the previous-year figure of 4.5 billion euros. It was not possible to offset them through the additional measures on the cost and price side.

While sales revenue fell 1.4 percent to 90.3 billion euros, the cost of sales fell by just 0.6 percent to 62.6 billion euros. As a result, gross margin fell to 30.7 percent, from the previous year's level of 31.2 percent. Despite the fall in sales revenue, personnel expenses rose as a result of both higher wage costs and additional personnel provisions. Higher depreciation of property, plant, and equipment is also an important factor for the cost of sales. Running counter to this, the cost of materials fell at a faster rate than sales revenue. Cost of materials decreased 2.1 percent to 42.9 billion euros. The ratio of cost of sales to sales revenue thus fell to 47.5 percent, compared with 47.9 percent the previous year. Despite many measures to improve competitiveness, including lower raw materials costs, the gross margin fell 0.5 points.

At 18.5 billion euros, distribution cost and administrative expenses were 1.6 percent higher than in the previous year. Research and development cost rose 6.5 percent to 7.8 billion euros. In the case of both items, this increase is especially due to greater burdens from structural adjustments that it was not possible to offset. In the research and development cost, there were no appreciable changes in the share of capitalized development cost. The ratio of distribution cost and administrative expenses to sales revenue is thus 20.5 percent, compared with the previous year's 19.9 percent, and the research and development cost ratio 8.6 percent, compared with the previous year's figure of 8.0 percent. There were no major changes in other operating income and expenses. As in the previous year, the positive balance results especially from earnings from the reversal of provisions.

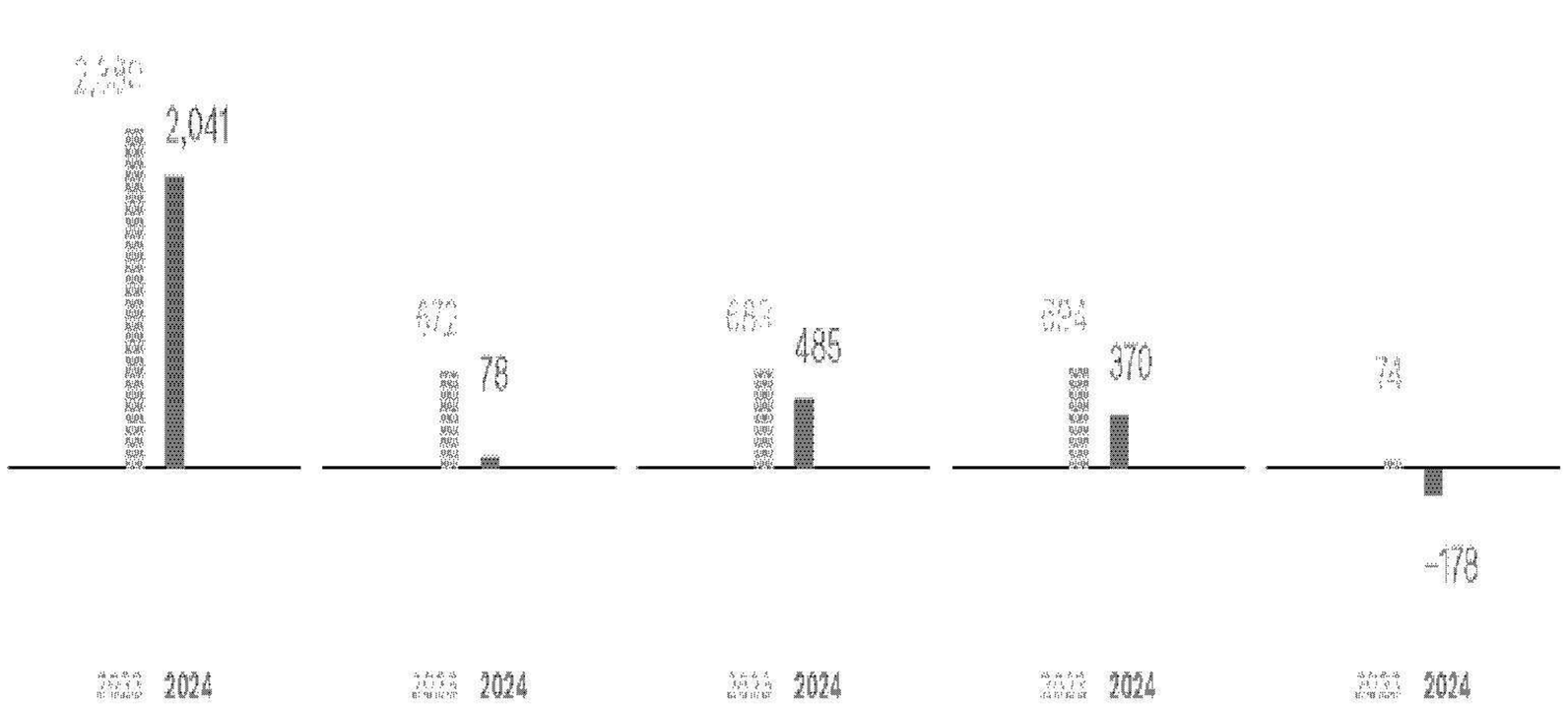
The Mobility business sector again accounted for the largest share of research and development cost in 2024, at 74 percent (previous year: 72 percent). The main focus of these upfront investments continues to be electrification, fuel cells, and driver assistance systems – also with a view to automated driving – as well as automotive electronics, semiconductors, and sensors. The percentage attributable to the Industrial Technology business sector came to 6 percent, compared with 7 percent in the previous year. At 15 percent, Consumer Goods is on a par with the previous year. The percentage attributable to the Energy and Building Technology business sector was 5 percent, following 6 percent in the previous year.

On balance, we disclose a negative financial result of 68 million euros in 2024, which is a significant improvement from the previous year's negative balance of 527 million euros. The main factors here are the increase in the value of securities and gains from derivatives in foreign-currency hedging

G13

EBIT by business sector

in millions of euros



transactions. This also includes the U.S. dollar options in connection with hedging the purchase price of the acquisition in the heating, ventilation, and air-conditioning business announced by Home Comfort. Profit before tax fell to 2.7 billion euros, compared with 4.0 billion euros in the previous year. Pre-tax profit decreased to 3.0 percent, compared with the previous-year figure of 4.3 percent. The result after tax amounts to 1.3 billion euros, compared with 2.6 billion euros the previous year.

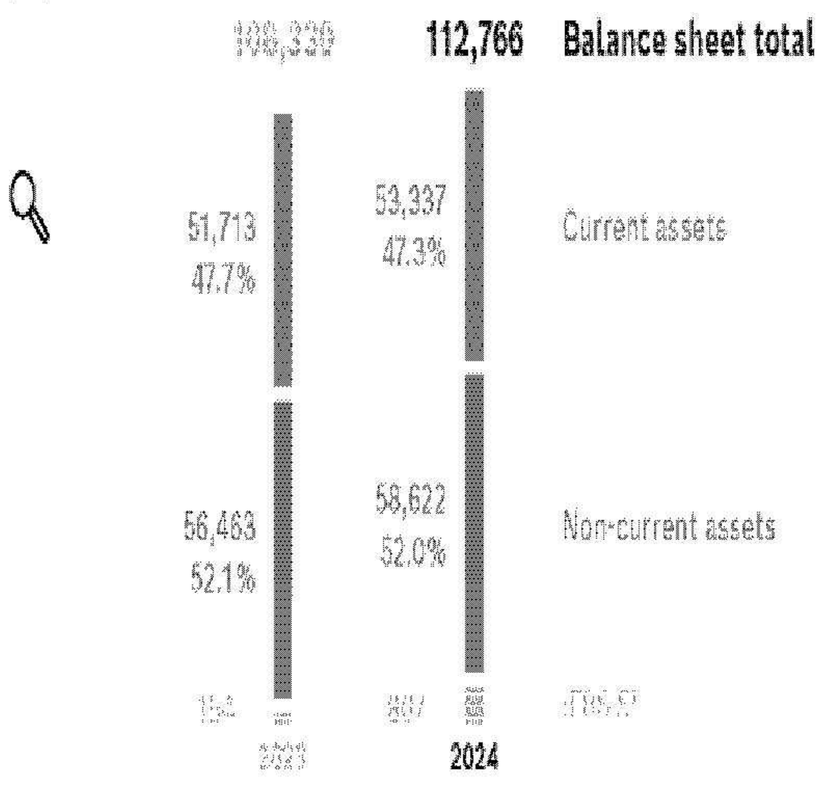
Result situation by business sector

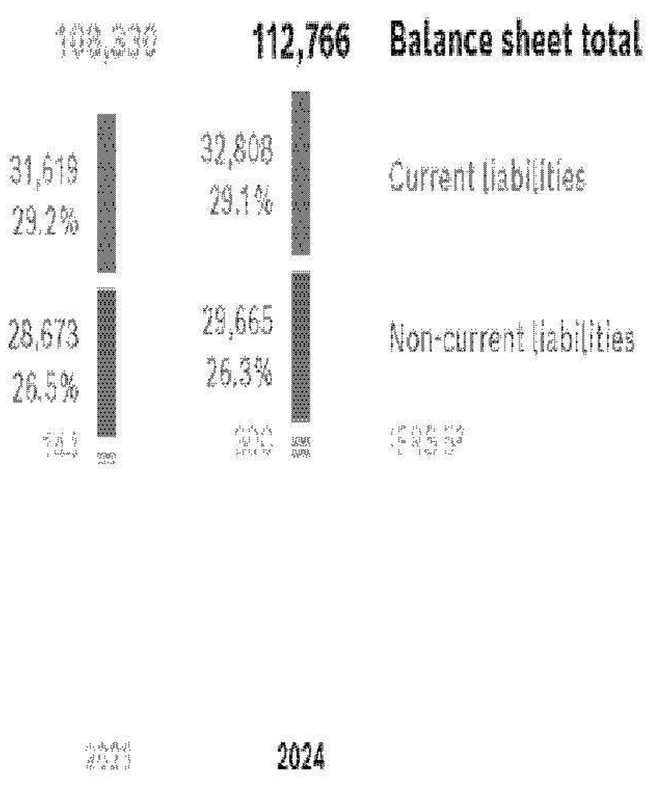
All business sectors achieved a positive result in terms of both EBIT and EBIT from operations, despite a sometimes very difficult market environment, some considerable decreases in sales revenue, and additional structural measures. In all business sectors, however, the figures for result are down on the previous year and, with the exception of the Energy and Building Technology business sector, also below the forecast range. We had expected to see a significant improvement in margin from operations in the Mobility and Consumer Goods business sectors. The decline in Industrial Technology was even greater than expected. In the case of Energy and Building Technology, we had already forecast a considerable decline.

In the Mobility business sector, we disclose EBIT of 2.0 billion euros for 2024, compared with EBIT of 2.4 billion euros in the previous year. EBIT from operations comes to 2.1 billion euros, compared with the previous year's figure of 2.5 billion euros. This results in an EBIT margin from operations of 3.8 percent, compared with 4.4 percent the previous year. Due to considerable progress on costs, the business sector managed to more than offset the effects of the worse than expected development of sales revenue. This development was the result of the decline in global automotive production and of consumer restraint in electromobility and

Consolidated statement of financial position

in millions of euros and as a percentage of balance sheet total





1. Assets held for sale
2. Liabilities directly associated with assets held for sale

automated driving, which are areas of importance for the future of mobility. There were also considerable burdens as a result of additional structural measures that were announced over the course of the year and that were not included in our expectations.

The Industrial Technology business sector discloses EBIT of 78 million euros and a margin of 1.2 percent. In our forecast, we had already assumed a significant drop in result. Especially in mobile hydraulics, market developments were even more difficult than expected. The steep drop in sales revenue is also the main reason for the decline in result from the previous-year figures of 672 million euros and an EBIT margin of 9.1 percent. To a lesser extent, additional structural measures decided over the course of the year were a burden.

EBIT in the Consumer Goods business sector comes to 485 million euros (previous year: 683 million euros). At 704 million euros, EBIT from operations was therefore also less than the previous year's 896 million euros. EBIT margin from operations fell to 3.5 percent, compared with 4.5 percent in the previous year. In our forecasts, we had assumed a significant improvement. The determining factor here is additional structural adjustments. There were also burdens from weak market developments and increased demand for more affordable products. Improvements on the cost side were only partly able to offset these two effects.

In the Energy and Building Technology business sector, EBIT fell considerably from its previous-year level, as forecast. Compared with 694 million euros in 2023, it came to 370 million

euros. EBIT margin is 4.9 percent, following 9.0 percent the previous year. This was mainly due to the difficult situation in the heating market, and the resulting steep drop in sales in Home Comfort. Compared with this, additional restructuring costs play a subordinate role. There are also project costs in connection with the announced sale of significant parts of the Building Technologies product business and in preparation for the acquisition in the heating, ventilation, and air-conditioning business announced by Home Comfort.

With respect to the internal key performance indicator of the ratio of average NWC to sales revenue, the target for all business sectors for 2024 was to achieve a significant improvement. While the Consumer Goods and Energy and Building Technology business sectors achieved this target, Mobility and Industrial Technology were unable to improve this key performance indicator. Mobility reports an NWC of 27.8 percent, compared with the previous year's figure of 27.3 percent, while Industrial Technology reports 33.9 percent, compared with 33.5 percent. The reason for falling short of forecast is inventories and receivables that were not adapted to the level of sales revenue. In the Consumer Goods business sector, NWC for 2024 improved to 27.0 percent, from the previous year's figure of 29.4 percent. In Energy and Building Technology, it improved to 20.1 percent, compared with 21.5 percent.

Net assets and financial position

Equity ratio and financial statement

The Bosch Group balance sheet total as of the December 31, 2024, reporting date stood at 112.8 billion euros, exceeding the previous year's level of 108.3 billion euros. Year on year, the equity ratio rose 0.1 percentage points to 44.3 percent. The main reasons for the rise in balance sheet total are the increase in current assets and property, plant, and equipment on the assets side and, on the equity and liabilities side, increased trade payables and personnel provisions.

On the assets side, our liquidity as reported in the statement of financial position was 26.9 billion euros as of the reporting date. Apart from cash and cash equivalents, liquidity as per statement of financial position includes marketable securities and bank balances with a term of more than 90 days. The financing structure is sound. The net financial position (defined as balance sheet liquidity minus financial liabilities and provisions for pensions and similar obligations) is significantly positive, having risen year on year by 0.9 billion euros to 6.2 billion euros. With a long-term rating of A (with a "stable" outlook) from the credit rating agencies Standard & Poor's and Fitch, Robert Bosch GmbH has good ratings.

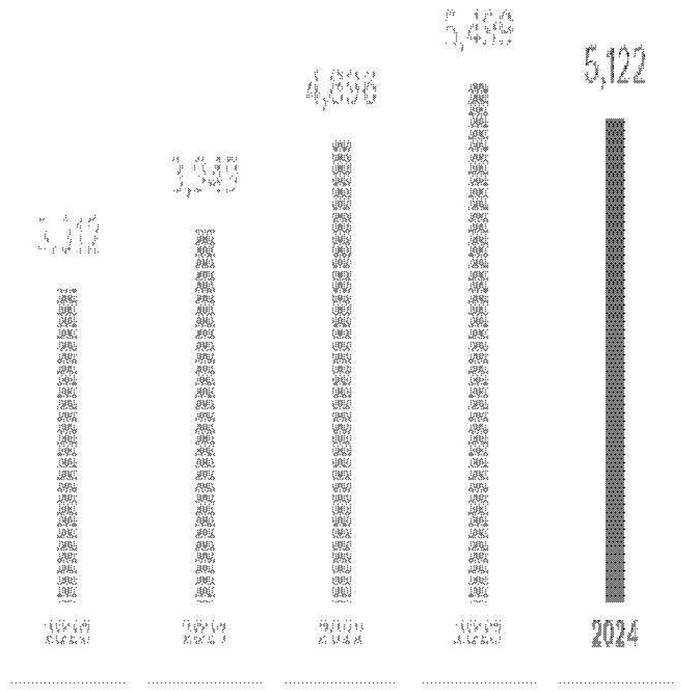
In equity and liabilities, the financial liabilities of the Bosch Group include bonds with a nominal value of 5.75 billion euros that bear between 2.625 percent and 4.375 percent interest. A maturing 750-million-euro bond was repaid from available liquidity in 2024. There are also schuldschein loans and registered bonds with a nominal value of 3.2 billion euros that bear between 1.028 percent and 4.893 percent interest, and U.S. private placements with a nominal value of 1.2 billion U.S. dollars that bear between 6.19 percent and 6.42 percent interest.

The average interest rate for the bonds, schuldschein loans, and registered bonds is 3.35 percent. For the U.S. private placements, it is 6.31 percent. The average residual term to maturity of the schuldschein loans and registered bonds is 4.00 years; for the bonds, it is 9.77 years. The average residual term to maturity of the U.S. private placements is 7.38 years.

G 15

Capital expenditure, 2020–2024

in millions of euros



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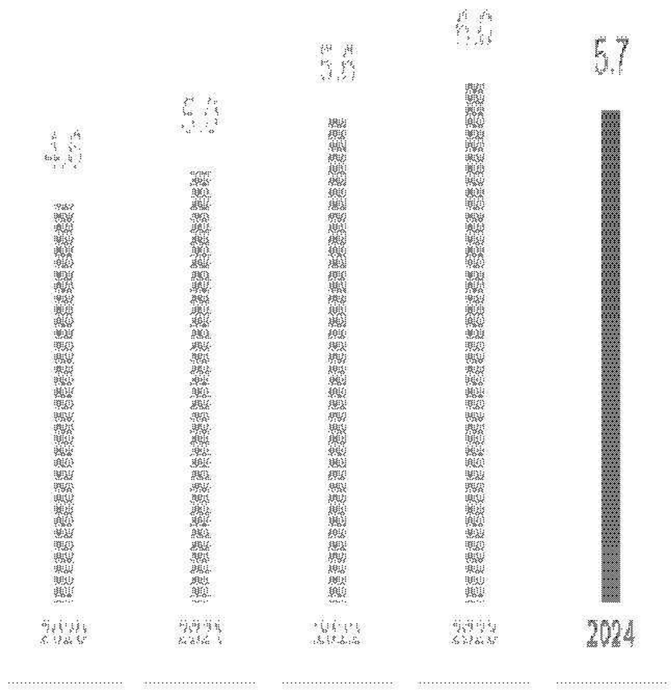
Capital expenditure, 2020–2024

as a percentage of sales revenue



Under our revolving 2.0 billion U.S. dollar commercial paper program, short-term issuances of roughly 500 million U.S. dollars are outstanding as of the reporting date. To further boost our financial reserves, the existing bilateral U.S. credit lines were increased by 300 million euros to 1.25 billion U.S. dollars during the reporting period. There is also a syndicated credit line of 5 billion euros that is valid until 2026. These credit lines have not been used.

Capital expenditure

In 2024, notwithstanding many projects of future importance, capital expenditure on property, plant, and equipment fell to 5.1 billion euros from 5.5 billion euros the previous year. The capex ratio is 5.7 percent, compared with 6.0 percent in the previous year. Capital expenditure thus reached 137 percent of depreciation, compared with 161 percent in the previous year. As of the reporting date, existing investment commitments resulting from orders already placed total 0.9 billion euros, following a previous-year figure of 1.5 billion euros. Thanks to our comfortable liquidity position, we have ample financial resources at our disposal. We invested 631 million euros in intangible assets, compared with 620 million euros the previous year.

By business sector, the lion's share of capital expenditure – 3.7 billion euros, following 3.8 billion euros the previous year – once again went to Mobility. Among other things, the focus of investment is on areas of future importance: electromobility, fuel cells, and power electronics. In addition, there are investments in growth areas such as braking control systems, semiconductors and sensors, and driver assistance systems, as well as in our long-established business activities. In our semiconductor operations, investments are being made to expand semiconductor manufacturing at the sites in Reutlingen, Germany, and Roseville, California, USA.

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Consolidated statement of cash flows

in millions of euros

	2024	2023
Liquidity at the beginning of the year (Jan. 1)	**7,443**	6,469
Cash flow from operating activities	6,975	8,430
Cash flow from investing activities	–4,547	–11,231
Cash flow from financing activities	–1,867	3,961
Other	219	–186
Liquidity at the end of the year (Dec. 31)	**8,223**	7,443

Capital expenditure in Industrial Technology fell to 292 million euros, compared with 410 million euros the previous year. The focus of investment at Bosch Rexroth was on the construction of a new mobile hydraulics plant in Querétaro, Mexico, and of a new assembly technology plant in Charlotte, North Carolina, USA, as well as the equipping of the new plant in Brnik, Slovenia, and a logistics building in Lohr, Germany.

In the Consumer Goods business sector, capital expenditure was 736 million euros, compared with 839 million euros in the previous year. Major projects at BSH Hausgeräte are new factories: one in Monterrey, Mexico, for refrigerators and one in Madinat al-Aschir min Ramadan, near Cairo, Egypt, for stoves to support growth in emerging markets. Further investments relate to the location in Dillingen, Germany, where dishwashers are made. In addition, factories in Nazarje, Slovenia, and La Cartuja, Spain, were rebuilt following flooding in summer 2023. Capital expenditure in Power Tools focused on the expansion of manufacturing in the Accessories business unit at locations in the U.S., Italy, and Poland, as well as on battery production in Miskolc, Hungary.

In Energy and Building Technology, capital expenditure came to 173 million euros, compared with 180 million euros the previous year. In Home Comfort, the focus was on expanding the heat pump business. In addition, there are other investments that are not allocated to the business sectors, such as the reorganization of the Paris location in France and the renovation of group headquarters in Gerlingen, Germany.

From a regional viewpoint, we invested 3.0 billion euros in our European locations, compared with 3.5 billion euros the previous year. Germany accounted for 1.7 billion euros of this, compared with 2.1 billion euros in the 2023 fiscal year. We invested 1.2 billion euros in Asia Pacific, compared with 1.3 billion euros the previous year. For example, several engineering locations were brought together under one roof in Yokohama, Japan, and a new building was constructed there for our Japan headquarters. In the Americas, we invested 975 million euros, compared with 767 million euros the previous year.

Liquidity

The Bosch Group is financially strong. Liquidity at year-end as per the consolidated statement of cash flows (cash and cash equivalents) stood at 8.2 billion euros, compared with 7.4 billion euros the previous year. Cash flows from operating activities fell to 7.0 billion euros or 7.7 percent of sales revenue in 2024; the previous-year figure was 9.2 percent. In the reporting year, it was again possible to reduce the amount of capital tied up in current assets. However, this improvement was not as great as in the previous year.

Cash flows from investing activities amounted to 4.5 billion euros, compared to the previous-year figure of 11.2 billion euros. The main reasons for the sharp decline are cash flows from the sale of securities as well as a lower level of bank deposits with a term of more than 90 days. There was also a significant year-on-year reduction in cash flows relating to the acquisition of subsidiaries.

Cash flows from financing activities, including repayments of lease liabilities, led to an outflow of 1.9 billion euros in 2024; this includes the repayment of maturing bonds from existing equity. In the previous year, we reported a cash inflow of 4.0 billion euros as a result of the issue of bonds and U.S. private placements.

For 2024, we disclose a positive free cash flow of 0.9 billion euros, compared with 2.2 billion euros in the previous year. Despite the reduction in EBIT, we met the expectations formulated in the previous year. FCF is calculated as the sum of cash flows from operating activities, cash flows from investing activities (without participating interests and other financial investments), and the repayment of lease liabilities.

Non-financial indicators

CO_2 emissions

Once again in 2024, the Bosch Group with its more than 450 locations worldwide was carbon-neutral overall (scopes 1 and 2). In 2024, residual emissions of roughly 531,300 metric tons of CO_2 were offset through carbon credits to achieve this. Compared with the previous year's level, this is a decrease of some 49,600 metric tons of CO_2, or 8.5 percent. We achieved this decrease primarily by further decarbonizing our energy supply and increasing energy efficiency at our locations. The calculation of emissions is based on the standards of the International Energy Agency (IEA, Emission Factors 2022) and the Intergovernmental Panel on Climate Change (IPCC).

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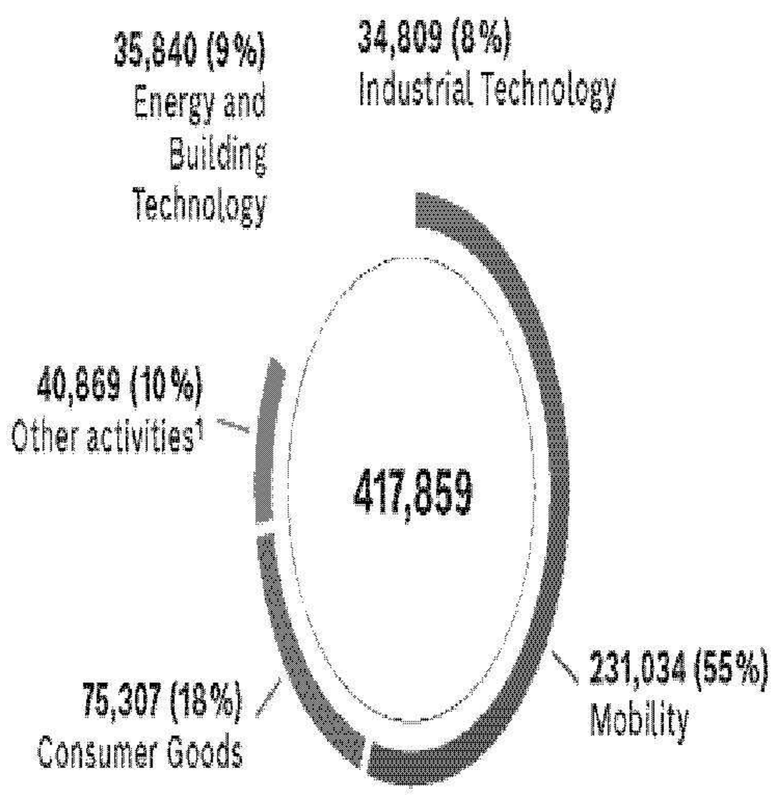
Headcount by business sector

As of Dec. 31, 2024



1. Corporate functions and services as well as research

In total, the Bosch Group's locations consumed 7,517 gigawatt-hours (GWh) of energy in 2024 (previous year: 7,537 GWh). Bosch requires energy primarily in the form of power for manufacturing plant and machinery, in the form of thermal energy to heat and air-condition buildings, and to operate facilities such as foundry furnaces.

Occupational safety

In 2024, the accident rate was 1.46 accidents per million hours worked. Regrettably, a worker from a third-party company suffered a fatal accident in 2024. The total number of workplace accidents in 2024 was 1,077, compared with 1,073 in 2023.

Headcount

The total number of Bosch Group associates fell to 417,859 at the end of 2024, compared with 429,416 at the end of 2023. The number of Bosch associates thus decreased worldwide by 11,557. Changes in the consolidated group play no appreciable role.

The workforce in the Mobility business sector fell to 231,034, compared with 237,104 at the end of 2023. The number of associates in the Industrial Technology business sector decreased to 34,809, compared with 35,735 at the end of 2023. In the Consumer Goods business sector, the number of associates fell to 75,307, compared with 79,376 at the end of 2023. The Energy and Building Technology business sector employed 35,840 people at the end of the year, compared with 36,402 at the end of the previous year. A total of 40,869 associates are employed in corporate functions and services as well as research and development, compared with 40,799 in the previous year.

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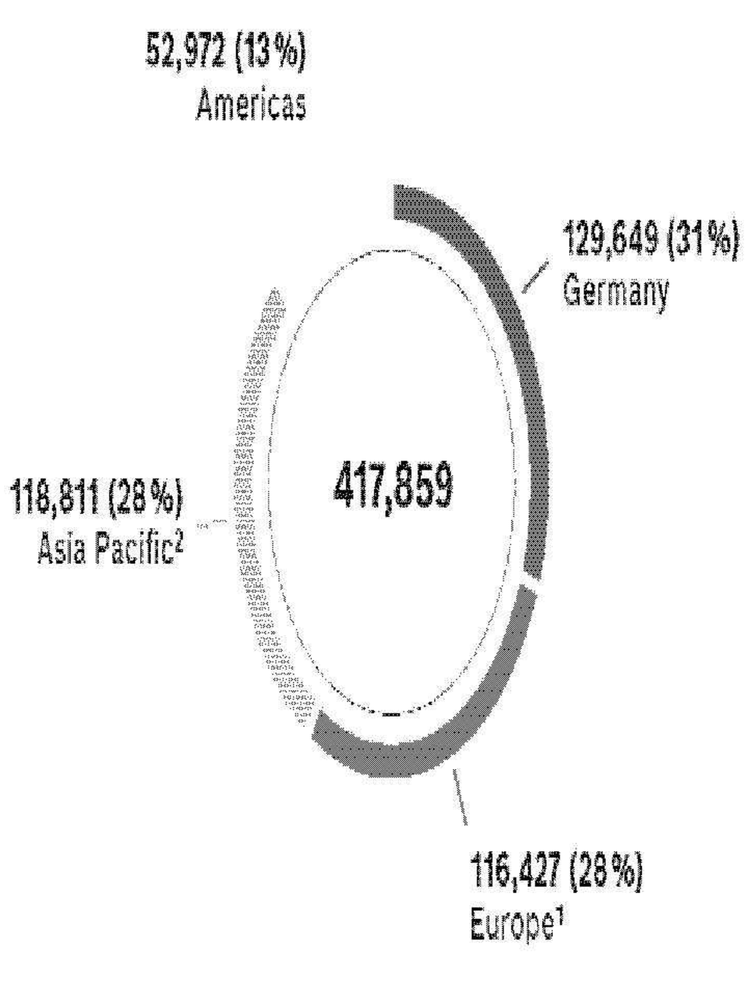
Headcount by region

As of Dec. 31, 2024



[1] Excluding Germany
[2] Including other countries and Africa

The number of associates in research and development across all units worldwide fell worldwide to 86,840 at the end of the year, compared with 90,084 in the previous year. Regions outside Germany account for 63 percent of associates in research and development, with Asia Pacific accounting for 43 percent. The number of associates worldwide in the corporate sector for research and advance engineering ("Other activities") at year-end was 1,600, compared with the previous-year figure of 1,627. Headcount decreased in all regions. The percentage distribution of Bosch Group associates by region is unchanged.

Outlook

The outlook for the 2025 fiscal year is marked by great uncertainty with respect to the further development of global trade. In our forecasts, this uncertainty can only be taken into account to a limited extent. The considerable volatility arising from the global debate about tariffs also plays a role here. On top of this, there is uncertainty as a result of severe geopolitical tension, also in the Middle East. In addition, the war in Ukraine continues. For 2025 as well, we expect economic developments to be subdued, and forecast that growth will be in the range of 2¼ to 2¾ percent. Once again, moreover, stimuli cannot be expected to come from important core markets. Against this background, our planning is cautious. In light of the difficult environment, we forecast sales revenue growth of between 1 and 3 percent for the Bosch Group. Despite further burdens as a result of adjustment measures and of continued heavy upfront investments in areas of future importance, we want to achieve a significantly better EBIT margin from operations than in 2024. The aim is to achieve an FCF on the same level as the previous year. We will continue to work intensively to reduce our costs in order to strengthen competitiveness. In addition, we will press ahead with the implementation of our growth strategy, which is based on organic growth as a result of innovation and improved competitiveness as well as on acquisitions.

The planned acquisition in the heating, ventilation, and air-conditioning segment in Home Comfort and the announced sale of large parts of the Building Technologies product business, which are to be consummated in the course of 2025, have not yet been considered in our forecasts.

Macroeconomic and sector-specific environment

Our plans are based on the assumption that the global economy will not pick up pace significantly in 2025. Given the trade policy risks, our forecasts are marked by considerable uncertainty. On the basis of this, we forecast that global economic output will grow in the region of 2¼ to 2¾ percent in 2025. This also takes account of the initial possible effects of additional trade barriers. On its own, the debate about additional tariff barriers is likely to be a burden on the economic outlook. For Europe, we expect developments to be comparatively weak. Apart from structural factors such as aging and excessive red tape, increasing uncertainty about future U.S. trade policy is likely to be a burden on business mood. We see a more favorable outlook in the Americas. With fiscal policy remaining expansive and with cheaper energy prices, the U.S. economy is likely to develop more robustly. Asia is once again expected to disclose the strongest growth. In China, we expect growth of 4½ to 5 percent. A more expansive economic policy in China will have to contend with the braking effects of the situation in the real-estate market, which remains difficult.

If additional trade barriers are imposed, they could result in price increases across the globe. For 2025, we assume that the global rate of inflation will be between 3 and 3½ percent, following 4.3 percent in 2024. This means that we once again expect inflation to be higher than the average for the decade before the outbreak of the pandemic. For this reason, central banks will keep a very close eye on inflation figures, with a view to further action on interest rates. Interest rates will likely once again be higher than the average in the decade before the outbreak of the pandemic, and thus inhibit consumption and construction investment.

For the Americas, we expect that GDP will rise by 2 to 2½ percent year on year in 2025. On the basis of current data, our forecast for Europe is a slight rise in economic output of between ¾ and 1¼ percent. In this context, we expect the European Union to grow by between ½ and 1 percent year on year. All we expect for Germany is stagnation, following the decline in growth in the previous two years. At between 3¾ and 4¼ percent year on year, growth rates in Asia Pacific (including other countries) are unlikely to change appreciably. As their point of reference, our forecasts are based on the data sources of Macrobond and the International Monetary Fund, as well as on our own assessments.

For the automotive sector, our most important market, we so far expect to see a similar level of production in 2025 as in 2024 (including heavy trucks), at around 93 million vehicles. Our forecast process is based on the third-party forecasts of S&P Global Mobility and on Bosch in-house marketing analyses in the regions and at headquarters.

Bosch Group and business sectors

Forecast for sales revenue in 2025

In light of the changing international trade relations, the forecasts for the 2025 fiscal year are marked by considerable uncertainty. For the Bosch Group, we expect sales revenue growth in the range of 1 to 3 percent. As in previous years, we do not disclose exchange-rate effects separately in our forecast. We expect all business sectors to grow, albeit at different speeds.

For the Mobility business sector, our expectations lie between 1 and 4 percent. Following the steep drop in sales revenue in 2024, the Industrial Technology business sector expects a recovery to a certain extent, and forecasts growth of between 2 and 5 percent. The forecast range for sales revenue growth in Consumer Goods is 1 to 3 percent. In the case of Energy and Building Technology, any effects from the planned acquisition in the HVAC business by the Home Comfort division and from the announced sale of major parts of the Building Technologies division's product business have been ignored. When calculated on a comparable basis, we expect a year-on-year increase in sales revenue in the range of 2 to 4 percent.

Result forecast for 2025

Our expectations for result are also subject to considerable uncertainty. On the level of the Bosch Group and of the Energy and Building Technology business sector, moreover, any effects from the planned acquisition in the HVAC business by the Home Comfort division and from the announced sale of major parts of the Building Technologies division's product business have been ignored. Despite a business environment in our markets that remains challenging, and despite the chronic weakness of the global economy, we want to significantly increase the Bosch Group's EBIT margin from operations. With the exception of Energy and Building Technology, all business sectors make a positive contribution to this forecast, albeit to differing degrees.

In this context, we expect the Mobility business sector to slightly improve its EBIT margin from operations. In the Industrial Technology business sector, we expect EBIT margin to be considerably higher than in the previous year, and EBIT margin from operations to be significantly higher in Consumer Goods. By contrast, the forecast EBIT margin in the Energy and Building Technology business sector will remain significantly below its 2024 level, as it will account for the integration and transaction costs already incurred in advance of the acquisition in the HVAC business planned by Home Comfort. The same applies to the costs arising in the course of carving out major parts of the Building Technologies division's product business in the course of the planned sale.

Expectation for NWC and FCF in 2025

Disregarding the announced transactions in the Energy and Building Technology business sector, our aim is to achieve an FCF-to-sales ratio on a par with the previous year.

For all business sectors, apart from Energy and Building Technology, we want to achieve an improvement in the internal indicator of the ratio of average NWC to sales revenue, albeit to differing degrees. In the Mobility business sector, we are assuming a slight improvement. Both the Industrial Technology and Consumer Goods business sectors are aiming for a significant improvement. For Energy and Building Technology, we expect a slight deterioration.

Report on opportunities and risks

Opportunities

On the whole, we see good growth opportunities for the Bosch Group. For us as a supplier of technology, additional sales opportunities are opening up through changes in markets and technology – especially as a result of electrification, electronification, automation, and digitalization. There is also the growing economic and social focus on sustainability, and the growth potential of emerging regions such as China, India, ASEAN, and Africa. For the sake of greater clarity, the "Prospects for the Bosch Group" section describes in detail the opportunities and specific strategies we derive from them for the company as a whole and the business sectors.

Risk report

Risk management system

In the Bosch Group, risk management encompasses the entire company, including all essential operations, functional areas, divisions, and business sectors. It is thus a core responsibility for all managers on every level of the Bosch Group. As far as possible, risks are identified and managed where they arise: in other words, above all in the divisions and their regional subsidiaries. The latter organizational units are also primarily responsible for introducing measures to reduce or control risks.

While the corporate departments for compliance, risk management, and internal control system exercise a governance function for their respective systems, specialist departments such as the legal services and tax departments support, govern, and monitor directives and focal points. The internal audit department also helps assess the appropriateness and effectiveness of these tasks, and where necessary submits proposals for the introduction of appropriate improvements to the board of management and the heads of the specialist departments.

The Bosch Group risk management system takes its lead from the ISO 31000, COSO III (ERM), and IDW PS 340 standards. It includes the systematic recording and follow-up of relevant risks and, where necessary, the identification and follow-up of measures to deal with those risks. In this context, the corporate coordinating office for the risk management system is responsible for continuously improving the system.

A corporate risk management directive sets out principles and responsibilities. Reporting to the supervisory board's audit committee is a fixed component of this directive. In addition, it features a "disruption radar" for the early detection of risks that lie partly outside the planning period. "Disruption" refers to groundbreaking developments that profoundly change customer expectations and markets through new functions, technological innovations, and new business models, and in this way may significantly affect the Bosch Group's business. In addition, a cross-functional risk committee is tasked with identifying significant risk areas across the operating units and pinpointing potentially disruptive risks.

Overall risk assessment

We are not currently aware of any risks, beyond those listed in this report, which could materially affect the net assets, financial position, and results of operations of the Bosch Group in 2025. From a current perspective, there are no risk exposures that could jeopardize the Bosch Group's continued existence as a going concern.

Risk assessment on the basis of the risk management system

Fundamental remarks

Risk assessment on the basis of the risk management system considers a time horizon up to 2028. The number of reported risks (at year-end 2024) has fallen further compared with the previous year. The financial risk ("monetary risk") is calculated from a risk matrix of probability of occurrence and potential loss. It thus gives an indication of how high any likely losses are. This risk has grown 21 percent year on year. While the likelihood of occurrence has remained the same, the potential loss has risen.

Here, the potential scale of loss is based on a three-point estimate for the worst-case, realistic, and best-case scenarios, in a ratio of 1:4:1. Risk reporting uses the residual method. Risks with a probability of occurrence of at least 50 percent are still considered in our annual or interim sales revenue and income forecasts as a matter of principle.

As in the previous year, we have determined a number of thematic focal points under which individual risks are clustered. These focal points take their lead from the size of the aggregate financial risk.

The most important focal point is hybrid globalization. In connection with this, mention should be made of the special risks of a global proliferation of tariff barriers, with its effect on free trade, and the risks arising from geopolitical tensions between the U.S. and China. Changes in the market and competitive environment are a further risk category. As a result of the greater volatility resulting from this, it is becoming increasingly challenging to work existing markets, as well as to access new ones. This development is also being driven by price competition with Asian market players. The risks resulting from protracted market weakness are clustered in the "macroeconomic developments" category. In addition, there are risks from exchange-rate fluctuations, which are described in the section "Hedging policy and financial risks." The "IT infrastructure and cybersecurity" risk cluster addresses risks with respect to core IT processes and connected products, and the danger of business processes being interrupted. One of the risks considered in the "projects and customers" cluster looks at the implications of projects for individual customers being delayed. There is also the focal point of risks arising from legislation and regulations, including those relating to product safety, climate, and data privacy. The most important risk categories also include the Bosch Group's global supply chains. This includes factors such as the bankruptcy of critical suppliers and interruptions in supply.

Four risks exceeded the 250-million-euro threshold for individual financial risks: an increase in nation-state protectionism and the concomitant need to adapt the manufacturing network, increasing risks to sales operations as a result of higher trade barriers, the cybersecurity risk of interrupted business processes, and exchange-rate fluctuations in our business operations.

With respect to the thematic focal points and major individual risks, we are keeping a close eye on developments and are designing scenario-based measures. With respect to the risks related to hybrid globalization, it is part of our strategy to balance our business internationally, and to grow more strongly in markets that have so far been underrepresented. As concerns the changes in the market and competitive environment, we are using our growth strategy to strengthen our position in existing areas, to open up new areas of business, and to extend our global market footprint. When it comes to macroeconomic developments, we pursue a conservative financial policy that includes regular analyses of deviance and, if necessary, the prompt introduction of corrective measures. One of the ways we minimize the risk of business-process interruptions as a result of cyberattacks is through security audits to identify and remedy vulnerabilities. Our response to risks relating to projects and customers is the close monitoring of milestones and greater consideration of superordinate levels. To reduce the risks arising from legislation and regulations, we carefully analyze political developments in order to be able to adapt to changed framework conditions at an early stage. On the subject of global supply chains, we analyze the structure of our procurement sources and track the development of critical suppliers and of logistical challenges in the supply chain. We also take sweeping measures to address individual risks. As concerns the increase in nation-state protectionism and a possible additional need to adapt, we elaborate scenarios and analyze the effects resulting from them, such as additional customs duties and a reduction in sales revenue. To reduce risks and be able to respond quickly to changed framework conditions, developments are tracked closely and preparations made to make supply chains more flexible. These measures are described in the "foreign-trade risks" section. The Bosch cybersecurity organization identifies and evaluates potential risks arising from malware (such as ransomware), identifies vulnerabilities through regular audits and checks, and develops appropriate measures to minimize risks. To ensure that security considerations are an integral part of product and IT service development, this is done in close collaboration with other departments in the company. In addition, our cybersecurity organization collaborates with third-party partners and authorities in order to exchange information about current threats and to adopt best practices. The measures taken to reduce the risk of unfavorable exchange-rate movements affecting unhedged currency items in our business operations are explained separately in the "Hedging policy and financial risks" section.

Risks by business sector

Of the business sectors, Mobility has the highest financial risk. Increasing nation-state protectionism and the concomitant need for additional adjustment are the most prominent risks. We are taking measures to spread value creation more evenly across the various global regions. Apart from the Mobility business sector, this also relates especially to Industrial Technology. The Consumer Goods business sector continues to be faced above all with risks resulting from

changes in its competitive environment. The measures it takes include strengthening competitiveness by improving cost efficiency and modifying its product strategy. In the Energy and Building Technology business sector, the highest risks are a lack of product components and delays in the introduction of products. Our strategy here is to supply technologies that are appropriate to the market and that satisfy requirements.

Hedging policy and financial risks

Hedging policy principles and financial derivatives

The business operations of the Bosch Group are impacted in particular by fluctuations in exchange and interest rates and additionally, on the procurement side, by commodity price risks. Business policy aims to limit these risks by means of hedging. Hedging transactions are managed at corporate level. Internal regulations and guidelines set down a mandatory framework and define the responsibilities related to investment and hedging transactions. According to these regulations, derivatives may only be used in connection with business operations, financial investments, or financing transactions; speculative transactions are not allowed. Trader limits are an important component of the guidelines. Hedges are generally concluded via banks with good credit ratings from leading agencies and taking into account current risk assessments in financial markets. The creditworthiness of the Bosch Group's banking partners is closely monitored, and the risk mitigated by counterparty limits.

To reduce the credit risk of the bank, fixed-term deposits are in some cases also entered into as secured deposits in tri-party repo transactions. In such cases, the bank provides predefined securities as collateral. The transaction settlement, as well as the management and valuation of the securities, are managed by a clearing center. The decision-making bodies are committees for commodities, foreign exchange, and investments that meet at regular intervals. There is a functional segregation of trading, settlement, and control functions. Key tasks of the control function above all include determining risks and continuously checking compliance with instructions and guidelines.

Each month, the risk of financial investments is calculated using the value-at-risk concept. Risks relating to financial assets are monitored using ad hoc asset-allocation studies and limited by diversifying investment. The board of management member responsible attends the monthly foreign exchange and investment committee meetings, and is informed about risk analyses and the results of investments and hedges.

Currency risks

Currency risks from cash flows in business operations are mitigated by the central management of invoicing and purchasing currencies. The currency risk is determined on the basis of the worldwide consolidated cash flows in the respective currencies. Based on annual forecasts, estimated inflows and outflows in the various currencies for the reporting period are aggregated in a foreign exchange balance plan. The resulting net position is then used for the central management of currency exposures. The biggest net currency positions of the planned cash flow are in Chinese renminbi, U.S. dollar, British pound, and Mexican peso.

Hedging of the currency risks for business operations largely takes the form of forward exchange contracts, currency options, and currency swaps. These transactions, which are only entered into with banks, are subject to minimum requirements with respect to nature and scope. The risk attaching to material foreign exchange items from operations is determined using the cash-flow-at-risk concept. These risk analyses and the hedge result are determined monthly and also presented to the member of the board of management responsible in the foreign exchange and investment committee meetings.

A sensitivity analysis in the notes to the financial statements shows the effect of a 10 percent change in the euro exchange rate on the profit before tax. The analysis includes the major currencies. In the case of the Chinese renminbi, the Hungarian forint, the Japanese yen, the Romanian leu, and the Mexican peso, the effect of such a change on profit before tax would in each case run into a low eight-figure sum. These effects with respect to the Czech crown and British pound would be a mid-range eight-figure sum. The U.S. dollar would be the only currency where the effect would be in the nine-figure range. For the most part, the effects on the reported profit or loss result from foreign exchange positions relating to operations as well as from loans within the Bosch Group if, by way of an exception, the loan was granted in a currency other than the local currency of the borrower – for example, because it can be repaid from expected cash flows in this currency. The currency risk as per the statement of financial position deviates from the purely economic currency risk, as the latter is determined solely on the basis of the planned cash flow from operating activities.

The currency risk attached to the purchase price for the planned acquisition of the heating, ventilation, and air-conditioning business of Johnson Controls International plc, Ireland, being denominated in U.S. dollars has been completely hedged through currency options.

Interest-rate risks

Risks from changes in interest rates on investments and borrowings can be limited by select use of derivative financial instruments. These are mainly interest-rate swaps and interest-rate futures. In a sensitivity analysis, the assets and liabilities subject to floating interest rates, fixed-rate securities, pension and money-market funds, and interest derivatives were considered. The effect of a 100-basis-point change in the market interest rate (based on the interest rate on the reporting date) on the profit before tax would be a mid-range eight-figure sum.

Share-price risks

The Bosch Group holds stock as a part of its financial investments used to cover non-current pension obligations. It also holds investments in quoted companies. The analysis of the share price took account of share portfolios, quoted investments, equity funds, and share derivatives. In the 2024 financial statements, these had a carrying amount of 4,769 million euros. A change in the share price of 10 percent (taking the share price on the reporting date as the baseline) would have an effect on the profit before tax of 140 million euros. To reduce share-price risks, a broadly diversified investment strategy is pursued across various regions and sectors.

Other price risks

Derivatives are used to limit the risks of fluctuating commodity prices. The analysis of the commodity price risk took into account commodity price derivatives measured as of the reporting date. The effect on the profit before tax of a change in the forward-rate level of 10 percent (starting from forward rate on the reporting date) would be a high eight-figure sum. As of the reporting date, the Bosch Group is not aware that it is exposed to any significant other price risks.

Credit risks

The credit risk from customer receivables is recorded and monitored on an ongoing basis. Responsibilities and duties relating to credit risks are governed by an internal directive. This mainly concerns the stipulation of payment terms, fixing of credit limits, release of deliveries, and receivables monitoring.

The credit risk for trade receivables is reduced by processing invoices with the corresponding credit notes in a single work step; the net amount is reported in the statement of financial position. This procedure is only performed if there is a legal right to offset and the customer intends to settle the receivable on a net basis or to settle the receivable by offsetting against the corresponding liability. Moreover, trade receivables are partly secured by retention of title. For some trade receivables, collateral has been additionally provided in the form of guarantees, property liens, and mortgages. Due to the measures that have been taken, we do not see any material credit risk.

Liquidity risks

Changes in financial assets and liabilities are monitored on an ongoing basis. Internal directives regulate the duties and responsibilities of liquidity management and planning. The liquidity risk is reduced by processing invoices for trade payables with the corresponding credit notes received in a single work step. This procedure is only performed if there is a legal right to offset and there is an intention to settle the liability based on the net amount or to settle the liability by offsetting against the corresponding receivable. Moreover, collateral is provided in the form of guarantees.

Thanks to our comfortable liquidity position, presented above in the section on net assets and financial position, we have ample financial resources at our disposal. We therefore evaluate the liquidity risk as low.

Risks pursuant to the compliance management system

In 2024, we did not register any unusual corruption-related risks. As before, the general corruption-related risks concern the dealings with business partners whose risk profile is high. Also as before, there are even more and even tighter national and international laws and official requirements with respect to effective compliance, data protection, and information security management systems. They relate above all to current technological developments such as artificial intelligence and cybersecurity. Above all, the focus is on data protection, whistleblower protection, and more stringent prosecution of companies and natural persons.

In the course of further improving the Bosch compliance management system, we have revised our "Code of Business Conduct" and published it as a "Code of Conduct." We have also fundamentally revised our anticorruption regulations. Worldwide, risk analyses relating to "anticorruption," "antitrust law," and "money laundering" were carried out. We are also systematically continuing the digitalization of our core processes, and adhering closely to the cybersecurity management system in order to efficiently dovetail subjects such as cybersecurity and artificial intelligence. In the area of training and communication, we have above all revised our training concept for the "Code of Conduct" and developed role-specific training for all Robert Bosch GmbH associates. We have taken on European and local regulations relating to whistleblower systems and protection and modified our data analysis tools to give more weight to whistleblower reports when they are evaluated.

Foreign-trade risks

Geopolitical developments such as the war in Ukraine and increasing tension in global trade relations are leading internationally to new and tighter rules that restrict free trade. This can also have a negative effect on the reliability of legal frameworks. For globally operating companies such as Bosch, with intermeshed supply-chain structures and complex production processes, this increases the risk of greater tariff burdens. The number of export controls and sanctions regulations is also increasing in many countries. The growing number of foreign-trade challenges also means a greater risk of civil- and criminal-law sanctions, as well as greater reputation risks. For Bosch, there is also the risk that business opportunities will be restricted.

To address the risks of sanctions, we are continuously improving our compliance management in this area, and extending it to include business processes and products. Other important aspects are the rapid implementation of changes in the law and the systematic monitoring of market developments and logistical processes. In addition, in order to do justice to the high number of daily transactions that are potentially subject to sanctions, processes for identifying, evaluating, and documenting risks have been put into practice, along with appropriate strategies and controls for IT-assisted risk minimization. For executives, extensive training courses on sanctions-related risks are being carried out.

Legal risks

In 2024, Bosch was again able to successfully conclude many proceedings relating to emissions from diesel vehicles. Only individual civil-law proceedings are still open. In the view of the board of management, the provisions for legal risks are a sufficient precautionary measure. In all these proceedings, Bosch is asserting its rights. In none of the proceedings concluded does Bosch acknowledge the validity of the claims brought forward, nor does it concede any liability. Bosch is also engaged in compensation discussions with customers in respect of potential civil-law risks associated with closed antitrust proceedings. In the antitrust proceedings against BSH Hausgeräte in France, the French antitrust authority fined the French subsidiary of BSH Hausgeräte 54 million euros on December 19, 2024. This decision is final.

On the basis of the facts relating to antitrust law and engine control units that were available when the financial statements were prepared and that the board of management has assessed, the board of management believes that sufficient precautions have been taken in the form of provisions for legal risks. For the various legal risks outlined above, provisions throughout the group amount to 107 million euros. From the 2024 fiscal year, the board of management is not aware of any further legal risks that could, from a present perspective, materially impair the company's net assets, financial position, or results of operations.

Stuttgart, March 10, 2025

Robert Bosch Gesellschaft mit beschränkter Haftung
The board of management

Dr. Stefan Hartung
Dr. Christian Fischer
Dr. Markus Forschner
Stefan Grosch
Dr. Markus Heyn
Dr. Frank Meyer
Katja von Raven
Dr. Tanja Rückert

Consolidated financial statements

of Robert Bosch GmbH

as of December 31, 2024

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Consolidated income statement

for the period from January 1 to December 31, 2024

T03

in millions of euros

	Note	2024	2023
Sales revenue	7	**90,345**	91,526
Cost of sales	8	–62,591	–62,576
Gross profit		**27,754**	28,950
Distribution and administrative cost	8	–18,531	–18,255
Research and development cost	8	–7,807	–7,351
Other operating income	9	3,378	3,470
Other operating expenses	10	–2,001	–2,025
Result from entities included at equity	6	3	6
Earnings before financial result and taxes (EBIT)		**2,796**	4,795
Financial income	11	3,547	3,956
Financial expenses	11	–3,615	–4,507
Financial result		**–68**	–551
Profit before tax		**2,728**	4,244
Income taxes	12	–1,396	–1,595
Profit after tax		**1,332**	2,649
of which attributable to non-controlling interests		546	535
of which attributable to shareholders of the parent company		786	2,113

Consolidated statement of comprehensive income

for the period from January 1 to December 31, 2024

T04

in millions of euros

	2024	2023
Profit after tax	**1,332**	2,849
Change in debt instruments, measured at fair value	16	324
reclassified to profit or loss	31	185
Currency translation of subsidiaries outside the euro zone	1,019	-915
reclassified to profit or loss	4	25
Items that may be reclassified to profit or loss	**1,035**	-655
Change in equity instruments, measured at fair value	208	87
Remeasurement of pension provisions	-59	-337
Items that will not be reclassified to profit or loss	**149**	-250
Other comprehensive income after tax	**1,184**	-905
Comprehensive income	**2,516**	1,945
of which attributable to non-controlling interests	629	306
of which attributable to shareholders of the parent company	1,887	1,639

Consolidated statement of financial position

for the year ended December 31, 2024

Assets

in millions of euros

	Note	12/31/2024	12/31/2023
Current assets			
Cash and cash equivalents	14	8,223	7,441
Trade receivables	15	17,536	17,691
Other financial assets	16	7,777	7,822
Contract assets	17	1,167	1,376
Income tax receivables		350	349
Other assets	18	2,610	2,628
Inventories	19	15,674	15,784
		53,337	53,713
Non-current assets			
Financial assets	16	14,899	14,336
Contract assets	17	811	805
Income tax receivables		258	345
Property, plant, and equipment	20	25,939	24,618
Right-of-use assets	32	2,710	2,776
Intangible assets	21	10,552	11,055
Investments measured at equity	6	76	53
Other assets	18	1,188	1,608
Deferred taxes	12	2,189	2,617
		58,622	56,463
Assets held for sale	6	**807**	154
Total assets		**112,766**	108,330

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Equity and liabilities

in millions of euros

	Note	12/31/2024	12/31/2023
Current liabilities			
Trade payables	22	13,198	12,205
Lease liabilities	32	656	553
Other financial liabilities	23	2,477	2,172
Contract liabilities	24	2,260	1,876
Income tax liabilities	12	697	675
Other liabilities	25	8,573	8,418
Other provisions	25	4,947	5,125
		32,808	31,549
Non-current liabilities			
Financial liabilities	23	10,043	10,599
Lease liabilities	32	2,128	1,758
Contract liabilities	24	994	836
Other liabilities	25	51	61
Provisions for pensions and similar obligations	26	9,685	9,636
Other provisions	25	6,152	5,321
Deferred taxes	12	612	866
		29,665	28,078
Liabilities directly associated with assets held for sale	6	**300**	144
Equity	27		
Issued capital		1,200	1,200
Capital reserve		4,557	4,557
Retained earnings		41,512	39,776
Equity attributable to shareholders of the parent company		**47,269**	45,533
Non-controlling interests		2,724	2,361
		49,993	47,894
Total equity and liabilities		**112,766**	108,330

Consolidated statement of changes in equity

T06

in millions of euros

Note 27			Retained earnings								
					Other comprehensive income						
	Issued capital	Capital reserve	Earned profit	Treasury stock	Currency translation	Financial instruments	Pensions	Total	Equity parent company	Equity non-controlling interests	Group equity
1/1/2023	1,200	4,557	43,582	-62	-908	238	-2,944	-3,614	44,663	2,867	47,531
Profit after tax			2,587						2,587	538	2,840
Other comprehensive income after tax					-777	428	-788	-569	-569	-143	-712
Comprehensive income			2,587		-777	428	-788	-569	2,018	395	2,413
Dividends			-452						-452	-452	-904
Changes in ownership interests in subsidiaries									3		0
Other changes			131		-136			-136	-54	20	-34
12/31/2023	1,200	4,557	45,848	-62	-1,821	667	-3,732	-4,318	46,175	2,831	49,006
Profit after tax			786						786	546	1,332
Other comprehensive income after tax					934	226	-59	1,101	1,101	83	1,184
Comprehensive income			**786**		**934**	**226**	**-59**	**1,101**	**1,887**	**629**	**2,516**
Dividends			-170					0	-170	-282	-452
Changes in ownership interests in subsidiaries									0	16	16
Other changes			288			-274	5	-269	19		19
12/31/2024	**1,200**	**4,557**	**44,546**	**-62**	**-821**	**579**	**-2,730**	**-2,972**	**47,269**	**2,724**	**49,993**

Consolidated statement of cash flows

T07

in millions of euros

	Note 28	2024	2023
Earnings before financial result and taxes (EBIT)		2,796	4,[illegible]
Depreciation and amortization[1]		5,459	4,[illegible]
Gains/losses on disposal of non-current assets		50	-[illegible]
Result from investments measured at equity		-3	-[illegible]
Other expenses and income, not cash-effective		-169	[illegible]
Change in inventories		-202	[illegible]
Change in receivables and other assets		-204	-[illegible]
Change in liabilities		690	[illegible]
Change in pension provisions and other provisions		221	-[illegible]
Interest paid		-692	-[illegible]
Interest and dividends received		727	[illegible]
Other financial expenses and income, cash-effective		-162	[illegible]
Income taxes paid		-1,536	-[illegible]
Cash flows from operating activities (A)		**6,975**	[illegible]
Acquisition of subsidiaries, net of cash acquired		-102	[illegible]
Disposal of subsidiaries, net of cash disposed of		-107	[illegible]
Payments for hedges associated with future investments		-175	
Additions to non-current assets		-6,030	-[illegible]
Disposal of non-current assets		487	[illegible]
Change in securities and time deposits (term of more than 90 days)		1,380	[illegible]
Cash flows from investing activities (B)		**-4,547**	-[illegible]

1. After offsetting write-ups of EUR 0 million (previous year: EUR 63 million).

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T07

in millions of euros

	Note 28	2024	2023
Acquisition of non-controlling interests		16	
Borrowing		782	4,143
Repayment of financial liabilities		–1,538	–1,687
Repayment of lease liabilities		–675	–598
Dividends paid		–452	–784
Cash flows from financing activities (C)		**–1,867**	**3,861**
Change in liquidity (A+B+C)		**561**	**1,486**
Liquidity at the beginning of the period (January 1)		**7,443**	**6,854**
Exchange-rate related change in liquidity		182	–238
Change in liquidity due to changes in the consolidated group		26	19
Change in liquidity held for sale		11	2
Liquidity at the end of the period (December 31)		**8,223**	**7,443**

Notes to the consolidated financial statements

Principles and methods

1 – General information

Robert Bosch Gesellschaft mit beschränkter Haftung (Stuttgart Local Court, HRB 14000; referred to in the following as Robert Bosch GmbH) is headquartered in Stuttgart, Germany. Its business address is Robert-Bosch-Platz 1, 70839 Gerlingen, Germany. The shareholders of Robert Bosch GmbH are Robert Bosch Stiftung Gesellschaft mit beschränkter Haftung, Stuttgart (93.99 percent of the shares), ERBO II Gesellschaft mit beschränkter Haftung, Stuttgart (5.36 percent of the shares), and Robert Bosch Industrietreuhand KG, Stuttgart (0.01 percent of the shares), which performs the entrepreneurial ownership functions. Robert Bosch GmbH holds treasury stock equivalent to 0.64 percent of capital. For further information on the Bosch Group's business activities, please refer to note 29 "Segment reporting" and to the group management report.

The consolidated financial statements of Robert Bosch GmbH as of December 31, 2024, have been prepared in accordance with the International Financial Reporting Standards (IFRSs) as adopted by the EU at the end of the reporting period in accordance with Regulation (EC) No. 1606/2002 of the European Parliament and of the Council on the application of international accounting standards. In addition, the provisions of Sec. 315e (3) HGB [*Handelsgesetzbuch*: German Commercial Code] have been observed. The previous-year figures have been determined using the same principles.

To enhance the clarity and transparency of the consolidated financial statements, individual line items of the consolidated income statement and the consolidated statement of financial position have been combined. These items are explained separately in the notes to the consolidated financial statements. The income statement has been prepared using the function of expense method.

The group currency is the euro (EUR). Unless otherwise stated, all figures are in millions of euros (EUR million).

The consolidated financial statements prepared as of December 31, 2024, were authorized for publication by the board of management on March 10, 2025. The consolidated financial statements and group management report are filed with the Company Register [*Unternehmensregister*] and published there.

2 – Changes in financial reporting

Accounting standards applied for the first time in the fiscal year 2024

The following new or revised standards became effective for the first time in the reporting year:

- Amendments to IAS 1 *Presentation of Financial Statements* (Classification of Liabilities as Current or Non-current and Non-current Liabilities with Covenants), and
- Amendments to IAS 7 *Statement of Cash Flows* and IFRS 7 *Financial Instruments: Disclosures* (Supplier Finance Arrangements), and
- Amendments to IFRS 16 *Leases* (Lease Liability in a Sale and Leaseback).

The above amendments are not expected to have any material effects on the consolidated financial statements of Robert Bosch GmbH.

Accounting standards not adopted early

In the reporting year, the EU endorsed amendments to IAS 21 *The Effects of Changes in Foreign Exchange Rates* (Lack of Exchangeability), which will become effective for fiscal years beginning on or after January 1, 2025.

