



ÅRSREGNSKAPET FOR REGNSKAPSÅRET 2021 - GENERELL INFORMASJON

Enheten

Organisasjonsnummer:	977 296 919
Organisasjonsform:	Aksjeselskap
Foretaksnavn:	HAFSLUND OSLO CELSIO AS
Forretningsadresse:	Askekroken 11 0277 OSLO

Regnskapsår

Årsregnskapets periode:	01.01.2021 - 31.12.2021
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Konsern

Morselskap i konsern:	Ja
Konsernregnskap lagt ved:	Ja

Regnskapsregler

Regler for små foretak benyttet:	Nei
Benyttet ved utarbeidelsen av årsregnskapet til selskapet:	Forenklet IFRS
Benyttet ved utarbeidelsen av årsregnskapet til konsernet:	-

Årsregnskapet fastsatt av kompetent organ

Bekreftet av representant for selskapet:	Lene Holstad Juliussen
Dato for fastsettelse av årsregnskapet:	13.05.2022

Grunnlag for avgivelse

År 2021: Årsregnskapet er elektronisk innlevert
År 2020: Tall er hentet fra elektronisk innlevert årsregnskap fra 2021

Det er ikke krav til at årsregnskapet m.v. som sendes til Regnskapsregisteret er undertegnet. Kontrollen på at dette er utført ligger hos revisor/enhetens øverste organ. Sikkerheten ivaretas ved at innsender har rolle/rettighet for innsending av årsregnskapet via Altinn, og ved at det bekreftes at årsregnskapet er fastsatt av kompetent organ.

Brønnøysundregistrene, 09.05.2023



Resultatregnskap

Beløp i: NOK	Note	2021	2020
RESULTATREGNSKAP			
Inntekter			
Fjernvarme og andre energiinntekter	1	2 255 205 000	1 378 418 000
Annen driftsinntekt	1	10 880 000	60 121 000
Sum inntekter		2 266 085 000	1 438 539 000
Kostnader			
Energikjøpskostnad		773 083 000	232 713 000
Personalkostnader	2,4	240 300 000	214 789 000
Avskrivning på varige driftsmidler	3,4	255 300 000	265 804 000
Andre driftskostnader	5,15	356 138 000	375 419 000
Sum kostnader		1 624 821 000	1 088 726 000
Driftsresultat		641 264 000	349 813 000
Finansinntekter og finanskostnader			
Renteinntekt fra foretak i samme konsern	15	412 000	1 597 000
Annen renteinntekt	15	178 000	623 000
Annen finansinntekt		32 000	41 000
Sum finansinntekter		622 000	2 262 000
Rentekostnad til foretak i samme konsern	15	72 966 000	81 907 000
Annen rentekostnad	15	75 312 000	83 941 000
Annen finanskostnad		67 000	38 000
Sum finanskostnader		148 346 000	165 886 000
Netto finans		-147 724 000	-163 624 000
Ordinært resultat før skattekostnad		493 540 000	186 189 000
Skattekostnad på ordinært resultat	7	109 082 000	41 233 000
Ordinært resultat etter skattekostnad		384 457 000	144 956 000
Årsresultat		384 457 000	144 956 000
Årsresultat etter minoritetsinteresser		384 457 000	144 956 000



Resultatregnskap

Beløp i: NOK	Note	2021	2020
Endringer i virkelig verdi i perioden		-626 472 000	213 655 000
Overføringer til resultatregnskapet		312 588 000	-169 548 000
Skatteeffekt av endringene	7	69 054 000	-9 704 000
Estimatavvik pensjoner	12	-30 960 000	-14 300 000
Skatteeffekt av estimatavvik pensjoner	7	6 811 000	3 146 000
Sum resultatkomponenter for IFRS-foretak		-268 979 000	23 249 000
Totalresultat		115 479 000	168 206 000
Overføringer og disponeringer			
Ordinært utbytte		384 457 000	144 956 000
Overføringer annen egenkapital		-268 978 000	23 250 000
Sum overføringer og disponeringer		115 479 000	168 206 000



Balanse

Beløp i: NOK	Note	2021	2020
BALANSE - EIENDELER			
Anleggsmidler			
Immaterielle eiendeler			
Goodwill	3	216 540 000	216 540 000
Sum immaterielle eiendeler		216 540 000	216 540 000
Varige driftsmidler			
Tomter, bygninger og anlegg	3	2 878 311 000	2 840 671 000
Maskiner og utstyr	3	1 988 875 000	1 996 398 000
Anlegg under utførelse	3	191 856 000	154 150 000
Driftsløsøre, inventar, verktøy, kontormaskiner	3	79 936 000	74 041 000
Bruksretteiendeler	4	162 759 000	79 216 000
Sum varige driftsmidler		5 301 736 000	5 144 476 000
Finansielle anleggsmidler			
Investering i datterselskap	8	22 536 000	22 536 000
Investeringer i tilknyttet selskap	8	734 000	734 000
Finansielle anleggsmidler	10,11, 16	51 744 000	34 244 000
Derivater	16	1 044 000	
Sum finansielle anleggsmidler		76 059 000	57 515 000
Sum anleggsmidler		5 594 335 000	5 418 530 000
Omløpsmidler			
Varer			
Varer	9	43 121 000	37 340 000
Sum varer		43 121 000	37 340 000
Fordringer			
Kundefordringer	16	136 934 000	148 741 000
Andre fordringer	10,16	596 121 000	181 918 000
Derivater	16	1 222 000	43 635 000
Konsernfordringer	6,11,1 6	439 873 000	238 920 000
Sum fordringer		1 174 150 000	613 214 000



Balanse

Beløp i: NOK	Note	2021	2020
Sum omløpsmidler		1 217 271 000	650 554 000
SUM EIENDELER		6 811 606 000	6 069 083 000
BALANSE - EGENKAPITAL OG GJELD			
Egenkapital			
Innskutt egenkapital			
Selskapskapital		195 197 000	195 197 000
Overkurs		724 713 000	798 412 000
Sum innskutt egenkapital		919 910 000	993 608 000
Opptjent egenkapital			
Annen egenkapital		218 206 000	168 657 000
Sikringsreserve kontantstrømsikring		-218 206 000	26 623 000
Sum opptjent egenkapital			195 280 000
Sum egenkapital		919 910 000	1 188 888 000
Gjeld			
Langsiktig gjeld			
Pensjonsforpliktelser	12	71 489 000	33 073 000
Utsatt skatt	7	161 032 000	226 951 000
Sum avsetninger for forpliktelser		232 521 000	260 023 000
Annen langsiktig gjeld			
Langsiktig konserngjeld	11,13, 16	2 000 000 000	2 000 000 000
Derivater	16	25 428 000	7 273 000
Langsiktige leieforpliktelser	4	156 127 000	77 969 000
Øvrig langsiktig gjeld	13,16	2 000 000 000	2 000 000 000
Sum annen langsiktig gjeld		4 181 556 000	4 085 242 000
Sum langsiktig gjeld		4 414 077 000	4 345 266 000
Kortsiktig gjeld			
Leverandørgjeld	11,16	174 439 000	68 945 000



Balanse

Beløp i: NOK	Note	2021	2020
Betalbar skatt	7	99 135 000	41 189 000
Utbytte		384 457 000	144 956 000
Kortsiktig konserngjeld	6,11,1 6	254 156 000	61 909 000
Derivater	16	254 323 000	10 822 000
Kortsiktige leieforpliktelser	4	9 313 000	3 434 000
Annen rentefri kortsiktig gjeld	14,16	301 797 000	203 674 000
Sum kortsiktig gjeld		1 477 620 000	534 929 000
Sum gjeld		5 891 696 000	4 880 195 000
SUM EGENKAPITAL OG GJELD		6 811 606 000	6 069 083 000



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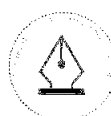
Name	Method	Signed at
Hanna-leena Masala	FTN (Danske Bank)	2022-04-07 14:59 GMT+02
PER LANGER	BANKID	2022-04-07 13:51 GMT+02
Koppang, Jane	BANKID	2022-04-07 13:49 GMT+02
Stubholt, Liv Monica Bargem	BANKID	2022-04-07 13:26 GMT+02
Ruyter, Finn Bjørn	BANKID_MOBILE	2022-04-07 13:26 GMT+02
THESEN, AGNAR BJARNE	BANKID_MOBILE	2022-04-08 08:28 GMT+02
OLA HÖKSTRAND	BANKID	2022-04-07 15:37 GMT+02



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Årsregnskap 2021 for Fortum Oslo Varme AS



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Årsberetning 2021

Virksomheten

Fortum Oslo Varme AS er Norges største fjernvarmeselskap, eier og operatør av Norges største avfallsforbrenningsanlegg, og et selskap som vokser innenfor fornybar termisk energi. Virksomheten bidrar til å videreutvikle vertskommunen Oslo som en bærekraftig by på vei mot fornybarsamfunnet og bidrar til å nå byens ambisiøse klimamål. Oslo kommune og Fortum Participation Limited eier 50 prosent hver. Selskapet er en del av Fortum-konsernets divisjon City Solutions.

Fortum signerte 22. mars 2022 avtale om å overdra sin 50 prosent eierandel i Fortum Oslo Varme til et partnerskap bestående av Hafslund Eco, Infranode og HitecVision. Oslo kommune har samtidig inngått avtale om å overføre sin 50 prosent eierandel i selskapet til Hafslund Eco.

Eierskiftet forventes fullført i andre kvartal 2022. Det tas forbehold om at transaksjonen må godkjennes av Oslo bystyre og Konkurransetilsynet. Hvis aksjekjøpet blir fullført, vil Hafslund Eco bli majoritetseier i selskapet med en eierandel på 60 prosent. Infranode og HitecVision vil få en eierandel på 20 prosent hver.

Transaksjonen sikrer med stor sannsynlighet en fullfinansiering av Fortum Oslo Varmes karbonfangstprosjekt på Klemetsrud, med forbehold for enighet med staten om oppdatert støtteavtale for den statlige medfinansiering av prosjektet og med tentativ oppstart sommeren 2022.

Koronapandemien har også i 2021 preget selskapet. I tråd med krav til enheter underlagt kraftberedskapsforskriften, ble det i 2020 etablert beredskap for å sikre fortsatt drift, med tiltak spesielt rettet mot driftskritiske anlegg og funksjoner. Det er praktisert bruk av hjemmekontor for alle ansatte som kan gjøre sine oppgaver hjemmefra. I løpet av året har selskapet tilpasset tiltak i tråd med nasjonale og kommunale retningslinjer, samt konsernets føringer. Selskapet har gjennom pandemien opprettholdt sine forpliktelser til samfunnet, kundene og samtidig videreutviklet fremtidig viktige prosjekter.

Selskapet er en viktig bidragsyter til det grønne skiftet og omlegging av samfunnet i bærekraftig retning. Selskapets virksomhet er en viktig og nødvendig del av den sirkulære økonomien, der målet er at flest mulige ressurser blir bevart og brukt igjen. Men ikke alle ressurser kan gjenvinnes. Vår oppgave er å sluttbehandle og energigjenvinne det restavfall som ikke kan, bør eller skal gjenbrukes eller materialgjenvinnes. Fortum Oslo Varme eier og drifter verdikjeden fra sluttbehandling av avfall, og videre til produksjon, salg og distribusjon av fjernvarme og kjøling.

Selskapet bidrar med dette til å løse samfunnets avfallsproblem og produserer fornybar og bærekraftig energi basert på spillvarme fra avfallsforbrenning.

Selskapet har flere utviklingsprosjekter:

- Selskapet har som mål om å være først ute i bransjen med karbonfangstprosjektet på avfallsforbrenningsanlegget på Klemetsrud. Klemetsrud vil få en viktig rolle i å demonstrere at det er mulig å få til karbonfangst på avfallshåndtering. I tillegg til å redusere utslipp vil karbonfangst på Klemetsrud oppnå negative utslipp basert på at cirka 50 prosent av avfallet som sluttbehandles har biogen opprinnelse.
- I 2021 har vi satt i drift selskapets første energisentral som benytter overskuddsvarme fra et datasenter. Ulven energisentral leverer som planlagt fra overtakelse.
- Selskapet fortsetter planleggingen av etablering av sesonglagring av varme fra perioder med overskudd til perioder med behov for ytterligere varmetilførsel. Selskapets satsning på områdekjøling i tre definerte utviklingsområder vil gjøre flere av byens tak blågrønne, etablere selskapet som en totalleverandør av termisk energi og bidra til å redusere belastningen av strømmettet for kjøling av bygg.

Fortum Oslo Varme har to avfallsforbrenningsanlegg, ett på Klemetsrud og ett på Haraldrud i Oslo. Det største er anlegget på Klemetsrud, som har mål om drift i alle årets timer.



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Fortum Oslo Varmes avfallsforbrenningsanlegg har en årlig samlet kapasitet på cirka 400 000 tonn, og sluttbehandler avfall fra det nasjonale og internasjonale markedet. Anleggene er miljø- og kvalitetsertifisert og har moderne røykgassrensing med lave utslipp. Spillvarmen fra avfallsforbrenningen brukes til produksjon av strøm og fjernvarme.

Ved optimal drift er elektrisitetsproduksjonen på Klemetsrud cirka 150 GWh/år. Utnyttet spillvarme til fjernvarmenettet fra de to avfallsforbrenningsanleggene ble i alt 912 GWh i 2021. I tillegg utnyttes spillvarmen fra kommunens avfallsforbrenningsanlegg på Haraldrud. Om sommeren må fortsatt noe spillvarme fra anlegget på Klemetsrud kjøles bort.

Selskapet har fjernvarmevirksomhet i store deler av Oslo samt i deler av Nordre Follo kommune. Det er tilknytningsplikt til fjernvarme for nybygg og totalrenoveringsprosjekter over 1 000 m² i de områdene selskapet har konsesjon.

Vår vertskommune Oslo har som mål å redusere klimagassutslipp med 65 prosent innen 2025, og med 95 prosent innen 2030, sammenlignet med 2009-nivå. Fjernvarme og karbonfangst er begge viktige virkemidler for å nå disse målene.

I 2021 ble selskapets fjernvarmeproduksjon rekordhøye 1,92 TWh. Dette representerer cirka en tredjedel av samlet norsk fjernvarmeleveranse. I 2021 ble strømproduksjonen 138 GWh og behandlet avfallsmengde cirka 370 000 tonn.

2021 var temperaturmessig et nokså gjennomsnittlig år sammenlignet med den siste 10 års perioden. Graddagstallet, som er et mål på oppvarmingsbehov, endte svært nær gjennomsnittet for de siste 10 årene. 2021 var likevel preget av en uvanlig mild sommer og fyringsmånedene januar og desember som var vesentlig kaldere enn normalt.

Selskapets fjernvarmeanlegg består av 14 varmesentraler, 2 429 kundesentraler, 346,2 kilometer primærnett og 85 kilometer sekundærnett som leverer varme til 1 254 næringsbygg, 1 169 borettslag og sameier (blokker og flermannsboliger) samt 3 346 privathusholdninger (rekkehus og eneboliger). Produksjonskapasiteten målt i installert effekt er cirka 1 050 MW, hvorav 32 MW er spillvarme fra Oslo kommune (Renovasjons- og gjenvinningssetaten). I løpet av 2021 har selskapet gjennomført videre utbygging av fjernvarmenettet. Nye kundetilknytninger i 2021 har et estimert årlig varmebehov på 95 GWh fordelt på 75 nye kundesentraler.

Prosjekt karbonfangst på Klemetsrud (CCS-prosjektet)

Forbrenning av avfallsfraksjoner som ikke kan gjenbrukes eller materialgjenvinnes er den miljømessige beste løsningen kombinert med samfunnsnyttig bruk av overskuddsenergien fra prosessen.

Avfallsforbrenning reduserer CO₂-utslipp, både fordi forbrenning erstatter deponering av avfall og fordi utnyttelse av spillvarmen til energiformål erstatter annen energiproduksjon.

Det største potensialet for videre kutt i CO₂-utslipp fra avfallshåndtering innebærer økt gjenbruk, økt materialgjenvinning og avfallsforbrenning med karbonfangst og lagring (CCS).

CCS-prosjektet har gjennom forprosjektrapporten (FEED-Studien - Front End Engineering and Design) demonstrert at et fullskala karbonfangstanlegg kan oppnå stabil fangst av over 90 prosent av all CO₂ i røykgassen.

Fortum Oslo Varmes CCS-prosjekt er en integrert del av den norske stats CCS-prosjekt Langskip og staten har gitt tilsagn om medfinansiering av prosjektet med cirka 3 milliarder kroner med forutsetning om restfinansiering fra EU eller andre eksterne kilder. Siden 2020 har selskapet deltatt i en søknadsprosess for prosjektet hos EUs Innovasjonsfond. I november 2021 ble det klart at prosjektet ikke nådde opp blant de syv prosjektene som fikk tildelt støtte fra Innovasjonsfondets første runde.

Karbonfangstprosjektet fikk tilskudd i tilleggsproposisjonen til statsbudsjettet for 2022. Bidraget var viktig for å finansiere karbonfangstprosjektet i 2022 og selskapets søknad til EUs Innovasjonsfonds andre runde som ble levert mars 2022.



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Gjennom transaksjonen annonsert 22. mars 2022 er karbonfangstprosjektet nær fullfinansiert med noen viktige forutsetninger om økt statlig støtte og enkelte endringer av selskapets støtteavtale med staten. Partnerskapet Hafslund Eco, Infranode og HitecVision har et klart mål om å realisere prosjektet for karbonfangst på Klemetsrud.

I 2021 har selskapet gjennom CCS-prosjektet engasjert seg i utviklingen av kvotemarkedet for negative utslipp, bidratt til videreutvikling av fangstteknologien med mål om redusert energibruk og gått inn i det EU-støttede Horisont 2020-prosjektet ACCCESS, som skal teste ny fangstteknologi på ulike industrielle røykgasser.

Redegjørelse for årsregnskapet

Fortum Oslo Varme hadde i 2021 en omsetning på 2 266 millioner kroner, og et ordinært resultat før skatt på 494 millioner kroner. Selskapets resultat etter skatt ble 384 millioner kroner. Driftsinntektene er økt med 828 millioner kroner sammenlignet med 2020. Resultat før skatt er økt med 307 millioner kroner og resultat etter skatt med 240 millioner kroner. Økningen i resultatstørrelser skyldes hovedsakelig høyere kraftpriser og rekordhøyt volum.

Samlede investeringer i perioden var på 323 millioner kroner. Investeringene i varige driftsmidler er hovedsakelig knyttet til reinvesteringer i fjernvarmenettet og varmesentralene, tilknytning av nye fjernvarmekunder, økt installert effekt og driftstilgjengelighet.

Selskapets arbeidskapital ved utgangen av desember består av omløpsmidler på 1 217 millioner kroner (herav 440 millioner kroner i konsernfordringer) samt kortsiktig gjeld på 1 478 millioner kroner (herav 254 millioner kroner i konserngjeld). Gjennom tilgang på likviditet fra tilknytning til Fortums konsernkontosystem vil selskapet kunne innfri alle sine forpliktelser ved forfall, og den finansielle stillingen anses tilfredsstillende.

Kontantstrømanalysen viser likvide midler tilført fra driften på 733 millioner kroner, mens driftsresultatet for perioden er 641 millioner kroner. Kontantstrøm fra operasjonelle aktiviteter avviker fra driftsresultatet hovedsakelig som en følge av avskrivninger uten kontanteffekt, og endring i selskapets arbeidskapital samt betalte renter og skatt.

Totalkapitalen ved utgangen av året var 6 812 millioner kroner. Egenkapitalen var på 920 millioner kroner, tilsvarende en egenkapitalandel på 14 prosent. Reduksjon i egenkapital skyldes hovedsakelig tap på derivater/finansielle instrumenter. Hele årsresultatet etter skatt er avsatt til utbytte. Selskapet har 2 milliarder kroner i ansvarlig lån fra eierne, fordelt likt på Fortum og Oslo kommune.

Etter styrets oppfatning gir regnskapet for 2021 en tilfredsstillende beskrivelse av selskapets drift og den finansielle situasjonen per 31. desember 2021. Styrets oppfatning er at selskapet har en forsvarlig egenkapitalandel på grunn av god kontantstrøm fra underliggende drift og gjeldsstrukturen med 2 milliarder i ansvarlig lån fra eierne.

Fortsatt drift

Årsregnskapet er avlagt under forutsetning om fortsatt drift. Til grunn for antagelsen ligger resultatprognoser for året 2022 samt selskapets langsiktige strategiske planer. Selskapet er i utgangspunktet i en god økonomisk og finansiell stilling, og styret er fornøyd med selskapets utvikling.

Samfunnsansvar og ytre miljø

Fortum Oslo Varme har ansvar for de samfunnsmessige konsekvensene som følger av selskapets virksomhet, både med hensyn til virksomhetens miljøpåvirkning, arbeidsforhold, menneskerettigheter og øvrige sosiale forhold. Samfunnsansvar er både en integrert del av vår forretningsmodell og en høy strategisk prioritet i hele virksomhetens verdikjede. Begge eiere har høye ambisjoner for reduserte klimautslipp og en mer effektiv sirkulærøkonomi, og selskapets virksomhet er en del av dette målbildet.

Selskapets påvirkning på det ytre miljø fra avfallsforbrenning og fjernvarmeproduksjon er reell. Samtidig gir energigjenvinning av avfall langt lavere miljøbelastning enn deponi, som fortsatt er i utstrakt



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bruk i mange land i Europa. Når selskapet realiserer et karbonfangstanlegg vil det redusere utslippene fra sluttbehandling i en enda større grad.

Selskapets avfallsforbrenningsanlegg sluttbehandler restavfall som ikke kan, bør eller skal materialgjenvinnes. Avfallsforbrenning sørger for en miljømessig trygg destruksjon av fraksjoner som inneholder miljøgifter, smittefarlige stoffer eller avfall som er av så dårlig kvalitet og beskaffenhet at materialgjenvinning ikke er praktisk mulig. Dette er en viktig og samfunnskritisk tjeneste.

Fjernvarmen utnytter i stor skala lokale og lavverdige varmeressurser som ellers ville gått tapt. Det siste gjør at man reduserer bruk av høyverdige energikilder som elektrisitet, samtidig som selskapet har en viktig rolle når det gjelder forsyningssikkerhet ved å avlaste kraftnettet i høylastperioder. Dette gjør det enklere å elektrifisere for eksempel transportsektoren.

Fjernvarmen i Oslo har over mange år erstattet mange mindre fyringsanlegg med god miljøgevinst, både lokalt og klimamessig. Fjernvarmen vil også i årene som kommer være et viktig verktøy for at byen skal nå sine ambisiøse klimamål.

Fjernvarmen vil de neste årene spille en viktig rolle i utviklingen av en moderne og klimavennlig hovedstad som vokser raskt. Gjennom en plass- og kostnadseffektiv infrastruktur kan bygg og områder både varmes og kjøles med svært lave klimagassutslipp. Grunnlasten i systemet er spillvarme fra byens tre avfallsforbrenningsanlegg. En høy utnyttelse av spillvarme, samt bevisst bruk av andre fornybare energikilder, gjør at klimagassutslippene fra produksjonen av fjernvarme er svært lave.

Oppvarming på byggeplasser og kjøleløsninger basert på varme er nye og bærekraftige bruksområder for fjernvarmen.

Varmeproduksjonen levert ut på fjernvarmenettet var i 2021 1 923 GWh. Fordelingen mellom de ulike energibærerne var 1 099 GWh fra avfallsvarme (spillvarme fra forbrenning av sortert restavfall), 124 GWh fra varmepumper, 177 GWh fra trepellets, 406 GWh fra elkjeler, 87 GWh fra bioolje og 30 GWh fra flytende naturgass (LNG). På Klemetsrud ble det dessuten produsert 138 GWh med elektrisitet ved hjelp av spillvarmen fra avfallsforbrenningen.

Selskapet har som mål å unngå bruk av fossile brenslers i produksjon av fjernvarme i et normalår. Det er fortsatt noe LNG i produksjonen, mens fossil fyringsolje er så godt som helt utfaset, og vil kun bli benyttet i beredskapssammenhenger. Andel LNG i produksjonen var i 2021 1,5 %.

Selskapets produksjonsanlegg har også utslipp av mer lokal og regional karakter, som for eksempel støv og NOx. Disse utslippene ligger normalt under myndighetenes grenseverdier. Det er ikke registrert enkelthendelser av en slik karakter at det har vært nødvendig å varsle miljømyndighetene.

Øvrig påvirkning på det ytre miljø stammer i hovedsak fra drift av egen bygningsmasse, egen transport, samt innkjøpte tjenester, herunder transporttjenester og entreprenørvirksomhet. Selskapet har en høy andel utslippsfrie kjøretøy i egen bilflåte. Alle nye kjøretøy skal være ladbare så lenge de tilfredsstiller krav til funksjonalitet og sikkerhet.

Det var én større fjernvarmelekkasje i 2021. Lekkasjen ble raskt utbedret og nedetiden var lav. Arbeidet med å minimere risikoen for slike uønskede hendelser foregår kontinuerlig. I løpet av 2021 ble det gjennomført inspeksjoner av kummer, ventiler og kulverter og i 2021 økte andelen av rørnettet med automatisk alarmtråd for deteksjon av fuktighet i nettet.

Helse, miljø og sikkerhet

Selskapets mål er null skader.

Det er rapportert fire hendelser som resulterte i skader med fravær i 2021. En hendelse med en ansatt i selskapet resulterte i brannskade på arm etter lekkasje av varmt vann ved arbeid på en pumpe. Tre hendelser involverte leverandører hvorav to av dem innebar en klemskade på en finger ved flytting av en pallegaffelforlenger og en vrikket ankel etter snubling i trapp. Den tredje hendelsen medførte at en leverandør fikk en hofte slått ut av ledd etter at et stempel fra en delvis demontert aktuator traff personen i siden.



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Selskapet tar alle hendelser meget alvorlig og de blir systematisk analysert for læringspunkter og oppfølgingstiltak for at det ikke skal skje igjen. Selskapet deler erfaringer med og samarbeider også tett med Fortum-konsernet og leverandørene om økt sikkerhet. Selskapets ledelse og styret har høy og synlig fokus på sikkerhet internt og eksternt og det gjennomføres et betydelig antall tiltak for oppfølging og forbedring hvert år.