The IASB published the following new standards and amendments in the reporting year:

- IFRS 18 *Presentation and Disclosure in Financial Statements*, which will become effective for fiscal years beginning on or after January 1, 2027,
- IFRS 19 *Subsidiaries without Public Accountability: Disclosures*, which will become effective for fiscal years beginning on or after January 1, 2027,
- Amendments to IFRS 9 *Financial Instruments* and IFRS 7 *Financial Instruments: Disclosures* (Contracts Referencing Nature-dependent Electricity), which will become effective for fiscal years beginning on or after January 1, 2026,
- Amendments to IFRS 9 *Financial Instruments* and IFRS 7 *Financial Instruments: Disclosures* (Amendments to the Classification and Measurement of Financial Instruments), which will become effective for fiscal years beginning on or after January 1, 2026, and
- *Annual Improvements to IFRS Accounting Standards* (Volume 11), which will become effective for fiscal years beginning on or after January 1, 2026.

These standards and amendments have yet to be endorsed by the EU.

The Bosch Group has not adopted the above standards and amendments early. The potential effects of first-time adoption on the Bosch Group's consolidated financial statements are currently being reviewed.

3 – Currency translation

In the separate financial statements of the group companies, monetary assets and liabilities denominated in currencies other than the euro are measured at the closing rate, regardless of whether they are hedged or not. Exchange-rate gains and losses from revaluations are recorded in profit or loss.

Financial statements prepared in foreign currency are translated into euros in accordance with IAS 21 *The Effects of Changes in Foreign Exchange Rates*. Assets and liabilities are translated at the closing rate, while equity is translated at historical rates. The line items of the income statement are translated into euros at the annual average exchange rates. Any resulting exchange-rate differences are recorded directly in equity as a separate line item until the disposal of the subsidiaries.

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For the most important non-euro currencies of the Bosch Group, the following exchange rates apply:

T08

		Closing rate		Average rate	
	EUR 1 =	12/31/2024	12/31/2023	2024	2023
Australia	AUD	1.68	1.63	1.64	1.63
Brazil	BRL	6.43	5.36	5.82	5.40
Canada	CAD	1.49	1.46	1.48	1.46
China	CNY	7.58	7.85	7.79	7.66
Czech Republic	CZK	25.19	24.72	25.12	24.00
Hungary	HUF	411.35	382.80	395.30	380.75
India	INR	88.93	91.90	90.54	89.38
Japan	JPY	163.06	156.33	163.84	161.00
Korea	KRW	1,532.15	1,433.66	1,475.23	1,413.29
Mexico	MXN	21.55	19.72	19.81	19.19
Poland	PLN	4.28	4.34	4.31	4.54
Romania	RON	4.97	4.98	4.97	4.95
Switzerland	CHF	0.94	0.93	0.95	0.97
Türkiye	TRY	36.74	32.65	35.56	28.73
United Kingdom	GBP	0.83	0.87	0.85	0.87
United States	USD	1.04	1.11	1.08	1.08

The financial statements of consolidated entities in hyperinflationary economies are prepared in accordance with IAS 29 *Financial Reporting in Hyperinflationary Economies*. In the reporting year, this relates to the subsidiaries in Argentina and Türkiye; their income statements and statements of cash flows are translated at closing rates. To identify economies as hyperinflationary, reference is made to the pronouncements issued by the Center for Audit Quality's International Practices Task Force (IPTF). In accordance with IAS 29, nonmonetary assets and liabilities, equity, and all line items of the income statement and statement of comprehensive income are indexed to the respective country's general price index. In Türkiye, the consumer price index issued by the Turkish Statistical Institute TURKSTAT is used. On December 31, 2024, this stood at 2,684.55 (previous year: 1,859.38). Argentina uses the consumer price index set by the FACPCE, which stood at 7,694.01 on December 31, 2024 (previous year: 3,533.19). Monetary items of the statement of financial position are not restated. The loss of EUR 88 million (previous year: EUR 59 million) on the net monetary position is

recognized in the financial result under expenses or income from exchange-rate fluctuations.

4 – Accounting policies

The accounting policies used in the preparation of the consolidated financial statements of Robert Bosch GmbH are presented in the notes to the individual line items of the income statement and the statement of financial position. The accounting policies applicable to financial instruments are presented together in note 30 "Additional disclosures on financial instruments."

In general, the accounting policies applied are unchanged from the previous year, with the exceptions outlined in note 2.

5 – Assumptions and estimates

The preparation of consolidated financial statements in accordance with IFRSs requires that assumptions and estimates be made for some line items. These assumptions and estimates have an effect on the amount and presentation of the assets and liabilities, income and expenses, and on the contingent liabilities disclosed in the reporting period. Uncertainty involved in these assumptions and estimates could result in actual outcomes that require a restatement to the carrying amount of assets or liabilities concerned in future periods. Assumptions and estimates mainly concern the following:

The determination of loss allowances on receivables and contract assets is based on estimates and assumptions with respect to the credit standing of individual customers. The measurement of inventories requires assumptions and estimates to be made, including for determining the net realizable value. The discounted future cash flows used as a basis for testing goodwill, other intangible assets, and property, plant, and equipment for impairment are based on estimates. Assumptions are also made in the determination of the discount rates and growth rates used. Determining lease terms requires assumptions and estimates with respect to the likelihood of options to terminate or extend the lease being exercised. The recognition of deferred tax assets is premised on their future recoverability being probable. Consequently, assumptions have to be made regarding future taxable income and the expected timing of the reversal of temporary differences. Further assumptions are required to determine the useful lives of items subject to wear and tear within property, plant, and equipment, as well as of intangible assets. The determination of carrying amounts of investments also involves making assumptions and estimates. Provisions for pensions and similar obligations are measured using actuarial methods. This requires various assumptions, including with respect to life expectancy, salary trends, the pension growth rate, and the discount factor. The recognition and measurement of other provisions is based on estimates of amounts and the probability of future events. To the extent possible, such estimates are based on past experience, and are regularly reviewed and adjusted as necessary. Assumptions and estimates are involved to a high degree in measuring provisions for legal risks and for possible compensation claims by customers. Uncertainties exist in particular with regard to the production volumes affected, the amount of claims, and the course of negotiations.

Macroeconomic trends in the reporting year, such as the development of inflation and interest rates, were appropriately taken into account in impairment testing of goodwill and other non-current assets, but also when calculating provisions. In the reporting year, there were no effects on the recognition and measurement of assets and only immaterial effects on the measurement of provisions.

With respect to the consideration of climate-related matters in the preparation of the consolidated financial statements, the relevant legislation is continuously monitored. The effects of legal requirements relating to internal combustion engines, as well as structural changes such as the transition to electromobility and increasing electrification in many fields, have to be assessed in terms of their impact on financial reporting. In the reporting year, this concerns in particular the unfavorable development of all relevant core markets and, related to this, the likely delay in the process of technological transformation. The effects of weaker demand for electromobility and changes in the market situation in some sectors also need to be reflected in the assumptions underlying the measurement of assets and liabilities. This applies especially in impairment testing for assets, but also in the regular review of the useful lives assumed for non-current assets. In the reporting year, climate-related matters had no effect on the recognition and measurement of assets and liabilities. Impairment losses were recognized on the carrying amount of assets due to a change in the market situation in the Power Solutions division.

6 – Consolidation

Basis of consolidation

Besides Robert Bosch GmbH, the consolidated financial statements include all subsidiaries over which Robert Bosch GmbH has control pursuant to the criteria set out in IFRS 10 *Consolidated Financial Statements*. These entities are included in the consolidated financial statements from the date on which the Bosch Group obtains control. Conversely, subsidiaries are no longer fully consolidated when control of the entity is lost.

The capital of the entities consolidated for the first time in the reporting year is accounted for pursuant to IFRS 3 *Business Combinations*, using the acquisition method of accounting. The acquisition-date cost of the investment is offset against the proportionate share of revalued equity. As a matter of principle, assets, liabilities, and contingent liabilities are carried at fair value. Remaining positive differences are accounted for as goodwill. Negative differences are recognized in profit or loss after reassessment. Any difference resulting from the purchase and disposal of non-controlling interests without loss of control is offset against equity.

All intercompany profits and losses, sales revenue, expenses, and other income, as well as receivables and liabilities or provisions, are eliminated. In the case of consolidation measures with an effect on profit or loss, income tax effects are considered and deferred taxes recognized.

101 Consolidated group

Besides Robert Bosch GmbH, the consolidated group comprises a further 490 (previous year: 468) fully consolidated entities. The group developed as follows:

T09

	Germany	Outside Germany	Total
Included in consolidation at January 1, 2023	70	398	468
Additions/formations in the fiscal year 2023	3	10	13
Disposals/mergers in the fiscal year 2023	4	13	17
Included in consolidation at December 31, 2023	77	395	472
Additions/formations in the fiscal year 2024	3	34	37
Disposals/mergers in the fiscal year 2024	–7	–8	–15
Included in consolidation at December 31, 2024	**73**	**421**	**494**

The consolidated group includes four special funds, as well as other investments.

Due to changes to the consolidated group, sales revenue decreased by EUR 138 million in the reporting year and total assets as of December 31, 2024, decreased by EUR 149 million.

102 Condensed financial information on fully consolidated subsidiaries with material non-controlling interests

T10

in millions of euros

	Bosch Powertrain Systems Co., Ltd., Wuxi, China		United Automotive Electronic Systems Co., Ltd., Shanghai, China	
	2024	2023	2024	2023
Current assets	1,719	1,575	3,660	2,048
Non-current assets	431	419	1,524	1,505
Current liabilities	957	1,083	2,415	2,032
Non-current liabilities	2	3	380	338
Sales revenue	1,516	1,329	5,268	4,780
Profit after tax	320	366	575	520
Comprehensive income	360	266	661	374
Cash flows from operating activities	249	312	842	583
Cash flows from investing activities	–67	–50	–368	–219
Cash flows from financing activities	–178	–362	–457	–596
Share of capital attributable to non-controlling interests	34.0%	34.0%	49.0%	49.0%
Profit/loss after tax attributable to non-controlling interests	109	124	282	255
Equity attributable to non-controlling interests	405	361	1,171	1,021
Dividends paid to non-controlling interests	68	218	171	161

T11

in millions of euros

	Bosch HUAYU Steering Systems Group, Shanghai, China		Bosch Ltd., Bengaluru, India	
	2024	2023	2024	2023
Current assets	1,280	1,359	1,194	1,108
Non-current assets	597	585	1,134	922
Current liabilities	991	1,081	633	540
Non-current liabilities	95	82	104	90
Sales revenue	1,891	1,836	1,880	1,834
Profit after tax	203	208	226	177
Comprehensive income	223	181	269	129
Cash flows from operating activities	278	274	349	167
Cash flows from investing activities	–83	–92	–272	–6
Cash flows from financing activities	–96	–121	–105	–234
Share of capital attributable to non-controlling interests	49.0%	49.0%	29.5%	29.5%
Profit/loss after tax attributable to non-controlling interests	99	102	67	52
Equity attributable to non-controlling interests	388	336	469	426
Dividends paid to non-controlling interests	0	95	36	47

The condensed financial information of the respective entities corresponds to the figures before consolidation entries.

Joint ventures and joint operations

The accounting for joint arrangements in accordance with IFRS 11 *Joint Arrangements* is based on whether they are classified as a joint operation or a joint venture, which in turn depends on the contractually agreed rights and obligations of the parties to the arrangement. With regard to joint operations, the Bosch Group recognizes, in relation to its interest, its rights to the assets, liabilities, expenses, and revenue in the related line items in the consolidated financial statements. Investments in joint ventures within the meaning of IFRS 11 are accounted for using the equity method in accordance with IAS 28 *Investments in Associates and Joint Ventures*. The carrying amount of these interests is subsequently measured in accordance with the change in equity of the jointly controlled entity attributable to the Bosch Group, less any impairment, where appropriate.

The following joint ventures are subject to joint control in accordance with IFRS 11 and were recognized in the consolidated financial statements as of December 31, 2024, using the equity method in accordance with IAS 28:

- Bosch BASF Smart Farming GmbH, Cologne, Germany (50 percent),
- BS Systems GmbH & Co. KG, Zusmarshausen, Germany (50 percent),
- MAGURA Bosch Parts & Services GmbH & Co. KG, Nürtingen, Germany (50 percent),
- North America Fuel Systems Remanufacturing LLC, Kentwood, MI, United States (50 percent).

The share of capital indicated corresponds to the share of voting rights. The carrying amounts of the investments in the latter three entities were determined on the basis of the most recent available financial statements as of December 31, 2023.

Condensed financial information on individually immaterial joint ventures

T12

in millions of euros

	2024	2023
Carrying amount of the investments	38	33
Group share of profit after tax	16	16
Group share of other comprehensive income after tax	0	1
Group share of comprehensive income	16	18

The carrying amount of the investments in the above-mentioned joint ventures corresponds to the proportionate share in these entities' equity.

Since 2022, a cooperation arrangement has been in place between Robert Bosch GmbH and the Volkswagen group entity CARIAD SE, Wolfsburg, Germany, for the development of a software platform for partially and highly automated driving. The principal place of business of the joint operation is Ingolstadt, Germany. The development costs incurred are shared equally between the parties. Each party is granted rights to use and market the jointly developed results; the results of engineering work are not marketed jointly.

Associated entities

Pursuant to IAS 28, investments are also included in the consolidated financial statements using the equity method if significant influence can be exercised.

The following associated entities are accounted for using the equity method in accordance with IAS 28 as of December 31, 2024:

- FerRobotics Compliant Robot Technology GmbH, Linz, Austria (49 percent),
- plc2 Design GmbH, Endingen am Kaiserstuhl, Germany (25 percent).

To determine the carrying amount of FerRobotics Compliant Robot Technology GmbH, the most recent available financial statements as of December 31, 2023, were used.

Condensed financial information on individually immaterial associated entities

T 13

in millions of euros

	2024	2023
Carrying amount of the investments	38	39
Group share of profit after tax	–13	–4
Group share of other comprehensive income after tax	0	0
Group share of comprehensive income	–13	–4

The carrying amount of the investments in the abovementioned associated entities corresponds to the proportionate share in these entities' equity.

Business combinations

Business combinations in the reporting year

The following individually immaterial acquisitions were closed in the reporting year:

On January 2, the Bosch Group acquired 100 percent of the shares in MIIT Mechatronics Industries GmbH, Vienna, Austria. The entity is allocated to the Power Tools division (Consumer Goods business sector) and holds shares in FerRobotics Compliant Robot Technology GmbH, Linz, Austria, which, as an associated entity, is accounted for using the equity method in Robert Bosch GmbH's consolidated financial statements.

As part of the restructuring of the sales organization of the Home Comfort division (Energy and Building Technology business sector) in Spain, the Bosch Group acquired 100 percent of the shares in Servicio Tecnico Arnaiz, S.L.U., Bilbao, on April 30 and 100 percent of the shares in Servimat Asistencia Tecnica, S.L., Madrid, both Spain, on September 30. In addition, the assets of Paulo Azkue, S.L., San Sebastian, Spain, were acquired on July 30.

Having previously held a 20 percent interest in Nederlandse Veiligheidsdienst Groep Meldkamer B.V., Goes, Netherlands, the Bosch Group acquired the entity in full on June 3. The acquisition expands the Building Technologies division's services portfolio (Energy and Building Technology business sector) in building security in the Netherlands.

On August 6, the Bosch Group acquired the assets and liabilities of Engineered Control Systems, Inc., based in Fuquay-Varina, NC, United States. The acquired business with building automation solutions for the efficient control, regulation and monitoring of technical building equipment is allocated to the Building Technologies division (Energy and Building Technology business sector).

On September 2, the Bosch Group acquired 100 percent of the shares in DMS Digitale Mess- und Steuersysteme AG, Ettlingen, Germany, including a subsidiary based in Suzhou, China. The acquisition is allocated to the Building Technologies division (Energy and Building Technology business sector). The acquisition is intended to strengthen the division's building automation activities.

In connection with the above business combinations, current assets of EUR 32 million (including cash of EUR 19 million and trade receivables of EUR 8 million) and non-current assets of EUR 41 million were acquired. Current liabilities assumed amounted to EUR 52 million and non-current liabilities to EUR 4 million. The aggregate purchase prices for the above acquisitions amounted to EUR 104 million, and goodwill totaling EUR 85 million was recognized. Goodwill essentially represents part of the synergy potential and is largely non-deductible for tax purposes. On aggregate, as of the acquisition date the above individually immaterial business combinations contributed EUR 20 million to the group's sales revenue and incurred a loss after tax of EUR 1 million.

If the business combinations had already taken place as of January 1, 2024, the Bosch Group's sales revenue would have amounted to EUR 90,393 million and its profit after tax to EUR 1,329 million.

Business combinations recognized provisionally in the previous year

Effective August 31, 2023, 100 percent of the shares in Paladin Technologies Inc., Vancouver, BC, Canada, and Pal-American Technologies Inc., Tumwater, WA, United States, were acquired. The acquisition also included a subsidiary in Canada and two subsidiaries in the United States. The acquisition of Paladin Technologies, a leading provider of security solutions and services in the field of systems integration, is intended to expand the building services business in North America. The final purchase price for the shares came to EUR 338 million and was mainly settled by transferring cash. The purchase price includes contingent consideration that will fall due over the next two years. Allocated to the Energy and Building Technology business sector, the acquired entities have been included in Robert Bosch GmbH's consolidated financial statements as of September 1, 2023.

Provisional amounts had been recognized for the business combination when the consolidated financial statements for the previous year were approved. The final amounts of the acquired assets and liabilities as of the date of first-time inclusion in the consolidated financial statements are presented in the table below:

T14

in millions of euros

	Paladin Technologies
Current assets	**140**
of which cash	1
of which trade receivables	93
Non-current assets	**328**
Property, plant, and equipment	22
Intangible assets	294
of which goodwill	205
Other assets including deferred taxes	12
Current liabilities	**73**
Non-current liabilities	**57**
Liabilities including deferred taxes	57

The acquisition gave rise to goodwill of EUR 205 million, which is not tax deductible and mainly represents part of the synergy potential and the value of the workforce. The goodwill is allocated to the Building Technologies division.

No adjustments were made in relation to the carrying amounts recognized in the previous year.

Non-current assets held for sale and disposal groups

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction. The corresponding assets and disposal groups are available for immediate sale and the sale is highly probable. In accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*, they are measured at the lower of carrying amount or fair value less costs to sell, unless another standard prescribes a different measurement method. Any impairment loss in excess of the balance of non-current assets is recognized by recording current provisions.

As of December 31, 2024, the following operations meet the criteria for classification as a disposal group within the meaning of IFRS 5:

It was announced back in October 2023 that most of the Building Technologies division's product business (Energy and Building Technology business sector) would be sold. This concerns the Video, Access and Intrusion, and Communication business units. The sale will be effected by transferring shares in separate legal entities. The related contracts were signed on December 12, 2024, and the transaction is expected to be closed in the second quarter of 2025. The reason for the arranged sale is the realignment of the Building Technologies division, which is to focus in the future on its regional integrator business with solutions and services for building security, energy efficiency, and building automation.

In the reporting year, the planned sale of the plant in Pollenfeld, Germany, belonging to the legal entity Bosch Automotive Service Solutions GmbH, was announced to secure the site's future. The sale comprises the assets associated with the production of special tools for the automotive industry, which are allocated to the Mobility Aftermarket division (Mobility business sector). The transaction is expected to be closed in the second quarter of 2025.

As part of the classification of the above operations as a disposal group, an expense of EUR 18 million was recognized in sundry other operating expenses in the reporting year. Of that amount, EUR 2 million is attributable to the impairment of non-current assets and EUR 16 million to the recognition of current sundry other provisions.

As of December 31, 2024, the main groups of assets held for sale and the directly associated liabilities are as follows:

T 15

in millions of euros

	2024
Cash and cash equivalents	9
Trade receivables	73
Inventories	205
Property, plant, and equipment and intangible assets	455
Other financial and non-financial assets	65
Assets held for sale	**807**
Trade payables	112
Provisions for pensions and similar obligations	25
Other provisions	49
Other financial and non-financial liabilities	114
Liabilities directly associated with assets held for sale	**300**

The cumulative decrease in equity through other comprehensive income related to disposal groups amounts to EUR 0 million, with a EUR 7 million reduction in the revaluation reserve from pensions and a EUR 7 million increase in the revaluation reserve from currency translation.

As of December 31, 2024, the following operations no longer met the criteria for classification as a disposal group in accordance with IFRS 5:

It proved impossible to transact the sale of the shares in the Russian subsidiary OOO BSH Bytowije Pribory, St. Petersburg, that was planned in the previous year. This was due to the entity being placed under Russian state administrative receivership in April of the reporting year. Because of the associated loss of control in accordance with IFRS 10, the entity was deconsolidated. The entity, which is part of the Consumer Goods business sector, sold household appliances and provided the associated customer services.

In the fiscal year, it was decided not to go ahead with the planned sale of the manufacturing activities of Robert Bosch (France) S.A.S, Saint-Ouen, France, relating to electronic and mechatronic components for the automotive and consumer goods sectors (Mobility business sector), as the sale process scheduled to be transacted by mid-2024 was unsuccessful.

The effects of no longer classifying the activities as a disposal group were reflected in the consolidated financial statements.

Divestments completed in the reporting year

Announced back in the fiscal year 2021, the planned divestment of the passenger car brake disc business, allocated to the Mobility Solutions business sector, was completed on April 30, 2024. The reasons for the sale are that brake disc production within the Bosch Group has hardly any synergies with existing business areas and that the sale is expected to allow better use of the potential inherent in the business to be made. The sale concerned shares held in the entities Buderus Guss GmbH, Breidenbach, and Robert Bosch Lollar Guss GmbH, Lollar, both in Germany.

On September 10, the Bosch Group completed the sale of shares in the Russian subsidiary OOO Bosch Thermotechnik, Moscow. The entity was active in the sale of heating appliances and allocated to the Energy and Building Technology business sector. The sale took place because it was not possible to continue doing business due to the sanctions regime.

In total, current assets of EUR 275 million (including cash of EUR 81 million) and non-current assets of EUR 9 million were sold, and current liabilities of EUR 44 million and non-current liabilities of EUR 68 million transferred.

The transactions had no effect on earnings in the reporting year, as the corresponding expenses of EUR 183 million had already been accounted for in previous years through the recognition of sundry other current provisions. The expenses include the reclassification of EUR 11 million from the currency translation reserve as of the date of disposal. The reclassification from the reserve from pensions through equity reduces retained earnings by EUR 4 million.

Notes to the income statement

7 – Sales revenue

In accordance with IFRS 15 *Revenue from Contracts with Customers*, sales revenue is recognized when the customer obtains control of the goods or services and is thus able to direct the use of, and obtain substantially all the remaining benefits from, the goods or services. This is based on the assumption that there is a contract that creates enforceable rights and obligations; in addition, it must be probable that the Bosch Group will collect the consideration for the goods and services transferred. Revenue is recognized at the amount of the transaction price, i.e. the amount of consideration that the Bosch Group is expected to collect in exchange for the transfer of goods and services arranged. IFRS 15 sets forth a consistent, five-step model for determining the amount of revenue to be reported, which is generally applicable for all customer contracts.

In the sale of goods, control is typically transferred to the customer on delivery. Invoicing usually takes place at the same time. Revenue from services is mostly recognized once the service has been rendered in its entirety and invoiced. In the case of development work, milestone payments or downstream separate remuneration are also agreed. When invoicing the sale of goods, services, and development work, country- and industry-specific payment terms are granted; these are 48 days (previous year: 46 days) on average. For customer-specific products that are allocable to the Mobility (formerly: Mobility Solutions) business sector and do not create an asset with an alternative use for the group, revenue is recognized over time; the same applies to plant engineering contracts in the Energy and Building Technology business sector. Revenue is recognized according to the percentage of completion, which can be determined using input or output methods. Output methods recognize revenue on the

basis of the value to the customer of the goods or services transferred relative to the remaining goods or services promised under the contract. Input methods recognize revenue on the basis of costs incurred relative to the estimated total costs. Depending on the underlying business model, the Bosch Group uses input methods as well as output methods in determining the percentage of completion.

Sales revenue comes to EUR 90,345 million (previous year: EUR 91,596 million). Of this amount, EUR 55,795 million (previous year: EUR 56,182 million) is attributable to the Mobility business sector, EUR 6,450 million (previous year: EUR 7,418 million) to the Industrial Technology business sector, EUR 20,263 million (previous year: EUR 19,943 million) to the Consumer Goods business sector, EUR 7,486 million (previous year: EUR 7,693 million) to the Energy and Building Technology business sector, and EUR 351 million (previous year: EUR 360 million) to other activities.

Sales revenue includes an amount of EUR 1,708 million (previous year: EUR 1,542 million) that had been included in the balance of current contract liabilities at the beginning of the reporting year.

In relation to performance obligations not satisfied in full or in part as of the reporting date, an amount of EUR 368 million (previous year: EUR 118 million) is expected to be realized as sales revenue within the next two years and an amount of EUR 115 million (previous year: EUR 29 million) thereafter. These amounts relate to long-term construction contracts.

Sales revenue recognized over time amounts to EUR 54,427 million (previous year: EUR 55,581 million) in the Mobility business sector and to EUR 1,244 million (previous year: EUR 944 million) in the Energy and Building Technology business sector.

A breakdown of sales revenue by region is provided in note 29 "Segment reporting."

8 – Functional costs

Cost of sales contains the cost of internally manufactured goods sold and the cost price of resold merchandise. The cost of internally manufactured goods sold contains materials and production cost that can be allocated directly, the allocable parts of indirect production overheads, including depreciation of production equipment and amortization of other intangible assets, and write-downs of inventories. Cost of sales also includes development work charged directly to customers and amortization of capitalized development work.

111 The **distribution and administrative cost** breaks down as follows:

T16

in millions of euros

	2024	2023
Distribution cost	13,397	13,403
Administrative cost	5,134	4,824
	18,531	18,228

The distribution cost includes personnel and non-personnel costs, depreciation charged in the distribution function, customer service, logistics, market research, sales promotion, shipping, advertising, and warranty costs.

Research and development cost contains both research cost and development cost that cannot be capitalized.

T17

in millions of euros

	2024	2023
Total research and development cost	7,954	7,568
Development cost capitalized in the reporting period	–212	–234
Impairment losses on capitalized development cost	65	7
	7,807	7,331

Cost of materials amounted to EUR 42,898 million in the reporting year (previous year: EUR 43,839 million).

9 – Other operating income

T18

in millions of euros

	2024	2023
Income from exchange-rate fluctuations	865	934
Income from derivatives	168	251
Income from the reversal of loss allowances on trade receivables and other financial assets	79	105
Income from the disposal of non-current assets	122	271
Income from rent and leases	8	8
Income from the reversal of provisions	882	556
Sundry other operating income	1,254	912
	3,378	3,037

The income from exchange-rate fluctuations is offset by expenses that are disclosed in other operating expenses. Income from derivatives includes income from foreign exchange and commodity derivatives allocated to operating activities.

Income from the reversal of provisions mainly concerns the sundry other provisions.

Sundry other operating income in the reporting year includes income from compensation payments of EUR 201 million and a gain of EUR 132 million on the initial measurement at fair value of an investment previously accounted for using the equity method.

Government grants are recognized pursuant to IAS 20 *Accounting for Government Grants and Disclosure of Government Assistance* only if it is sufficiently certain that the assistance will be granted and the conditions attached to the assistance are satisfied. Grants related to income are presented as part of profit or loss in the period in which the related expenses are incurred. They are offset against the respective expenses. If there are no such expenses, the grants are disclosed in sundry other operating income. In the reporting year, grants related to income totaled EUR 553 million (previous year: EUR 395 million).

10 – Other operating expenses

T19

in millions of euros

	2024	2023
Expenses from exchange-rate fluctuations	860	1,045
Expenses from derivatives	197	161
Loss allowances on trade receivables and other financial assets	125	128
Expenses from the disposal of non-current assets	163	357
Other taxes	27	30
Expenses from the recognition of provisions	146	89
Sundry other operating expenses	483	413
	2,001	2,223

"Expenses from derivatives" includes expenses from foreign exchange and commodity derivatives allocated to operating activities.

11 – Financial result

T20

in millions of euros

	2024	2023
Interest and similar income	785	762
Interest and similar expenses	-1,234	-1,168
Interest result	**-449**	-406
Profit/loss from investments	44	-1
Income from securities	534	518
Expenses from securities	-133	-275
Income from exchange-rate fluctuations	1,029	1,670
Expenses from exchange-rate fluctuations	-1,095	-1,654
Income from derivatives	1,146	1,015
Expenses from derivatives	-1,114	-1,308
Other income	9	11
Other expenses	-39	-40
Other financial result	**381**	-101
Financial result, total	**-68**	-507
of which financial income	3,547	3,960
of which financial expenses	-3,615	-4,467

The line item "interest and similar income" contains dividend income from shares of EUR 54 million (previous year: EUR 73 million) and income from investment funds of EUR 35 million (previous year: EUR 26 million).

The profit/loss from investments comprises dividend income as well as changes in the fair value of investments measured at fair value through profit or loss.

Income and expenses from securities include the changes in the fair value of securities measured at fair value through profit or loss, gains and losses on the disposal of securities measured at fair value through other comprehensive income, as well as impairment losses and income from the reversal of impairment losses on such securities.

The line items "income from derivatives" and "expenses from derivatives" contain transactions to hedge financial assets, mainly from foreign-currency derivatives. In the reporting year, these include currency options to hedge the currency risk from the purchase price agreed in USD for the acquisition of the heating, ventilation, and air-conditioning business of Johnson Controls and Hitachi. In total, the measurement gain on these currency options amounted to EUR 260 million as of the end of the year.

Interest income and expenses are attributable to financial instruments not measured at fair value through profit or loss as follows:

T21

in millions of euros

	2024		2023	
	Interest income	Interest expenses	Interest income	Interest expenses
Financial assets measured at amortized cost (AC)	388		304	
Financial assets measured at fair value through other comprehensive income (FVOCI wR)	222		252	
Financial liabilities measured at amortized cost (AC)		591		426
	610	**591**	556	426

12 – Income taxes

Income tax obligations comprise certain and uncertain income tax liabilities.

In accordance with IAS 12 *Income Taxes*, deferred tax assets and liabilities are recorded for temporary differences between the tax carrying amounts and the carrying amounts in the consolidated statement of financial position. This does not apply when a deferred tax liability arises from the initial recognition of goodwill or when deferred taxes arise from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither earnings before tax nor taxable profit or loss. Deferred taxes from transactions that give rise to taxable and deductible temporary differences of the same amount on initial recognition are an exception to this rule. Deferred tax assets arising from unused tax losses and tax credits are recognized only if it is sufficiently certain that they can be utilized. The deferred tax item equals the estimated tax expense or relief in later periods. The tax rate applicable at the time of realization is taken as a basis. If it is uncertain whether recognized deferred tax assets can be realized, they are adjusted accordingly.

Income tax expenses are classified according to their origin as follows:

T22

in millions of euros

	2024	2023
Current taxes	1,545	1,461
Deferred taxes	–149	–62
	1,396	1,399

Current taxes contain tax expenses not related to the reporting period totaling EUR 32 million (previous year: tax income of EUR 11 million).

Deferred taxes break down as follows:

T23

in millions of euros

	2024	2023
Temporary differences	–207	30
Tax losses and tax credits	58	–92
	–149	–62

Deferred taxes are calculated on the basis of the tax rates that apply or are expected to apply given the current legislation in the individual countries at the expected time of realization. The corporate income tax rate for German companies is 15 percent. Taking into account the solidarity surcharge of 5.5 percent and the trade tax levied on profits recorded in Germany, the total tax rate is 30 percent (previous year: 30 percent). As in the previous year, the tax rates outside Germany range between 6 percent and 35 percent.

115 As of December 31, the deferred tax assets and liabilities presented in the statement of financial position are attributable to the following items:

T24

In millions of euros

	2024		2023	
	Assets	Liabilities	Assets	Liabilities
Receivables, other assets, and inventories	1,007	848	1,145	758
Securities and investments	130	148	119	197
Property, plant, and equipment	218	658	241	671
Right-of-use assets		592		469
Intangible assets	314	861	292	919
Other asset items	552	56	470	83
Liabilities	1,205	151	1,159	152
Lease liabilities	594		497	
Provisions	1,195	87	1,389	95
Other liabilities	0	343	7	373
Tax losses and tax credits	106		104	
Total	**5,321**	**3,744**	5,023	3,955
Netting	–3,132	–3,132	–3,057	–3,057
	2,189	**612**	1,967	898

Of the reported deferred tax assets, EUR 76 million (previous year: EUR 88 million) relates to entities that incurred losses in the reporting year or in the previous year. It is assumed that sufficient taxable income or taxable temporary differences will be available in subsequent years to permit the deferred tax assets to be realized.

No deferred tax assets were recognized in the statement of financial position for the items presented in the table below as it is not probable that sufficient taxable profit will be available in the future:

T25

in millions of euros

	2024	2023
Temporary differences	2,958	2,715
Tax losses	13,341	11,846
Tax credits	7	3
	16,306	14,564

The utilization of unused tax losses and tax credits for which no deferred tax assets have been recognized to date resulted in a reduction of the current tax expense in the reporting year of EUR 2 million (previous year: EUR 4 million).

The unused tax losses for which no deferred taxes were recognized expire as follows:

T26

in millions of euros

	2024	2023
Within one year	70	46
Later than one year and no later than two years	79	63
Later than two years and no later than three years	53	58
Later than three years	530	191
Without expiry date	12,609	11,460
	13,341	11,846

Deferred tax liabilities are recognized on temporary differences relating to investments in subsidiaries if these are expected to reverse in the following year due to planned dividend distributions or the planned sale of shares. No further deferred tax liabilities were recognized on temporary differences in this connection as it is not probable that the temporary differences will reverse in the foreseeable future. As of the reporting date, retained profits of subsidiaries amount to EUR 7,850 million (previous year: EUR 8,051 million). If these profits are distributed, this could lead to an income tax or withholding tax expense at Robert Bosch GmbH or at the level of intermediate holding entities.

Deferred taxes recognized in other comprehensive income in the fiscal year are presented in the following table:

T27

in millions of euros

	2024	2023
Change in equity instruments	−6	−5
Change in debt instruments	−8	−3
Remeasurement of pension provisions	0	1
	−14	−11

Deferred tax income of EUR 0 million (previous year: EUR 0 million) is attributable to the change in debt instruments measured at fair value through other comprehensive income, which was reclassified to profit or loss in the reporting year.

The basis for the expected income tax expense is the German tax rate of 30 percent (previous year: 30 percent). The difference between expected and disclosed income tax expense is attributable to the following factors:

T28

in millions of euros

	2024	2023
Profit before tax	2,728	3,578
Expected income tax expense	818	1,103
Variances due to tax rate	–173	–276
Non-deductible expenses	400	357
Zero-rated income	–254	–308
Tax credits	–109	–133
Recognition/measurement of deferred tax assets	509	497
Withholding taxes	290	238
Tax effects not related to the reporting year	–2	23
Other differences	–83	–7
Income tax expense disclosed	**1,396**	**1,496**
Effective tax rate	51%	34%

"Variances due to tax rate" includes effects resulting from changed tax rates. In the reporting year, these resulted in a deferred tax expense of EUR 2 million (previous year: tax income of EUR 4 million).

"Other differences" mainly includes effects from temporary differences in connection with shares in subsidiaries and effects from changes in permanent differences.

International Tax Reform – Pillar Two Model Rules

In Germany, the country of domicile of Robert Bosch GmbH as the ultimate parent company of the Bosch Group, the act on ensuring a global minimum level of taxation for corporate groups (*Mindeststeuergesetz*: German Minimum Tax Act) came into force on December 28, 2023. This is based on the OECD's model rules on global minimum taxation (Pillar Two). The provisions of the law are effective for the first time for fiscal years beginning after December 30, 2023. In addition, laws were passed in some other countries to introduce a qualified domestic minimum tax. For the Bosch Group, the relevant German and foreign rules are to be applied for the first time for the fiscal year 2024.

In accordance with the rules on global minimum taxation, a corporate group must pay a top-up tax for those countries in which its operating units/entities based there achieve an aggregate effective tax rate of less than 15 percent calculated in accordance with the rules of the German Minimum Tax Act. The levying of a top-up tax is intended to ensure that the minimum tax rate of 15 percent is reached in each country. In most countries in which the Bosch Group operates, either the effective tax rate exceeds the minimum tax rate of 15 percent or temporary transitional rules (safe harbor rules) can be used. For those countries where this is not the case, an expense of EUR 2 million was recognized for expected top-up tax payments.

With regard to the recognition of deferred taxes, use is made of the exemption in IAS 12, which does not require deferred taxes to be recognized in connection with the global minimum taxation rules.

13 – Personnel expenses and headcount

Disclosures on personnel expenses

Personnel expenses break down as follows:

T29

in millions of euros

	2024	2023
Remuneration	24,514	25,930
Social security costs	3,937	3,821
Post-employment benefit costs	1,001	1,520
	29,452	29,271

Headcount

T30

	Annual average 2024	Annual average 2023
EU countries	217,992	221,578
Rest of Europe	33,217	33,536
Americas	53,072	53,698
Asia, Africa, Australia	120,384	120,849
	424,665	429,367

Notes to the statement of financial position

14 – Cash and cash equivalents

T31

in millions of euros

	2024	2023
Bank balances (term up to 90 days)	8,222	7,443
Cash	1	0
	8,223	7,443

Disclosures on restricted cash and cash equivalents are provided in note 28 "Statement of cash flows."

15 – Trade receivables

The accounting policies applicable to trade receivables are explained in note 30 "Additional disclosures on financial instruments."

In the reporting year, trade receivables came to EUR 17,536 million (previous year: EUR 17,081 million). Trade receivables due in more than one year amounted to EUR 10 million (previous year: EUR 14 million).

Information about loss allowances on trade receivables is contained in the credit risk section of note 31 "Capital and risk management."

16 – Other current and non-current financial assets

T32

in millions of euros

	2024		2023	
	up to 1 year	more than 1 year	up to 1 year	more than 1 year
Securities	4,251	11,979	3,859	11,581
Investments		2,354		2,123
Bank balances (term of more than 90 days)	2,417	29	3,307	69
Loan receivables	84	19	103	14
Derivatives	569	32	132	41
Receivables from finance leases	36	150	37	148
Sundry other financial assets	420	336	389	159
	7,777	14,899	7,827	14,535

The securities classified as current assets are listed securities with a residual term of less than one year as well as securities which are intended for sale within a year.

Non-current securities consist of interest-bearing and other securities, investment funds, and shares. In the reporting year, shares and investments in corporations with a fair value of EUR 1,546 million (previous year: EUR 1,423 million) were sold. Related to this, an amount of EUR 274 million (previous year: EUR 165 million) was reclassified from the reserve from financial instruments to earned profit. Disposals of investments in corporations are carried out on the basis of business-policy decisions.

The pledged securities have a carrying amount of EUR 1,754 million (previous year: EUR 1,609 million). The pledged securities satisfy the legal requirement to secure obligations to members of the workforce and bank guarantees. Fund units equivalent to at least the value of the claims were pledged as collateral.

The bank balances are partly invested as secured deposits in tri-party repo transactions. As of the reporting date, the secured deposits have a carrying amount of EUR 1,450 million (previous year: EUR 1,100 million). The bank provides collateral of the same amount in the form of securities.

Disclosures on loss allowances on loan receivables, sundry other financial assets, and finance lease receivables are contained in the section on credit risks in note 31 "Capital and risk management."

Note 32 "Leases" contains additional disclosures on receivables from finance leases.

17 – Contract assets

In accordance with IFRS 15, any performance surpluses at contract level are presented as contract assets. The asset constitutes the Bosch Group's right to consideration in exchange for goods or services it has transferred to the customer.

The contract assets from revenue recognition over time present the excess of the Bosch Group's performance, presented as sales revenue, over consideration already received from the customer. At the point in time when control is transferred to the customer, contract assets from development work are disclosed for all separate consideration that is to be subsequently paid by the customer for separately commissioned research and development work.

T 33

in millions of euros

	2024			
	up to 1 year	more than 1 year	[illegible]	[illegible]
From revenue recognition over time	659	25	[illegible]	[illegible]
From development work	508	786	[illegible]	[illegible]
	1,167	**811**	[illegible]	[illegible]

18 – Other current and non-current assets

T34

in millions of euros

	2024		2023	
	up to 1 year	more than 1 year	up to 1 year	more than 1 year
Prepaid expenses	266	95	279	161
Receivables from tax authorities (without income tax receivables)	1,849	65	1,780	61
Deferred consideration to customers	112	282	358	331
Sundry other assets	383	746	453	511
	2,610	**1,188**	2,870	1,064

The item "sundry other assets" contains costs to fulfill a contract totaling EUR 413 million (previous year: EUR 232 million). No amortization or impairment losses were recognized on capitalized costs to fulfill a contract either in the reporting year or in the previous year.

19 – Inventories

Inventories include raw materials, consumables, and supplies; work in process, finished goods, and merchandise; and prepayments. Inventories are stated at purchase cost or cost of conversion using the average cost method, or at net realizable value if lower. In addition to direct cost, cost of conversion includes an allocable portion of materials and production overheads as well as production-related depreciation that can be directly allocated to the production process. Appropriate allowance is made for risks of slow-moving goods or obsolescence associated with holding and selling inventories.

In the Mobility business sector, development cost incurred for research and development work separately commissioned and separately charged is recognized as work in process under inventories until the date when control is transferred (revenue recognition at a point in time), and not as research and development cost through profit or loss. This development work in process is generally measured on the same basis as all other work in process, except that no allowances for slow-moving goods or obsolescence are applied.

Inventories break down as follows:

T35

in millions of euros

	2024	2023
Raw materials, consumables, and supplies	6,028	5,379
Work in process	3,727	3,377
Finished goods and merchandise	5,833	6,342
Prepayments	86	86
	15,674	15,184

In the reporting year, the change in impairment losses of EUR 120 million was recognized as income in profit or loss (previous year: expense of EUR 31 million). No inventories were pledged as collateral.

20 – Property, plant, and equipment

Property, plant, and equipment are measured at cost less depreciation and, if necessary, impairment losses. Depreciation is charged on a straight-line basis over the economic useful life.

Depreciation is based on the following ranges of useful lives:

T36

	Useful life
Buildings	10 – 50 years
Plant and equipment	8 – 11 years
Other equipment, fixtures, and furniture	3 – 25 years

In accordance with IAS 36 *Impairment of Assets*, impairment losses are recorded on property, plant, and equipment if their recoverable amount has fallen below their carrying amount. Impairment losses are reversed if the reasons for the impairment loss from previous years no longer apply. Repair costs are recognized in the income statement.

In accordance with IAS 23 *Borrowing Costs*, **borrowing costs** are capitalized if they are directly attributable to the acquisition, construction, or production of a qualifying asset. All other borrowing costs are expensed in the period in which they are incurred. Write-downs on capitalized borrowing costs are reported in cost of sales. In the reporting year, borrowing costs of EUR 17 million (previous year: EUR 15 million) were capitalized. The underlying borrowing rate is 3.5 percent (previous year: 3.0 percent).

123 **Government grants** are recognized pursuant to IAS 20 only if it is sufficiently certain that the assistance will be granted and the conditions attached to the assistance are satisfied. Grants related to assets are deducted in order to calculate the carrying amount of the asset.

In millions of euros

	Land, buildings including buildings on third-party land	Development costs	Plant and machinery	Other equipment, factory and office equipment	Prepayments and assets under construction	Total
Gross values 1/1/2023	13,443	23	56,184	19,148	3,265	92,064
Changes in consolidated group	63		107	37	14	221
Additions	223		1,193	884	1,219	3,519
Reclassifications	184	3	1,116	197	-2,300	
Disposals	-124	-1	-1,223	-334	-98	-1,780
Exchange-rate differences	-198		-525	-166	-52	-939
Assets held for sale	-54		-95	-37	-7	-193
Gross values 12/31/2023	13,535	25	56,757	19,729	2,041	92,087
Depreciation 1/1/2023	5,758	11	34,585	14,917	85	55,356
Changes in consolidated group	19		63	25	4	105
Additions	358		1,766	1,178	2	3,304
Reclassifications	-16	4	15	-5	-1	
Disposals	-51		-1,357	-807		-2,215
Write-ups	-30		-15	-4	-7	-56
Exchange-rate differences	-93		-365	-257		-715
Assets held for sale	-38		-25	-17	-1	-81
Depreciation 12/31/2023	5,913	15	34,982	14,988	25	55,923
Carrying amounts 12/31/2023	7,622	21	21,775	4,741	2,016	36,164

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T37

in millions of euros

	Land, buildings belonging to operating assets	Investment property	Plant and equipment	Other equipment, fixtures, and furniture, leased assets	Prepayments and assets under construction	Total
Gross values 1/1/2024	**13,465**	**36**	**31,287**	**14,300**	**4,351**	**63,439**
Changes in consolidated group	52		0	–10	6	48
Additions	349		1,113	810	2,850	5,122
Reclassifications	708	–1	1,482	547	–2,736	
Disposals	–93		–1,137	–760	–142	–2,132
Exchange-rate differences	127	1	826	170	70	1,194
Assets held for sale	–75		–88	–87	–14	–264
Gross values 12/31/2024	**14,533**	**36**	**33,483**	**14,970**	**4,385**	**67,407**
Depreciation 1/1/2024	**5,813**	**15**	**21,982**	**10,988**	**25**	**38,823**
Changes in consolidated group	51		7	–21	8	45
Additions	429		2,023	1,250	33	3,735
Reclassifications	2		3	5	–10	
Disposals	–46		–957	–710		–1,713
Exchange-rate differences	57		572	117		746
Assets held for sale	–38		–55	–75		–168
Depreciation 12/31/2024	**6,268**	**15**	**23,575**	**11,554**	**56**	**41,468**
Carrying amounts 12/31/2024	**8,265**	**21**	**9,908**	**3,416**	**4,329**	**25,939**

125 The depreciation charge for the reporting year contains the following impairment losses:

- Land and buildings: EUR 37 million (previous year: EUR 3 million),
- Plant and equipment: EUR 34 million (previous year: EUR 1 million),
- Other equipment, furniture, and fixtures, assets under construction: EUR 75 million (previous year: EUR 2 million).

The impairment losses of the reporting year contain an amount of EUR 94 million attributable to plant and equipment, to other equipment, fixtures, and furniture, as well as to assets under construction of the Power Solutions division (Mobility business sector). The impairment losses were necessary due to fundamental changes in the market.

The corresponding expenses are recognized in functional costs.

Purchase commitments for items of property, plant, and equipment amounted to EUR 903 million (previous year: EUR 1,489 million); there were no restrictions on title in either the reporting year or the previous year. Government grants for assets of EUR 31 million (previous year: EUR 58 million) were deducted from the additions in the reporting year.

Investment property comprises rented land and buildings which were measured at depreciated cost in accordance with IAS 40 *Investment Property*. Measured at fair value, the portfolio comes to EUR 30 million (previous year: EUR 29 million). The fair values were calculated at corporate headquarters by the competent specialist department. The residential property in Germany and Asia allocated to level 3 of the fair-value hierarchy pursuant to IFRS 13 *Fair Value Measurement* is measured using the discounted earnings or comparative method based on the ImmoWertV [*Verordnung über die Grundsätze für die Ermittlung der Verkehrswerte von Grundstücken*: Ordinance on principles to assess the market value of land] and taking the current fabric and market values of the individual properties into account. Rental income from investment property came to EUR 5 million (previous year: EUR 5 million), maintenance expenses totaled EUR 2 million (previous year: EUR 2 million).

21 – Intangible assets

Acquired and internally generated intangible assets are recognized pursuant to IAS 38 *Intangible Assets* if a future economic benefit will flow to the entity from the use of the asset and the cost of the asset can be reliably determined. These assets are generally carried at cost and amortized using the straight-line method over their economic useful life. The useful life of acquired and internally generated intangible assets is generally four years. The useful life of intangible assets recognized in the context of business combinations is generally between ten and twenty years, in exceptional cases up to fifty years.

Goodwill is tested annually for impairment. Intangible assets subject to wear and tear are only tested for impairment if there is an indication that they may be impaired. Impairment losses are recorded in accordance with IAS 36 if the recoverable amount of the asset concerned has fallen below its carrying amount. Impairment losses are reversed if the reasons for the impairment loss from previous years no longer apply.

T38

	Acquired intangible assets without goodwill	Acquired goodwill	Internally generated intangible assets	Total
Gross values 1/1/2023	3,084	5,799	1,747	10,180
Changes in consolidated group	807	391	5	1,203
Additions	335		285	620
Disposals	-139	-3	-401	-542
Exchange-rate differences	125	84	1	191
Assets held for sale				
Gross values 12/31/2023	10,296	6,271	1,637	18,204
Amortization 1/1/2023	5,353	107	871	7,331
Changes in consolidated group	7		1	8
Additions	719		229	948
Disposals	-714		-409	-1,123
Exchange-rate differences	-69	-1	1	-69
Assets held for sale				
Amortization 12/31/2023	5,296	106	693	6,095
Carrying amounts 12/31/2023	5,000	6,165	944	12,109

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T38

in millions of euros

	Acquired intangible assets (without goodwill)	Acquired goodwill	Internally generated intangible assets	Total
Gross values 1/1/2024	**10,244**	**7,423**	**1,637**	**19,304**
Changes in consolidated group	–6	85	–2	77
Additions	373		258	631
Disposals	–357	–13	–284	–654
Exchange-rate differences	161	114		275
Assets held for sale	–105	–316	–57	–478
Gross values 12/31/2024	**10,310**	**7,293**	**1,552**	**19,155**
Amortization 1/1/2024	**6,632**	**806**	**811**	**8,249**
Changes in consolidated group	–8		–2	–10
Additions	685		337	1,022
Disposals	–338	–13	–281	–632
Exchange-rate differences	92	1		93
Assets held for sale	–99		–20	–119
Amortization 12/31/2024	**6,964**	**794**	**845**	**8,603**
Carrying amounts 12/31/2024	**3,346**	**6,499**	**707**	**10,552**

Amortization of internally generated and acquired intangible assets is recognized in functional costs.

The amortization charge for the reporting year contains the following impairment losses:

- Acquired intangible assets (without goodwill): EUR 18 million (previous year: EUR 0 million),
- Internally generated intangible assets: EUR 65 million (previous year: EUR 1 million).

The impairment losses recognized on internally generated intangible assets relate to capitalized development projects and are attributable to the Mobility business sector. They are recognized in research and development cost. The impairment losses were charged because an economic benefit was no longer expected.

Goodwill from business combinations represents the difference between the purchase price on the one hand and the proportionate share of equity at acquisition-date fair value

on the other. Goodwill is allocated to the divisions (cash-generating units) that are expected to benefit from the synergies of the business combination and is subjected to an annual impairment test. In accordance with the requirements of IAS 36, an impairment loss is recorded when the recoverable amount is below the carrying amount of the net assets of a cash-generating unit (including the goodwill allocated to it). An asset's recoverable amount is the higher of its fair value less costs of disposal and its value in use. The recoverable amount for all cash-generating units is determined based on fair value less costs to sell, which is derived from the future cash flows. Fair value is largely determined by the present value of the perpetual annuity, which in turn is influenced above all by the applicable discount rate and the growth rate assumed. This is based above all on a risk-free interest rate, a market-risk premium, as well as business sector-specific beta factors and leverage ratios. Fair value less costs to sell is assigned to level 3 of the fair value hierarchy in accordance with IFRS 13. The cash flows are determined by reference to business plans with a planning period of five years in most cases and based on the medium-term planning approved by management. Planning reflects expectations concerning future market shares, growth in the respective markets, technological change, and the profitability of products and services. It is based on past experience and the group's internal assessments as well as market studies, if available. In some cases, the planning horizon was extended to ten years in order to take account of a slower uptake of technologies of future importance relating to areas such as electromobility, automated driving, and new electrical and electronic architectures. The business plans are used to derive the factors relevant for determining future cash flows, such as EBIT, change in net working capital, and planned capital expenditure. Cash flows after the detailed planning period are determined by reference to an expected long-term growth rate.

An annual rate of sales growth of 5 percent has been set as a target in the Mobility business sector for the period until 2030. The growth target was reduced by one percentage point year on year to account for both the adjusted expectations regarding global vehicle production and the expected delay in the onset of technologies of future importance relating in particular to electromobility, automated driving, new electrical and electronic architectures, and hydrogen. These technologies are taking longer than previously expected to become established in the European and North American markets. The changes resulting from the expected delays have been taken into account in the business plans.

The economic effects, including particularly the steeper than expected decline in the construction and machinery sectors in the main markets of Europe, North America, and China, have been taken into account in the business plans in the Industrial Technology business sector. No adjustments have been made to the medium-term expectations, despite the economic downturn in the reporting year.

129 The growth rate in particular also remained unchanged compared with the previous year for all business sectors in light of the circumstances described above.

The parameters used in impairment testing are presented in the following table:

T39

Percentage figures

	Mobility		Industrial Technology		Consumer Goods		Energy and Building Technology	
	2024	2023	2024	2023	2024	2023	2024	2023
Growth rate	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
After-tax discount rate	9.9	10.7	9.4	10.4	8.7	9.6	9.4	10.0

A risk-free interest rate of 2.5 percent (previous year: 2.8 percent) and a market-risk premium of 6.5 percent (previous year: 6.5 percent) are assumed. The standard tax rate used is 30 percent (previous year: 30 percent).

In both the reporting year and the previous year, the annual impairment test did not give rise to any need to recognize an impairment loss on goodwill.

The sensitivity analysis of the cash-generating units to which goodwill is allocated considered the following assumed changes: an increase in the after-tax discount rate of 1 percentage point, a decrease in EBIT of 10 percent, and a reduction in the growth rate of 0.5 percentage points. The change in the discount rate or EBIT would have the effects shown in the table below on the goodwill allocated to the divisions:

T40

in millions of euros

Division	Reportable segment	1 percentage-point increase 10 percent decrease in EBIT	1 percentage-point increase in the after-tax discount rate
Electrified Motion	Mobility	–72	–72
Mobility Electronics	Mobility	–136	–136
Drive and Control Technology	Industrial Technology	–226	–299
Building Technologies	Energy and Building Technology	–7	–30

A reduction in the growth rate of 0.5 percentage points would not have resulted in an impairment loss.

Goodwill of EUR 6,499 million (previous year: EUR 6,617 million) is attributable to the divisions (cash-generating units) as follows:

T41

In millions of euros

Division	Reportable segment	2024	2023
Electrified Motion (formerly Electrical Drives)	Mobility	72	74
Mobility Aftermarket (formerly Automotive Aftermarket)	Mobility	378	382
Mobility Electronics (formerly Automotive Electronics)	Mobility	136	132
Power Solutions (formerly Powertrain Solutions)	Mobility	364	363
Cross-Domain Computing Solutions	Mobility	131	126
Drive and Control Technology	Industrial Technology	2,557	2,553
Power Tools	Consumer Goods	437	431
BSH Hausgeräte GmbH	Consumer Goods	548	540
Building Technologies	Energy and Building Technology	633	663
Home Comfort	Energy and Building Technology	1,021	995
Bosch Global Service Solutions	Energy and Building Technology	143	145
Other		79	73
		6,499	6,617

On January 1, 2024, a reorganization took effect in the Mobility (until December 31, 2023: Mobility Solutions) business sector. As part of this reorganization, the divisions assigned to the business sector were renamed and, in some cases, restructured. The previous year's figures in the table have been adjusted to reflect the new structure. The reorganization resulted in only immaterial changes in the allocation of goodwill to the divisions.

The changes in goodwill are attributable to business combinations, to currency effects, and to the separate disclosure in accordance with IFRS 5 in the reporting year. Further information about entities acquired is contained in the section on business combinations in note 6 "Consolidation."

22 – Trade payables

T 42

in millions of euros

	2024	2023
Trade payables	13,129	12,190
Notes payable	69	15
	13,198	12,205

With two partner banks, Bosch offers a worldwide reverse factoring program that is open to all Bosch suppliers. Under this program, the banks handle payment processing for Bosch and settle trade payables to participating suppliers. When a supplier declares its participation in the reverse factoring program, the bank concludes a bilateral agreement with the supplier in question and acquires the supplier's trade receivables due from Bosch. As consideration, the bank pays the supplier the invoice amount, reduced by a discount, before the original due date. As a result, Bosch's supply chain is strengthened. The companies of the Bosch Group settle the invoice amount with the bank on the originally agreed due date. The contracts between the bank and the suppliers are independent of the agreements between Bosch and the banks. Bosch has not issued any guarantees or similar commitments to the banks in connection with the reverse factoring program. Participation in the reverse factoring program that the banks offer to suppliers is not linked to specific payment terms or purchase volumes being agreed between Bosch and its suppliers. Due to the connection with the operating business, the corresponding payables are not reclassified to financial liabilities.

Trade payables include payables of EUR 815 million (previous year: EUR 647 million) for which suppliers of the Bosch Group have concluded reverse factoring agreements. Of this total amount, suppliers have already received payments of EUR 526 million.

The term to maturity of the payables for which reverse factoring agreements have been concluded ranges between 0 and 120 days. The term to maturity for comparable trade payables ranges between 0 and 180 days.

Trade payables due in more than one year came to EUR 102 million (previous year: EUR 56 million).

Further disclosures on trade payables are contained in the section on liquidity risks in note 31 "Capital and risk management."

23 – Other current and non-current financial liabilities

T43

in millions of euros

	2024		2023	
	up to 1 year	more than 1 year	up to 1 year	more than 1 year
Bonds		6,870	749	6,387
Schuldschein loans, registered bonds	551	2,649		3,195
Liabilities to banks	233	207	196	118
Commercial papers	480		535	
Loans	96	28	76	30
Derivatives	308	49	359	30
Sundry other financial liabilities	809	240	861	221
	2,477	10,043	2,772	10,369

The line item "bonds" contains bonds with a nominal value of EUR 5.75 billion that bear interest between 2.625 percent and 4.375 percent as well as U.S. private placements with a nominal value of USD 1.2 billion that bear interest between 6.19 percent and 6.42 percent. The bonds' average residual term to maturity is 9.77 years, compared with 9.59 years the previous year. The average residual term to maturity of the U.S. private placements is 7.38 years (previous year: 8.38 years).

The Bosch Group's financial liabilities additionally include schuldschein loans and registered bonds with a nominal value of EUR 3.2 billion that bear interest between 1.028 percent and 4.893 percent. The average residual term to maturity of the schuldschein loans and registered bonds is 4.00 years, compared with 5.00 years the previous year.

The average interest rate for the bonds, schuldschein loans, and registered bonds is 3.35 percent after 3.36 percent in the previous year. The average interest rate for the U.S. private placements is 6.31 percent as in the previous year.

Sundry other financial liabilities also include financial liabilities to members of the workforce.

Further disclosures on other financial liabilities are contained in the section on liquidity risks in note 31 "Capital and risk management."

24 – Contract liabilities

In accordance with IFRS 15, existing performance obligations to customers at contract level for which consideration has been or will be received must be recognized as contract liabilities.

Contract liabilities break down as follows:

T44

in millions of euros

	2024		2023	
	up to 1 year	more than 1 year	up to 1 year	more than 1 year
From revenue recognition over time	81	81	70	80
From development work	1,361	565	1,132	453
From other items	818	348	658	324
	2,260	**994**	1,860	857

Contract liabilities from development work include advance payments from customers for separately contracted research and development work. Contract liabilities from other items mainly include advance payments from customers for deliveries of goods and other outstanding performance obligations.

25 – Other liabilities, other provisions, contingent liabilities, and other obligations

Other liabilities

T45

in millions of euros

	2024		2023	
	up to 1 year	more than 1 year	up to 1 year	more than 1 year
Accruals in the personnel area	2,978		3,163	
Accruals in the sales and marketing area	2,757		2,805	
Other accruals	1,373		1,760	
Tax liabilities (without income taxes)	928		927	
Deferred income	116	24	68	15
Sundry other liabilities	421	27	348	33
	8,573	**51**	8,418	51

The accruals in the personnel area mainly relate to vacation and salary entitlements as well as accrued special payments, while those in the sales and marketing area mainly pertain to bonus and commission payments.

Other provisions

Pursuant to IAS 37 *Provisions, Contingent Liabilities, and Contingent Assets*, other provisions are recognized if there is a current obligation from a past event which will probably lead to an outflow of resources embodying economic benefits in the future. In addition, it must be possible to reliably estimate the amount of this outflow. Other provisions are measured at full cost. Provisions due in more than one year are stated at their discounted settlement amount if the effect is material. Discounting is based on a current pre-tax market interest rate with matching maturities. Individual provisions in the personnel area are recognized and measured in accordance with IAS 19 *Employee Benefits*.

A breakdown of other provisions is presented in the following table:

T46

in millions of euros

	2024		2023	
	up to 1 year	more than 1 year	up to 1 year	more than 1 year
Tax provisions (without income taxes)	35	30	77	71
Provisions in the personnel area	1,721	3,495	883	2,388
Provisions in the sales and marketing area	2,314	1,528	2,281	1,383
Sundry other provisions	877	1,099	1,383	1,080
	4,947	**6,152**	5,176	5,324

Provisions in the personnel area relate to obligations from personnel adjustment measures, long-service bonuses, early phased retirement, and other special benefits. Provisions in the sales and marketing area mainly take account of losses from delivery and warranty obligations, including risks from recall, exchange, and product-liability cases. Sundry other provisions are recognized, among other things, for risks from purchase commitments, environmental protection obligations, litigation risks, and legal risks.

136 Other provisions developed as follows:

T47

in millions of euros

	Tax provisions (without income taxes)	Provisions in the personnel area	Provisions in the sales and marketing area	Sundry other provisions	Total
1/1/2024	43	3,648	3,836	2,973	10,500
Changes in consolidated group	1	18	5	4	28
Amounts used	–10	–799	–1,209	–531	–2,549
Amounts reversed	–2	–141	–595	–1,095	–1,833
Amounts added	37	2,395	1,717	656	4,805
Reversal of discount	0	96	46	9	151
Other changes	–4	–1	42	–40	–3
12/31/2024	65	5,216	3,842	1,976	11,099

The additions to provisions in the personnel area are mainly related to structural adjustment measures.

Other changes include effects from currency translation and reclassification to liabilities directly associated with assets held for sale.

In 2024, Bosch was again able to successfully conclude many proceedings relating to emissions from diesel vehicles. Only individual civil-law proceedings are still open. In the view of the board of management, the provisions for legal risks are a sufficient precautionary measure. In all these proceedings, Bosch is asserting its rights. In none of the proceedings concluded does Bosch acknowledge the validity of the claims brought forward, nor does it concede any liability.

Bosch is also engaged in compensation discussions with customers in respect of potential civil-law risks associated with closed antitrust proceedings. In the antitrust proceedings against BSH Hausgeräte in France, the French antitrust authority fined the French subsidiary of BSH Hausgeräte EUR 54 million on December 19, 2024. This decision is final.

On the basis of the facts relating to antitrust law and engine control units that were available when the consolidated financial statements were prepared and that the board of management has assessed, the board of management believes that sufficient precautions have been taken in the form of provisions for legal risks. For the various legal risks outlined above, provisions throughout the group amount to EUR 107 million (previous year: EUR 386 million).

The increased demand from the automotive industry and the high demand for semiconductors from the consumer electronics, IT, and communications sectors have in recent years caused bottlenecks in the global supply of semiconductors, which were exacerbated by disruptions of production at certain semiconductor manufacturers. The semiconductor bottlenecks had already been largely overcome in the course of 2023. The remaining commercial risk as of the reporting date is estimated to be declining and has been reflected accordingly in the consolidated financial statements. The commercial risk from further delivery obligations that may lead to compensation claims by customers has also been reflected in the consolidated financial statements. Applying IAS 37.92, no further disclosures are made.

Contingent liabilities

No provisions were recognized for the following contingent liabilities, as it is more likely than not that they will not occur:

T48

in millions of euros

	2024	2023
Contingent liabilities from guarantees	9	25
Contingent liabilities to tax authorities	76	48
Other contingent liabilities	11	16
	96	**88**

Other financial obligations

On July 23, 2024, the Bosch Group signed binding agreements to acquire the residential and light commercial heating, ventilation, and air-conditioning business from Johnson Controls and Hitachi. A purchase price of USD 8 billion was agreed. The closing of the transaction is subject to regulatory approvals and is planned for the third quarter of 2025. The business associated with the planned acquisition is allocated to the Home Comfort division (Energy and Building Technology business sector).

26 – Provisions for pensions and similar obligations

Pursuant to IAS 19 *Employee Benefits*, pension provisions are recognized using the projected unit credit method, taking estimated future increases in pensions and salaries into account, among other things. The expense from unwinding the discount on pension provisions is reported in the financial result under interest expenses.

The workforce of the companies included in the consolidated financial statements have certain rights in connection with the company pension scheme, depending on the conditions existing in the various countries. The benefit obligations include both currently claimed benefits and future benefit obligations of active associates or associates that have left the company.

The group's post-employment benefits include both defined contribution plans and defined benefit plans. In the case of defined contribution plans, the company pays contributions to state or private pension or insurance funds, either based on legal or contractual provisions or on a voluntary basis. The payment of these contributions does not give rise to any further payment obligations for the company. The defined benefit plans are funded or unfunded pension systems, as well as systems financed by insurance premiums.

Plan assets are invested based on the underlying defined benefits granted. Asset-liability studies are performed regularly for this purpose. The funding status is an important controlling variable in this context. Bosch continuously monitors it with the involvement of external experts. The investment strategy is derived from the corresponding governance guidelines. External asset managers are tasked with investing the assets.

The major defined benefit plans and post-employment medical-care plans operated by the Bosch Group are described below. These plans are subject to actuarial risks such as longevity risks, interest fluctuation risks, and capital market risks.

Germany

The company pension scheme ("Bosch pension plan"), introduced on January 1, 2006, is a defined contribution plan with salary-based contributions for accumulating retirement benefits. The Bosch pension plan is partly funded via an external pension fund, Bosch Pensionsfonds AG. The value of the assets of Bosch Pensionsfonds AG is offset against the pension obligation calculated using the projected unit credit method.

During the vesting period, employer and employee contributions are added to the assets of Bosch Pensionsfonds AG up to the tax-allowed ceiling in accordance with Sec. 3 No. 63 EStG [*Einkommensteuergesetz*: German Income Tax Act]. Contributions that exceed the tax-allowed ceiling are allocated to the unfunded obligation. Irrespective of whether contributions are allocated to Bosch Pensionsfonds AG or to direct commitments, the amount of the total entitlement develops in line with the performance of the Bosch pension fund. Entitlements to retirement benefits from commitments predating the introduction of the Bosch pension plan were transferred to the Bosch pension plan. For a constantly decreasing number of associates in the vesting period, a transitional arrangement guarantees a fixed rate of return on the defined benefit obligation.

On reaching retirement, or in the event of death, the earned benefits are paid out in the form of a lump-sum payment, in installments, or as a lifelong annuity, depending on the beneficiary's choice. For benefits triggered from January 1, 2016, onward, a fund-based retirement pension payment is made through Bosch Pensionsfonds AG. Owing to the low likelihood of claims being made against Bosch, the Bosch pension plan is treated as a defined contribution plan from the beginning of the pension phase.

Japan

The majority of the pension obligations are corporate pension plans (CPPs) in the form of funded career average pension plans. The benefits are based on salary-dependent contributions that are subject to interest. The rate of return depends on the structure of the pension plan.

There are also pension obligations from unfunded retirement allowance plans, the benefits of which are based on years of service and final salary.

All benefits are paid out as lump-sum payments on termination, death, or reaching retirement age. In some CPPs, associates can draw pension payments after a certain period of service.

Switzerland

Bosch has a funded pension plan. The Bosch pension plan is organized as a foundation. All the demographic and financial risks are borne by the foundation and regularly assessed by the foundation's board of trustees. In the case of a deficit, adjustments can be made such as a change in the pension factors or an increase in future contributions.

Pension plans are governed by the BVG [*Bundesgesetz über die berufliche Alters-, Hinterlassenen- und Invalidenvorsorge*: Swiss Pension Fund Law]. All benefits are defined by law, and the BVG stipulates the minimum benefits to be paid. The Bosch pension plan meets all legal requirements.

Both employer and employees make contributions to the Bosch pension plan. The benefits are paid out either as a lump sum or a lifelong annuity.

United Kingdom

Bosch finances a closed final-salary-based defined benefit plan. The pension obligation is funded via a trust association which is legally independent of Bosch, and which is operated in accordance with the law. The trustees are required to comply with the legal requirements.

The benefits earned are paid out on reaching retirement age, or in the event of occupational disability or death.

United States

Bosch operates the Bosch pension plan as well as other smaller defined benefit and funded pension plans. These were merged into one plan, the Bosch pension plan, at the end of 2023; at the same time, the termination of the Bosch pension plan was resolved and the corresponding process initiated. The termination is subject to approval by the U.S. Pension Benefit Guaranty Corporation. The termination process is expected to take between 18 and 24 months.

This does not affect unfunded pension plans that provide benefits for certain members of management or for members of the Bosch pension plan whose income lies above the statutory contribution assessment basis. The benefits depend on age, years of service, and salary, and are paid out on reaching retirement age or in the event of death. The pension plans are closed to new entrants.

In addition, Bosch finances unfunded plans for post-employment medical care. The level of benefits and the contributions for pensioners vary depending on location, age, and years of service. The benefits include healthcare benefits and life assurance contributions for pensioners and their spouses. The plans are also closed to new entrants.

Actuarial calculations and estimates are made for all defined benefit plans. Besides assumptions about life expectancy, and taking index-linked developments into account, the calculations are based on the following parameters, which vary from one country to another depending on local economic circumstances:

T49

Percentage figures

	Germany		Japan		Switzerland		United Kingdom		United States		Total	
	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023
Discount factor	3.6	3.6	1.8	1.9	1.0	1.4	5.5	4.5	5.4	4.7	3.8	3.7
Projected salaries	3.0	3.0	2.5	2.5	1.8	1.9	3.1	3.3	3.5	3.5	3.1	3.1
Projected pensions	2.0	2.2	n.a.	n.a.	0.0	0.0	2.9	2.8	n.a.	n.a.	1.9	2.0

n.a. Not applicable

To determine the discount factor in the euro zone, reference was made to corporate bonds rated AA by at least one leading rating agency as of the reporting date.

Projected salaries are future salary increases estimated on the basis of the economic situation and inflation, among other factors.

The pension trend (projected pensions) for inflation-linked pension payments is based on the development of country-specific, recognized indices.

The pension plans are measured using the current mortality tables as of December 31 of the fiscal year concerned. As of December 31, 2024, the following mortality tables are used:

T50

Germany	Heubeck 2018G mortality tables
Japan	2020 MHLW Standard Table
Switzerland	BVG 2020 with CMI_2016 improvement factors, LTR of 1.5 percent
United Kingdom	114 percent for males, 109 percent for females of S3PXA tables with 2023 CMI projections and 1.25 percent long-term improvement
United States	Pri-2012, projected by MP2021; aggregate for some plans, collar adjustments for others

141 As of December 31, 2023, the following mortality tables were used in the key countries:

T51

Germany	Heubeck 2018G mortality tables
Japan	2020 Shinkan standard table
Switzerland	BVG 2020 with CMI 2018 improvement factor, rate of 1.5 percent
United Kingdom	118 percent for males, 108 percent for females of S3PA tables with 2022 CMI projections and 1.5 percent long-term improvement
United States	Pri-2012 projected by MP-2021, generally for annuities, other adjustments for others

142 For the key regions, the present value of the defined benefit obligation can be reconciled to the provision as follows:

T52

in millions of euros

	Present value of the obligation	Plan assets	Other assets	Unrecognized asset	Provision
12/31/2024					
Germany	15,286	-6,204	0	0	9,082
Japan	146	-236	0	114	24
Switzerland	990	-1,144	27	130	3
United Kingdom	224	-278	54	0	0
United States	1,461	-1,419	141	0	183
Other	649	-260	3	1	393
	18,756	**-9,541**	**225**	**245**	**9,685**
12/31/2023					
Germany	14,883	-5,798	0	0	9,085
Japan	136	-231	2	90	28
Switzerland	918	-1,107	27	169	7
United Kingdom	233	-269	55	0	0
United States	1,569	-1,415	109	0	263
Other	645	-269	7	1	384
	18,384	-9,089	200	260	9,767

143 The development of the net liability of the defined benefit obligation is presented in the following table:

T53

in millions of euros

	Present value of the obligation	Plan assets	Other assets	Unrecognized asset	Provision
1/1/2024	**18,026**	**–8,824**	**198**	**266**	**9,666**
Pension cost charged to profit or loss					
Current service cost	699				699
Past service cost	–19				–19
Gains/losses from plan settlements not related to past service cost	3				3
Net interest income/expense	656	–315		4	345
Other	0	8			8
	1,339	**–307**	**0**	**4**	**1,036**
Remeasurement					
Return on plan assets (excluding amounts included in net interest)		–237			–237
Gains/losses arising from changes in demographic assumptions	–4				–4
Gains/losses arising from changes in financial assumptions	–134				–134
Experience gains/losses	441				441
Other adjustments		0		–18	–18
	303	**–237**	**0**	**–18**	**48**

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	Present value of the obligation	Plan assets	Other assets	Unrecognized asset	Provision
Contributions					
Employer		-461			-461
Beneficiaries	18	-18			0
	18	**-479**	**0**	**0**	**-461**
Benefits paid[1]	-949	361			-588
Special events (plan settlement)	0	0			0
Transfers	-1	0			-1
Currency translation	58	-76		-7	-25
Changes in consolidated group	1	-2			-1
Changes in other assets			27		27
Disposal groups	-39	23			-16
12/31/2024	**18,756**	**-9,541**	**225**	**245**	**9,685**

1. Including EUR 87 million for transfer payments to Bosch Pensionsfonds at the beginning of the pension phase for payment of a fund-based retirement pension.

	Present value of the obligation	Plan assets	Other assets	Unrecognized asset	Provision
1/1/2023	15,991	-8,026	177	252	9,304
Pension cost charged to profit or loss					
Current service cost	638				638
Past service cost	0				0
Gains/losses from plan settlements not related to past service cost	-1				-1
Net interest income/expense	631	-332		5	304
Other	0	5			3
	1,268	-327	0	5	1,074
Remeasurement					
Return on plan assets (excluding amounts included in net interest)		-886			-886
Gains/losses arising from changes in demographic assumptions	1				1
Gains/losses arising from changes in financial assumptions	374				374
Experience gains/losses	265				265
Other adjustments		0		0	0
	640	-886	0	0	254

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	Present value of the obligation	Plan assets	Other assets	Unrecognized asset	Provision
Contributions					
Employer		-449			449
Beneficiaries	97	-97			0
	17	-455	0	1	-439
Benefits paid[1]	-931	841			-600
Special events (plan settlement)	0	0			0
Transfers	0	0			0
Currency translation	-53	43		1	-10
Changes in consolidated group	4	-2			2
Changes in other assets			3		3
Disposal groups	-5	3			-2
12/31/2023	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1. Including EUR 97 million for transfer payments to Bosch Pensionsfonds at the beginning of the pension phase for payment of a fund-based retirement pension.

147 The plan assets comprise the following components:

T 55

Percentage figures

	Germany		Japan		Switzerland		United Kingdom		United States	
	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023
Cash and cash equivalents	**2**	2	**1**	0	**1**	1	**6**	5	**19**	2
Equity instruments	**56**	58	**28**	30	**29**	27	**0**	0	**0**	0
of which Europe	62	63	8	10	41	43	0	0	0	0
of which North America	18	17	42	38	52	48	0	0	0	0
of which Asia Pacific	12	12	50	51	7	8	0	0	0	0
of which emerging markets	7	7	0	0	0	12	0	0	0	0
of which other	1	1	0	0	0	1	0	0	0	0
Debt instruments	**38**	40	**64**	65	**27**	28	**91**	92	**81**	89
of which government bonds	27	28	74	75	11	11	53	55	56	28
of which corporate bonds	72	71	22	22	89	87	47	45	44	71
of which other debt instruments	1	1	4	3	0	2	0	0	0	1
Property	**4**	3	**0**	0	**33**	34	**0**	0	**0**	0
of which owner-occupied	97	95	0	0	0	0	0	0	0	0
of which non-owner-occupied	3	5	0	0	100	100	0	0	0	0
Insurance	**0**	0	**0**	5	**0**	0	**3**	3	**0**	0
Other	**0**	1	**7**	0	**10**	10	**0**	0	**0**	0

Quoted prices in an active market are available for equity instruments. For the other classes of assets, there are in most cases no quoted prices in an active market. The "other" line item mainly contains investments in infrastructure facilities.

Duration of the pension obligation

The weighted duration of the pension obligation as of December 31, 2024, is 10.4 years (previous year: 10.4 years).

Estimated maturities of the undiscounted estimated pension payments

T56

in millions of euros

	2024	2023
Less than one year	1,001	533
Between one and two years	1,060	970
Between two and three years	1,107	1,936
	3,168	3,439

The estimated contributions to plan assets in the fiscal year 2025 amount to EUR 466 million (previous year: EUR 473 million).

The estimated benefits to be paid directly in the fiscal year 2025 amount to EUR 621 million (previous year: EUR 575 million).

Sensitivity of the defined benefit obligation in relation to actuarial parameters

T57

Percentage figures

	Germany		Japan		Switzerland		United Kingdom		United States	
	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023
Discount factor										
Increase of 0.25 percentage points	–1.1	–1.2	–1.7	–1.8	–2.9	–2.7	–2.6	–3.2	–2.2	–2.4
Decrease of 0.25 percentage points	1.2	1.2	1.7	1.8	3.0	2.9	2.7	3.3	2.3	2.5
Projected salaries										
Increase of 0.25 percentage points	n.a.	n.a.	0.8	0.8	0.2	0.2	0.2	0.2	0.0	0.0
Decrease of 0.25 percentage points	n.a.	n.a.	–0.7	–0.7	–0.2	–0.2	–0.2	–0.2	0.0	0.0
Projected pensions										
Increase of 0.25 percentage points	0.6	0.6	n.a.	n.a.	2.6	2.6	1.9	1.9	n.a.	n.a.
Decrease of 0.25 percentage points	–0.6	–0.6	n.a.	n.a.	–2.5	–2.5	–1.7	–1.7	n.a.	n.a.
Life expectancy										
Increase by one year	1.9	1.9	n.a.	n.a.	3.1	3.1	4.9	4.8	3.1	3.1

n.a. Not applicable

The sensitivity analyses of the defined benefit obligation for the main actuarial assumptions are based on the same methods as those used for the post-employment benefit obligations presented in the consolidated statement of financial position (projected unit credit method). In each case, one assumption was changed and the other assumptions were

left unchanged. This means that possible correlation effects were not considered.

Defined contribution plans

Defined contribution plans mainly include employee contributions to statutory pension schemes and employer contributions for the company's defined contribution plans. Expenses for defined contribution plans amounted to EUR 1,875 million (previous year: EUR 1,718 million).

27 – Equity

The issued capital of EUR 1,200 million and capital reserve of EUR 4,557 million correspond with the items of the statement of financial position disclosed by Robert Bosch GmbH. The issued capital is divided between the shareholders as follows:

Shareholders of Robert Bosch GmbH

T 58

Percentage figures

	Share-holding	Voting rights
Robert Bosch Stiftung GmbH	93.99	
Robert Bosch Industrietreuhand KG	0.01	93.17
ERBO II GmbH	5.36	
Robert Bosch Familientreuhand KG	0.00	6.83
Robert Bosch GmbH (treasury stock)	0.64	

Retained earnings contain undistributed profits generated in the past by the entities included in the consolidated financial statements, as well as accumulated other comprehensive income. The amount recognized outside profit or loss in the reporting year under financial instruments increases the revaluation reserve from equity instruments by EUR 209 million (previous year: increase of EUR 34 million) and the revaluation reserve from debt instruments by EUR 17 million (previous year: increase of EUR 384 million). As in the previous year, the other changes reported in the consolidated statement of changes in equity in the reporting year mainly comprise effects from the disposal of equity instruments.

Retained earnings also include treasury stock of EUR 62 million (previous year: EUR 62 million).

The board of management proposes to distribute a dividend of EUR 186 million.

Non-controlling interests

The non-controlling interests in the equity of the consolidated subsidiaries mainly comprise the non-controlling interests in United Automotive Electronic Systems Co., Ltd., Shanghai, Bosch Powertrain Systems Co., Ltd., Wuxi, Bosch HUAYU Steering Systems Group, Shanghai, all China, and Bosch Ltd., Bengaluru, India. Condensed financial information on the above entities is included in note 6 "Consolidation."

Other notes

28 – Statement of cash flows

The statement of cash flows presents cash inflows and outflows from operating activities, investing activities, and financing activities.

Cash flows are derived indirectly, starting from EBIT. EBIT is earnings before the financial result and before tax. Cash flows from operating activities are adjusted for non-cash expenses and income (mainly depreciation and amortization of non-current assets) and take into account changes in working capital as well as cash-effective financial expenses, financial income, and taxes.

Investing activities mainly comprise additions to non-current assets including leased products, the acquisition and disposal of subsidiaries, and changes in securities and time deposits with a term to maturity of more than 90 days. Within the changes in securities and time deposits, cash inflows and outflows are netted, as these are essentially revolving asset reallocations. In the previous year, the investment of financial liabilities taken out as time deposits with a term of more than 90 days and in money market funds in particular had led to a cash outflow from investing activities.

Financing activities combine the cash inflows and outflows from borrowing and repayment of financial liabilities, from the repayment of lease liabilities, and from dividends.

Changes in items of the statement of financial position contained in the statement of cash flows cannot be directly derived from the statement of financial position, as they have been adjusted for exchange-rate effects and changes in the consolidated group.

Interest and dividends received contains interest received of EUR 674 million (previous year: EUR 677 million) and income received from equity investments of EUR 53 million (previous year: EUR 24 million).

The liquidity reported in the statement of cash flows includes cash and cash equivalents of EUR 8,223 million (previous year: EUR 7,443 million). In the reporting year, cash and cash equivalents of EUR 95 million (previous year: EUR 103 million) were subject to restrictions, including EUR 70 million (previous year: EUR 86 million) in Russia and in Ukraine as a result of restrictions on capital movements in the two countries.

151 Changes in liabilities from financing activities during the reporting year and the previous year are presented in the following table:

T59

In millions of euros

		Cash-effective changes		Non-cash changes			
	1/1/2024	Borrowing	Repayment	Changes in consolidated group	Exchange rate-related changes	Other changes	12/31/2024
Bonds	7,546		–750		69	5	6,870
Schuldschein loans, registered bonds	3,199					1	3,200
Other financial liabilities	900	782	–788	5	53	–21	931
Lease liabilities	2,351		–675	–14	30	1,092	2,784
	13,996	782	–2,213	–9	152	1,077	13,785

T60

152 in millions of euros

		Cash-effective changes		Non-cash changes			
	1/1/2023	Borrowing	Repayment	Changes in consolidated group	Exchange rate-related changes	Other changes	12/31/2023
Bonds	1,591	599			24	2	1,916
Schuldschein loans, registered bonds	2,098		-300			1	1,799
Other financial liabilities	757	1,565	-1,439	66	-77	-31	841
Lease liabilities	2,187		-568	32	-27	757	2,381
	6,633	2,164	-2,307	98	-80	729	7,137

The other changes in lease liabilities mainly comprise the effects of new or amended lease agreements.

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29 – Segment reporting

Disclosures on operating segments

T 61

In millions of euros

	Mobility		Industrial Technology		Consumer Goods	
	2024	2023	2024	2023	2024	2023
External sales revenue	55,793	58,171	6,450	7,107	20,264	19,843
Intersegment sales revenue	245	205	875	866	314	488
Total sales revenue	**56,038**	58,376	**7,325**	7,973	**20,578**	20,331
EBIT from operations	2,147	2,518	78	543	704	885
of which: result from entities included at equity	9	16				
Amortization and depreciation of intangible assets, right-of-use assets, and property, plant, and equipment	3,593	3,468	274	297	1,017	1,023
Impairment losses on intangible assets, right-of-use assets, and property, plant, and equipment	183				10	6
Non-cash expenses (without depreciation and amortization)	3,970	3,968	357	125	1,017	765
Non-cash income	1,643	1,725	54	60	168	275
Additions to property, plant, and equipment	3,740	3,769	292	418	736	839
Net working capital	15,596	15,587	2,482	2,795	5,548	5,040

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T61

in millions of euros

	Energy and Building Technology		Other		Consolidation		Group	
	2024	2023	**2024**	2023	**2024**	2023	**2024**	2023
External sales revenue	7,478	7,563	325	325			90,310	91,479
Intersegment sales revenue	414	489	127	209	–1,975	–2,169		
Total sales revenue	**7,892**	8,052	**452**	534	**–1,975**	–2,169	**90,310**	91,479
EBIT from operations	370	696	–178	76			3,121	4,865
of which: result from entities included at equity	–11	–4	5				3	6
Amortization and depreciation of intangible assets, right-of-use assets, and property, plant, and equipment	283	259	58	63			5,225	5,007
Impairment losses on intangible assets, right-of-use assets, and property, plant, and equipment	3	2	34				230	6
Non-cash expenses (without depreciation and amortization)	324	353	77	58			5,745	4,534
Non-cash income	88	134	22	36			1,975	2,250
Additions to property, plant, and equipment	173	186	181	271			5,122	5,435
Net working capital	1,586	1,730	–98	–198			25,114	25,895

Based on the internal management and reporting structure, the Bosch Group is divided into four business sectors. These are the reportable segments and result from the combination of divisions in accordance with the criteria set forth in IFRS 8 *Operating Segments*. Business operations within the business sectors are the responsibility of the divisions.

The Mobility business sector mainly comprises the following areas of business: powertrain products and solutions as well as systems for active and passive driving safety, assistance and convenience functions, technology for user-friendly infotainment and vehicle-to-vehicle and vehicle-to-infrastructure communication, concepts, technology, and services for the automotive aftermarket, steering systems for passenger cars and commercial vehicles, connected mobility services, as well as activities in electromobility, control devices, sensor technology, and semiconductors, and a wide-ranging portfolio for e-bikes.

The Industrial Technology business sector combines the following activities:

- Automation technology (technologies for drives, controls, and motion)
- Industry 4.0 software activities and projects

The operations of the Consumer Goods business sector comprise the production and distribution of:

- Power tools (tools for professionals, industry, and DIY, accessories, garden tools, as well as industrial tools and measuring equipment)
- Household appliances (appliances for cooking, washing-up, laundry, drying, cooling, freezing, floor care, etc.)

The Energy and Building Technology business sector comprises the following activities:

- Security systems (video surveillance, public address systems, evacuation systems, and access control)
- Solutions and services for building security, energy efficiency, and building automation
- Home comfort (heating, cooling, and well-being in buildings)
- Service solutions (business solutions for internal and external customers, shared services for the Bosch Group)

Operating segments which are not reportable are combined and presented in the category "Other." This mainly relates to financial, holding, and other service companies as well as operations that are not allocated to a business sector.

The divisions allocated to a business sector are aggregated into a single reportable segment, as they have similar economic characteristics. Above all, the economic performance of all the divisions aggregated in one segment depends to a similar extent on the same core markets (automotive production, capital goods, consumer goods, and energy and building technology).

Line items allocable to financing activities are not included in segment reporting as they are not part of the reported earnings.

The main controlling variables reported to the board of management are sales-revenue growth, EBIT from operations as a percentage of sales revenue (EBIT adjusted for negative effects on earnings from purchase price allocations in the fiscal year 2015), and, as an indicator of the capital that is generally tied up in the short term, net working capital as a percentage of sales revenue. EBIT is earnings before the financial result and before tax. Net working capital is an average of inventories, trade receivables, and contract assets, in each case before valuation allowances, plus capitalized deferred consideration to customers and costs to fulfill a contract, less trade payables and contract liabilities.

Transfer prices between the operating segments are determined at arm's length.

The main items included in non-cash expenses are bad debt allowances, additions to provisions, as well as losses on the disposal of items of property, plant, and equipment, and of intangible assets.

The main items included in non-cash income are income from the reversal of provisions.

Reconciliation statements

T62

in millions of euros

	2024	2023
Sales revenue		
Sales revenue of reportable segments	91,833	93,112
Sales revenue of "Other"	452	535
Consolidation	–1,975	–2,169
Differences in the consolidated group	35	117
Group sales revenue	**90,345**	91,595
Earnings		
EBIT from operations of reportable segments	3,299	4,788
EBIT from operations of "Other"	–178	76
Adjustments from purchase price allocations	–325	231
Differences in the consolidated group		–41
Financial income	3,547	3,080
Financial expenses	–3,615	–4,129
Profit before tax	**2,728**	3,975
Net working capital		
Net working capital of reportable segments	25,212	26,138
Net working capital of "Other"	–98	–195
Reconciliation of average values to carrying amounts as of 12/31	–3,179	–3,615
Valuation allowances on segment assets	–2,231	2,306
Net working capital attributable to disposal groups	–164	–89
Group net working capital	**19,540**	19,545

157 In the reconciliation to the group's net working capital, individual figures for the previous year were adjusted to the presentation in the reporting year.

Disclosures by key countries

T63

in millions of euros

	Sales revenue by registered office of the customer		Non-current assets[1]	
	2024	[illegible]	2024	[illegible]
Europe	**44,497**	[illegible]	**24,446**	[illegible]
of which Germany	17,566	[illegible]	14,860	[illegible]
of which United Kingdom	3,729	[illegible]	735	[illegible]
of which France	2,831	[illegible]	403	[illegible]
of which Italy	2,389	[illegible]	556	[illegible]
Americas	**17,774**	[illegible]	**6,049**	[illegible]
of which United States	12,850	[illegible]	4,693	[illegible]
Asia	**26,718**	[illegible]	**8,506**	[illegible]
of which China	17,275	[illegible]	5,441	[illegible]
of which Japan	2,621	[illegible]	588	[illegible]
Other regions	**1,356**	[illegible]	**200**	[illegible]
	90,345	[illegible]	**39,201**	[illegible]

1. Non-current assets consist of intangible assets, right-of-use assets, and property, plant, and equipment.

The customer structure of the Bosch Group in the reporting year and in the previous year does not reveal any concentration on individual customers.

30 – Additional disclosures on financial instruments

In accordance with IAS 32 *Financial Instruments: Presentation*, a financial instrument is any contract that gives rise to a financial asset of one entity and to a financial liability or equity instrument of another entity.

Financial assets and financial liabilities are recognized in the statement of financial position when the Bosch Group becomes party to the contractual provisions of the financial instrument. For regular-way purchases or sales, however, the settlement date is the relevant date for initial recognition and for derecognition from the statement of financial position. On initial recognition, financial assets and financial liabilities are measured at fair value and classified in accordance with IFRS 9 *Financial Instruments*. Unless subsequent measurement is at fair value through profit or loss, directly attributable transaction costs are taken into account on initial recognition. The fair-value option pursuant to IFRS 9 is not exercised. Hedge accounting is not used in the Bosch Group.

On initial recognition, financial assets are classified either as at amortized cost (AC), at fair value through profit or loss (FVPL), or at fair value through other comprehensive income (FVOCI). The classification depends on the business model underlying the financial assets as well as the contractual cash flow characteristics of the asset. Classification is determined by

- whether the financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows ("hold" business model), whether the objective is achieved by both collecting contractual cash flows and selling financial assets ("hold and sell" business model), or solely by selling financial assets ("sell" business model), and
- whether the contractual cash flows are "solely payments of principal and interest" (SPPI).

The business model is determined on the basis of the Bosch Group's business management. For this purpose, the financial instruments are grouped together by their underlying business model. The contractual cash flow characteristics are reviewed at the level of the individual financial instrument.

Financial assets whose cash flows are solely payments of principal and interest on the principal amount outstanding and held within the "hold" business model are measured at amortized cost (AC). These are trade receivables, cash and cash equivalents, bank balances, loan receivables, and sundry other financial assets. These assets are subsequently measured using the effective interest method; impairment gains and losses, or gains or losses from the derecognition of assets, are recognized in profit or loss.

If the group also intends to collect cash flows from selling financial assets ("hold and sell" business model), the financial assets are measured at fair value through other comprehensive income (with recycling, FVOCI wR). Gains and losses are recorded in other comprehensive income in this case. Cumulative changes in fair value are reclassified to profit or loss when the instruments are sold. Impairment losses are likewise reclassified from other comprehensive income to

profit or loss. Interest income is recognized in profit or loss using the effective interest method. Most of the Bosch Group's interest-bearing securities are measured in this category.

Financial assets that do not satisfy the cash flow criterion owing to there not being solely payments of principal and interest on the principal amount outstanding are measured at fair value through profit or loss (FVPL). Changes in fair value and income from these assets are recognized immediately in profit or loss. This category mainly comprises interests in partnerships, shares in investment funds, certain interest-bearing securities, and derivatives with a positive fair value which are mainly used to limit currency, interest, and commodity risks in accordance with internal risk management.

The group may, at initial recognition, irrevocably designate equity instruments that are not held for trading as measured at fair value through other comprehensive income (no recycling, FVOCI nR) rather than as measured at fair value through profit or loss. In that case, all changes in value are recognized in other comprehensive income. Cumulative changes in value are not reclassified to profit or loss even when the financial asset is sold. Dividend income, however, is recognized in profit or loss. As this measurement method appropriately presents the net assets and results of operations, the Bosch Group has decided to apply this option to investments in corporations and to shares reported under securities.

With regard to financial assets (not including equity instruments) that are not measured at fair value through profit or loss, IFRS 9 requires loss allowances to be recognized for any expected credit losses. The extent to which expected losses are recognized is determined based on three stages that differ in terms of the extent to which the credit risk on financial assets has significantly increased since initial recognition. Stage 1 includes all financial assets whose credit risk has not increased significantly and whose outstanding payments are up to 30 days past due. For such assets, credit losses are recognized in relation to the probability of a default occurring over the next 12 months. If the borrower's credit risk has increased significantly, the financial instrument is allocated to stage 2, and loss allowances are recognized at an amount equal to the expected losses over the lifetime of the financial asset. A significant increase in credit risk is assumed when either agreed payments are more than 30 days past due or information is available about a deterioration in the borrower's financial situation. If there is additional evidence that the financial asset is credit-impaired, it is allocated to stage 3. Such evidence includes payments more than 90 days past due, observable data about significant financial difficulty of the borrower, a high probability that the borrower will enter bankruptcy, and significant changes in the issuer's technological, economic, regulatory, or market environment.

The simplified approach to impairment is used for trade receivables, contract assets, and lease receivables. Accordingly, a loss allowance is always recognized at the lifetime-expected credit losses irrespective of any changes in the credit risk since initial recognition of the financial asset. As a practical expedient, a loss allowance table is used in the Bosch Group for receivables that are not credit-impaired, which determines the expected losses over the remaining term as a flat-rate percentage in relation to the number of days past due. Historical probabilities of default are used as a basis, supplemented by forward-looking parameters of relevance for the credit risk. If there is any information available about financial difficulty of the borrower, the assets are analyzed individually and a loss allowance for credit-impaired receivables is recognized. According to internal group guidelines, the carrying amounts of receivables are generally adjusted via a loss allowance account. Loss allowances are not recognized if receivables are collateralized or credit insurance exists.

Financial liabilities are generally subsequently measured at amortized cost using the effective interest method. In the Bosch Group, this applies to trade payables, bonds, schuldschein loans, registered bonds, liabilities to banks, commercial papers, loan liabilities, and other financial liabilities. The main exception to this rule concerns financial liabilities held for trading, which are measured at fair value through profit or loss. In the Bosch Group, these are derivatives with a negative fair value.

When determining the fair value of financial assets and financial liabilities, the input factors of the valuation techniques pursuant to IFRS 13 are categorized as follows:

- Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities that the accounting entity can access at the measurement date
- Level 2: Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly
- Level 3: Inputs that are not based on observable market data

The fair value of current financial assets and liabilities is assumed to correspond to their carrying amount.

Financial assets are derecognized when the rights to cash flows have expired, e.g. after completion of bankruptcy proceedings or after a court ruling. They are also derecognized when the Bosch Group transfers substantially all risks and rewards from a financial asset. Financial liabilities are derecognized when the obligations specified in the contract have been discharged or canceled, or when they have expired.

Financial assets and financial liabilities are offset and presented as a net amount in the statement of financial position when there is a legal right to offset and the group either intends to settle on a net basis, or when the asset and the liability are to be settled at the same time.

161

Net gain/loss by category

The table below presents the net gains and losses from financial instruments recognized in the income statement, classified by the categories defined in IFRS 9:

T 64

in millions of euros

	2024	2023
Financial assets measured at amortized cost (AC)	467	382
Financial assets measured at fair value through other comprehensive income (FVOCI wR)	363	–69
Financial assets and financial liabilities measured at fair value through profit or loss (FVPL)	561	785
Equity instruments measured at fair value through other comprehensive income (FVOCI nR)	96	95
Financial liabilities measured at amortized cost (AC)	–894	–478

The net gain/loss from equity instruments measured at fair value through other comprehensive income includes dividend income. In all other categories, foreign-currency gains and losses as well as interest income and expenses are disclosed. The net gain/loss from financial assets and financial liabilities measured at fair value through profit or loss additionally includes the result from changes in the fair values of investments, securities, and derivatives. Moreover, the net gain/loss from financial assets measured at amortized cost discloses the gains/losses from the measurement of receivables and loans. The gain/loss from financial assets measured at fair value through other comprehensive income also includes the gains/losses from the release of the reserve from financial instruments in equity.

The dividend income of EUR 96 million (previous year: EUR 95 million) reported in net gains/losses from investments in equity instruments includes dividend income amounting to EUR 4 million (previous year: EUR 8 million) from equity instruments derecognized in the reporting year.

The measurement gains and losses from securities and equity investments recognized in other comprehensive income are presented in the statement of comprehensive income.

162 Carrying amounts and fair values by category

765

Assets

in millions of euros

		2024		2023	
	Category pursuant to IFRS 9	Carrying amount	Fair value	Carrying amount	Fair value
Cash and cash equivalents	**AC**	**8,223**		7,443	
Trade receivables	**AC**	**17,536**		17,987	
Current other financial assets		**7,777**		7,822	
Securities	FVPL	3,932	3,932	3,806	3,806
	FVOCI wR	319	319	253	253
Bank balances	AC	2,417		3,369	
Loan receivables	AC	84		168	
Derivatives	FVPL	569	569	132	132
Receivables from finance leases	n.a.	36		37	
Sundry other financial assets	AC	420		383	
Non-current financial assets		**14,899**		14,938	
Securities	FVOCI nR	2,179	2,179	2,885	2,885
	FVOCI wR	4,715	4,715	4,526	4,526
	FVPL	5,085	5,085	4,554	4,554
Investments	FVPL	159	159	145	145
	FVOCI nR	2,073	2,073	1,576	1,576
	n.a.	122		180	
Bank balances	AC	29	29	93	93
Loan receivables	AC	19	19	14	14
Derivatives	FVPL	32	32	41	41
Receivables from finance leases	n.a.	150	150	148	145
Sundry other financial assets	AC	336	338	159	158

AC At amortized cost
FVPL At fair value through profit or loss
FVOCI wR At fair value through other comprehensive income, with recycling
FVOCI nR At fair value through other comprehensive income, no recycling
n.a. Not applicable

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Equity and liabilities

in millions of euros

	Category pursuant to IFRS 9	2024 Carrying amount	2024 Fair value	2023 Carrying amount	2023 Fair value
Trade payables	**AC**	**13,198**		13,293	
Current other financial liabilities		**2,477**		2,772	
Bonds	AC			718	
Schuldschein loans, registered bonds	AC	551			
Liabilities to banks	AC	233		154	
Commercial papers	AC	480		680	
Loans	AC	96		73	
Derivatives	FVPL	308	308	308	308
Sundry other financial liabilities	AC	809		839	
Non-current financial liabilities		**10,043**		10,869	
Bonds	AC	6,870	7,227	6,787	7,281
Schuldschein loans, registered bonds	AC	2,649	2,596	3,153	3,184
Liabilities to banks	AC	207	207	116	115
Loans	AC	28	29	33	33
Derivatives	FVPL	49	49	30	30
Sundry other financial liabilities	AC	240	240	277	282

AC At amortized cost
FVPL At fair value through profit or loss
FVOCI wR At fair value through other comprehensive income, with recycling
FVOCI nR At fair value through other comprehensive income, no recycling
n. a. Not applicable

The fair value of financial assets and liabilities measured at amortized cost is determined on the basis of prices provided by agencies offering pricing services or is determined by calculating present value using the applicable interest curves (level 2).

The carrying amounts of the financial assets and liabilities, classified by IFRS 9 measurement categories, are as follows:

T 66

in millions of euros

	2024	2023
Financial assets measured at amortized cost (AC)	29,064	28,555
Financial assets measured at fair value through other comprehensive income (FVOCI wR)	5,034	4,783
Equity instruments measured at fair value through other comprehensive income (FVOCI nR)	4,252	4,058
Financial assets measured at fair value through profit or loss (FVPL)	9,777	8,678
Financial liabilities measured at fair value through profit or loss (FVPL)	357	324
Financial liabilities measured at amortized cost (AC)	25,361	25,342

165 The tables presented below show the fair values of financial assets and financial liabilities measured at fair value determined by using the fair value hierarchy in accordance with IFRS 13:

T 67

in millions of euros

		2024			
	Category pursuant to IFRS 9	Level 1[1]	Level 2[2]	Level 3[3]	Total
Financial assets					
Securities	FVPL	49	8,264	704	9,017
	FVOCI wR	3	5,031		5,034
	FVOCI nR	2,170	9		2,179
Investments	FVPL			159	159
	FVOCI nR	1,215		858	2,073
Derivatives	FVPL	4	597		601
Financial liabilities					
Derivatives	FVPL	4	353		357

1. Fair value is measured on the basis of quoted, unadjusted market prices in active markets.
2. Fair value is measured on the basis of market data such as share prices, exchange rates, or interest curves using market-based valuation techniques.
3. Fair value is measured on the basis of unobservable market data.

T 68

in millions of euros

	2023				
	Category pursuant to IFRS 9	Level 1[1]	Level 2[2]	Level 3[3]	Total
Financial assets					
Securities	FVPL	42	7,856	382	8,280
	FVOCI eR	167	4,826		4,992
	FVOCI oR	2,865	2		2,868
Investments	FVPL			146	146
	FVOCI oR	857		878	1,734
Derivatives	FVPL	8	165		173
Financial liabilities					
Derivatives	FVPL	5	328		334

1. Fair value is measured on the basis of quoted, unadjusted market prices in active markets.
2. Fair value is measured on the basis of market data such as share prices, exchange rates, or interest curves using market-based valuation techniques.
3. Fair value is measured on the basis of unobservable market data.

Investments measured at fair value through other comprehensive income include the equity investments in ads-tec Energy Public Limited Company (fair value of EUR 156 million), in Hesai Group LLC (EUR 102 million; previous year: EUR 62 million), in Husqvarna AB (EUR 349 million; previous year: EUR 518 million), in Weifu High Technology Group Co., Ltd. (EUR 337 million; previous year: EUR 250 million), and in WeRide Inc. (EUR 141 million; previous year: EUR 48 million).

At the end of the fiscal year, items are reviewed to determine whether they need to be reclassified between individual levels of the fair-value hierarchy. In the reporting year, a small volume of securities measured at fair value through other comprehensive income were reclassified from level 1 to level 2, as they were no longer measured at their stock market price. There were no reclassifications in the previous year. The table presenting the changes in financial assets allocated to level 3 includes reclassifications relating to this level.

Equity investments measured at fair value through profit or loss and those measured at fair value through other comprehensive income are allocated to level 3. Various methods are used to determine the fair values, mainly based on price information from third parties and financing rounds carried out in the reporting year. In addition, in certain cases, cost is used as the best estimate of fair value.

Units in a closed fund are also allocated to level 3 (reported under securities). The fair value of the fund units is notified by the asset management firm; it is measured based on the fund's net asset value. The fair value is dependent on changes in the market value of the respective investments within the fund.

Changes during the reporting year and the previous year in financial assets allocated to level 3 are presented in the tables below:

T 69

in millions of euros

	1/1/2024	Additions	Disposals	Reclassifications	Changes recognized in other comprehensive income	Changes recognized in profit or loss	Other changes	12/31/2024
Investments FVOCI nR	876	131	–57	–48	–49		5	858
Investments FVPL	145	12	–1			2	1	159
Securities FVPL	562	88				54		704

T 70

in millions of euros

	1/1/2023	Additions	Disposals	Reclassifications	Changes recognized in other comprehensive income	Changes recognized in profit or loss	Other changes	12/31/2023
Investments FVOCI nR	887	52	–43	–11	–169		–7	876
Investments FVPL	163	9	–1			25	2	185
Securities FVPL	462	67				33		562

Changes recognized in profit or loss are presented in the financial result, while changes recognized in other comprehensive income are reported in the gains/losses on financial instruments within equity.

Due to the IPO of an entity, the Bosch Group's corresponding equity investment in the entity was reclassified from level 3 to level 1. In the previous year, an equity investment was reclassified from level 3 to level 1 due to that entity's IPO. Neither in the reporting year nor in the previous year were there any reclassifications of securities allocated to level 3.

31 – Capital and risk management

Capital management

The Bosch Group's goal is to achieve sustainable growth through innovation while maintaining its financial independence. To achieve this goal, it is necessary to maintain a high level of internal financing capability, along with unrestricted access to capital markets, which is ensured by a solid A rating at a minimum. Capital structure and other financial performance indicators, such as free cash flow, are tracked as part of financial planning. As of December 31, 2024, the Bosch Group's equity as a percentage of total assets was 44 percent (previous year: 44 percent). Depending on market circumstances, the volume required, and the preferred currency, the Bosch Group generally raises debt capital on capital markets in the form of bonds, schuldschein loans, registered bonds, and commercial paper programs. Bilateral and syndicated loan facilities with banks are also in place.

Hedging policy and financial derivatives

The business operations of the Bosch Group are impacted in particular by fluctuations in exchange and interest rates and additionally, on the procurement side, by commodity-price risks. Business policy aims to limit these risks by means of hedging. Hedging transactions are managed at corporate level.

Internal regulations and guidelines set down a mandatory framework and define the responsibilities relating to investment and hedging transactions. According to these regulations, derivatives may only be used in connection with business operations, financial investments, or financing transactions; speculative transactions are not allowed. Trader limits are an important component of the guidelines. Hedges are generally concluded via banks with good credit ratings from leading agencies and taking into account current risk assessments in financial markets. The creditworthiness of the Bosch Group's banking partners is closely monitored, and the risk mitigated by counterparty limits.

To reduce the credit risk of the bank, fixed-term deposits are in some cases also entered into as secured deposits in tri-party repo transactions. In such cases, the bank provides predefined securities as collateral. The transaction settlement, as well as the management and valuation of the securities, are managed by a clearing center. Further information is provided in note 16 "Other current and non-current financial assets."

The decision-making bodies are committees for commodities, foreign currencies, and investments that meet at regular intervals. There is a functional segregation of trading, settlement, and control functions. Key tasks of the control function above all include determining risks and continuously checking compliance with instructions and guidelines.

Each month, the risk of financial investments is calculated using the value-at-risk concept. Risks relating to financial assets are monitored using ad hoc asset-allocation studies and limited by diversifying investment. The board of management member responsible attends the monthly foreign-exchange and investment committee meetings, and is informed about risk analyses and the results of investments and hedges.

Currency risks

Currency risks from cash flows in business operations are mitigated by the central management of invoicing and purchasing currencies. The currency risk is determined on the basis of the worldwide consolidated cash flows in the respective currencies. Based on annual forecasts, estimated inflows and outflows in the various currencies for the reporting period are aggregated in a foreign exchange balance plan. The resulting net position is then used for the central management of currency exposures.

The biggest net currency positions of the planned cash flows are in CNY, USD, GBP, and MXN.

Hedging largely takes the form of forward exchange contracts, currency options, and currency swaps. These transactions, which are only entered into with banks, are subject to minimum requirements with respect to nature and scope.

The risk attaching to material foreign currency items from operations is determined using the cash-flow-at-risk concept. These risk analyses and the hedge result are determined monthly and also presented to the member of the board of management responsible in the foreign-exchange and investment committee meetings.

To present the currency risks for the most important foreign currencies of the Bosch Group in accordance with IFRS 7 *Financial Instruments: Disclosures*, all monetary assets and monetary liabilities denominated in foreign currency for all consolidated companies were analyzed as of the reporting date and sensitivity analyses carried out for the respective currency pairs, in terms of the net risk.

170 A change in the EUR of 10 percent (taking the closing rate as the baseline) against the foreign currencies listed in the table would have the following effects on the profit before tax:

T71

in millions of euros

	10% increase in EUR		10% decrease in EUR	
	2024	2023	2024	2023
AUD	-3	-2	3	2
BRL	4	4	-4	-4
CAD	7	5	-7	-5
CHF	15	12	-15	-12
CNY	-24	-27	24	27
CZK	-49	-53	49	53
GBP	37	38	-37	-38
HUF	-20	-21	20	22
INR	-12	-7	12	7
JPY	-34	-33	34	33
KRW	1	-2	-1	2
MXN	-25	-25	25	25
PLN	-5	-13	5	13
RON	-21	-36	21	36
TRY	5	-15	-5	15
USD	-368	-295	719	295

The currency risk attached to the purchase price for the planned acquisition of the heating, ventilation, and air-conditioning business of Johnson Controls and Hitachi being denominated in USD has been completely hedged through currency options.

171 A change in the USD of 10 percent (taking the closing rate as the baseline) against the foreign currencies listed in the table would have the following effects on the profit before tax:

T72

In millions of euros

	10% increase in USD		10% decrease in USD	
	2024	2023	2024	2023
CNY	–19	–15	19	15

For the most part, the effects on the reported profit or loss result from foreign currency positions relating to operations as well as from loans within the Bosch Group if, by way of an exception, the loan was granted in a currency other than the local currency of the borrower – for example, because it can be repaid from expected cash flows in this currency. The currency risk as per the statement of financial position deviates from the purely economic currency risk, as the latter is determined solely on the basis of the planned cash flows from operating activities.

Interest-rate risks

Risks from changes in interest rates on investments and borrowings can be limited by select use of derivative financial instruments. These are mainly interest-rate swaps and interest-rate futures.

An analysis of the interest-rate risk was carried out in accordance with IFRS 7. In a sensitivity analysis, the assets and liabilities subject to floating interest rates, fixed-rate securities, pension and money market funds, and interest derivatives were considered.

A change in the market interest rate by 100 basis points (taking the interest rate on the reporting date as the baseline) would have the following effect on the gains/losses on financial instruments recognized in equity and the profit before tax:

T73

in millions of euros

	Increase in market interest level by 100 basis points		Decrease in market interest level by 100 basis points	
	2024	[illegible]	2024	[illegible]
Reserve from financial instruments	–231	[illegible]	231	[illegible]
Profit before tax	–46	[illegible]	46	[illegible]

173

Share-price risks

The Bosch Group holds stock as part of its financial investments used to cover non-current pension obligations. It also holds investments in publicly quoted companies. The analysis of the share-price risk in accordance with IFRS 7 took into account share portfolios, quoted investments, equity funds, and share derivatives with a total carrying amount of EUR 4,769 million (previous year: EUR 5,028 million).

A change in the share price of 10 percent (taking the share price on the reporting date as the baseline) would have the following effect on the gains/losses on financial instruments recognized in equity and the profit before tax:

T74

in millions of euros

	10% increase in share price		10% decrease in share price	
	2024	2023	2024	2023
Reserve from financial instruments	339	370	–339	–370
Profit before tax	140	130	–140	–130

To reduce share-price risks, a broadly diversified investment strategy is pursued across various regions and sectors.

Other price risks

Derivatives are used to limit the risks of fluctuating commodity prices. The analysis of the commodity-price risk in accordance with IFRS 7 took into account commodity derivatives measured as of the reporting date.

A change in the forward-rate level of 10 percent (taking the forward rate on the reporting date as the baseline) would have the following effect on the profit before tax:

T75

in millions of euros

	10% increase in forward rates		10% decrease in forward rates	
	2024	2023	2024	2023
Profit before tax	86	62	–86	–62

As of the reporting date, the Bosch Group is not aware that it is exposed to any further significant other price risks as defined by IFRS 7.

The Bosch Group holds several physical power purchase agreements (PPAs) with terms of up to 16 years, under which electricity is purchased at a fixed price for its own use, as well as the associated green electricity certificates. The physical PPAs are therefore subject to the own-use exception and are for the most part not accounted for as derivatives in accordance with IFRS 9. The physical PPAs contain additional clauses to an immaterial extent. In these cases, the PPA is accounted for as a derivative in accordance with IFRS 9.

175

Credit risks

The maximum credit risk for each category of financial instruments is the carrying amount of the financial assets recognized in the statement of financial position.

The credit risk from customer receivables is recorded and monitored on an ongoing basis. Responsibilities and duties relating to credit risks are governed by an internal directive. This mainly concerns the stipulation of payment terms, fixing of credit limits, release of deliveries, and receivables monitoring.

The credit risk for trade receivables is reduced by processing invoices with the corresponding credit notes in a single work step; the net amount is reported in the statement of financial position. This procedure is only performed if there is a legal right to offset and the customer intends to settle the receivable on a net basis or to settle the receivable by offsetting against the corresponding liability. Moreover, trade receivables are partly secured by retention of title. For some trade receivables, collateral has been additionally provided in the form of guarantees, property liens, and mortgages.

The table below shows the remaining credit risk for trade receivables:

T76

in millions of euros

	2024	2023
Trade receivables (before offsetting of credit notes)	18,346	17,835
Offsetting of credit notes	–810	–774
Trade receivables (carrying amount)	17,536	17,061
Financial guarantee contracts (received)	–2,592	–2,387
Remaining credit risk	**14,944**	**14,674**

176 The following table presents the development of loss allowances on trade receivables (credit-impaired and not credit-impaired) as well as on loan receivables and sundry other financial assets (according to the three-stage approach to impairment) for the reporting year and the previous year:

In millions of euros

	Trade receivables	Loan receivables and sundry other financial assets	
		Stage 1	Stage 2/3
1/1/2023	304	5	61
Changes in consolidated group	–4	0	0
Amounts added	94	1	8
Amounts utilized	–35	0	0
Amounts reversed	75	2	1
Exchange-rate differences	–15	0	0
12/31/2023	369	4	74
Changes in consolidated group	–1	0	0
Amounts added	109	2	4
Amounts utilized	–26	0	–38
Amounts reversed	–37	–1	–29
Exchange-rate differences	–1	0	0
12/31/2024	**304**	**5**	**61**

As of December 31 of the reporting year, loss allowances on contract assets amount to EUR 10 million (previous year: EUR 11 million) and loss allowances on finance lease receivables amount to EUR 2 million (previous year: EUR 2 million).

177 The table below shows the gross carrying amounts of trade receivables:

T78

in millions of euros

	2024	2023
Trade receivables	17,840	17,341
of which not exposed to default risk	5,884	5,520
of which credit-impaired	355	317
of which not credit-impaired	11,601	11,504
not due	10,514	10,471
up to 30 days past due	677	668
31–90 days past due	200	212
91–180 days past due	89	85
more than 180 days past due	121	118

The development of loss allowances on securities measured at fair value through other comprehensive income is presented in the following table:

T79

in millions of euros

	Stage 1	Stage 2/3
1/1/2023	12	49
Changes in consolidated group	0	0
Additions	11	40
Amounts utilized	0	0
Amounts reversed	–11	–40
Reclassifications	2	–2
Exchange-rate differences	0	0
12/31/2023	14	47
Changes in consolidated group	0	0
Additions	15	43
Amounts utilized	0	0
Amounts reversed	–16	–36
Reclassifications	5	–5
Exchange-rate differences	0	0
12/31/2024	**15**	**43**

Derivative transactions are entered into in accordance with either the German master agreement for financial forward transactions or the ISDA (International Swaps and Derivatives Association). These do not satisfy the set-off criteria of IAS 32 as netting is only enforceable in the case of insolvency.

The credit risk for derivatives with a positive fair value that do not currently satisfy the set-off criteria of IAS 32 (offsetting only enforceable in the case of insolvency of the contracting party) is presented in the following table:

T80

in millions of euros

	2024	2023
Derivatives with a positive fair value	601	723
Amounts not offset in the statement of financial position		
Derivatives	–200	[illegible]
Cash collateral received		[illegible]
Remaining credit risk	**401**	[illegible]

Liquidity risks

Changes in financial assets and liabilities are monitored on an ongoing basis. Internal directives regulate the duties and responsibilities of liquidity management and planning. The company has liquidity reserves in the form of highly liquid assets totaling EUR 12,474 million (previous year: EUR 11,302 million). These include a syndicated credit line with an ESG component totaling EUR 5 billion with a term until 2026. The existing bilateral U.S. loan facilities were increased to a volume of USD 1,250 million in the reporting year. These facilities have not been drawn. In the reporting year, a bond of EUR 750 million that had fallen due was repaid using available cash funds. Under our revolving USD 2.0 billion commercial paper program, short-term issuances of USD 499 million are outstanding as of the reporting date.

The liquidity risk is reduced by processing invoices for trade payables with the corresponding credit notes received in a single work step. This procedure is only performed if there is a legal right to offset and there is an intention to settle the liability on a net basis or to settle the liability by offsetting against the corresponding receivable. Moreover, collateral is provided in the form of guarantees.

The table below shows the remaining liquidity risk for trade payables:

T81

in millions of euros

	2024	[illegible]
Trade payables (before offsetting of credit notes)	14,008	[illegible]
Offsetting of credit notes	–810	[illegible]
Trade payables (carrying amount)	13,198	[illegible]
Financial guarantee contracts (granted)	–2	[illegible]
Remaining liquidity risk	**13,196**	[illegible]

179 The liquidity risk for derivatives that do not currently satisfy the set-off criteria of IAS 32 (offsetting only enforceable in the case of insolvency) is presented in the following table:

T 82

In millions of euros

	2024	2023
Derivatives with a negative fair value	357	334
Amounts not offset in the statement of financial position		
Derivatives	–200	–136
Cash collateral provided	–39	
Remaining liquidity risk	**118**	198

180 The undiscounted cash outflows of the non-derivative and derivative financial liabilities are presented in the tables below:

T83

In millions of euros

	Carrying amount	Undiscounted cash flows					
	2024	2025	2026	2027	2028	2029	2030 et seq.
Non-derivative financial liabilities							
Trade payables	13,198	13,096	2		113		
Bonds	6,870	286	286	1,036	997	575	6,599
Schuldschein loans, registered bonds	3,200	638	868	704	37	299	1,042
Liabilities to banks	440	252	31	151	5	4	30
Commercial papers	480	481					
Lease liabilities	2,784	757	642	495	360	309	671
Loans	124	98	16	6	3	2	4
Sundry other financial liabilities	1,049	827	76	29	2	2	133
Derivatives							
Gross settlement	276						
Cash outflows		11,746	183	10			
Cash inflows		11,470	182	10			
Net settlement	81						
Cash outflows		33	16	11	5	3	13

T84

181 in millions of euros

	Carrying amount	Undiscounted cash flows					
		2024					
	2023	2024	2025	2026	2027	2028	after
Non-derivative financial liabilities							
Trade payables	12,205	12,149				69	
Bonds	7,544	1,946	780	787	1,033	1,068	7,501
Schuldschein loans, registered bonds	3,139	105	651	977	715	40	1,340
Liabilities to banks	312	198	92	28	0	0	3
Commercial papers	586	628					
Lease liabilities	2,357	632	538	397	287	213	670
Loans	109	17	16	8	8	9	5
Sundry other financial liabilities	1,083	663	25	61	21	1	110
Derivatives							
Gross settlement	205						
Cash outflows		10,275	364	49	37		
Cash inflows		10,232	330	47	37		
Net settlement	65						
Cash outflows		43	7	1	1	2	11

The undiscounted cash outflows contain interest and principal payments. All on-call financial liabilities are allocated to the earliest possible period. Variable interest payments were calculated using the most recent interest rate determined before the respective reporting date.

32 – Leases

Contracts that convey the right to control the use of an identifiable asset for a period of time in exchange for consideration are accounted for as leases in accordance with IFRS 16.

Bosch as lessee

The lessee generally recognizes leases based on the right-of-use approach. With certain exceptions, this requires recognizing right-of-use assets and liabilities for the payment obligations under the lease in the statement of financial position. These accounting requirements are not applied to short-term leases and leases of low-value assets; lease payments under such leases are recognized in functional costs on a straight-line basis over the lease term. In addition, the requirements of IFRS 16 are not applied to leases of intangible assets.

Lease liabilities are measured at the present value of the lease payments over the lease term. Lease payments include fixed payments for lease components and non-lease components as well as variable lease payments based on an index or an interest rate. The payments are generally discounted using the incremental borrowing rate for the appropriate currency and lease term. In determining the lease term, termination and extension options are considered if it is reasonably certain that they will be exercised.

At the commencement date, right-of-use assets are recognized at the amount of the lease liability, plus initial direct costs and less any lease incentives received. Right-of-use assets are typically depreciated over the lease term, with depreciation recognized in functional costs.

As lessees, entities of the Bosch Group have entered into leases mainly for land and buildings and, to a lesser extent, vehicles, plant and equipment, and other equipment, fixtures, and furniture.

183 The right-of-use assets recognized in the statement of financial position and the corresponding depreciation charge are as follows:

T85

in millions of euros

	2024		2023	
	Carrying amount	Depreciation	Carrying amount	Depreciation
Land and building	1,999	449	1,821	435
Plant, fixtures, and furniture	386	75	361	69
Vehicles	325	174	293	145
	2,710	698	2,475	649

Additions to right-of-use assets came to EUR 1,180 million in the reporting year (previous year: EUR 882 million).

The following amounts were additionally recognized in the income statement:

T86

in millions of euros

	2024	2023
Interest expenses relating to lease liabilities	109	88
Expenses relating to short-term leases	183	178
Expenses relating to leases of low-value assets	115	87
Expenses for variable lease payments	20	35

Cash outflows from leases totaled EUR 1,102 million in the reporting year (previous year: EUR 964 million). The maturity analysis of future lease payments is contained in the section on liquidity risks in note 31 "Capital and risk management."

Bosch as lessor

Lessors are required to classify a lease as either a finance lease or an operating lease.

Finance leases transfer substantially all the risks and rewards incidental to ownership to the lessee. For such leases, a receivable is recognized at the amount of the net investment in the lease and disclosed under financial assets.

The receivables from finance lease agreements mainly stem from products leased by the Building Technologies division. As a rule, the agreed lease term is ten years. The receivables are due as follows:

T 87

in millions of euros

	2024	2023
Gross investment in finance leases, not discounted		
due no later than one year	41	42
due later than one year and no later than two years	36	35
due later than two years and no later than three years	32	30
due later than three years and no later than four years	26	26
due later than four years and no later than five years	21	22
due later than five years	48	48
	204	**203**
Present value of outstanding minimum lease payments		
due no later than one year	36	37
due later than one year and no later than two years	33	33
due later than two years and no later than three years	29	27
due later than three years and no later than four years	24	24
due later than four years and no later than five years	20	20
due later than five years	46	44
	188	**185**
Unearned finance income	**16**	**17**

In relation to finance leases, finance income in the reporting year came to EUR 5 million (previous year: EUR 6 million)

and losses on disposal amounted to EUR 2 million (previous year: EUR 3 million). There were no unguaranteed residual values.

Under operating leases, the lessor retains substantially all the risks and rewards incidental to ownership. The assets concerned are recognized in property, plant, and equipment and, unless recognized as sales revenue, the lease payments received are recorded in other operating income.

The outstanding undiscounted minimum lease payments from operating lease agreements with entities of the Bosch Group as lessors stem mainly from activities of the Building Technologies and BSH Hausgeräte GmbH divisions. They are due as follows in the reporting year:

T88

in millions of euros

	2024	2023
Within one year	61	51
Later than one year and no later than two years	4	8
Later than two years and no later than three years	3	3
Later than three years and no later than four years	3	2
Later than four years and no later than five years	2	2
Later than five years	1	2
	74	68

In the reporting year, income from operating leases came to EUR 65 million (previous year: EUR 57 million).

33 – Related party disclosures

As shareholder, Robert Bosch Industrietreuhand KG exercises the majority of voting rights at Robert Bosch GmbH. In addition, Robert Bosch Industrietreuhand KG is responsible for the internal audit of the Bosch Group. The related costs incurred of EUR 21 million (previous year: EUR 21 million) were borne by Robert Bosch GmbH. As in the previous year, there were only immaterial other transactions and outstanding balances as of the reporting date.

A part of the pension obligations and funds has been outsourced to Bosch Pensionsfonds AG. Robert Bosch GmbH is the sole shareholder of Bosch Pensionsfonds AG. In the fiscal year, contributions were made to the plan assets of Bosch Pensionsfonds AG to finance pension obligations. For further details, see note 26 "Provisions for pensions and similar obligations."

Robert Bosch Stiftung GmbH, Stuttgart, is the lessee of several properties belonging to Robert Bosch GmbH, Stuttgart. As of the reporting date, furthermore, Robert Bosch GmbH has a liability of EUR 36 million (previous year: EUR 47 million) to Robert Bosch Stiftung GmbH.