Det er ikke rapportert vesentlige materielle skader i 2021.

Selskapet har et eget Arbeidsmiljøutvalg (AMU) som er et samarbeidsorgan innen helse, miljø og sikkerhet. Arbeidsmiljøet er i høyt fokus i selskapet, og det fysiske arbeidsmiljøet tilfredsstiller kravene i arbeidsmiljøloven. Sykefraværet i 2021 var på 4,3 prosent.

Selskapet har etablert styreansvarsforsikring som, innen rammene for forsikringsvilkårene, dekker det personlige erstatningsansvaret man kan pådra seg som styremedlem eller administrerende direktør i henhold til gjeldende rett.

Organisasjon og likestilling (Aktivitets- og redegjørelsesplikt)

Del 1: Tilstand for kjønnslikestilling

Selskapet har etiske retningslinjer (Code of Conduct) som bidrar til å forhindre diskriminering og forskjellsbehandling. Retningslinjene finnes på hjemmesidene til Fortum, www.fortum.no. Alle ansatte må gjennomgå opplæring i selskapets etiske retningslinjer.

Selskapet hadde 195 ansatte med en gjennomsnittsalder på 44,6 år ved utgangen av året. Det er ikke gjennomført større endringer i organisasjonen gjennom året. Selskapet hadde en kvinneandel på 18 prosent blant sine ansatte. Selskapets styre bestod ved utgangen av året av 7 personer, 4 menn og 3 kvinner, og styrets leder er en kvinne. Av selskapet 39 ledere er 12 kvinner og 27 menn.

I 2021 hadde selskapet 5 midlertidig ansatte, hvorav 3 menn og 2 kvinner. 4 ansatte hadde deltidsstillinger, hvorav 3 menn og 1 kvinne. Selskapet har ingen tilfeller av ufrivillig deltid.

I 2021 er det gjennomsnittlig tatt ut 17 antall uker i foreldrepermisjon, som fordeler seg slik:

- Menn: 12 uker
- Kvinner: 24 uker

Tallene er basert på registrerte fødselspermisjonsdager i 2021, og gjenspeiler dermed ikke total permisjonslengde for den enkelte medarbeider.

Kartlegging lønnsforskjeller

Det er i 2022 gjort en kartlegging sammen med tillitsvalgte i forhold til lønnsforskjeller basert på data fra 2021. Her er de ansatte delt inn i stillingsgrupper basert på stillinger som er vurdert i forhold til likt arbeid og lik verdi. Totallønn omfatter, i tillegg til fastlønn, også elementer som skifttillegg og annen godtgjørelse som bonus og naturallytelse. For å gi et sammenlignbart datagrunnlag, er kun bonusberettigede tatt med i beregningen. Dette for å unngå at ansatte med kortvarige arbeidsforhold, for eksempel sommerstudenter, bidrar til et feilaktig bilde av lønnsforskjeller.

Gjennomsnittlig faktisk totallønn er i noen grupper påvirket av at en større andel menn enn kvinner jobber skift, og dermed har skifttillegg. Dette gjelder særlig grade-gruppe 10-13.



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For likestillingsresultater i 2021 viser oversikten nedenfor at kvinners totallønn er 103.4 % av menns lønn.

Kartlegging lønnsforskjeller på ulike nivåer:

Job grade	Antall kvinner	Antall menn	Ratio kvinner/menn totallønn
10-13	6	92	89.8 %
14-15	20	43	94.4 %
16-23	9	28	94.6 %
Alle nivåer	35	163	103.4 %

Del 2: Vårt arbeid for likestilling og mot diskriminering

Selskapets arbeid for likestilling og mot diskriminering er forankret i selskapets etiske retningslinjer, Code of Conduct, som oppdateres årlig og godkjennes av styret.

Selskapet har som rekrutterings- og personalpolicy at alle skal ha like muligheter og at man ikke forskjellsbehandler på grunnlag av kjønn, etnisitet, nasjonal opprinnelse, hudfarge, seksuell legning, språk, religion eller livssyn. Det er en målsetting om å rekruttere flere kvinner, spesielt i produksjonsmiljøet der kvinneandelen er lav, samt å øke andelen kvinner i mellomlederstillinger.

I forbindelse med årlige lønnsoppgjør gjøres det analyser av selskapets lønnsforhold med hensyn til likelønn (jfr. likestillings- og diskrimineringsloven § 34), og på denne måten kontrollerer bedriften at det ikke foreligger lønnsmessige skjevheter som er basert på kjønn. Dette er også nedfelt i selskapets lønnspolicy.

Det er gjort flere kartlegginger av likestilling og diskriminering, samt arbeidsorganisering i løpet av 2021. I mai og november ble det sendt ut undersøkelser til hele Fortum-konsernet:

- Mai (uke 20): Spørsmål som omhandler engasjement, lederskap, organisering av arbeidshverdagen og helse.
- November (uke 46): Spørsmål som omhandler engasjement, lederskap, nysgjerrighet og lyst til å lære, organisering av arbeidshverdagen og jobbrotasjon.

I begge undersøkelser ble det stilt spørsmål om hvorvidt de ansatte føler seg likt behandlet uavhengig av alder, etnisitet, seksuell orientering, kjønn og utdanning. Her svarer enkelte at de opplever en forskjellsbehandling basert på alder og utdanning.

Det ble også stilt spørsmål om hvorvidt de ansatte føler seg verdsatt på jobb og hvorvidt de føler man får nok støtte fra sin leder.



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I 2021 ble det jobbet med følgende aktiviteter:

- En arbeidsgruppe bestående av representant fra tillitsvalgt, verneombud for kontor og representanter fra bedriften, utarbeidet en sammenstilling av råd og retningslinjer for hvordan erfaringene med økt bruk av hjemmekontor og digitale løsninger kunne videreføres til arbeidshverdagen etter at pandemien var over. Arbeidet tok blant annet utgangspunkt i en undersøkelse sendt ut til alle ansatte i Fortum i mars, der det ble stilt spørsmål om hvordan ansatte ønsket å jobbe i fremtiden. Dette utgjør nå retningslinjene for «Ny normal» der det for ansatte som jobber på kontor, er muligheter for kombinasjon av hjemmekontor og tilstedeværelse på kontoret i større grad enn tidligere. Dette vil kunne gi større fleksibilitet i hverdagen for de som har familier med små barn.
- Som et resultat av et større internt forbedringsprosjekt, New Energy, ble det utarbeidet en ledelsesplattform som skal være en støtte og et verktøy for å utøve ledelse i Fortum Oslo Varme. Plattformen ble diskutert med selskapets ledere og arbeidsmiljøutvalget. Den bygger på ledelsesprinsippene; vi tror det beste om våre ansatte, vi vil det beste for våre ansatte og vi forventer det beste av våre ansatte. Plattformen gir et felles sett med forventninger til alle ledere, uavhengig av nivå i organisasjonen. Som leder i FOV har man et spesielt ansvar, både som representant for selskapet og for å ivareta medarbeidere på en måte som gjør at de trives, utvikler seg og leverer resultater.

Tiltak vi planlegger i året som kommer er:

- I 2022 vil det gjennomføres en større arbeidsmiljøundersøkelse (QPS Nordic) som gir en kartlegging av psykososialt arbeidsmiljø, organisering og ledelse og fysisk arbeidsmiljø. Dette gir et godt utgangspunkt for iverksettelse av videre tiltak.
- Et lederutviklingsprogram, med utgangspunkt i ledelsesplattformen, vil utarbeides og gjennomføres for alle selskapets ledere i løpet av 2022. Programmet vil utarbeides og gjennomføres i samarbeid med en ekstern aktør.

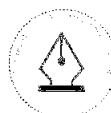
Opplysninger om risikoer

Fortum Oslo Varmes virksomhet er eksponert for en rekke typer risikoer, deriblant markedsmessige, regulatoriske, finansielle, operasjonelle og for omdømme. Risikostyring er en integrert del av virksomheten for å sikre at selskapet håndterer og begrenser risiko best mulig, og at selskapet oppnår sine strategiske og operative mål.

Helse, miljø og sikkerhet (HMS) er førsteprioritet i selskapets arbeid for å ivareta alle ansatte og andre som kommer i kontakt med vår virksomhet og for å redusere risiko. Ansatte i selskapet arbeider i et krevende arbeidsmiljø med komplekse tekniske installasjoner som krever til dels høy teknisk kunnskap og sertifisert kompetanse i samsvar med gjeldende regelverk. Selskapet har et godt innarbeidet kvalitetssystem, og gjennomfører årlige beredskapsøvelser samt intern opplæring for å opprettholde et lavt risikonivå i forbindelse med operativ drift. Selskapet er også oppmerksom på HMS-risiko knyttet til leverandører og andre som må inn på våre anlegg, og vil ha økt oppmerksomhet på hvordan denne kan reduseres fremover.

Selskapets markedsmessige risiko er knyttet til svingninger i kraft-, brensel- og avfallsmarkedet, samt til at fjernvarmevolumet i stor grad er følsomt for temperaturendringer. For å redusere risiko for fallende kraftpriser har selskapet en strategi for nedsidesikring, og inngår sikringshandler for eksponeringen knyttet til fremtidig fjernvarmevolum. Varmere enn normale vintere reduserer varmebehovet til selskapets kunder og dermed varmeproduksjonen. Dette svinger fra måned til måned og fra vinter til vinter.

NVE annonserte på slutten av 2021 at de kommer til å se nærmere på prismodellen for fjernvarme. For å være godt forberedt på hva som kan komme av endringer har Fortum Oslo Varme etablert et prosjekt internt for å gjennomgå ulike alternativer for prising av fjernvarme i markedet. I tillegg har vår representant i styret i Norsk Fjernvarme fått gjort tilsvarende vedtak om at bransjeforeningen får utredet ulike prismodeller. Dermed kan både bedriftene og bransjen være godt forberedt på den politiske diskusjonen som kan komme som en følge av NVEs arbeid på dette området.



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På slutten av 2021 fremmet Regjeringen forslag om at husholdningskunder, både strømkunder og fjernvarmekunder, skulle få reduksjon i prisen. Strømsstøtteordningen ble konstruert slik at strømkundene fikk reduserte priser ved at staten utbetalte penger til nettselskapene, slik at strømmregningen ble redusert. Fjernvarmekunder fikk samme ordning med reduserte fjernvarmepriser, men til forskjell fra strømselskapene må fjernvarmebedriftene dekke kostnadsreduksjonen selv.

Fortum Oslo Varme driver konsesjonspliktig fjernvarmevirksomhet som er gjenstand for offentlig regulering. For å sikre forutsigbarhet prioriterer selskapet arbeidet med å gi gode innspill om virkningen av rammebetingelser som påvirker virksomheten, både for avfallsforbrenning og fjernvarme.

Den likviditetsmessige og finansielle risikoen i selskapet anses som lav, da selskapet er i en god økonomisk og finansiell stilling med forventninger om stabil kontantstrøm de kommende årene. Det at selskapet er en del av Fortum-konsernet og har tilgang på likviditet i konsernkontosystemet, reduserer den finansielle risikoen. Selskapet styrer og minimerer sin valutaeksponering ved hjelp av valutaterminer ved salg av behandlingstjenester i et internasjonalt avfallsmarked. All krafthandel gjøres i norske kroner (NOK).

Hovedtyngden av selskapets debitorer er privatpersoner, offentlige institusjoner og bedrifter som kjøper fjernvarme. Selskapet har ikke hatt tap på fordringer de siste årene. Fortum Oslo Varme driver selv inn egne fordringer og arbeider kontinuerlig med oppfølging av fordringsmassen. Finansiell sikringshandel i kraftderivater og valuta utføres via Fortum-konsernet.

For å redusere risiko for svikt i energileveranse er selskapets fjernvarmeproduksjon fordelt på mange produksjonsenheter, og energien distribueres gjennom et robust nettverk av fjernvarmerør. Et økende antall ringledninger i rørnettet sikrer kontinuitet i leveransene også ved ledningsbrudd. For å ivareta sikkerheten i varmeforsyningen er det bygget varmesentraler med redundant kjeleeffekt som sikrer produksjon av kontraktfestet varme til kundene, ved for eksempel rasjonering av strøm, utkobling av el-kjeler og varmepumper eller ved havari på en av selskapets største varmekjeler.

Fremtidsutsikter

Samfunnet sitt økende og helt nødvendige fokus på klimavennlige avfalls- og energiløsninger er en viktig rammebetingelse for Fortum Oslo Varme. Selskapet arbeider aktivt for å opprettholde og styrke dagens rammevilkår i nært samarbeid med andre selskaper og bransjeforeninger. Fortum Oslo Varme har faset ut bruk av fossil olje og arbeider med å redusere den gjenværende bruken av LNG. Fortum Oslo Varme arbeider aktivt for å utvide bruk av nye og eksisterende spillvarmekilder i Oslo, og koblet i løpet av 2021 til det første datasenteret til sitt fjernvarmenett. Ytterligere planer om utbygging av datasentre i Oslo vil gjøre det mulig å fortsette økningen i bruk av spillvarmekilder.

Selskapet har en offensiv vekststrategi der måloppnåelsen er avhengig av at selskapet kan dekke kundenes totale termiske energibehov. Det krever at selskapet må kunne tilby både varme og kjøling til sine kunder. For å kunne tilby kjøling er det etablert en oversikt over hvilke områder det er hensiktsmessig å etablere produksjon og distribusjon, og disse er organisert i enkeltstående prosjekter som planlegges gjennomført de kommende årene. I 2021 ble det besluttet å starte bygging av ny kjølesentral på Hovin i samarbeid med AF-gruppen. Denne kjølesentralen vil levere kjøling til næringsbygg i området Hovin-Økern gjennom et fjernkjølenett som bygges ut i takt med det økende kjølebehovet for området.

Målene for økt salg av både fjernvarme og kjøling er ambisiøse, og man ser også muligheter for økt sluttbehandling av avfall sammen med et vellykket CCS-prosjekt. Selskapets mål sammenfaller naturlig med en videreutvikling av en sirkulær økonomi.

Fortum Oslo Varme driver samfunnskritisk infrastruktur, og har som en følge av Covid-19 og koronapandemien iverksatt egen beredskapsorganisasjon som følger myndighetenes til enhver tid gjeldende råd. Siden pandemien brøt ut i mars 2020 har selskapet prioritert å ta vare på de ansatte, opprettholde produksjons- og leveransekapasitet og ha en god kontantstrøm.

Med vedvarende smitte i samfunnet og utbrudd av nye mutanter har selskapet fortsatt beredskap knyttet til koronasituasjonen. Situasjonen har ikke påvirket virksomhetens operasjonelle muligheter i



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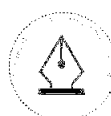


nevneverdig grad. En noe lavere etterspørsel etter avfallsbehandlingstjenester har svekket inntjeningen noe. Styret vurderer fortløpende selskapets økonomiske stilling som følge av situasjonen.

Årsresultat og disponeringer

Styret foreslår følgende disponering av årsresultatet i Fortum Oslo Varme AS på 384 456 910 kroner:

Avsatt utbytte	384 456 910 kroner
<u>Overføring til annen egenkapital</u>	<u>0 kroner</u>
Sum disponert	384 456 910 kroner



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Oslo, 7. april 2022

Liv Monica Bargem Stubholt
(Styreleder)

Per Erik Langer
(Styrets nestleder)

Finn Bjørn Ruyter
(Styremedlem)

Hanna-Leena Masala
(Styremedlem)

Agnar Bjarne Thesen
(Styremedlem)

Jane Koppang
(Styremedlem)

Nils Ola Høkstrand
(Styremedlem)

Knut Inge Inderhaug
(konst. administrerende direktør)



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Resultatregnskap

Tall i NOK (000)	Note	2021	2020
Fjernvarme og andre energiinntekter	1	2 255 205	1 378 418
Andre driftsinntekter	1	10 880	60 121
Driftsinntekter	1	2 266 085	1 438 539
Energikjøp		773 083	232 713
Personalkostnader	2, 12	240 300	214 789
Avskrivninger	3, 4	255 300	265 804
Andre driftskostnader	5, 15	356 138	375 419
Sum driftskostnader		1 624 821	1 088 726
Driftsresultat		641 264	349 813
Renteinntekter fra konsernselskaper	15	412	1 597
Annen renteinntekt	15	178	623
Annen finansinntekt		32	41
Sum finansinntekter		622	2 262
Rentekostnader til konsernselskaper	15	72 966	81 907
Annen rentekostnad	15	75 312	83 941
Annen finanskostnad		67	38
Sum finanskostnader		148 346	165 886
Netto finansielle poster		-147 724	-163 624
Resultat før skatt		493 539	186 189
Skattekostnad	7	-109 082	-41 233
Årsresultat		384 457	144 956

Utvidet resultat

Årsresultat		384 457	144 956
<i>Poster som kan bli reversert over resultatet i senere perioder:</i>			
Kontantstrømssikring			
Endringer i virkelig verdi i perioden		-626 472	213 655
Overføringer til resultatregnskapet		312 588	-169 548
Skatteeffekt av endringene	7	69 054	-9 704
Poster som vil reversere over resultatet		-244 829	34 404
<i>Poster som ikke vil reverseres over resultatet</i>			
Estimatavvik pensjoner	12	-30 960	-14 300
Skatteeffekt av estimatavvik pensjoner	7	6 811	3 146
Poster som ikke vil reverseres over resultatet		-24 149	-11 154
Årets utvidede resultat		-268 978	23 250
Årets totalresultat		115 479	168 206



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Balanse

Tall i NOK (000)	Note	2021	2020
Eiendeler			
Anleggsmidler			
Goodwill	3	216 540	216 540
Tomter, bygninger og anlegg	3	2 878 311	2 840 671
Maskiner og utstyr	3	1 988 875	1 996 398
Anlegg under utførelse	3	191 856	154 150
Driftsløsøre, inventar, verktøy, kontormaskiner	3	79 936	74 041
Bruksretteiendeler	4	162 759	79 216
Investering i datterselskap	8	22 536	22 536
Investeringer i tilknyttet selskap	8	734	734
Finansielle anleggsmidler	10, 11, 16	51 744	34 244
Derivater*	16	1 044	0
Sum anleggsmidler		5 594 335	5 418 530
Omløpsmidler			
Varer	9	43 121	37 340
Kundefordringer	16	136 934	148 741
Andre fordringer	10, 16	596 121	181 918
Derivater*	16	1 222	43 635
Fordring på konsernselskap	6, 11, 16	439 873	238 920
Bankinnskudd, kontanter o.l.	6	0	0
Sum omløpsmidler		1 217 271	650 554
Sum eiendeler		6 811 606	6 069 083
Gjeld og Egenkapital			
Egenkapital			
Selskapskapital		195 197	195 197
Overkurs		724 713	798 412
Annen innskutt kapital		0	195 280
Sum egenkapital		919 910	1 188 888
Gjeld			
Langsiktig gjeld			
Pensjonsforpliktelser	12	71 489	33 073
Utsatt skatt	7	161 032	226 951
Langsiktig lån konsernselskap	11, 13, 16	2 000 000	2 000 000
Derivater*	16	25 428	7 273
Langsiktige leieforpliktelser	4	156 127	77 969
Andre langsiktige lån	13, 16	2 000 000	2 000 000
Sum langsiktig gjeld		4 414 077	4 345 266
Kortsiktig gjeld			
Leverandørgjeld	11, 16	174 439	68 945
Betalbar skatt	7	99 135	41 189
Utbytte		384 457	144 956
Derivater*	16	254 323	10 822
Kortsiktige leieforpliktelser	4	9 313	3 434
Kortsiktig gjeld til konsernselskap	6, 11, 16	254 156	61 909
Annen rentefri kortsiktig gjeld	14, 16	301 797	203 674
Sum kortsiktig gjeld		1 477 620	534 929
Sum gjeld		5 891 696	4 880 195
Sum egenkapital og gjeld		6 811 606	6 069 083

*Derivater er i 2021 presentert netto, sammenligningstall for 2020 er omarbeidet tilsvarende



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Oslo, 7. april 2022

Liv Monica Bargem Stubholt
(Styreleder)

Per Erik Langer
(Styrets nestleder)

Finn Bjørn Ruyter
(Styremedlem)

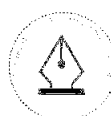
Hanna-Leena Masala
(Styremedlem)

Agnar Bjarne Thesen
(Styremedlem)

Jane Koppang
(Styremedlem)

Nils Ola Høkstrand
(Styremedlem)

Knut Inge Inderhaug
(konst. administrerende direktør)



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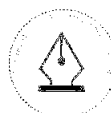
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Oppstilling over endringer i egenkapitalen

	Aksje kapital	Overkurs	Annen Innskutt egenkapital	Sikringsreserve kontantstrømsikring	Annen egenkapital	Sum egenkapital
Balanse pr. 31. desember 2019	195 197	798 411	0	-7 781	179 811	1 165 638
Utbytte avsatt i regnskapet					-144 956	-144 956
Resultat for året etter skatt før poster i utvidet resultat					144 956	144 956
Poster som inngår i utvidet resultat				34 404	-11 154	23 250
Balanse pr. 31. desember 2020	195 197	798 411	0	26 623	168 657	1 188 888
Utbytte avsatt i regnskapet		-73 698			-310 759	-384 457
Resultat for året etter skatt før poster i utvidet resultat					384 457	384 457
Poster som inngår i utvidet resultat				-244 829	-24 149	-268 978
Balanse pr. 31. desember 2021	195 197	724 713	0	-218 206	218 206	919 910

Selskapet har 100 aksjer pålydende 1 951 965,8775 kroner og en samlet aksjekapital på kr 195 196 587.
Selskapet har kun en aksjeklasse. Aksjene eies av Oslo kommune og Fortum Participation Ltd (Ireland) med 50 aksjer hver og inngår i det børsnoterte finske energikonsernet Fortum Oyj.



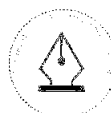
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Kontantstrømoppstilling

Tall i NOK (000)	2021	2020
Resultat før skattekostnad	493 539	186 189
Gevinst/tap på anleggsmidler	-788	-160
Periodens betalte skatter	-41 189	-99 477
Ordinær avskrivning	255 300	265 804
Netto finanskostnader	147 724	163 624
Endring i lager	-5 780	1 082
Endring i kundefordringer	11 808	130 211
Endring i leverandørgjeld	105 494	-26 382
Endring konsernmellomværende	239 599	-47 016
Endringer i pensjonsavsetning	7 456	-16 271
Endring i andre driftsposter	-336 352	107 952
Betalte renter	-144 269	-172 459
Netto kontantstrøm fra operasjonelle aktiviteter	732 541	493 096
Kontantstrøm fra investeringsaktiviteter		
Utbetaling ved kjøp av varige og immaterielle anleggsmidler	-323 145	-228 532
Innbetaling ved salg av varige og immaterielle anleggsmidler	1 365	223
Utbetaling ved andre investeringer	-17 500	0
Netto kontantstrøm fra investeringsaktiviteter	-339 280	-228 309
Kontantstrøm fra finansieringsaktiviteter		
Endring i kortsiktig gjeld/konsernkonto	-248 306	30 274
Utbetaling av utbytte og konsernbidrag	-144 956	-295 061
Netto kontantstrøm fra finansieringsaktiviteter	-393 261	-264 787
Netto endring i kontanter og kontantekvivalenter	0	0
Kontanter og kontantekvivalenter 01.01.	0	0
Kontanter og kontantekvivalenter 31.12.	0	0



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Regnskapsprinsipper

Fortum Oslo Varme AS er et aksjeselskap registrert i Norge. Hovedkontoret er lokalisert i Askekroken 11 i Oslo.

Årsregnskapet er satt opp i henhold til regnskapsloven §3-9 og Forskrift om forenklet anvendelse av internasjonale regnskapsstandarter fastsatt av Finansdepartementet 20. desember 2018 ("forenklet IFRS"). Dette innebærer i hovedsak at måling og innregning følger de internasjonale regnskapsstandardene (IFRS) med noen unntak i henhold til forskriftens §3-1, og at presentasjon av regnskapet og noteopplysninger følger regnskapsloven og god regnskapsskikk, med noen utvidede krav i henhold til IFRS.

Årsregnskapet er vedtatt av selskapets styre 7. april 2022.

Fortum Oslo Varme AS inngår i det finske børsnoterte konsernet Fortum Corporation Oyj som utarbeider konsernregnskap i samsvar med EU-godkjente Internasjonale standarder for finansiell rapportering (IFRS) og fortolkninger fastsatt av International Accounting Standards Board (IASB).

Konsernregnskapet kan innhentes fra Fortum Oyj, PB 1, FIN-00048 Fortum Finland eller på www.fortum.com.

Forenklet IFRS

Selskapet har valgt å fravike måle- og innregningsregler i henhold til Forskriftens § 3-1 på følgende områder:

- IAS 10 nr. 12 og 13, IAS 27 nr. 12 og IFRIC 17 nr. 10 fravikes slik at utbytte og eventuelt konsernbidrag regnskapsføres i samsvar med regnskapslovens bestemmelser.
- IAS 16 nr. 43 fravikes slik at de samme vurderinger av avskrivningsenhet (dekomponering) legges til grunn i selskapsregnskapet som i konsernregnskapet til Fortum Oyj.
- IAS 28 fravikes slik at investering i tilknyttet selskap regnskapsføres i samsvar med kostmetoden.
- IFRS 1 D15, slik at balanseført verdi etter kostmetoden i samsvar med god regnskapsskikk videreføres som anskaffelseskost på investeringer i datterselskap og tilknyttet selskap.

Nye standarder som er tatt i bruk

Ingen nye standarder er tatt i bruk i regnskapsåret 2021.

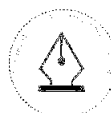
Grunnlag for utarbeidelse av årsregnskapet

Årsregnskapet legger til grunn prinsippene i et historisk kost regnskap med unntak av følgende regnskapsposter

- Valutaterminkontrakter måles til virkelig verdi
- Kraftderivater måles til virkelig verdi

Bruk av estimer

Utarbeidelse av regnskapet krever at selskapets ledelse gjør estimer og etablerer forutsetninger som har innvirkning på verdien av eiendeler og forpliktelser i balansen og rapporterte inntekter og kostnader i regnskapsåret. Estimer og tilhørende forutsetninger er basert på historisk erfaring og andre faktorer som anses rimelige, forholdene tatt i betraktning. Disse beregningene danner grunnlaget for vurdering av balanseført verdi for eiendeler og forpliktelser som ikke kommer klart fram av andre kilder. De endelige verdier som realiseres vil kunne avvike fra disse estimatene. Estimatenes og de underliggende forutsetningene vurderes løpende. Endringer i regnskapsmessige



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estimerer regnskapsføres i den perioden endringene oppstår. Dersom endringer også gjelder fremtidige perioder, fordeles effekten over inneværende og fremtidige perioder.

Informasjon om vesentlige områder hvor det eksisterer usikkerhet rundt estimer, hvor det er benyttet skjønnsmessige vurderinger ved bruk av regnskapsprinsipper og som har størst effekt på beløpene i finansregnskapet er beskrevet i de følgende notene:

Note 3 Immaterielle eiendeler

Note 4 Leieavtaler

Note 12 Pensjonsforpliktelser

Klassifisering og vurdering av balanseposter

Omløpsmidler og kortsiktig gjeld omfatter poster som forfaller til betaling innen ett år etter anskaffelsestidspunktet, samt poster som knytter seg til varekretsløpet. Øvrige poster er klassifisert som anleggsmiddel/langsiktig gjeld.

Inntektsføring

I henhold til IFRS 15, skal inntektsføring foretas når en kunde har oppnådd kontroll over varen eller tjenesten. Vurderingen av om overføring av kontroll skjer på et bestemt tidspunkt eller over tid er i mange tilfeller basert på skjønn.

Inntekt består av en vurdering av virkelig verdi på godtgjørelsen som mottas på tidspunkt for levering av produktene eller ferdigstilling av tjenesten. Inntekten føres netto etter rabatter, merverdiavgift og andre skatter og avgifter.

Fjernvarmeinntekter

Innregning av inntekt fra fjernvarme foretas i henhold til kundenes målte forbruk av fjernvarme. For næringsbygg, sameier og borettslag foretas måleravlesning hver time og kundene faktureres månedlig. For privatkunder fortas det månedlig eller kvartalsvis måleravlesning avhengig av område. Det utstedes kvartalsvise a-konto fakturaer og avregning foretas ved årsslutt. Fjernvarmeinntekter beregnes ved at målt forbruk til kundene multipliseres med gjeldende fjernvarmetariffer for perioden. Selskapet er vanligvis ansvarlig for leveranse av hele tjenesten og har konkludert med at distribusjon og salg av fjernvarme ikke er separate leveringsforpliktelser.

Tilknytningsavgift anses som en egen leveringsforpliktelse og blir inntektsført ved varmepåsettelse. Frem til kunden blir tilknyttet er avgiften balanseført som en utsatt inntekt. Utgifter knyttet til tilkoblingen aktiveres i balansen.

Strøm

Selskapet selger all sin produksjon av strøm via Nordpool og inntektsføres på leveringstidspunktet.

Avfallshåndtering

Inntekter fra avfallshåndtering kommer i hovedsak fra den avgiften kunden betaler for at selskapet skal ta imot avfall. Avgiften beregnes hovedsakelig basert på kvalitet og volum på mottatt avfall og det er variable elementer i prisingen. Selskapet har plikt til å behandle avfallet og denne leveringsforpliktelsen er oppfylt når avfallet er behandlet. Frakt av avfall er en separat leveringsforpliktelse og inntektsføres når frakten er gjennomført.

Leieinntekter er i hovedsak knyttet til utleie av eiendom og inntektsføres på leveringstidspunktet.

Salgsgevinster av utslippskvoter som ikke brukes til å dekke forpliktelsen fra CO₂-utslipp, blir rapportert som andre inntekter.



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Vedlikehold og reinvesteringer

Det utføres planlagt, periodisk vedlikehold med varierende og gjennomgående relativt langvarige intervaller, av fjernvarmeanlegg. Vedlikeholdskostnader resultatføres når de er påløpt. Periodisk vedlikehold avgrenses mot reinvesteringer. Kostnader som vesentlig forlenger anleggets levetid og/eller øker kapasiteten regnskapsføres som reinvestering.

Varer, kundefordringer og andre fordringer

Lager av innkjøpte varer verdsettes til laveste av anskaffelseskost og netto realisasjonsverdi. Anskaffelseskost tilordnes etter FIFO-prinsippet.

Kundefordringer oppstår ved omsetning av varer eller tjenester som er innenfor den ordinære driftssyklusen. Kundefordringer måles til virkelig verdi ved første gangs balanseføring. Ved senere måling vurderes kundefordringer til amortisert kost ved bruk av effektiv rentemetode fratrasket avsetning for forventet tap. Renteelementet er ikke hensyntatt dersom det er uvesentlig. Hovedregel er at dersom oppgjør forventes innen ett år eller mindre, klassifiseres fordringene som omløpsmidler. Dersom dette ikke er tilfelle klassifiseres fordringene som anleggsmidler.

Andre fordringer innregnes til virkelig verdi ved første gangs innregning og deretter til amortisert kost.

Leieavtaler

Selskapet implementerte IFRS 16 ved bruk av modifisert retrospektiv metode i 2019, se note 4 – Leieavtaler.

Identifisering av en leieavtale

Ved inngåelse av en kontrakt vurderer selskapet hvorvidt kontrakten er eller inneholder en leieavtale. En kontrakt er eller inneholder en leieavtale dersom kontrakten overfører retten til å ha kontroll med bruken av en identifisert eiendel i en periode i bytte mot et vederlag.

Atskillelse av bestanddelene i en leiekontrakt

For kontrakter som utgjør eller inneholder en leieavtale, separerer selskapet leiekomponenter dersom det kan dra nytte av bruken av en underliggende eiendel enten alene eller sammen med andre ressurser som er lett tilgjengelige for selskapet, og den underliggende eiendelen verken er svært avhengig av eller tett forbundet med andre underliggende eiendeler i kontrakten. Selskapet regnskapsfører deretter hver enkelt leiekomponent i kontrakten som en leiekontrakt separat fra ikke-leiekomponenter i kontrakten.

Innregning av leieavtaler og innregningsunntak

På iverksettelsestidspunktet for en leieavtale innregner selskapet en leieforpliktelse og en tilsvarende bruksretteeiendel for alle sine leieavtaler, med unntak av følgende anvendte unntak:

- Kortsiktige leieavtaler (leieperiode på 12 måneder eller kortere)
- Eiendeler av lav verdi

For disse leieavtalene innregner selskapet leiebetalingene som andre driftskostnader i resultatregnskapet når de påløper.

Leieforpliktelser

Selskapet måler leieforpliktelser på iverksettelsestidspunktet til nåverdien av leiebetalingene som ikke betales på dette tidspunktet. Leieperioden representerer den uoppsigelige perioden av



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leieavtalen, i tillegg til perioder som omfattes av en opsjon enten om å forlenge eller si opp leieavtalen dersom konsernet med rimelig sikkerhet vil (ikke vil) utøve denne opsjonen.

Leieforpliktelsen måles etterfølgende ved å øke den balanseførte verdien for å gjenspeile renten på leieforpliktelsen, redusere den balanseførte verdien for å gjenspeile utførte leiebetalinger og måle den balanseførte verdien på nytt for å gjenspeile eventuelle revurderinger eller endringer av leieavtalen, eller for å reflektere justeringer i leiebetalinger som følger av justeringer i indekser eller rater.

Selskapet presenterer sine leieforpliktelser på egne linjer i balanseoppstillingen.

Bruksretteiendeler

Bruksretten er lik leieforpliktelsen på innregningstidspunktet og eiendelen avskrives over leieperioden. Anskaffelseskost for bruksretteiendelene omfatter:

- Beløpet fra førstegangsmålingen av leieforpliktelsen
- Alle leiebetalinger ved eller før iverksettelsestidspunktet, minus eventuelle leieinsentiver mottatt
- Alle direkte utgifter til avtaleinngåelse påløpt selskapet

Selskapet anvender avskrivningskravene i IAS 16 Eiendom, anlegg og utstyr ved avskrivning av bruksretteiendelen, bortsett fra at bruksretteiendelen avskrives fra iverksettelsestidspunktet fram til det som inntreffer først av slutten av leieperioden og slutten av bruksretteiendelens utnyttbare levetid.

Selskapet anvender IAS 36 «Verdifall på eiendeler» for å fastslå om bruksretteiendelen er verdiforringet og for å regnskapsføre eventuelle påviste tap ved verdifall.

Varige driftsmidler og avskrivninger

Balanseføring ved første gangs innregning av varige driftsmidler foretas til kostpris. Kostpris inkluderer kostnader direkte knyttet til anskaffelse av driftsmidlet. Utvidelser og reinvesteringer balanseføres når det er sannsynlig at den fremtidige økonomiske fordelen vil tilflyte selskapet. Balanseførte egenarbeider vurderes til tilvirkningskost og føres som lønnskostnadsreduksjoner.

Offentlige tilskudd innregnes til virkelig verdi når det er rimelig sikkerhet for at tilskuddet vil bli mottatt og selskapet vil oppfylle betingelser knyttet til tilskuddet.

Tilskudd som skal dekke kostnader periodiseres over tidsperioden for de kostnadene tilskuddene er ment å dekke. Refusjoner og tilskudd i forbindelse med investeringer bokføres som reduksjoner av investeringskost og innregnes som inntekt gjennom reduserte avskrivninger på eiendelene tilskuddet knytter seg til.

Driftsmidlene avskrives lineært over forventet brukstid. Anlegg avskrives fra det tidspunkt det blir satt i drift. I hovedsak følges veiledende avskrivningstider for bransjen og disse fremgår av driftsmiddelnoten.

Forventet brukstid estimeres på bakgrunn av historiske erfaringer samt skjønnsmessige vurderinger knyttet til fremtidig teknisk bruk og lønnsomheten til anleggene. Det gjennomføres endringer i avskrivningsplanene dersom det oppstår endringer i disse estimatene.

Ved indikasjon på at balanseført verdi av et anleggsmiddel er høyere enn virkelig verdi, foretas det test for verdifall. Testen foretas for det laveste nivå av anleggsmidler som har selvstendige inngående kontantstrømmer (kontantstrømgenererende enhet). Hvis balanseført verdi er høyere enn gjenvinnbart beløp, skrives eiendelen ned til gjenvinnbart beløp.

Tidligere nedskrivninger, med unntak for nedskrivning av goodwill, reverseres hvis forutsetningene for nedskrivningen ikke lenger er til stede.



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Lånekostnader som er direkte knyttet til kjøp av anleggsmidler eller egenarbeider hvor det tar vesentlig tid å få installert og klargjort driftsmidlet til bruk, tillegges kostpris frem til driftsmidlet er klart for bruk. Alle andre lånekostnader utgiftsføres løpende.

Immaterielle eiendeler

Immaterielle eiendeler består av goodwill i forbindelse med kjøp og senere fusjon av Fortum Oslo Varme KEA AS. Alle virksomhetssammenslutninger regnskapsføres etter oppkjøpsmetoden. Goodwill representerer beløp som oppstår ved overtakelse. Goodwill representerer differansen mellom anskaffelseskost ved overtakelse og virkelig verdi av de netto identifiserte eiendeler som er overtatt.

Goodwill føres i balansen til anskaffelseskost, fratrasket eventuelle akkumulerte tap ved verdifall. Goodwill fordeles på kontantstrømgenererende enheter og blir ikke avskrevet, men blir testet årlig for verdifall. Nedskrivning av goodwill vil ikke reverseres.

Pensjonsforpliktelser

Selskapet har pensjonsordninger som omfatter både ytelsesbaserte og innskuddsbaserte pensjoner.

Ytelsesbasert ordning

I en ytelsesbasert pensjonsordning har hver ansatt rett til fremtidige pensjonsytelser. Pensjonskostnader og pensjonsforpliktelser beregnes etter lineær opptjening basert på forutsetninger om diskonteringsrente, fremtidig regulering av lønn, pensjoner og ytelser fra folketrygden, fremtidig avkastning på pensjonsmidler samt aktuariemessige forutsetninger om dødeligheter, frivillig avgang, osv. Beregningene er foretatt av godkjent aktuar som har benyttet et rammeverk godkjent og alminnelig brukt i Norge for denne type beregninger.

Selskapets netto forpliktelse i forbindelse med den ytelsesbaserte pensjonsordning er vurdert til virkelig verdi beregnet som den fremtidige ytelsen den ansatte har opptjent rettigheter til fratrasket virkelig verdi av pensjonsmidlene. Ved regnskapsføring av pensjon er lineær opptjeningsprofil og forventet sluttlønn som opptjeningsgrunnlag lagt til grunn. Periodens estimatavvik som skyldes ny informasjon eller endringer i de aktuariemessige forutsetningene innregnes i utvidet resultat i det året de beregnes sammen med justering for utsatt skatt/utsatt skattefordel.

Netto pensjonskostnad er beregnet som brutto pensjonskostnad fratrasket estimert avkastning på pensjonsmidlene. Selskapet presenterer pensjonskostnaden i sin helhet under drift, inklusive renteelementet som beregnes med diskonteringsrenten på grunnlag av netto forpliktelse eller netto eiendel.

Innskuddsbasert ordning

En innskuddsbasert pensjonsordning er en ordning hvor det betales faste innskudd til et fond, og hvor selskapet ikke har noen juridisk eller underforstått plikt til å betale ytterligere innskudd. Pliktig innskudd innregnes som personalkostnader i resultatet under drift når de påløper.

Finansinntekter - og kostnader

Finansinntekter består av renteinntekt på finansielle investeringer og mottatt utbytte. Renteinntekter innregnes i resultatet etter hvert som de påløper. Utbytte innregnes i resultatet når selskapet har fått en rett til å motta utbytte.

Finanskostnader består av rentekostnader på lån.



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Finansielle instrumenter

IFRS 9 Finansielle Instrumenter erstattet 01.01.2018 IAS 39 og omhandler klassifisering, måling og fraregning av finansielle eiendeler og forpliktelser, introduserer nye regler for sikringsbokføring og en ny nedskrivingsmodell for finansielle eiendeler.

Regnskapsstandarden omfatter blant annet følgende forhold:

Etter IFRS 9 skal finansielle eiendeler klassifiseres i tre kategorier: Virkelig verdi over utvidet resultat, virkelig verdi over resultatet, samt amortisert kost. Målekategori bestemmes ved førstegangsinnregning av eiendelen. Klassifiseringen avhenger av enhetens forretningsmodell for styring av sine finansielle instrumenter og karakteristikken av kontantstrømmene til det enkelte finansielle instrumentet.

For finansielle forpliktelser viderefører standarden stort sett kravene i IAS 39. Den største endringen er at i tilfeller der virkelig verdi-opsjonen er tatt i bruk for en finansiell forpliktelse, skal endringer i virkelig verdi som skyldes endring i egen kreditt risiko innregnes i utvidet resultat.

Verdifall som skyldes kreditt risiko skal nå innregnes basert på forventet tap i stedet for dagens modell der tap må være pådratt. Den nye nedskrivingsmodellen baserer seg på forventet kredittap som resulterer i tidligere avsetning for tap på fordringer.

Finansielle instrumenter regnskapsføres når selskapet blir part i kontraktsmessige betingelser knyttet til instrumentet.

Klassifikasjon og måling

De fleste av selskapets finansielle eiendeler består av fordringer og bankbeholdninger som klassifiseres under en virksomhetsmodell hvis formål er å holde finansielle eiendeler for å motta kontraktsregulerte kontantstrømmer. Disse finansielle eiendelene måles til amortisert kost, da de er vurdert å tilfredsstille SPPI (solely payments of principal and interest) test-kriteriet (kontraktsvilkårene for den finansielle eiendelen fører på bestemte tidspunkter til kontantstrømmer som utelukkende er betaling av hovedstol og utestående renter på hovedstol). Dersom SPPI-kriteriet ikke vurderes å være tilfredsstillt regnskapsføres de finansielle instrumentene til virkelig verdi over resultatet.

Verdifall

Kravene til regnskapsføring av verdifall er basert på en forventet tapsmodell ("expected credit loss"). Tapsmodellen anvendes på finansielle eiendeler som kundefordringer, andre fordringer og bankinnskudd. Fortum har utviklet to ECL-modeller. En motpartsmodell brukes på individuelle kontrakter vedrørende innskudd og fordringer mot større kunder. De forventede tapene basert på denne modellen bygger på måling av den individuelle motpartens risiko for mislighold. Det er også utviklet en porteføljemodell som anvendes på kundefordringer med konsumenter og mindre bedriftskunder. De forventede kredittapene er basert på en historisk analyse av kredittap som også vurderer forventet fremtidig utvikling.

Per 31. desember 2021 er det foretatt avsetning i forventet tap på 1,9 millioner NOK.

Sikring og derivater

Derivater balanseføres til virkelig verdi på det tidspunkt derivatkontrakten inngås, og deretter løpende til virkelig verdi. Regnskapsføring av tilhørende gevinster og tap avhenger av hvorvidt derivatet er utpekt som et sikringsinstrument og eventuell type sikring. Selskapet øremerker enkelte derivater i følgende sikringstype:

Sikring av variabilitet i kontantstrømmer knyttet til en særskilt risiko i en balanseført eiendel, forpliktelse eller svært sannsynlig planlagt transaksjon (kontantstrømsikring)



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Ved inngåelse av sikringsforholdet dokumenterer selskapet sammenhengen mellom sikringsinstrumentene og sikringsobjektene, i tillegg til formålet med risikostyringen og strategien bak de forskjellige sikringstransaksjonene. Selskapet dokumenterer også sin vurdering av hvorvidt derivatene som benyttes er svært effektive i å utligne endringene i virkelig verdi eller kontantstrøm knyttet til sikringsobjektene. Slike vurderinger dokumenteres både ved inngåelse av sikringsforholdet og løpende i sikringsperioden.

Valuta

Regnskapet benytter NOK både som sin funksjonelle valuta og sin presentasjonsvaluta. Regnskapet er presentert i hele tusen NOK. Pengeposter i utenlandsk valuta vurderes etter valutakursen på valutaen etter kursnoteringen på den siste dagen i regnskapsåret. Poster som er sikret med terminkontrakter, er vurdert til terminkurs (korrigert for renteelementet etter balansedato inkludert i terminkursen). Gevinst og tap som følge av valutakursendringer resultatføres løpende og er klassifisert som driftspost.

Skatter

Skattekostnaden i resultatregnskapet omfatter både periodens betalbare skatt, endring i utsatt skatt og eventuelle korrigeringer av betalbar skatt for tidligere år. Periodeskatt beregnes til gjeldende skattesatser på balansedagen. Skattekostnaden innregnes i resultatet for perioden med unntak av skatt på poster som er innregnet i utvidet resultat.

Utsatt skatt er beregnet med 22 prosent på grunnlag av de midlertidige forskjeller som eksisterer mellom regnskapsmessige og skattemessige verdier, samt skattemessig underskudd til fremføring ved utgangen av regnskapsåret. Skatteøkende og skattereduserende midlertidige forskjeller som reverserer eller kan reversere i samme periode er utlignet. Det tas ikke hensyn til midlertidige forskjeller på goodwill som ikke er skattemessig fradragsberettiget.

Utsatt skatt og utsatt skattefordel på midlertidige forskjeller er beregnet i samsvar med de skattemessige lover og regler som er vedtatt eller i hovedsak vedtatt på balansedagen hvor den midlertidige forskjellen har oppstått.

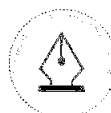
Netto utsatt skattefordel balanseføres i den grad det er sannsynlig at denne kan bli utnyttet.

Leverandørgjeld

Leverandørgjeld er forpliktelser til å betale for varer eller tjenester som er levert fra leverandørene til den ordinære driften. Leverandørgjeld måles til virkelig verdi ved første gangs balanseføring. Ved senere måling vurderes leverandørgjeld til amortisert kost fastsatt ved bruk av effektiv rente-metode. Dersom renteelementet er uvesentlig er dette sett bort fra. Hovedregel er at leverandørgjeld er klassifisert som kortsiktig dersom den forfaller innen ett år eller kortere. Dersom det ikke er tilfelle, klassifiseres den som langsiktig.

Bankinnskudd, kontanter og lignende

Bankinnskudd, kontanter og lignende inkluderer kontanter, bankinnskudd og andre betalingsmidler med forfall kortere enn tre måneder fra anskaffelse. Selskapet er for øvrig en del av konsernkontosystemet til Fortum-konsernet. Innestående på bankkonti som inngår i konsernkontosystemet klassifiseres som fordring på konsernselskap. Trekk på bankkonti som inngår i konsernkontosystemet klassifiseres som gjeld på konsernselskap.



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Note 1 - Driftsinntekter

Salgsinntektene fordeles seg på følgende virksomhetsområder:

Tall i NOK (1.000)	2021	2020
Fjernvarme	1 861 778	1 089 365
Avfallshåndtering	261 169	251 159
Gevinst ved salg av CO2 kvoter	0	37 820
Strøm	130 317	37 238
Metaller, leieinntekter og andre inntekter	12 822	22 957
Sum driftsinntekter	2 266 085	1 438 539

Salget av fjernvarme knytter seg til konsesjon for fjernvarme for store deler av Oslo og deler av Oppegård.

Note 2 - Personalkostnader

Tall i NOK (1.000)	2021	2020
Lønn inkl feriepenger	183 392	163 501
Arbeidsgiveravgift	27 958	23 980
Pensjonskostnader	22 675	18 635
Andre ytelser	6 275	8 674
Sum personalkostnader	240 300	214 789

Det var 193 årsverk ved utgangen av 2021, sammenlignet med 197 årsverk ved utgangen av 2020.

Ytelser til daglig leder (tall i NOK 1.000)	2021	2020
Lønn og annen godtgjørelse til daglig leder	3 712	2 829
Pensjonskostnader daglig leder	149	144

Selskapet tilsatte ny midlertidig daglig leder 15.10.2021 og noten over viser tidligere daglig leders godtgjørelse frem til den dato og ny daglig leders godtgjørelse fra 15.10-31.12.2021.

Daglig leder er inkludert i Fortums Long Term Incentive program (LTI) med mulighet til å opptjene aksjer i Fortum Oyj, i tillegg til den årlige bonusordningen Short Time Incentive (STI).

Daglig leder har ved opphør av arbeidsforhold på visse vilkår, rett til lønn i 9 måneder utover oppsigelsestiden på 6 måneder.

Utbetalt styrehonorar i 2021 utgjorde 1 002 tusen kroner sammenlignet mot 1007 tusen kroner i 2020.

Styrets leder har ingen avtale om særskilt vederlag ved opphør eller endring av vervet.

Daglig leder hadde pr 31.12.2021 billån på 184 tusen kroner. Samlede lån og sikkerhetsstillelser til alle ansatte, inkludert daglig leder, utgjorde 1 252 tusen kroner pr 31.12.2021. Lånene er gitt med løpetid på 10 år og rentefastssettelse pr årsskiftet på 2,5 prosent. Det er stilt betryggende sikkerhet for lånene. Det er ingen enkelte lån/sikkerhetsstillelser som utgjør mer enn 5 prosent av selskapets egenkapital.



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Note 3 - Varige driftsmidler og immaterielle eiendeler

Varige driftsmidler

Tall i NOK (1.000)	Tomter (1), bygninger, anlegg	Maskiner, transp.m & utstyr	Inventar, ktr.msk, reservedeler	Anl. under utførelse.	Sum
Bokført verdi 31.12.2019	2 634 145	1 837 163	74 437	552 577	5 098 322
Tilgang			1 010	227 522	228 532
Avgang	-	110		-	110
Overf. fra anlegg under utførelse	315 602	310 347	-	625 949	0
Avskrivninger	109 076	151 002	1 406		261 483
Bokført verdi 31.12.2020	2 840 671	1 996 398	74 041	154 150	5 065 260
Anskaffelseskost	3 756 241	3 627 174	87 378	154 150	7 624 943
Akkumulerte avskrivninger	915 570	1 630 776	13 337	-	2 559 683
Bokført verdi 31.12.2020	2 840 671	1 996 398	74 041	154 150	5 065 261
Tilgang		249	6 311	316 834	323 394
Avgang		827			827
Overf. fra anlegg under utførelse	141 071	137 057	1 000	279 128	-
Avskrivninger	103 431	144 003	1 416		248 850
Bokført verdi 31.12.2021	2 878 311	1 988 875	79 936	191 856	5 138 978
Anskaffelseskost	3 897 312	3 760 989	94 689	191 856	7 944 846
Akkumulerte avskrivninger	1 019 001	1 772 115	14 752	-	2 805 868
Bokført verdi 31.12.2021	2 878 311	1 988 875	79 936	191 856	5 138 978

Avskrivningsplan
Økonomisk levetid
(1) Tomter avskrives ikke

Lineær (1)
0-50 år
Lineær
0-40 år
Lineær
3-10 år

Immaterielle eiendeler

Tall i NOK (1.000)	Goodwill	Sum
Anskaffelseskost 01.01	216 540	216 540
+ Tilgang	-	-
- Avgang anskaffelseskost	-	-
= Anskaffelseskost 31.12.2021	216 540	216 540
Akk. nedskrivninger 01.01.	-	-
- Avgang akk. nedskrivninger	-	-
+ Nedskrivninger	-	-
= Akk. nedskrivninger 31.12.2021	-	-
Bokført verdi 31.12.2021	216 540	216 540

Goodwill anses som en eiendel med ubestemt levetid. Goodwill avskrives ikke, men testes årlig for verdifall.

Goodwill fremkommer i forbindelse med oppkjøp av Fortum Oslo Varme KEA AS i 2017 og innfusjonering av selskapet med virkning fra 01.01.2018.

Beregningen av goodwillverdien og test for verdifall, bygger på forventede kontantstrømmer for det siste godkjente langtidsbudsjettet for den kontantgenererende enheten (Fortum Oslo Varme) som goodwill knytter seg til. Perioden kontantstrømmene beregnes på grunnlag av, knytter seg til antatt levetid for goodwill. Vekstraten som benyttes for å beregne kontantstrømmene over levetiden følger i stor grad antatt inflasjon.

Grunnlaget for beregningene krever at ledelsen utøver stor grad av skjønn og foretar forventninger om fremtiden. Disse forventningene er avhengig av hvilket marked enheten opererer innenfor, og bygger på historiske analyser og fremtidige prognoser. Diskonteringsrenten som benyttes tar hensyn til risiko i det markedet enheten opererer i, både geografisk og bransjemessig. Så langt som mulig benyttes observerbare markedsverdier. Det er benyttet en diskonteringsrente før skatt på 5,18 prosent i beregningen.