Business transactions with related entities

Related entities of the Bosch Group include the joint ventures, associated entities, and the entities in which non-controlling interests are held (investees) as well as entities not consolidated on materiality grounds. Transactions with these entities are presented in the following table:

T89

in millions of euros

	Goods and services sold		Goods and services purchased		Receivables		Liabilities	
	2024	2023	2024	2023	2024	2023	2024	2023
Joint ventures	87	83	27	25	14	16	19	19
Associated entities and investees	17	35	29	20	13	28	18	122
Entities not consolidated on materiality grounds	213	133	125	207	152	209	55	66

All transactions with related parties were at arm's length.

Total remuneration of key management personnel

The key management personnel are the general partners of Robert Bosch Industrietreuhand KG and any limited partners who are concurrently members of the board of management of Robert Bosch GmbH, as well as the members of the supervisory board and the members of the board of management of Robert Bosch GmbH.

Total remuneration of key management personnel breaks down as follows:

T90

in millions of euros

	2024	2023
Short-term benefits	24	23
Post-employment benefits	6	12
Other long-term benefits	5	6
Termination benefits	0	2

For obligations from pensions and deferred compensation, provisions totaling EUR 81 million (previous year: EUR 77 million) have been recognized.

Share-based payments are not made.

Beyond this, the companies of the Bosch Group have not conducted any reportable transactions with key management personnel.

34 – Remuneration of members of the board of management and supervisory board

The total remuneration of the members of the board of management comes to EUR 23 million in the fiscal year 2024 (previous year: EUR 27 million), and that of the former members of the board of management and their dependants to EUR 21 million (previous year: EUR 22 million). An amount of EUR 268 million (previous year: EUR 275 million) has been accrued for pension obligations to former members of the board of management and their surviving dependants.

The remuneration of the members of the supervisory board comes to approximately EUR 2 million.

35 – Auditor's fees

The fees of the group auditor for audit and advisory services in Germany amount to:

T 91

in millions of euros

	2024	2023
Fees for		
Audit services	9	9
Other assurance services	1	1
Tax advisory services	1	1
Other services	2	1

36 – Events after the reporting date

The global tariff discussions, in particular the announcements made by the U.S. government in this regard, are expected to have an impact on the Bosch Group, the extent of which cannot be reliably estimated at present.

It was announced in February 2025 that operations in the Power Solutions division (Mobility business sector) relating to the industrialization and preparation for production of decentralized power-supply systems based on solid-oxide fuel cells (SOFC) will be discontinued.

List of shareholdings of the Bosch Group

as of December 31, 2024

A. Subsidiaries

1. Fully consolidated entities

Region/country	Company name	Registered office	Percentage share of capital
Germany	AS Abwicklung Dritte Produktion GmbH	Stuttgart	**100.0**
	AS Abwicklung und Solar-Service GmbH	Stuttgart	**100.0**[1]
	AS Guss Beteiligungsgesellschaft mbH	Stuttgart	**100.0**
	Bosch Access Systems GmbH	Aachen	**100.0**
	Bosch Automotive Service Solutions GmbH	Pollenfeld-Preith	**100.0**[1]
	Bosch Building Automation GmbH	Verl	**100.0**[1]
	Bosch Charging Solutions GmbH	Stuttgart	**100.0**[1]
	Bosch Energy and Building Solutions GmbH	Ditzingen	**100.0**[1]
	Bosch Engineering GmbH	Abstatt	**100.0**[1]
	Bosch Global Software Technologies GmbH	Stuttgart	**100.0**[1]
	Bosch Healthcare Solutions GmbH	Waiblingen	**100.0**[1]
	Bosch Hilfe GmbH	Stuttgart	**100.0**
	Bosch Industriekessel GmbH	Gunzenhausen	**100.0**[1]
	Bosch KWK Systeme GmbH	Lollar	**100.0**[1]
	Bosch Mobility Platform & Solutions GmbH	Gerlingen	**100.0**[1]
	Bosch Pensionsgesellschaft mbH	Stuttgart	**100.0**[1]
	Bosch Rexroth Aktiengesellschaft	Stuttgart	**100.0**[1,2]
	Bosch Secure Authentication GmbH	Stuttgart	**100.0**[1]
	Bosch Sensortec GmbH	Kusterdingen	**100.0**[1]
	Bosch Service Solutions GmbH	Stuttgart	**100.0**[1]
	Bosch Service Solutions Leipzig GmbH	Leipzig	**100.0**[1]
	Bosch Service Solutions Magdeburg GmbH	Magdeburg	**100.0**[1]

Region/country	Company name	Registered office	Percentage share of capital
	Bosch Sicherheitssysteme Engineering GmbH	Nuremberg	100.0
	Bosch Sicherheitssysteme GmbH	Stuttgart	100.0[1,2]
	Bosch Sicherheitssysteme Montage und Service GmbH	Amt Wachsenburg	100.0[1]
	Bosch Solar Services GmbH	Arnstadt	100.0[1,2]
	Bosch Solar Thin Film GmbH	Arnstadt	100.0[1]
	Bosch Solarthermie GmbH	Wettringen	100.0[1]
	Bosch Technology Licensing Administration GmbH	Gerlingen	100.0[1]
	Bosch Telecom Holding GmbH	Stuttgart	100.0[1,2]
	Bosch Thermotechnik GmbH	Wetzlar	100.0[1,2]
	Bosch Wohnungsverwaltungsgesellschaft mbH & Co. KG	Stuttgart	100.0[3]
	BSH Hausgeräte GmbH	Munich	100.0[1,2]
	BSH Hausgeräte Service GmbH	Munich	100.0[1]
	BSH Hausgeräte Service Nauen GmbH	Nauen	100.0[1]
	BSH Hausgerätewerk Nauen GmbH	Nauen	100.0[1]
	BSH Vermögensverwaltungs-GmbH	Munich	100.0[1]
	Constructa-Neff Vertriebs-GmbH	Munich	100.0[1]
	DAA GmbH	Hamburg	100.0[1]
	DMS Digitale Mess- und Steuersysteme Aktiengesellschaft	Hamburg	100.0
	ELPRO Meßtechnik GmbH	Schorndorf	100.0
	ETAS GmbH	Stuttgart	100.0[1,2]
	EVI Audio GmbH.	Straubing	100.0
	Gaggenau Hausgeräte GmbH	Munich	100.0[1]
	grow platform GmbH	Stuttgart	100.0[1]
	Holger Christiansen Deutschland GmbH	Wilnsdorf	100.0[1]
	Hörburger GmbH	Waltenhofen	100.0[1]
	ITK Engineering GmbH	Rülzheim	100.0[1]
	ITK Holding GmbH	Rülzheim	100.0[1]
	Keenfinity GmbH	Munich	100.0

Region/country	Company name	Registered office	Percentage share of capital
	Moehwald GmbH	Homburg	100.0[1]
	Neff GmbH	Munich	100.0[1]
	Pollux Solar-Service GmbH	Arnstadt	100.0
	Robert Bosch Automotive Steering GmbH	Schwäbisch Gmünd	100.0[1,2]
	Robert Bosch Elektronik GmbH	Salzgitter	100.0[1]
	Robert Bosch Fahrzeugelektrik Eisenach GmbH	Eisenach	100.0[1]
	Robert Bosch Hausgeräte Gesellschaft mit beschränkter Haftung	Munich	100.0[1]
	Robert Bosch Manufacturing Solutions GmbH	Stuttgart	100.0[1,2]
	Robert Bosch Power Tools GmbH	Leinfelden-Echterdingen	100.0[1]
	Robert Bosch Risk and Insurance Management GmbH	Stuttgart	100.0[1]
	Robert Bosch Sechste Vermögensverwaltungsgesellschaft mbH	Gerlingen	100.0[1]
	Robert Bosch Semiconductor Manufacturing Dresden GmbH	Dresden	100.0[1]
	Robert Bosch Smart Home GmbH	Stuttgart	100.0[1]
	Robert Bosch Steering Columns GmbH	Stuttgart	100.0[1]
	Robert Bosch Venture Capital GmbH	Gerlingen	100.0[1]
	Robert Bosch Wohnungsgesellschaft mbH	Stuttgart	100.0[1]
	Bosch Digital Commerce GmbH	Munich	100.0
	SEG Hausgeräte GmbH	Munich	100.0[1]
	Siliconally GmbH	Dresden	85.4
	susteco solutions GmbH	Berlin	100.0
	WeWash GmbH	Munich	100.0[1]
	WOGE Service- und Regiebetrieb GmbH	Stuttgart	100.0[1]

1. These companies make use of the exemption provided for in Sec. 264 (3) HGB.
2. These companies make use of the exemption provided for in Sec. 291 (2) HGB.
3. This company makes use of the exemption provided for in Sec. 264b HGB.

Region/country	Company name	Registered office	Percentage share of capital
Europe			
Austria	Bosch General Aviation Technology GmbH	Vienna	**100.0**
	Bosch Industriekessel Austria GmbH	Bischofshofen	**100.0**
	Bosch Rexroth GmbH	Pasching	**100.0**
	BSH Finance and Holding GmbH	Vienna	**100.0**
	BSH Hausgeräte Gesellschaft mbH	Vienna	**100.0**
	MIIT Mechatronics Industries GmbH	Vienna	**100.0**
	Robert Bosch AG	Vienna	**100.0**
	Robert Bosch Holding Austria GmbH	Vienna	**100.0**
Belgium	Bosch Rexroth N.V.	Anderlecht	**100.0**
	Bosch Thermotechnology N.V. / S.A.	Mechelen	**100.0**
	BSH Home Appliances S.A.	Brussels	**100.0**
	Robert Bosch Produktie N.V.	Tienen	**100.0**
	Robert Bosch S.A.	Anderlecht	**100.0**
	sia Abrasives Belgium N.V. / S.A.	Mollem	**100.0**
Bulgaria	Bosch Digital EOOD	Sofia	**100.0**
	BSH Domakinski Uredi Bulgaria EOOD	Sofia	**100.0**
Croatia	BSH kućanski uređaji d.o.o.	Zagreb	**100.0**
Czech Republic	Bosch Powertrain s.r.o.	Jihlava	**100.0**
	Bosch Rexroth spol. s.r.o.	Brno	**100.0**
	Bosch Thermotechnika s.r.o.	Prague	**100.0**
	BSH domácí spotřebiče s.r.o.	Prague	**100.0**
	Keenfinity s.r.o.	Prague	**100.0**
	Robert Bosch odbytova s.r.o.	Prague	**100.0**
	Robert Bosch, spol. s.r.o.	České Budějovice	**100.0**

Region/country	Company name	Registered office	Percentage share of capital
Denmark	Bosch Rexroth A/S	Hvidovre	**100.0**
	BSH Hvidevarer A/S	Ballerup	**100.0**
	ELPRO NORDIC ApS	Roskilde	**100.0**
	Holger Christiansen A/S	Esbjerg	**100.0**
	Kassow Robots ApS	Copenhagen	**100.0**
	Robert Bosch A/S	Ballerup	**100.0**
Finland	Bosch Rexroth Oy	Vantaa	**100.0**
	BSH Kodinkoneet Oy	Helsinki	**100.0**
	Robert Bosch Oy	Vantaa	**100.0**
France	Bosch Automotive Service Solutions S.A.S.	Saint-Ouen	**100.0**
	Bosch Rexroth DSI S.A.S.	Vénissieux	**100.0**
	Bosch Rexroth S.A.S.	Vénissieux	**100.0**
	Bosch Security Systems France S.A.S.	Drancy	**100.0**
	BSH Electroménager S.A.S.	Saint-Ouen	**100.0**
	e.l.m. leblanc S.A.S.	Drancy	**100.0**
	ETAS S.A.S.	Saint-Ouen	**100.0**
	Gaggenau Industrie S.A.S.	Lipsheim	**100.0**
	Holger Christiansen France S.A.S.	Olivet	**100.0**
	Robert Bosch (France) S.A.S.	Saint-Ouen	**100.0**
	Robert Bosch Automotive Steering Marignier S.A.S.	Marignier	**100.0**
	Robert Bosch Automotive Steering Vendôme S.A.S.	Vendôme	**100.0**
Greece	BSH Ikiakes Syskeves A.B.E.	Athens	**100.0**
	Robert Bosch S.A.	Koropi (Athens)	**100.0**

Region/country	Company name	Registered office	Percentage share of capital
Hungary	Automotive Steering Column Kft.	Eger	**100.0**
	Bosch Rexroth Kft.	Budapest	**100.0**
	BSH Háztartási Készülék Kereskedelmi Kft.	Budapest	**100.0**
	ELPRO Systems Kft.	Maklár	**100.0**
	Robert Bosch Automotive Steering Kft.	Maklár	**100.0**
	Robert Bosch Elektronika Gyártó Kft.	Hatvan	**100.0**
	Robert Bosch Energy and Body Systems Kft.	Miskolc	**100.0**
	Robert Bosch Kft.	Budapest	**100.0**
	Robert Bosch Power Tool Elektromos Szerszámgyártó Kft.	Miskolc	**100.0**
Ireland	Robert Bosch Ireland Ltd.	Dublin	**100.0**
Italy	ARESI S.p.A.	Brembate	**100.0**
	Bosch Automotive Service Solutions S.r.l.	Parma	**100.0**
	Bosch Rexroth Oil Control S.p.A.	Milan	**100.0**
	Bosch Rexroth S.p.A.	Cernusco	**100.0**
	Bosch Security Systems S.p.A.	Milan	**100.0**
	BSH Elettrodomestici S.p.A.	Milan	**100.0**
	Centro Studi Componenti per Veicoli S.p.A.	Modugno (Bari)	**100.0**
	EDIM S.p.A.	Villasanta	**100.0**
	Freud S.p.A.	Milan	**100.0**
	Holger Christiansen Italia S.r.l.	San Lazzaro di Savena	**100.0**
	ROBERT BOSCH S.p.A. Società Unipersonale	Milan	**100.0**
	Tecnologie Diesel S.p.A. Società Unipersonale	Modugno (Bari)	**100.0**
Kazakhstan	BSH Home Appliances LLP	Almaty	**100.0**
	TOO Robert Bosch	Almaty	**100.0**

Region/country	Company name	Registered office	Percentage share of capital
Latvia	Robert Bosch SIA	Riga	**100.0**
Luxembourg	BSH électroménagers S.A.	Senningerberg	**100.0**
	Ferroknepper Buderus S.A.	Esch-sur-Alzette	**100.0**
Netherlands	Bosch Energy and Building Solutions B.V.	Nieuwegein	**100.0**
	Bosch Power Tools B.V.	Breda	**100.0**
	Bosch Rexroth B.V.	Boxtel	**100.0**
	Bosch Security Systems B.V.	Eindhoven	**100.0**
	Bosch Thermotechniek B.V.	Deventer	**100.0**
	Bosch Transmission Technology B.V.	Tilburg	**100.0**
	BSH Huishoudapparaten B.V.	Amsterdam	**100.0**
	Digicontrol Benelux B.V.	Apeldoorn	**100.0**
	ELPRO Benelux B. V.	s'-Hertogenbosch	**100.0**
	Hacousto Holland B.V.	Berkel en Rodenrijs	**100.0**
	Nederlandse Veiligheidsdienst Groep Meldkamer B.V.	Goes	**80.0**
	Nefit Vastgoed B.V.	Deventer	**100.0**
	Robert Bosch Asset Managing C.V.	Boxtel	**100.0**
	Robert Bosch B.V.	Boxtel	**100.0**
	Robert Bosch Finance Nederland B.V.	Boxtel	**100.0**
	Robert Bosch Holding Nederland B.V.	Boxtel	**100.0**
	Robert Bosch Investment Nederland B.V.	Boxtel	**100.0**
Norway	Bosch Rexroth AS	Ski	**100.0**
	BSH Husholdningsapparater AS	Oslo	**100.0**
	Robert Bosch AS	Trollåsen	**100.0**

Region/country	Company name	Registered office	Percentage share of capital
Poland	Bosch Rexroth Sp. z o.o.	Warsaw	**100.0**
	BSH Sprzet Gospodarstwa Domowego Sp. z o.o.	Warsaw	**100.0**
	Keenfinity Sp. z o.o.	Warsaw	**100.0**
	ROBERT BOSCH Sp. z o.o.	Warsaw	**100.0**
	SIA Abrasives Polska Sp. z o.o.	Goleniów	**100.0**
Portugal	Bosch Car Multimedia Portugal, S.A.	Braga	**100.0**
	Bosch Security Systems, S.A.	Ovar	**100.0**
	Bosch Service Solutions, S.A.	Lisbon	**100.0**
	Bosch Termotecnologia S.A.	Lisbon	**100.0**
	BSHP Electrodomésticos, S.U., Lda.	Carnaxide	**100.0**
	Robert Bosch, S.A.	Lisbon	**100.0**
Romania	Bosch Automotive S.R.L.	Blaj	**100.0**
	Bosch Global Business Services S.R.L.	Timişoara	**100.0**
	Bosch Rexroth S.R.L.	Blaj	**100.0**
	Bosch Service Solutions S.R.L.	Timişoara	**100.0**
	BSH Electrocasnice S.R.L.	Bucharest	**100.0**
	ROBERT BOSCH S.R.L.	Bucharest	**100.0**
	S. C. Hörburger s.r.l.	Sibiu	**100.0**
Russian Federation	OOO "Construction & Investments"	Khimki	**100.0**
	OOO Bosch Rexroth	Moscow	**100.0**
	OOO Robert Bosch	Moscow	**100.0**
Serbia	BSH Kućni Aparati d.o.o. Beograd	Belgrade	**100.0**
	Robert Bosch doo Beograd	Belgrade	**100.0**

Region/country	Company name	Registered office	Percentage share of capital
Slovakia	Bosch Electrical Drives SK s.r.o.	Bratislava	**100.0**
	BSH Drives and Pumps s.r.o.	Michalovce	**100.0**
	Robert Bosch spol. s.r.o.	Bratislava	**100.0**
	Robert Bosch Production Slovakia, s.r.o.	Bernolákovo	**100.0**
Slovenia	Bosch Rexroth d.o.o.	Brnik – Aerodrom	**100.0**
	BSH Hišni Aparati d.o.o. Nazarje	Nazarje	**100.0**
Spain	BOSCH HOME COMFORT GROUP SERVICE ESPANA, S.L.	Madrid	**100.0**
	Bosch Rexroth, S.L.U.	Madrid	**100.0**
	Bosch Service Solutions, S.A.U.	Madrid	**100.0**
	BOSCH SISTEMAS DE FRENADO, S.L.U.	Madrid	**100.0**
	BSH Electrodomésticos España, S.A.	Zaragoza	**100.0**
	Keenfinity S.L.	Aranjuez	**100.0**
	ROBERT BOSCH ESPAÑA FÁBRICA ARANJUEZ S.A.U.	Aranjuez	**100.0**
	ROBERT BOSCH ESPAÑA FÁBRICA CASTELLET S.A.U.	Castellet	**100.0**
	ROBERT BOSCH ESPAÑA FÁBRICA MADRID S.A.U.	Madrid	**100.0**
	ROBERT BOSCH ESPAÑA, S.L.U.	Madrid	**100.0**
	Servicio Tecnico Arnaiz, S.L.U.	Bilbao	**100.0**
	Servimat Asistencia Tecnica, S.L.	Madrid	**100.0**
Sweden	AB Bosch	Stockholm	**100.0**
	Bosch Rexroth AB	Stockholm	**100.0**
	Bosch Thermoteknik AB	Tranås	**100.0**
	BSH Home Appliances AB	Stockholm	**100.0**
	HB Bosch	Linköping	**100.0**
	Keenfinity Sweden AB	Kista	**100.0**
	Robert Bosch AB	Kista	**100.0**

Region/country	Company name	Registered office	Percentage share of capital
Switzerland	Bosch Rexroth Schweiz AG	Buttikon	**100.0**
	BSH Hausgeräte AG	Geroldswil	**100.0**
	Bosch Thermotechnik AG	Pratteln	**100.0**
	ELPRO-BUCHS AG	Buchs	**100.0**
	Elpro Group AG	Buchs	**100.0**
	Robert Bosch AG	Zuchwil	**100.0**
	Robert Bosch Internationale Beteiligungen AG	Oberdorf	**100.0**
	Scintilla AG	Zuchwil	**100.0**
	sia Abrasives Industries AG	Frauenfeld	**100.0**
Türkiye	Bosch Fren Sistemleri Sanayi ve Ticaret A.S.	Bursa	**84.5**
	Bosch Rexroth Otomasyon Sanayi ve Ticaret A.S.	Bursa	**100.0**
	Bosch Sanayi ve Ticaret A.S.	Bursa	**100.0**
	Bosch Termoteknik Isıtma ve Klima Sanayi Ticaret A.S.	Manisa	**100.0**
	BSH Ev Aletleri Sanayi ve Ticaret A.S.	Istanbul	**100.0**
	Keenfinity Güvenlik ve İletişim Sistemleri Limited Şirketi	Istanbul	**100.0**
Ukraine	MBT Trade T.B.O.	Kyiv	**100.0**
	SC "Robert Bosch Production Ukraine"	Krakovets	**100.0**
	Robert Bosch Ltd.	Kyiv	**100.0**
	TOV BSH Pobutova Technika	Kyiv	**100.0**
	Zelmer Ukraine T.B.O.	Kyiv	**100.0**
United Kingdom	Bosch Automotive Service Solutions Ltd.	Brixworth	**100.0**
	Bosch Lawn and Garden Ltd.	Stowmarket	**100.0**
	Bosch Rexroth Ltd.	St. Neots	**100.0**
	Bosch Service Solutions Ltd.	Denham	**100.0**
	Bosch Thermotechnology Ltd.	Worcester	**100.0**

Region/country	Company name	Registered office	Percentage share of capital
	BSH Home Appliances Ltd.	Milton Keynes	100.0
	ELPRO UK Ltd.	Worthing	100.0
	ETAS Ltd.	York	100.0
	Five AI Limited	Cambridge	100.0
	Gas Alarm Systems Limited	Nelson	100.0
	HydraForce Hydraulics, Ltd.	Birmingham	100.0
	Keenfinity Limited	Denham	100.0
	Lynteck Limited	Nelson	100.0
	MoTeC (Europe) Limited	Oxford	100.0
	Protec Camerfield Limited	Nelson	100.0
	Protec Fire and Security Group Limited	Nelson	100.0
	Protec Fire Detection Plc	Nelson	100.0
	Protec Fire Detection (Export) Limited	Nelson	100.0
	Robert Bosch Investment Ltd.	Worcester	100.0
	Robert Bosch Ltd.	Denham	100.0
	Robert Bosch UK Holdings Limited	Denham	100.0
	sia Abrafoam Ltd.	Alfreton	100.0
	sia Abrasives (G.B.) Ltd.	Greetland	100.0
	sia Abrasives Holding Ltd.	Greetland	100.0
	sia Fibral Ltd.	Greetland	100.0
	Worcester Group Ltd.	Worcester	100.0

Region/country	Company name	Registered office	Percentage share of capital
Americas			
Argentina	Bosch Rexroth S.A.I.C.	Buenos Aires	**100.0**
	Robert Bosch Argentina Industrial S.A.	Buenos Aires	**100.0**
Brazil	Bosch Rexroth Ltda.	Itatiba	**100.0**
	Bosch Soluções Integradas Brasil Ltda.	Campinas	**100.0**
	Bosch Telecom Ltda.	São Paulo	**100.0**
	HydraForce Hydraulics, Ltda.	Taboao da Serra	**100.0**
	Keenfinity Security and Communications Ltda.	Campinas	**100.0**
	Robert Bosch Direção Automotiva Ltda.	Sorocaba	**100.0**
	Robert Bosch Ltda.	Campinas	**100.0**
Canada	Action Electric Ltd.	Vancouver, BC	**100.0**
	Bosch Rexroth Canada Corporation	Welland, ON	**100.0**
	BSH Home Appliances Ltd./ Électroménagers BSH Ltée	Mississauga, ON	**100.0**
	Freud Canada Inc.	Mississauga, ON	**100.0**
	Keenfinity Inc.	Mississauga, ON	**100.0**
	Paladin Technologies Inc.	Vancouver, BC	**100.0**
	ROBERT BOSCH INC.	Mississauga, ON	**100.0**
Chile	Bosch Rexroth Chile S.p.A.	Santiago de Chile	**100.0**
	Robert Bosch S. A.	Santiago de Chile	**100.0**
Colombia	Keenfinity S.A.S.	Bogotá	**100.0**
	Robert Bosch Ltda.	Bogotá	**100.0**
Costa Rica	Robert Bosch Service Solutions - Costa Rica Sociedad Anonima	Heredia	**100.0**

Region/country	Company name	Registered office	Percentage share of capital
Mexico	Bosch Rexroth, S.A. de C.V.	Mexico City	**100.0**
	BSH Home Appliances S.A. de C.V.	Mexico City	**100.0**
	Frenados Mexicanos, S.A. de C.V.	Aguascalientes	**100.0**
	Keenfinity Mexico, S. de R.L. de C.V.	Mexico City	**100.0**
	Robert Bosch México Sistemas Automotrices, S.A. de C.V.	San Luis Potosí	**100.0**
	Robert Bosch México Sistemas de Frenos, S. de R.L. de C.V.	Juárez	**100.0**
	Robert Bosch México Sistemas de Seguridad, S.A. de C.V.	Hermosillo	**100.0**
	Robert Bosch México, S.A. de C.V.	Mexico City	**100.0**
	Robert Bosch Sistemas Automotrices, S.A. de C.V.	Juárez	**100.0**
	Robert Bosch Tool de México, S.A. de C.V.	Mexicali	**100.0**
	Robert Bosch, S. de R.L. de C.V.	Toluca	**100.0**
	SPLT MÉXICO, S.A. DE C.V.	Mexico City	**100.0**
Panama	Robert Bosch Panama Colón, S.A.	Panama City	**100.0**
Peru	BSH Electrodomésticos S.A.C.	Callao/Lima	**100.0**
	Robert Bosch S.A.C.	Lima	**100.0**
United States	Automotive Steering Column LLC	Florence, KY	**100.0**
	Bosch Automotive Service Solutions LLC	Wilmington, DE	**100.0**
	Bosch Automotive Workshop Services LLC	Wilmington, DE	**100.0**
	Bosch Aviation Technology LLC	Novi, MI	**100.0**
	Bosch Brake Components LLC	Oakbrook Terrace, IL	**100.0**
	Bosch grow platform LLC	Wilmington, DE	**100.0**
	Bosch Mobility Platform & Solutions LLC	Wilmington, DE	**100.0**
	Bosch Rexroth Corporation	Lehigh Valley, PA	**100.0**
	Bosch Security Systems LLC	Burnsville, MN	**100.0**
	Bosch Service Solutions North America LLC	Wilmington, DE	**100.0**

Region/country	Company name	Registered office	Percentage share of capital
	Bosch Thermotechnology Corp.	Londonderry, NH	100.0
	BSH Home Appliances Corporation	Irvine, CA	100.0
	Climatec, LLC	Phoenix, AZ	100.0
	Elmo Motion Control Inc.	Nashua, NH	100.0
	ELPRO Services, Inc.	Marietta, OH	100.0
	ETAS Inc.	Wilmington, DE	100.0
	FHP Manufacturing Company	Fort Lauderdale, FL	57.0
	Freud America Inc.	High Point, NC	100.0
	HydraForce, Inc.	Lincolnshire, IL	100.0
	HydraForce China LLC	Lincolnshire, IL	100.0
	Nimbus Holdings LLC	Wilmington, DE	100.0
	Paladin Technologies (USA) Inc.	Dover, DE	100.0
	PalAmerican Technologies Inc.	Tumwater, WA	100.0
	Robert Bosch Automotive Steering LLC	Florence, KY	100.0
	Robert Bosch Finance LLC	Mt. Prospect, IL	100.0
	ROBERT BOSCH FUEL SYSTEMS LLC	Kentwood, MI	100.0
	Robert Bosch LLC	Farmington Hills, MI	100.0
	Robert Bosch North America Corporation	Oakbrook Terrace, IL	100.0
	Robert Bosch Semiconductor LLC	Wilmington, DE	100.0
	Robert Bosch Tool Corporation	Mt. Prospect, IL	100.0
	Service Maintenance Installation, Inc.	Burnsville, MN	100.0
	sia Abrasives, Inc. USA	Raleigh, NC	100.0

Region/country	Company name	Registered office	Percentage share of capital
Asia Pacific (including other countries)			
Australia	Bosch Automotive Service Solutions Pty. Ltd.	Clayton	**100.0**
	Bosch Rexroth Pty. Ltd.	Kings Park	**100.0**
	Bosch Security Systems Pty. Ltd.	Sydney	**100.0**
	BSH Home Appliances Pty. Ltd.	Heatherton	**100.0**
	MoTeC PTY LTD	Croydon South	**100.0**
	MoTeC Holdings PTY LTD	Docklands	**100.0**
	Protec Fire Detection Pty Ltd	Sydney	**100.0**
	Robert Bosch (Australia) Pty. Ltd.	Clayton	**100.0**
Botswana	Bosch Rexroth Botswana (Pty) Ltd.	Gaborone	**100.0**
China	Bosch (Chengdu) Information Technology Service Co., Ltd.	Chengdu	**100.0**
	Bosch (China) Investment Ltd.	Shanghai	**100.0**
	Bosch (Donghai) Automotive Test & Technology Center Co., Ltd.	Donghai	**100.0**
	Bosch (Hulunbeier) Automotive Test and Technology Centre Co., Ltd.	Yakeshi	**100.0**
	Bosch (Ningbo) e-scooter Motor Co., Ltd.	Ningbo	**100.0**
	Bosch (Shanghai) Digital Technology Ltd.	Shanghai	**100.0**
	Bosch (Shanghai) Information Technology Service Co., Ltd.	Shanghai	**100.0**
	Bosch (Shanghai) Investment Consulting Co., Ltd.	Shanghai	**100.0**
	Bosch (Shanghai) Security Systems Ltd.	Shanghai	**100.0**
	Bosch (Shanghai) Smart Life Technology Ltd.	Shanghai	**100.0**
	Bosch (Shanghai) Venture Capital Investment Co., Ltd.	Shanghai	**100.0**
	Bosch (Zhuhai) Security Systems Co., Ltd.	Zhuhai	**100.0**
	Bosch Automotive Aftermarket (China) Co., Ltd.	Nanjing	**100.0**
	Bosch Automotive Components (Changchun) Co., Ltd.	Changchun	**55.0**
	Bosch Automotive Products (Changsha) Co., Ltd.	Changsha	**100.0**
	Bosch Automotive Products (Chengdu) Co., Ltd.	Chengdu	**100.0**

Region/country	Company name	Registered office	Percentage share of capital
	Bosch Automotive Products (Suzhou) Co., Ltd.	Suzhou	100.0
	Bosch Automotive Service Solutions (Suzhou) Co., Ltd.	Suzhou	100.0
	Bosch Automotive Steering (Jinan) Co., Ltd.	Jinan	100.0
	Bosch Automotive Systems (Wuxi) Co., Ltd.	Wuxi	100.0
	Bosch Automotive Technical Service (Beijing) Co., Ltd.	Beijing	100.0
	Bosch Connected Mobility Solutions Ltd.	Wuxi	100.0
	Bosch Electronics Trading (Suzhou) Co., Ltd.	Suzhou	100.0
	Bosch HUAYU Steering Systems (Wuhan) Co., Ltd.	Wuhan	100.0
	Bosch HUAYU Steering Systems (Yantai) Co., Ltd.	Yantai	100.0
	Bosch HUAYU Steering Systems Co., Ltd.	Shanghai	51.0
	Bosch Hydrogen Powertrain Systems (Chongqing) Co., Ltd.	Chongqing	60.0
	Bosch Innovation and Software Development (Wuxi) Co., Ltd.	Wuxi	100.0
	Bosch Laser Equipment (Dongguan) Limited	Dongguan	100.0
	Bosch Power Tools (Chengdu) Co., Ltd.	Chengdu	100.0
	Bosch Power Tools (China) Co., Ltd.	Hangzhou	100.0
	Bosch Powertrain Systems Co., Ltd.	Wuxi	66.0
	Bosch Rexroth (Beijing) Hydraulic Co., Ltd.	Beijing	100.0
	Bosch Rexroth (Changzhou) Co., Ltd.	Changzhou	100.0
	Bosch Rexroth (China) Ltd.	Hong Kong	100.0
	Bosch Rexroth (Xi'an) Electric Drives and Controls Co., Ltd.	Xi'an	100.0
	Bosch Security Systems Ltd.	Hong Kong	100.0
	Bosch Thermotechnology (Beijing) Co., Ltd.	Beijing	100.0
	Bosch Thermotechnology (Shanghai) Co., Ltd.	Shanghai	100.0
	Bosch Trading (Shanghai) Co., Ltd.	Shanghai	100.0
	BSH Electrical Appliances (Jiangsu) Co., Ltd.	Nanjing	100.0
	BSH Home Appliances (China) Co., Ltd.	Nanjing	100.0
	BSH Home Appliances Co., Ltd.	Chuzhou	100.0
	BSH Home Appliances Holding (China) Co., Ltd.	Nanjing	100.0
	BSH Home Appliances Ltd.	Hong Kong	100.0

Region/country	Company name	Registered office	Percentage share of capital
	BSH Home Appliances Service Jiangsu Co., Ltd.	Nanjing	100.0
	BSW Household Appliances Co., Ltd.	Wuxi	100.0
	ETAS Automotive Technology (Shanghai) Co., Ltd.	Shanghai	100.0
	Gaggenau Home Appliances (Shanghai) Co., Ltd.	Shanghai	100.0
	Guangzhou sia Abrasives Company Ltd.	Guangzhou	100.0
	HydraForce Hydraulics Systems (Changzhou) Co., Ltd.	Guangzhou	100.0
	Le-AutomatiX (Shanghai) Co., Ltd.	Shanghai	100.0
	Le-ElectriX (Shanghai) Co., Ltd.	Shanghai	50.0
	Le-HydrauliX (Suzhou) Co., Ltd.	Suzhou	100.0
	Le-HydrauliX BoWei (Shanghai) Co., Ltd.	Shanghai	50.0
	Robert Bosch Company Ltd.	Hong Kong	100.0
	Shanghai Bosch Rexroth Hydraulics & Automation Ltd.	Shanghai	100.0
	Bosch Automotive Products (Shenzhen) Co., Ltd.	Shenzhen	100.0
	United Automotive Electronic Systems (Chongqing) Co., Ltd.	Chongqing	65.0
	United Automotive Electronic Systems (Liuzhou) Co., Ltd.	Liuzhou	100.0
	United Automotive Electronic Systems Co., Ltd.	Shanghai	51.0
Egypt	BSH Home Appliances Holding LLC	New Cairo	100.0
	BSH Home Appliances LLC	New Cairo	100.0
	RBEG LLC	Cairo	100.0
	Robert Bosch Holding Egypt LLC	Cairo	100.0
Ghana	Bosch Rexroth Ghana Ltd.	Accra	100.0
India	Bosch Automotive Electronics India Private Ltd.	Bengaluru	100.0
	Bosch Chassis Systems India Private Ltd.	Pune	100.0
	Bosch Global Software Technologies Private Limited	Bengaluru	100.0
	Bosch Ltd.	Bengaluru	70.5
	Bosch Mobility Platform and Solutions India Private Limited	Bengaluru	100.0

Region/country	Company name	Registered office	Percentage share of capital
	Bosch Rexroth (India) Private Limited	Ahmedabad	100.0
	BSH Household Appliances Manufacturing Private Limited	Mumbai	100.0
	ETAS Automotive India Private Ltd.	Bengaluru	100.0
	Keenfinity India Private Limited	Bengaluru	100.0
	MIVIN ENGG. TECHNOLOGIES PRIVATE LIMITED	Bengaluru	100.0
	Robert Bosch Automotive Steering Private Limited	Pune	100.0
	Robert Bosch India Manufacturing and Technology Private Limited	Bengaluru	100.0
Indonesia	PT BSH Home Appliances	Jakarta	100.0
	PT Keenfinity Security and Communications Indonesia	Jakarta	100.0
	PT. Robert Bosch	Jakarta	100.0
Israel	BSH Home Appliances Ltd.	Herzlia	100.0
	Elmo Motion Control Ltd.	Petach Tikva	100.0
Ivory Coast	Bosch Rexroth Cote d'Ivoire S.A.R.L.	Abidjan-Marcory	100.0
Japan	Bosch Corporation	Yokohama	100.0
	Bosch Engineering K.K.	Yokohama	100.0
	Bosch Global Software Technologies Ltd.	Tokyo	100.0
	Bosch Rexroth Corporation	Tsuchiura-shi	99.9
	Bosch Security Systems Ltd.	Yokohama	100.0
	ELPRO Corporation	Tokyo	100.0
	ETAS K.K.	Yokohama	100.0
	FA Niigata Co., Ltd.	Niigata	100.0
	Fuji Aitac Co., Ltd.	Saitama	100.0
	Gunma Seiki Co., Ltd.	Gunma	100.0
	Nippon Injector Corporation	Odawara	50.0

Region/country	Company name	Registered office	Percentage share of capital
Korea	Bosch Electrical Drives Co., Ltd.	Sejong	100.0
	Bosch Rexroth Korea Ltd.	Busan	100.0
	ETAS Korea Co., Ltd.	Seoul	100.0
	KB Wiper Systems Co., Ltd.	Daegu	100.0
	Keenfinity Ltd.	Daejeon	100.0
	Robert Bosch Korea Limited Company	Daejeon	100.0
Malaysia	Bosch Power Tools Engineering Sdn. Bhd.	Penang	100.0
	Bosch Rexroth Sdn. Bhd.	Kuala Lumpur	100.0
	BSH Home Appliances Sdn. Bhd.	Kuala Lumpur	100.0
	Keenfinity Malaysia Sdn. Bhd.	Kuala Lumpur	100.0
	Robert Bosch (Malaysia) Sdn. Bhd.	Penang	100.0
	Robert Bosch Automotive Steering Sdn. Bhd.	Penang	100.0
	Robert Bosch Power Tools Sdn. Bhd.	Penang	100.0
	Robert Bosch Sdn. Bhd.	Kuala Lumpur	100.0
	Robert Bosch Semiconductor Manufacturing Penang Sdn. Bhd.	George Town Pulau Pinang	100.0
Morocco	BSH Electroménagers (SA)	Casablanca	100.0
	Keenfinity SAS	Casablanca	100.0
	Robert Bosch Morocco S.A.R.L.-A.U.	Casablanca	100.0
Mozambique	Bosch Rexroth Mozambique Lda.	Maputo	100.0
	Bosch Rexroth Matola Lda.	Matola	100.0
Namibia	Bosch Rexroth Namibia (Pty.) Ltd.	Walvis Bay	100.0
New Zealand	BSH Home Appliances Ltd.	Auckland	100.0

Region/country	Company name	Registered office	Percentage share of capital
Philippines	Bosch Service Solutions, Inc.	Manila	**100.0**
	Robert Bosch Inc.	Manila	**100.0**
Singapore	AquaEasy Pte. Ltd.	Singapore	**100.0**
	Bosch Rexroth Pte. Ltd.	Singapore	**100.0**
	BSH Home Appliances Pte. Ltd.	Singapore	**100.0**
	ELPRO Pte. Ltd.	Singapore	**100.0**
	Keenfinity Pte. Ltd.	Singapore	**100.0**
	Robert Bosch (South East Asia) Pte. Ltd.	Singapore	**100.0**
	Robert Bosch Security Solutions Pte. Ltd.	Singapore	**100.0**
South Africa	Bosch Rexroth Africa Development (RF) (Pty.) Ltd.	Kempton Park	**100.0**
	Bosch Rexroth South Africa (RF) (Pty) Ltd.	Johannesburg	**100.0**
	BSH Home Appliances (Pty.) Ltd.	Johannesburg	**100.0**
	Corgam Property Investment (RF) (Pty.) Ltd.	Kempton Park	**100.0**
	Hydraulic and Automation Warehouse (RF) (Pty.) Ltd.	Kempton Park	**100.0**
	Hytec Engineering (RF) (Pty.) Ltd.	Kempton Park	**100.0**
	Hytec Fluid Technology (RF) Pty. Ltd.	Kempton Park	**100.0**
	Hytec South Africa (RF) (Pty) Ltd.	Kempton Park	**75.0**
	Keenfinity (Pty) Ltd.	Midrand	**100.0**
	Robert Bosch (Pty.) Ltd.	Midrand	**100.0**
	Tectra Automation (RF) (Pty.) Ltd.	Kempton Park	**100.0**
Taiwan	Bosch Rexroth Co. Ltd.	Taipei City	**100.0**
	BSH Home Appliances Private Limited	Taipei City	**100.0**
	Robert Bosch Taiwan Co., Ltd.	Taipei City	**100.0**

Region/country	Company name	Registered office	Percentage share of capital
Thailand	Bosch Automotive Thailand Co. Ltd.	Rayong	**87.9**
	BSH Home Appliances Ltd.	Bangkok	**100.0**
	Keenfinity (Thailand) Limited	Rayong	**100.0**
	Robert Bosch Automotive Technologies (Thailand) Co., Ltd.	Rayong	**100.0**
	Robert Bosch Ltd.	Bangkok	**100.0**
United Arab Emirates	BSH Home Appliances FZE	Dubai	**100.0**
	BSH Home Appliances General Trading LLC	Dubai	**100.0**
	Keenfinity FZCO	Dubai	**100.0**
	Robert Bosch Middle East FZE	Dubai	**100.0**
Vietnam	Bosch Vietnam Co., Ltd.	Dong Nai Province	**100.0**
	Bosch Global Software Technologies Co. Ltd.	Ho Chi Minh City	**100.0**
	BSH Home Appliances (Vietnam) Co. Ltd.	Ho Chi Minh City	**100.0**
Zambia	Bosch Rexroth Zambia Ltd.	Kitwe	**100.0**

2. Non-consolidated entities

Region/country	Company name	Registered office	Percentage share of capital
Germany	AIG Planungs- und Ingenieurgesellschaft mbH	Stuttgart	**100.0**
	Bosch Climate Solutions GmbH	Gerlingen	**100.0**
	Bosch Management Support GmbH	Leonberg	**100.0**
	Bosch Pensionsfonds AG	Stuttgart	**100.0**
	BSH Altersfürsorge GmbH	Munich	**100.0**
	Circular Economy Solutions GmbH	Göttingen	**100.0**
	eAx solutions GmbH	Stuttgart	**100.0**
	Elmo Motion Control GmbH	Viernheim	**100.0**
	for you Insurance Services GmbH	Gerlingen	**100.0**
	GFI – Gesellschaft für Infrastrukturdienste mbH	Reutlingen	**100.0**
	Home Connect GmbH	Munich	**100.0**
	HydraForce Hydraulics GmbH	Zweibrücken	**100.0**
	Kassow Robots GmbH	Ulm	**100.0**
	Koller + Schwemmer GmbH	Nuremberg	**100.0**
	Mobility Media GmbH	Gerlingen	**100.0**
	Prüfzentrum Boxberg GmbH	Boxberg	**100.0**
	Service- und Betriebsgesellschaft Heidehof mbH	Stuttgart	**100.0**

Region/country	Company name	Registered office	Percentage share of capital
Europe			
Austria	ITK Engineering GmbH	Premstätten	**100.0**
Belarus	Robert Bosch OOO	Minsk	**100.0**
Bulgaria	Robert Bosch EOOD	Sofia	**100.0**
Croatia	Robert Bosch d.o.o.	Zagreb	**100.0**
Czech Republic	KR Soft s.r.o.	Prague	**100.0**
Estonia	Robert Bosch OÜ	Tallinn	**100.0**
France	Soindev 3 (Société Intermédiaire de Développement 3) S.A.S.	Saint-Ouen	**100.0**
Georgia	Robert Bosch Ltd.	Tiflis	**100.0**
Greece	Bosch Rexroth S.A.	Athens	**100.0**
Italy	Elmo Italy S.R.L.	Milan	**100.0**
Lithuania	UAB Robert Bosch	Vilnius	**100.0**
Poland	Elmo Motion Control Poland Sp. z o.o.	Warsaw	**100.0**
Romania	Bosch Servicii Termotehnica S.R.L.	Bucharest	**100.0**
	BSH Electrocasnice Manufacturing S.R.L.	Bucharest	**100.0**

Region/country	Company name	Registered office	Percentage share of capital
Russian Federation	OOO BSH Bytowije Pribory	St. Petersburg	**100.0**
Slovenia	BSH Hišni aparati I.D. INVALIDSKA DRUŽBA d.o.o.	Nazarje	**100.0**
	Robert Bosch d.o.o.	Ljubljana	**100.0**
Spain	Bosch Automotive Service Solutions S.A.U.	Madrid	**100.0**
	ITK Systems Engineering, S.L.U.	Barcelona	**100.0**
Switzerland	Elmo Motion Control AG	Biel	**100.0**
United Kingdom	Bosch Automotive Training Limited	Motherwell	**100.0**
	Camerfield Limited	Nelson	**100.0**
	Face Macanda Limited	Nelson	**100.0**
	Firepro Systems Limited	Nelson	**100.0**
	HydraForce Ltd.	Birmingham	**100.0**
	LAGTA Group Training Limited	Motherwell	**100.0**
	XL Fire Detection Systems Ltd.	Nelson	**100.0**

Region/country	Company name	Registered office	Percentage share of capital
Americas			
Brazil	Bosch Management Support Ltda.	Campinas	**100.0**
	Metapar Usinagem Ltda.	Curitiba	**100.0**
	Robert Bosch Centro de Comunicação Limitada	Joinville	**100.0**
	sia Abrasivos Industriais Ltda.	São José dos Pinhais	**100.0**
Canada	ETAS Embedded Systems Canada Inc.	Waterloo, ON	**100.0**
Ecuador	Robert Bosch Sociedad Anónima – Ecuabosch	Guayaquil	**100.0**
Mexico	Bosch Management Services México, S.C.	Mexico City	**100.0**
Paraguay	Robert Bosch Sociedad Anonima	Asunción	**100.0**
Peru	Bosch Rexroth S.A.C.	Lima	**100.0**
United States	Bosch Management Services Corporation	Wilmington, DE	**100.0**
	Bosch Solar Energy Corp.	Detroit, MI	**100.0**
	HydraForce India LLC	Lincolnshire, IL	**100.0**
	HydraForce Japan LLC	Lincolnshire, IL	**100.0**
	HydraForce Sweden LLC	Lincolnshire, IL	**100.0**
	ITK Engineering, LLC	Farmington Hills, MI	**100.0**
Uruguay	Robert Bosch Uruguay S.A.	Montevideo	**100.0**
Venezuela	Robert Bosch S.A.	Caracas	**100.0**

Region/country	Company name	Registered office	Percentage share of capital
Asia Pacific (including other countries)			
Angola	Robert Bosch, Limitada	Luanda	**100.0**
Bangladesh	Robert Bosch (Bangladesh) Ltd.	Dhaka	**100.0**
Cambodia	Robert Bosch (Cambodia) Co., Ltd.	Phnom Penh	**100.0**
China	DMS Automation Technology (Suzhou) Co., Ltd.	Suzhou	**100.0**
	Elmo Motion Control Technology (Shanghai) Co., Ltd.	Shanghai	**100.0**
	Freud International Trading (Shanghai) Co., Ltd.	Shanghai	**100.0**
	ITK Engineering Technology (Wu Xi) Co., Ltd.	Wuxi	**100.0**
	KB Wiper Systems (JiangYin) Co., Ltd.	Jiangyin	**100.0**
Egypt	Bosch Rexroth Egypt LLC	Cairo	**100.0**
	Robert Bosch Ltd.	Cairo	**100.0**
Ghana	Robert Bosch Ghana Ltd.	Accra	**100.0**
India	KB Wiper Systems India Private Ltd.	Oragadam	**100.0**
	MICO Trading Private Ltd.	Bengaluru	**100.0**
	Newtech Filter India Private Limited	Nalagarh	**100.0**
	Precision Seals Manufacturing Pvt. Ltd.	Chakan	**100.0**
Indonesia	PT Aquaeasy Technology Indonesia	Jakarta	**100.0**
	PT Bosch Rexroth	Jakarta	**100.0**
	PT KB Wiper Systems Indonesia	Cikarang	**100.0**
	PT Robert Bosch Automotive	Jakarta	**100.0**
	PT Robert Bosch Retail Indonesia	Jakarta	**100.0**

Region/country	Company name	Registered office	Percentage share of capital
Iran	Bosch Tejarat Pars	Tehran	**100.0**
Israel	Robert Bosch Technologies Israel Ltd.	Tel Aviv	**100.0**
Japan	Bosch Service Solutions Corporation	Tokyo	**100.0**
	ITK Engineering Japan, Inc.	Tokyo	**100.0**
	Kanto Seiatsu Kogyo Co., Ltd.	Honjo	**92.9**
Kenya	Robert Bosch East Africa Ltd.	Nairobi	**100.0**
Korea	Elmo Motion Control APAC Ltd.	Hwaseong	**100.0**
Laos	Robert Bosch (Lao) Sole Co., Ltd.	Vientiane Capital	**100.0**
Malaysia	Robert Bosch (Penang) Sdn. Bhd.	Penang	**100.0**
Morocco	Bosch Rexroth Morocco S.A.R.L.	Casablanca	**100.0**
New Zealand	Bosch Rexroth Ltd.	Auckland	**100.0**
	Robert Bosch Ltd.	Auckland	**100.0**
Nigeria	Robert Bosch Limited	Lagos	**100.0**
Oman	Robert Bosch Muscat Sole Proprietor Company	Muscat	**100.0**
Saudi Arabia	BSH Home Appliances Saudi Arabia LLC	Jeddah	**51.0**
	Robert Bosch Regional Headquarters (Single Shareholder Limited Liability Company)	Jeddah	**100.0**
	Robert Bosch Saudi Arabia Ltd.	Riyadh	**100.0**

Region/country	Company name	Registered office	Percentage share of capital
Singapore	Elmo Motion Control (Singapore) PTE Ltd.	Singapore	**100.0**
	WhatsEGG Pte. Ltd.	Singapore	**78.6**
South Africa	Diesel Electric (Lesotho) (Pty) Ltd.	Brits	**100.0**
	Diesel Electric (South Africa) (Pty) Ltd.	Brits	**100.0**
	Diesel Electric Holdings (Pty) Ltd.	Brits	**100.0**
	Hägglunds Drives South Africa (Pty.) Ltd.	Fourways	**100.0**
Sri Lanka	Robert Bosch Lanka (Pvt.) Ltd.	Colombo	**100.0**
Thailand	Bosch Rexroth (Thailand) Ltd.	Rayong	**100.0**
	WhatsEgg (Thailand) Co. Ltd.	Bangkok	**70.0**
Tunisia	Robert Bosch Tunisie S.A.R.L.	Tunis	**100.0**

B. Joint ventures and associated entities

1. Entities measured using the equity method

Region/country	Company name	Registered office	Percentage share of capital
Germany	Bosch BASF Smart Farming GmbH	Cologne	**50.0**
	BS Systems GmbH & Co. KG	Zusmarshausen	**50.0**
	MAGURA Bosch Parts & Services GmbH & Co. KG	Nürtingen	**50.0**
	plc2 Design GmbH	Endingen am Kaiserstuhl	**25.0**

Region/country	Company name	Registered office	Percentage share of capital
Europe			
Austria	FerRobotics Compliant Robot Technology GmbH	Linz	**49.0**

Region/country	Company name	Registered office	Percentage share of capital
Americas			
United States	North America Fuel Systems Remanufacturing LLC	Kentwood, MI	**50.0**

2. Entities not measured using the equity method on materiality grounds

Region/country	Company name	Registered office	Percentage share of capital
Germany	Alltrucks GmbH & Co. KG	Munich	**33.3**
	Blauhut & Partner Informationssysteme GmbH	Egling	**37.6**
	Aranea Battery Solutions GmbH	Stuttgart	**50.0**
	MAGURA Bosch Parts & Services Verwaltungs-GmbH	Nürtingen	**50.0**
	SupplyOn Aktiengesellschaft	Hallbergmoos	**42.1**

Region/country	Company name	Registered office	Percentage share of capital
Europe			
Hungary	Kazántrade Kft.	Budapest	**30.0**
Italy	Oleodinamica Gambini S.r.l.	Modena	**20.0**
Poland	Loos Centrum Sp.z o.o.	Warsaw	**26.0**
United Kingdom	Megasets Ltd.	London	**25.1**

Region/country	Company name	Registered office	Percentage share of capital
Americas			
Brazil	PEÇA AI.COM S.A.	São Paulo	**20.0**
Mexico	BUSCABOT, S.A.P.I. DE C.V.	Guadalajara	**49.0**

Region/country	Company name	Registered office	Percentage share of capital
Asia Pacific (including other countries)			
Australia	The Yield Technology Solution Pty. Ltd.	Hobart	**28.7**
China	HEFEI M&B Air Conditioning Equipment Co., Ltd.	Heifei	**40.0**
India	AMP Energy C&I Eight Private Limited	New Delhi	**29.4**
	AMP Solar Infrastructure Private Limited	New Delhi	**26.0**
	Autozilla Solutions Pvt. Ltd.	Hyderabad	**26.0**
	Prebo Automotive Pte. Ltd.	Pune	**40.0**
	Simyog Technology Pvt. Ltd.	Bengaluru	**24.7**
Israel	Electra Industries Ltd.	Rishon LeZion	**40.0**

C. Other investments

Region/country	Company name	Registered office	Percentage share of capital
Asia Pacific (including other countries)			
China	Boyuan (Shanghai) Investment Management Co., Ltd.	Shanghai	**50.0**
	Shanghai Boyuan Jiacheng Venture Investment Partnership	Shanghai	**25.3**

Stuttgart, March 10, 2025

Robert Bosch Gesellschaft mit beschränkter Haftung

The board of management

Dr. Stefan Hartung

Dr. Christian Fischer

Dr. Markus Forschner

Stefan Grosch

Dr. Markus Heyn

Dr. Frank Meyer

Katja von Raven

Dr. Tanja Rückert

Auditor's report

Independent auditor's report

To Robert Bosch Gesellschaft mit beschränkter Haftung

Opinions

We have audited the consolidated financial statements of Robert Bosch Gesellschaft mit beschränkter Haftung, Stuttgart and its subsidiaries (the Group), which comprise the consolidated income statement and consolidated statement of comprehensive income for the fiscal year from January 1 to December 31, 2024, the consolidated statement of financial position as at December 31, 2024, the consolidated statement of changes in equity and the consolidated statement of cash flows for the fiscal year from January 1 to December 31, 2024, and notes to the consolidated financial statements, including material accounting policy information. In addition, we have audited the group management report of Robert Bosch Gesellschaft mit beschränkter Haftung for the fiscal year from January 1 to December 31, 2024. In accordance with the German legal requirements, we have not audited the content of the statement on corporate governance pursuant to Sec. 289f (4) HGB ["Handelsgesetzbuch": German Commercial Code] included in the "Corporate governance report" section of the group management report (disclosure on female representation on executive boards).

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRS Accounting Standards as issued by the International Accounting Standards Board (IASB) (IFRS Accounting Standards) and adopted by the EU, and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB and, in compliance with these requirements, give a true and fair view of the assets, liabilities and financial position of the Group as at December 31, 2024, and of its financial performance for the fiscal year from January 1 to December 31, 2024, and
- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. We do not express an opinion on the content of the statement on corporate governance referred to above.

Pursuant to Sec. 322 (3) Sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with Sec. 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's responsibilities for the audit of the consolidated financial statements and of the group management report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the group management report.

Other information

The supervisory board is responsible for the supervisory board report. The executive directors are responsible for the other information. The other information comprises the corporate governance statement mentioned above pursuant to Sec. 289f (4) HGB (disclosures on the quota for women on executive boards). Furthermore, the other information comprises additional parts to be included in the annual report, of which we obtained a version prior to issuing this auditor's report, in particular the sections: "Foreword", "Board of management", "Supervisory board report", "Supervisory board", "Industrial Trust and International Advisory Committee", "Business sectors", "Highlights 2024", "Stories" and "Robert Bosch Stiftung", but not the consolidated financial statements, not the group management report disclosures whose content is audited and not our auditor's report thereon.

Our opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

Responsibilities of the executive directors and the supervisory board for the consolidated financial statements and the group management report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with the IFRS Accounting Standards as adopted by the EU and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB, and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position and financial performance of the Group. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud (i.e., fraudulent financial reporting and misappropriation of assets) or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The supervisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor's responsibilities for the audit of the consolidated financial statements and of the group management report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Sec. 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than the risk of not detecting a material misstatement resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control and of such arrangements and measures.
- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.
- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the

Group in compliance with the IFRS Accounting Standards as adopted by the EU and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB.

- Plan and perform the audit of the consolidated financial statements to obtain sufficient appropriate audit evidence regarding the financial information of the entities or business units within the Group as a basis for forming opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and review of the work performed for the group audit. We remain solely responsible for our audit opinions.
- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.
- Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Stuttgart, March 12, 2025

EY GmbH & Co. KG
Wirtschaftsprüfungsgesellschaft

Somes	Bürkle
Wirtschaftsprüferin	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]

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Ten-year summary of the Bosch Group

T92

in millions of euros

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Sales revenue	70,587	73,129	78,066	78,965	77,721	71,454	78,748	88,391	91,596	90,345
Research and development cost[1]	6,275	6,491	7,264	6,983	6,879	6,998	6,918	7,124	7,681	7,807
as a percentage of sales revenue	8.9	8.9	9.3	8.8	8.9	9.8	8.8	8.1	8.4	8.6
EBIT	4,597	3,335	4,556	3,592	2,360	1,657	2,615	3,474	4,530	2,796
as a percentage of sales revenue	6.5	4.6	5.8	4.5	3.0	2.3	3.3	3.9	4.9	3.1
Profit after tax	4,597	2,334	3,284	3,574	2,366	749	2,489	1,936	2,640	1,332
as a percentage of sales revenue	6.5	3.2	4.2	4.5	3.0	1.0	3.2	2.1	2.9	1.5
Capital expenditure	4,068	4,262	4,345	4,045	4,089	3,317	3,949	4,936	5,609	5,122
as a percentage of sales revenue	5.7	5.8	5.6	5.1	5.3	4.6	5.0	5.6	6.1	5.7
as a percentage of depreciation	146	141	140	128	126	107	116	141	151	137
Depreciation of property, plant, and equipment	2,786	2,962	3,255	3,152	3,251	3,252	3,383	3,474	3,421	3,735
Total assets	77,266	81,875	81,840	88,694	87,861	91,369	97,725	100,227	109,536	112,766
Equity	34,424	35,884	37,587	38,573	41,079	40,166	43,304	46,777	47,208	49,993
as a percentage of total assets	45	44	46	44	47	44	45	47	44	44
Dividend of Robert Bosch GmbH	143	168	241	262	119	87	145	354	170	186
Headcount as of December 31 of the year	373,778	389,281	402,165	409,931	398,150	395,024	402,612	421,103	429,416	417,859
Personnel expenses	20,365	21,868	22,286	22,215	23,937	22,695	23,468	24,922	28,854	29,452

1. Up to 2017: including development work charged directly to customers.

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Postfach 10 60 50

70049 Stuttgart

Germany

Phone +49 711 811-0

contact@bosch.com

Executive vice-president

Prof. Christof Ehrhart

Idea and coordination

Dennis Christmann

Idea, design, and lithography

hw.design GmbH, Munich

Sustainability report 2024

Ambition

BOSCH

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03

Foreword

Dear readers,

In a time marked by numerous crises and fundamental challenges, one thing must not take a back seat: our efforts to protect the climate and environment. This is why Bosch remains resolutely committed to greater sustainability.

2024 was the warmest year since records began. For the first time ever, the average global temperature was more than 1.5 degrees Celsius higher than the pre-industrial average. Climate change is already leading to a loss of habitats. This trend must be stopped.

With its more than 450 locations worldwide, in 2020 Bosch was one of the first global industrial companies to achieve carbon neutrality (scope 1 & 2).[1] Compared to 2018, the baseline year for our calculations, we save more than 2.7 million metric tons of CO_2 per year and offset the remaining 0.5 million metric tons. But is that enough?

STEFAN GROSCH

DR. STEFAN HARTUNG

[1] For terms and details see the Environment | Climate action section.

In 2018, indirect CO_2 emissions from upstream and downstream value chains such as transport, procurement, and the use of Bosch products still amounted to 458 million metric tons of CO_2 (scope 3). This was where action was needed, and this is where we focused our efforts: in the space of five years, Bosch succeeded in reducing CO_2 emissions in the upstream and downstream value chains to 335 million metric tons of CO_2 in 2023. In other words, we achieved a reduction of 123 million metric tons of CO_2. Contributing to this were the transformation of the energy sector, a product portfolio geared towards energy and resource efficiency, and mitigation technologies such as heat pumps and electric motors. At the same time, we are increasingly involving our suppliers in our decarbonization activities. Many have committed themselves – with our support – to complying with the Paris Climate Agreement.

Encouraged by this success, we have decided to push our previous reduction target of 15 percent even further. Compared to our 2018 baseline year, we now aim to cut our scope 3 emissions by 30 percent in absolute terms by 2030, and this independent of our goal to continuously increase Bosch's sales revenue. Bosch intends to grow while having as little negative impact on the climate and environment as possible.

One example is our entry into the hydrogen generation technology business. Here, Bosch is developing the core component of an electrolyzer, the so-called stack, which consists of over a hundred electrolysis cells that split water into oxygen and hydrogen using electricity. With this innovation, we're expanding our green tech portfolio and underpinning our leading position in this domain. Bosch is a pioneer in this regard – no other company in Germany holds more outstanding green tech patents.[2]

The key is not just to invent and create new things, but also to refine what already exists. More output with fewer resources – this is an approach that works. Last year, we launched a rechargeable battery for professional power tools that delivers up to 70 percent longer runtimes than previous rechargeable battery models – all while still having the same size and weight. Efficiency leaps are also possible in hydraulics with new technology. For example, our variable-speed powertrain solutions have the potential to reduce energy consumption by up to 80 percent compared to previous models.

One increasingly important aspect of enhancing the sustainability of products and services is the development of a circular economy. This involves reusing components and products, consistently recycling, and reducing waste. A circular economy not only helps to conserve resources and make supply chains more resilient, but also to reduce energy demand and CO_2 emissions.

[2] Cf. Bertelsmann Stiftung, "Green Tech made in Germany: Wie zukunftsfit sind wir?", Gütersloh 2023.