Den gjennomførte nedskrivningsvurderingen i 2021 viste god robusthet og at den balanseførte verdien kan forsvares.



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Note 4 Leieavtaler

Selskapet implementerte IFRS 16 1. januar 2019, se prinsipnote for beskrivelse.

Selskapets leide eiendeler gjelder hovedsakelig leie av lokaler der produksjonsutstyr befinner seg.

Selskapets bruksretteiendeler er kategorisert og presentert i balansen som vist under:

Tall i NOK (1.000)	2021	2020
Bruksretteiendeler		
Bygninger	162 759	79 216

Netto tilgang av bruksretteiendeler i 2021 var TNOK 96,125. Det var ingen tilgang av bruksretteiendeler i 2020.

Tall i NOK (1.000)	2021	2020
Leieforpliktelser		
Kortsiktige leieforpliktelser	9 313	3 434
Langsiktige leieforpliktelser	156 127	77 969
Sum	165 440	81 403

Forfallsanalyse kontraktsmessig forfall - udiskontert

Kortere enn ett år	13 069	5 895
Ett til fem år	51 437	23 579
Mer enn fem år	136 968	76 631
Totale udiskonterte leieforpliktelser 31. desember 2021	201 474	106 104

Resultatregnskapet viser følgende tall knyttet til leasing og IFRS 16

Tall i NOK (1.000)	2021	2020
Avskrivninger av bruksretteiendeler/bygninger	6 450	4 320
Rentekostnad knyttet til leieforpliktelse	2 582	2 519

Total kontantstrøm for leieutbetaling i 2021 var 15,4 millioner kroner mot 16,2 millioner kroner i 2020.

Andre leiekostnader innregnet i resultatet (Tall i NOK (1.000))	2021	2020
Driftskostnader i perioden knyttet til kortsiktige leieavtaler (inkludert kortsiktige leieavtaler av lav verdi)	7 073	7 467

Beløpet gjelder i det vesentligste leie av hovedkontoret på Skøyen. Leieavtalen kan sies opp med 12 måneders varsel og er derfor vurdert til ikke å være en leieforpliktelse etter IFRS 16. Leieavtalen kostnadsføres løpende over resultat.

Opsjoner om å forlenge en leieavtale: Selskapets vesentligste leieavtaler er leie av bygninger der produksjonsutstyret befinner seg og er evigvarende leieavtaler. Leieperioden er satt til resterende levetid på produksjonsutstyret som er cirka 20 år.



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Note 5 - Andre driftskostnader

Tall i NOK (1.000)	2021	2020
Kjøp av maskiner, teknisk materiell, utstyr og instrumenter	9 781	18 268
Anleggs- og montasjearbeid fra eksterne leverandører	187 173	180 728
Kjøp av konsulenttjenester	83 180	98 519
Kjøp av post, tele, data, frakt og byråttjenester	6 442	4 280
Øvrige administrasjons- og driftskostnader	69 562	73 624
Sum andre driftskostnader	356 138	375 419

Tall i NOK (1.000)	2021	2020
Revisjonshonorar	740	1 075
Andre revisjonsrelaterte attestasjonstjenester	47	46
Skatterådgivning		19
Andre tjenester utenfor revisjon	277	510
Sum honorarer til revisor eks. mva.	1 064	1 650

Note 6 - Bankinnskudd og garantier

Fortum-konsernet har et konsernkontosystem med Nordea og et med Danske Bank. Et konsernkontosystem innebærer gjensidig solidaransvar for deltakende selskaper. Morselskapet i konsernet sine bankkonti utgjør eneste direkte mellomværende med bankene, mens tilgodehavende og gjeld på datterselskapenes konti betraktes som interne forhold. Fortum Oslo Varme AS er en del av disse konsernkontosystemene og har per 31. desember 2021 netto innestående 415 millioner kroner på bankkonti som inngår i konsernkontosystemet klassifisert som fordring / gjeld på konsernselskap.

Selskapet har konti i ulike valuta som er en del av konsernkontoordningene NOK, SEK, EUR, GBP (flervalutakontoordning).

Morselskapet i konsernet, Fortum Oyj, har en flervalutatoppkreditt mot Nordea og Danske Bank

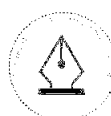
med en total trekkramme på 50 millioner Euro i hver av bankene.

Per 31. desember 2021 var innestående på toppkonto i Nordea 398 millioner Euro og i Danske Bank 210 millioner Euro.

Fortum Oslo Varme har ingen bundne konti knyttet til depositum eller andre sikkerhetsstillelser.

Konsernkonto - spesifisering av valuta (tall i NOK 1.000)	2021	2020
Konsernkonto NOK Nordea	386 191	141 288
Konsernkonto NOK Danske Bank	48 121	27 592
Konsernkonto EUR Danske Bank	3 157	716
Konsernkonto EUR Nordea	-21 396	-3 400
Konsernkonto GBP Nordea	1 232	10 233
Konsernkonto GBP Danske Bank	46	172
Konsernkonto SEK Danske Bank	346	2 780
Konsernkonto SEK Nordea	-2 882	-12 871
Netto klassifisert som fordring på konsernselskap	439 094	182 781
Netto klassifisert som gjeld på konsernselskap	-24 278	-16 271

Garantiforpliktelse (tall i NOK 1.000)	2021	2020
Oslo kemnerkontor - skattetrekksgaranti	11 500	11 500
Sum garantiforpliktelser	11 500	11 500



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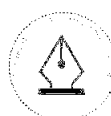
Note 7 - Skattekostnad og utsatt skatt

Spesifikasjon av årets skattegrunnlag (tall i NOK 1.000)	2021	2020
Resultat før skattekostnad	493 539	186 189
+ Permanente forskjeller	2 289	1 235
+/- Derivater til virkelig verdi rapportert over ordinært resultat	- 10 858	22 202
+/- Estimatavvik pensjon rapportert under utvidet resultat	- 30 960	14 300
+ Endring midlertidige forskjeller	5 906	17 406
= Inntekt før konsernbidrag og anvendelse av fremførbart underskudd	459 917	177 920
Justering på grunn av begrensning i rentefradrag	- 9 302	9 302
= Grunnlag betalbar skatt	450 615	187 222

Spesifikasjon av årets skattekostnad (tall i NOK 1.000)	2021	2020
+ Betalbar skatt av alminnelig inntekt	99 135	41 189
+/- For lite/mye avsatt skatt i fjor	-	-
+/- Utsatt skatteeffekt av derivater rapportert under utvidet resultat	69 054	9 704
+/- Utsatt skatteeffekt av estimatavvik pensjoner rapportert under utvidet resultat	6 811	3 146
+/- Endring utsatt skattefordel (bokført)	- 65 919	6 602
= Ordinær skattekostnad	109 082	41 233
Skattesats 31.12	22 %	22 %

Utsatt skatt/utsatt skattefordel (tall i NOK 1.000)	2021	2020	Endring
+ Driftsmidler	1 089 598	1 053 455	- 36 142
+ Fordringer	- 783	-	783
+ Pensjonsforpliktelser	- 71 489	- 33 073	38 416
+ Gevinst & tapskonto	296	370	74
+ Netto Leasingobjekt/leasinggjeld	- 2 681	- 2 187	494
+ Avsetninger andre forpliktelser	- 1 000	- 3 210	2 210
+ Finansielle instrumenter, CO2-kvoter	- 4 491	-	4 491
= Midlertidige forskjeller som påvirker betalbar skatt	1 009 449	1 015 356	5 906
+/- Derivater, virkelig verdi rapportert under ordinært resultat	2 267	8 591	-
+/- Derivater, virkelig verdi rapportert under utvidet resultat	- 279 752	34 132	-
Fremførbart rentebegrensning	-	9 302	-
= Grunnlag utsatt skatt/(skattefordel)	731 964	1 031 594	
Utsatt skatt, beregnet	161 032	226 951	
Utsatt skatt, bokført	161 032	226 951	65 919
Skattesats utsatt skatt	22 %	22 %	

Avstemming av skattekostnad (tall i NOK 1.000)	2021	2020
Beregnet skatt av resultat før skatt (22 %)	108 579	40 962
Skatteeffekt av permanente forskjeller	504	272
Effekt av for mye/lite avsatt året før	-	-
= Skattekostnad	109 082	41 233
Effektiv skatteprosent	22,1 %	22,1 %



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Note 8 - Investeringer i datterselskap og tilknyttet selskap

2020

Datterselskaper (tall i NOK 1.000):	Forretnings- konto	Aksje- kapital	Eier- andel %	Andel EK	Andel årsres.	Bokført verdi
Fortum Fiber AS	Oslo		60	60	17 699 -	3 384
Sum						22 536

2021

Fortum Fiber AS	Oslo		60	60	12 090 -	5 609
Sum						22 536

Fortum Fiber AS ble stiftet 29. januar 2019 og Fortum Oslo Varme AS eier 60 % av selskapet.

2020

Tilknyttet selskap (tall i NOK 1.000):	Forretnings- konto	Aksje- kapital	Eier- andel %	Bokført verdi
OF Energi AS	Oslo		220	50
Sum				734

2021

OF Energi AS	Oslo		220	50
Sum				734

Aksjer i OF Energi ble anskaffet desember 2018 og er et joint venture med OBOS Energi AS.

Selskapene er oppført i balansen til anskaffelseskost. Stemmeandel er lik eierandel.

Note 9 - Varer

Varelageret vurderes til det laveste av anskaffelseskost og virkelig verdi. Bokført verdi fordeler seg som følger:

Tall i NOK 1.000	2021	2020
Fjernlager pellets	9 735	20 862
Bio-olje /diesel	29 600	13 339
Andre varer	3 786	3 139
Sum varer	43 121	37 340

Note 10 - Andre fordringer

Tall i NOK 1.000	2021	2020
Fordringer på ansatte	1 252	1 576
Forskuddsbetalte kostnader	2 270	139
Påløpte, ikke fakturerte inntekter	589 086	179 091
Andre kortsiktige fordringer	3 513	1 112
Sum andre fordringer - kortsiktige	596 121	181 918
Lån til datterselskap	17 500	
Innskudd pensjonskasse	34 244	34 244
Sum andre fordringer - langsiktige (finansielle anleggsmidler)	51 744	34 244



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Note 11 - Mellomværende med konsernselskaper

Tall i NOK 1.000	2021	2020
Kundefordringer konsernselskaper	779	52 375
Bankkonti tilknyttet konsernkontosystemet (se note 6,15)	439 094	182 781
Andre fordringer konsernselskaper		3 764
Sum kortsiktige fordringer på konsernselskaper	439 873	238 920

Tall i NOK 1.000	2021	2020
Leverandørgjeld konsernselskaper	199 871	12 942
Trekk bankkonti tilknyttet konsernkontosystemet (se note 6,15)	24 278	16 271
Påløpte, kostnader konsernselskaper	30 007	32 696
Sum kortsiktig gjeld til konsernselskaper	254 156	61 909

Tall i NOK 1.000	2021	2020
Langsiktige fordring til konsernselskaper	17 500	
Langsiktige lån fra konsernselskaper	2 000 000	2 000 000



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Note 12 - Pensjonsforpliktelser

Fortum Oslo Varme har innskuddsbasert pensjonsordning, og i tillegg flere lukkede ytelsesbaserte tjenstepensjonsordninger. Ved utgangen av 2021 hadde selskapet 195 faste ansatte, og 143 av disse er omfattet av innskuddsbasert pensjonsordning. 49 ansatte har en offentlig tjenstepensjon og 3 ansatte har privat ytelsesordning.

De ytelsesbaserte ordningene gir rett til definerte fremtidige ytelser iht. inngåtte avtaler. Ny offentlig tjenstepensjon er implementert fra 2020.

Fortum Oslo Varme er sponsorforetak for Fortum pensjonskasse, som inntil 1. september forvaltet ytelsespensjonsordningene. Den 1. september ble pensjonsordningene flyttet til Storebrand Liv. Fortum pensjonskasse er under avvikling som følge av at alle medlemsforetakene har flyttet pensjonsordningene til Storebrand Liv. Fortum Oslo Varme vil få tilbakeført egenkapital når Finanstilsynet endelig har godkjent oppløsningen.

Innskuddsbasert pensjonsordning forvaltes av DnB.

De ansatte har rettigheter til ulike AFP-ordninger, avhengig av hvilken pensjonsordning de tilhører i selskapet. Ansatte med innskuddspensjon, samt ansatte med privat ytelsespensjon, har rettigheter i Fellesordningen for AFP. Selskapet betaler premie til Fellesordningen, men har utover dette ikke noen økonomisk forpliktelse. Ansatte med offentlig ytelsespensjon har rettigheter til AFP i tråd med regelverket for offentlig sektor, og selskapet er dermed innvilget fritak for disse av Fellesordningen. Forpliktelser knyttet til denne førtidspensjonsordningen er beregnet og regnskapsført.

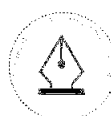
Netto pensjonskostnad fremkommer på følgende måte (tall i NOK 1.000)	2021	2020
Service kostnad	6 944	6 439
Netto rentekostnader/inntekter	- 39	728
Administrative kostnader	112	110
Arbeidsgiveravgift	989	1 026
Netto pensjonskostnad ytelsesplaner	8 006	8 302
Periodisert kostnad som ikke er innbetalt i 2021	2 344	
Tilskuddsplaner		
LO/NHO AFP-ordning	3 903	2 409
Tilskuddsbaserte pensjonsordninger	8 421	7 924
Netto pensjonskostnad tilskuddsplaner	12 324	10 332
Netto pensjonskostnad (inkl. i personalkostnader note 2)	22 675	18 635

Netto pensjonsmidler/-forpliktelse (-/+)	2021	2020
Nåverdi opptjent pensjonsforpliktelse for ytelsesplaner i fondsbaserte ordninger	296 557	217 303
Virkelig verdi på pensjonsmidler	- 225 068	- 184 231
Nettoverdi	71 489	33 073
Nåverdi av forpliktelse for ikke fondsbaserte ordninger	-	-
Netto pensjonsmidler/-forpliktelse (-/+)	71 489	33 073

Endring i balanseført forpliktelse	2021	2020
Balanseført verdi 01.01	33 073	10 470
Kostnad resultatført i året	8 006	8 302
Årets estimatavvik pensjon ført mot utvidet resultat	30 960	14 300
Netto betalinger	- 551	
Balanseført verdi 31.12	71 489	33 073

Økonomiske forutsetninger	2021	2020
Diskonteringsrente	1,90 %	1,70 %
G-regulering	2,50 %	1,75 %
Lønnsregulering	3,50 %	2,00 %
Regulering av pensjoner i offentlige ordninger	1,75 %	1,00 %

De aktuarmessige forutsetningene er basert på vanlige benyttede forutsetninger innen forsikring når det gjelder demografiske faktorer.



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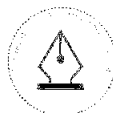
Note 13 - Langsiktige lån

Tall i NOK 1.000	2021	2020
Fortum Finance Ireland DAC (1)	1 000 000	1 000 000
Oslo kommune (2)	1 000 000	1 000 000
Sum aksjonærlån ("Senior loans")	2 000 000	2 000 000
Fortum Finance Ireland DAC (1)	1 000 000	1 000 000
Oslo kommune (2)	1 000 000	1 000 000
Sum ansvarlige aksjonærlån ("Subordinated loans")	2 000 000	2 000 000
Langsiktig lån konsernselskap (1)	2 000 000	2 000 000
Andre langsiktige lån (2)	2 000 000	2 000 000

Lånene er gitt på vanlige markedsmessige vilkår som en del av restruktureringsprosessen av tidligere Hafslund ASA og Oslo kommune og Fortums overtagelse av samtlige aksjer i selskapet per 4. august 2017. Lånene forfaller i sin helhet 4. august 2027.

Note 14 - Annen rentefri kortsiktig gjeld

Tall i NOK 1.000	2021	2020
Mottatt tilknytningsavgift, ikke varmepåsatt anlegg	96 797	83 204
Påløpte kostnader og forskuddsbetalinger	117 573	55 370
Skyldig offentlige avgifter	50 800	26 730
Skyldig lønn, feriepenger mv.	33 264	21 403
Annen kortsiktig gjeld	3 363	16 967
Sum annen rentefri kortsiktig gjeld	301 797	203 674



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Note 15 - Transaksjoner med nærstående

Fortum Oslo Varme AS inngår i det finske børsnoterte konsernet Fortum Corporation Oyj.

Selskapet eies av Fortum Participation Ltd (50 %) og Oslo Kommune (50 %).

Fortum Oslo Varme AS bygger, eier og driver anlegg for vannbåren varme basert på alternative energikilder primært innenfor Oslo og Oppegård. Selskapet både selger og kjøper varer og tjenester fra andre selskaper i Fortum konsernet og Oslo Kommune. Alle transaksjoner er foretatt som en del av den ordinære virksomheten og med armlengdes prinsipper.

De vesentligste transaksjonene er som følger:

Resultat (tall i NOK 1.000) - 2020	Drifts- inntekter	Drifts- kostnader	Netto rente- kostnader
Oslo Kommune	20 584	55 344	80 714
Fortum Finance Ireland DAC			80 714
Fortum Power & Heat Oyj (inkl gevinst El-derivater)	159 452	18 155	
Fortum Oyj Finland	634	15 894	405
Sum	180 670	89 394	161 024

Balanse (tall i NOK 1.000) - 2020	Langsiktige fordringer	Kortsiktige fordringer	Langsiktig gjeld	Lev. Gjeld	Annen gjeld
Oslo Kommune		5 149	2 000 000		29 458
Fortum Finance Ireland DAC			2 000 000		29 458
Fortum Power & Heat Oyj (inkl El-derivater)	3 547	582 960	10 125	6 240	498 756
Fortum Oyj Finland		182 908		1 338	16 271
Sum	3 547	771 018	4 010 125	7 578	573 943

Resultat (tall i NOK 1.000) - 2021	Drifts- inntekter	Drifts- kostnader	Netto rente- kostnader
Oslo Kommune	28 156	52 765	72 634
Fortum Finance Ireland DAC			72 634
Fortum Power & Heat Oyj (inkl tap El-derivater)	31 183	314 037	
Fortum Oyj Finland	1 588	15 171	52
Sum	60 928	381 972	145 321

Balanse (tall i NOK 1.000) - 2021	Langsiktige fordringer	Kortsiktige fordringer	Langsiktig gjeld	Lev. Gjeld	Annen gjeld
Oslo Kommune		6 164	2 000 000	4 355	29 958
Fortum Finance Ireland DAC			2 000 000		29 958
Fortum Fiber AS	17 500				
Fortum Power & Heat Oyj (inkl El-derivater)	12 412	6 528 195	34 355	149 864	6 740 637
Fortum Oyj Finland		439 600		42 705	24 278
Sum	29 912	6 973 959	4 034 355	196 924	6 824 831

Det er på linjen driftsinntekter i resultatoppstillingen resultatført et tap på derivater i 2021 på 313 millioner kroner, og en urealisert gevinst på kontrakter som ikke var sikret 11 millioner kroner. Urealisert tap på derivater for sikringsformål utgjorde per 31. desember 2021 280 millioner kroner og er bokført som tap i egenkapitalen.

Til sammenligning ble det i 2020 resultatført en gevinst på 150 millioner kroner, hvorav 22 millioner kroner utgjorde et urealisert tap for kontrakter som ikke var sikret. Urealisert gevinst på derivater for sikringsformål utgjorde per 31. desember 2020 34 millioner kroner og ble bokført som gevinst i egenkapitalen.



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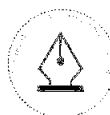
Note 16 - Finansielle eiendeler og forpliktelser etter kategori

taill NOK 1000	Derivater benyttet for sikringsformål	Instrumenter til virkelig verdi over resultatet	Finansielle eiendeler og forpliktelser målt til amortisert kost	Totalt
Finansielle eiendeler				
Finansielle anleggsmidler			34 244	34 244
Derivater (kortsiktig)	43 635	0		43 635
Derivater (långsiktig)	0	0		0
Kundefordringer og andre fordringer			569 579	569 579
Bankinnskudd, kontanter o.l.				0
Sum finansielle eiendeler per 31. desember 2020	43 635	0	603 823	647 438

taill NOK 1000	Derivater benyttet for sikringsformål	Instrumenter til virkelig verdi over resultatet	Finansielle eiendeler og forpliktelser målt til amortisert kost	Totalt
Finansielle forpliktelser				
Långsiktig lån konsernselskap			2 000 000	2 000 000
Andre långsiktige lån			2 000 000	2 000 000
Långsiktige leieforpliktelser			77 999	77 999
Kortsiktige leieforpliktelser			3 434	3 434
Leverandørgjeld			68 945	68 945
Derivater (kortsiktig)	3 415	7 407		10 822
Derivater (långsiktig)	6 088	1 184		7 273
Kortsiktiggjeld til konsernselskap			61 909	61 909
Annen rentefri kortsiktiggjeld			16 967	16 967
Sum finansielle forpliktelser per 31. desember 2020	9 503	8 591	4 229 224	4 247 318

taill NOK 1000	Derivater benyttet for sikringsformål	Instrumenter til virkelig verdi over resultatet	Finansielle eiendeler og forpliktelser målt til amortisert kost	Totalt
Finansielle eiendeler				
Finansielle anleggsmidler			51 744	51 744
Derivater (kortsiktig)	0	1 222		1 222
Derivater (långsiktig)	0	1 044		1 044
Kundefordringer og andre fordringer			1 172 938	1 172 938
Bankinnskudd, kontanter o.l.				0
Sum finansielle eiendeler per 31. desember 2021	0	2 267	1 224 672	1 226 939

taill NOK 1000	Derivater benyttet for sikringsformål	Instrumenter til virkelig verdi over resultatet	Finansielle eiendeler og forpliktelser målt til amortisert kost	Totalt
Finansielle forpliktelser				
Långsiktig lån konsernselskap			2 000 000	2 000 000
Andre långsiktige lån			2 000 000	2 000 000
Långsiktige leieforpliktelser			156 127	156 127
Kortsiktige leieforpliktelser			9 313	9 313
Leverandørgjeld			174 439	174 439
Derivater (kortsiktig)	254 323			254 323
Derivater (långsiktig)	25 428			25 428
Kortsiktiggjeld til konsernselskap			254 156	254 156
Annen rentefri kortsiktiggjeld			3 361	3 361
Sum finansielle forpliktelser per 31. desember 2021	279 752	0	4 587 396	4 877 148



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Note 17 - Finansielle instrumenter til virkelig verdi

Virkelig verdi-målinger klassifiseres etter følgende nivåer:

Nivå 1: Verdssettelse er basert på noterte priser i aktive markeder for identiske eiendeler eller forpliktelser
Nivå 2: Verdssettelse er basert på andre inndata enn noterte priser som omfattes av nivå 1, som er observerbare for eiendelen, enten direkte eller indirekte
Nivå 3: Verdssettelse er basert på ikke-observerbare inndata for eiendelen eller forpliktelser

2020

tall i NOK 1000	Nivå 1	Nivå 2	Nivå 3	Virkelig verdi	Bokført verdi
Eiendeler målt til virkelig verdi:					
Sikringsderivater		95 903		95 903	95 903
Ikke-sikringsderivater (MTM)		400 237		400 237	400 237
Netting av derivater		-452 505		-452 505	-452 505
Sum finansielle eiendeler målt til virkelig verdi 2020	0	43 635	0	43 635	43 635
Forpliktelser målt til virkelig verdi:					
Sikringsderivater		61 771		61 771	61 771
Ikke-sikringsderivater (MTM)		408 829		408 829	408 829
Netting av derivater		-452 505		-452 505	-452 505
Sum finansielle forpliktelser målt til virkelig verdi 2020	0	18 095	0	18 095	18 095

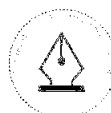
2021

tall i NOK 1000	Nivå 1	Nivå 2	Nivå 3	Virkelig verdi	Bokført verdi
Eiendeler målt til virkelig verdi:					
Sikringsderivater		86 982		86 982	86 982
Ikke-sikringsderivater (MTM)		5 874 927		5 874 927	5 874 927
Netting av derivater		-5 959 643		-5 959 643	-5 959 643
Sum finansielle eiendeler målt til virkelig verdi 2021	0	2 266	0	2 266	2 266
Forpliktelser målt til virkelig verdi:					
Sikringsderivater		366 734		366 734	366 734
Ikke-sikringsderivater (MTM)		5 872 660		5 872 660	5 872 660
Netting av derivater		-5 959 643		-5 959 643	-5 959 643
Sum finansielle forpliktelser målt til virkelig verdi 2021	0	279 751	0	279 751	279 751

Finansielle eiendeler målt til amortisert kost består i hovedsak av kundefordringer, og andre fordringer hvor amortisert kost er tilnærmet lik virkelig verdi.
For andre finansielle forpliktelser målt til amortisert kost er amortisert kost tilnærmet lik virkelig verdi.

Forfallsstruktur 31.12.2020 (tall i NOK 1000)	0-6 mnd	6-12 mnd	1-5 år	Sum
Fordringer				
Sikringsderivater	60 178	35 560	165	95 903
Ikke-sikringsderivater (MTM)	354 343	43 456	2 438	400 237
Gjeld				0
Sikringsderivater	54 808	710	6 253	61 771
Ikke-sikringsderivater	362 348	42 857	3 624	408 829
Totalt	-2 635	35 449	-7 274	25 540

Forfallsstruktur 31.12.2021 (tall i NOK 1000)	0-6 mnd	0-12 mnd	1-5 år	Sum
Fordringer				
Sikringsderivater	57 503	0	29 479	86 982
Ikke-sikringsderivater (MTM)	5 333 033	534 405	7 489	5 874 927
Gjeld				
Sikringsderivater	233 470	78 356	54 908	366 734
Ikke-sikringsderivater	5 510 742	355 474	6 444	5 872 660
Totalt	-353 676	100 575	-24 384	-277 485



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Note 18 – Risiko

Fortum Oslo Varme AS inngår i Fortum-konsernets policy for finansiell risiko-håndtering og følger de retningslinjer og prosesser som skal motvirke de finansielle risikoene.

Rammer og instruksjoner for risikostyringen er gitt ved styregodkjente retningslinjer samt tilhørende risikomandater.

Selskapet har en naturlig finansiell eksponering i tilknytning til kraftmarkedet, og er i tillegg eksponert for valutarisiko, renterisiko, likviditetsrisiko og kredittrisiko.

Kraftpris, volum og avfall risiko

Utviklingen i kraftpriser vil sammen med faktorer som påvirker produksjonsvolum - i første rekke værforhold - være av vesentlig betydning for resultatene til varmemevirksomheten. Selskapet inngår sikringsforretninger for å redusere kraftpriserisiko. Sikringshandel gjøres i hovedsak mot, og cleares hos, Fortum konsernets krafthandelsvirksomhet, som har motpartsrisikoen mot den nordiske elbørsen Nasdaq OMX Commodities.

Den finansielle sikringen gjøres ved bruk av sikringsinstrumenter (systempris og Oslo EPAD kontrakter) i henhold til markedspriser på NASDAQ OMX Commodities. Perioden varierer fra 0 til 3 år. Dette innebærer at urealiserte gevinster og tap bokføres i egenkapitalen, og at gevinster og tap bokføres i resultatet når de realiseres. Dette vil være samtidig med at salgsforpliktelsene påløper.

Ved inngåelsen av sikringsrelasjonen dokumenterer selskapet sammenhengen mellom sikringsinstrumentet(ene) og sikringsobjektet, samt risikostyringsmålet og strategien bak sikringsrelasjonen. Selskapet identifiserer sikringsobjektet og sikringsinstrumentet(ene) og dokumenterer også hvorvidt derivatene som benyttes anses som effektive til å utligne endringene i kontantstrøm knyttet til den sikrede risikoen (sikringsobjektet).

Fortum Oslo Varme var ved utgangen av 2021 prissikret for 51 % av forventet eksponering i 2022 til en vektet gjennomsnittspris på 43,3 Eur/MWh, og for 2023 var den tilsvarende sikringsgraden 11% til en vektet pris på 29,4 Eur/MWh. Forventet volum som er eksponert for kraftprisvariasjon, er hovedsakelig avhengig av kraftprisen, temperatur samt tilgjengelighet på kjeler. Kraftprisen isolert sett er påvirket av hydrologisk balanse i Norden, temperatur, vind, kvoteprisen på CO₂, kraftpriser på kontinentet, gasspriser, generell økonomisk utvikling, overføringskapasitet i kraftnettet samt import-/eksportsituasjonen. Sensitiviteten på kraftderivatporteføljen utgjør henholdsvis +/- 1,4 MEUR i egenkapitalen ved en prisendring på +/- 1 EUR/MWh. Selskapet hadde per 31.12.2021 ingen åpne posisjoner som treffer resultatregnskapet.

Sikringsgraden fastsettes ved at det hver måned modelleres forventet produksjonsoptimering som gir netto eksponering for sikringsobjektet. Input er priser på de forskjellige brensler som brukes i produksjonsmiksen. Modellen produserer da netto elektrisitetseksponering som representerer sikringsobjektet.

Netto eksponering sendes krafthandelsenheten i Fortum som vil utføre et hedgeprogram basert på selskapets sikringsstrategi. Sikringsgraden blir presentert i hvert styremøte. Ved en eventuell kraftig prisendring for selskapets brensler vil produksjonsmiksen bli remodellert og ny eksponering etablert.

Eksponering skal alltid holdes innenfor fastsatte rammer som gis årlig av styret og følges opp av risk management funksjonen i selskapet.

Kilden til sikringsineffektivitet kommer hovedsakelig fra forskjell mellom systempris i sikringsinstrument og områdepris i sikringsobjekt. Historisk har det vært høy korrelasjon mellom prisområdene NO1 og den nordiske systemprisen. I inneværende regnskapsår har ingen sikringskontrakter medført ineffektivitet.



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Virkelig verdi sikringsinstrumenter

(tall i NOK 1000/MWh)	Virkelig verdi sikringsinstrument	Andel OCI	Ineffektivitet i resultatet	Hedget volum (GWh)
31.12.2021				
Finansiell kraftsikring	-279 752	-279 752	0	-1375

Valutarisiko

Selskapet har ikke ordinær gjeld i utenlandsk valuta, men gjennomfører transaksjoner som er eksponert for svingninger i valutakurs. Selskapet er eksponert for valutarisiko gjennom kjøp og salg i annen valuta enn NOK, først og fremst i Euro.

Fortum konsernets finansavdeling utfører alle transaksjoner ut mot markedet og konsernets krafthandelsvirksomhet styrer valutaeksponeringen for kraftderivatene. Selskapet selv styrer resterende valutaeksponering via sin risk management funksjon. For å redusere valutarisiko tilknyttet framtidig eurokontantstrøm for inntekter fra varmeproduksjon benyttes hovedsakelig valutaterminer. Selskapet sikrer også kontantstrømmene ved større kontrakter i utenlandsk valuta.

Kredittrisiko

Selskapet er underlagt Fortum konsernets policy for kreditt-eksponering. Selskapet har størst eksponering mot bedriftskunder knyttet til fysiske leveranser. Oppfølging og innkreving av kundefordringer er sentralisert i en egen resultatenhet i Fortum konsernet.

På balansetidspunktet var det ingen vesentlige forhold med kredittrisiko.

Renterisiko

Selskapet har en blanding av fast- og flytende rentelån i sin låneportefølje og er eksponert for renterisiko og svingninger i rentemarkedet. Lånene er gitt av henholdsvis Oslo Kommune og Fortum som er eiere av selskapet.

Gitt selskapets renteeksponering per 31.12.2021 vil en renteendring på +/- 0,5 prosentpoeng over hele kurven påvirke selskapets resultat etter skatt med 7,8 millioner kroner.

Likviditetsrisiko

Selskapets likviditetsrisiko anses som lav da selskapet er i en god finansiell og økonomisk stilling med forventning om stabil kontantstrøm de kommende årene. Selskapet inngår i Fortum konsernets konsernkonto-ordning.



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Note 19 – Vesentlige hendelser i året

Det har ikke vært vesentlige hendelser i 2021.

Note 20 – Hendelser etter balansedagen

Fortum signerte 22. mars 2022 avtale om å overdra sin 50 prosent eierandel i Fortum Oslo Varme til et partnerskap bestående av Hafslund Eco, Infranode og HitecVision. Oslo kommune har samtidig inngått avtale om å overføre sin 50 prosent eierandel i selskapet til Hafslund Eco.

Eierskiftet forventes fullført i andre kvartal 2022. Det tas forbehold om at transaksjonen må godkjennes av Oslo bystyre og Konkurransetilsynet. Hvis aksjekjøpet blir fullført, vil Hafslund Eco bli majoritets-eier i selskapet med en eierandel på 60 prosent. Infranode og HitecVision vil få en eierandel på 20 prosent hver.

Transaksjonen sikrer med stor sannsynlighet en fullfinansiering av Fortum Oslo Varmes karbonfangstprosjekt på Klemetsrud, med forbehold for enighet om staten om oppdatert støtteavtale for den statlige medfinansiering av prosjektet og med tentativ oppstart sommeren 2022.

Russlands folkerettsstridige invasjon av Ukraina og den pågående krigen har skapt geopolitisk spenning og stor uro i energimarkedet, særlig i Europa. Prisene på olje, gass og kull har skutt i været, og det samme har strømprisen. Europas energikrise kan gå fra å være en priskrise til å bli en forsyningskrise hvis russiske gassleveranser begrenses eller stanses av krigshandlinger, sanksjoner eller mottiltak mot sanksjoner. Den økte usikkerheten rundt priser for og tilgang på råvarer, utviklingen av EUs og medlemslandenes respons på usikkerheten i deres energi- og klimapolitikk og forsyning av energi i Europa har også direkte innvirkning på det nordiske kraftmarkedet.

Ledelsen overvåker fortsatt utviklingen av pandemien. Med vedvarende smitte i samfunnet og utbrudd av nye mutanter har selskapet fortsatt nødvendig beredskap knyttet til koronasituasjonen. Situasjonen har ikke påvirket virksomhetens operasjonelle muligheter i nevneverdig grad. Effekten på selskapets regnskap har så langt vært begrenset. Det forventes ikke at pandemien vil ha vesentlig effekt på driften på sikt.



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Til generalforsamlingen i Fortum Oslo Varme AS

UAVHENGIG REVISORS BERETNING

Konklusjon

Vi har revidert Fortum Oslo Varme AS' årsregnskap som består av balanse per 31. desember 2021, resultatregnskap, utvidet resultatregnskap, oppstilling over endringer i egenkapital og kontantstrømoppstilling for regnskapsåret avsluttet per denne datoen og noter til årsregnskapet, herunder et sammendrag av viktige regnskapsprinsipper.

Etter vår mening

- oppfyller årsregnskapet gjeldende lovkrav, og
- gir årsregnskapet et rettviseende bilde av selskapets finansielle stilling per 31. desember 2021, og av dets resultater og kontantstrømmer for regnskapsåret avsluttet per denne datoen i samsvar med forenklet anvendelse av internasjonale regnskapsstandarder etter regnskapsloven § 3–9.

Grunnlag for konklusjonen

Vi har gjennomført revisjonen i samsvar med de internasjonale revisjonsstandardene International Standards on Auditing (ISA-ene). Våre oppgaver og plikter i henhold til disse standardene er beskrevet nedenfor under *Revisors oppgaver og plikter ved revisjonen av årsregnskapet*. Vi er uavhengige av selskapet slik det kreves i lov, forskrift og International Code of Ethics for Professional Accountants utstedt av the International Ethics Standards Board for Accountants (IESBA-reglene), og vi har overholdt våre øvrige etiske forpliktelser i samsvar med disse kravene. Innhentet revisjonsbevis er etter vår vurdering tilstrekkelig og hensiktsmessig som grunnlag for vår konklusjon.

Øvrig informasjon

Styret og daglig leder (ledelsen) er ansvarlige for informasjonen i årsberetningen. Øvrig informasjon omfatter informasjon i årsrapporten bortsett fra årsregnskapet og den tilhørende revisjonsberetningen. Vår konklusjon om årsregnskapet ovenfor dekker ikke informasjonen i årsberetningen.

I forbindelse med revisjonen av årsregnskapet er det vår oppgave å lese årsberetningen. Formålet er å vurdere hvorvidt det foreligger vesentlig inkonsistens mellom årsberetningen og årsregnskapet og den kunnskap vi har opparbeidet oss under revisjonen av årsregnskapet, eller hvorvidt informasjon i årsberetningen ellers fremstår som vesentlig feil. Vi har plikt til å rapportere dersom årsberetningen fremstår som vesentlig feil. Vi har ingenting å rapportere i så henseende.

Basert på kunnskapen vi har opparbeidet oss i revisjonen, mener vi at årsberetningen

- er konsistent med årsregnskapet og
- inneholder de opplysninger som skal gis i henhold til gjeldende lovkrav.

Ledelsens ansvar for årsregnskapet

Ledelsen er ansvarlig for å utarbeide årsregnskapet og for at det gir et rettviseende bilde i samsvar med forenklet anvendelse av internasjonale regnskapsstandarder etter regnskapsloven § 3–9. Ledelsen er også ansvarlig for slik internkontroll som den finner nødvendig for å kunne utarbeide et regnskap som ikke inneholder vesentlig feilinformasjon, verken som følge av misligheter eller utilsiktede feil.

Ved utarbeidelsen av årsregnskapet må ledelsen ta standpunkt til selskapets evne til fortsatt drift og opplyse om forhold av betydning for fortsatt drift. Forutsetningen om fortsatt drift skal legges til grunn for årsregnskapet med

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side 2
Uavhengig revisors beretning -
Fortum Oslo Varme AS

mindre ledelsen enten har til hensikt å avvike selskapet eller legge ned virksomheten, eller ikke har noe realistisk alternativ til dette.

Revisors oppgaver og plikter ved revisjonen av årsregnskapet

Vårt mål er å oppnå betryggende sikkerhet for at årsregnskapet som helhet ikke inneholder vesentlig feilinformasjon, verken som følge av misligheter eller utilsiktede feil, og å avgi en revisjonsberetning som inneholder vår konklusjon. Betryggende sikkerhet er en høy grad av sikkerhet, men ingen garanti for at en revisjon utført i samsvar med ISA-ene, alltid vil avdekke vesentlig feilinformasjon som eksisterer. Feilinformasjon kan oppstå som følge av misligheter eller utilsiktede feil. Feilinformasjon blir vurdert som vesentlig dersom den enkeltvis eller samlet med rimelighet kan forventes å påvirke økonomiske beslutninger som brukerne foretar basert på årsregnskapet.

Som del av en revisjon i samsvar med ISA-ene, utøver vi profesjonelt skjønn og utviser profesjonell skepsis gjennom hele revisjonen. I tillegg:

- identifiserer og vurderer vi risikoen for vesentlig feilinformasjon i regnskapet, enten det skyldes misligheter eller utilsiktede feil. Vi utformer og gjennomfører revisjonshandlinger for å håndtere slike risikoer, og innhenter revisjonsbevis som er tilstrekkelig og hensiktsmessig som grunnlag for vår konklusjon. Risikoen for at vesentlig feilinformasjon som følge av misligheter ikke blir avdekket, er høyere enn for feilinformasjon som skyldes utilsiktede feil, siden misligheter kan innebære samarbeid, forfalskning, bevisste utelatelser, uriktige fremstillinger eller overstyring av internkontroll.
- opparbeider vi oss en forståelse av den interne kontroll som er relevant for revisjonen, for å utforme revisjonshandlinger som er hensiktsmessige etter omstendighetene, men ikke for å gi uttrykk for en mening om effektiviteten av selskapets interne kontroll.
- evaluerer vi om de anvendte regnskapsprinsippene er hensiktsmessige og om regnskapsestimatene og tilhørende noteopplysninger utarbeidet av ledelsen er rimelige.
- konkluderer vi på hensiktsmessigheten av ledelsens bruk av fortsatt drift-forutsetningen ved avleggelsen av årsregnskapet, basert på innhentede revisjonsbevis, og hvorvidt det foreligger vesentlig usikkerhet knyttet til hendelser eller forhold som kan skape tvil av betydning om selskapets evne til fortsatt drift. Dersom vi konkluderer med at det eksisterer vesentlig usikkerhet, kreves det at vi i revisjonsberetningen henleder oppmerksomheten på tilleggsopplysningene i årsregnskapet, eller, dersom slike tilleggsopplysninger ikke er tilstrekkelige, at vi modifiserer vår konklusjon. Våre konklusjoner er basert på revisjonsbevis innhentet inntil datoen for revisjonsberetningen. Etterfølgende hendelser eller forhold kan imidlertid medføre at selskapet ikke fortsetter driften.
- evaluerer vi den samlede presentasjonen, strukturen og innholdet i årsregnskapet, inkludert tilleggsopplysningene, og hvorvidt årsregnskapet gir uttrykk for de underliggende transaksjonene og hendelsene på en måte som gir et rettviseende bilde.

Vi kommuniserer med styret blant annet om det planlagte omfanget av revisjonen og til hvilken tid revisjonsarbeidet skal utføres. Vi utveksler også informasjon om forhold av betydning som vi har avdekket i løpet av revisjonen, herunder om eventuelle svakheter av betydning i den interne kontrollen.

Oslo, 7. april 2022
Deloitte AS

Guro Magnetun Heimvik
statsautorisert revisor

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Financial statements and operating and financial review 2021

Årsregnskap regnskapsåret 2021 for 977296919

Fortum Oyj
Business ID: 1463

Financial statements and operating and financial review 2021

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Financial performance and position

Outstanding performance under extraordinary and volatile market conditions

Key figures

EUR million	2021	2020	2019	Change 21/20
Reported				
IS Sales	112,400	49,015	5,447	129%
IS Operating Profit	-588	1,599	1,118	-137%
- of sales %	-0.5	3.3	20.5	
IS Share of profit of associates and joint ventures ¹⁾	192	656	744	-71%
IS Profit before income tax	-289	2,199	1,728	-113%
- of sales %	-0.3	4.5	31.7	
IS Net profit	-114	1,855	N/A	-106%
IS Net profit (after non-controlling interests)	739	1,823	N/A	-59%
IS Earnings per share, EUR	0.83	2.05	1.67	-60%
CF Net cash from operating activities	4,970	2,555	1,575	95%

EUR million	2021	2020	2019	Change 21/20
Comparable				
EBITDA ¹⁾	3,817	2,434	1,766	57%
IS Operating profit	2,536	1,344	1,191	89%
Share of profit of associates and joint ventures ¹⁾	154	656	N/A	-77%
Net profit (after non-controlling interests) ²⁾	1,778	1,483	N/A	20%
Earnings per share, EUR ²⁾	2.00	1.67	N/A	20%

EUR million

	2021	2020	2019
Shareholders' equity per share, EUR	13.66	14.58	14
Financial net debt (at end of period) ³⁾	789	7,023	4,814
Adjusted net debt (at end of period) ³⁾	3,227	9,784	4,914
Financial net debt/comparable EBITDA ^{1) 3)}	0.2	2.9	1
Return on shareholders' equity, %	-0.8	12.9	1
Equity-to-assets ratio, %	9	27	

1) Comparable EBITDA is defined as an alternative performance measure and used as a component in the capital structure target. F
Comparable EBITDA: In 2020 Comparable EBITDA includes contribution from Uniper for the period of 1 April to 31 December 2020
consolidated as a subsidiary from 31 March 2020. Until 31 of March 2020 Uniper's contribution to the income statement was recog
profit/loss of associates and joint ventures. Comparable share of profit/loss of associates and joint ventures for 2020 has been rec
the introduction of comparable net profit APM in 2021.

2) In 2021, Fortum introduced two new performance measures: comparable net profit and comparable earnings per share.
3) Following the consolidation of Uniper, Fortum has updated its definition of net debt and uses financial net debt and adjusted net debt

See ► Definitions and reconciliations of key figures.

2021 was in many ways an extraordinary year in the energy business. We have experienced a rare combination of circumstances leading to unprecedented developments in the commodity market. During these turbulent times Fortum Group held course. We successfully continued the implementation of our strategy with active portfolio rotation and accelerated decarbonisation, and produced another great set of operative results.

After the drop in 2020, energy consumption in our market areas increased as economies recovered, and societies learned to cope with the Covid-19 pandemic. Market conditions were characterised by colder weather during the first half of the year, below normal European wind and Nordic hydro conditions as well as increasing EU emission allowance prices. It was gas that was in the driver's seat for the energy commodities. Lower-than-average gas storage levels coupled with tight LNG and pipeline supplies caused unprecedented volatility and a price rally in the second half of the year in Europe.

The higher power and gas prices have clearly impacted both our business and results in many ways. Both our Uniper and Generation segments significantly contributed to the Group's comparable operating profit, which increased by 89%. Uniper's gas business benefitted from the extraordinary market developments with volatile and rising prices despite additional liquidity requirements while the Generation segment significantly gained from the higher power prices supported by successful physical and financial optimisation. In the fourth quarter, the segment's achieved power price reached its highest quarterly level since 2009. Record-high nuclear and higher hydro volumes also contributed to the upsurge. The results of our Russia segment were supported by sales gains and higher power prices. Our City Solutions segment also produced a sound result improvement especially in power and heat sales year-on-year. Whilst large parts of the business benefitted from these developments, Consumer Solutions suffered from high electricity purchase costs due to the very high power prices in the fourth quarter and the intensifying competition in the Nordic market.

The extremely volatile commodity markets with record-high gas prices in December also caused a sharp increase in the margining requirements of Uniper's trading business. At the beginning of 2022, Uniper took precautionary financing measures including credit arrangements from Fortum and the German state-owned KfW Bank to ensure liquidity and financial flexibility, and to manage any further market volatility. These efforts were positively noted as S&P Global Ratings rating agency in January 2022 affirmed Fortum's and Uniper's long-term ratings of BBB with a stable outlook.

In this turbulent operating environment, we have kept our strategic priorities clear. Our goals for 2021 were to strengthen the balance sheet, to further decarbonise our portfolio and to drive profitable growth while balancing it with our dividend and financial position.

Actions taken during the year included the divestments of mainly district heating assets such as Stockholm Exergi (50%) and the Baltic district heating business as well as the 500 megawatts of solar power capacity in India. The total consideration recorded for divested assets amounted to more than EUR 4 billion in 2021, securing a strong balance sheet and bringing our financial net debt-to-comparable EBITDA to 0.2 times, significantly below our set target level of <2 times.

We also continued working towards our climate targets to be carbon neutral in our European generation at the latest by 2035 and in all operations by 2050. Within less than one year, we have been able to announce accelerated coal phase-out of six of our coal-fired power plants in Germany and the UK compared to the original timetable. In Russia, our Chelyabinsk CHP-2 plant is transitioning from the use of coal to gas, ending the use of coal in the Fortum Russia segment by the end of 2022. Towards the end of the year, we also set a reduction target for the Group's indirect emissions, i.e. Scope 3, which is -35% by 2035.

At the same time, we strengthened our position in CO₂-free power generation. Over the year, we commissioned a total of almost 600 MW of new wind and solar capacity in Russia and announced our first joint wind power project of 380

MW in Finland together with Uniper. In addition, we have won the right to build a total of 2 GW of wind and solar capacity in the coming years in national auctions.

2021 was also the year in which Fortum and Uniper grew closer together. We announced new cooperation three strategic areas of Nordic hydro and physical trading optimisation, wind and solar development, as well as hydrogen with the ambition to create value for both companies, and, in particular, for our customers. We announced management changes and announced more diverse leadership teams at both Fortum and Uniper.

As a group, our strategy execution will continue with the same determination and focus this year. We drive profitable growth and to further deepen the cooperation between Fortum and Uniper. Today we have announced the decision to submit an application for a new operating licence for our nuclear power plant in Finland. In addition to financial, political and societal aspects, the EU taxonomy was a key factor that we account when preparing the decision – it is central in guiding investments towards sustainable and clean energy.

Based on the solid results of 2021 and the outlook for future years, Fortum's Board of Directors is proposing an Annual General Meeting a dividend of EUR 1.14 per share for the financial year 2021. The proposal is in line with Fortum's dividend policy to pay a stable, sustainable, and over time increasing dividend.

Changes in reporting

In 2021, Fortum introduced two new Alternative Performance Measures (APM) to provide additional financial performance indicators that better reflect the underlying profitability.

- Comparable net profit
- Comparable earnings per share

Comparable net profit is shown after non-controlling interest and adjusted for items affecting comparability adjustments to share of profit of associates and joint ventures, net finance costs, income tax expenses, and controlling interest. Comparable earnings per share is calculated from comparable net profit.

See » Note 7 and » Definitions and reconciliations of key figures.

Financial results

Sales by segment

EUR million	2021	2020
Generation	2,895	2,690
Russia	906	906
City Solutions	1,302	1,302
Consumer Solutions	2,622	1,212
Uniper	105,994	44,544
Other Operations	138	138
Netting of Nord Pool transactions ¹⁾	-1,125	-6
Eliminations	-33	-
IS Total	112,400	49,000

¹⁾ Sales and purchases with Nord Pool Spot are netted at the Group level on an hourly basis and posted either as revenue or cost of sales. Fortum is a net seller or net buyer during any particular hour.

Comparable EBITDA by segment				Share of profits of associated companies and joint ventures			
EUR million	2021	2020	Change 21/20	EUR million	2021	2020	
Generation	1,299	886	47%	Generation		36	
Russia	404	394	2%	Russia		62	
City Solutions	317	239	33%	City Solutions		42	
Consumer Solutions	123	153	-20%	Consumer Solutions		-	
Uniper	1,789	856	109%	Uniper		51	
Other Operations	-114	-94	-21%	Other Operations		0	
Total	3,817	2,434	57%	IS Total		192	
Comparable operating profit by segment				Comparable share of profits of associated companies and joint ventures			
EUR million	2021	2020	Change 21/20	EUR million	2021	2020	
Generation	1,110	722	54%	Generation		11	
Russia	261	251	4%	Russia		62	
City Solutions	135	47	186%	City Solutions		42	
Consumer Solutions	52	90	-43%	Consumer Solutions		39	
Uniper	1,120	363	209%	Uniper		0	
Other Operations	-142	-129	-10%	Other Operations		0	
IS Total	2,536	1,344	89%	Total 1)		150	
				1) Comparable share of profit/loss of associates and joint ventures for 2020 has been recalculated following the introduction of company law in 2021.			
Operating profit by segment				Arregunkap regin erakutsa			
EUR million	2021	2020	Change 21/20	For further information see ▶ Note 6.			
Generation	1,054	711	48%	Sales were EUR 112,400 (49,015) million due to record high commodity prices.			
Russia	227	252	-10%	Comparable operating profit was EUR 2,536 (1,344) million. A strong performance in an exceptional market enabled the highest comparable operating profit in Fortum's history following volatile commodity prices.			
City Solutions	2,671	775	245%	Consolidation of Uniper as a subsidiary. Additionally, the Uniper segment's gas business could make profit in 2021 due to the extraordinarily volatile market fundamentals. Earnings increased in the Generation segment due to the power price and higher nuclear and hydro volumes. In the first quarter of 2020, Uniper was consolidated as an associated company.			
Consumer Solutions	495	129	283%				
Uniper	-4,901	29	-16,885%				
Other Operations	-134	-298	55%				
IS Total	-588	1,599	-137%				

Operating profit for the period was impacted by EUR -3,124 (255) million of items affecting comparability, mainly due to changes in fair values of non-hedge-accounted derivatives of EUR -5,424 (-675) million almost entirely related to the Uniper segment. Items affecting comparability also includes the tax-exempt capital gains of EUR 2,681 million, the main part of which is related to the divestment of the 50% ownership in Stockholm Exergl Holding AB and the divestment of the Baltic district heating operations (► **Note 7**).

Comparable share of profits of associates and joint ventures was EUR 154 (656) million (► **Note 18**). The comparison period includes the comparable share of profit from Uniper of EUR 502 million based on Uniper's fourth-quarter 2019 and first-quarter 2020 results.

Finance costs – net, i.e. net finance income, amounted to EUR 107 (-56) million. Comparable finance costs - net amounted to EUR -38 (-103) million. The change mainly relates to the positive effect of changes in discount rates on other provisions in the Uniper segment.

Profit before income taxes was EUR -289 (2,199) million. Comparable profit before income taxes was EUR 2,651 (1,897) million.