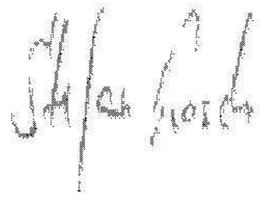
Bosch has firmly integrated these guiding principles into its corporate thinking and actions: repair, replace, or recycle products so they can continue being used. Whether it's industry and trade, energy and buildings, for the home or mobility, Bosch offers corresponding services in almost all its areas of business. Refrigerators, washing machines, and dishwashers can be rented through Bosch's BlueMovement circular business model, defective vehicle components such as generators or steering and braking systems can be replaced using the Bosch eXchange program, and industrial plants and machinery can be reconditioned by Bosch Rexroth. The intention: to transform old into new. Over the last 15 years, Bosch Rexroth has used remanufacturing to overhaul several hundred thousand control units, servomotors, and electronic drive parts. Remanufacturing can save around 75 percent of components, and compared to buying things new, customers can save up to 50 percent of the cost for remanufactured components.

And that's not all. The Power Tools division has established a network in which recyclable materials are collected at Bosch plants, recycled externally, and reused. New Bosch accessories for power tools are made from carbide and grinding sludge, for example drill attachments or saw blades. Carbide production currently uses around 20 percent recycled material from Bosch's own sources, which reduces the demand for the high-risk primary raw materials tungsten and cobalt accordingly.

These examples show that ecology and economy are not mutually exclusive. The EU taxonomy, which classifies and categorizes sustainable business activities and is intended to promote environmentally friendly growth, also plays a role here. New criteria are being set for entrepreneurial success. At Bosch, we're approaching this with conviction and taking our responsibility seriously. Climate change will not wait for us to get our act together, we must tackle it now. The good thing is that there's a lot we can do – it's within our power to shape a future that restores the balance between people and the environment, supported by an ambitious and innovative sustainable economy.

We wish you an enjoyable read and appreciate your interest.

Dr. Stefan Hartung
Chairman of the board of management

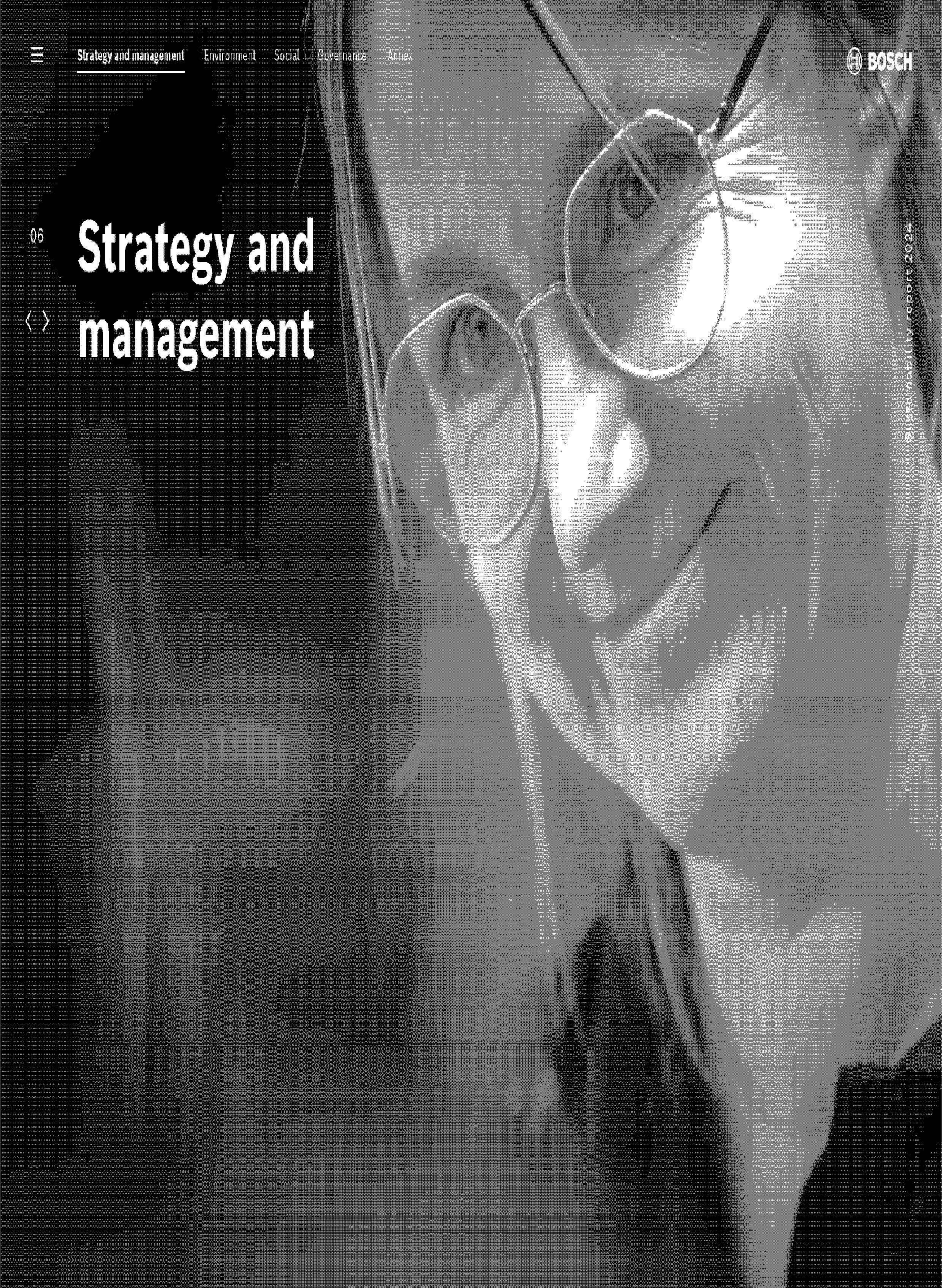


Stefan Grosch
Member of the board of management and director of industrial relations

BOSCH

06

Strategy and management



Strategy and management

By acting in an economically, environmentally, and socially responsible manner, we want to improve people's quality of life and safeguard the livelihoods of present and future generations.

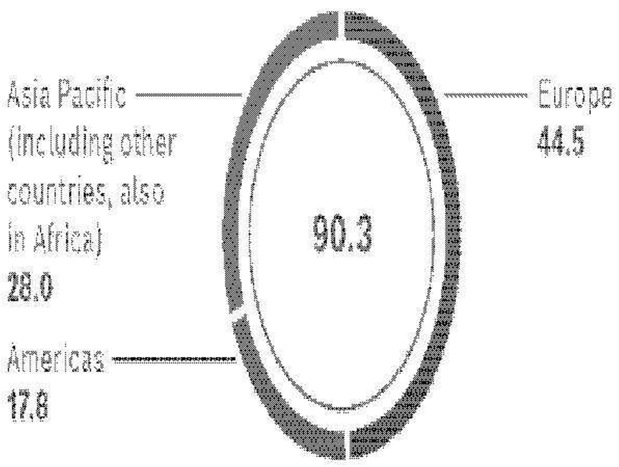
Bosch Group profile

The Bosch Group is a leading global supplier of technology and services. It employs roughly 417,900 associates worldwide (as of December 31, 2024). The company generated sales revenue of 90.3 billion euros in 2024. Its operations are divided into four business sectors: Mobility, Industrial Technology, Consumer Goods, and Energy and Building Technology. Universal trends such as automation, electrification, digitalization, and connectivity as well as an orientation to sustainability are increasingly determining the group's business operations. Bosch's broad footprint as a global and diversified technology company strengthens its innovativeness and robustness.

G 01

Sales revenue

Bosch Group 2024 by region, in billions of euros

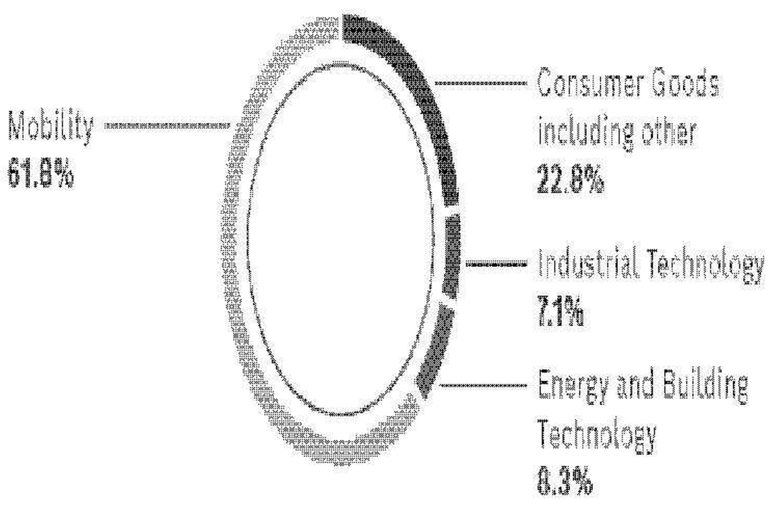


G 02

Bosch uses its proven expertise in sensor technology, software, and services to offer customers cross-domain solutions from a single source. At the same time, Bosch uses its know-how in areas such as connectivity and artificial intelligence to develop and manufacture intelligent, user-friendly, and sustainable products. With technology that is

Sales revenue structure

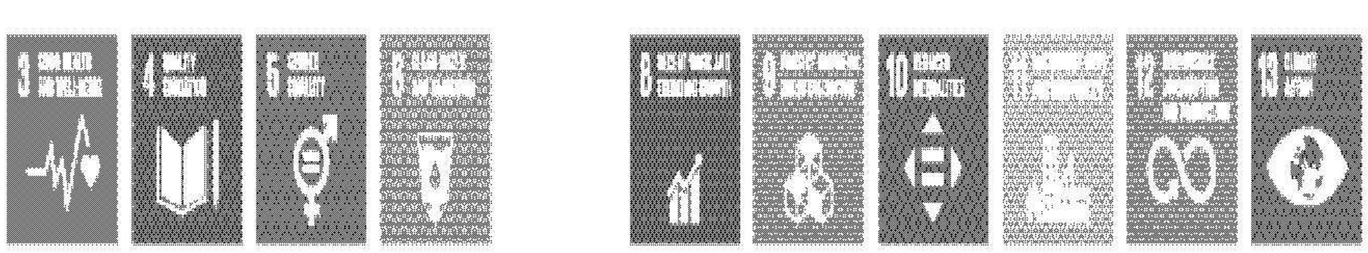
Sales revenue Bosch Group 2024 by business sector



"Invented for life," Bosch wants to help improve quality of life and conserve natural resources. With its more than 450 locations worldwide, the Bosch Group has been carbon-neutral overall since 2020 (scope 1 & 2). In 2024, residual emissions of roughly 531,300 metric tons of CO_2 were offset by carbon credits. Year on year, this is a decrease of roughly 49,600 metric tons of CO_2, or 8.5 percent.[3]

The Bosch Group comprises Robert Bosch GmbH and its roughly 490 subsidiary and regional companies in more than 60 countries. Including sales and service partners, Bosch's global manufacturing, engineering, and sales network covers nearly every country in the world. Bosch's innovative strength is key to the company's further development. Bosch employs around 86,800 associates in research and development at 136 locations around the globe, including roughly 48,000 software engineers. You will find further details on research and development at Bosch online and in the 2024 annual report, page 67 et seq.

The company was set up in Stuttgart in 1886 by Robert Bosch (1861–1942) as "Workshop for Precision Mechanics and Electrical Engineering." The special ownership structure of Robert Bosch GmbH guarantees the entrepreneurial independence of the Bosch Group, making it possible for the company to plan over the long term and to undertake significant up-front investments in the safeguarding of its future. 94 percent of the share capital of Robert Bosch GmbH is held by Robert Bosch Stiftung GmbH, a charitable foundation. The remaining shares are held by Robert Bosch GmbH and by a corporation owned by the Bosch family. The majority of voting rights are held by Robert Bosch Industrietreuhand KG. Further information on the organization of the Bosch Group, the activities of the business sectors, and the company's economic situation, can be found in the current annual report.



Bosch also supports the United Nations Sustainable Development Goals (SDG).

[3] Scopes 1, 2, and 3 are used in accordance with the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard. For further details about the Bosch Group's carbon neutrality (scope 1 & 2), see the "Environment | Climate action" section.

09 Sustainability management

To us, sustainability means striking a balance between the economic, environmental, and social dimensions of our business activities as part of responsible corporate governance.

Defined as a group-wide task within the Bosch Group, sustainability is coordinated by the Sustainability and EHS (Environment, Health, Safety) corporate department. The business sectors pursue the jointly set goals on the basis of systematic sustainability management. The contents, tasks, and related controlling are anchored in the company's processes. Internal company regulations define the organization and responsibilities for sustainability and EHS in the Bosch Group.

The board of management of Robert Bosch GmbH is responsible for sustainability and EHS and assigns one of its members to perform the corresponding organizational and supervisory duties. Goal agreements and management reviews for all sustainability-related issues are the responsibility of the chairman of the board of management and the board of management member responsible for sustainability. For information on Robert Bosch GmbH's board of management and supervisory board, see the 2024 annual report, page 10 et seq.

At Bosch, the highest technical committee for sustainability is the corporate sustainability board (CSB) under the aegis of the chairman of the board of management of Robert Bosch GmbH and the board of management member responsible for sustainability. The Sustainability and EHS corporate department is responsible for the organizational and functional management of the CSB, which convenes twice a year.

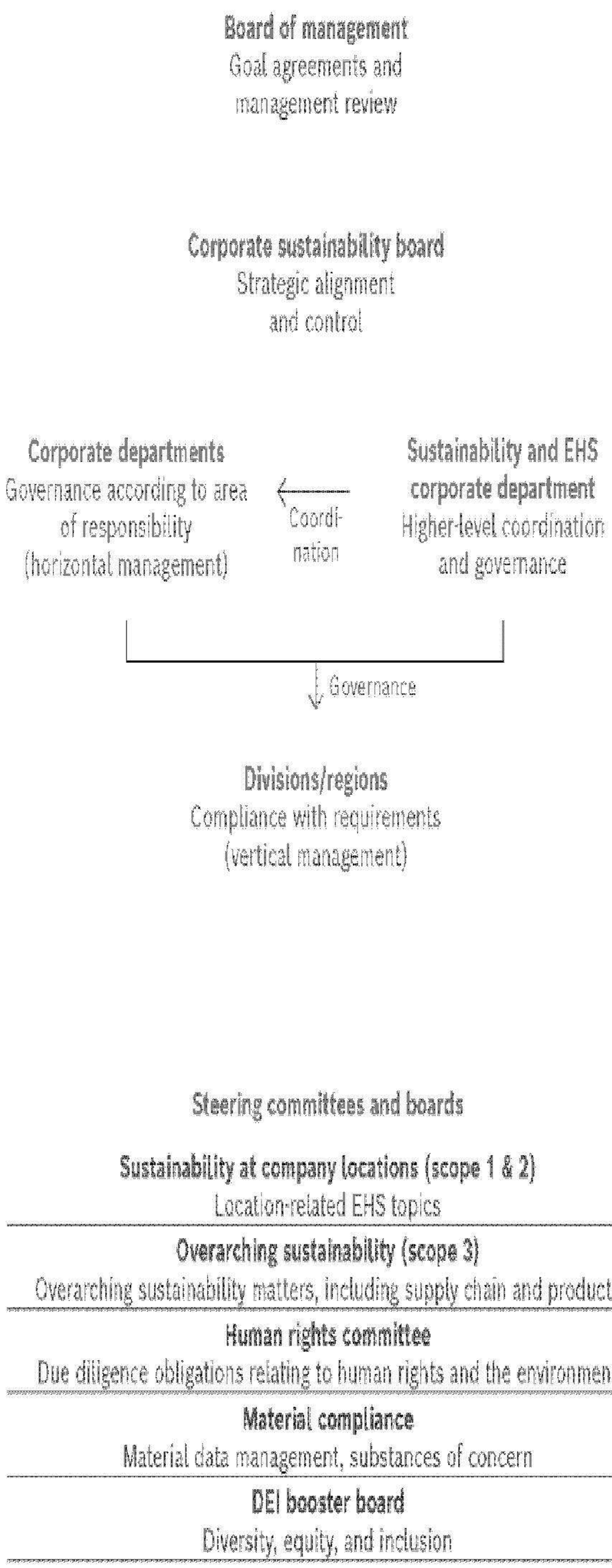
The CSB members are the chief financial officer of the Bosch Group, the board of management member responsible for the Mobility business sector, and the heads of the corporate departments responsible for the relevant matters: Research and Advance Engineering, Purchasing and Logistics, Real Estate, Human Resources, Legal, Compliance, Finance, as well as Corporate Communications and Governmental Affairs. The CSB also includes the executive management of various divisions and the management of the individual regions. Further members are included when required. The committee's main tasks are to define the sustainability strategy and goals for the Bosch Group, to adopt sustainability activities, to provide transparency and decide in the event of conflicting objectives, to monitor implementation of the sustainability strategy and activities, and to coordinate group-wide position papers on sustainability matters.

10 The Sustainability and EHS corporate department is responsible for sustainability management, which mainly entails setting and tracking goals, designing and accompanying programs, preparing concepts for further development, and sustainability reporting. It is accountable for governance in all matters concerning sustainability and EHS and coordinates implementation of regulatory requirements throughout the group. The Corporate Communications and Governmental Affairs corporate department is responsible for sustainability communications and interaction with stakeholders around the world.

The competent officers at corporate headquarters and in the divisions are responsible for implementing the sustainability strategy worldwide and for monitoring the achievement of goals. Coordinators offer professional support to the divisions, for example for implementing strategies and establishing processes and internal regulations. In addition, the coordinators review the effectiveness of the respective measures. The associates responsible in the regions and at the Bosch sites worldwide are tasked with ensuring that the relevant requirements are observed locally and that the defined framework conditions are complied with by means of established processes. In parallel, the Sustainability and EHS corporate department regularly performs internal sustainability and EHS audits.

G 03

How sustainability is organized at Bosch



Steering committees, supported by topic-specific competence centers, have been established within the company for material topics. The steering committees are made up of experts from various corporate departments, divisions, and regions. They are responsible for the enhanced development of the sustainability strategy taking stakeholder interests into account. With the exception of the material compliance steering committee, which generally meets quarterly, the steering committees meet twice a year.

Continuous improvement

Bosch's global sustainability management is defined in a central process that is based on the ISO standard process definitions, especially ISO 31000. This process is based on the concept of the PDCA cycle for continuous improvement.

- Plan: Defining the strategy

Strategy development is based on risks and opportunities and takes into account the legal requirements, internal and external trends, and the results of our reporting systems, audits, and management reviews. The responsible corporate departments develop strategic goals and KPIs for the Bosch Group and its organizational units with the involvement of the relevant units, which are then approved by the board of management or the responsible member of the board of management.

- Do: Implementing the strategy

Suitable organizational and operational structures are established at all organizational levels to ensure compliance with external and internal requirements, the implementation of strategic goals, and the execution of strategic projects.

- Check: Reviewing implementation and effectiveness

The effectiveness of the process is checked at least once a year as part of a management review. The effectiveness of the achievement of strategic goals and the associated processes and organizational requirements are also reviewed on a regular basis. In addition to audits and management reviews, we rely on the established reporting systems as well as the targeted tracking of measures.

- Act: Continuous improvement

Measures for the continuous improvement of the PDCA cycle and further development of the sustainability strategy are derived from elements of the previous checks, implemented, and tracked by the responsible central departments.

Materiality assessment

As a leading global supplier of technology and services, Bosch operates in a large number of markets around the world. Directly or indirectly, our operations affect the interests of a wide range of stakeholders. To parse out what these interests are and take account of them in our activities, we actively seek to enter into dialogue with our stakeholders (see T 01).

As part of our double materiality assessment, we identified the sustainability matters in 2024 that could have a significant impact on our business, people, and the environment. With this approach, we are following the requirements of the Corporate Sustainability Reporting Directive (CSRD) and the associated European Sustainability Reporting Standards (ESRS). The assessment covers Bosch's global activities and the entire value chain, taking the results of our established due diligence processes and exchange with our stakeholders into account. It followed a four-stage process:

- Determining the scope of topics and defining potentially material impacts, risks, and opportunities

The first step was adapting a predefined list of topics (ESRS 1, AR 16) to Bosch's activities and identifying the sustainability matters potentially associated with material impacts, risks, and opportunities (IRO). For this purpose, we also carried out qualitative and quantitative assessments of our own activities in our value chain, taking relevant sectors and geographical risk areas as well as typical production processes into account.

- Assessing the impacts, risks, and opportunities

In the next step, the identified IRO were assessed by the corporate departments responsible for the topics. A standardized methodology was used as a basis, which also allows for short-term, medium-term, and long-term assessments and takes both the materiality of the impact and the financial materiality into account.

When assessing the materiality of impacts, the focus was on the severity, i.e., the extent, scope, and irremediability, and the probability of occurrence of potential impacts on people and the environment. The assessment covered the entire value chain and included both positive and negative impacts. The results were classified on a scale from 0 (very low) to 100 (critical), with a materiality threshold of ≥ 40.

For financial materiality, the financial extent and probability of occurrence of the identified risks and opportunities were assessed based on the Bosch Group's risk management assessment methods. Criteria included the impact on the financial position, company performance, cash flow, and cost of capital. These results were classified on a scale from 1 (very low) to 5 (critical). Level 4 was defined as the materiality threshold, which corresponds to a financial impact of at least 50 million euros. For further information on the analyses conducted, see the Environment and Social sections.

T 01

13

Overview of key stakeholder groups, forms of dialogue, and example results

Associates and employee representative bodies	Dialogue with associates and their representative bodies, training programs, surveys, internal media, Bosch Business Dialog	Inclusion of viewpoints, experiences, and expectations	Updating internal regulations, improvements, and action plans, global initiatives and campaigns
Customers	Customer services, training programs, surveys, trade fairs, social media	Inclusion of viewpoints, experiences, and expectations	Improving products and services, adapting market strategies
Suppliers and partners	Supplier days, awards, training programs, assessments, dialogue as part of industry initiatives	Responsible procurement, decarbonization of our supply chain	Improvements and action plans to improve sustainability performance
Investors	Conference calls, analyst meetings, and investor conferences	Identifying potential investors and presenting financial and non-financial key performance indicators, creating transparency regarding sustainability requirements	Setting priorities and measures to improve positioning in ESG ratings
Associations	Participation in committees and working groups, initiative and association memberships	Developing industry standards, understanding the views of employee representative bodies	Updating internal regulations, action plans
Universities and research institutes	Collaborations, lectures, dialogue events, trade fairs	Developing innovations, talent acquisition	Pilot projects
Policymakers	Contact for questions from policymakers, involvement in committees organized by governments or ministries, dialogue events, one-on-one talks	Taking a stand on technical feasibility and impact on society	Adapting market strategies, creating value, and mitigating risk through compliance
Local stakeholders	Local community talks, plant visits, donations	Dealing with concerns, questions and feedback, strengthening local initiatives	Support for local initiatives
Civil society and NGOs	Dialogue events, answering questions, collaborations, donations	Dealing with concerns, questions and feedback, strengthening initiatives	Support for initiatives, collaborations

Stakeholder engagement

The results of the assessments were discussed with external stakeholders at a round table event. Their feedback was incorporated into the materiality assessment. Participants included representatives from non-governmental organizations, business associations, ESG rating agencies, providers of certification and auditing services, customers, and other business partners.

Confirmation by the board of management

The results of the double materiality assessment were reviewed by the corporate sustainability board and finally approved by its members.

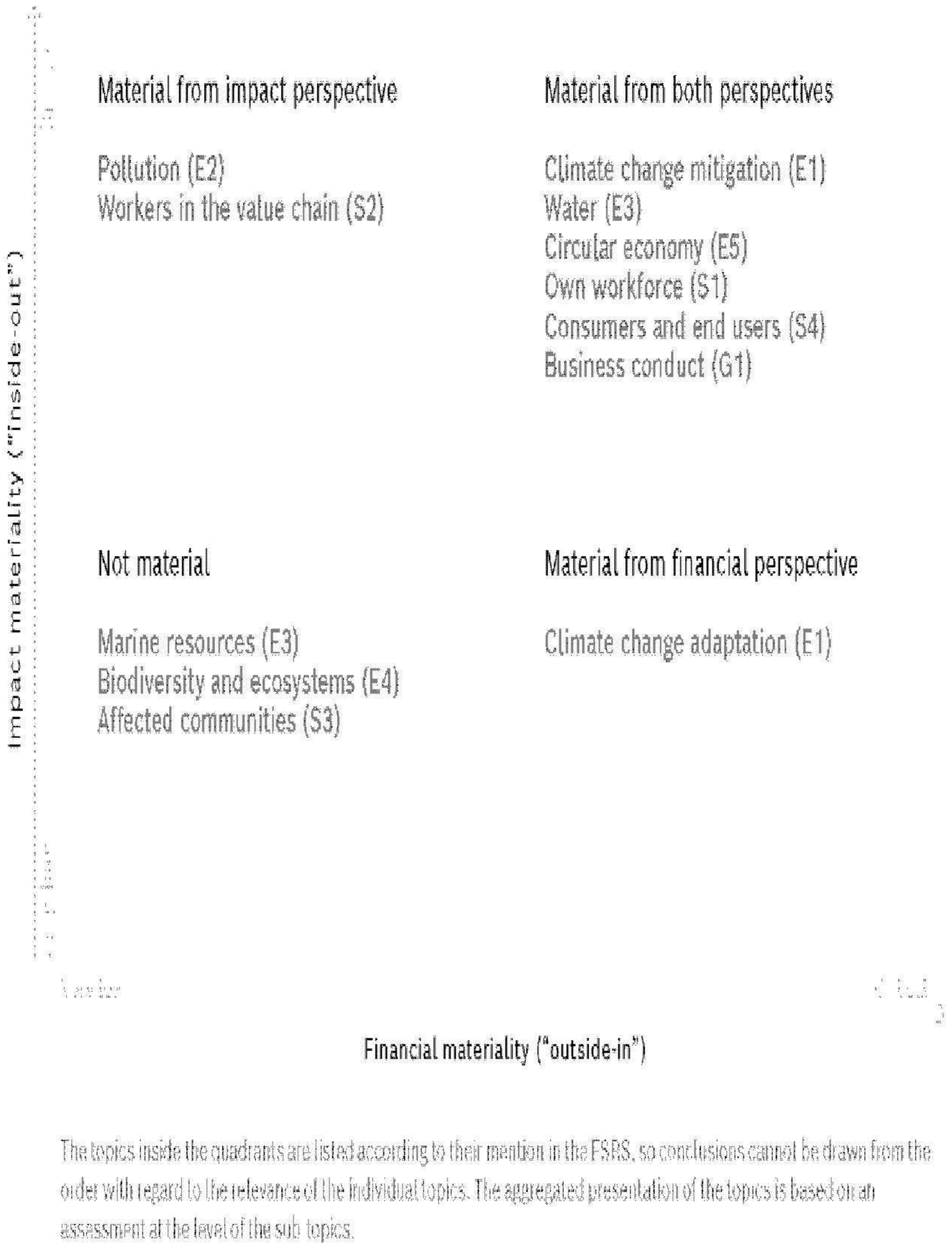
Risk management

The dimensions of the sustainability strategy are replicated in the Bosch Group's risk management system. Risk management encompasses the entire company, including all essential operations, functions, divisions, and business sectors. The Bosch Group's risk management system is based on the ISO 31000 and COSO III (ERM) standards, as well as IDW PS 340. It comprises the systematic detection and tracking of relevant risks and, where necessary, identification and monitoring of measures to manage these risks. In this context, the corporate coordinating office for the risk management system is responsible for continuously refining the system. For further information and a description of material risks, see the 2024 annual report, page 79 et seq. The material antitrust and legal risks are also described there.

T 02

Results of the double materiality assessment

Areas covered: E | Environment S | Social G | Governance



The topics inside the quadrants are listed according to their mention in the ESRS, so conclusions cannot be drawn from the order with regard to the relevance of the individual topics. The aggregated presentation of the topics is based on an assessment at the level of the sub-topics.

Sustainability strategy

We are convinced that sustainability can make a significant contribution to Bosch achieving its growth objectives. We therefore continually strive to create win-win situations by achieving economic success while enhancing sustainability at the same time. Our vision for sustainability with its six dimensions defines the strategic focal points in this respect. Each of these is specified and continually enhanced by reference to two focus activities, where appropriate, with clearly defined, medium-term targets. We adjusted the vision based on the results of our new double materiality assessment in 2024. The two topics "Employer of choice" and "Diversity, equity, and inclusion" were integrated into the new "People" dimension and the aspect of "Pollution" was included in the "Health" dimension. We have also anchored the two topics of "Business ethics" and "Privacy" in the vision in the overarching "Governance" dimension (see G 04).

Our sustainability activities consider the entire value chain – from the procurement of materials and goods through production at Bosch locations to the product use phase and beyond ("end of life").

We are committed to the principle of legality and regard respect for social values and standards to be essential for the success of the company. Topics such as climate action, circular economy, and water offer further potential to stand out positively from the competition. Examples of this are energy-efficient or water-conserving products as well as the use of recycled materials in production. This is how our "Invented for life" mission statement becomes a reality: Bosch products aim to fascinate, improve quality of life, and help conserve natural resources.

The KPIs that we collect in the course of preparing for the EU taxonomy (sales revenue, capital expenditure, operating expenses) correlate with non-financial indicators such as CO_2 emissions in product use. Bosch is obliged to report in accordance with the EU taxonomy. We are currently preparing intensively for this and are already using the knowledge gained strategically. The transparency of the EU taxonomy enables us to evaluate our company's transformation progress toward the EU environmental targets and to manage the development of our portfolio using corresponding KPIs.

Target vision: "New Dimensions"

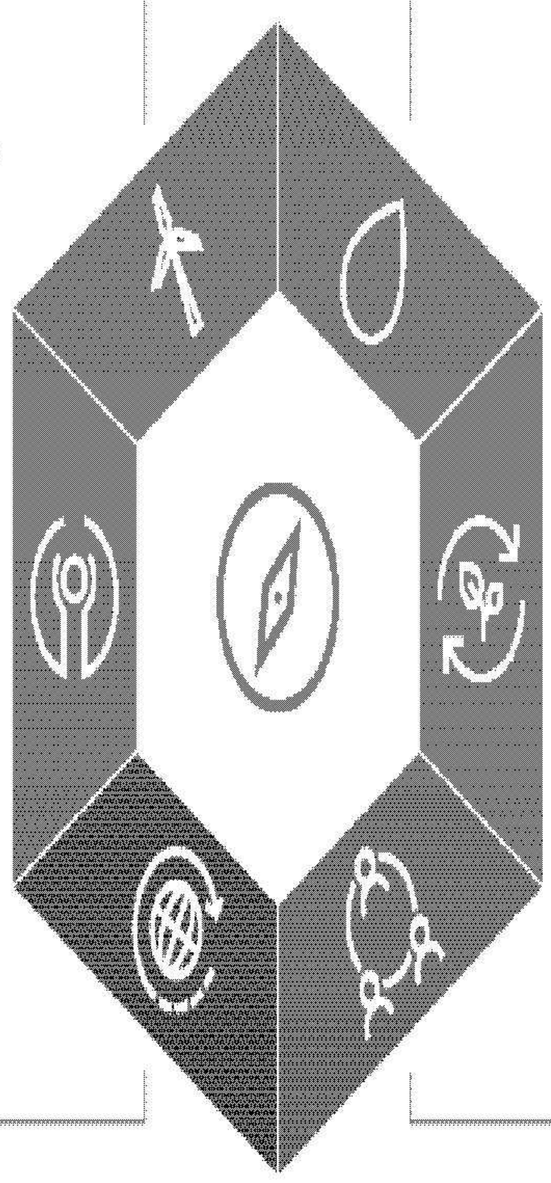
Our ambition: By acting in an economically, environmentally, and socially responsible manner, we want to improve people's quality of life and safeguard the livelihoods of present and future generations.

Climate action
1 | Reducing CO_2 emissions
2 | Energy efficiency and renewable energies

It is Bosch's ambition to be a climate action pioneer – advancing the expansion of renewables and striving continuously for energy efficiency.

Water
1 | Water scarcity
2 | Water quality

For Bosch, water is a resource to be treated sparingly. Regions in which water is scarce are a special concern.



Health
1 | Occupational health and safety
2 | Pollution and substances of concern

Bosch contributes to people's health – with innovative products and services and by avoiding harm to people and the environment in its own production processes.

Circular economy
1 | Materials efficiency
2 | Second life

Bosch is reducing its ecological footprint and striving to create social benefit. In this endeavor, Bosch takes its lead from the circular economy principle.

Human rights
1 | Responsibility
2 | Transparency

Bosch takes on responsibility and is sensitive to human rights being respected – along the entire value chain.

Governance
1 | Business ethics
2 | Privacy

Compliance with the principle of legality as well as responsible and fair business practices are part of the Bosch values and a top priority for our company.

People
1 | Employer of choice
2 | Diversity, equity, and inclusion

Attractive working conditions qualify Bosch as an employer of choice. Diversity, equity, and inclusion are key to long term success in business.

Goals and goal achievement

Climate action	It is Bosch's ambition to be a climate action pioneer – advancing the expansion of renewables and striving continuously for energy efficiency.		
	Reducing CO_2 emissions Operating carbon neutral in scopes 1 and 2 and continuously improving the mix of measures by 2030	With its more than 450 locations worldwide, the Bosch Group has been carbon-neutral overall since 2020 (scope 1 & 2).[4] Four levers were used to achieve carbon neutrality: increasing energy efficiency, generating our own energy from renewable sources (new clean power), purchasing electricity from renewable sources (green electricity), and – as the last resort – offsetting residual CO_2 emissions with carbon credits. In 2024, residual emissions of roughly 531,300 metric tons of CO_2 were offset by carbon credits. This represents a decrease of 8.5 percent on the prior year's level (see the "Environment | Climate action" section).	
	Lowering absolute scope 3 CO_2 emissions by 30 percent by 2030 (baseline year 2018)	Since 2018, we have cut our scope 3 emissions by around 27 percent, down to 335 million metric tons of CO_2 in 2023. In this process, we are focusing on the categories that make up around 98 percent of our scope 3 emissions: upstream emissions in the Bosch value chain primarily concern purchased goods and services as well as logistics. Downstream emissions are mainly caused by the use of our products (see the "Environment | Climate action" section).	
	Energy efficiency and renewable energies Saving 1.7 TWh through increased energy efficiency by 2030	Since 2019, we have initiated over 7,000 energy-efficiency projects worldwide, with roughly 1,100 new projects added in 2024 alone. With them, we have so far captured savings potential of 1,144 GWh in total. This corresponds to a goal achievement level of 67 percent (see the "Environment | Climate action" section).	
	Increasing own renewable generation at our sites to 400 GWh and 100 percent green electricity by 2030	In 2024, we generated 197 GWh of energy from renewable sources in-house at our company locations. Accordingly, we have already reached 49 percent of our target value. In addition, around 99.5 percent of the Bosch Group's global electricity demand was covered by green electricity (electricity purchased from renewable sources) (see the "Environment | Climate action" section).	
Water	For Bosch, water is a resource to be treated sparingly. Regions in which water is scarce are a special concern.		
	Water scarcity Reducing absolute water withdrawal at company locations in regions with water scarcity by 25 percent by 2025	Since 2019, we have launched more than 260 projects and reduced water withdrawal by 28.5 percent compared with 2017 at company locations in regions with water scarcity. The company locations were identified using the Water Risk Filter of the World Wildlife Fund for Nature (see the "Environment | Water" section).	
	Water quality Improving the quality of wastewater flows	In 2024, Bosch's wastewater volume decreased to 15.25 million m^3 (prior year: 15.46 million m^3). We have established standard processes in the company for monitoring local wastewater quality requirements and standards (see the "Environment | Other environmental impacts" section).	

[4] Scopes 1, 2, and 3 are used here in accordance with the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard. We have taken into account the effects of CO_2 and of other greenhouse gases, as well as climate-relevant substances, to the extent that these are of relevance for the analysis. To enable comparability between the climate impact of the various greenhouse gases and substances of relevance for the climate, emissions are presented in CO_2 equivalents. For ease of reading, we use the terms CO_2 and CO_2 equivalents synonymously.

Circular economy	Bosch is reducing its ecological footprint and striving to create social benefit. In this endeavor, Bosch takes its lead from the circular economy principle.	
Materials efficiency Improving materials efficiency	For years, materials efficiency has been a fixed criterion in the Bosch product development process, where it is anchored in our Design for Environment (DfE) principle (see the "Environment | Circular economy" section).	
Second life Extending product life cycles and reusing materials and components	Our activities range from reusing products and their components to repairs and right through to remanufacturing – in each case with the objective of extending product and component life cycles. The individual divisions of Bosch each have their own objectives in this regard, depending on market and product-specific framework conditions (see the "Environment | Circular economy" section).	
People	Attractive working conditions qualify Bosch as an employer of choice. Diversity, equity, and inclusion are key to long term success in business.	
Employer of choice Attractive working conditions and recruitment of talent for growth areas	Bosch supports its associates in striking a balance between their individual career goals, personal life-style, and private goals. We offer career opportunities for various positions in diverse fields of work at Bosch (see the "Social | Bosch as an employer" section).	
Diversity, equity, and inclusion Ensuring equitable opportunities and increasing the proportion of female executives to 25 percent by 2030	Globally, the proportion of female executives rose to 20.4 percent in 2024 (prior year: 20.0 percent) across all management levels (see the "Social | Bosch as an employer" section).	
Human rights	Bosch takes on responsibility and is sensitive to human rights being respected – along the entire value chain.	
Responsibility Ensuring human rights are respected along the value chain	We contribute to improving human rights conditions worldwide by implementing due diligence obligations concerning human rights in our operational processes. At the same time, we actively demand respect for human rights in our global supply chains as well and take appropriate remedial action in the case of violations (see the "Social | Complying with due diligence obligations relating to human rights and the environment" section).	
Transparency Increasing transparency about compliance with environmental and social standards	By the end of 2024, we had assessed around 82 percent of our relevant direct materials suppliers (excluding BSH Hausgeräte GmbH) for compliance with our requirements. We also assessed 77 percent of indirect materials suppliers who are particularly relevant in terms of country risk and field of materials risk (see the "Social | Complying with due diligence obligations relating to human rights and the environment" section).	

Health	Bosch contributes to people's health – with innovative products and services and by avoiding harm to people and the environment in its own production processes.	
Occupational health and safety Reducing the accident rate to 1.45 accidents per 1 million hours worked or less by 2025	The accident rate was reduced to 1.46 accidents per one million hours worked (prior year: 1.49) (see the "Social	Bosch as an employer" section).
Pollution and substances of concern Continuously upgrading materials data management	Bosch handles substances of concern responsibly. To efficiently manage prohibitions and restrictions on materials, we are continuously upgrading our IT-based Material Data Management for Compliance and Sustainability (MaCS) system (see the "Environment	Other environmental impacts" section).

Sustainability culture

The Bosch value "responsibility and sustainability" has always characterized our entrepreneurial activity and is an integral part of our mission statement "Be#LikeABosch". For Bosch, it is key to involve as many associates as possible in sustainability management. Each and every one at Bosch is called upon to contribute and advance sustainability in their individual sphere of influence. The aim is for sustainability to become a shared mindset within the company – shouldered by each associate through their conduct. Specific impetus is provided in seven action areas (see G 05).

The following measures are examples of our activities in 2024:

- Sustainability multipliers

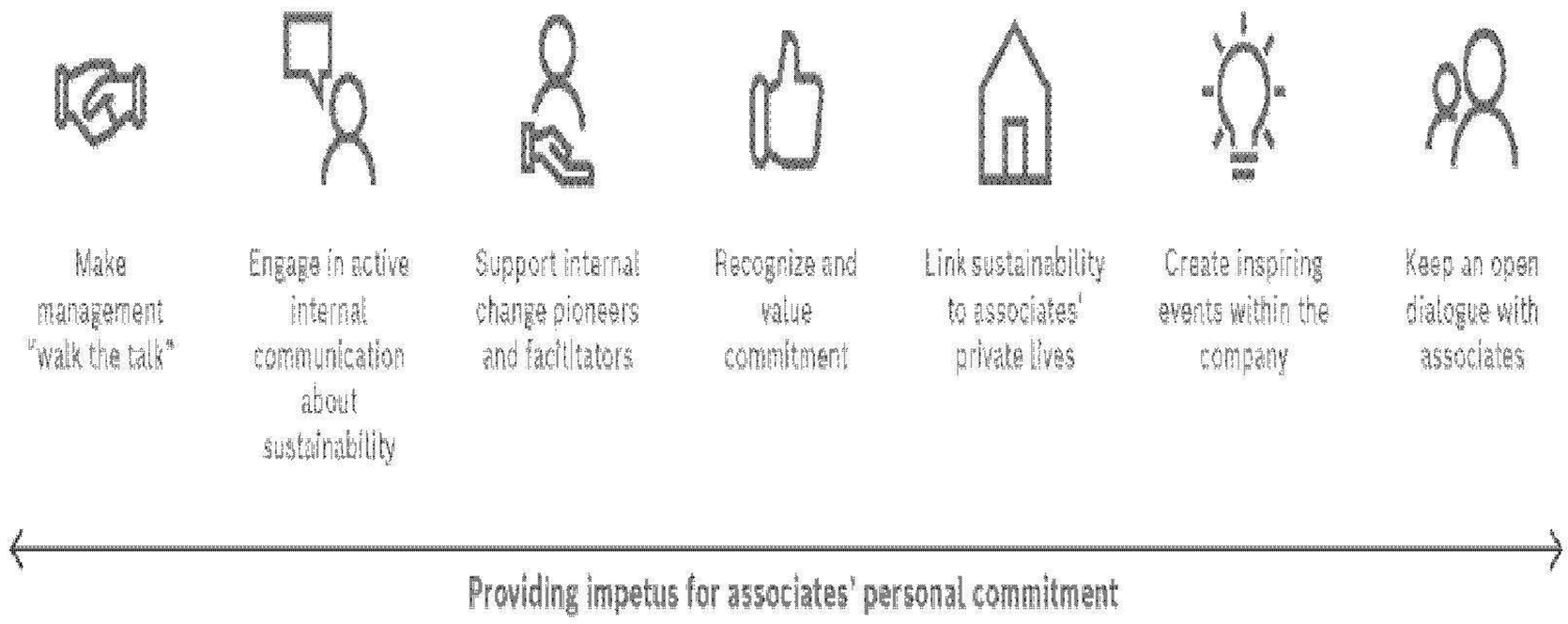
At Bosch, executives are role models and, as such, multipliers for sustainability. They are required to attend web-based training to familiarize themselves with the sustainability strategy and the targets set. Since the training program's launch in 2014, around 34,200 executives with and without team management responsibilities have already completed the course.

- Sustainability days at Bosch locations worldwide

The "Word Tour of Sustainability" live stream event has been held annually since 2023. The one-day event in 2024 focused on a total of 35 sustainability initiatives, activities, and projects, which were promoted by teams from around the globe. Apart from project presentations and information on Bosch's sustainability strategy, a special item featured on the agenda was the announcement of the winning teams of the "Sustainability, Environment, Health, and Safety Awards." The award honors outstanding projects each year in the categories "CO_2 and energy efficiency," "resource efficiency," "occupational safety," "sustainable products," and "sustainability culture." The 278 applications submitted reflect the high level of motivation among associates to contribute to greater sustainability.

G 05

Seven action areas for embedding sustainability culture



Graphic based on: Network for Business Sustainability (2010) and Majka Baur (2016)

Events took place again at various locations in 2024 to put the spotlight on the topic of sustainability in the company. For example, Bosch Japan hosted a sustainability week in September during which around 1,000 associates took the opportunity to find out about sustainability at Bosch by taking part in 13 online sessions and several on-site workshops.

Commitment and cooperation

We want to make a relevant contribution to overcoming global social challenges, which is why we are involved in numerous initiatives. For instance, Robert Bosch GmbH has been a member of the United Nations Global Compact since 2004 and is committed to its globally applicable principles concerning human rights, labor standards, environmental protection, and anti-corruption. With this publication, we fulfill the related requirement to report on relevant progress we made in 2024 in these areas. Bosch is also a founding member of UN Global Compact Netzwerk Deutschland e.V.

We are active in a large number of other sustainability-related initiatives though memberships – including Transparency International Deutschland e.V. which we have been supporting as a corporate member since 1995. In addition, we are active on the executive board of econsense – Forum Nachhaltige Entwicklung der Deutschen Wirtschaft e.V. (Forum for Sustainable Development of German Business).

Bosch also supports the United Nations Sustainable Development Goals (SDG) adopted in 2015. Accordingly, we regularly benchmark our sustainability activities against the 17 SDG (see T 03).

Social involvement

We see ourselves as a corporate citizen and engage actively in society, also beyond the scope of our own business activities. Through our charitable donations, for example, we chiefly support initiatives in the following areas:

- Living sustainably:
  Citizen projects promoting climate action in everyday life
- Education for the high-tech world:
  Projects to develop socially disadvantaged children and young people's skills for technological change
- Social cohesion:
  Projects strengthening democracy and tolerance, especially at Bosch sites
- Emergency aid in disaster situations:
  Donations to aid organizations and people on the ground, especially when catchment areas around Bosch sites are affected

Our social involvement in the form of donations is handled by the operating units in the countries in question. In the reporting year, the Bosch Group donated 25.8 million euros worldwide (prior year: 26.6 million euros) to charitable causes, including donations in kind. Internal company regulations set out corresponding principles, assessment criteria, and responsibilities. Depending on the amount involved, either the management of the operating units or the members of Robert Bosch GmbH's board of management decide how the funds raised should be spent. All donation transactions must be documented in writing. In addition, the people

responsible keep an annual ledger of donations that is accessible for audit purposes. At a minimum, this ledger must indicate the group of recipients and the amount of the donation, along with the reasons for the donation and the date on which confirmation of receipt was received.

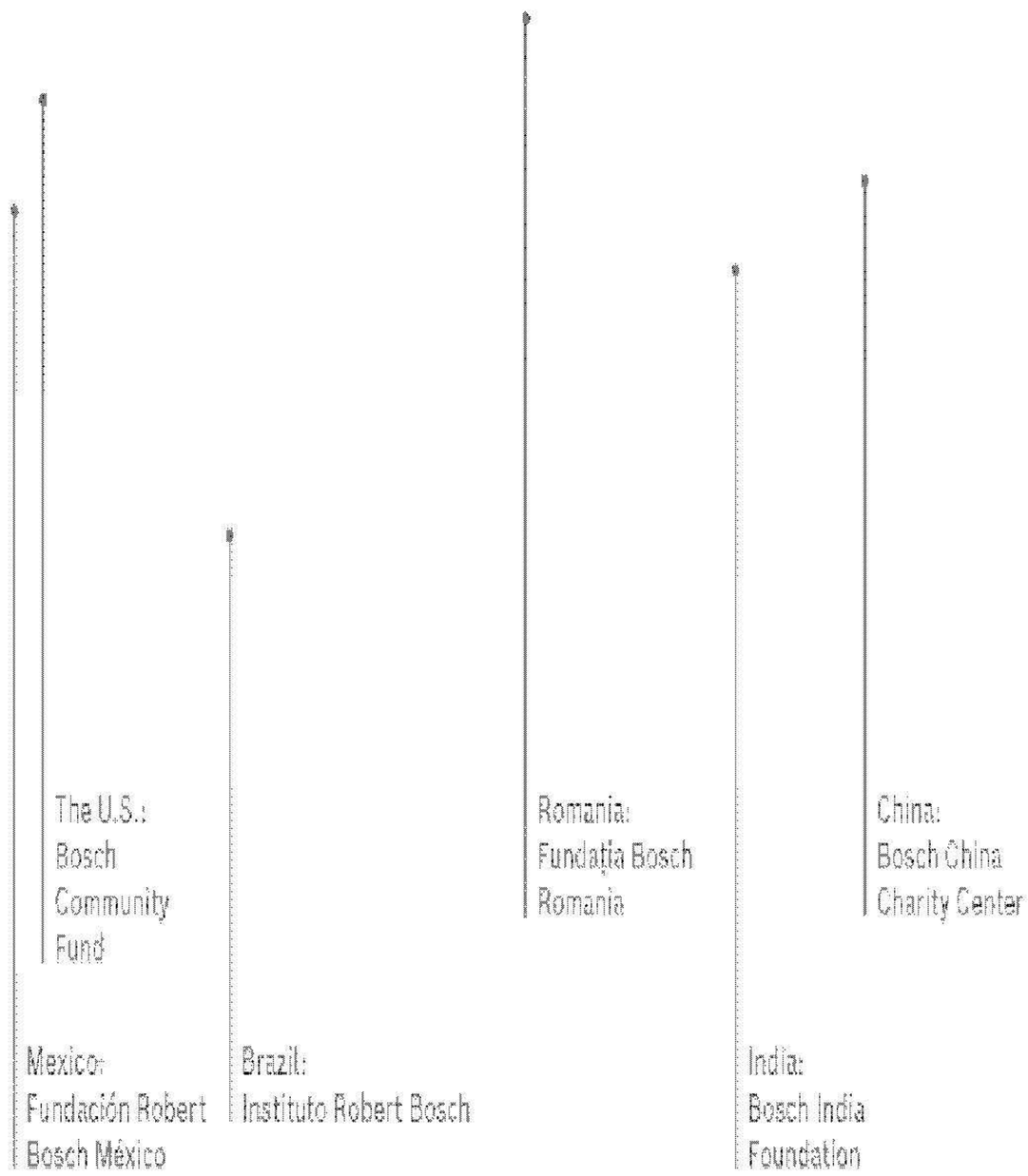
One focus of global donation activities in 2024 was on emergency aid in the event of a disaster, in particular aid for the victims of the catastrophic floods in Spain in the fall. Robert Bosch GmbH donated 500,000 euros to the German Red Cross to help deal with the consequences of the flood. A further donation of 50,000 euros was made by Bosch in Spain directly to the particularly hard-hit communities. In addition, support packages were provided by various Bosch divisions to alleviate the situation of those affected in the flooded areas.

Bosch is not only financially active at many of its locations, but also through the volunteer work of its associates locally. In some countries, dedicated non-profit institutions engage in corporate social responsibility activities. Such institutions are usually active in the vicinity of company locations and concentrate on country-specific priorities.

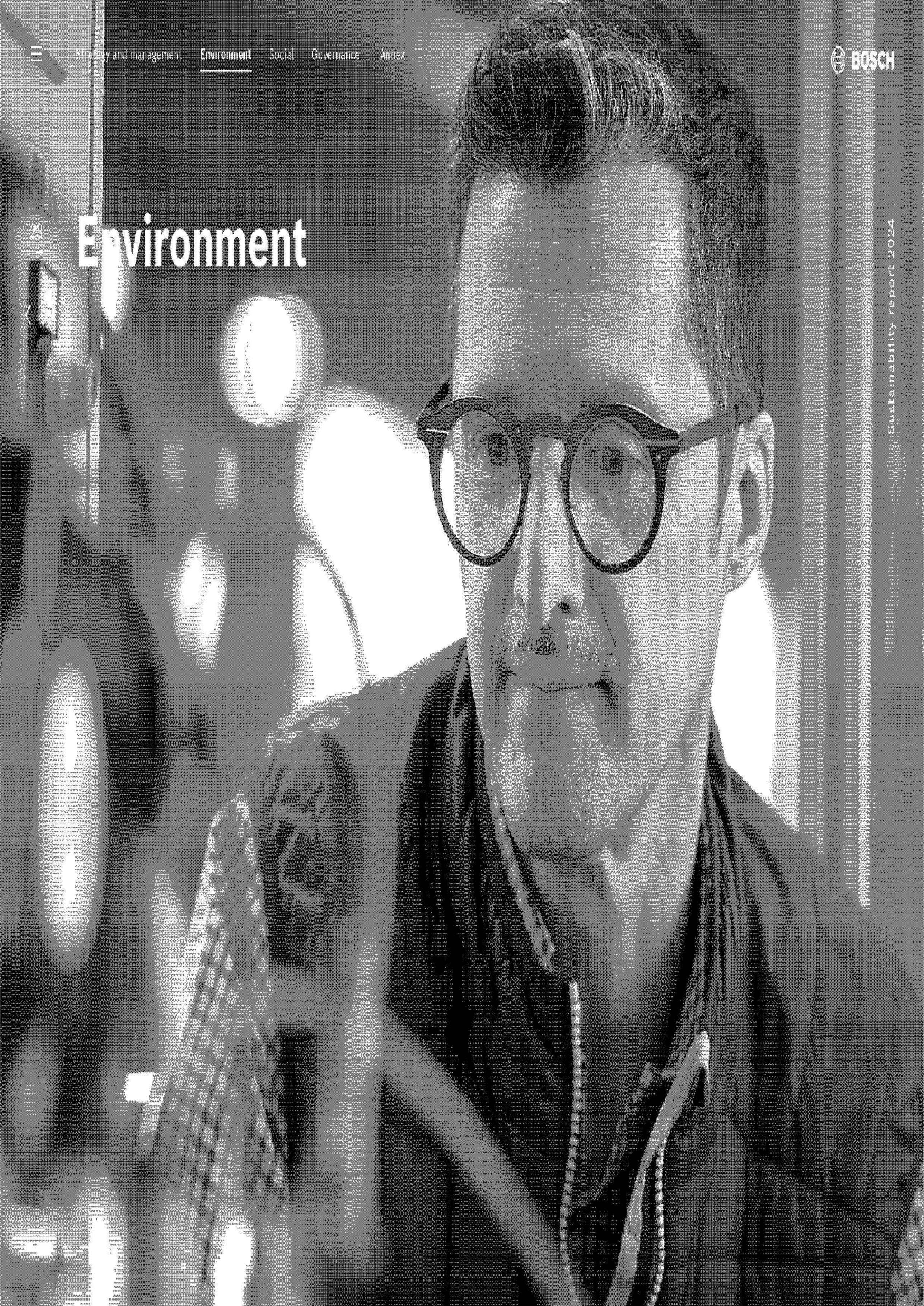
As an independent, not-for-profit foundation, Robert Bosch Stiftung GmbH demonstrates its commitment to society worldwide by supporting or implementing innovative and lighthouse projects.

G 06

Bosch's non-profit institutions



Environment



24

Environment

Bosch's activities should have as little impact on the environment as possible. We are working to fulfil this aspiration with a Group-wide environmental management system and specific targets. In particular, we want to use targeted measures to protect the climate, save water, especially where it is scarce, and strengthen the circular economy.

Organization and responsibilities

Internal company regulations define the principles and requirements for sustainability and EHS in the Bosch Group and specify the organization and responsibilities. Occupational safety and environmental protection policy is framed in the publicly accessible Guidelines of Work Safety and Environmental Protection. We have also clearly formulated our expectations of our business partners in corresponding codes (also see the "Social" section).

The Sustainability and EHS corporate department manages environmental protection with the help of a Group-wide process that follows the PDCA cycle[5]. This approach extends across the entire value chain and covers all material environmental issues for Bosch as well as the underlying impacts, risks, and opportunities (see the "Strategy and management" section).

[5] The PDCA cycle (Plan, Do, Check, Act) is a fundamental concept for continuous improvement in an organization.

In general, we intend to have all relevant locations[6] operating with certified environmental management systems. In total, 97 percent of our relevant manufacturing and development locations operate an environmental management system, which in most cases (98 percent) is certified according to the ISO 14001 standard. Similarly, 90 percent of the energy management systems used are certified to ISO 50001 (also see T 04).

Bosch has clearly defined environmental criteria for the design, planning, and acquisition or construction of facilities, machinery, and manufacturing equipment, for example with regard to energy efficiency and the use of renewable energy sources. These criteria also play a role in the decision-making process when choosing new company locations.

Audits on environmental topics

Regular briefings, workshops, and internal audits are held at the company locations on environmental topics in order to verify compliance with requirements. Locations are selected based on risks or specific events, while their size, measured by headcount or the proportion of resources consumed in the Group, also plays a role. Audit findings are

T 04

Environmental and energy management systems Bosch Group 2024

Production locations and development locations[6]	**252**
Environmental management system implemented according to ISO 14001	244
Environmental management system certified according to ISO 14001	240
Energy management system implemented according to ISO 50001	69
Energy management system certified according to ISO 50001	62

[6] The following applies to information on environmental and energy management systems: Production locations and development locations (with material responsibility) with more than 50 associates and that have been included in the consolidated group for more than three years.

documented in Bosch's database. As a result, it is also possible to track corrective actions in the event of deviations. Any deviations detected, their causes, and improvement opportunities identified are taken into account in the following year's audit program. The results of the analyses are also considered in determining the content and focus of our environmental protection campaigns.

At production locations, relevant environmental issues are audited on a risk basis by company headquarters as part of corporate audits. The auditors have in-depth knowledge of ISO 19011 audit methodologies as well as external and internal EHS requirements. In 2024, the EHS audit team performed a total of 75 corporate audits. Further audits are usually carried out every three years, for example as part of ISO certifications.

Competence development and training

In training, we promote the methodological and technical competence of our associates, thereby creating the conditions for safe and environmentally compatible work processes. We therefore ensure that those responsible for environmental protection, for instance, are specifically familiarized with the relevant internal regulations and standards in training programs that have been standardized worldwide. In supplementary training modules, we address the specific requirements of individual operating units, locations, and regions. In addition, we also train and brief associates of external companies and visitors to our locations on health, safety, and environmental protection at Bosch.

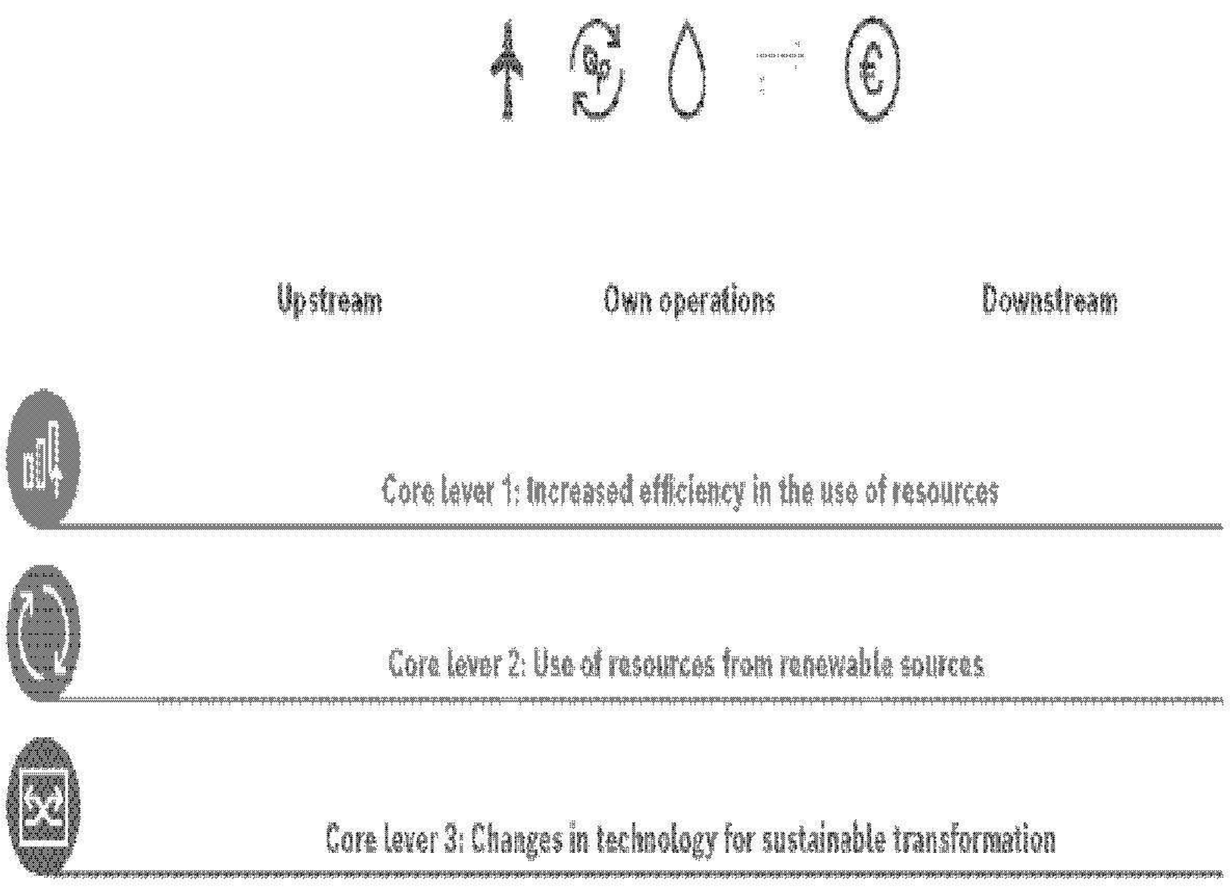
Uniform sustainability methodology enables systematic control

The environmental dimensions of our target vision are underpinned by a standardized logic. This is characterized by three core levers: increasing efficiency, purchasing resources from renewable sources, and changing the technology used. The three core levers can be applied to all value creation stages – from purchasing materials and goods (upstream) to subsequent processing at our plants (own operations) through to use of the products by our customers (downstream). In this way, we create transparency with regard to the impact of the different measures, we show the relationships and interactions between the various influencing factors, and we thus provide the basis for in-depth scenarios in order to capture and control the effects of decisions in their entirety. This also reveals the additional

G 07

Sustainability methodology

Core levers for improving sustainability performance along the value chain



differentiation potential of sustainability topics that will be of particular importance to Bosch in the future – as illustrated by trend and market analyses.

Environmental risk analyses

As part of our internal environmental impact and risk analyses, we assess all reportable locations[7] with regard to the drivers of biodiversity loss and ecosystem change defined by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). These include impacts related to climate change, environmental pollution, the use and exploitation of natural resources, changes in land use, and the spread of invasive species.

Our approach to managing environmental impacts and risks is to act early through an proactive assessment. Our measures are based on data-driven findings and tailored to location-specific conditions, and the corresponding risks. We distinguish between measures to mitigate impacts (mitigation) and activities for adapting the company to changed framework conditions (adaptation). We include our products in these considerations.

The assessments are based on the guidelines for nature-related target setting by the Science Based Targets Network (SBTN) and the Taskforce on Nature-related Financial Disclosures (TNFD). After an initial screening using the SBTN Materiality Screening Tool (V1.1), we identified climate change, water use, and pollution as the material negative environmental impacts for Bosch.

We use the MunichRe Risk Suite for the climate-related assessment. For our water, pollution, and biodiversity-related assessments, we rely on geodata from the WWF Water Risk Filter, the WWF Biodiversity Risk Filter and the Integrated Biodiversity Assessment Tool.

In addition, the findings from the environmental risk analyses are incorporated into our materiality assessment (see the "Strategy and management" section) and into the risk assessments for the implementation of corporate due diligence obligations (see the "Social" section).

[7] Reportable locations are all production locations and development locations (with material responsibility) with more than 50 associates as well as other sites with more than 100 associates.

Climate action

Opportunities and risks of climate change

Counteracting climate change is a task for society as a whole. We see this not only as an obligation for our company, but also as an opportunity to contribute to protecting the climate with innovative solutions and technologies. Bosch's growing self-sufficiency and energy efficiency will also reduce its dependence on volatile energy markets and, in turn, its exposure to price fluctuation risks.

With the annual assessment of the risks and opportunities that climate change poses for Bosch, we are guided by the specifications of the Task Force on Climate-related Financial Disclosures (TCFD) to help us identify transitory and physical risks in particular. Transitory risks in the divisions are taken into account in short-, medium- and long-term time horizons. The assessment of physical risks covers all reportable locations as well as the time horizons present day, 2030, 2050 and, for individual indicators, 2100.

In addition to the geographical location and probability of occurrence, the systematic analysis also takes into account the duration and financial impact of the risks. The focus is on both acute risks (such as those related to flooding) and permanent climate risks (such as those that arise on account of global warming). In the supply chain, the focus is on climate risks that can arise in connection with the four focus materials steel, aluminum, copper, and plastics.

Identified risks are recorded in the Bosch Group's Enterprise Risk Management and, if necessary, mitigated with appropriate measures or internal controls (see also the "Strategy and management" section). The member of the board of management responsible for sustainability has ultimate responsibility for managing the identified risks and opportunities of climate change.

The assessment is based on the scenarios of the International Energy Agency (IEA NZE 2050), the Intergovernmental Panel on Climate Change (RCP3.4/SSP2, RCP8.5/SSP5), and the energy scenarios of the Bosch Research and Advance Engineering corporate sector. A central role in this context is played by the internal climate change report: prepared by our experts every two years, it highlights fundamental climate change developments and their significance for our company and for society.

The risks posed by climate change include water scarcity and extreme weather events, which are occurring with increasing frequency and causing ever greater damage. They can jeopardize production at our locations and the stability of the supply chain, and influence the cost of insurance cover against extreme weather events. Climate aspects also play a role in the choice of company locations. This is something that demands Bosch's adaptability, for example, with respect to water and energy supply. To manage the respective risks and opportunities, the individual divisions use the results of the risk assessment for market forecasts and incorporate them in specific plans.

Other risks include the shortage of raw materials and changes in the regulatory framework, such as bans on certain technologies or the tightening of CO_2 emissions standards, for example, for vehicles. The increasing diversity of customer preferences, which can change rapidly – often in response to political decisions, are also important in this context. Increasingly, the focus is also on the processes upstream of our production and the use of materials. For example, we are receiving more inquiries about the proportion of green electricity (electricity purchased from renewable sources) in our energy mix or recycled materials (see also the "Circular economy" section).

We address these challenges with our climate action strategy and systematic research and development. At the same time, we are convinced that we must work together if we are to successfully counter the effects of climate change. That is why we take an active role in the relevant associations and committees (see the "Governance" section).

Climate action strategy

Bosch wants to make a contribution to climate action, an aspiration it has anchored in its sustainability vision. We support the United Nations 2015 Paris Agreement on climate action and the goal formulated therein of limiting

Sustainability methodology, focus on climate action

Measures for improving sustainability performance along the value chain

	Upstream	Own operations	Downstream
Increased efficiency	General target agreements	Energy efficiency	Energy efficiency of products
Resources from renewable sources	General target agreements, specific agreements for focus materials	In-house energy generation from renewable sources	Transformation of product portfolio toward renewable energy sources
Changes in technology		Switching to electricity from renewable sources	
		Carbon offsets	
Range of topics	**Scope 3, upstream: Purchased goods and services**	**Scope 1 & 2: Carbon neutrality**	**Scope 3, downstream: Product use**

global warming to as close to 1.5 degrees Celsius as possible. With carbon neutrality (scope 1 & 2)[8], we are making a measurable contribution to this goal.

As early as 2020, the Bosch Group with its more than 450 locations worldwide has been carbon neutral overall (scope 1 & 2). Four levers were used to achieve carbon neutrality: increasing energy efficiency, generating our own energy from renewable sources (new clean power), purchasing electricity from renewable sources (green electricity), and – as the last resort – using carbon credits to offset residual CO_2 emissions. In 2024, residual emissions of roughly 531,300 metric tons of CO_2 were offset by carbon credits.

At the same time, we also want to reduce emissions produced outside Bosch's direct sphere of influence (scope 3), for example at suppliers, in logistics, or when our products are used. Our aim is to reduce these upstream and downstream emissions by 30 percent in absolute terms by 2030, compared with the baseline year 2018 – irrespective of our company's growth.

The Science Based Targets initiative (SBTi) has endorsed our climate targets for the 1.5 degree pathway.[9] This means that Bosch has science-based climate targets for the entire value chain – from purchasing to the product use phase. Our targets are based on an internal analysis of potential, which we have compared with SBTi's cross-sector ambition.

T 05

Energy demand

Bosch Group 2022–2024, in GWh

	2022	2023	⊘ 2024
Bosch Group	**7,696**	**7,537**	**7,517**
Natural gas	1,325	1,132	1,085
Heating oil	49	57	81
LPG	34	36	35
Coke/coal	100	101	36
Renewable energy	128	156	318
Other (inter alia gasoline, diesel)	482	512	531
Direct energy (own combustion)	**2,118**	**1,993**	**2,086**
Electricity	5,334	5,323	5,231
thereof green electricity	5,049	5,250	5,206
District heat, steam, cooling energy	244	221	200
Indirect energy (purchased)	**5,578**	**5,544**	**5,431**

Energy intensity

in MWh/million euros of sales revenue

	2022	2023	⊘ 2024
Bosch Group	**87.3**	**82.3**	**83.2**

T 06

Greenhouse gas emissions

Bosch Group 2022–2024, in 1,000 metric tons of CO_2e

	2022	2023	⊘ 2024
Bosch Group with carbon offsets	**0**	**0**	**0**
Carbon offsets	717	581	531
Bosch Group	**717**	**581**	**531**
Manufacturing	328	295	269
Vehicle fleet	117	129	135
Volatile GHG	78	77	57
Scope 1	**523**	**501**	**460**
Electricity	119	15	9
District heat, steam, cooling energy	75	65	63
Scope 2	**194**	**80**	**71**

Emissions intensity

in metric tons/million euros of sales revenue, without carbon offsets

	2022	2023	⊘ 2024
Bosch Group	**8.13**	**6.34**	**5.88**

[8] Scopes 1, 2, and 3 are used here in accordance with the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard. We have taken into account the effects of CO_2 and of other greenhouse gases, as well as climate relevant substances, to the extent that these are of relevance for the analysis. To enable comparability between the climate impact of the various greenhouse gases and substances of relevance for the climate, emissions are presented in CO_2 equivalents. For ease of reading, we use the terms CO_2 and CO_2 equivalents synonymously.

[9] Robert Bosch GmbH's entry in the SBTi's target dashboard. In 2024, Bosch increased the existing scope 3 reduction target to 30% in absolute terms (compared with the baseline year 2018) and initiated a validation of such new target by the SBTi. This process had not been completed before publication of the report; the target dashboard will be updated after the confirmation.

Four levers for carbon neutrality (scope 1 & 2)

In 2024 also, we continued to improve the mix of levers by increasing energy efficiency, generating our own energy from renewable sources, and purchasing green electricity. This is reflected in the further reduction of CO_2 emissions to be offset.

Around 73 percent of total energy demand stems from renewable energy sources including purchased green electricity (prior year: 72 percent). While the consumption of purchased energy (scope 2) accounts for most of our energy demand, the majority of CO_2 emissions are generated by stationary combustion, primarily through heat generation (scope 1). Bosch requires energy primarily in the form of electrical power for manufacturing plants and machinery, and in the form of thermal energy to heat and air-condition buildings and to operate foundry furnaces.

Lever 1: Energy efficiency

By 2030, we want to substantially increase our energy efficiency and implement measures at our company locations with savings potential totaling 1.7 terawatt-hours (TWh). An annual investment budget has been available for this purpose since 2019. Overall, Bosch plans to invest one billion euros in increasing energy efficiency by 2030. Since 2022, we have been using part of this budget to fund the reduction of CO_2 emissions, such as the electrification of the heat supply or the use of district heating. In order to calculate the amortization rate of the individual measures, an internal CO_2 price is used, which is based on the price of emission allowances in the European Emissions Trading System (EU ETS).

Introduction of a building management system in Łódź

A building management system was introduced at the Polish site in Łódź over a period of two years, which centrally controls the heating, ventilation systems, exhaust fans, lighting, and boiler rooms. Automatic settings and the option of remote control lead to improved overall management and shorter response times in the event of failures. The building management system has achieved savings of around 4,200 MWh per year. This corresponds to a 31 percent reduction in heating energy consumption and a 6 percent reduction in electricity consumption in non-productive processes compared to consumption in 2022.

Use of waste heat in Blaichach

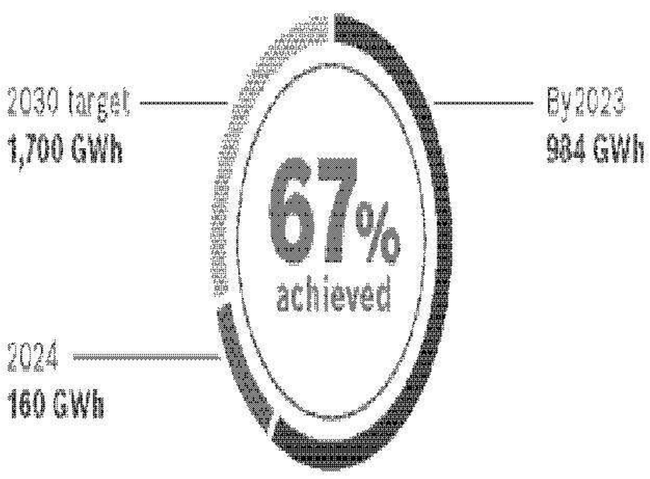
At the German site in Blaichach, waste heat from compressed air, cold water and cooling water production is used to generate heat. When the project is completed at the end of 2025, natural gas consumption for heat generation is expected to be reduced by 92 percent compared to 2021. This measure was already effective in 2024 and reduced natural gas consumption by 80 percent compared to 2021.

We have already achieved roughly 67 percent of our energy efficiency target today: since 2019, we have initiated more than 7,000 projects worldwide, capturing savings potential of 1,144 GWh. In 2024 alone, more than 1,100 new projects with savings potential of 160 GWh were introduced.

G 09

Goal achievement for energy efficiency

Savings potential captured with measures to increase energy efficiency



Lever 2: New clean power

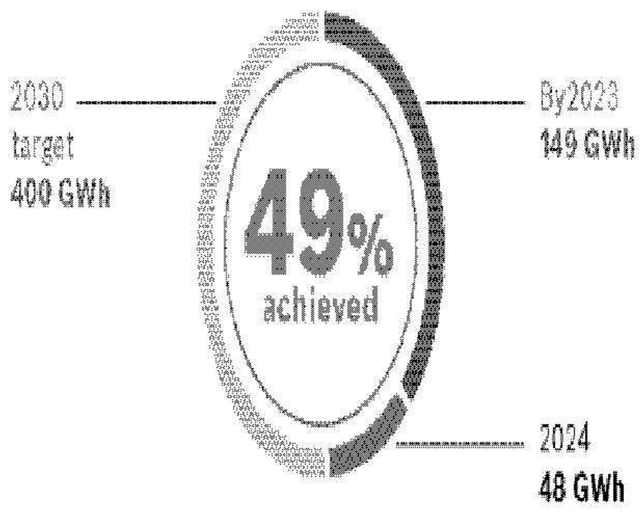
By 2030, we want to generate 400 GWh of the annual energy demand in-house at our company locations from renewable sources. We are placing particular emphasis here on photovoltaics (PV). A total of 139 Bosch sites were already using solar power for their energy supply at the end of 2024. We also operate a hydroelectric power station at our site in Blaichach, Germany.

In total, we generated around 197 GWh of renewable energy at Bosch in 2024, which means that as of year-end we have already achieved 49 percent of the target. Locations in China accounted for around 31 percent of the volume of renewable energy generated at Bosch, followed by Germany (25 percent), and India (18 percent).

G 10

Goal achievement for new clean power

In-house energy generation from photovoltaics and hydroelectric power



Further increase in the use of solar power

A large number of projects contributed to the further expansion of our PV capacities in 2024. In addition to expanding existing facilities, new facilities were also built at various locations. For example, a facility with around 811 kW_{peak} was built at the Michalovce site in Slovakia, which will cover around 7 percent of local annual electricity demand in future. A facility with a similar output (750 kW_{peak}) went into operation at the Spanish site in La Cartuja Baja. In future, it will contribute to covering around 14 percent of annual electricity demand. A 1 MW_{peak} photovoltaic system was installed at the Tochigi site in Japan, where it will cover around 5 percent of annual electricity demand in future.[10]

[10] Calculations based on electricity consumption in 2024.

Lever 3: Green electricity

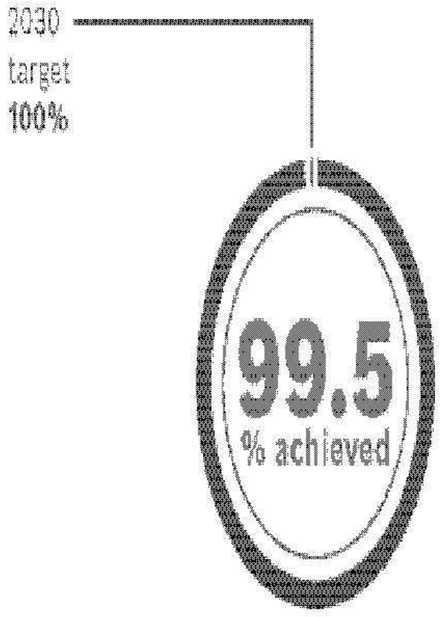
Bosch has concentrated on purchasing green electricity[11] from existing facilities and has been greatly expanding its purchase volume from green electricity with corresponding guarantees of origin since 2019. Around 99.5 percent of the Bosch Group's global electricity demand was already covered using green electricity in 2024. We aim to exclusively source green electricity for the whole company by 2030.

At the same time, we have been involved in long-term agreements with our energy suppliers (Power Purchasing Agreements, PPAs) since 2020 and concluded a new agreement in Germany in 2024. All told, Bosch purchased around 374 GWh in 2024 through long-term power purchasing agreements.

G 11

Goal achievement for green electricity

Global electricity demand covered by green electricity in 2024



[11] The following definition of green electricity applies both to purchase through electricity supply contracts in accordance with EU Directive 2018/2001 (RED II) and its implementation in national legislation as well as through the direct procurement of guarantees of origin (GOs), PPAs, and EACs (e.g. RECs or I-RECs). Green electricity generation from the following sources is permitted: wind power, hydropower, photovoltaics, geothermal energy, tidal technology, biomass from sustainable forestry or agriculture in accordance with national management practices or certifications such as RED II Article 29 (2) to (7) and certifications for the EU, and in other countries in accordance with the respective national regulations, as well as from biogas and landfill gas, including from organic waste. Electricity from nuclear power or waste incineration is not considered an energy from renewable sources.

Lever 4: Carbon offsets

At present, we use carbon offsets to compensate for residual CO_2 emissions, such as those from combustion processes (heating, process heat). In addition, we refer to carbon offsets to compensate for electricity sourced in countries with only limited availability of green electricity.

As we make progress with levers 1 to 3, we want to further reduce the share that we offset to achieve carbon neutrality (scope 1 & 2) to no more than 15 percent by 2030 (baseline year 2018). In 2024, we came another step closer to achieving this target – especially as a result of decarbonizing our energy supply further and increasing energy efficiency at our locations. We cut the volume of emissions to be offset to around 531,300 metric tons of CO_2 in the reporting year. Year on year, this is a decrease of roughly 49,600 metric tons of CO_2, or 8.5 percent (see T 06).

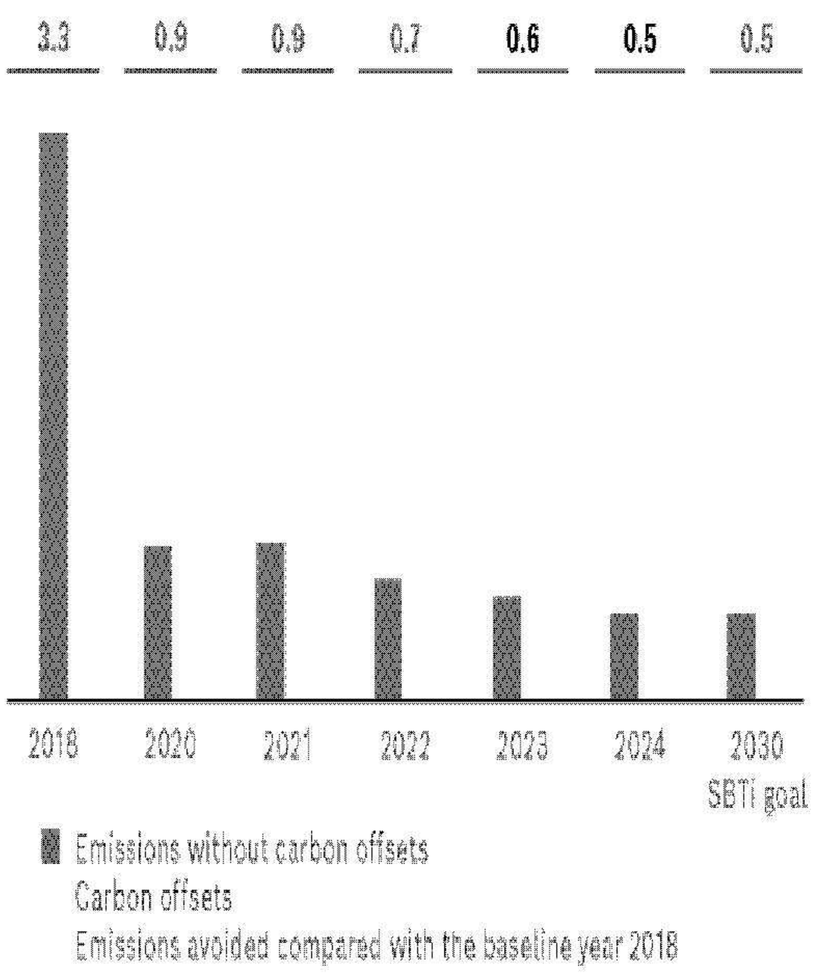
When selecting carbon offset projects, we are guided by internationally recognized and independent certifications, such as the Gold Standard. In the future we want to focus our carbon offset measures even more intensively on nature-based removals. The relevant projects involve sequestering CO_2 in biomass, for example by afforestation.

Bosch calculates the emissions it needs to offset using the standards of the International Energy Agency (IEA, Emission Factors 2022), and the Intergovernmental Panel on Climate Change (IPCC). In 2020, we switched to a market-based presentation. Previously, we had used the location-based approach (up to and including 2019). In the calculation, we focus on the greenhouse gas CO_2 as well as on emitted process gases and hydrofluorocarbons (HFCs). An internal analysis has shown that Bosch does not produce or emit any other greenhouse gases to any material extent that would be subject to disclosure requirements. This also applies to greenhouse gas emissions that are locked in products or key assets.

G 12

Climate action at Bosch – the path to 2030

CO_2 emissions (scope 1 & 2) in millions of metric tons



Outlook: Climate action strategy extends beyond 2030

Bosch has set itself specific climate action targets for 2030, but is also looking beyond that date. Since Bosch is aiming to use green electricity exclusively by then, the relevant potential must be leveraged in particular through changes in technology – such as in the area of mobility and heating of buildings. In addition, increases in energy efficiency and the measures pursued with the "New clean power" lever can deliver further climate action improvements. An analysis of more than 400 locations in 2023 showed that further advances in climate action can still be achieved beyond 2030 – relevant projects are being evaluated. However, the fact that the cost-effectiveness of the energy efficiency projects will decrease over time must be considered. In other words, further improvements will require increasing effort. We are therefore striving to enhance the cost effectiveness of the projects in partnership with customers so that we can contribute as best possible to climate action with the resources available to us.

Goal management and implementation

The corporate sustainability board is the central body for goal management in climate action and convenes twice a year. It makes decisions on implementing the climate action strategy (scope 1, 2, 3) and manages implementation of the adopted action plans (see the "Strategy and management" section).

To achieve the group-wide targets set for 2030, all Bosch divisions are pursuing staggered annual targets. These targets are set based on the energy demand and the savings achieved so far. Targets are cascaded down to individual company locations at the discretion of the respective divisions and the degree to which goals are achieved is tracked centrally. On this basis, those responsible at the divisions and company locations make decisions to implement measures to improve energy efficiency or to initiate projects to generate their own energy.

As the availability and quality of green electricity and the legal conditions for the expansion of renewables differ between countries, the regional organizations are responsible for green electricity and new clean power projects. Carbon offsets are regulated centrally to ensure the quality of projects. The sites themselves order and transact the measures.

Upstream and downstream emissions (scope 3)

We want to shape climate action beyond our immediate sphere of influence (scope 1 & 2) and also systematically reduce upstream and downstream emissions (scope 3). In this process, we are focusing on the categories that make up around 98 percent of our scope 3 emissions: upstream emissions in the Bosch value chain primarily concern purchased goods and services as well as logistics. Downstream emissions are mainly caused by the use of our products.

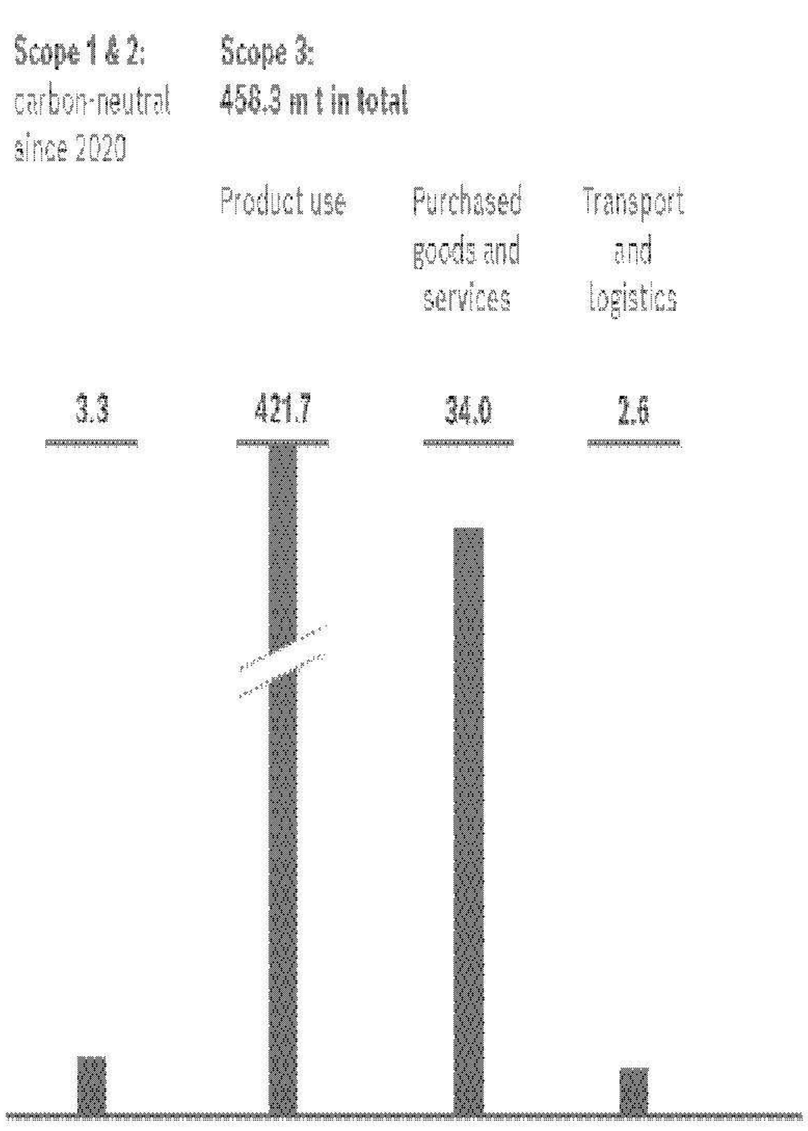
At 458 million metric tons of CO_2 in the baseline year 2018, upstream and downstream emissions exceeded those in scopes 1 and 2 several times over (see G 13). Since 2018, we have cut our scope 3 emissions by around 27 percent, down to 335 million metric tons of CO_2 in 2023 (see G 14).

Encouraged by this success, we have decided to significantly increase our previous reduction target of 15 percent. Compared to the baseline year 2018, we now intend to cut our scope 3 emissions by 30 percent in absolute terms by 2030. The challenge we are still facing is to mitigate future emissions relating to the anticipated sales growth by 2030. This is because the new percentage target value for reducing emissions was also purposefully set independently of sales growth, which means that the absolute amount to be mitigated will increase steadily as the company grows in future. We can directly influence the goal achievement through more efficient products. On the other hand, there are also a large number of external factors that Bosch can only influence indirectly, such as suppliers' success in reducing CO_2 emissions, the speed of transformation processes in the energy and mobility sector, or general economic development (see G 15).

G 13

Main scope 3 categories in baseline year

Bosch Group 2018, in millions of metric tons of CO_2

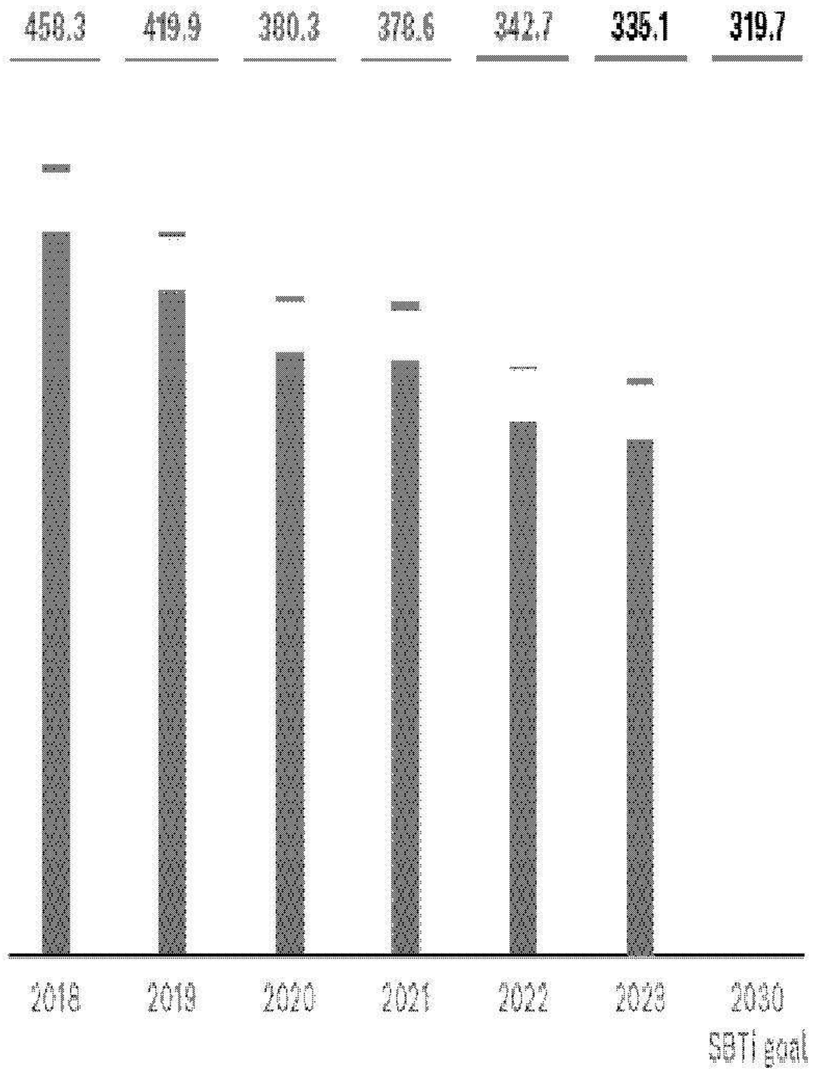


The calculation of scope 3 emissions was revised in 2024 to improve data quality further. In the process, we have included additional business activities in the calculation in the "product use" category and are using primary data increasingly in the "purchased goods and services" category. Changes in the consolidated group are taken into account in the calculation of the baseline.

G 14

Development of scope 3 emissions

Bosch Group 2018–2023, in millions of metric tons of CO_2



Our scope 3 emissions are calculated annually in all categories in accordance with the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard and subjected to external certification. Material scope 3 emissions that are relevant for control and reporting purposes fall into the categories Sc3.1, Sc3.2, Sc3.4/3.9 and Sc3.11. The corresponding scope 3 figures for 2024 were not available before publication of the report, but will be published without delay in the key figures tool at sustainability.bosch.com.

In order to achieve our goal, we are taking a step-by-step approach. Having identified the material scope 3 categories, we increased the granularity of our calculations and data collection. This allows us now to identify material drivers for emissions within purchasing and logistics as well as in the use of our products, and to derive measures that make a measurable contribution to climate action.

In 2024, an internal CO_2 price was piloted in the Electrified Motion division to calculate the total cost of ownership (TCO). The CO_2 price is to be used to make objective decisions in the event of conflicting objectives between costs and PCF (product carbon footprint) in various areas, for example, product designs or concepts for procurement, logistics and transportation. It is based on the price of emission allowances in the European Emissions Trading System (EU ETS).

G 15

Key levers for achieving the scope 3 target

Calculation base and key direct and indirect levers

Scope 3 categories	Calculation base	Key levers for reducing CO_2 Direct → Indirect		
Upstream emissions		**Realign top-down**	**Refine status quo**	**Transform energy sector**
Purchased goods and services (including machinery and equipment) **Transport and logistics** (also downstream)	» Purchasing volume » Goods categories » Source region » Mode of transport	» Supplier selection » Sourcing of secondary raw materials » Mode of transport (sea, land, air)	» Supplier development » Route optimization	» Green electricity » Hydrogen » Biogas
Downstream emissions		**Energy efficiency**	**Transformation and portfolio optimization**	
Product use	» Volume » Sales revenue » Efficiency » Energy source » Emissions factors » Product life	» Increased efficiency » Digitalization » Optimized use	» Investment in growth areas (e-mobility, heat pumps) » Phaseout of products with lowest energy efficiency	

Scope 3, upstream: Purchased goods and services

To reduce upstream CO_2 emissions in purchasing, all divisions use a standardized steering concept. The individual instruments fit seamlessly into Bosch's higher-level sustainability methodology system. We want to make sure that suppliers can use their resources as efficiently as possible. With this in mind we do not influence the measures they choose to reduce CO_2 emissions, rather we aim to enter into target agreements with our suppliers.

General target agreements

We use general target agreements with suppliers to reduce our suppliers' CO_2 emissions, based on valid and transparent data on carbon emissions and preferably in combination with a specific SBTi commitment[2].

Individual ambition levels have been set for all relevant Bosch divisions, which cover the period from 2024 to 2030. We are collaborating with our suppliers on this basis to obtain detailed information and data on group-wide CO_2 emissions (scope 1, 2, 3) for around 80 percent of our purchasing volume by 2030. This figure stands at 77 percent at the moment (prior year: 60 percent). At the same time, we intend to source more than 50 percent of our purchasing volume from suppliers that have already committed to the SBTi and set themselves targets in line with the Paris Climate Agreement. We were also able to increase this figure in 2024, which now stands at 38 percent (prior year: 25 percent). By the end of the reporting year, over 1,270 of our suppliers had already committed to specific CO_2 targets (prior year: over 450 suppliers) and are thus following the path Bosch has also taken to achieve its climate targets (scope 1, 2, 3).

Following the successful completion of a number of pilot projects, many divisions have taken account of the sustainability performance of potential suppliers in the purchasing process since 2023, in order to support the achievement of sustainability targets when awarding contracts. Apart from the direct effects on our upstream CO_2 emissions, this approach gives Bosch a multiplier effect, which exceeds the effects in its own supply chain many times over. This is because the suppliers' commitments to the SBTi initiated by Bosch also impact their other products and business relationships.

Specific agreements for focus materials

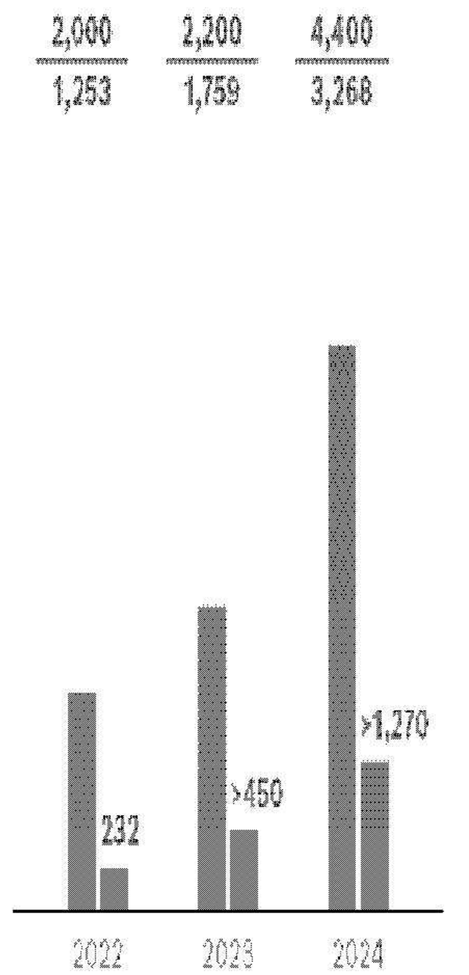
We also use specific agreements with our suppliers for focus materials such as steel, aluminum, copper, and plastics as these materials are responsible for a material proportion of the CO_2 emissions in the supply chain. To purchase materials that are as low-carbon as possible in the future, we analyzed the CO_2 reduction potential and identified reduction paths. Pilot projects have been carried out on this in some divisions since 2023.

In the Mobility business sector, material specifications for the material carbon footprint (MCF specifications) were created for the focus materials steel, aluminum, and copper in 2024 and made available for the purchasing process. The MCF specifications include upper CO_2 intensity limits for the raw materials mentioned as well as lower limits for recycled content in the case of alloys.

[2] The SBTi commitment refers to the voluntary commitment by companies to set science-based targets for reducing greenhouse gas emissions. Through this commitment, companies demonstrate their willingness to contribute actively to climate action and to align their business practices with the goals of the Paris Climate Agreement.

G 16

Results of surveys via the CDP platform



Approach and methodology for improving scope 3 data quality

Clear rules and targets require uniform definitions and calculation standards because this is the only way to make performance transparent and comparable. This is particularly true when it comes to advancing sustainability issues overall across supply chains. As there is still no international standardization and the information currently available is sometimes of poor quality, we rely on a combination of approaches to obtain supply chain data and try in this way to improve the quality and comparability of the data collected. In order to manage the collection of supply chain data uniformly across the Group, we adopted an internal regulation on CO_2 data collection in the supply chain in 2024, which will be implemented from 2025.

We prefer to use primary data that we request our suppliers to provide. Through these direct requests, for example via the CDP platform, we obtain specific data on our suppliers' individual emissions profile and make their specific development transparent. If no primary data is available, we use secondary data from established databases. In that case, for example, we record emissions for specific products using industry averages and also include the technology used in the manufacturing process and geographical factors. We calculate the corporate carbon footprint (CCF) on this basis. The CCF is the share of the supplier's emissions that is attributed to Bosch as the buyer on the basis of sales. This enables us to benchmark all suppliers based on comparable standards and to manage them strategically. We plan to use primary data largely in the future so that our calculations are as precise as possible.

The product carbon footprint (PCF) is a means for us to record the emissions caused during a product's manufacturing and production process. The material carbon footprint (MCF) is a means for us to record the emissions caused during the extraction and production of specific materials. Here, too, primary data is preferable to secondary data because they are of greater informative value, as directly requested product or material-related information provides the greatest possible transparency and accuracy. However, a lack of international standards still makes data comparisons difficult. We are currently working with external partners on a software solution to obtain primary data on the PCF and MCF from our suppliers. At the same time, existing database structures will continue in parallel for recording

T 07

Determining the corporate, product, and material carbon footprint

Improving data quality in two stages, scope 3, upstream

	Stage 1	
	Secondary data (sources)	Primary data (sources)
Corporate carbon footprint (CCF)	Databases	Supplier survey, e.g. via the CDP platform and SupplyON
Product carbon footprint (PCF), material carbon footprint (MCF)	Databases	Supplier survey via SupplyOn and development of standards

Stage 2

product-related primary data. It is already possible to record and take into account the PCF or MCF when awarding contracts.

Scope 3, upstream: Transport and logistics

In logistics, we primarily aim to reduce CO_2 emitted during the transport of goods. We have a variety of instruments at our disposal here:

- Optimizing freight

Transport management centers (TMC) have been established worldwide to manage shipments between suppliers, Bosch plants, and customers. We have already achieved a high degree of standardization in this area and can guarantee efficient transport – also with respect to environmental criteria – by pooling freight. To secure even higher capacity utilization, especially for road shipments, a new transport management system was introduced at Bosch in 2023. This system enables cyclical strategic planning of the transport network and short-term operational planning of routes, modes of transport, and load quantities.

Our goal is to increase transport capacity utilization by truck from about 65 percent in 2023 to 80 percent in 2025 and thus reduce carbon emissions with this mode of transport by up to 10 percent. Capacity utilization currently stands at 67 percent. At the same time, we are working on moving freight transport from road to rail.

- Alternative powertrains and fuels

In the future, alternative powertrains and fuels will play an ever-greater role in reducing carbon emissions. The availability of vehicles with alternative powertrains is increasing all the time. In ongoing projects, Bosch is already today evaluating further potential to curb CO_2 in delivery traffic. Attention is focused here on strategic cooperation with logistics service providers in a bid to achieve short- and medium-term emissions reductions by using biofuels or alternative powertrain technologies.

The first applications worldwide were launched in 2023. For example, freight forwarders are already using trucks powered by fuel cell technology for Bosch in China. Meanwhile, battery-electric powered trucks are used for shuttle traffic at sites in Anderson in the U.S. and Wernau in Germany. In addition, some of our parcel services have been using battery-electric powered vans and have provided us with evidence of the CO_2 savings compared with diesel vehicles. Alternative fuels such as HVO100 (hydrotreated vegetable oils) and BioLNG (a mix of liquefied fossil gas (LNG) and liquefied biomethane) are used by our logistics service providers on 28 routes in Europe. Compared to the consumption of diesel fuel, this saves around 1,690 metric tons of CO_2 per year. HVO100 has also been used for internal transport at our German site in Bamberg since 2024.

- Reducing air cargo

Air cargo remains economically viable for parts such as electronic components or smaller and lightweight parts and is practically irreplaceable for reducing turnaround times in international production networks. As a general rule, however, we want to avoid air cargo and only use it in exceptional cases, since roughly 70 percent of all of Bosch's transport-related CO_2 emissions are attributable to this mode of

transport. Whenever possible, we therefore switch shipments destined for Bosch from air to sea or rail freight. The corresponding potential is reviewed continuously.

- Improving packaging design

In a joint initiative with the divisions, work is also under way to increase packing density in a bid to use less packaging material, storage space, and transport capacity – in turn, reducing CO_2 emissions. Packaging Design Centers have been set up in Europe and North America to improve and standardize packaging. At the same time, we want to use packaging material with a higher recycling content. The internal Packaging Excellence Award has been presented since 2024 to promote this topic. The award for the "Best Sustainable Solution" category went to a modular packaging system for the Bosch eAxle, which enables a higher packing density with less materials utilization compared to the previous packaging system.

- Consistent use of the total cost of ownership (TCO) approach

The TCO approach considers all costs incurred when purchasing a component or a product. These costs include freight, customs, and packaging costs. In addition, risk and location factors are assessed, which likewise contribute to the decision to buy. An example of this is the proximity to our site. The corresponding potential is reviewed continuously.

Reduction in transport-related CO_2 emissions

A team made up of representatives from purchasing, central logistics, the divisions, and plants is working on developing key measures for reducing CO_2 emissions. Moreover, the individual divisions and plants devise local measures that are implemented on site. Since 2018, we have cut our transport-related CO_2 emissions by around 27 percent, down to 1.9 million metric tons of CO_2 in 2023. Initial calculations for 2024 show that we have achieved a further reduction of around 4 percent compared to the prior year. This is mainly due to the reduced use of air freight.

Since 2020 we have also been offsetting the CO_2 emissions generated by the business air travel of all associates and are supporting climate action too with our worldwide principles on company car usage. In addition to reducing CO_2 emissions, for example, through a defined CO_2 cap or a bonus/penalty scheme linked to a vehicle's CO_2 emissions, the country-specific regulations also provide for a range of alternative forms of mobility to the classic company car.

Scope 3, downstream: Product use

Around 90 percent of scope 3 emissions are generated during the product life cycle, which is why energy efficiency in product development is a high priority at Bosch. We currently see the greatest potential for lowering CO_2 emissions in those divisions in which products require a relevant amount of energy, that is above all mobility, thermotechnology, industrial drive and control technology, and household appliances. The focus is on three leverage points in each case:

- Boosting energy efficiency

The energy efficiency of products can increase from one product generation to the next. That said, we keep an eye on the average energy efficiency of a product portfolio. Bosch Rexroth leverages energy efficiency potential by improving design parameters (e.g., weight reduction) and through the type and quality of the materials used. Thanks to active portfolio management, these improvements are also having an impact on the market: 63 percent of all electric motors sold in 2024 were models with the highest efficiency. At the same time, savings can be achieved by using the right control software in existing products. For example, in mobile hydraulics for construction machinery. The combination of hardware and software and the resulting needs-based use can reduce energy consumption by around 40 percent. Intelligent driver assistance systems alone can result in energy savings of 15 percent.

- Market transformation and portfolio optimization

Far-reaching structural changes in markets or industries, for example as a result of technological innovations, changes in consumer patterns, regulations, or globalization, require fundamental adjustments to a company's strategies and business models. These transformation processes can be used to deliver improvements in climate action.

A current example of this is switching the heat supply to renewable energy sources. The Home Comfort division is driving this development through expansion of the electric portfolio and is investing in particular in development and production capacity for heat pumps. This strategy is beginning to produce results in the form of higher sales figures in recent years and the subsequent reduction in emissions from product use (scope 3). In the area of Home Comfort, these scope 3 emissions were 21 percent lower in 2023 compared with the baseline year (2018), which is also attributable to the shift in the portfolio from fossil fuel heating systems to electric solutions.

As one of the largest suppliers to the automotive industry, Bosch is pressing ahead with the transition to electromobility and utilizing the available opportunities. The company aims to generate sales of six billion euros in this area in 2026. We currently serve more than 50 customers worldwide. By the end of 2024, Bosch had manufactured more than 15 million powertrain components for electric vehicles.

» Transformation of the energy sector through the use of green electricity, hydrogen, and biogas

Because many of Bosch's products, systems, and facilities operate on the basis of electricity, an increased proportion of green electricity in the power grids has a direct positive effect on our carbon footprint downstream, so during the product life cycle. The corresponding transformation of the energy sector is therefore highly relevant for achieving our scope 3 target – even if it can only be influenced in a small way by Bosch.

Reduction in CO_2 emissions in the product use phase

To achieve the overarching SBTi target, the relevant divisions are pursuing specific CO_2 targets and targeted action plans. The plans are based on currently available findings and market development scenarios in the coming years. The progress toward goal achievement as well as the underlying scenarios and framework conditions are reviewed annually. If any changes occur, we make adjustments accordingly.

Up until 2023, we were able to significantly reduce scope 3 emissions resulting from the use of our products – from 422 million metric tons of CO_2 in the baseline year 2018 to 300 million metric tons of CO_2. The material drivers underlying this reduction include the shift initiated within the product portfolio toward higher energy efficiency classes, more energy-efficient motors and pumps, the supply of heat pumps and solar collectors, as well as the transformation toward e-mobility.

Circular economy

With our circular economy strategy, we want to enhance the sustainability of our products over their entire life cycle – from procurement and production to use, return, and remanufacturing, right through to recycling and reuse of materials. To this end, we endeavor to either create loops directly within Bosch or close them outside the company using established recycling processes. This way, we reduce the amount of materials used and our products' carbon footprint[1] and contribute toward achieving our scope 3 target. At the same time, we also avoid potential risks relating to compliance with environmental and social standards. Building a closed-loop system for materials has the particular advantage of eliminating parts of the value chain that are subject to risks, such as extraction of raw materials.

As with carbon neutrality (scope 1 & 2), in our circular economy strategy we use a model comprising levers that can be applied across the entire value chain and that is based on the core levers of our higher-level sustainability methodology (see G 17). Depending on the markets in which our divisions operate, however, the levers differ in their degree of effectiveness, are not equally applicable across the board, and therefore offer different development potential. This was evident from an analysis we carried out in 2022 of around 80 product groups, which collectively account for roughly 80 percent of Bosch's sales revenue. It is therefore vital for Bosch to develop a market-specific circular economy strategy for each division and find the optimum mix of the three levers in each case.

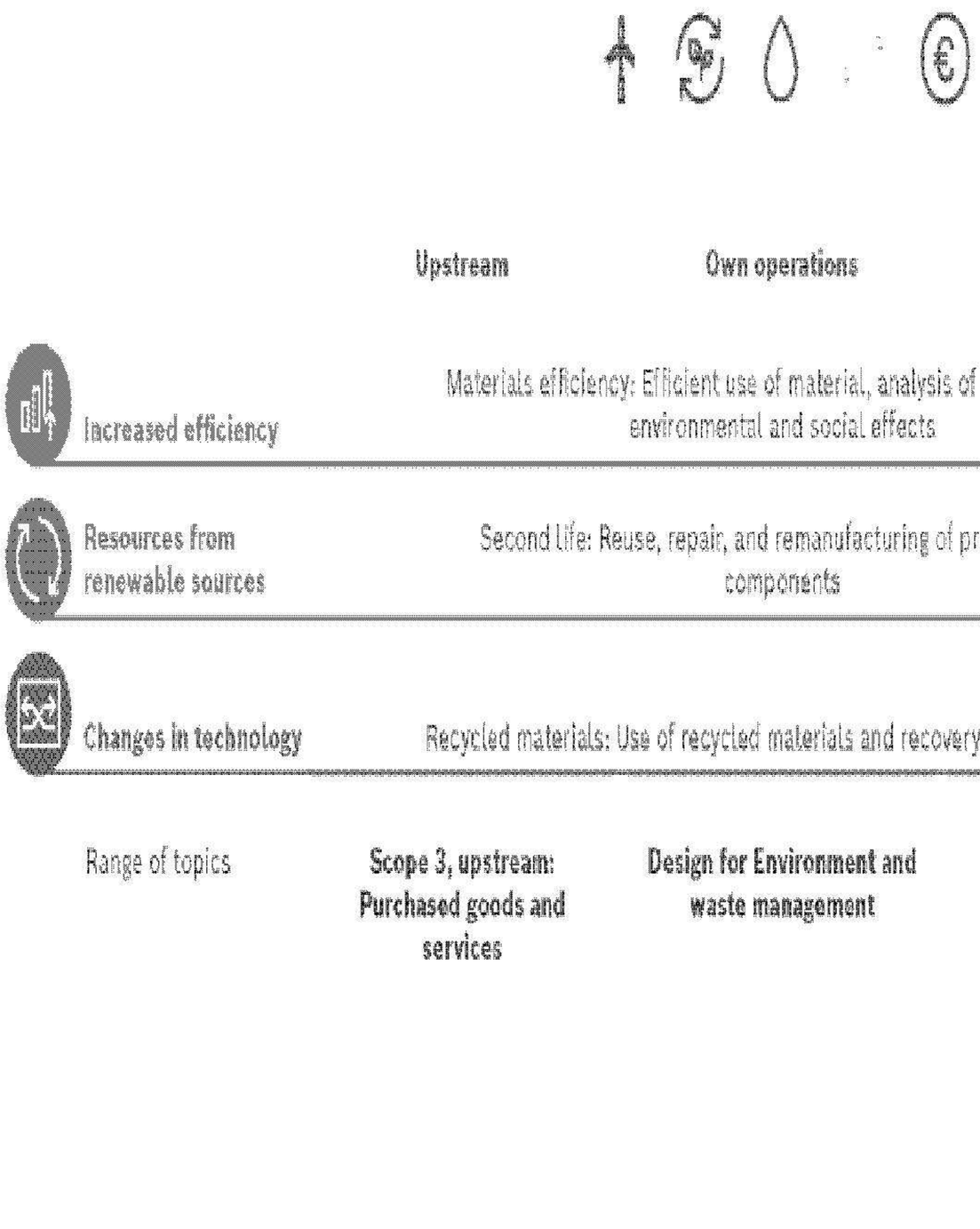
By organizing the material flows according to the concept of the circular economy, we also impact the corresponding CO_2 emissions directly. This relationship is also illustrated by our sustainability methodology. This means that by using material more efficiently and taking advantage of recycled materials, fewer resources are consumed in general and the related CO_2 emissions are also reduced.

[1] Unless otherwise stated, carbon footprint takes into account all greenhouse gas emissions ranging from raw materials extraction to transport, production, sales, and use through to disposal of the product (cradle to grave) (see DIN EN ISO 14067).

G 17

Sustainability methodology, focus on circular economy

Measures for improving sustainability performance along the value chain



With remanufacturing of products and parts, the product is rebuilt and only defective parts are replaced. This extends the product life cycle.

Design and production guidelines for environmentally compatible product development (Design for Environment, DfE) are described in an internal standard. Supplementary documents define methods for calculating product carbon footprints (PCF) and material carbon footprints (MCF) (also see "Approach and methodology for improving scope 3 data quality"). A cross-divisional and interdisciplinary research project will draw up specific strategies and implementation options for developing products in line with the circular economy based on the example of a product group by mid-2027.

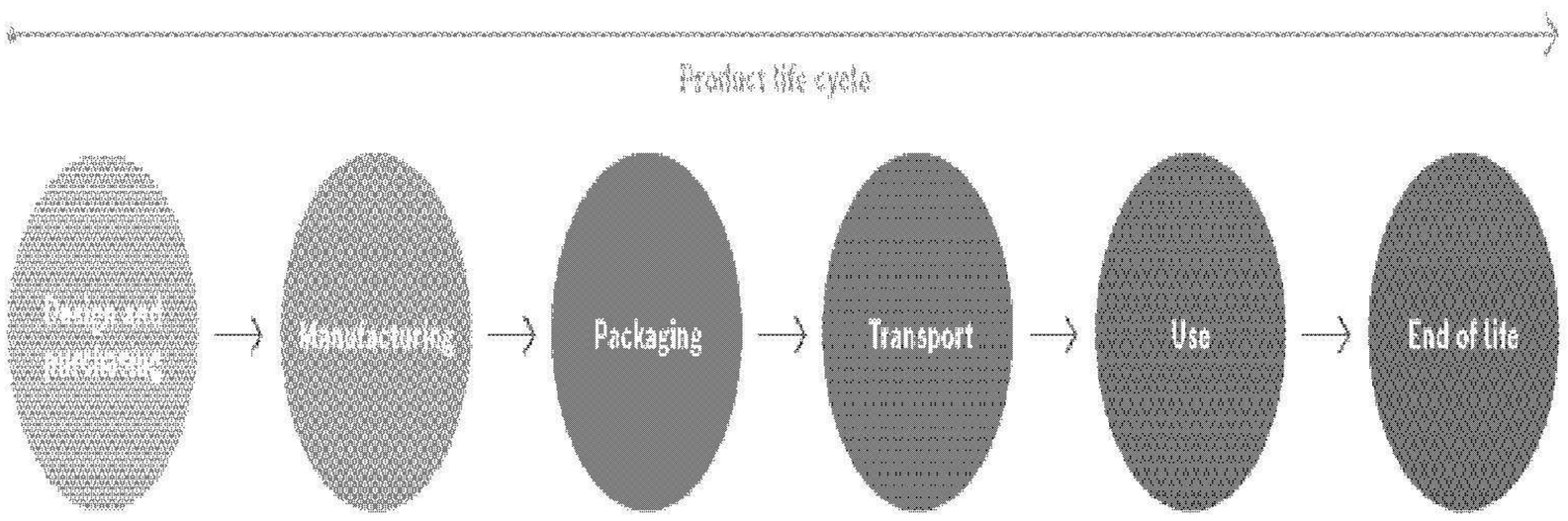
A comprehensive web-based training program raises awareness about aspects of the circular economy among product managers and developers. Around 6,600 associates have taken part in the training program since it was launched in 2023. Split into four modules, it provides training on sustainable product development, materials efficiency, second life, and recycling-compliant development.

Lever 1: Materials efficiency

Improvements in materials utilization can reduce the consumption of resources and also cut the manufacturing cost of a product. Bosch can also directly influence the corresponding measures. For years, improvements in materials efficiency in production processes or products have therefore been an essential element of our product development process, where it is anchored in an internal standard via the

G 18

Environmental aspects of Design for Environment



- Materials efficiency
- Ability to repair
- Upgradeability
- Secondary and recycled material
- Renewable raw materials
- Avoidance of high-risk raw materials

- Emissions
- Waste
- Substances of concern
- Hot spot processes

- Type and quantity of materials
- Recyclability
- Reuse and take-back

- Mode of transport
- Transport capacity utilization
- Local purchasing

- Resource and energy consumption
- Emissions (including CO_2, pollutants, noise)

- Reuse
- Remanufacturing
- Recycling

Design for Environment (DfE) principle. Examples of measures include the reduction of waste or material requirements for specific products. Objectives such as the efficiency of powertrains are formulated here for the specific product and tracked using appropriate indicators if required. The environmental and social effects of using certain raw materials are also considered in order to keep the environmental impact of materials utilized to a minimum, while at the same time taking into account social aspects. Good practice is shared throughout the company as part of an internal network for sustainable production to improve materials efficiency in production.

Lever 2: Second life

In the second lever, we have grouped together those measures that allow us to improve materials flows or to close loops within the company. The concepts and activities of the divisions range from reusing products and their components to repairs and right through to remanufacturing – in each case with the objective of extending product and component life cycles. While Bosch can reduce negative effects – which arise, for example, during the extraction of raw materials – by closing the materials and products loop, the effectiveness of the measures also depends on there being sufficient demand – and this places strict requirements on product development.

Life cycle assessments

Based on the idea of a closed-loop or circular economy, we have been systematically conducting life cycle assessments (LCAs) for material product groups since 2017. This entails evaluating product-specific environmental aspects in each phase of the product life cycle – from purchasing to production and use right through to disposal. Depending on the use case, we distinguish between two assessment methods: the full-scale LCA, performed in compliance with ISO 14040 and 14044, and the streamlined LCA, allowing faster assessment of specific issues and drawing on standard database values. While various environmental aspects are evaluated in life cycle assessments, the focus for the calculations of product carbon footprints (PCF) and material carbon footprints (MCF) is on the CO_2 emissions associated with the product or material (for more information, see "Approach and methodology for improving scope 3 data quality").

Wiper blades from Mobility Aftermarket

Wiper blades are a part subject to wear and should be replaced regularly. Here, too, products are being continuously developed. The calculation of the PCF of wiper blades in the Mobility Aftermarket division served as the basis for the targeted improvement of product design and packaging. The PCF was reduced by 24 percent as a result of the derived measures.[14]

The Aerotwin Plus wiper range generally comes with various adapters to fit the wiper blades. Thanks to an additional offer, workshops now have the option of ordering the required adapters separately. This reduces the amount of materials utilized by Bosch and the amount of waste generated by adapters that are not required. In addition, the packaging was adapted to the specific requirements of the "workshop" sales channel, allowing a lean and therefore space-saving packaging solution to be used. This results in 50 percent less packaging waste in the workshops, while at the same time achieving a higher packing density during transport.

[14] Comparison between the revised Aerotwin windshield wipers GWB2S3 340MM (P/N: 3398.134.293); GWB2S3 600MM (P/N: 3398.134.304); GWB2S3 750MM (P/N: 3398.132.067) and the previous Aerotwin windshield wipers. PCF calculation according to ISO 14067 (cradle to gate).

The individual divisions of Bosch each set their own priorities in this regard, depending on market and product-specific framework conditions. Take, for example, the Mobility Aftermarket and Bosch Rexroth divisions, which each serve the Remanufacturing and Repair and Remanufacturing business lines. For over 50 years, the Bosch eXchange program has been offering customers the option to have defective vehicle components replaced with remanufactured products at specialist workshops.[15] Bosch Rexroth gives old control and powertrain technology products a second life with the "Remanufactured Products" program. Both divisions are focused on successively extending their activities in these segments.

Lever 3: Recycled materials

The third lever of our circular economy strategy – recycled materials – covers all measures to close the loop by established recycling processes for materials such as steel, aluminum, and plastics. This way, we can reduce the use of primary materials and lessen our environmental impact – as well as mitigate human rights risks associated with the extraction of raw materials. Our use of recycled materials also means that we are supporting the achievement of our scope 3 target.

Extended availability of spare parts at BSH Hausgeräte GmbH

BSH Hausgeräte GmbH generally keeps spare parts for large appliances (e.g. washing machines) in stock for up to 15 years and for small appliances (e.g. vacuum cleaners) for ten years. This applies to all functional and storable parts of appliances produced after January 1, 2023. With over 350,000 spare parts available and a worldwide service network of 12,000 technicians and partners, BSH ensures fast and competent repairs. In 81 percent of cases, the problem is solved on the first customer service visit.

Rental and subscription of household appliances

BSH BlueMovement is a circular business model from BSH Hausgeräte GmbH that focuses on the rental and subscription of household appliances. It aims to extend the life cycle of appliances, reduce electronic waste, and offer consumers affordable access to high-quality appliances. After the rental period, BSH reconditions the appliances and uses them for new cycles. Appliances that cannot be repaired are recycled and suitable components are reused as spare parts. Household appliances rented from BlueMovement can therefore last up to 20 percent longer than purchased appliances.[16] The model has since been extended to business customers and the portfolio has been expanded to include additional appliance categories.

[16] Comparison between the BlueMovement circular business model and a traditional linear purchasing model according to ISO 14021:2016. Based on data from large household appliances that have been used for at least two years, refurbished and rented to another customer.

[15] Bosch eXchange can be supplemented by new material, if necessary, in order to ensure a high degree of market coverage and delivery capability.

The activities of two divisions should be mentioned as examples in this context. The Bosch Power Tools division has set quantitative targets for the use of recycled plastics. Specific targets have also been set for packaging materials. BSH Hausgeräte GmbH is aiming to increase the proportion of recycled material used in products and at the same time improve the recyclability of the products.

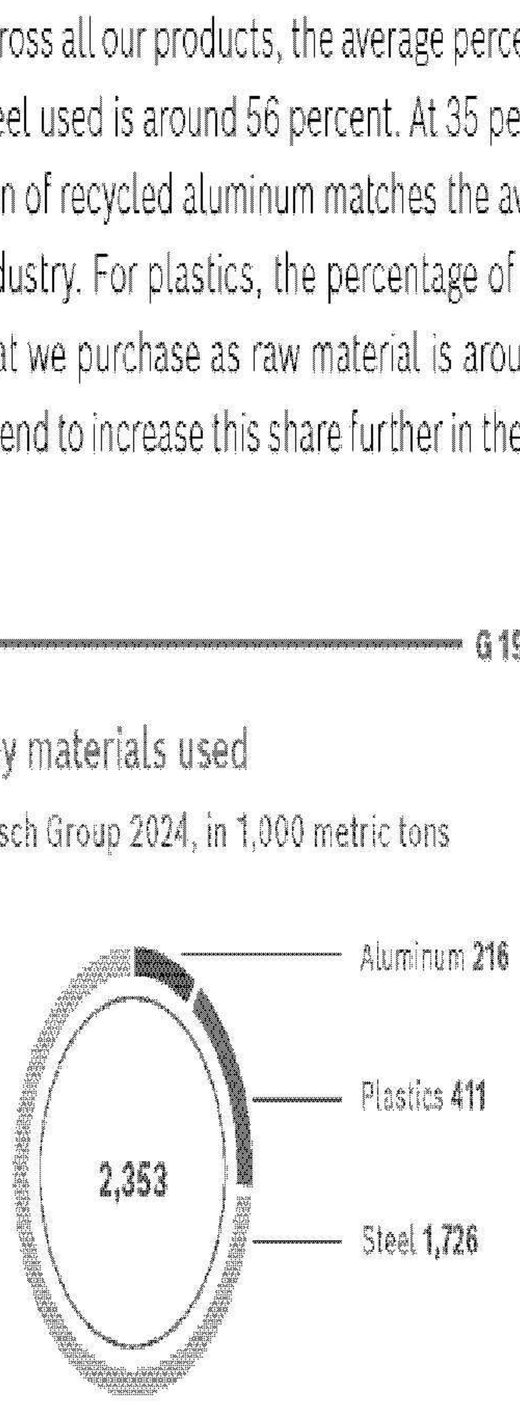
Key factors determining how effective the measures are include whether high-quality materials are available, as well as whether the percentage of recycled materials used can be verified, and whether they can be purchased cost-effectively (see also "Scope 3, upstream: Purchased goods and services").

Across all our products, the average percentage of recycled steel used is around 56 percent. At 35 percent, the proportion of recycled aluminum matches the average level in the industry. For plastics, the percentage of recycled material that we purchase as raw material is around 5 percent. We intend to increase this share further in the coming years.

G 19

Key materials used

Bosch Group 2024, in 1,000 metric tons



Recicla Auto Partes – recycling program for automotive parts in Brazil

With the "Recicla Auto Partes" program, the Mobility Aftermarket division in Brazil has created the opportunity for workshops to recycle defective automotive parts. Currently, 56 Bosch Car Service workshops are participating in the program. Since 2023, 105 metric tons of defective parts have been collected and recycled.

Recycled material for the Performance Line CX and PowerTubes from eBike

Bosch eBike uses partially recycled material in the production of the Performance Line CX (BDU384Y) as well as the PowerTube 600 and PowerTube 800: for the first time in the drive unit's largest plastic part as well as in the battery mount and battery housing.[17] Furthermore, the amount of materials utilized for the batteries has been reduced.[18] In future, the black color coating will also be omitted. In pilot projects, Bosch eBike is focusing on purchasing components that were produced using electricity from renewable sources. This applies to the aluminum of the PowerTube 600 and the PowerTube 800 as well as to the housing of the Performance Line CX.

Bosch Power Tools relies on recycled material for the production of carbides

Bosch Power Tools has been using recycled carbides for the production of new accessories for over ten years. At the plant in Udine, Italy, around 20 percent recycled material from Bosch's own sources is used in the production of carbide. Sintered carbide[19] and grinding sludge are collected from production processes at Bosch sites and sent to a remanufacturer. The recyclable materials are chemically treated[20], cleaned, and processed into tungsten carbide and cobalt powder to be used at the plant in Udine for the production of new accessories such as circular saw blades. This reduces the demand for the high-risk primary raw materials tungsten and cobalt accordingly (for more information on high-risk raw materials, see the "Social" section).