Income taxes for the period totalled EUR 175 (tax income) (-344) million. Comparable income tax expenses were EUR -605 (-299) million (► **Note 12**).

Net profit was EUR -114 (1,855) million. Comparable net profit was EUR 1,778 (1,483) million after the deduction of adjusted non-controlling interest. Comparable net profit is adjusted for items affecting comparability, adjustments to share of profit of associates and joint ventures, net finance costs, and income tax expenses. The alternative performance measure (APM) 'comparable net profit' was introduced in the first quarter of 2021 to better reflect the underlying profitability (► **Note 7.2** and ► **Definitions and reconciliations of key figures**).

Earnings per share were EUR 0.83 (2.05) and comparable earnings per share were EUR 2.00 (1.67).

Financial position and cash flow

EUR million	2021	2020	Change 21/20
Interest expense	-202	-170	19%
Interest income	156	111	40%
Other financial items - net	154	3	-5,250%
IS Finance costs - net	107	-56	293%
Financial net debt	789	7,023	89%
Adjusted net debt	3,227	9,784	67%

Cash flow

In 2021, net cash from operating activities increased by EUR 2,415 million to EUR 4,970 (2,555) million. Working capital was impacted by operational liquidity measures in the Uniper segment, which are done to increase margin receivables in investing activities.

Net cash used in investing activities was EUR 5,727 (2,140) million. Capital expenditure increased by EUR 1,178 (1,101) million. Acquisition of shares, net of liquid funds, was EUR 294 (1,801) million. Acquisitions mainly relates to the acquisition of Uniper shares. Divestment of shares and capital returns of EUR 1 million mainly include the divestments of the 50% ownership in Stockholm Exergl Holding AB and the divestment in the Baltics. In 2020, divestment of shares mainly included the divestment of the Joensuu and district heating operations. The change in margin receivables was EUR -7,964 (-552) million as a result of commodity prices.

The negative change of EUR 7,964 (552) million in margin receivables in net cash used in investing activities offset by the positive change of EUR 649 (-623) million in margin liabilities in the cash flow from financing activities. Cash flow before financing activities was EUR -756 (415) million.

Net cash from financing activities was EUR 6,013 (505) million. The net increase in long-term liabilities was 1,124 (2,062) million while the increase in short-term liabilities was EUR 5,364 (207) million. The increase in liabilities is mainly related to the use of commercial paper programmes and revolving credit facilities, which manage the increased margin receivables. In 2020, Fortum drew a term loan of EUR 2,000 million and EUR 300 million to finance the acquisition of shares in Uniper. (For additional information, see the Financial statements for 2020). The dividend, EUR 995 million, was paid on 7 May 2021. The change in margin liabilities was EUR 649 mainly due to higher commodity prices. The net increase in liquid funds was EUR 5,256 (920) million (► **Note 18**).

Assets

At the end of 2021, total assets amounted to EUR 149,661 (57,810) million. The increase from December 2020 relates to derivative financial instruments in the Uniper segment as a result of the higher commodity prices at the end of 2021 were EUR 7,592 (2,308) million.

Equity

Total equity amounted to EUR 13,665 (15,577) million. Equity attributable to owners of the parent company was EUR 12,131 (12,953) million. The change from December 2020 was mainly related to the net profit for the period of EUR 739 million offset by the EUR -980 million impact from fair valuation of cash flow hedges and the dividend of EUR 995 million.

Financing

At the end of 2021, financial net debt was EUR 789 (7,023) million and adjusted net debt EUR 3,227 (9,784) million († Note 27).

At the end of 2021, the Group's liquid funds totalled EUR 7,592 (2,308) million. Liquid funds include EUR 2,966 (289) million held by the Uniper segment.

At the end of 2021, Fortum had undrawn committed credit facilities of EUR 400 million.

In May, Fortum repaid a maturing bond of EUR 500 million and in December 2021 Fortum prepaid EUR 1,550 million of a EUR 2,000 million bridge loan maturing in October 2022. Additionally, in October 2021 Fortum cancelled the remaining revolving credit facility that was part of the facility for the purchase of Uniper shares and liquidity purposes, EUR 1,350 million, with the original maturity date in November 2021.

In December, following the surge in commodity prices Fortum extended the credit facility agreement with Uniper, originally signed in September, to EUR 8,000 million comprising tranches for both a shareholder loan and a parent company guarantee. Both Fortum (EUR 1,750 million) and Uniper (EUR 1,800 million) withdrew their core revolving credit facilities as precautionary measures to secure sufficient liquidity for possible further increases and volatility in commodity prices and consequent additional requirement of collateral payments. In addition, Fortum signed new bilateral financing agreements to further strengthen the liquidity position. These agreements consisted of a EUR 400 million bank loan (maturing in September 2024), a EUR 500 million bank loan (maturing in June 2023 with an extension option of eight months) and a revolving credit facility of EUR 800 million (maturing in December 2022 with an extension option of one year), of which EUR 500 million was drawn as of 31 December 2021. Also in December, Uniper extended the existing EUR 400 million bank loan, maturing in September 2022, to mature in March 2023 and signed a new EUR 150 million bank loan with maturity in January 2024.

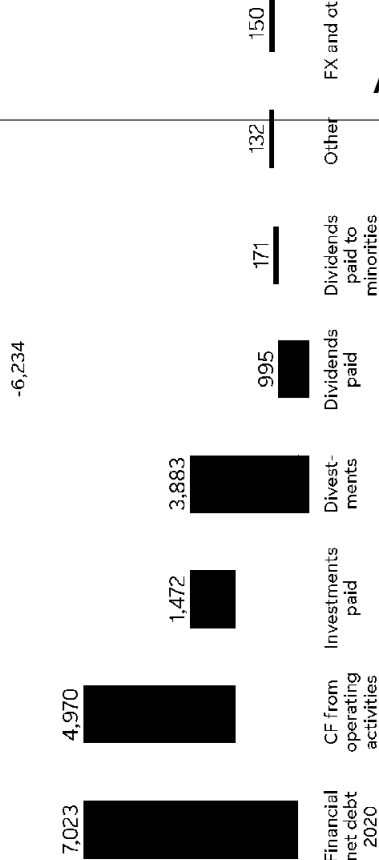
After year-end 2021, in January 2022, Uniper signed a EUR 2,000 million short-term revolving credit facility with the German state-owned KfW-Bank (maturing in April 2022). Fortum signed a EUR 3,000 million revolving credit facility (maturing in April 2022 with an extension option of three months). These facilities have not been used.

In the fourth quarter of 2021, Fortum's total interest-bearing loans increased by EUR 4,486 million to EUR 16,144 million. Current loans, including the EUR 1,731 million current portion of long-term loans, amounted to EUR 8,389 million. In order to manage the higher margin requirements short-term loans increased by EUR 2,847 million from EUR 3,811 million at the end of September to EUR 6,658 million at the end of the year. These short-term liquidity needs were mainly covered by commercial paper programmes and the use of the revolving credit facilities. The use of commercial papers increased by EUR 895 million from EUR 2,234 million at the end of September to EUR 3,129 million.

In June 2021, Fitch revised its long-term rating for Fortum to BBB, with a stable outlook (previously BBB with a negative outlook). The short-term rating is at the level F2. In July 2021, S&P Global Ratings revised its long-term rating for Fortum to BBB. The short-term rating is at the level F2. In July 2021, S&P Global Ratings revised its long-term rating for Fortum to BBB, with a stable outlook (previously BBB with a negative outlook).

In September 2021, S&P Global Ratings reaffirmed Uniper's BBB rating and stable outlook. In July 2021, S&P Global Ratings also revised its long-term rating for Uniper to BBB, with a stable outlook (previously BBB with a negative outlook). In January 2022, S&P Global Ratings affirmed both Fortum's and Uniper's rating of BBB with a stable outlook.

Change in financial net debt during 2021, EUR million



Operating and regulatory environment

European power markets

Year 2021 turned out to be the complete opposite of year 2020, with European gas, carbon and power markets breaking record-high levels in both day-ahead and forward products. A cold winter and spring 2021, in conjunction with the Russian gas flows from Russia to Europe, led to a significant increase in the consumption of gas in the power and industrial sectors in Asia, lower pipeline gas flows from Russia to Europe and below normal European wind conditions all contributed to unprecedentedly high gas and consequently power prices. Towards the end of 2021, high Continental European power prices also increasingly influenced prices in the Nordics, further supported by continuing low precipitation in the Nordics and new interconnectors between Germany and the UK.

According to preliminary statistics, power consumption in the Nordic countries was 404 (389) TWh in higher power demand in the Nordics, was mainly caused by colder weather but also supported by a slight industrial demand.

In central western Europe (Germany, France, Austria, Switzerland, Belgium, and the Netherlands), power consumption in 2021 was 1,359 (1,316) TWh according to preliminary statistics. This is in line with the power level of power demand.

In the long term, electricity is expected to continue to gain a significantly higher share of total energy consumption. The electricity demand growth rate will largely be determined by classical drivers, such as macroeconomic and demographic development, but also increasingly by decarbonising the industrial, transport and heating sectors through direct electrification and green hydrogen.

At the beginning of 2021, the Nordic water reservoirs were at 105 TWh, which is 21 TWh above the long-term average. During 2021, the Nordic precipitation and inflow was below normal while hydro power utilization remained high, which decreased the water reservoirs compared to normal. At the end of 2021, the reservoirs were at 73 TWh, which is 11 TWh below the long-term average and 32 TWh lower than one year earlier.

In 2021, the average system spot price in Nord Pool was EUR 62.3 (10.9) per MWh. The average area price in Finland was EUR 72.3 (28.0) per MWh, in the SE3 area in Sweden (Stockholm) EUR 66.0 (21.2) per MWh, and in the SE2 area in Sweden (Sundsvall) EUR 42.6 (14.4) per MWh. In Germany, the average spot price during 2021 was EUR 96.8 (30.5) per MWh.

At the end of February 2022, the Nordic system electricity forward price on Nasdaq Commodities for the remainder of 2022 was around EUR 69 per MWh and for 2023 around EUR 48 per MWh. The Nordic water reservoirs were at 55 TWh, which is about 5 TWh below the long-term average and 14 TWh lower than one year earlier. The German electricity forward price for the remainder of 2022 was around EUR 225 per MWh and for 2023 around EUR 148 per MWh.

European commodity markets

In 2021, gas demand in central western Europe was 2,218 (2,111) TWh. The central western European gas storage levels decreased from 439 TWh at the beginning of the year to 293 TWh at the end of 2021, which is 146 TWh lower than in 2020 and 129 TWh lower than the five-year average (2017–2021).

Tightness in the gas market has lifted European gas prices to unprecedented levels. During 2021 the average gas spot price (TTF) was EUR 47 (9) per MWh. The 2022 forward price increased from EUR 16 per MWh at the beginning of the year to EUR 79 per MWh at the end of 2021.

In 2021, there were also strong gains in the EUA market. The price increased from EUR 34 per tonne at the beginning of the year to EUR 81 per tonne at the end of 2021, which is EUR 56 per tonne higher than the average price in 2020. For the full year of 2021, the average EUA price was EUR 54 per tonne.

In 2021, there was an increase in coal prices. The forward quotation for coal (ICE Rotterdam) for 2022 increased from USD 72 per tonne at the beginning of the year to USD 99 per tonne at the end of 2021, which is USD 37 per tonne above the average price in 2020.

At the end of February 2022, the TTF forward price for gas for the remainder of 2022 was EUR 102 per MWh. The forward quotation for EUA's for 2022 was at the level of EUR 85 per tonne. The forward price for coal (ICE Rotterdam) for the remainder of 2022 was USD 204 per tonne.

Russian power market

Fortum's Russia segment operates thermal power plants mainly in the Tyumen and Khanty-Mansiysk areas in Siberia, where industrial production is dominated by the oil and gas industries, and in the Chelyabinsk area, which is dominated by the metal industry. Uniper's Russian subsidiary Unipro PJSC operates in the Smolensk, Sverdlovsk, and Krasnoyarsk regions, as well as in the Khanty-Mansiysk Autonomous District.

The Russian market is divided into two price zones; Fortum's Russia division operates in the first price zone (European and Urals part of Russia), while Uniper operates in both the first and second price zones.

According to preliminary statistics, Russian power consumption in 2021 was 1,090 (1,033) TWh. The figure for the first price zone was 830 (783) TWh and for the second price zone 217 (209) TWh. The increase in consumption resulted from the economic recovery.

In 2021, the average electricity spot price, excluding capacity prices, was RUB 1,405 (1,220) per MWh in the first price zone, RUB 935 (873) in the second price zone, and RUB 1,221 (1,068) per MWh in the Urals hub.

The Russian Government increased the gas price by 3% in July 2021.

In Russia, capacity payments based on Capacity Supply Agreements (CSA) are a key driver for earning CSA payments are considerably higher than for capacities selected in Competitive Capacity Selection (CCS). Currently, Fortum's Russia segment's CSA capacity amounts to 1,926 MW, including 70 MW of solar and 800 MW. These capacities do not include those related to the joint ventures. Correspondingly, Uniper's CSA capacity amounts to 800 MW.

Thermal power plants are entitled to clearly higher CSA payments starting approximately six years after commissioning (see tables below). In 2021, there was an increase in CSA payments for three units of Fortum's segment's generation fleet and for one unit of Fortum's Uniper segment's generation fleet. As for the CSA, the units can receive CCS payments from CCS auctions. See the corresponding changes in the table below.

Fortum's Russia segment's units	CSA starts	Higher CSA starts
Tyumen CHP 1, unit 2	1 Feb 2011	1 Oct 2016
Chelyabinsk CHP 3, unit 3	1 Jun 2011	1 Nov 2016
Nyagan, unit 1	1 Apr 2013	1 Jan 2018
Nyagan, unit 2	1 Dec 2013	1 Aug 2018
Nyagan, unit 3	1 Jan 2015	1 Jan 2021
Chelyabinsk CHP 4, unit 1	1 Dec 2015	1 Jan 2021
Chelyabinsk CHP 4, unit 2	1 Mar 2016	1 Jan 2021
Ulyanovsk ¹⁾	1 Jan 2018	n/a
Bugulchansk ²⁾	Nov 2016 – Mar 2017	n/a
Pleshanovsk ²⁾	1 Mar 2017	n/a
Grachevsk ²⁾	1 Mar 2017	n/a

¹⁾ Wind CSA.

²⁾ Solar CSA.

Fortum's Uniper segment's units	CSA starts	Higher CSA starts	CSA ends
Surgutskaya-2 GRES-2, unit 7	1 May 2011	1 May 2017	31 Jul 2021
Surgutskaya-2 GRES-2, unit 8	1 Jun 2011	1 Jun 2017	31 Aug 2021
Shaturskaya GRES, unit 7	1 Oct 2010	1 Oct 2016	31 Dec 2020
Yavinskaya GRES, unit 5	1 Jan 2011	1 Jan 2017	31 Dec 2020
Berezovskaya GRES, unit 3 ¹⁾	1 Nov 2014	1 Nov 2020	31 Oct 2024
Surgutskaya-2 GRES-2, unit 1 ²⁾	Apr 2022	n/a	Feb 2038
Surgutskaya-2 GRES-2, unit 2 ²⁾	Dec 2026	n/a	Nov 2042
Surgutskaya-2 GRES-2, unit 3 ²⁾	Dec 2027	n/a	Nov 2043
Surgutskaya-2 GRES-2, unit 4 ²⁾	Dec 2025	n/a	Nov 2041
Surgutskaya-2 GRES-2, unit 6 ²⁾	Sep 2024	n/a	Aug 2040

1) Started receiving CSA payments from 1 May 2021 when returning to the market after repairs.

2) Modernisation CSA 2.

Fortum's Russia segment's generation capacity not receiving CSA payments, a total of 2,697 MW, is allowed to participate in the annual CCS auctions. Uniper's generation capacities allowed to participate in the CCS auction totalled 10,445 MW. The next CCS auction, for the year 2027, is expected to be held in November 2023.

Year	2020	2021	2022	2023	2024	2025	2026
CCS auction price, tRUB/MW/month, first price zone ¹⁾	115	134	168	171	182	193	195
CCS auction price, tRUB/MW/month, second price zone							
1)	191	225	264	267	279	303	299
Fortum's Russia segment							
Selected in CCS auction, MW, first price zone	2,331	2,848	3,451	3,904	3,904	4,351	4,852
Fortum's Uniper segment							
Selected in CCS auction, MW, first price zone	7,190	8,829	8,035	8,035	7,225	6,427	5,617
Selected in CCS auction, MW, second price zone	1,600	1,600	1,600	1,600	2,400	2,400	2,400
1) Excluding inflation.							

In the June 2017 CSA auction, the Fortum-Rusnano wind investment fund won the right to build 1,000 MW of wind capacity. The wind parks were to be commissioned during 2018–2022 and will receive a guaranteed CSA price corresponding to approximately RUB 7,000–9,000 per MWh for a period of 15 years.

In the June 2018 CSA auction, the Fortum-Rusnano wind investment fund won the right to build 823 MW capacity. The wind parks were to be commissioned during 2019–2023 and will receive a guaranteed CSA price corresponding to approximately RUB 7,000–8,000 per MWh for a period of 15 years.

In the June 2018 and 2019 CSA auctions, Fortum won the right to build 110 MW and 6 MW of solar capacity. Power plants will receive a guaranteed CSA price for a period of 15 years corresponding to approximately RUB 14,000 per MWh and RUB 14,000 per MWh, respectively. In December 2021, 78 MW of the capacity was commissioned and the remaining part will be commissioned in the second half of 2022.

In September 2021 in the most recent CSA auction, Fortum announced that the Fortum-Rusnano wind investment fund won annual CSA remuneration in the range of RUB 16.9–23.8 billion for new wind power generation capacity corresponding to wind capacity of approximately 430–530 MW per annum (a maximum of 1.4 GW); the capacity was commissioned during the years 2025–2027. The number of gigawatts ultimately to be constructed is subject to investment decisions. The projects will be covered by CSAs for a period of 15 years from commissioning. The nominal price is expected to be in the range of RUB 2,600–4,200 per MWh during the CSA period. The price is inflation adjusted.

Together with its joint ventures in Russia, Fortum is the largest player on the renewable energy market in Russia. Fortum's wind and solar portfolio of approximately 3.4 GW projects. Of the wind and solar power plants and projects in the portfolio, 1.2 GW are operational, 0.3 GW are under construction, and 1.9 GW are under development.

Power consumption

TWh	2021	2022
Nordic countries	404	390
Central western Europe ¹⁾	1,359	1,330
Central western Europe gas demand ¹⁾	2,218	2,200
Russia	1,090	1,000
Tyumen	90	90
Chelyabinsk	36	36
Russia Urals area	256	256
Russia Siberia area	217	217
1) Reported from 2020 onwards.		

Average prices

	2021	2020	2019
Spot price for power in Nord Pool power exchange, EUR/MWh	62.3	10.9	38.9
Spot price for power in Finland, EUR/MWh	72.3	28.0	44.0
Spot price for power in Sweden, SE3, Stockholm, EUR/MWh	66.0	21.2	38.4
Spot price for power in Sweden, SE2, Sundsvall, EUR/MWh	42.6	14.4	37.9
Spot price for power in the First Price Zone of Russia, RUB/MWh ¹⁾	1,405	1,220	1,289
Spot price for power in the Second Price Zone of Russia, RUB/MWh ¹⁾	935	873	892
Average capacity price for the Russia segment, tRUB/MW/month	584	608	624
Average capacity price for the Uniper segment, tRUB/MW/month	293	261	-
Spot price for power in Germany, EUR/MWh	96.8	30.4	37.7
Average regulated gas price in Urals region, RUB/1,000 m ³	4,077	3,977	3,910
Average capacity price for the Russia segment's CCS, tRUB/MW/month ^{2) 3)}	170	156	154
Average capacity price for the Uniper segment's CCS, tRUB/MW/month ^{2) 3)}	1,174	1,058	1,096
Average capacity price for the Uniper segment's CSA, tRUB/MW/month ^{2) 3)}	160	136	-
Average capacity price for the Uniper segment's CSA, tRUB/MW/month ³⁾	1,488	951	-
Spot price for power (market price), Urals hub, RUB/MWh ¹⁾	1,221	1,068	1,117
CO ₂ , (ETS EUA), EUR/tonne CO ₂	54	25	25
Coal (ICE Rotterdam), USD/tonne	117	50	61
Oil (Brent Crude), USD/bbl	71	43	64
Spot price for gas (TTF), EUR/MWh ⁴⁾	47	9	-

¹⁾ Excluding capacity tariff.

²⁾ Including capacity receiving payments under "forced mode status", regulated tariffs, and bilateral agreements.

³⁾ Capacity prices paid for the capacity volumes, excluding unplanned outages, repairs, and own consumption.

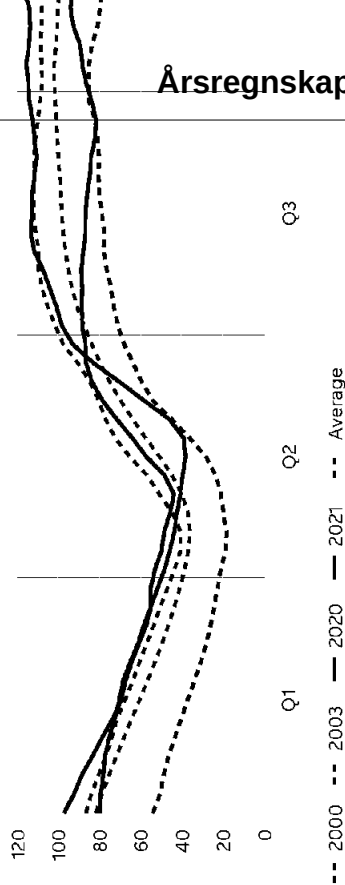
⁴⁾ Reported from 2020 onwards.

Water reservoirs and gas storage levels

TWh	31 Dec 2021	31 Dec 2020
Nordic water reservoirs level	73	1
Nordic water reservoirs level, long-term average	84	
Central western European gas storage levels ¹⁾	293	4

¹⁾ Reported from 2020 onwards.

Nordic water reservoirs, energy content, TWh



Export/import

TWh (+ = import to, - = export from Nordic area)	2021	2020
Export/import between Nordic area and Continental Europe+Balics	-29	0
Export/import between Nordic area and Russia	9	
Export/import Nordic area, total	-20	

Regulatory environment

EU taxonomy rules on nuclear and gas published

At the beginning of December 2021, the first Climate Delegated Act under the EU taxonomy framework on climate change was officially approved by the Council and the European Parliament. At the end of December 2021, the European Commission issued the long-awaited draft Complementary Delegated Act covering nuclear and gas and the final Act was published in February 2022. In the Act both gas and nuclear energy are classified as transitional activities under strict conditions. The Act is subject to a four-month scrutiny period, extendable by two months, during which the Parliament and the Council can either reject or adopt the Act.

Fortum has consistently advocated for a science-based and technology-neutral taxonomy. In broad terms, we welcome the Complementary Delegated Act, as it recognises the contribution of nuclear energy to drive climate mitigation, but we recognise that it leaves several issues open for interpretation. It is also unfortunate that the majority of existing nuclear is not included, as was recommended by both the Commission's own research centre and the Finnish and Swedish governments. We welcome the recognition of natural gas as a transitional fuel but consider the proposed criteria too restrictive. These criteria will make necessary investments in additional gas-fired power plants more difficult in countries where flexible gas is needed for the security of supply.

EU's gas market package published

In December, the Commission adopted a set of legislative proposals to decarbonise the EU gas market by facilitating the uptake of renewable and low carbon gases, including hydrogen, and to ensure security of energy supply for all citizens in Europe. The proposal largely extends the existing rules that are currently applied to natural gas to cover also hydrogen.

Gas is confirmed to act as a bridging technology and thus the proposal supports the planning and investment security of the respective industries – at least until 2049. Simultaneously, the proposed criteria in the EU taxonomy are highly restrictive for gas. Regarding energy prices, the Commission supports a market-driven approach; however, it suggests member states to, if needed, use voluntary measures based on the Commission's Toolbox Communication (see the 'next' section) in order to keep consumer prices at reasonable level. The proposals support the non-discriminatory treatment of market participants and propose unbundling principles for both gas and hydrogen networks.

However, several ambiguities still need to be addressed, e.g. the clarification of technology neutrality in hydrogen production and the methodology to calculate the greenhouse gas emission reduction of low-carbon gases. Further, clarification is needed regarding the discussed controversial 'additionality principle' related to the Renewable Energy Directive (meaning that the corresponding capacity for renewable generation must be added specifically for each newly installed hydrogen production plant (electrolysis)).

EU not to intervene in the energy market despite the price crisis

Unprecedentedly high energy prices have triggered a debate among the EU institutions. The European Commission published its Toolbox Communication in October with the objective to help member states tackle the high energy prices. This toolbox outlined a number of measures that member states can implement to protect vulnerable consumers and industries within the existing regulatory framework.

Although the energy price crisis was discussed at the EU level on multiple occasions during the fourth quarter of 2021, the Commission, together with a broad coalition of member states, highlighted free/market-driven competitive markets without any need to intervene in the market. The impact of soaring and persistent high prices start to be visible in the real economy, and several small- and medium-sized enterprises, including suppliers, have already been significantly affected. The exceptional commodity price situation is also putting utilities with large trading portfolios (including Uniper), as they face clearly higher collateral requirements, consequently need to secure additional liquidity reserves.

New German government with ambitious climate goals started

"The Traffic Light Coalition", the new German Government formed by Social Democrats, Liberals, and Greens, officially started under the leadership of Chancellor Olaf Scholz. The coalition agreement sets very ambitious targets and requires heavy investments to implement those targets (e.g. a target to reach an 80% share of renewable energies by 2030). Renewable energies shall be expanded massively while the coal exit is intended to be brought forward by 2030. The crucial role of natural gas for security of supply is well recognized, at the same time the Government supports the pressure because the goal of climate neutrality must be achieved in 2045. The Government supports the hydrogen economy which is important especially to enable decarbonisation of the industry sector.

Nord Stream 2 halted

Following the invasion of Russia on Ukraine, the German government halted the certification process of Nord Stream 2 AG on 22 February 2022, and the US has put Nord Stream 2 AG, which is a Swiss subsidiary of Gazprom, under sanction on 23 February 2022.

For comments on the geopolitical uncertainty due to Russia's invasion on Ukraine, imposed sanctions on Russia and the impact on the Russian business environment, please see section 'Events after the balance sheet date'.