[17] Primary plastics and metals were used for previous drive units and batteries. Recycled material is now specifically used in the grease guide plate of the drive unit, in the protective cap of the battery mount system and in the battery housing. By providing the grease reservoir, the grease guide plate makes a significant contribution to the efficiency level and life of the drive unit and was produced for the first time using a plastic that consists of around 50 percent recycled material. We use recycled polypropylene for the protective cap of the battery mount system, while we use aluminum, consisting of approximately 38 percent recycled material, for the battery housing.

[18] The reduction is achieved by reducing the wall thickness of the housing. When comparing PowerTube 600 with PowerTube 625, the housing wall is 26 percent lighter, and 37 percent lighter when comparing PowerTube 800 with PowerTube 750.

[19] Sintering is a process for manufacturing metal or ceramic parts from powdered primary material.

[20] In the recycling process, the process chemicals are kept in a closed loop.

Waste

The previously discussed instruments are also relevant for our own activities. This is especially the case with waste management. "Avoid, then reuse, then dispose" – that is the principle we apply at Bosch with respect to waste management. As part of its circular economy strategy, Bosch continues to work systematically on reducing waste volume and, in particular, on recycling. A group guideline defines processes and ensures that the legal requirements for the transport and disposal of waste are complied with locally. All production locations have a clearly designated organizational unit responsible for sorting, classifying, and handing over waste to disposal companies.

In 2024, Bosch generated 617,570 metric tons of waste (prior year: 666,028 metric tons), a decrease of 7.3 percent. Of the amount of waste, it was possible to recycle 87 percent. In relation to the development of sales revenue, the waste volume decreased by around 6 percent year on year (also see T 08). An analysis of waste at a number of production locations, which together account for around 80 percent of our total amount of waste, has shown that roughly 45 percent of our waste consists of metals, 24 percent is packaging waste, and around 13 percent is hazardous waste. In addition – as the analysis also revealed – there is potential to lower the volume of hazardous waste and therefore not only reduce disposal costs, but make an important contribution to protecting people and the environment. In 2019, we decided to pursue two priorities in response to these findings: reducing hazardous waste and minimizing the amount of waste going to landfills. At Bosch, hazardous waste occurs mainly in the form of cooling lubricants, washing water, oils, and fuels. In 2024, their volume increased by 1.3 percent to 77,412 metric tons compared with the prior year (76,436 metric tons).

Specific measures are being implemented at sites with relatively large quantities of waste to reduce the amount of waste. Use of vacuum distillation and ultrafiltration is leading to a reduction in the quantity of cooling lubricants that need to be disposed of, while the volume of washing water is likewise decreasing. Centrifugal treatment leads to a decrease in the quantity of oil to be disposed of.

In order to reduce the amount of waste going to landfills, we want to increase the recycling ratio. With this in mind, we implemented the "Zero Waste to Landfill" campaign in 2019.

T 08

Waste volume and disposal

Bosch Group 2022–2024, in 1,000 metric tons

	2022	2023	2024
Bosch Group	**678.3**	**666.0**	**617.6**
Recyceled waste	584.4	569.9	539.4
Waste for disposal	93.9	96.1	78.2
thereof hazardous waste	75.8	76.4	77.4
Material-based recycling	35.4	36.7	33.6
Thermal recycling	7.0	7.6	7.3
Other recycling	7.7	7.9	9.4
Landfill disposal	3.0	3.3	4.0
Disposal through incineration	7.9	7.5	7.5
Other disposal	14.8	13.4	15.6

Waste intensity

in metric tons/million euros of sales revenue

	2022	2023	2024
Bosch Group	**7.7**	**7.3**	**6.8**

Water

Conscientious use of water is a major priority for Bosch. We especially focus on counteracting the increasing scarcity of water. Interdependencies arise in this case also with our activities in the areas of climate action and the circular economy. This became apparent when developing the sustainability methodology. Energy, material, and water consumption frequently exhibit similar patterns. For example, less water is required to produce green electricity than to produce electricity from fossil fuels (gray electricity), due to the associated high cooling water requirement.[21] This means that water withdrawal can also be reduced in the supply chain by sourcing materials that have been produced with green electricity. When it comes to manufacturing steel, the water withdrawal can thus be reduced by just under 19 percent by using renewable energy in the supply chain.[22]

[21] Grubert and Sanders (2018): Water Use in the United States Energy System: A National Assessment and Unit Process Inventory of Water Consumption and Withdrawals; Environ. Sci. Technol. 2018, 52, 11, 6695–6703.

[22] Internal calculation: production of steel with green electricity compared with production of steel with gray electricity based on Grubert and Sanders (2018).

G 20

Sustainability methodology, focus on water

Measures for improving sustainability performance along the value chain

	Upstream	Own operations	Downstream
Increased efficiency		Water-efficient processes	Water-efficient products
Resources from renewable sources	Indirect effects of CO_2 and circular economy strategy	Rainwater usage	Water treatment
Changes in technology		Water-efficient processes	
Range of topics	**Scope 3, upstream: Purchased goods and services**	**Water management**	**Adjustment of product portfolio**

49

Water targets for company locations in regions with water scarcity

We analyzed our company locations using the Water Risk Filter provided by the World Wide Fund for Nature (WWF). According to this analysis, 70 of our sites are located in areas of severe or severest water scarcity (see G 21). We have set ourselves a target of reducing absolute water withdrawal at the 70 sites identified by 25 percent by 2025 compared with our 2017 baseline year. In 2024, company locations in regions with water scarcity accounted for around 2.23 million m^3 of water (prior year: 2.32 million m^3) or 11.1 percent of Bosch's total annual water withdrawal. This corresponds to a reduction of around 28.5 percent compared to the baseline year 2017 (prior year: 25.6 percent).

Total water withdrawal by the Bosch Group increased to 20.0 million m^3 in 2024 (prior year: 19.5 m^3). In relation to sales revenue, this constitutes a relative increase of around 4.2 percent year on year (also see T 10 and G 22).

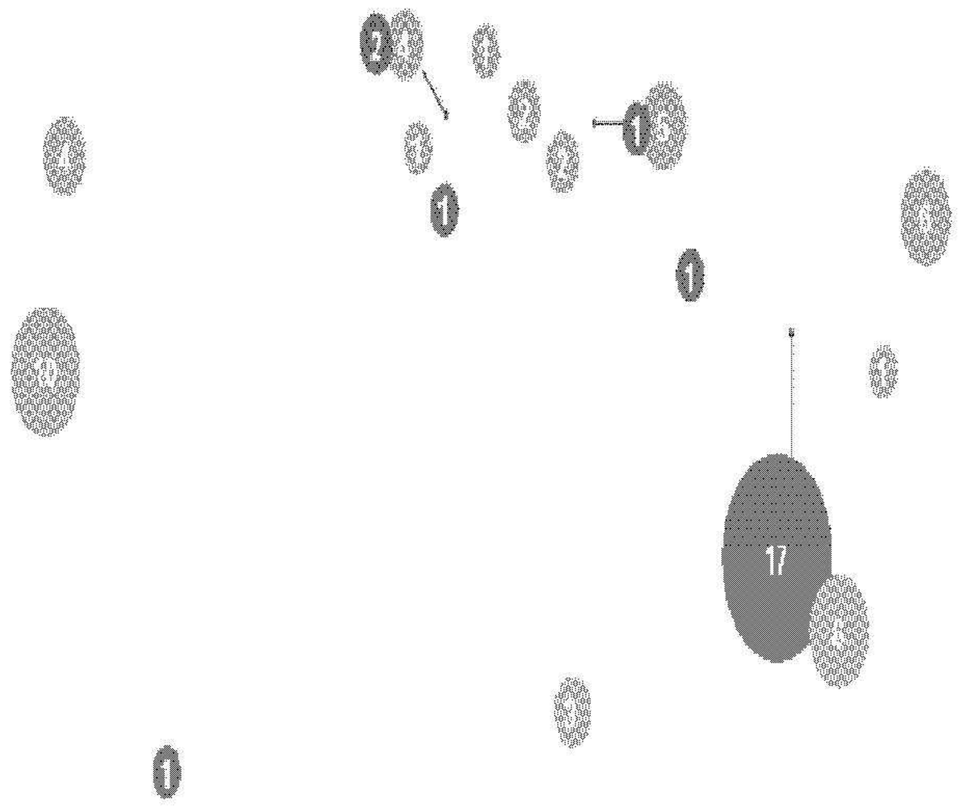
In 2025, we will analyze our company locations again using the Water Risk Filter from the World Wide Fund for Nature (WWF) and set ourselves a new target based on the results, which will extend beyond 2025.

Identifying and realizing savings potential

Bosch requires water for cooling systems, sanitary facilities and technical processes. We are focusing on process improvements, recycling, and the use of rainwater to further reduce water withdrawal at our company locations. In regions with strained water supplies, water is already reused or rainwater is used wherever possible. To ensure that the funds for achieving water targets are used efficiently, water coordinators in the divisions identify local savings potential and implement suitable measures together with those responsible at the sites concerned. Since 2019, we have

G 21

Company sites in regions with water scarcity



	Number	Withdrawal in millions of m^3	Share of total water withdrawal	Affected regions
Sites with the severest water scarcity	23	0.4	2.0%	Chile, India, Morocco, Spain, Turkey, United Arab Emirates
Sites with severe water scarcity	47	1.8	9.2%	China, France, Greece, India, Italy, Mexico, Portugal, South Africa, Spain, Thailand, Turkey, USA

T 09

Water withdrawal in regions with water scarcity

Sites in regions with severe or severest water scarcity
2017–2024, in millions of cubic meters

2017	2018	2019	2020	2021	2022	2023	2024	2025 target
3.1	3.0	2.8	2.4	2.5	2.4	2.3	2.2	2.3

launched more than 260 projects that enable us to save up to 700,000 m^3 of water at our sites each year. By systematically collecting rainwater we reduce the amount of groundwater we extract and the amount of water we withdraw from the public water supply. In 2023, we were able to nearly double the quantity of rainwater used company-wide year on year to 140,000 m^3 (prior year: 74,000 m^3). In 2024, we used 190,000 m^3 of rainwater.

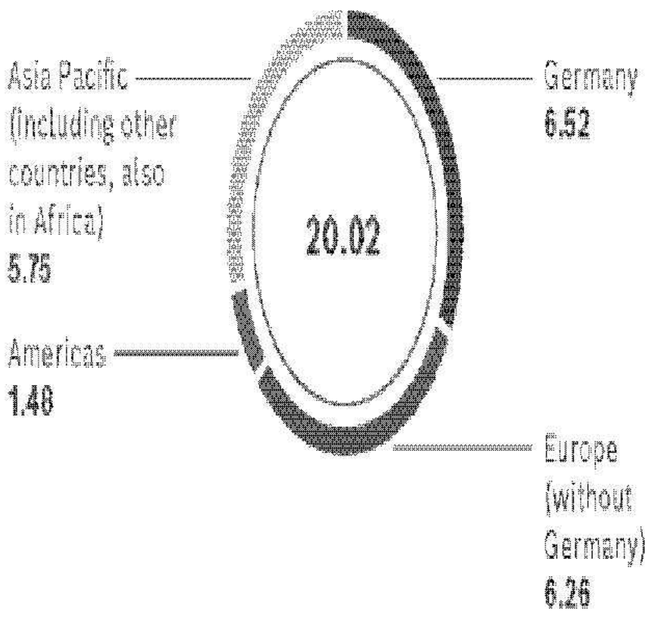
Collection systems for monsoon rains

A new rainwater collection system was put into operation in Bidadi in India in 2023, which has a storage capacity of 10,000 m^3. In 2024, around 64,000 m^3 of rainwater was collected and used at the site. This covered roughly 41 percent of the total volume of water needed at the site. Rainwater is also used at the site in Naganathapura in India. Around 11,200 m^3 of rainwater was treated and used at the plants in 2024, covering roughly 26 percent of the total water demand at the site in this period.

G 22

Water withdrawal

Bosch Group 2024 by region, in millions of cubic meters



Environmentally friendly water treatment

Bosch products contribute to the sustainable use of water on an industrial scale as well. In a new business field, water treatment systems have been marketed since 2024 to provide electrolyzers all over the world with high-purity water for the production of hydrogen. The challenges are especially demanding for facilities offshore or in the desert, for example due to salty water of extreme water hardness. In this harsh environment, the Bosch systems use thermal and electrochemical processes to extract minerals from the water in order to produce high-purity water. Compared to systems based on reverse osmosis, Bosch systems do not require a filter medium for distillation. As a result, operators can dispense completely with the use of chemicals when treating salty water. In the coming years, Bosch plans to install several water treatment systems at its own locations in regions with severe water scarcity.

T 10

Water withdrawal

Bosch Group 2022–2024, in millions of cubic meters

	2022	2023	2024
Bosch Group	**19.13**	**19.47**	**20.02**
Surface water	3.71	3.51	3.12
Groundwater	2.22	2.99	3.26
Public/private waterworks	13.16	12.94	13.61
Fresh water[23]	**19.09**	**19.44**	**19.99**
Public/private waterworks	0.04	0.03	0.03
Other sources[24]	**0.04**	**0.03**	**0.03**

[23] < 1,000 mg/l total dissolved solids
[24] > 1,000 mg/l total dissolved solids

Water intensity

in cubic meters/million euros of sales revenue

	2022	2023	2024
Bosch Group	**216.9**	**212.6**	**221.6**

Other environmental impacts

Other environmental impacts may arise from wastewater and air and soil emissions at our company locations. We aim to have as little impact on the environment as possible here too and are working to fulfil this aspiration with our Group-wide environmental management system. We have established a systematic material data management system for the management of substance bans and restrictions, which helps ensure material compliance.

Wastewater

Wastewater at Bosch is mainly produced in sanitary facilities and canteens (46 percent) and also in connection with cooling water (29 percent). Manufacturing accounts for 25 percent of the wastewater produced. Water is used here in electroplating as well as in washing systems and machining centers, among other areas. In 2024, Bosch's wastewater volume decreased to 15.25 million m^3 (prior year: 15.46 m^3).

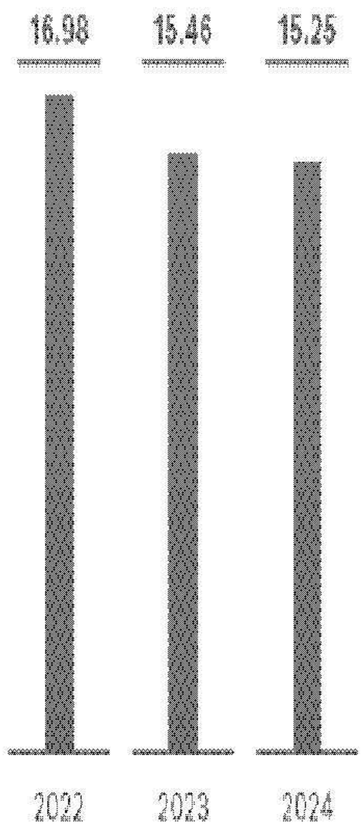
Negative impacts from wastewater are mainly caused by foreign substances or excessive discharge temperatures. Within the strategic core topic of water, we are therefore working on further reducing wastewater flows and continuously improving quality. In 2019 we recorded centrally where which quantities are generated, how they are treated, and where they are discharged (see G 24). We have established standard processes in the company for monitoring local wastewater quality requirements and standards.

One incident in which substances were released was reported through our incident management system in 2024. The impact on the environment was categorized as low.

G 23

Wastewater

Bosch Group 2022–2024, in millions of cubic meters



At some sites, we carry out wastewater treatment in-house, using processes such as ultrafiltration to separate solids and liquids or physical-chemical treatment methods such as precipitation or distillation, depending on local conditions.

We apply the following wastewater treatment process:

- Primary treatment

Physical removal of suspended and floating substances such as large particles, oils, and fats by sedimentation to feed the wastewater into secondary treatment.

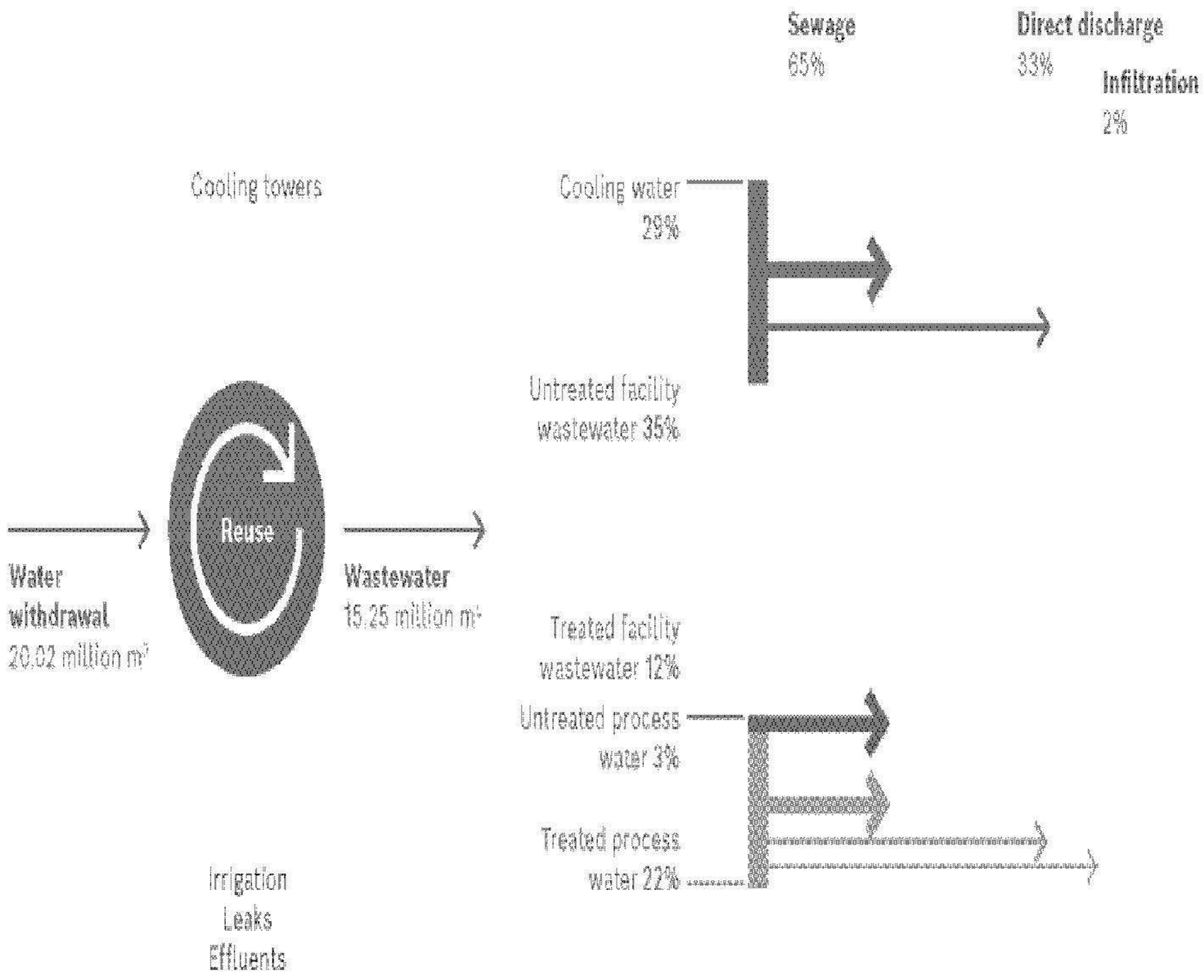
- Secondary treatment

Degradation of organic matter and reduction of solids through biological treatment and of nutrients through a combination of chemical and biological treatment.

- Tertiary treatment

Additional treatment to remove any remaining suspended, colloidal, and dissolved components, for example by granulate filtration.

Wastewater flows and discharge routes



Air emissions

Air pollutants can impact people's health and should therefore be reduced. As part of the materiality assessment in 2024, we once again examined which air pollutants are produced and at what levels in the relevant business processes in manufacturing, such as surface treatment and foundry processes. The results show that the topic has gained importance. It will therefore be the focus of further activities in the future.

Use of substances of concern

At Bosch, substances of concern (SoC) are all substances in production aids or products that could have a negative impact on human health or the environment. These include, for example, substances that are classified accordingly or are regulated by law, customer agreements or in-house requirements.

Internal company regulations define the material compliance requirements and specify the organization and responsibilities. We are continuously working to identify permissible SoC in our products and processes, adopt substitutes, and reduce or altogether avoid hazardous substances in the long term wherever possible. For example, where technically feasible, we intend to dispense with substances on the EU's REACH candidate list in new developments. Our internal Design for Environment standard defines the requirements for handling SoC in the product development process. If permissible SoC are unavoidable in the production process for technical reasons, we conduct hazard assessments to ensure suitable protective measures are taken for safe handling of such substances.

No incidents in which substances were released were reported through our incident management system in 2024.

Systematic management of materials data

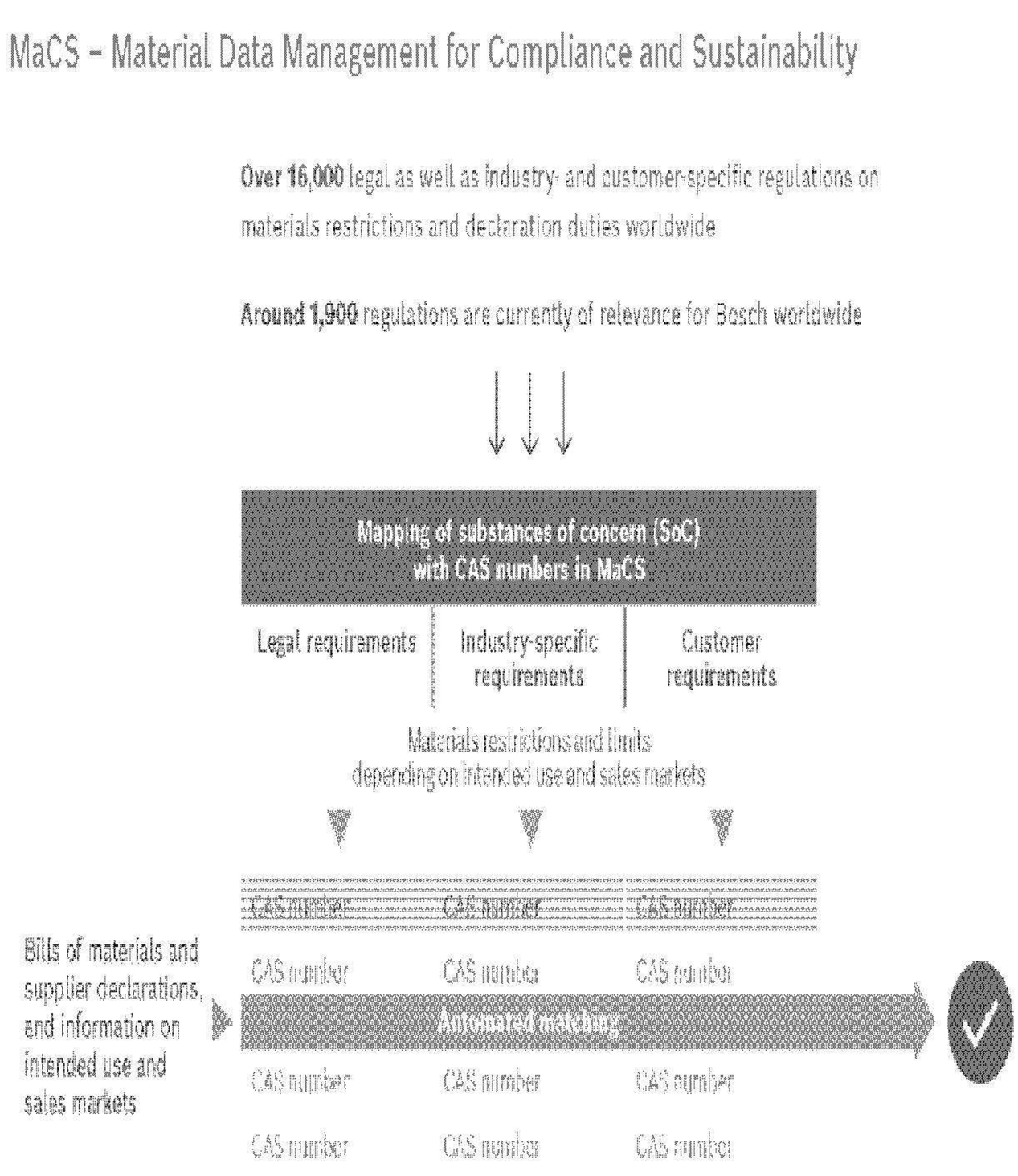
At present, there are more than 16,000 statutory, industry-specific, and customer-specific regulations worldwide governing materials restrictions and declaration duties, which are continually changing and becoming more extensive. Around 1,900 of these regulations are currently relevant for Bosch worldwide, including the European Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) or the Toxic Substances Control Act (TSCA) in the United States. The resulting requirements are monitored centrally as well as at division level so that any adjustment measures needed in response to any changes can be initiated in a timely manner.

We have built a central IT system – MaCS (Material Data Management for Compliance and Sustainability) – to efficiently manage materials restrictions, in particular for products. The Sustainability and EHS corporate department is responsible for the technical coordination and continuous development of the IT system and processes. All substances of concern are rendered in the MaCS system using distinct identifiers such as Chemical Abstracts Service (CAS)

numbers. This approach takes into account the intended use and the respective sales market as well as information on materials restrictions or defined limits. MaCS currently covers more than 40,000 identification attributes. Algorithms that map the relevant materials restrictions and declaration regulations automate the process of matching bills of materials and associated supplier declarations against the pertinent requirements. To enable checks, MaCS maps the individual components of a product in the form of a bill of materials.

MaCS also includes information from the supplier declarations that is made available to us via systems such as the International Material Data System (IMDS), Compliance Data Exchange (CDX), and Bosch's declaration format. This information indicates the substances contained in the individual components as well as their concentration levels. By linking bills of materials and supplier declarations, it is possible to make accurate statements about the substances contained in each component. The nature and scope of declaration requirements Bosch has to fulfil with regard to SoC in materials are regulated uniformly and bindingly for all suppliers in Bosch's standard N 2580-1.

MaCS – Material Data Management for Compliance and Sustainability



Social

Social

As a globally operating company, Bosch takes its social responsibility seriously. We respect human rights and actively demand this in our global supply chains as well. At the same time, we are focused on strengthening diversity, equity, and inclusion as well as on ensuring a safe working environment.

Bosch as an employer

Bosch is transitioning from a manufacturer of technology hardware to a provider of connected hardware, software, and services. To actively shape this change, we are purposefully developing our corporate culture and are empowering our associates to acquire new competencies. At the same time, we are creating the conditions to win new talent for innovative, high-growth areas.

Regulations and organization

In the Basic principles of social responsibility at Bosch, which have been made publicly available, the board of management of Robert Bosch GmbH and the employee representatives undertake, among other things, to comply with human rights, equal opportunities, fair working conditions, and global standards in occupational health and safety. The eleven principles are based on the core labor standards of the International Labour Organization (ILO).

Our associates are familiar with the basic principles and are required to report violations. The same applies to violations of our Codes of Conduct (see the "Governance | Compliance" section).

The Human Resources corporate sector is responsible for defining the content-related parameters for HR management in the countries where Bosch operates, with the respective regional HR management reporting to central HR management.

Employment at Bosch

Bosch employs more than 417,900 people worldwide. To enable flexible staffing, around 7.4 percent of the workforce have time-limited employment contracts. As a rule, they have the same training opportunities as associates with permanent contracts.

In addition, the company employs roughly 13,900 subcontracted workers. Bosch uses subcontracted workers when there is a staffing need that cannot otherwise be met. There is no restriction on the use of subcontracted workers, for instance, in direct functions such as manufacturing and logistics. Whenever the company draws on subcontracted workers, Bosch gives due regard to compliance with legal framework conditions, such as the German Temporary Employment Act (Arbeitnehmerüberlassungsgesetz) and any collective bargaining agreements. If there are vacancies in the company, associates with time-limited employment contracts or subcontracted workers are considered within the applicable legal requirements and if they are equally suited.

In an increasingly competitive labor market, it is vital that we attract the best talent and make sure they remain enthusiastic about Bosch in the long term. We offer career-entry opportunities at Bosch for high school graduates (internships, occupational training, and dual study programs) and students (internships, student traineeships, and final theses). Bosch also offers graduates and experienced professionals access to diverse fields of work.

G 26

Associates

Bosch Group by region, as of December 31, 2024

Our personnel recruitment activities are guided by Bosch's group strategy, the requirements of the specialist departments, and the expectations of the target groups. We use a variety of formats to reach out to potential applicants. Depending on the target group, these range from online career channels to national and international career fairs, through to social network events.

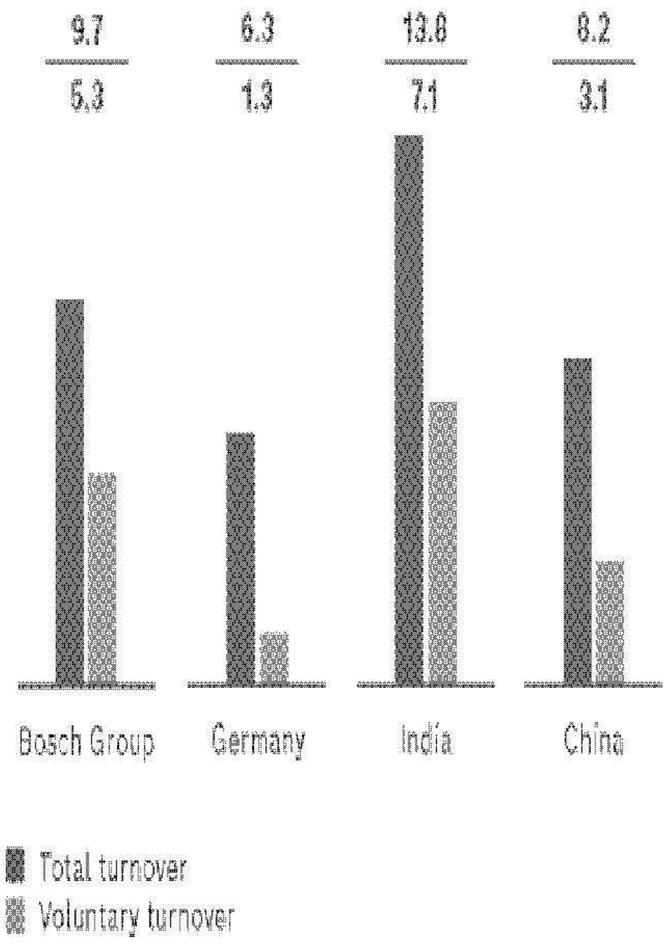
We benchmark our turnover rate against the respective market average as an indicator of how attractive we are as an employer. As a result, we are able to make any adjustments necessary at an early stage, for example in our employment conditions. Our objective is to always keep voluntary turnover[25] at Bosch below the average for each respective

[25] In the case of voluntary turnover, associates leave the company of their own accord.

G 27

Turnover

Bosch Group 2024, selected countries, in %



country. In general, it can be observed that our associates rarely terminate their employment relationship. However, there are regional differences (see G 27).

HR work in the transformation

The automotive industry is undergoing a profound upheaval. The technological change in the context of more sustainable mobility, as well as economic trends, leave Bosch no choice but to adjust its workforce. Our objective is to make this transition in a manner that is as socially acceptable as possible. This commitment is enshrined in collective bargaining agreements with employee representatives, for example, and in a combined works agreement governing how crisis situations are dealt with. As a responsible employer, we want to cooperate with the employee representatives in the interest of our associates to find constructive solutions to save jobs.

As the various business units and locations are affected in different ways by current developments, we create targeted solutions. One example is the dedicated platforms that have been specifically set up for Bosch to refer associates internally (potentially after training) or externally to other employers. Beyond that, we prioritize adjustments based on natural turnover, early retirement, and voluntary redundancy on the basis of severance pay. We also give our associates the opportunity to reduce their weekly working hours and take on part-time work.

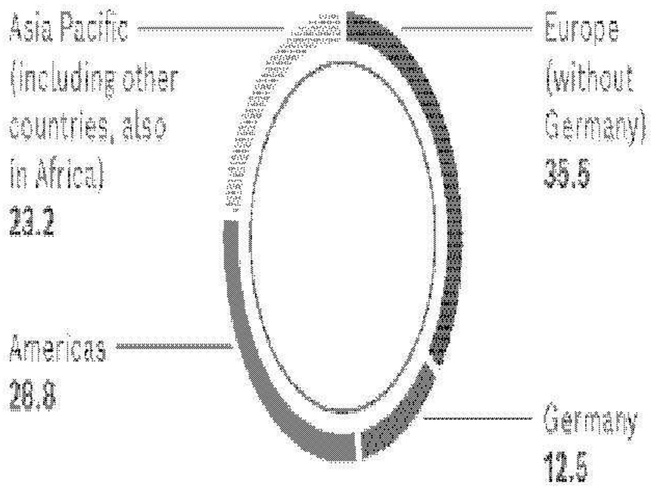
Agreements on the transformation of company locations were also concluded and continued with local works councils in 2024, for example at the Feuerbach, Schwieberdingen, Abstatt, und Leinfelden sites. In all cases, participation by associates in these programs is voluntary. The number of associates who make use of the offers is an indicator of the attractiveness of the respective individual measures.

In 2023, collaboration with the employee representatives in the Mobility business sector was placed on a new footing in Germany with the conclusion of a new works agreement for the future. In particular, this involved detailed agreements to give practical shape to participation by the

G 28

New hires

Bosch Group by region, in %, as of December 31, 2024



employee representatives and individual committees in the transformation of the business sector. In addition, a supporting collective bargaining agreement provides for implementation of target vision processes at the Mobility locations in Germany that are bound by collective bargaining agreements. Social partnership at Bosch will be further intensified by the agreements made – after all, industrial transformation in the mobility sector can only succeed with the cooperation of all partners.

Training and placement

Against the backdrop of the company's transformation, we are stepping up our initiatives for training and the placement of our associates across different business fields. Our "People Acquisition Campus" and "Mission to Move" programs set up in 2018 have provided over 3,000 associates from our powertrain business with further qualifications, opening up new career prospects for them. In 2024, we extended these programs to the entire Mobility business sector. The initiatives also extend beyond our own company. We have joined forces with around 70 companies in the "Allianz der Chancen" to be able to move people directly from job to job. In addition, we already provide our associates with corresponding placement offers at seven locations through our in-house professional placement service.

We proactively support the digital transformation as well through various initiatives, such as "LernWerk," "Digital Talent Academy," and "Wissensfabrik," and enable various target groups in manufacturing and occupational training to acquire the corresponding skills.

Collaboration with employee representatives

Bosch has a tradition of maintaining open and constructive dialogue with employee representatives. We are convinced that it is only with their cooperation that we can implement the change processes needed to secure our competitiveness. We therefore continuously seek to consult and involve the employee representatives in the process at the earliest possibility. As part of a transparent and open information and communication policy, briefings are provided in a timely manner and with due regard to the relevant facts and national regulations.

The framework for cooperation with employee representatives as well as the corresponding agreements are defined by internal company policies. Among other matters, they lay down regulations in accordance with ILO conventions 87 and 98, which guarantee workers' freedom of association and the right to collective bargaining. They also provide for the appointment by the company of a negotiating partner for existing employee representatives. The person appointed must have wide-ranging powers of representation for the unit concerned, is appointed through a formal process, and is responsible for collaborating with the relevant employee representative body.

Particularly the colleagues responsible in the regions engage locally with employee representatives and the relevant organizations. At the same time, we are continuously committed to making progress in the respective countries. Any restrictions on the rights of employee representatives are identified in particular in cooperation with the combined works council and the European and international employee

representatives. If there are obstacles at local level to implementing our standards, the HR corporate department deals with the issue and works toward finding a solution that achieves the greatest possible consensus according to our principles.

An established process is in place for handling complaints by the international network of employee representatives. Individual cases are handed over, for example, by the chair of the European works council of the Bosch Group to the responsible corporate office, the board of management, or the supervisory board.

Collective bargaining agreements

Practically all Bosch sites in Germany have a works council and the associates are subject to works agreements. Only a few small units are the exception to the rule. Collective bargaining agreements are in effect for practically all units at Bosch in Germany, covering approximately 116,000 associates, or around 90 percent of the workforce.

On account of the general validity of original national or combined works agreements, even for locations without a works council, all associates of Bosch in Germany are also covered by collective agreements. The only exception to this rule are senior executives.

Bosch has also concluded collective bargaining agreements in numerous countries outside Germany, both within the EU and elsewhere, including Turkey, Malaysia, Serbia, Japan, and India. European works councils provide institutionalized cross-border employee representation in Europe. In accordance with the respective national regulations, there are local employee representatives in many other countries, such as China and India, for example.

Associates are informed about collective bargaining and the corresponding agreements through notices and digital media. Trade union rights are safeguarded and taken into account at works meetings, among other things. Trade unions can also inform the workforce using notices and posters.

Regular surveys of associates

If Bosch's transformation process is to be mastered successfully, it is essential that the corporate culture also evolves. We are convinced that clear and purpose-driven feedback from associates is the key to lasting improvement. Our impact: feedback landscape gives the workforce the opportunity to express their opinions and initiate change (see G 29).

As a full global survey, the Bosch Pulse Check is used to measure associate satisfaction, among other things. The results are analyzed at higher levels, for example by division, country, location, or management area. The survey was conducted for the first time in 2024 and is to be repeated annually.

The results at Group level show high approval ratings for well-being at work, sense of belonging, loyalty, and employer attractiveness. There is potential for improvement in the areas of appreciation, future prospects and leadership.

Once a year, Bosch also surveys its executives worldwide on current strategic topics in the context of the Executive Pulse Check. The survey results are elaborated together with recommended actions for the board of management. They are also shared with all participating executives and are used as a basis for dialogue between supervisors and associates. Other survey elements are available in the feedback landscape, if required, as in-depth content on important topics such as leadership, teamwork or well-being at work.

G 29

Elements of the "impact:" feedback landscape

Remuneration and social benefits

Bosch sees itself as a hands-on social partner that actively helps shape agreements, creates attractive framework conditions, and offers its associates pay that reflects performance and market conditions.

Basic principles of the remuneration system

Bosch has established principles applicable worldwide governing fair pay in line with market conditions[20]. The basic principles of the remuneration system are defined in internal company regulations. We want to ensure an attractive remuneration level in line with market conditions for all associates and strengthen our competitive position, while enabling the adjustment of remuneration systems to local conditions in response to the increasing volatility of markets. As a consequence, within the framework of the defined basic principles, differences can arise in the remuneration systems of individual operating units, regions, countries, and locations.

If the requirements and tasks are comparable, Bosch makes no distinction in the remuneration level for male and female associates. Individual pay arrangements comprise fixed and variable components and typically reflect the requirements of the given job. Performance-related or market-specific aspects are also taken into account for some groups of associates. In the case of groups of associates subject to rules comparable with collective bargaining agreements, remuneration models are adapted to local and regional regulations. All statutory minimum wage regulations in individual countries are complied with in full.

[20] To achieve a remuneration level in line with the market, Bosch follows the market average for comparable tasks. As a rule, the data is based on a survey of the overall market conducted by a global service provider.

Worldwide standards also apply to management remuneration at Bosch. Individual bonuses were replaced by a collective profit participation model for management back in 2016.

Basic principles for company pension promises and other social benefits

Bosch makes commitments to its associates worldwide in relation to occupational benefits, such as company pension schemes. The basic principles for granting, arranging, and financing these pension benefit promises are laid down in internal company regulations. Promises of pension benefits are structured consistently for all income groups within a company or for all companies in a country. In addition, we offer our associates other social benefits, such as a company healthcare scheme (see also the "Occupational health and safety" section).

Work-life balance

Bosch supports its associates in striking a balance between their individual career goals, personal life-style, and private goals. With this in mind, we are working on further flexibilization of when and where associates work in compliance with legal requirements.

Our guidelines for a flexible and family-friendly work culture cover, among other aspects, a fast return to work after a period of leave, job sharing, or part-time leadership. These guidelines have meanwhile been introduced in many countries or adapted to country-specific requirements. Various working time models have also been introduced in this context (especially mobile working and part-time work), for example in China, India, Mexico, and the United States.

Flexible working conditions

Bosch wants to empower its associates to structure their working time individually while addressing business requirements in the best possible way. Accordingly, many different working time models are used in the Bosch Group across all hierarchy levels, including part-time work or job sharing. Mobile working is also now standard practice at Bosch. Associates in all countries can and should benefit from the increased flexibility, assuming their particular role permits this.

Other agreements and benefits

We help our associates strike a work-life balance by creating a work environment that is as flexible as possible. Furthermore, we offer childcare at specific locations as well as the option to take parental leave or leave of absence to care for family members. In addition, they can take sabbaticals, spe-

T 11

Part-time associates

Bosch Group 2023–2024, by region and by gender

	2023	2024
Bosch Group	**25,875**	**21,420**
By region		
Europe (without Germany)	5,686	4,934
Germany	18,905	15,671
Americas	626	613
Asia-Pacific (incl. other countries, also in Africa)	658	202
By gender		
Female	14,842	14,026
Male	11,033	7,394

cial leave, or paid leave in special circumstances. In principle, the aforementioned offers are also available to associates with time-limited employment contracts.

Diversity, equity, and inclusion

At Bosch we value the uniqueness of every human being and consider diversity to be critical to our business success. Each and every individual in the company should feel welcome, respected, and appreciated, regardless of factors such as gender, origin, age, personal background, or individual life path.

We are convinced that teams with a range of vantage points, educational and cultural backgrounds, as well as personal qualities often produce better results and that mutual appreciation of all associates is beneficial for the work climate. That is why diversity, equity, and inclusion are firmly anchored in our "Be#LikeABosch" mission statement.

Bosch became a signatory to the Diversity Charter as early as 2007. Our Code of Conduct, too, underscores that Bosch respects and protects the personal dignity of each individual, tolerates neither discrimination nor harassment, and promotes diversity, equity, and inclusion.

Dimensions of diversity

In order to do justice to the different dimensions of diversity, we are actively involved in various topic areas:

- Gender

We want to further increase the proportion of women in our total workforce, which is currently 28.9 percent (prior year: 28.8 percent). We also want to further increase the proportion of women in leadership positions, which – across all management levels – is currently at 20.4 percent (prior year: 20.0 percent). The aim is that by 2030 at least one in four leadership positions at Bosch worldwide is held by a woman.

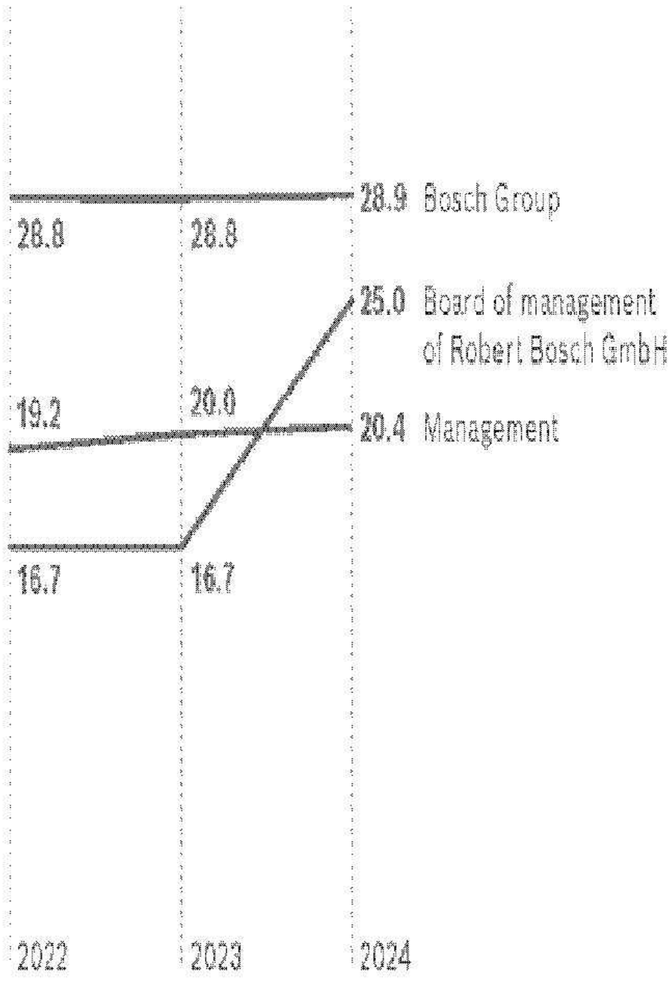
On account of legal requirements in Germany, targets apply for the proportion of women on the supervisory board, on the board of management, and in the first two management tiers below the board of management at Robert Bosch GmbH and the co-determined subsidiaries based in Germany. For further details, see the 2024 annual report (page 40 et seq.).

We offer comprehensive seminar and mentoring programs for women who hold or would like to hold specialist, project, and executive positions. They can also exchange views and ideas in networks like women@bosch and the heratec

G 30

Proportion of women

Bosch Group 2022–2024, in %



network of female engineers and gain inspiration for their everyday professional lives. External networks and events as part of Bosch memberships expand the range of opportunities for professional and interdisciplinary exchange among women. For example, Bosch is a member and cooperation partner of the international Women Automotive Network, which has set itself the goal of supporting women in the automotive industry. Representatives from Bosch took part in two meetings in 2024, one in Detroit, in the U.S., and the other in Stuttgart, Germany.

In Germany, Bosch is also a long-standing partner of the Women Leadership Network PANDA and was also represented by several female executives at the network's annual summit in Frankfurt am Main in 2024. Bosch wants to use activities like these to appeal to women, particularly in recruiting, and attract them to the company.

Generations

We create a work environment that fosters successful, cross-generational collaboration adapted to the different life stages. In this way, we want to seize the opportunities that the combination of diverse experiences, competencies, and perspectives of the different age groups can provide. We create the conditions for this through our lifelong learning concepts, occupational health management system, and systematic sharing of experience and know-how through the BestAger@Bosch associate network.

Cultural diversity

People from around 150 nations work together for Bosch. This diversity allows us to successfully cooperate with our customers, partners, and suppliers worldwide. Intercultural competencies are demanded every day. We therefore reinforce international collaboration and use our cultural diversity to further advance Bosch as a company. Our associates show their commitment too through their involvement in numerous networks around the world, such as Afric@Bosch, Asians@Bosch, Hispanics@Bosch, For Bosch abroad, and the Turkish Forum.

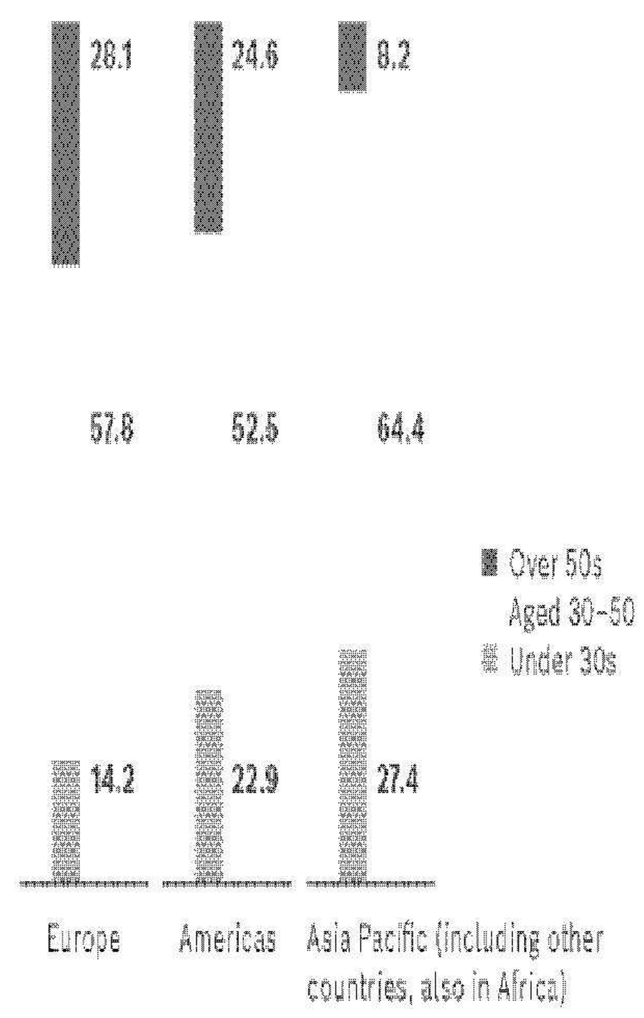
Physical and mental abilities

We increase our innovative strength by focusing on our associates' individual potential – not on their limitations. We therefore create an inclusive work environment that considers and appreciates individual needs and skills, in the

G 31

Total workforce by age group

Bosch Group by region, in %, as of December 31, 2024



realization that inclusion can only succeed if prejudices and reservations are overcome and the issue is addressed continually. We are committed to the inclusion of people with restricted abilities in internal (e.g. BeAdept@Bosch) and external networks and acknowledge our social responsibility in this area.

At 5.5 percent, the proportion of people with severe disabilities in the Bosch Group in Germany in 2024 remained at a level comparable to the previous year.

LGBTQIA+

At Bosch, all associates are valued – irrespective of their sexual orientation or gender identity. The b:proud associate network helps create an open corporate culture. In 2017, it launched the LGBT*IQAlly initiative. Allies are associates from all business sectors whose role is to openly address possible incidents of bias or discrimination to help shape the transition to an open work culture.

Goal management and implementation

Back in 2011, Bosch established a central project team to promote diversity, equity and inclusion within the company and embed the related commitment within the organization. Project management reports directly to the member of the board of management with responsibility for human resources and social welfare.

The team sets the framework by providing a global strategy and advising, supporting, and networking people and activities throughout the group. The team members are also engaged outside of the company (see www.bosch.com/diversity). The project team cooperates closely with the Booster Board, which includes colleagues representing different countries, organizations, and hierarchy levels. It serves as a sparring partner for the project team and as a multiplier. More than 140 coordinators worldwide as well as the numerous members of internal company networks also support the project team in embedding topics of diversity, equity, and inclusion within the organization and making them visible.

Bosch Diversity Days and Global Disability Conference

Bosch organizes Diversity Days each year in order to raise awareness of diversity, equity, and inclusion throughout the company and to demonstrate the strength the company and its associates can derive from these topics. More than 135 online and in-person events took place worldwide in 2024 with the motto "Be open". Not only did this create a shared sense of belonging across all career stages and borders, it also raised awareness of diversity at Bosch.

The Global Disability Conference took place for the third time in a row in 2024 under the motto #BeyondLimits. Internal and external speakers shared their experiences and knowledge at more than 20 online and in-person events.

Learning and development

New or changing business models and the use of digital technologies require our company to consistently adapt and transform. Our associates are called upon in this regard to continually acquire new competencies and skills and to adapt their qualifications and training to current and future requirements. Bosch supports them in this through competence management and various learning programs.

Associate development

Competence management at Bosch is a systematic process for identifying professional and methodological competences and helping associates to develop. In this way, we want to ensure that the required competencies, in other words the attributes, skills, and behavior, which are key to successfully dealing with current and future tasks, are available in the right place at the right time. Our competence model is defined in internal company regulations and sets the framework for recruitment, feedback talks, assessment of potential, and support programs. It comprises four competence areas: entrepreneurial competence, leadership competence, interpersonal competence, and professional competence.

The competence model is applied in different formats that support our associates in their personal development:

- Contribution dialogue[77]

As part of the annual performance review, executives and associates look back over what was achieved in the past year, and jointly discuss targets for the year ahead. Around 246,600 such dialogues were held in 2024.

- Development dialogue[77]

The development dialogue takes place between associates and their line manager, the next higher executive, and their HR business partner. It deals with the associate's medium- to long-term development goals and sets out the course for their achievement. Around 3,800 development dialogues were held in 2024.

- Talent and associate review

Once a year, executives, experts, and HR Business Partners discuss the potential of their associates in order to identify and advance talent at an early stage.

- Talent Pool

Talent Pool members take part in training programs to prepare for the requirements of the next-higher level and have the opportunity to network across sectors. In 2024, the Talent Pool included roughly 9,900 associates, the largest number yet since the platform was established.

[77] Since the end of 2024, the annual performance review (formerly the goal and performance dialogue) and the associate development dialogue (formerly the career and development dialogue) have been applied in a revised form.

Lifelong learning strategy

As a "learning company," Bosch supports a ongoing learning process with forward-thinking, motivational, and easily accessible learning programs that allow associates to quickly and flexibly acquire the necessary knowledge. We strengthen the employability of our associates in this way, help shield Bosch from the shortage of available skilled labor, and secure the company's capacity for innovation and competitive position into the future.

Internal company regulations define the competence development process. This requires all organizational units to derive strategic competencies and learning needs from the corporate strategy and to define role-based curricula, which are then assigned to associates and tracked during implementation. The following strategic objectives are being pursued:

- Smart learning via digital platforms

We invest in digital learning platforms and harness the possibilities of artificial intelligence to constantly offer our associates suitable learning opportunities. This allows them to acquire new knowledge faster than before at a time and place that suits them and at their own pace. In-person seminars are transformed into "learning journeys," consisting of various digital or social learning formats that can be completed individually or in groups. By 2030, 40 percent of the roughly 8,000 training measures are to be converted into modular or smart learning formats.

Online learning platforms (e-universities) offer our associates access to a variety of learning content and the means to obtain knowledge from external science and business experts in a self-managed format. Since the corresponding licenses were introduced in 2019, around 67,200 have been used by associates.

- Self-managed learning and mutual learning

There are a variety of learning formats, some informal or self-managed by associates, in which participants can share their knowledge in a network. Internal learning platforms leverage the expert knowledge available at Bosch anywhere and anytime. "Days of Learning" are also held annually in various business sectors.

In 2024, Bosch invested 252 million euros (prior year: 277 million euros) in training for its associates. Our associates attended a total of 729,679 training days in 2024 in the form of seminars and webinars (prior year: 827,968 training days).

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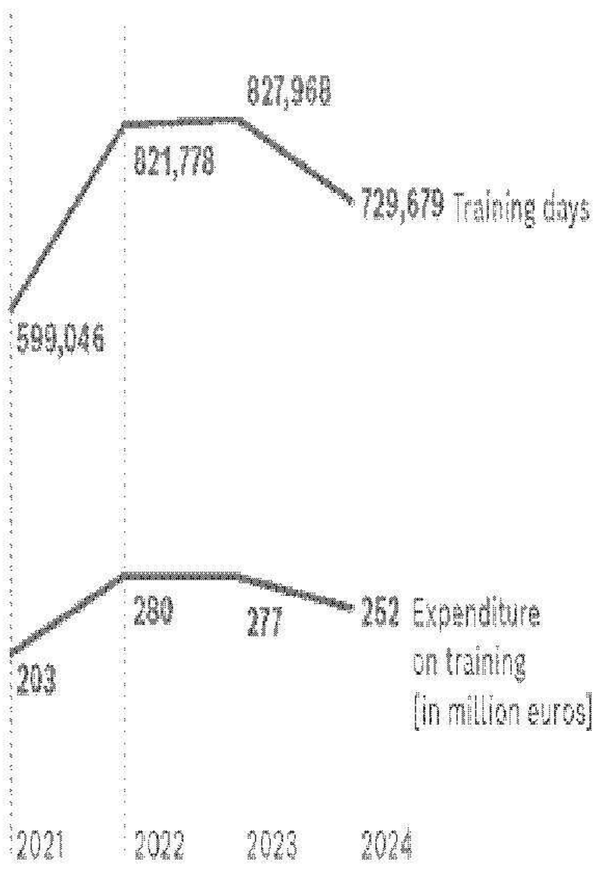
Training activities

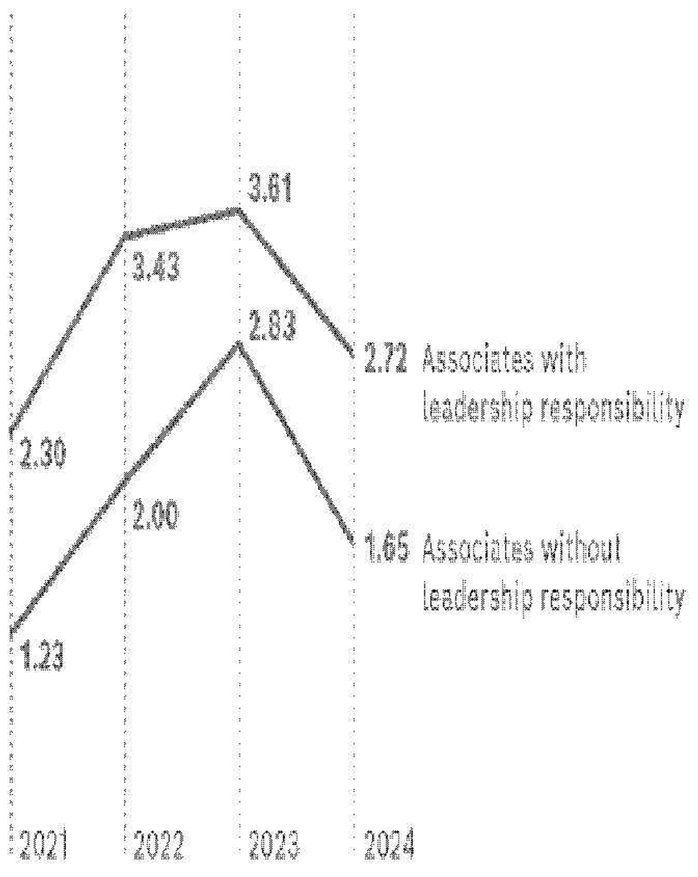
Bosch Group 2021–2024



G 33

Average training days

Bosch Group 2021–2024, without BSH Hausgeräte GmbH



These training measures are usually based on target-group-specific curricula set for associates with standardized profiles. At present, there are around 3,500 (prior year: 3,500 curricula) such curricula, while roughly 190,000 (prior year: 174,400) associates use at least one learning curriculum for their training.

All training measures are systematically evaluated. The associate feedback is made available to the providers and taken into account in revisions. In addition, the Learning Management System permits effectiveness audits in accordance with ISO for all formal training measures. Target group-specific curricula aligned to the competencies required by specific workforce groups are revised each year and adapted accordingly as requirements change.

Occupational health and safety

Measures to protect and promote associates' health and provide a safe working environment at all times are a top priority for Bosch. Internal company regulations define the relevant principles, organization and responsibilities within the Bosch Group.

The Sustainability and EHS corporate department manages occupational health and safety at Bosch using a group-wide process. The heads of the organizational units and company locations are responsible for compliance with the centrally defined requirements and goals. Designated EHS officers support them in this task. Current progress toward goal achievement is reported regularly to all executives as well as the board of management of Robert Bosch GmbH, also on an ad hoc basis in the event of particularly serious incidents.

As of the end of 2024, 241 out of the 252 relevant production locations and development locations (with material responsibility) had already implemented an occupational health and safety management system according to ISO 45001, of which 97 percent had been certified (see T 12). As a result, around 99 percent of the workforce currently work at production locations and development locations (with material responsibility) that have an implemented occupational health and safety management system. Our approach remains to use certified occupational health and safety management systems at all relevant locations.

By the end of 2025, we aim to lower the number of work-related accidents at Bosch to 1.45 accidents per 1 million hours worked. In the reporting year, the accident rate was 1.46 accidents per 1 million hours worked (prior year: 1.49). Regrettably, an employee of an external company died in an accident in 2024. We set up a working group at the end of 2024 to focus on accident prevention at external companies.

T 12

Occupational health and safety management systems (OHSMS)

Bosch Group 2024

Production locations and development locations[28]	**252**
Occupational health and safety management system implemented according to ISO 45001	241
Occupational health and safety management system certified according to ISO 45001	234

[28] The following applies to information on the occupational health and safety management systems: production locations and development locations (with material responsibility) with more than 50 associates and that have been included in the consolidated group for more than three years.

Based on the already clearly defined responsibilities and processes, the working group aims to develop additional measures to prevent accidents when using external companies.

Risk assessment

Every year, we identify and assess potential occupational safety risks and classify them by priority. For this purpose, we refer to accidents reported in the Incident Management System and use findings from internal audits under ISO 45001 or the audits of the internal audit department. On this basis, we develop specific risk mitigation programs and define the focal points for subsequent audits. We carry out an in-depth analysis of any work-related accidents causing at least one day of downtime, irrespective of whether Bosch associates or third-party staff are involved. In the event of serious accidents, special analysis methods are used to perform a detailed investigation of the root causes and to derive specific measures.

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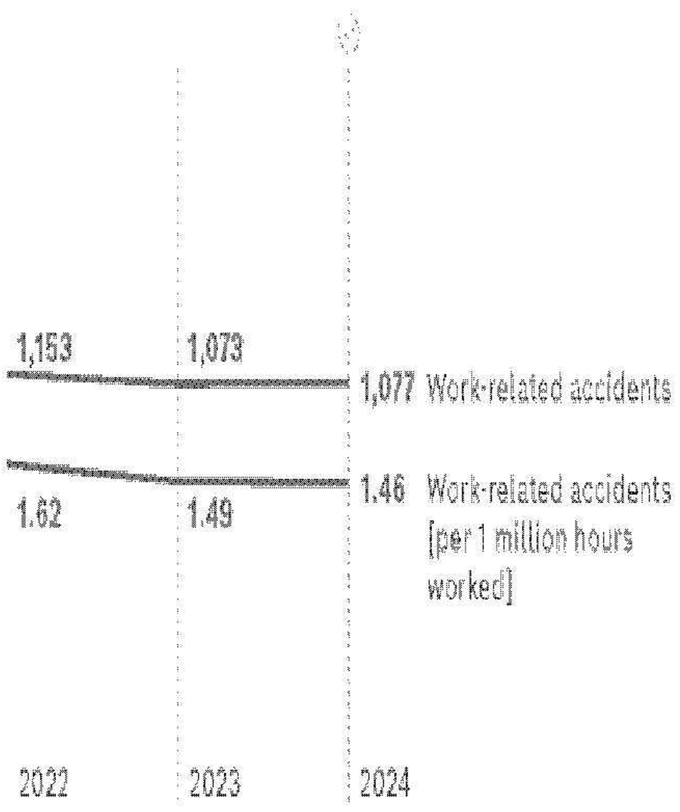
Work-related accidents

Bosch Group 2022–2024



Based on internal regulations, workplace or activity-related hazard assessments are also carried out regularly. These are used as a basis for determining any preventive and protective measures needed, and our associates are instructed accordingly.

Clearly defined regulations governing responsibilities and processes apply to occupational safety also when we use external companies at our sites. These apply right from the outset when we select a service provider. In this regard, we have set down key EHS requirements for suppliers in our Terms and Conditions of Purchase. Our service providers also agree to name a person in charge of ensuring compliance with the supervision and control duty. As part of internal audits, we check whether the requirements and defined protective measures are being complied with. In the event of discrepancies, appropriate remedial measures must be taken before proceeding with the work.