Proposal for Swedish hydrogen strategy published

In November 2021, the Swedish Energy Agency presented a proposal on a national hydrogen strategy. The strategy focuses on "colour-blind" fossil-free hydrogen with a target to have 5 GW of installed electrolyser capacity by 2030 and an additional 10 GW of capacity by 2045.

According to the proposal, the use of hydrogen should contribute to the transition to a fossil-free economy and at the same time strengthen security of supply in the electricity system. Hydrogen must be used where it is economically efficient and creates the highest system value. Sweden should be an international frontrunner and exporter of climate-friendly products and services based on hydrogen that lower emissions abroad.

The strategy is currently being processed in the Ministry of Infrastructure, but it is still unclear when it will be adopted as the official Swedish hydrogen strategy.

Lack of firm power production in the south of Sweden increases market turmoil

In Sweden, the electricity price differences between the four internal price areas significantly increased in 2021. The increased volatility and lack of balanced and sufficient power supply in southern Sweden has caused many retailers to stop offering fixed price contracts to their customers. It has also triggered the transmission system operator, Svenska Kraftnät, to announce that more firm dispatchable power must be added to the system and that transmission capacity from north to south needs to be increased.

Finnish river basin management plans approved

In December 2021, the Finnish Government approved the river basin management plans that will guide the future licencing and operation of all industrial plants in the neighbourhood of watercourses. The plans are based on the classification of water bodies and propose measures to reach the desired status of water bodies by 2027.

The proposed measures, e.g. minimum flow requirement, may reduce the regulating hydropower capacity provided by hydropower by up to 20%. Therefore, the hydropower generators consider the government's decision to pose a significant risk to the operation of the electricity system.

Fortum is committed to the goals of the plans, including reaching good water status. However, due to severe shortcomings in the classification of water bodies, Fortum has appealed to the Supreme Administrative Court regarding the Oulujoki watercourse and the Klobbfjärden sea area around the Lovisa nuclear power plant. Court processes are expected to take several years.

Government permit granted for the final repository for spent nuclear fuel – Posiva applies for operating permit for final disposal in Finland

In August 2021, the Swedish Government decided to extract the interim storage decision from SKB's (Kärlbränslehantering AB) comprehensive final repository system application. Only the increased storage capacity in the interim storage facility was given the go-ahead at that time. In line with the licensing process, the case decided by the Swedish Land and Environmental Court, and a building and operation permit on the interim facility is expected in June/July 2022. The Government decision made in August 2021 created uncertainty to the process to have a legally enforceable building and operation permit for the interim storage facility by the end of 2023, when maximum capacity under the current license will be reached. If a legally enforceable permit is not in place by the end of 2023, nuclear operators will not be able to store more spent fuel, and therefore electricity supply disruptions in the spring of 2024 still remains. In January 2022, the new Swedish Government decided to give the go-ahead to the final repository for spent nuclear fuel in Forsmark in Östhammar and an encapsulation plant in Oskarshamn.

In Finland, the nuclear waste management organisation Posiva Oy announced the submission of the operating license for the encapsulation and final disposal facility (ONKALO®) to the Finnish Ministry of Affairs and Employment in December 2021. Posiva will dispose of the high-level nuclear waste of its own (share of ownership 40%) and Teollisuuden Voima Oyj (TVO) (share of ownership 60%).

Segment reviews

Business model

Fortum is a European energy company with activities in more than 40 countries. We provide our customers electricity, gas, heating and cooling as well as smart solutions to improve resource efficiency together with our subsidiary Uniper, we are the third largest producer of CO₂-free electricity in Europe. Fortum is the largest retailer in the Nordic countries and one of the leading heat producers globally.

Fortum's organisation consists of four business divisions: Generation, Russia, City Solutions and Consumer and additionally Uniper as a segment. Fortum employs a diverse team of almost 20,000 energy professionals and additionally Uniper as a segment.

Generation

Generation is responsible for Nordic power generation. The division comprises CO₂-free nuclear, hydro, and wind, power generation, as well as power portfolio optimisation, trading, market intelligence, thermal power for the capacity reserve, and global nuclear services. The division does not include the Nordic hydro and nuclear power generation or the trading activities of Uniper. As of 31 March 2020, the division includes Generation's proportionate share of OKG (► Note 1).

EUR million Reported	2021	2020	Change 21/20
Sales	2,899	2,006	45%
- power sales	2,690	1,878	43%
of which Nordic outright power sales ¹⁾	1,937	1,478	31%
- other sales	209	128	63%
Operating profit	1,054	711	48%
Share of profits of associates and joint ventures ²⁾	36	29	26%
Capital expenditure and gross investments in shares	175	228	-23%
Number of employees	1,116	1,143	-2%

EUR million Comparable	2021	2020	Change 21/20
EBITDA	1,299	886	47%
Operating profit	1,110	722	54%
Share of profits of associates and joint ventures ^{2)/3)}	11	13	-16%
Return on net assets, % ³⁾	18.0	12.2	48%
Net assets (at period-end)	6,336	6,234	2%

¹⁾ The Nordic power sales income and volume includes hydro and nuclear generation, excluding minorities. It does not include thermal generation, minorities, customer business or other purchases.

²⁾ Power plants are often built jointly with other power producers, and owners purchase electricity at cost including interest cost and production taxes. The share of profit/loss is mainly IFRS adjustments (e.g. accounting for nuclear-related assets and liabilities) and depreciations on fair-value adjustments from historical acquisitions (► Note 18).

³⁾ Comparable share of profit/loss of associates and joint ventures for 2020 has been recalculated following the introduction of comparable net profit APM in 2021.

The Generation segment's total power generation in the Nordic countries increased driven especially by higher nuclear volumes but also by higher hydro volumes, the effect of which was partly offset by the sale of a majority share of Forum's Nordic wind assets. The availability for nuclear generation was at a good level throughout the year with annual production records in the Lovisa (Finland), Oskarshamn 3 and Forsmark (Sweden) nuclear power plants. The CO₂-free generation accounted for 100% of the total power generation.

The achieved power price in the Generation segment increased by EUR 8 per MWh, up 23%. The achieved power price increased due to the very successful physical optimisation, financial optimisation and higher spot price. The spot power price increased by 183% in Generation segment's power generation areas, the positive result was achieved by the higher achieved power price being dampened by the fairly high hedge levels and a hedge price below the spot price as well as the achieved power price being well above the spot price in comparison period.

Comparable operating profit increased by 54%. The increase was mainly related to the higher achieved power price. Also higher nuclear and hydro volumes contributed to the increase. Comparable operating profit included 1 million from the consolidation of the Generation segment's proportionate share of OKG (► Note 6).

Operating profit was affected by EUR -56 (-11) million of items affecting comparability, mainly related to change of non-hedge-accounted derivatives. It also included the tax-exempt capital gain of EUR 50 million from the divestment of eight small hydropower plants in Sweden (► Note 6).

Comparable share of profits of associates and joint ventures totalled EUR 11 ('13) million (► Note 6) and in January 2021, Fortum announced that it had finished the construction of two new wind parks in the Lovisa (Finland) and Sørfjord in Norway which subsequently started generating CO₂-free energy for the Nordic wind parks are part of the transaction concluded in 2020 with Energy Infrastructure Partners AG (EIP), a ownership is 20%.

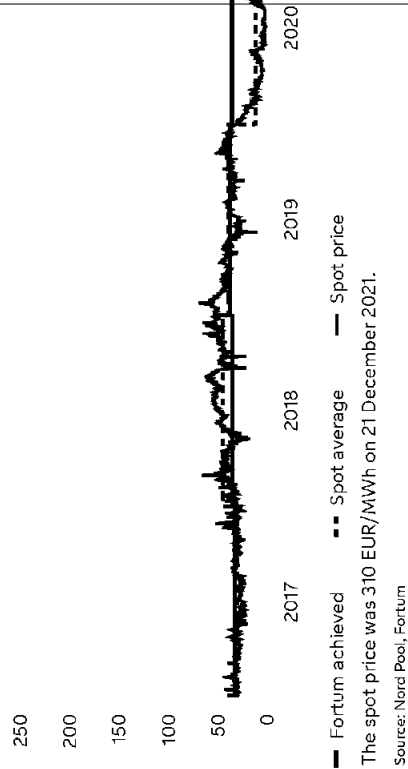
In March 2021, Fortum announced a substantial investment in dam safety in Sweden for an extensive over 100-year-old Forsnäs hydropower plant. Fortum is investing more than SEK 450 million (approximately 45 million) during 2021–2025. This investment guarantees an extended lifetime for the power plant as a sustainable renewable electricity and balancing power for more weather-dependent types of power.

In April 2021, Fortum announced its second pilot project for the use of batteries as energy storage at plants in Landaforsen, Sweden. Out-of-service batteries from plug-in hybrid cars and other batteries, at a combined capacity of 1 MW and 250 kWh, are installed, extending the lifetime of the hydropower turbines and the batteries.

In September 2021, Fortum and Uniper agreed on long-term external and internal collaboration in nuclear decommissioning services. The objective for the complementary capabilities is to develop a wider customer base and reach a stronger market position, and ensure excellent performance in the Oskarshamn and Forsmark decommissioning projects in Sweden.

In September 2021, Fortum submitted its Environmental Impact Assessment (EIA) Report for the Lovisa nuclear power plant in Finland to the Ministry of Economic Affairs and Employment (MEAE). The report contains information of the environmental impacts of the potential lifetime extension of the nuclear power plant or alternative decommissioning of it, as well as the environmental impacts of Posiva Oy's final disposal facility ONKALO for intermediate-level waste. In January 2022, MEAE gave its informed conclusion on the Lovisa nuclear power plant. Environmental Impact Assessment report and stated that it meets the requirements of the EIA legislation. Alternatives examined were not found to have such significant adverse environmental impacts that could not be accepted, prevented or mitigated to an acceptable level.

Nord Pool, power price, 2017–2021, EUR/MWh



On 16 December 2021, the Radiation and Nuclear Safety Authority in Finland (STUK) granted Teollisuuden Voima Oyj (TVO) permission to make the Olkiluoto 3 EPR (OL3) reactor critical and to conduct low power tests. Consequently, Finland's fifth nuclear reactor was started and it reached first criticality on 21 December 2021. Electricity generation starts in March 2022, and regular electricity generation is expected to start in July 2022 (► Note 29).

On 22 December 2021, Fortum announced the first investment by the joint team of Fortum and Uniper for wind and solar businesses in Europe. Fortum decided to construct the 380-MW Pjälax-Böle and Kristinestad Norr wind parks in Närpes and in Kristinestad in Finland in partnership with the Finnish energy company Helen Ltd. Construction started in January 2022 and the wind parks are expected to be fully operational at the latest in the second quarter of 2024. Fortum has a 60% majority and Helen holds a 40% minority ownership in the project. The total capital expenditure of the projects is approximately EUR 360 million, of which Fortum's share is EUR 216 million.

Power generation by source

TWh	2021	2020	Change 21/20
Hydropower, Nordic	23.3	22.4	4%
Nuclear power, Nordic	23.5	21.0	12%
Wind power, Nordic	-	0.4	-100%
Thermal power, Nordic	0.0	0.1	-95%
Total	46.8	43.9	7%

Nordic sales volume

TWh	2021	2020	Change 21/20
Nordic sales volume	54.1	51.4	5%
of which Nordic Power sales volume ¹⁾	45.3	42.5	7%

¹⁾ The Nordic power sales income and volume includes hydro and nuclear generation, excluding minorities. It does not include thermal generation, minorities, customer business or other purchases.

Sales price

EUR/MWh	2021	2020	Change 21/20
Generation's Nordic achieved power price ¹⁾	42.8	34.8	23%

¹⁾ Generation's Nordic power price includes hydro and nuclear generation, excluding minorities. It does not include thermal generation, minorities, customer business or other purchases.

The Russia segment comprises power and heat generation and sales in Russia. The segment includes Fortum's fully owned power plants and its joint ventures for building and operating approximately 3.4 GW of renewable power generation and for power and heat sales, as well as Fortum's more than 29% holding in TGC-1. These joint ventures and associated company are accounted for using the equity method. The segment does not include Uniper's Russian subsidiary Unipro.

EUR million	2021	2020	Change 21/20
Comparable			
EBITDA	404	394	2%
Operating profit	261	251	4%
Share of profits of associates and joint ventures	62	47	33%
Return on net assets, %	12.9	11.1	16%
Net assets (at period-end)	2,508	2,431	3%

Sales decreased by 2%, or EUR -23 million, due to the weaker Russian rouble during the first half of 2021. This impact was partly offset by higher power prices and volumes. The effect of the change in the Russian rouble exchange rate was EUR -48 million.

Operating profit was affected by Arqavash CHP plant divestment.

held in 2018 and 2019.

joint venture.

and reduce annual CO₂ emissions by approximately 2 million tonnes.

construction of wind power parks with a total capacity of 237 MW in the Samara region in Russia.

RUB 2,600–4,200 per MWh (inflation adjusted) during the CSA period.

During 2021, Fortum signed several Memorandums of Understanding (MoU) regarding renewable energy sales in Russia with Novatek, Magnitogorsk Iron and Steel Works, Baker Hughes, and Shell. MoU's were also signed with Electroshield Samara and Sberbank for the supply of wind power in the Samara region and with Mosenergosbyt for the supply of wind power to Sberbank's offices in Nizhny Novgorod. The new agreements support Fortum's strategy to partner with industrial and infrastructure customers to help them reduce their own emissions.

Key electricity, capacity and gas prices for Fortum Russia

	2021	2020	Change 21/20
Electricity spot price (market price), Urals hub, RUB/MWh	1,221	1,068	14%
Average regulated gas price, Urals region, RUB/1,000 m ³	4,077	3,977	3%
Average capacity price for CCS and other, tRUB/MW/month ^{1) 2)}	170	156	9%
Average capacity price for CSA, tRUB/MW/month ²⁾	1,174	1,058	11%
Average capacity price, tRUB/MW/month	584	608	-4%
Achieved power price for the Russia segment, RUB/MWh	2,018	1,940	4%
Achieved power price for the Russia segment, EUR/MWh ³⁾	23.2	23.4	-1%

¹⁾ Including capacity receiving payments under "forced mode status", regulated tariffs, and bilateral agreements.

²⁾ Capacity prices paid for the capacity volumes, excluding unplanned outages, repairs, and own consumption.

³⁾ Translated using the average exchange rate.

Russian power generation and heat production

	2021	2020	Change 21/20
TWh	28.6	27.1	6%
Russian power generation	17.1	16.4	4%
Russian heat production			

City Solutions

City Solutions is responsible for sustainable solutions for urban areas. The segment comprises heating, cooling, waste-to-energy, and other circular economy solutions, as well as solar power generation, services, and development of new biomass-based businesses. The business operations are located in the Nordics, Poland, and India. The segment has also included Fortum's 50% holding in Stockholm Exergi Holding AB, which was a joint venture accounted for using the equity method. Stockholm Exergi Holding AB was divested in September 2021. The segment does not include the operations of Fortum's subsidiary Uniper.

EUR million	2021	2020	Change 21/20
Reported			
Sales	1,302	1,075	21%
- heat sales	612	516	19%
- power sales	205	121	70%
- waste treatment sales ¹⁾	250	252	-1%
- other sales ²⁾	236	186	27%
Operating profit	2,671	775	245%
Share of profits of associates and joint ventures	42	57	-26%
Capital expenditure and gross investments in shares	162	333	-51%
Number of employees	1,766	2,093	-16%
EUR million	2021	2020	Change 21/20
Comparable			
EBITDA	317	239	33%
Operating profit	135	47	187%
Share of profits of associates and joint ventures	42	57	-26%
Return on net assets, %	6.1	2.8	118%
Net assets (at period-end)	2,456	3,679	-33%

¹⁾ Waste treatment sales comprise gate fees at waste treatment plants and environmental construction services.

²⁾ Other sales comprise mainly operation and maintenance services and fuel sales.

Heat sales volumes increased by 4% as temperatures were colder than usual especially during the first and fourth quarter of the year. This positive effect was partly offset by the divestment of the Baltic district heating business. The power sales volumes increased by 10%, mainly supported by a different production mix in the Finnish heat business and the commissioning of the new 250 MW solar power plant in Rajasthan, India. This positive effect was partly offset by the divestment of the Baltic district heating business.

Comparable operating profit increased by 187% mainly as a result of higher heat sales volumes in all heating areas, higher power prices, and higher Norwegian heat prices due to the price link between heat and power prices.

Comparable operating profit increased also due to Solar including the total tax-exempt sales gains from the divestment of the 250-MW Pavagada II solar plant and the 250-MW Rajasthan solar plant in India from which EUR 11 million was recorded in the fourth quarter of 2021 and the rest is expected to be recorded during the first half of 2022. The profits

from the Pavagada and Rajasthan solar park divestments are recognised in comparable operating profit. The result was positively affected by operational improvements in the Recycling and Waste Solutions.

Operating profit was affected by EUR 2,536 (728) million of items affecting comparability, mainly relating to exempt capital gains of EUR 2,350 million from the sale of the 50% ownership in Stockholm Exergi Holding AB, EUR 254 million from the sale of the district heating business in the Baltics partly offset by the fair value hedge-accounted derivatives. (► **Note 6**).

Comparable share of profits of associates and joint ventures totalled EUR 42 (57) million, EUR 28 (46) million, which is related to the share of profit of Stockholm Exergi until September 2021. (► **Note 6** and ► **Note 1**).

In March 2021, Fortum announced that it had signed an agreement to sell its district heating business Partners Group. In July 2021, Fortum concluded the sale. The total consideration of the sale amounted EUR 710 million.

In June 2021, Fortum made the investment decision to expand its lithium-ion battery recycling capacity to a new state-of-the-art hydrometallurgical plant in Harjavalta, Finland. The investment of approximately EUR 100 million will increase Fortum's hydrometallurgical recycling capacity and enable the production of sustainable battery materials. The new facility will be able to efficiently recover scarce metals from old electric vehicle lithium-ion battery recycling various waste fractions derived throughout the battery supply chain.

In June 2021, Fortum announced that it had signed an agreement to divest the 250-MW Pavagada II MW Rajasthan solar power plants in India to Actis. The parties also signed an agreement targeting potential investments in solar power plants in India. The total consideration for the divestment on a debt and cash basis, including the effect of deconsolidation of the net debt, amounted to approximately EUR 280 million. The MW Pavagada II solar plant was concluded in October and the first phase of the Rajasthan plant in November.

In September 2021, Fortum concluded the sale of its 50% ownership in the Swedish district heating company Stockholm Exergi Holding AB to a consortium comprising APG, Alecia, PGGM, Keya, and AXA. The total consideration of the sale amounted to SEK 29.5 billion (approximately EUR 2.9 billion).

Heat sales by country

	2021	2020
TWh		
Finland	3.7	3.7
Poland	3.8	3.8
Norway	1.8	1.8
Other countries	1.3	1.3
Total	10.6	10.6

Power sales by country

	2021	2020
TWh		
Finland	1.3	1.3
Poland	0.7	0.7
Other countries	1.3	1.3
Total	3.3	3.3

Consumer Solutions

Consumer Solutions is responsible for the electricity and gas retail businesses in the Nordics, Poland, and Spain, including the related customer service and invoicing businesses. Fortum is the largest electricity retail business in the Nordics, with approximately 2.2 million customers across different brands in Finland, Sweden, Norway, Poland, and Spain. The business provides electricity, as well as related value-added and digital services, mainly to retail customers.

EUR million	2021	2020	Change 21/20
Reported			
Sales	2,622	1,267	107%
- power sales	2,253	1,057	113%
- gas sales	225	139	61%
- other sales	144	70	106%
Operating profit	495	129	283%
Capital expenditure and gross investments in shares	68	57	19%
Number of employees	1,176	1,048	12%
EUR million	2021	2020	Change 21/20
Comparable			
EBITDA	123	153	-20%
Operating profit	52	90	-42%
Net assets (at period-end)	1,125	565	99%

The electricity sales volumes increased by 8% mainly due to clearly colder weather in the Nordics during the first and the fourth quarter and increased enterprise customer sales. Total sales revenue increased by 107%, driven by increased volumes and clearly higher prices in the Nordics. The gas sales volumes increased by 22%, mainly due to an increase in enterprise customers in Poland. Several new digital services were launched during the year, and new enterprise contracts were signed with customers in the energy, food processing, real estate, and retail industries.

Comparable operating profit decreased by 42%, mainly due to the high electricity purchase costs resulting from the high and volatile electricity market prices in the third and the fourth quarter and a reduction in the number of customers. Required additional electricity volumes were acquired in the spot market at prices that were clearly higher than the agreed customer prices, resulting in higher electricity purchase costs and negative margins. The negative effect was partially offset by increased unit margins resulting from active development and improvement of the service offerings. Operating profit was affected by EUR 443 (39) million of items affecting comparability, due to the fair value change of non-hedge-accounted derivatives (↑ **Note 6**).

Sales volumes

	2021	2020
TWh	31.5	29.2
Electricity	31.5	29.2
Gas ¹⁾	6.0	5.0
¹⁾ Not including wholesale volumes.		
Number of customers		
Thousands ¹⁾	2021	2020
Electricity	2,120	2,120
E-mobility ²⁾	70	70
Gas	50	50
Total	2,230	2,230
¹⁾ Rounded to the nearest 10,000.		
²⁾ Measured as quarterly paying customers.		

Uniper

The Uniper segment comprises Fortum's majority ownership in Uniper, a subsidiary of Fortum. Uniper is a leading international energy company with activities in more than 40 countries. Its business is the secure provision of energy and related services. Its main activities include power generation in Europe and Russia as well as global energy trading and optimisation, which Uniper reports in three businesses – European Generation, Global Commodities, and Russian Power Generation – in its financial statements. Approximately 50% of the power generating capacity is gas-based, 25% coal-based, approximately 15% hydro- or nuclear-based, and 10% is other. The segment includes Uniper's proportionate share of OKG (► Note 1).

EUR million Reported	2021	2020	Change 21/20
Sales	105,992	44,514	138%
- power sales	28,365	16,994	67%
of which Nordic outright power sales ¹⁾	644	373	73%
- heat sales	437	191	129%
- gas sales	59,577	22,176	169%
- other sales	17,612	5,154	242%
Operating profit	-4,901	29	-16,885%
Share of profits of associates and joint ventures	51	54	-5%
Capital expenditure and gross investments in shares	683	639	7%
Number of employees	11,494	11,751	-2%

EUR million Comparable	2021	2020	Change 21/20
EBITDA	1,789	856	109%
Operating profit	1,120	363	209%
Share of profits of associates and joint ventures ²⁾	39	38	2%
Net assets (at period-end)	4,971	7,432	-33%

¹⁾ The Nordic power sales income and volume includes hydro and nuclear generation, excluding minorities. It does not include thermal generation, minorities, customer business or other purchases.

²⁾ Comparable share of profit/loss of associates and joint ventures for 2020 has been recalculated following the introduction of comparable net profit APM in 2021.

Fortum consolidated Uniper into its balance sheet as of 31 March 2020 and, from the second quarter of 2020, consolidated Uniper's results into its income statement. In the first quarter of 2020, Uniper was consolidated as an associated company into Fortum's income statement, presented in the Other segment. The main reason for the change in cumulative figures and in comparison to the year 2020 is thus the consolidation of Uniper.

Power generation volumes were supported by better availability of the thermal fleet, the commissioning of Datteln 4 in the second quarter of 2020, and the return to commercial operation of the gas-fired Irsching 4 and 5 generating units. Additionally, nuclear volumes increased due to higher availability.

Comparable operating profit amounted to EUR 1,120 (363) million. Predominantly Uniper's gas business from the extraordinary market developments with volatile and rising prices, despite additional capital received in the first quarter of 2020, Uniper was consolidated as an associated company.

The result of the European Generation business was driven by the commissioning of the Datteln 4 coal plant at the end of May 2020 and the return to regular commercial operation of the Irsching 4 and 5 gas plants in the fourth quarter of 2020. In addition, higher revenues from the UK capacity market and higher volumes in the nuclear business, due to higher availability, contributed to the improved result. This positive more than offset by the lower result in the Dutch steam business stemming from outages in the third quarter and nuclear provisions in the fourth quarter. In addition, in the fossil business, the exceptionally positive margin from the previous year could not be repeated.

The Global Commodities business benefitted from improved results in the international portfolio, driven by unusual weather conditions in North America and Asian operations especially in the first quarter. The power activity in Asia was partly offset by a negative contribution from the trading of power and carbon and rescheduled deliveries phasing earnings into 2022 and affecting the result of the fourth quarter. Despite the already strong performance in 2020, the result of the gas business further improved benefiting from extraordinary market with volatile and rising gas prices especially during the second half of 2021.

The Russian Power Generation business was at almost the same level as in the previous year. The electricity payments for four units at the Shaturskaya, Surgutskaya, and Yavinskaya power plants were higher than payments from the commissioning of the Berezovskaya 3 power plant unit in May 2021 as well as by higher volumes on the electricity market.

Operating profit was affected by EUR -6,021 (-333) million of items affecting comparability, mainly related to 5,688 (-706) million of fair value change of non-hedge-accounted derivatives (► Note 6). The Uniper segment flows are largely hedged with forward sell contracts; however as hedge accounting is not applied for most of the unrealised changes in the fair values of these derivative instruments are presented in items affecting comparability.

Comparable share of profits of associates and joint ventures totalled EUR 39 (38) million (► Note 6 and ► Note 7). In March 2021, amendments to the Russian Strategic Investment Law were approved. Based on the allowed to own 100% of Uniper, the majority owner of Unipro PJSC. In July 2021, Fortum withdrew its application for merger control approval from the Russian Federal Antimonopoly Service under the Competition Law. The requirements of the scope and content of the filing process.

In April 2021, the German Federal Network Agency accepted the bid from the 757-MW Wilhelmshaven as part of the second round of auctions for the closure of hard-coal-fired power plants. Power generation ended in December 2021, one year earlier than previously announced. Uniper plans to establish a German for hydrogen in Wilhelmshaven, including an import terminal for green ammonia ('ammonia cracker') and an electrolysis plant in connection with the terminal. Uniper is working on a feasibility study and a final investment decision has been made.

In 2021, Uniper started legal proceedings on the Dutch coal phase-out law for the intended 2030 coal plant not provide appropriate compensation for investments made. Uniper also has the ambition to convert the site into an ecosystem for sustainable energy production.