Training and awareness-raising

It is our conviction that occupational safety begins with each individual's awareness of deficits and their behavior. This is where we see the greatest potential for improvement, which is why we are focusing on measures to raise the awareness of our associates for occupational health and safety matters. To do this, we organize campaigns with a different focus each year in addition to our EHS competence management and regular instructions and training. As in the past few years, in 2024 we again focused on the early detection of dangerous situations and hazards (hazard recognition).

We already established a working group in 2023 to focus on accidents involving associates in customer support. This group develops measures aimed at preventing accidents that occur during activities at the customer's premises. With the working group on accident prevention for external companies established in 2024, we are covering another important area of accident occurrence.

Prevention and health promotion

Each individual's health is of vital importance both for our associates' motivation and satisfaction and thus for Bosch as a responsible employer. As a person's health depends on many factors, associates and the company work together to ensure a comprehensive approach to occupational health.

Occupational health management at Bosch covers a broad range of topics under the title "befit." These range from preventive medical care and physical and mental fitness to mental health and right through to tips on a healthy diet and workplace layout. An important role is also played by our reintegration management, leadership, training, and competence development in relation to individuals' health, as well as the integration of people with reduced capacity to work and severe disabilities. In Germany and other countries, medical care is provided in the workplace by an internal network of occupational health services with the support of external providers. In addition, many company locations have specialists on workplace layout, in-house social services, and health management to answer health-related questions.

Safety culture from the heart

Various campaigns at company locations raise the awareness of our associates for occupational health and safety matters. The Mexican site in San Luis Potosí not only addressed the workforce, but also the next generation under the motto "Safety culture from the heart". While the parents were able to interactively experience the effects of working without concentration in a model house for unsafe situations, a range of activities took place for the associates' children. They were trained to operate fire extinguishers and were able to take part in a first aid course. They also had the opportunity to leave a video message about safety for their parents – a measure that has contributed to the long-term success of the campaign. While more than half of all occupational safety incidents were caused by individual misconduct in 2022, the figure was only one third in 2024.

As part of our integrated approach to health management, strategic guidelines were published to better meet the needs and tackle the challenges in the individual regions and company locations. The goal is for all health experts to work together as part of a network and to establish a central point of contact for health issues at the company locations.

Occupational health measures and projects at the individual company locations are tailored to their size and respective needs. As the challenges differ from one country to the next, we manage the activities locally – for example in Brazil, China, India, the United Kingdom, or Romania. Regular online network meetings enable the leveraging of synergies between locations and also across borders in order to offer associates the broadest and most attractive range of services possible. In countries without full medical coverage,

Bosch has established partnerships with clinics at many company locations. In addition, digital platforms are offered that provide associates with information on contacts and activities as well as media libraries with a wide range of health topics.

BSH Hausgeräte GmbH operates its own occupational health management globally with "Health@BSH," which is based very closely on "befit" in terms of its approach.

Occupational health focal points

In order to reduce the number of absentees due to sickness, occupational health management at Bosch sets specific priorities based on the experience of the medical service and safety engineers as well as the health report issued by the Bosch company health insurance fund, and the insights from the surveys carried out as part of impact:wellbeing. Insights from occupational reintegration management and hazard assessments are also considered. As a result, medical conditions affecting the musculoskeletal and respiratory systems as well as mental illnesses were identified as focus areas. So-called health working groups are responsible for implementation at the individual company locations. Various structures and programs exist to maintain and promote mental health. The aim is effective prevention of mental illness and effective treatment and reintegration of associates with mental illness. Associates have access to a wide range of information and advice options through the digital health platforms and on-site advisory services. In Germany, in-house social services should be highlighted, which offer associates support in the event of psychosocial stress. The occupational physicians are also available as a first point of contact.

Specialist presentations across locations

In 2024, Bosch hosted monthly digital specialist presentations by internal and external health experts. In addition to physical and mental health, the topics also included social health, for example, the effects of cohesion. A large number of associates also took advantage of the opportunity to participate in one of the many in-person events that took place at Bosch sites in more than 20 countries.

OncoCure – cancer support

Bosch works in collaboration with the Robert Bosch hospital in Stuttgart in the framework of the OncoCure program to offer associates diagnosed with cancer the possibility of getting a second, independent opinion from specialists at the Robert Bosch Center for Tumor Diseases (RBCT) and, if appropriate, a genetic diagnosis. Associates in Germany, Spain, Austria, and Switzerland can currently avail of the new offer.

Complying with due diligence obligations relating to human rights and the environment

For us, respecting human rights means fulfilling our due diligence obligations to protect people and the environment, taking the relevant social and environmental standards into account. This is because as an industrial company with production locations and supply relationships in many countries and regions, we influence the situation of people and the environment in a variety of different ways.

Bosch has supply relationships in around 60 countries. From a total of around 35,000 suppliers worldwide, the Bosch Group procured materials and services worth 49.8 billion euros in 2024 (prior year: 50.9 billion euros). A large proportion of the resources used in our supply chain are purchased components – mostly semi-finished products or finished components. We only procure a small proportion directly as raw material.

As a globally operating company, we recognize our corporate responsibility to respect human rights. We contribute to improving human rights conditions worldwide by implementing due diligence obligations concerning human rights in our operational processes. At the same time, we actively demand respect for human rights in our global supply chains as well and take appropriate remedial measures in the case of violations.

Our business activity is aligned to the United Nations Guiding Principles on Business and Human Rights and we comply with the requirements of the National Action Plan for Business and Human Rights applicable in Germany. We implement the requirements of the German Act on Corporate Due Diligence Obligations in Supply Chains (Lieferkettensorgfaltspflichtengesetz, LkSG). The corresponding report and our statement of principle on human rights are available online.

We likewise expect our business partners to commit to respect human rights, to establish appropriate due diligence processes, and to oblige their own suppliers and other third parties to comply with corresponding principles to the best of their ability.

Risk management for implementing corporate due diligence obligations

The Bosch Group has established a risk management system for the implementation of corporate due diligence obligations in accordance with the German Act on Corporate Due Diligence Obligations in Supply Chains to ensure compliance with human rights and environment-related due diligence obligations. The system is directed both at the actions of the Bosch Group in its own operations and the

activities of our suppliers, and is described clearly and bindingly in internal company regulations. Implementation of the requirements is audited regularly.

With its own governance system, BSH Hausgeräte GmbH plays an independent role within the Bosch Group. It has accordingly drawn up its own set of rules for implementing corporate due diligence obligations. In terms of broad guidelines, however, the risk management system defined therein corresponds to the risk management system described below, which otherwise applies to the Bosch Group.

Responsibilities

The internal implementation of corporate due diligence obligations is the responsibility of the corporate departments of Robert Bosch GmbH and the organizational units concerned in each case. The requirements for fulfilling the due diligence obligations are prescribed centrally and the organizational units concerned implement these requirements in their processes.

The responsible corporate departments enhance their own management systems, if necessary, within the scope of the obligations placed on them. This includes defining implementation and control requirements, monitoring the controls, performing annual or event-driven risk analyses, conducting training, and supporting the organizational units in developing preventive and remedial measures. If necessary, the corresponding regulations also have to be enhanced. The organizational units concerned implement the requirements of the responsible corporate departments, develop preventive measures, and establish remedial measures in the event that a breach of human rights or environment-related obligations is sufficiently probable or has already occurred.

The human rights committee convenes twice a year under the chair of the human rights officer. It is made up of the heads of the responsible corporate departments and other corporate departments with an advisory role (compliance, risk management, legal affairs, communication). The committee evaluates the effectiveness of the risk management system and contributes to its further development.

The responsible corporate departments report proactively to the committee on the risk situation and the resulting measures in their respective functional area. In addition, they report on a regular and, if required, ad hoc basis to the human rights officer on the status of the management system, the risks identified, and the measures taken.

Overarching responsibility for the risk management system was transferred to the member of the board of management of Robert Bosch GmbH responsible for sustainability. The relevant information for exercising this role is made available to the board member, in particular, by the human rights

committee as well as by the human rights officer, who reports directly to the board member. The board member attends the committee's meetings regularly. Moreover, the individual members of the human rights committee each have direct reporting lines to the board of management. All compliance officers are furthermore obligated under the Bosch Group's compliance management systems to inform the board of management once a year concerning the implementation of the due diligence obligations in their own functional area.

Codes of conduct

Bosch's Code of Conduct applies to all associates.[28] It requires them to comply with the relevant laws and internal regulations. This is especially the case in relation to ensuring respect for human rights. We provide regular training for associates on the content of the Code of Conduct. Clearly defined requirements for our security personnel, training programs on human rights, and far-reaching supervision measures aim to prevent behavior that violates human rights vis-à-vis our associates and third parties.

Bosch's Code of Conduct for Business Partners requires that our suppliers comply with social and environmental standards and is therefore critical for collaboration between our suppliers and Bosch.[29] We also expect our suppliers to use their best efforts to require their own suppliers and other third parties to comply with the appropriate principles. Further information on the Bosch Group's Code of Conduct and the Bosch Code of Conduct for Business Partners can be found in the "Governance | Compliance" section.

Since the Bosch Group's updated Code of Conduct for Business Partners was published in 2022, current suppliers of direct materials are asked to actively confirm the Code of Conduct – by the end of 2024, around 82 percent of suppliers contacted had already acknowledged the Code of Conduct (prior year: 71 percent). We are seeking to achieve a further increase in 2025 as well.

Regarding indirect materials (material and goods that are not directly related to products), we endeavor to have the Code of Conduct acknowledged each time a contract is awarded. The current acknowledge rate is 99 percent (prior year: 97 percent). Considering the number and diversity of our suppliers, should it happen that confirmation is outstanding in some cases, we address these cases in the context of our risk management.

In terms of environmental protection, we expect our suppliers to set up and continuously refine, within reason, an environmental management system certified to ISO 14001 or a suitable environmental management system for the industry. In 2024, around 71 percent of our relevant direct materials suppliers (excluding BSH Hausgeräte GmbH) had such a certificate (prior year: 69 percent). Suppliers without manufacturing operations are not required to adopt an environmental management system of their own, but they do have to implement corresponding measures.

[28] BSH Hausgeräte GmbH has developed its own Code of Conduct for Associates and its own Code of Conduct for Suppliers.

Complaints procedure

Our complaints procedure allows critical issues to be identified at an early stage and thus potential human rights or environment-related risks and violations to be uncovered, counteracted, or remediated. We therefore regard our complaints procedure as an important element of our human rights strategy, which helps us to continuously improve our processes for respecting human rights.

Our suppliers are made aware of our reporting system in the Code of Conduct for Business Partners, among other means.[30] By acknowledging this Code of Conduct, they agree, in particular, to establish a reporting system or to participate in an industry-wide system. They also agree to inform their associates accordingly.

Further details on the complaints procedure, our reporting systems, and the number of reports received can be found in the "Governance | Compliance" section.

Exchange with stakeholders and right holders

Bosch engages in regular exchanges with German and international employee representatives, takes part in joint initiatives with NGOs (e.g. Sector Dialogue Automotive Industry), and actively participates in public discourse. The company's views are taken into account in preventive and remedial measures through its dialogue with suppliers and direct exchanges with associates of suppliers within the scope of assessments. At the same time, we are continuously working to raise awareness of our reporting systems and complaints procedures both in our own operations and in the supply chain through targeted campaigns.

Potential human rights and environment-related risks

We adhere to uniform principles throughout the Bosch Group to prevent and mitigate risks. Individual elements of prevention are organized slightly differently in order to take account of the range of business models and supplier relationships within the Bosch Group.

The responsible corporate departments perform annual and, if necessary, event-driven risk analyses in order to improve understanding of human rights and environmental impact, identify potential vulnerabilities, and develop suitable preventive measures. This is done using standard evaluation methods to ensure comparability between the different operating units. The risk analysis comprises four steps:

» Risk identification

The responsible corporate departments identify areas where risks might occur. This could be a country, a plant or a business partner. General risks in regions can be determined using indicators from independent institutions such as the World Bank or the United Nations. Risks can also be derived from certain industrial activities or known critical sectors. In addition, we also consider any indications of risks we receive from internal processes, such as the internal control system or internal audits, as well as from the public realm, from our partners in the supply chain, or through our reporting systems.

[30] BSH Hausgeräte GmbH has developed its own Code of Conduct for Suppliers and operates its own reporting system.

Risk assessment

Risks are assessed using a uniform model and presented according to a standardized scale at Bosch in order to ensure the comparability of the results. Assessment criteria include the potential severity and impact of a potential violation, the irremediability of consequences, and the likelihood of a risk occurring.

We adhere to clearly defined principles when assessing risks. The responsible corporate departments assess the risks relating to their own business activities in a top-down or bottom-up approach (e.g. through questionnaires), depending on the processes in question. We developed a grading system for risks in the supply chain and use international indexes such as the Global Slavery Index or the ITUC Global Rights Index to assess the respective supplier's potential risk. A supplier's sustainability performance – such as audit results, acceptance of the Code of Conduct for Business Partners, or external certifications – is likewise included in the assessment and used to substantiate the results.

Prioritization

Risks are prioritized in each functional area with the aim of targeting the use of preventive measures and enhancing existing processes. The results of the risk assessment determine the prioritization within Bosch's direct sphere of influence. Additional factors are considered in the supply chain such as the extent to which each supplier contributes to causing a risk and the possibilities Bosch has to exert influence.

Measures

Should deficiencies arise in the risk management system, adjustments must be made and relevant measures introduced in the responsible corporate departments to counter these directly in the risk field concerned. In addition, risks that affect a number of functional areas or risk fields are managed by the human rights committee for the entire Bosch Group so that comprehensive measures can be developed.

We systematically review reports we receive through our reporting systems, for example, or that arise within the context of media monitoring and decide on the need for an event-driven risk analysis depending on the particular findings.

Potential risks for human rights in the company's own operations and at direct suppliers

Essential employee rights are derived from human rights, which is why we also pay special attention to people's situations at the workplace. First and foremost, we consider the risks associated with forced labor within our own operations and at direct suppliers (tier 1), in line with the definition of the International Labour Organization, (ILO Convention 29, Article 2). The risk already identified in the 2023 risk analysis in connection with recruitment fees was substantiated by the 2024 risk analysis. Recruitment fees are payments that employees have to make to employers or third parties as part of a recruitment chain in order to obtain a job. Such practices are often an indication of forced labor.

To express Bosch's rejection of such practices and to protect our associates, we introduced a policy in 2024 that regulates the topic of recruitment at Bosch and contains specific stipulations that also cover the topic of recruitment fees.

Potential risks for human rights further down the supply chain

Raw materials extraction and its circumstances are often particularly risk-sensitive from an ecological and social point of view. While Bosch itself only sources very few raw materials directly, potentially high-risk raw materials are processed in primary products and materials.

We want to mitigate risks related to human rights and the environment that are inherent in raw materials extraction through our involvement in various programs and measures. In the case of raw materials that can have adverse effects on people and the environment, we also regularly review the risk exposure and counteract potential risks, taking into account the corresponding OECD guidelines and the legal framework conditions.

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15 high-risk raw materials

Cassiterite (tin)	Lead	Lithium
Coltan (tantalum)	Graphite	Manganese
Tungsten	Natural rubber	Nickel
Gold	Cobalt	Platinum
Aluminum	Copper	Rare earth elements

In an analysis of raw materials, we identified 15 high-risk raw materials that Bosch uses and launched specific risk-mitigating programs (see G 35). These programs are managed by the Supply Chain Management and Sustainability and EHS corporate departments and implemented in the divisions. A binding standard process has been established in the purchasing departments for all identified raw materials. Depending on the material-specific risks, specific visions are defined accordingly for each high-risk raw material along its generic value chain. These visions reflect Bosch's expectations of its suppliers, such as a desired level of certification, and will be the focus of further corporate activities. In 2024, for example, we conducted a specific CSR quick scan of almost all direct suppliers and one of their tier-n suppliers for the raw material lead.

We continue to pursue the vision of establishing 100 percent certified smelters in our supply chains in the future and we communicate the associated ambition to our suppliers. However, as scarcely any certification standards exist on the market as yet for many materials, we will continue to closely monitor the situation so that we can take emerging standards into account in our strategy in due course.

Handling conflict minerals

Bosch uses various instruments to reduce risks from the area of conflict minerals. For example, we use specific risk analyses based on reports from our reporting systems. Furthermore, we have been using our Bosch Group Policy for Conflict Raw Materials since 2019 for the relevant suppliers. The policy describes our requirements for dealing with the conflict minerals cassiterite (tin), coltan (tantalum), tungsten and gold as an additional agreement.

At the same time, we use reporting in accordance with the Responsible Minerals Initiative (RMI) to obtain transparency about the proportion of certified smelters in the supply chain. Bosch has been involved in RMI Conflict Minerals Reporting and Cobalt Reporting since 2014. We are also working to ensure that suppliers of materials containing conflict minerals or cobalt have the smelters in their supply chains certified by the RMI.

In 2024, the certification rate among smelters was 86 percent for coltan (tantalum) (prior year: 91 percent). At the same time, 66 percent (prior year: 67 percent) of tungsten smelters are certified, while the rate for tin smelters lies at 74 percent (prior year: 80 percent). A proportion of 53 percent of gold smelters are certified (prior year: 55 percent). The reported certification rate for cobalt is 62 percent (prior year: 81 percent).

With respect to BSH Hausgeräte GmbH's suppliers, the certification rate among smelters is 97 percent for coltan (tantalum) (prior year: 92 percent), 84 percent for tungsten (prior year: 83 percent), and just under 90 percent for tin (prior year: 84 percent). A proportion of 77 percent of gold smelters (prior year: 80 percent) are certified, for cobalt the rate is 85 percent (prior year: 77 percent).

On request, Bosch provides customers with the RMI's Conflict Minerals Reporting Template, which is recognized by authorities such as the U.S. Securities and Exchange Commission. It can be obtained via established platforms, such as iPoint and HP CDX, or it can be sent to individual requesting parties.

Responsible supply chain management

Compliance with human rights and environment-related requirements, such as those set out in our Codes of Conduct for Business Partners, already plays a crucial role when selecting new suppliers and is a prerequisite for subsequently entering into a contractual relationship. The corresponding timing and the audit methodology used are determined by the respective purchasing organizations according to the risk. As part of the sanctioned party list screening, a check is additionally carried out prior to the conclusion of a contract to determine whether potential business partners are included in sanction lists or affected by embargo regulations.

If there is reasonable suspicion or concrete evidence of a violation of human rights or environment-related obligations by a supplier, we systematically investigate the facts of the matter. If we discover breaches of duty, we work to ensure that these are rectified immediately. Should this not be possible in the foreseeable future, we expect the supplier to present a plan and a specific time schedule for ending the breach and minimizing its effects. We track and monitor implementation of the measures – also by consistently requesting documented proof or by performing reassessments on site. Active suppliers found to be engaged in unlawful conduct or whose sustainability performance is deemed inadequate, such as a lack of effort in dealing with human rights or environment-related requirements, may be excluded by Bosch from any further awarding of contracts. If a supplier does not appear willing to fulfil our requirements or introduce corresponding measures, Bosch reserves the right to terminate the contractual relationship in extreme cases.

If there is reasonable suspicion of misconduct on the part of an indirect supplier, we initiate targeted preventive measures within the scope of our possibilities, such as controls and, if necessary, appropriate remedial measures through our business partners.

Assessment and monitoring

We regularly audit our suppliers both preventively and when the situation demands. Such an audit is generally carried out when we commence new supplier relationships, with the findings of our risk analyses then determining the type, scope, and frequency of the audits. Different methods are used depending on the prevailing framework conditions and the specific risk situation: verifications performed by Bosch itself (quick scans and drill-deep assessments), third-party audits, and self-declarations by suppliers.

Quick scans are based on a checklist of specific criteria relating to the environment, occupational health and safety, and human rights. Supplementary questionnaires are used, for example, for selected material groups and logistics services. Quick scans are carried out by qualified Bosch associates from purchasing or quality functions, frequently as part of regular on-site visits to suppliers. In 2024, we conducted around 3,200 quick scans, maintaining the same level as the prior year.

Drill-deep assessments are used mainly in potentially high-risk regions or industries, or when there are any specific indications of non-compliance. Irrespective of any other visits to suppliers, drill-deep assessments are carried out by internally licensed assessors and take between one and two days. They are announced so as to ensure that the required experts – such as environmental or safety officers – are on-site. Besides an in-depth assessment of the three areas covered by quick scans – the environment, occupational health and safety, and human rights – they also comprise an

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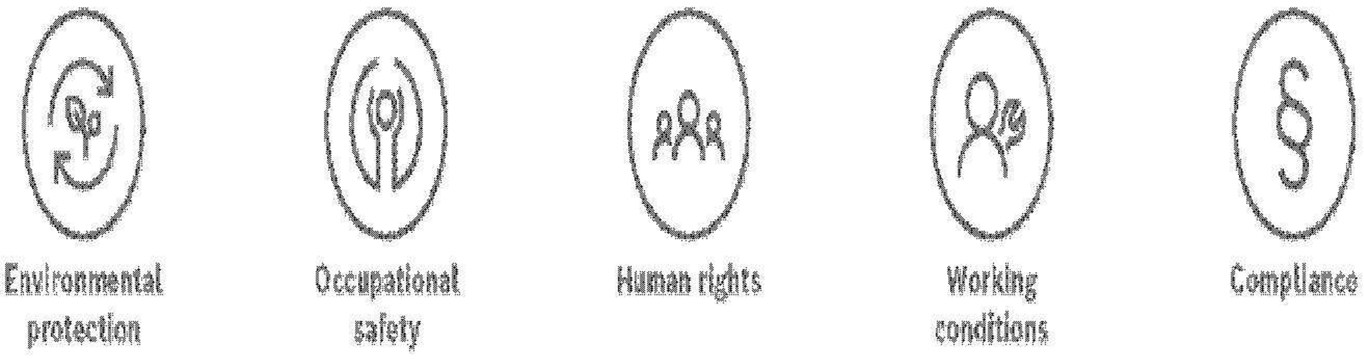
Selected in-scope content of drill-deep assessments



analysis of working conditions and compliance management. The assessment covers the practical implementation as well as system-based requirements, such as in the form of guidelines, which allow conclusions to be drawn about the maturity of the organization. The number of drill-deep assessments depends on the risks identified and the corresponding nominations, which is why the total number of assessments carried out varies from year to year. In 2024, Bosch conducted around 75 drill-deep assessments at suppliers (prior year: 120).

In addition to our supplier audits conducted by internal auditors, we also draw on the results of compatible third-party audits. This helps avoid multiple audits at our suppliers. One example of this is external audits according to the standard developed by the automotive industry's Responsible Supply Chain Initiative (RSCI), which Bosch is actively involved in as a member. From 2025, Bosch will also be an affiliate member of the Responsible Business Alliance (RBA). Originally founded by the electronics industry as a nonprofit organization, the internationally active alliance is committed to good management practices that respect human rights and promote transparency throughout the supply chain. Members undertake to implement the RBA Code of Conduct. External audits based on the RBA Code as a comparable standard contribute to the monitoring of our own management system and the fulfillment of due diligence obligations to check human rights risks in the supply chain.

Self-declarations are eligible as a means of checking suppliers where the risk is assumed to be low and there have been no issues in the past. The prerequisite is that the assessed risk of the group of suppliers or of the material group is queried and trustworthy documentation is provided to substantiate that the questions have been truthfully answered.

On aggregate, we assessed around 82 percent of our relevant direct materials suppliers (excluding BSH Hausgeräte GmbH) using the various methods by the end of 2024 (prior year: 76 percent). We also assessed 77 percent of indirect materials suppliers who are particularly relevant in terms of country risk and field of materials risk (prior year: 85 percent). Most of these were on-site assessments.

The insights we have obtained from the various assessments show that suppliers meet our requirements for the most part. Improvements were required in individual cases, and Bosch expects these to be implemented. Priority areas in 2024 also concerned aspects of environmental protection as well as occupational health and safety, such as marking escape routes, protecting work equipment and storing hazardous substances properly.

Training programs

Our associates in the purchasing function receive web-based as well as classroom training programs. All associates in purchasing watch a mandatory training video that provides an overview of the current strategy in purchasing and the requirements for suppliers in terms of climate action and human rights. Around 1,850 associates took part in this training in 2024.

Another training module that has already been in place for several years provides associates who manage suppliers not only with a general overview of topics, but also with information on the requirements expected from suppliers and the procedure for the quick scans in particular. We offer training programs for suppliers so that they can further consolidate their knowledge of our expectations in relation to the respect of human rights and environment-related standards. In 2024, the webinar on the topic of sustainability was accessed around 2,500 times.

Stakeholder dialogue and involvement in associations

Bosch regularly presents awards to its best suppliers around the world in recognition of their performance. The Bosch Global Supplier Award is bestowed every two years; the next award ceremony is planned for 2025. Suppliers have been recognized for their performance in the "Sustainability" category since 2021. Finalists in this category have at least an "A-" rating from CDP and make an exemplary contribution to climate action.

Bosch is involved both in VDA committees on sustainability, the Responsible Supply Chain Initiative (RSCI), and the "Sector Dialogue Automotive Industry" of the German Federal Ministry of Labor and Social Affairs. We are also active at a cross-company level in "econsense – Forum Nachhaltige Entwicklung der Deutschen Wirtschaft e.V." (Forum for Sustainable Development of German Business). Within the forum's "Human rights and supply chain" cluster, we work together with other partners on how to responsibly design global supply chains.

Responsibility to customers

Bosch products aim to impress thanks to their safety, quality, and reliability – regardless of where they are produced or used. In developing and manufacturing these products and in rendering services, we stay true to our "Invented for life" mission statement beyond compliance with the law.

Our Product Compliance Management System (PCMS) is designed to satisfy all the regulatory requirements relevant to our products in the respective market. It applies to all products (hardware, software, and services) within the respective product life cycle and considers product-related aspects such as health, safety, data protection, information security, cybersecurity, intellectual property, and environmental protection. Our PCMS includes elements that help us to identify, monitor, control, and minimize risks related to product compliance. We give due regard to product compliance throughout our entire supply chain.

Product compliance is generally the responsibility of the corporate department for quality. Reports are submitted to the responsible member of the board of management at least once a year. In addition, ad hoc reports are submitted to the board of management and, if necessary, directly to the supervisory bodies.

Our quality policy

Due to our wide-ranging product portfolio, we apply a large number of different laws and regulations worldwide governing quality assurance. Internal company policies create a binding framework for setting quality objectives and commit the organization to continuously work to improve the quality management system. They also define the process for handling complaints and for solving problems sustainably.

The majority of our production locations and development locations have a quality management system certified according to ISO 9001. All sites that manufacture vehicle components are certified according to the IATF 16949 standard, which is based on ISO 9001 and was developed by the International Automotive Task Force (IATF).

Starting with product development, we attach great importance to product safety and satisfy relevant standards, such as ISO 12100 for the safety of machinery, ISO 26262 for the functional safety of systems in passenger vehicles, or IEC 61508 for the functional safety of electrical and electronic systems. Products are not released for series production until all safety aspects have been fully clarified. In addition, compliance with pertinent specifications must be established and verified accordingly, for example through precautionary tests.

We perform product monitoring to the required extent throughout the entire product life cycle of safety-relevant products. Comprehensive training establishes the preconditions for ensuring that everyone in the company is committed to, and puts into practice, Bosch's quality standards – especially with regard to the provision of safe products. For associates whose activities directly influence product quality, we provide training programs on product safety and product liability (see also the "Governance | Compliance" section). To deepen their knowledge, the product safety and product liability officers of the various divisions have access to more in-depth classroom and online training courses.

Information and documentation

In addition to the existing information and documentation obligations, we offer learning opportunities for users to help them to use the product correctly and operate it safely. For example, Bosch Mobility Aftermarket offers learning opportunities for workshop associates, while Power Tools provides appropriate opportunities for consumers.

Cybersecurity, information security, and data protection

Cybersecurity, information security, and data protection are elementary components of our quality standards at Bosch. We see trust in the security of products, systems, and data as well as their resilience to attacks involving manipulation as a crucial success factor in realizing our digitalization strategy. This also means dealing with personal data in a responsible manner.

We ensure that all business processes and products comply with data protection regulations and that all necessary information security measures are implemented. This means that we comply with applicable law and respect the corresponding contractual obligations. We strive to protect relevant information and in particular personal data from unauthorized disclosure, access, manipulation, and loss through the use of technical and organizational measures adequate to the risk. We apply these information security measures when selecting, using, and operating IT solutions in close coordination with the applicable cybersecurity standards. As part of the development of Bosch products and new business models, we ensure that the data protection and information security regulations and requirements are taken into account at an early stage and put into practice at each stage.

Bosch uses a combined information security and data protection management system that is continuously maintained and updated. The system is aligned with international standards, such as ISO 27000, and also takes account of legal requirements such as those pursuant to the General Data Protection Regulation (GDPR). The majority of company locations that manufacture vehicle components are certified according to TISAX (level 3). Respective policies and internal company regulations cover all relevant areas of cybersecurity, information security, and data protection at Bosch. They comprise binding instructions for developing products and services, the operation of servers and other IT systems, as well as basic principles relating to company information security and data protection.

A cross-functional steering committee, which includes the chief data protection officer and the chief cybersecurity officer, reports directly to the board of management twice a year. Furthermore, we have set up a separate corporate office that is responsible for the cybersecurity of our products.

A clearly documented process as well as a growing network of experts ensure that cybersecurity, information security, and data protection are widely integrated in the development of our products. The associates regularly take part in specialist training programs, workshops, and information events on current topics as part of their duties.

Bosch Product Security Incident Response Team

Despite all precautionary measures, however, there is no such thing as absolute security in information technology. That is why we have established the Bosch Product Security Incident Response Team (PSIRT). The team serves as a central point of contact for security researchers, partners, or customers should they detect any vulnerabilities in our products. Security gaps can also be notified through our reporting systems (see the "Governance | Compliance" section). When a solution has been found, we make it transparent for our customers.

Responsible advertising

The trust of our customers in our services and in the quality of our products is our highest priority. The diverse customer services offered by our divisions range from knowledge databases with interactive learning programs as well as repair and maintenance services through to a service portal for energy-related remediation and advice on subsidy rates relating to heating, ventilation and cooling systems. At the same time, we make use of various opportunities to engage in direct and indirect dialogue with customers, for example through our social media channels, service hotlines, by e-mail, or in direct talks. In fact, we view our customers' feedback as a reliable yardstick against which we can measure our actions.

Marketing and sponsorship

When we market our products, we refer to our Bosch values for guidance as well as central principles, such as fairness and valuing cultural diversity. In addition, we are committed to maintaining a quality level in all our marketing activities that matches our products' performance standards. In this respect, advertising can be humorous, creative, and competitive. To ensure that these principles are applied and messages are consistent across the complete media mix worldwide, overarching marketing communication is organized centrally and closely coordinated with the regional companies and divisions. Sales-oriented product communication is mostly organized locally by the respective divisions, but it also follows the defined principles.

Our sponsorship activities mainly serve promotional purposes, including strengthening our brand. They are governed by an internal regulation. This stipulates, among other things, that sponsorship measures must be integrated into an overall communications strategy or concept. The objective of measures also has to be clearly defined and focused on increasing brand recognition and reputation, promoting sales, or attracting qualified talent. Corporate headquarters must be consulted for sponsorship measures in excess of 30,000 euros.

BOSCH

Sustainability report 2024

Governance

Compliance with the principle of legality as well as responsible and fair business practices are part of the Bosch values and a top priority for our company.

Compliance

Compliance refers to the observance of legal requirements and internal regulations. The global compliance management system (CMS) is an integral part of the measures for implementing corporate governance in the Bosch Group and comprises structures and processes for the organizational safeguarding of compliance requirements. It is based on auditing standard IDW PS 980 and is described in an internal regulation.

In addition to rule-based compliance, we are continuing to develop the values-based approach. Our ambition is that our associates not only regard values-based conduct as an obligation, but that they act in a compliant manner of their own volition. The CMS is preventive in nature and is designed to encourage all associates in the Bosch Group to identify compliance risks and violations at an early stage and to respond appropriately. This should also ensure a reduction in risks for the Bosch Group, its associates, and its corporate bodies. At the same time, we want to protect and cultivate the reputation of the Bosch Group, which is the basis of our customers' and business partners' trust.

BSH Hausgeräte GmbH operates an independent compliance management system, which is likewise based on the IDW PS 980 methodology and is supported by its own global compliance organization.

Organization and regulations

Robert Bosch GmbH's board of management has assigned responsibility for the implementation of corporate governance in key compliance areas to specific corporate departments. They implement corporate governance for the compliance area assigned to them throughout the Bosch Group. In doing so, they take the requirements of the risk management system and the internal control system into account.

The compliance committee supports the implementation of the Bosch Group's CMS and coordinates compliance areas. In addition, it contributes to the risk-based further development of the CMS. The compliance committee comprises the heads of the Compliance Management, Legal, Internal

Auditing, HR, Risk Management, and Quality Management corporate departments. A sanctions committee decides on recommendations for disciplinary measures in the event of serious compliance incidents.

The compliance committee is chaired by the chief compliance officer, who also heads the Compliance Management corporate department, which is responsible for the compliance area of anti-corruption as well as for the compliance area of information security and data protection, and for overarching key elements of the Bosch Group's CMS (e.g. compliance training, operating and further developing Bosch's reporting system, serving as a point of contact for reports of misconduct, and conducting internal investigations). The chief compliance officer reports, both regularly and on an ad hoc basis, directly to the member of the board of management of Robert Bosch GmbH responsible for compliance. A comprehensive written report is prepared once a year. If necessary, the chief compliance officer is also entitled to contact the chair of the supervisory board directly.

The supervisory board's audit committee discusses the appropriateness and effectiveness of the governance systems with the board of management at least once a year and receives reports on the material risks and compliance issues. It also discusses measures for the adaptation and further development of corporate governance systems.

In the Bosch Group's regions, compliance offices have been set up as part of the Compliance Management corporate department. One of their tasks is to support the regions in fulfilling their obligations under the CMS and in conducting internal investigations. For this purpose, they have unrestricted authority to demand information and perform investigations, are independent in exercising their duties, and bound only by the instructions of the Compliance Management corporate department. In Germany, the divisions are supported directly by the Compliance Management corporate department; internal investigations are carried out by an independent organizing body within the Compliance Management corporate department.

Implementation of corporate governance within the framework of the CMS is reviewed in the course of internal audits performed by the Internal Auditing corporate department. In addition, we review our CMS in the context of external audits and consulting engagements and take the results as an opportunity to further develop and optimize our CMS.

Risk-based compliance checks

We conduct global analyses of corruption and antitrust law risks based on a regular cycle. In 2024, we repeated the analysis and also included checks of money laundering risks.

The risk analysis covered 258 legal entities that were selected based on certain criteria such as headcount, sales revenue, and specific risk indicators (e.g., the current Corruption Perception Index published by Transparency International). In addition, we carried out further in-depth analyses in selected regions and subsidiaries.

We evaluated the results and initiated appropriate measures that will be implemented in 2025. These include, for example, activities to raise awareness among associates regarding individual risks, supplementary training programs for specific target groups, or even random checks of

compliance with rules and processes. To document and track the measures, we use a central database. We plan to further develop and digitalize our approach in terms of technology and content in 2025.

Our business partners are likewise regularly subject to a standardized and risk-based compliance check. This encompasses both customers and suppliers, potential acquisition and takeover targets, as well as possible partners in the establishment of joint ventures.

The depth and scope of the checks depend on various factors, such as the nature of the business relationship. Corporate and personnel structures can also play a role. Checks focus in particular on non-compliance with the law or official regulations such as applicable penal laws, environmental regulations, and human rights. We refer to information in the public domain for this purpose. The findings are assessed using a standard process and appropriate measures are defined and introduced to the extent necessary. These can range from a more in-depth assessment right through to withdrawal from the business relationship or project. In 2024, we made technical enhancements to the processes of our business partner check and preparations to replace the existing IT solution with a new system in 2025. This strengthens our risk-based approach and further increases the efficiency of our checks.

Codes of conduct

In 2024, we completely revised our Code of Business Conduct and republished it as the Code of Conduct.[31] In addition to legal developments, the results of benchmarking studies and user expectations were also taken into account.

The new document provides guidance for all Bosch associates on values-based, ethical, and legally compliant behavior. The Code of Conduct defines basic rules of conduct in the company and provides guidance on issues such as accepting gratuities or the prevention of conflicts of interest. The Code of Conduct also describes our social responsibility, including respecting human rights. The basic principles of the Code of Conduct are specified in other central policies and in local regulations, in which we also take a clear stance against dumping.

The Code of Conduct is available to associates in more than 30 languages as a brochure and was communicated in a letter from the chairman of the board of management of Robert Bosch GmbH to all associates worldwide at the start of the year. All associates exempt from collectively bargained agreements have to confirm their acknowledgement of the document. In addition to the long version, there is also an abridged version that summarizes the key messages. Furthermore, the Code of Conduct is also available to internal and external stakeholders online as a pdf download and as a website with further information.

[1] BSH Hausgeräte GmbH has developed its own Code of Conduct.

We have also prepared a new Anti-Corruption Policy as an umbrella regulation for further compliance rules on anti-corruption, focusing especially on gifts and invitations, sponsorship, donations, staff rotation, and conflicts of interest. At the same time, we have fundamentally revised our requirements with respect to gratuities.

In Germany, for example, the acceptance and issue of gifts is permissible up to a limit of 50 euros, gross, per year and recipient without the need for further approval. We have also standardized the requirements for certain recurring issues and regulated corresponding limits and approval requirements. Depending on local law, other requirements and limits may apply to those in Germany. So-called facilitation payments – payments made to officials to expedite an administrative service to which the payer is generally legally entitled – are still explicitly not permitted worldwide. These regulations are set to come into force in 2025, accompanied by corresponding training programs.

We feel that responsible and lawful conduct is important beyond company boundaries and have clearly formulated our expectations in our Code of Conduct for Business Partners.[32] In this way we require suppliers to the Bosch Group to comply with human rights and environment-related principles and to put in place appropriate due diligence processes. We likewise require them to pass on this expectation to their own suppliers (see also the "Social | Complying with due diligence obligations relating to human rights and the environment" section). Referenced in the Terms and Conditions of Purchase, this code is generally made an integral contractual element and is sent to all suppliers at the beginning of the business relationship.

Compliance training

We use various training programs and communication measures to raise our associates' awareness of compliance issues. The compliance training program[33] is available to our associates in the form of web-based training (WBT), in-person events or webinars as well as corresponding documentation (see T 13). Participation is mandatory for certain groups of associates, who are selected via a risk-based approach. For example, these include associates exempt from collectively bargained agreements due to their specific responsibility as specialists or managers, but also numerous other associates in selected areas or in special functions. The training content must be repeated regularly, usually at two- to three-year intervals. Our training programs are regularly refined and updated to accommodate new content and developments, as well as feedback from participants.

In addition to the company's own associates, people who are not Bosch associates can also be trained, in compliance with labor, company, and tax law requirements. These include associates of contractual partners or affiliated companies.

[32] BSH Hausgeräte GmbH has developed its own Code of Conduct for Suppliers, which is comparable in content.

[33] BSH Hausgeräte GmbH has developed its own compliance training program.

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The minimum compliance training courses currently held worldwide have been completed over one million times to date. With the new basic compliance training on the Code of Conduct, all associates must complete at least one mandatory compliance training course.

Participation in the minimum compliance training courses is tracked using a dashboard, which also reflects participants' feedback as a basis for improving the quality of the training. Particular attention is paid to checking that training has been completed on time. In the event that training courses are overdue, reminders are automatically sent to the associates, executives, and HR business partners to complete the outstanding training.

Four new training modules were added to the compliance training program in 2024. In the area of accounting law, the "Value limits for internal approvals" WBT was made mandatory for all associates with leadership responsibility. Mandatory information on the prevention of money laundering is also new. Furthermore, the existing area of customs and export control law was expanded to include two training modules on export control and sanctions.

Compliance at Bosch is also an integral part of the annual performance review. Associates actively confirm in the related documentation that they have taken due note of the Code of Conduct and the internal regulations of relevance to them and will act accordingly.

T 13

Areas covered by the global minimum compliance training courses

Area	Topic	Format
Business ethics	Code of Conduct	WBT, document
	General compliance awareness	Video
Anti-corruption	Anti-corruption	WBT
	Anti-corruption for Germany	Webinar
Accounting law	Value limits for internal approvals	WBT
Anti-money laundering	Money laundering prevention	Document
IP compliance	Dealing with classified information	WBT
	Software license management	WBT
Antitrust law	Antitrust law	WBT, webinar
Product compliance	Product compliance	WBT
	Product safety and product liability	WBT
Customs and export control law	Export control	WBT, webinar, document

Reporting systems

Where potential misconduct is suspected within the Bosch Group or at suppliers, associates, and business partners as well as other third parties can make a report via the Bosch Group's reporting system. NGOs can also contact us with their concerns at any time. Reports can be submitted – also anonymously – using the appropriate IT tool, by e-mail, or phone.

Bosch's reporting system and its reporting office support a number of languages. Associates and customers are actively made aware of the possibility of submitting a report. We also ask our suppliers to make their associates aware of the Bosch reporting system and to inform them accordingly. The objective is to make it as easy as possible for all target groups to submit reports and to ensure the widest possible accessibility. All reports are processed independently, impartially, autonomously, carefully, and confidentially. The principle of objectivity and the protection of whistleblowers are our top priority. Our rules of procedure set out the details of the different channels and principles, as well as the processing procedure.[34]

Procedure

When a report is received, it must be checked immediately and, if a communication channel exists, its receipt must be confirmed. The incident must then be assigned to the responsible office for further processing. If there are sufficient indications of non-compliance with legally binding external standards, the Code of Conduct or other internal regulations, the matter is classified as a compliance case and must be investigated immediately.

If the internal investigations confirm violation of the compliance requirement, this must be remediated immediately. Appropriate measures must also be taken to prevent future non-compliance issues of this nature. Internal investigations must be carried out in strict compliance with existing legal limits, in particular data protection law, and taking the compliance culture into account (e.g., presumption of innocence). If an internal investigation identifies a process weakness that facilitates violations of the compliance requirement, the responsible departments must be informed and necessary countermeasures must be taken. Any form of reprisal against whistleblowers, in particular negative consequences under labor law and the threat thereof, is prohibited.

The effectiveness of the reporting channels is ensured by the external provider of the reporting system and Bosch through appropriate measures. This includes carrying out effectiveness checks in accordance with the regulations on whistleblower protection and also taking information from internal and external users into account when operating, maintaining, and further developing the process. When a person submits a report, they are asked how they became aware of the reporting system. Indications of any difficulties or opportunities for improvement in reporting are taken into account in both the ongoing development of the system and as part of the effectiveness review.

[34] BSH Hausgeräte GmbH operates its own reporting system, which is comparable in its basic features, and has developed its own rules of procedure.

We address our associates through various internal communication channels to raise awareness and increase use of the reporting system, as well as strengthen trust and confidence in the internal investigation process. In 2024, we launched the company-wide "Zero tolerance for discrimination, bullying and harassment! Act now. Speak up!" campaign to provide further information on specific topics and to draw attention to the reporting system.

In 2024, 1,910 reports (prior year: 1,528) were recorded via Bosch's reporting systems. We have seen a steady increase in the number of reports over the last few years, a development we primarily attribute to the comprehensive measures in the field of compliance and the resulting increased awareness of compliance issues.

Political lobbying

As a supplier of technology with global operations, we believe it is our responsibility to put our technology expertise to work for the common good and to demonstrate specific solutions to current challenges in society. With this in mind, we help shape opinions at government policy level, for example in associations and in various social forums. This commitment is driven by our "Invented for life" ambition.

Organization and regulations

Responsibility for political lobbying at Bosch is set out in an internal company policy. The Bosch Group's government relations are assigned to a corresponding corporate department, together with group-wide corporate communication. Activities include representing the company's interests at policymaker, association, and organization level; they are designed to make our technology know-how available in regulatory processes, strengthen the company's reputation, build trust and relationships, and support the company's profitability.

Headquartered in Berlin, our Corporate Governmental and Stakeholder Affairs department has offices around the world. A total of 49 associates represent the political interests of the Bosch Group worldwide vis-à-vis institutions, ministries, governments, parliaments, and society. They are trained on the topic of "Antitrust law" at three-year intervals as part of the compliance training course (see the "Compliance training" section).

Transparency as a matter of principle

Transparency is a central principle for the political lobbying of Bosch's interests. Consistent with this understanding, the company is registered in the relevant transparency registers worldwide, including in the United States, in Germany, or at European Union level. Depending on the respective legislation, the entries represent the scope and content of political advocacy.

At a glance

Bosch is registered in the relevant transparency registers under the following identification numbers:

German Lobby Registry:

- Robert Bosch GmbH: R000999
- Bosch Thermotechnik GmbH: R003224
- Bosch Healthcare Solutions GmbH: R004462

EU Transparency Register:

- Robert Bosch GmbH: 8999533555-91
- Bosch Thermotechnology GmbH: 269619148071-01
- BSH Hausgeräte GmbH: 416456120129-02

USA Lobbying Disclosure:

- Robert Bosch LLC: Senate ID# 40008054-12; House ID# 401320000

Clear policy in the political arena

Internal company regulations at Bosch define the framework for engaging with politicians. These regulations define proper conduct, for example, in the run-up to elections, during visits to Bosch locations, or when Bosch associates come into contact with representatives and members of the political bodies of the EU. They also set out how to comply with the requirements of the EU Transparency Register and in what form Bosch participates in EU consultations.

Gratuities in dealings with third parties are likewise regulated internally within the company. It is only permitted to offer, grant, or accept gratuities in strict compliance with numerous prerequisites. Our rules relating to office holders are especially restrictive. Here, it must be ensured that any appearance of influence being exercised is ruled out and that the internal regulations of public authorities are adhered to. Should local law in some regions prescribe stricter or more specific requirements, these must be adopted and complied with.

As of 2021, we no longer make donations to political parties in Germany, but instead participate in the economic dialogue forums of the CDU, CSU, SPD, FDP, and Bündnis 90/Die Grünen parties. Through these memberships, we strive to provide appropriate stable financial support and engage in a productive exchange of ideas which all participants benefit from. While the regional organizations are responsible for donations made outside Germany, the guidelines require donations to political parties to be submitted to the chairman of the board of management of Robert Bosch GmbH for his decision. No such matters were presented in 2024.

Priority topics and activities

Owing to its expertise in technologies of the future, such as artificial intelligence, electrification, hydrogen, and connected, automated driving, Bosch is a sought-after partner and thought leader in the policymaking process. We are in favor of standards that are both ambitious and as consistent as possible. For instance, we believe supranational legislation at EU level is preferable to having a large number of national requirements.

Our political lobbying activities aim to identify discussions and developments on political regulations and initiatives early on, which may affect our products, our company locations, or our business operations in general. As a rule, the Bosch Group supports policy frameworks that are conducive to innovation, and endeavors to find possible solutions for the challenges facing society.

Our aim is to contribute to the relevant topics by taking a stand on issues such as technical feasibility and impact on society. We also want to do justice in this regard to the complete spectrum of requirements of our stakeholders. We are committed to remaining politically neutral.

Aligned policy papers define the Bosch Group's position on relevant topics and provide a summary of facts and arguments. Released by Robert Bosch GmbH's board of management, these global policy compass papers are valid worldwide. They form the basis for political lobbying and are supplemented by specific regional position papers to take account of respective regional or national legislation. The facts and arguments are also publicly available in the context of EU consultations. Further information is available online.

Due to our highly diversified product portfolio, we are affected by a large number of legislative projects, including in climate, energy, and environmental conservation policy as well as transport, research, and trade policy, data and digitalization laws, cybersecurity, or labor and social policy. At UN level, we advocate for the harmonization of technical standards, for example, for automated driving.

The priorities of our political lobbying activities are set each year by Robert Bosch GmbH's board of management. Our activities centered on the following topics in 2024:

Climate action

For an industrial company like Bosch, the question of how best to reconcile climate action and competitiveness is of particular importance. In this context, we advocate for regulation that is open to different technological solutions and takes account of environmental, social, and economic factors. To reach the EU climate goals, all technologies that reduce CO_2 emissions have to be leveraged. These include all forms of electromobility from e-bikes to trucks as well as the cross-sectoral deployment of renewable fuels as well as hydrogen. At a national as well as EU level, we are committed to the further development of the hydrogen economy.

Geopolitical situation and international trade

As a globally operating company, Bosch monitors geopolitical developments very closely. The global trading environment has changed dramatically in recent years. Protectionist tendencies are on the rise and trade measures are being used increasingly to protect geo-economic and national security interests. This means that companies are being confronted by additional costs, increasing fragmentation of markets, and potential disruptions in their supply chains.

Circular economy

Another important part of the European Green Deal is how to finance the transformation toward an ecologically sustainable economy. In this context, attention centers above all on the EU taxonomy for classifying products and services according to their sustainability and expanding the sustainability reporting requirements. Bosch is in favor of the EU's general efforts to achieve more transparent and comparable corporate sustainability information. In implementing these requirements, the task is now to eliminate legal uncertainty, ensure a harmonized approach, and guarantee uniform and industry-wide application. The announced European regulations are to be developed in close cooperation with existing, internationally recognized standards so that they are available promptly and redundant reporting in different publications is avoided.

Moreover, Bosch pursued the legislative process for deforestation-free products. Limiting the bureaucratic effort involved was important to us in this context as well as ensuring that it would be affordable for companies to implement. Also in relation to the circular economy, Bosch is closely following the current legislative process for the Ecodesign for Sustainable Products Regulation, the End of Life Vehicles Directive, and the implementation of the Battery Regulation.

Human rights

At EU level, the proposal for the Directive on Corporate Sustainability Due Diligence (CSDDD) was presented in 2022 to ensure the respect of human rights and compliance with environmental obligations in corporate supply chains. The negotiations on this proposed legislation were concluded at EU level in 2024. Bosch supports the objective of the planned directive – as it did with the corresponding legislation enacted in Germany. Legal certainty is essential for companies to implement due diligence in the supply chain. This is best ensured by setting clear requirements that can be easily implemented in practice.

Also in 2022, the EU Commission presented a new legislative proposal (Forced Labour Act) to ban products made with forced labor. Here too, negotiations at EU level were concluded in 2024. As a company with global operations that takes its social responsibility very seriously, Bosch supports the proposal and has set out its position in bilateral talks with policymakers. At the same time, we advocate for a risk-based approach to implementing the law to enable targeted and effective implementation.

Digitalization

Digitalization remains an important component for innovative and sustainable development of the economy. Applications, in particular in connection with the use of artificial intelligence, must serve humans and must be safe, robust, and explainable – and thus trustworthy. We therefore support the corresponding legislative processes and put forward our position through dialogue with decision makers.

2024 saw a large number of regulations adopted in the area of digitalization. The European Union's AI Act is of particular importance to our business activities. Bosch welcomes the general motives that led to the enactment of the AI Act, since the legal regulations will help to create trust in artificial intelligence and its application. The focus should always be on the interests of consumers.

Assisted and autonomous driving

Bosch laid the foundations for all levels of automated driving early on with driver assistance systems and the associated sensor technology. To make driving safer and more comfortable, Bosch is focusing on the gradual development of driver assistance systems into automated systems for private vehicles (currently up to SAE Level 3) and is contributing its expertise at national, European, and international level. In 2024, Bosch actively supported the discussions on assisted, combined lateral and longitudinal control of vehicles (UN R 171 on Driver Control Assistance Systems (DCAS)) at SAE Level 2. We are continuing to work on the market launch of automated driving solutions based on our

experiences in the field with these driver assistance systems and our extensive pre-development activities for components and software solutions. In China, Bosch already put a system into volume production at the end of 2023 that enables assisted driving at SAE Level 2 and can take over the driving task on a specific route. The driver remains responsible for driving, but they are assisted in performing their driving task.

▸ Research and innovation

As a matter of principle, Bosch only engages in business operations that are viable without support from subsidies. We consider temporary government support a suitable instrument only in efforts to assist breakthroughs in new technologies or for the purpose of implementing industrial policy strategies. In the reporting period, Bosch received funding of around 302 million euros for R&D projects and as part of the two IPCEI (Important Project of Common European Interest) funding programs "Microelectronics and communication technologies" and "Hydrogen." A further 1.1 million euros was raised for the promotion of training and further education measures. The measures aim to open up new prospects for the associates concerned against the backdrop of the company's transformation.

In addition to direct exchanges with policymakers, Bosch is involved in numerous associations and participates actively in formulating positions. In Germany, at EU level, and in a number of other countries, we are members of the relevant industry associations.

In Germany, for example, we are members of the German Electro and Digital Industry Association (ZVEI), the German Association of the Automotive Industry (VDA), the German Federal Association for Information Technology, Telecommunications, and New Media (BITKOM), and the German Mechanical Engineering Industry Association (VDMA). In addition, we are active on the executive board and steering committee of econsense – Forum Nachhaltige Entwicklung der Deutschen Wirtschaft e.V. (Forum for Sustainable Development of German Business).

In Brussels, we are members of the European Suppliers Association CLEPA, DIGITALEUROPE and Hydrogen Europe, among others, and Bosch is also represented in the International Chamber of Commerce. In the United States, for example, we are also members of the National Association of Manufacturers (NAM) and the Alliance for Automotive Innovation, and we are members of various national automotive industry associations in other countries, including Brazil (Sindipecas), Mexico (INA), and India (ACMA). BSH Hausgeräte GmbH is also a member of APPLiA Home Appliance Europe, the European association of household appliance manufacturers.

Organization of public stakeholder dialogues

Bosch strategically engages in and helps to actively shape social discourse. We enter into dialogue with policymakers, scientists, and society in the context of specific events on socially relevant topics and also seek new and innovative formats.

Among other things, Bosch hosted the "Allianz der Chancen" (Alliance of Opportunities) in January 2024. The network of currently 65 companies and institutions, representing more than 2.6 million associates in Germany, pursues the goal of actively shaping the transformation of the world of work. 192 participants from politics, business,

science, and employee representative bodies convened at Bosch's representative office in Berlin-Charlottenburg – including the Chancellor of the Federal Republic of Germany.

In May 2024, we organized an event together with one of our media partners and a consulting firm at Bosch's Innovation Campus in Berlin under the banner "Denkraum New Work: Neue Chancen zwischen Arbeit, Algorithmen und Ambitionen" (New work think-tank: new opportunities between activity, algorithms, and ambition). Together with representatives from politics, business, science, and society, the chair of Robert Bosch GmbH's board of management discussed solutions and challenges of the changing world of work. At six themed stations, the 104 participants were also able to experience hands-on how technological innovations such as artificial intelligence, virtual reality, and augmented reality are already being used at Bosch.

In June 2024, the chief executive officer of the Robert Bosch Stiftung and the head of corporate communications and governmental affairs at Bosch jointly hosted the "Round Table Superwahljahr 2024" (Super election year 2024 round table). After two keynote speeches, the 26 experts from politics, business, science, and civil society explored the question of what companies and social stakeholders can do to strengthen democracy.

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Independent auditor's report

on a reasonable assurance engagement*

To Robert Bosch Gesellschaft mit beschränkter Haftung, Stuttgart

We have performed a reasonable assurance engagement on selected key performance indicators and statements within the sustainability report of Robert Bosch Gesellschaft mit beschränkter Haftung, Stuttgart (hereinafter the "Company"), which are marked with the "✓" symbol in the sustainability report, for the period from January 1 to December 31, 2024 (hereinafter "selected disclosures").

Our engagement exclusively refers to the selected disclosures marked with the "✓" symbol in the German pdf version of the sustainability report.

Responsibilities of the executive directors

The executive directors of the Company are responsible for the preparation of the sustainability report containing the selected disclosures with reference to the GRI Sustainability Reporting Standards (hereinafter "applicable criteria").

These responsibilities of the Company's executive directors include the selection and application of appropriate methods for the preparation of the selected disclosures and making assumptions and estimates about individual non-financial disclosures that are reasonable in the circumstances. Furthermore, the executive directors are responsible for such internal control as the executive directors consider necessary to enable the preparation of selected disclosures that are free from material misstatement, whether due to fraud (manipulation of the selected disclosures) or error.

Independence and quality assurance of the auditor's firm

We have complied with the German professional requirements on independence as well as other professional conduct requirements.

Our audit firm applies the national legal requirements and professional pronouncements – in particular the BS WP/vBP ["Berufssatzung für Wirtschaftsprüfer/vereidigte Buchprüfer": Professional Charter for German Public Accountants/German Sworn Auditors] in the exercise of their Profession and the IDW Standard on Quality Management issued by the Institute of Public Auditors in Germany (IDW): Requirements for Quality Management in the Audit Firm (IDW QMS 1 (09.2022)) and accordingly maintains a comprehensive quality management system that includes documented policies and procedures with regard to compliance with professional ethical requirements, professional standards as well as relevant statutory and other legal requirements.

* The assurance engagement performed by EY relates exclusively to the German version of the "Ambitions Sustainability report 2024" of Robert Bosch Gesellschaft mit beschränkter Haftung. The following text is a translation of the original German independent assurance report.

Responsibilities of the auditor

Our responsibility is to express a reasonable assurance opinion on the selected disclosures based on our assurance engagement.

We conducted our assurance engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised): "Assurance Engagements other than Audits or Reviews of Historical Financial Information" issued by the IAASB. This standard requires that we plan and perform the assurance engagement to obtain reasonable assurance about whether the Company's selected disclosures are prepared, in all material respects, in accordance with the applicable criteria.

The assurance engagement on the selected disclosures includes performing procedures and obtaining evidence for the quantitative and qualitative information in the selected disclosures that is sufficient and appropriate to provide a basis for our opinion.

We exercise professional judgment and maintain professional skepticism throughout the assurance engagement. Our procedures also include:

- Obtaining an understanding of the carbon neutrality program and the policies relating to work accidents within the Group.

- Identifying and assessing the risks of material misstatement in the selected disclosures, whether due to fraud or error, designing and performing procedures responsive to those risks, and obtaining evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the overriding of internal control.

- Obtaining an understanding of internal control relevant to the assurance engagement on the selected disclosures in order to design procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.

- Obtaining sufficient appropriate evidence, e.g., during site visits, for the selected disclosures to express our opinion.

- Evaluating the appropriateness of methods used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.

- Evaluating the presentation of the selected disclosures; and

- Considering the existence of carbon offset certificates but not their effectiveness.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion, on the basis of the knowledge obtained in the assurance engagement, the selected disclosures of Robert Bosch Gesellschaft mit beschränkter Haftung for the period from January 1 to December 31, 2024 are prepared, in all material respects, in accordance with the applicable criteria.

Restriction of use

We draw attention to the fact that the assurance engagement was conducted for the Company's purposes and that the report is intended solely to inform the Company about the result of the assurance engagement. As a result, it may not be suitable for a purpose other than the one mentioned. Accordingly, the report is not intended to be used by third parties to make (financial) decisions based on it. Our responsibility is to the Company alone. We do not accept any responsibility to third parties. Our assurance opinion is not modified in this respect.

General engagement terms and liability

The "General Engagement Terms for Wirtschaftsprüferinnen, Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften [German Public Auditors and Public Audit Firms]" dated January 1, 2024, which are attached to this report, are applicable to this engagement and also govern our relations with third parties in the context of this engagement (ey-idw-aab-en-2024.pdf). In addition, please refer to the liability provisions contained there in section 9 and to the exclusion of liability toward third parties. We accept no responsibility, liability or other obligations toward third parties unless we have concluded a written agreement to the contrary with the respective third party or liability cannot effectively be precluded.

We make express reference to the fact that we will not update the report to reflect events or circumstances arising after it was issued, unless required to do so by law. It is the sole responsibility of anyone taking note of the summarized result of our work contained in this report to decide whether and in what way this information is useful or suitable for their purposes and to supplement, verify or update it by means of their own review procedures.

Stuttgart, March 12, 2025

EY GmbH & Co. KG
Wirtschaftsprüfungsgesellschaft

Storz	Beil
Wirtschaftsprüfer	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]

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About this report

The Bosch Group's sustainability report has been published annually since 2011. The present report describes the progress made in terms of sustainable business practices in the 2024 financial year (January 1, 2024, to December 31, 2024).

As in previous years, the report follows the guidelines of the Global Reporting Initiative (GRI). The Bosch Group has reported with reference to the GRI Standards for the 2024 financial year. Selected key indicators and statements on climate action and occupational health and safety were audited by EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft to obtain reasonable assurance. Audited content in this sustainability report is marked "✓." Tables and graphics as well as highlighted boxes are part of the audited content, provided that the information contained is marked "✓."

Unless otherwise stated, all information in this report refers to the full consolidated group. Besides Robert Bosch GmbH, the consolidated group comprises a further 490 (prior year: 468) fully consolidated entities. Details of the scope of consolidation and the developments in the financial year relating to it can be found in the annual report (see annual report 2024, page 100 et seq.). Unless otherwise stated, key environmental and occupational health and safety indicators cover 454 (prior year: 451) reportable locations. Reportable locations are all production locations and development locations (with material responsibility) with more than 50 associates as well as other sites with more than 100 associates.

The information was requested electronically and the data was mainly compiled using software specific to each division. As a rule, we aim to present three-year trends to enable better comparability. In individual cases, information relating to previous periods was restated as a result of changes in the methods used to collect and calculate data. Such changes are marked accordingly in the text. Discrepancies in the totals are possible due to rounding differences.

All forward-looking statements in this report are based on the assumptions valid as of the copy deadline and made after careful examination and consideration. Due to known and unknown risks, uncertainties, and other factors, the actual results, developments, or performance of the company may differ from our forecasts, assessments, and announcements.

German and English pdf versions of the sustainability report 2024 are available online. Further information can be found at sustainability.bosch.com and in the annual report 2024. Reporting will continue in spring 2026.

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Robert Bosch GmbH
Corporate Communications
and Governmental Affairs

Postfach 10 60 50
70049 Stuttgart
Germany
Phone +49 711 811-0

Corporate Communications and Governmental Affairs (C/CG)
Head: Prof. Dr. Christof Ehrhart

Sustainability, Environment, Health and Safety (C/SE)
Head: Dr. Thomas Schulte

Sustainable Relations Management (C/SEY)
Head: A. Michel Mittasch
Project Lead: Kyra Meckel
RB.sustainability@de.bosch.com

CONCEPT AND CONSULTING:
Schlange, Zamostny & Co. GmbH, Hamburg

TEXT:
Carlsberg & Richter GmbH & Co. KG, Haar

DESIGN:
AD&D Werbeagentur GmbH, Stephanskirchen

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