In April 2021, Uniper published a stock exchange release ('ad-hoc') with a positive update of its earnings for 2021.

In July 2021, the German Federal Network Agency confirmed the essential status of the Havel 4 and Havel 5 plant as a reserve power plant until the end of September 2022. Also, in July 2021, the German Federal

Agency accepted the bid from the 345-MW Scholven C power plant as part of the third round of auctions for the closure of hard-coal-fired power plants. The commercial power generation at the plant will end as early as the end of October 2022, slightly earlier than previously announced.

In August 2021, the Higher Administrative Court of North Rhine-Westphalia (OVG) declared in three parallel proceedings that the City of Datteln's 2014 development plan for the Datteln 4 hard-coal-fired power plant are invalid at the request of the City of Waltrop, BUND NRW, and four private individuals. Specifically, the OVG held that the City of Datteln's development plan is based on a deficient regional plan. The court did not admit an appeal. Uniper is a joined party to the proceedings as the permit owner and thus has the right to appeal. In October 2021, Uniper filed complaints against the non-admission of the appeal in relation to the judgements. The City of Datteln, as the direct defendant in the proceedings, has also filed non-admission complaints.

In August 2021, Uniper announced the decisions to accelerate the coal phase-out in the UK by closing one 500-MW unit of the Ratcliffe hard coal-fired power plant as early as at the end of September 2022 and the closure of the remaining three units by the end of September 2024 at the latest.

In September 2021, Fortum and Uniper announced cooperation in offering nuclear decommissioning and dismantling services for nuclear companies. See further details in the Generation segment.

In September 2021, Uniper announced that it was exploring the opportunity of restarting the Happurg pumped storage power plant. The plant has an output of 160 MW and can store water with energy for approximately 850 MWh of electricity making it the largest pumped storage power plant in Bavaria. With effect from the end of September, Uniper transferred its shares in the Schkopau power plant near Halle/Saale, the last investment in a lignite-fired power plant in the European portfolio. The sale follows the company's strategic goal of accelerating the phase-out of coal-fired power generation and becoming climate-neutral in Europe by 2035.

In October, after a strategic review, Uniper announced plans to fundamentally restructure its Engineering business, which has a total of 1,100 employees mainly located in Germany and the United Kingdom. Under the plans, the future engineering competencies will be solely focused on operating Uniper's own assets and on the growth priorities of decarbonization and green customer solutions.

In October 2021, Uniper published a stock exchange release ('ad-hoc') with a positive update of its earnings guidance for 2021.

In December 2021, Uniper announced that the Staudinger 5 power plant had been awarded the contract by the BNetzA and that commercial electricity generation would therefore be discontinued by the end of May 2023 at the latest and the power plant would be shut down.

In December 2021, Novatek and Uniper announced that they had signed a term-sheet on the long-term supply of low-carbon ammonia. Up to 1.2 million tonnes will be delivered to Uniper customers in Germany and northwest Europe in the future.

For further information, see Uniper's year-end 2021 results published on 23 February 2022.

Power generation by source

TWh	2021	2020
Hydropower, Nordics	8.1	7.9
Nuclear power, Nordics	12.9	12.9
Hydropower, Central Europe	4.9	4.9
Thermal power, Central Europe	40.9	40.9
Thermal power, Russia	43.2	43.2
Total	110.0	110.0

Nordic sales volume

TWh	2021	2020
Nordic sales volume	21.4	21.4
of which Nordic outright power sales volume ¹⁾	21.0	21.0

¹⁾ The Nordic outright power sales volume includes hydro and nuclear generation. It does not include thermal generation, minorities, or other purchases.

Sales price

EUR/MWh	2021	2020
Uniper's Nordic achieved power price ¹⁾	30.7	30.7
Average capacity price for Uniper CCS and other, tRUB/MW/month ^{2) 3)}	160	160
Average capacity price for Uniper CSA, tRUB/MW/month ³⁾	1,488	1,488
Average capacity price for Uniper, tRUB/MW/month	293	293
Achieved power price for Uniper in Russia, RUB/MWh ⁴⁾	1,643	1,643
Achieved power price for Uniper in Russia, EUR/MWh ^{4) 5)}	18.8	18.8

¹⁾ Uniper's Nordic achieved power price includes hydro and nuclear generation. It does not include thermal generation, minorities, or other purchases.

²⁾ Including capacity receiving payments under "forced mode status", regulated tariffs, and bilateral agreements.

³⁾ Capacity prices paid for the capacity volumes, excluding unplanned outages, repairs, and own consumption.

⁴⁾ Comparable prices changed from previously reported.

⁵⁾ Translated using the average exchange rate.

Capital expenditures, divestments, and investments in shares

EUR million	2021	2020
Capital expenditure		
Intangible assets	120	124
Property, plant and equipment	997	1,022
Total	1,116	1,146
Gross investments in shares		
Subsidiaries	210	3,646
Associated companies and joint ventures	44	119
Other investments	36	42
Total	290	3,807

In 2021, capital expenditures and investments in shares totalled EUR 1,407 (4,941) million. Capital expenditures were EUR 1,116 (1,146) million (► **Note 3** and ► **Note 6**).

Fortum expects to start, or has started, power and heat production capacity of new power plants and expects to upgrade its existing plants as follows:

Generation	Type	Electricity capacity MW	Heat capacity MW	Supply starts/ started
Pjælax-Böle and Kristinestad Norr, Finland	Wind	380		Q2/2024
City Solutions				
Suomenoja, Finland	Heat pump		20	June 2021 Q1/2021 and Q2/2021
Rajasthan, India	Solar	250		
Uniper				
Irsching 6, Germany	Gas	300		Q4/2022
Scholven, Germany	Gas	137	125	Q4/2022
Killingholme and Grain, UK	Grid stability			Q1/2022 and Q2/2022
Surgutskaya 1, Russia	Gas	20		Q1/2022
Surgutskaya 2, Russia	Gas	20		Q4/2026
Surgutskaya 3, Russia	Gas	20		Q4/2027
Surgutskaya 4, Russia	Gas	20		Q4/2025
Surgutskaya 6, Russia	Gas	20		Q3/2024

Generation

In January 2021, Fortum announced that it had finished the construction of two new wind parks in the Nord region of Finland and Sørfjord in Norway which subsequently started generating CO₂-free energy for the Nordic region. The wind parks are part of the transaction concluded in 2020 with Energy Infrastructure Partners AG (EIP), and Fortum's ownership is 20%.

In February 2021, Fortum completed the sale of eight small hydropower plants in Sweden with an average power generation of 0.1 TWh to Downing Renewables & Infrastructure Trust plc and recording a tax-exempt capital gain of EUR 50 million.

In March 2021, Fortum announced a substantial investment in dam safety in Sweden for extensive repair and maintenance of 100-year-old Forshuvud hydropower plant. Fortum is investing more than SEK 450 million (approximately 40 million) during 2021–2025. This investment guarantees an extended lifetime for the power plant as a source of renewable electricity and balancing power for more weather-dependent types of power.

On 22 December 2021, Fortum announced the first investment by the joint team of Fortum and Uniper in solar businesses in Europe. Fortum decided to construct the 380-MW Pjælax-Böle and Kristinestad Norr wind farms and in Kristinestad in Finland in partnership with the Finnish energy company Helen Ltd. Construction of the wind farms is expected to be fully operational at the latest in the second quarter of 2022. The wind parks and the wind farms are expected to be fully operational in the project, and the investment will be made in the second quarter of 2022. Fortum has a 60% majority and Helen holds a 40% minority ownership in the project, and the investment will be made in the second quarter of 2022. Fortum's balance sheet. The total capital expenditure of the projects is approximately EUR 380 million, and Fortum's share is EUR 216 million.

Russia

Together with its joint ventures in Russia, Fortum holds the largest portfolio of wind and solar power parks in Russia, approximately 3.4 GW. Once operational, the wind and solar parks receive a guaranteed feed-in tariff for a period of 15 years.

In 2017 and 2018, the Fortum-Rusnano wind investment fund (joint venture, Fortum's ownership 50%) to build a total of 1,823 MW of wind capacity in CSA auctions. During the second half of 2021, the Fortum-Rusnano wind investment fund sold the 50-MW Ulyanovsk 2 and the 300-MW Rostov wind parks to the Fortum-Rusnano joint venture. In June 2021, the Fortum-Rusnano wind investment fund additionally sold the 200-MW Kalmyk wind park to the Fortum-RDIF joint venture. In December 2021, the Fortum-Rusnano wind investment fund started the operation of wind farms with a total capacity of 478 MW in the Astrakhan, Volgograd and Rostov regions.

In 2018 and 2019, Fortum won the right to build a total of 116 MW of solar capacity in CSA auctions. Fortum announced the sale of the solar power project to the Fortum-RDIF joint venture and the Fortum-Rusnano solar power plant through this joint venture. In December 2021, 78 MW of the capacity was commissioned and the remaining part will be commissioned in the second half of 2022.

In June 2021, the Fortum-Rusnano wind investment fund made an investment decision on the construction of power parks with a total capacity of 237 MW in the Samara region in Russia. The investment decision is based on an agreement with the Government of the Samara Region that envisages construction of wind parks with a capacity of up to 300 MW in the region in 2022–2023. In September 2021, groundbreaking was done, and commissioning of wind parks is expected in the fourth quarter of 2022.

In July 2021, Fortum signed an agreement to sell its Argavash coal-fired CHP plant to AO JSC Rusatom Smart Utilities. In September 2021, the transaction was concluded. Following the decision earlier in 2021 to transition to gas at Chelyabinsk CHP-2, this transaction will allow the Russia Division to discontinue its use of coal by the end of 2022 and reduce annual CO₂ emissions by approximately 2 million tonnes.

In September 2021, Fortum announced that the Fortum-Rusnano wind investment fund was awarded annual CSA remuneration in the range of RUB 16.9–23.8 billion (inflation adjusted) for new wind power generation in the latest Russian renewables' auction. This corresponds to wind capacity of approximately 430–530 MW per annum (a maximum of 1.4 GW) to be commissioned during years 2025–2027. The number of gigawatts ultimately to be constructed is subject to separate investment decisions. The average nominal price is expected to be in the range of RUB 2,600–4,200 per MWh (inflation adjusted) during the 15-year CSA period from commissioning.

The investment decisions related to the solar and wind capacities won by Fortum and the Fortum-Rusnano wind investment fund in the Russian CSA auctions in 2017, 2018, 2019, and 2021 are made on a case-by-case basis. Fortum's maximum equity commitment is RUB 15 billion.

City Solutions

In March 2021, Fortum announced that it had signed an agreement to sell its district heating business in the Baltics to Partners Group. In July 2021, Fortum concluded the sale. The total consideration of the sale amounted to approximately EUR 710 million. Fortum recorded a tax-exempt capital gain of EUR 254 million in the City Solutions segment's third-quarter 2021 results.

In March 2021, Fortum commissioned 150 MW of the 250-MW Rajasthan solar park in India. The remaining 100 MW was commissioned in May 2021.

In June 2021, Fortum made the investment decision to expand its lithium-ion battery recycling capacity by building a new state-of-the-art hydrometallurgical plant in Harjavalta, Finland. The investment, estimated at EUR 24 million, will increase Fortum's hydrometallurgical recycling capacity and enable the production of sustainable battery chemicals.

The plant is expected to be taken into operation in 2023. In March, Fortum's hydrometallurgical battery recycling operations were shortlisted for the EU's Innovation Fund for low-carbon technologies.

In June 2021, Fortum announced that it had signed an agreement to divest the 250-MW Pavagada II and the 250-MW Rajasthan solar power plants in India to Actis. The parties also signed an agreement targeting potential further investments in solar power plants in India. The total consideration for the divestment on a debt- and cash-free basis, including the effect of deconsolidation of the net debt amounted to approximately EUR 280 million. The sale of the 250-MW Pavagada II solar plant was concluded in October and the first phase of the Rajasthan divestment in November.

In September 2021, Fortum concluded the sale of its 50% ownership in the Swedish district heating and cooling company Stockholm Exergi Holding AB to a consortium comprising APG, Alecia, PGGM, Keava, and AXA. The total consideration of the sale amounted to SEK 29.5 billion (approximately EUR 2.9 billion). Fortum recorded a tax-exempt capital gain of EUR 2,350 million in the City Solutions segment's third-quarter 2021 results.

Uniper

In February 2020, Uniper signed an agreement to sell its 58% stake in Schkopau, a lignite-fired power plant in Saxony-Anhalt in eastern Germany, to Saale Energie GmbH, a subsidiary of the Czech energy producer EPH, which owns 42%. The transfer of ownership took place on 1 October 2021.

Other Operations

In June 2021, Fortum signed an agreement to sell a majority share of its carbon removal startup Puro.earth to a multinational financial services company. The partnership will create a shared ownership structure designed to accelerate Puro.earth's global growth and long-term market development. Puro.earth is the first marketplace for carbon removal from the atmosphere that is verifiable and tradable through an open, online platform.

Research and development

Sustainability is at the core of Fortum's strategy and, alongside Fortum's current businesses, the company is exploring and developing new sources of growth within clean energy solutions.

Fortum's goal is to be at the forefront of energy technology and application development. To accelerate and the commercialization of new offerings, Fortum is strengthening its in-house innovation and digitalization building partnerships with leading global suppliers, technology and service companies, and research institutions makes direct and indirect investments in start-ups that have promising new innovations focused on decarbonization, clean gas or accelerate the transition towards a circular economy. Fortum also invests in technologies that support better utilization of the current asset base and that can create new markets and products for Fortum's company is continuously looking for emerging clean energy solutions and for solutions that increase resource efficiency.

The Group reports its R&D expenditure on a yearly basis. In 2021, Fortum's R&D expenditure was EUR 61 million, or 0.1% (0.1%) of sales.

	2021	2020
R&D expenditure, EUR million	61	56
R&D expenditure, % of sales	0.1	0.1

Changes in Group management

In February 2021, Bernhard Günther started as Chief Financial Officer (CFO) and member of Fortum's Executive Management.

In March 2021, Klaus-Dieter Maubach, member of Fortum's Board of Directors, announced his resignation from the Board, as he had been elected the CEO of Uniper. Fortum's Shareholders' Nomination Board evaluated the Directors' ability to function and concluded, based on the recommendation of the Board of Directors, that the full capacity to continue in its current composition until the 2021 Annual General Meeting (AGM).

In March 2021, Tiina Tuomela was appointed the new CFO of Uniper and consequently stepped down from her position at Fortum. Simon-Erik Ollus, was appointed Executive Vice President of Fortum's Generation division and member of Fortum's Executive Management with immediate effect.

In March 2021, Nebahat Albayrak was appointed Senior Vice President Corporate Affairs, Safety, and Environment and member of Fortum's Executive Management. Ms Albayrak assumed the role on 1 June 2021. She stepped down from her position at the end of October 2021.

In April 2021, Sirpa-Helena Sormunen was appointed as Uniper's new General Counsel and Chief Compliance Officer and Risto Penttinen was appointed as Uniper's new Executive Vice President, Strategy, Corporate Development and M&A. Nora Steiner-Forsberg was appointed Fortum's General Counsel and member of Fortum's Executive Management, and Eveliina Dahl was appointed Senior Vice President, People and Procurement and member of Fortum's Executive Management. All appointments were effective as of 1 May 2021.

In November 2021, Arun Aggarwal, Senior Vice President, Business Technology left his position at Fortum. He was succeeded by Sanna Pekari, M.Sc. (Civil Eng.), MBA. Sanna Pekari is not a member of the Fortum Management Team but is reporting directly to the President and CEO, Markus Rauramo.

Annual General Meeting 2021

The AGM of Fortum Corporation was held on 28 April 2021. The AGM adopted the Financial Statements and the Consolidated Financial Statements for the financial period 1 January-31 December 2020 and discharged from liability for the year 2020 all persons who acted as members of the Board of Directors and as President and CEO during the year 2020.

The AGM decided that a dividend of EUR 1.12 per share be paid for the financial year that ended on 31 December 2020. The record date was 30 April 2021, and the dividend of EUR 995 million was paid on 7 May 2021.

The AGM supported the Remuneration Report for the company's governing bodies.

The AGM confirmed the remuneration for the Board of Directors for the upcoming term as follows: for the chair EUR 77,77,200 per year, for the deputy chair EUR 57,500 per year, for a member EUR 40,400 per year, and for the Board member acting as the chair of the Audit and Risk Committee EUR 57,500 per year if he or she is not simultaneously acting as chair or deputy chair of the Board. In addition, a fee of EUR 600 will be paid for each Board meeting and Board Committee meeting. For Board members living outside Finland in Europe, the fee for each meeting will be doubled, and for Board members living outside Europe, the fee for each meeting will be tripled. For Board members living in Finland, the fee for each Board and Board Committee meeting will be doubled for meetings held outside Finland and tripled for meetings held outside Europe. For Board and Committee meetings held as a telephone conference, the fee will be paid as single to all members.

The AGM decided that the Board of Directors will consist of seven members. Mr Veli-Matti Reinikkala was elected as chair, Ms Anja McAlister as deputy chair, and Ms Essimari Kairisto, Mr Teppo Paavola, Mr Philipp Rösler, and Ms Annette Siube were re-elected as members. Ms Luisa Delgado was elected as a new member.

In addition, Deloitte Oy was re-elected as the auditor with Jukka Vattulainen, APA, as the responsible auditor. The auditor's fee is paid pursuant to an invoice approved by the company.

The AGM authorised the Board of Directors to decide on the repurchase and disposal of the company's own shares up to 20,000,000 shares, which corresponds to approximately 2.25 % of all the shares in the company. Only the unrestricted equity of the company can be used to repurchase own shares on the basis of the authorisation. These authorisations cancelled the authorisation resolved by the AGM of 2020 and will be effective until the next AGM and in any event no longer than for a period of 18 months. These authorisations have not been used as per 2 March 2022.

The AGM authorised the Board of Directors to decide on contributions of a maximum of EUR 500,000 for charitable or similar purposes and to decide on the recipients, purposes, and other terms of the contributions. The authorisation will be effective until the next AGM. As per 2 March 2022, a contribution of 300,000 euros of this authorisation has been used.

Board decisions

At the meeting held after the AGM 2021, Fortum's Board of Directors elected to the Nomination and Remuneration Committee: Veli-Matti Reinikkala as chair and Luisa Delgado and Anja McAlister as members.

Furthermore, the Board elected to the Audit and Risk Committee: Essimari Kairisto as chair and Teppo Philipp Rösler, and Annette Stube as members.

Shareholders' Nomination Board

On 6 September 2021, Mr Kimmo Viertola, Director General, Prime Minister's Office, Ownership steering group (Chairman), Mr Jouko Pölonen, President and CEO, Ilmarinen Mutual Pension Insurance Company, and Mr Jarmo Muurto, President and CEO, Varma Mutual Pension Insurance Company were appointed to Fortum's Shareholders' Nomination Board. In addition, Veli-Matti Reinikka, the Chairman of Fortum's Board of Directors is a member of the Shareholders' Nomination Board.

Other major events during the reporting period

On 30 September 2021, Fortum's Board of Directors decided to launch the savings period for year 20222021 for the Employee Share Savings (ESS) programme. The ESS programme was established in October 2019; the Board of Directors decides separately on the annual launch of each individual savings period. The total amount of the 2022 savings period may not exceed EUR 6 million.

On 17 December 2021, Fortum's Board of Directors decided to commence the 2022–2024 Long-term Incentive Plan for key employees and executives. The 2022–2024 LTI plan is part of Fortum's ongoing LTI program and follows the same principles as the previous plan. The performance measures applied to the 2022–2024 LTI plan are based on the total shareholder return measured relative to the peer group comprising selected European companies, as well as a target linked to the reduction of absolute CO₂ emissions based on fossil fleet relative to the Group's European generation portfolio. The rewards related to the 2022–2024 LTI plan will be paid in 2025, assuming that the performance targets are achieved. The 2022–2024 LTI plan will comprise a maximum amount of approximately 140 participants, including the members of Fortum Executive Management. The Board of Directors also decided to commence the 2022–2024 restricted share (RS) plan as a supplement to the LTI program. The RS plan is intended to provide incentives to key employees and executives for the retention of the plan participants and the reserve shares that potentially will be delivered in spring 2025. The maximum amount of shares of the plan to be delivered as a reward is expected to be approximately 620 000 shares for the 2022–2024 LTI plan and approximately 100 000 shares for the 2022–2024 RS plan.

On 20 December 2021, Fortum Group announced to have set a reduction target for Scope 3 indirect emissions as part of its ambitious decarbonisation agenda. The target is to reduce Scope 3 indirect emissions by 2030 (base year 2019) and to be carbon neutral at the latest by 2035. In addition to the Scope 3 indirect emissions, the Scope 3 target confirms the Group-level commitment to achieve carbon neutrality at the latest by 2050 and is in line with the objectives of the Paris Agreement. In December 2020, Fortum Group announced that in European power generation it is committed to reduce CO₂ emissions (Scope 1 and 2) by 50% by 2030 (base year 2019) and to be carbon neutral at the latest by 2035.

Key drivers and risks

For comments on the geopolitical uncertainty due to Russia's invasion on Ukraine, imposed sanctions and possible future sanctions and counter sanctions and their possible impacts on Fortum Group's Russian business and assets, please see section 'Events after the balance sheet date'.

Fortum's financial results are exposed to a number of financial, operational, strategic, and sustainability-related risks. Fortum is exposed to these risks both directly and indirectly through its subsidiaries, associated companies, and joint ventures. The principal associated companies and joint ventures are TVO, Forsmarks Kraftgrupp AB, Kemijoki Oy, and TGC-1. For more information, please see each respective company's annual report.

Fortum is the majority shareholder of Uniper. However, Uniper remains a separate listed company operating under German law and regulations and with its own risk management systems. As per the end of the fourth quarter 2021, credit risk, market risk, legal risk, political and regulatory risk, financial risk, and asset project risk are the major sources of uncertainty for Uniper's financial performance. During the fourth quarter the key commodity prices Uniper is exposed to significantly increased, with the short- to mid-term gas future prices reaching unprecedented levels. Although this development is positive for Uniper's earnings, the cash flow risks have increased as especially the margining requirements from Uniper's hedges have grown, and the risk of further margin calls has increased in light of elevated market volatility. For more information about Uniper's risk management systems and risk exposures, please see Uniper's Annual report for 2021.

The increasing geopolitical tensions pose a risk for the Fortum Group, the impacts of which have been assessed. The increasing geopolitical tensions and further escalation could, for example lead to curtailments of physical gas deliveries to Uniper which may require Uniper to source gas in the market at higher prices. In addition, counterparties of the Fortum Group could become subject to sanctions, which may impact current or future business relations. Fortum is actively monitoring the situation in order to ensure continued compliance with prevailing rules and applicable sanctions laws. Moreover, Germany has halted the certification of the Nord Stream 2 gas pipeline for time being. Uniper is currently analysing potential effects of the halted certification process on its financial position, net assets, and operational results. Both Fortum and Uniper are continuing to monitor the situation closely and constantly preparing adapted mitigation measures to minimise the impact of an escalation to Fortum Group.

One of the key factors influencing Fortum's business performance is the Nordic electricity wholesale price. In the Nordics, power prices exhibit significant short- and long-term variations on the back of several factors, including but not limited to weather conditions, outage patterns in production and transmission lines, CO₂ emission allowance prices, fuel prices, and the supply-demand balance. Fortum uses hedging in order to limit the exposure to fluctuations in power prices and reports on the hedging levels quarterly (see 'Outlook').

For Fortum's Russian businesses, the key drivers are economic growth, the rouble exchange rate, and the regulation of the power and heat business. A key profitability driver is the received payments based on the CSA contracts and CCS auctions. The main part of Fortum's generation capacity built after 2007 is entitled to CSA payments for approximately 10 years after commissioning and approximately 15 years for renewable generation. The CSA payments are adjusted for, among other factors, the Government bond yield, the rate of return, the consumer price index (CPI), and earnings from the electricity-only (spot) market (done every three and six years after commissioning of a unit). In addition, thermal power plants are entitled to clearly higher CSA payments starting approximately six years after commissioning.

Fortum is exposed to liquidity and refinancing risks primarily through the need to finance the Group's business operations, including margining and collaterals issued for commercial activities. As a result of the recent volatility increase in commodity prices, the cash flow risk related to margin calls on the Group's hedges has increased. In the fourth quarter, further mitigating actions were taken to increase liquidity and reduce the positions exposed to margin calls.

Fortum has cash flows, assets, and liabilities in currencies other than the euro and is therefore exposed to fluctuations in exchange rates. Currency risk arises mainly from physical and financial trading of commodities and new investments, external financing, as well as internal loans and shareholder loans within the Group. Currency exposures are toward euro/Swedish krona, euro/Russian rouble, and euro/British pound sterling. Fortum's extensive operations in Sweden, Russia, and the United Kingdom.

Fortum's business activities include energy generation, storage, distribution, and control of operations in construction, modernisation, maintenance, and decommissioning of power plants or other energy industrialised operational event (which could be caused by e.g. technical failure, human or process error, sabotage, failure of key suppliers, or terrorist attack) can endanger personal safety or lead to environmental damage, business interruptions, project delays, and possible third-party liability. The associated costs are especially in the Group's largest units and projects.

During 2020 and 2021, the Covid-19 pandemic resulted in new and partly unexpected risks as societies and governments across the world implemented drastic measures to contain the spread of the disease. Although for Fortum have so far been limited, and the situation compared to the end of 2020 has improved, the risk of prolonged pandemic cannot be ruled out. The main risk factors include lower commodity prices, decreased increased risk of credit defaults and delayed payments, project delays, and increased risk of operational in prolonged maintenance as a result of travel restrictions, absence of key personnel, as well as difficulties in materials and spare parts. Fortum is closely monitoring the development of the pandemic and its potential for further information about Fortum's risks and risk management systems. see the ► Risk Management the Operating and financial review and ► Note 4.

Outlook

Hedging

At the end of 2021, approximately 75% of the Generation segment's estimated Nordic power sales volume at EUR 34 per MWh for 2022 (at the end of the third quarter of 2021: 65% at EUR 32 per MWh) and approximately EUR 31 per MWh for 2023 (at the end of the third quarter of 2021: 40% at EUR 31 per MWh).

At the end of 2021, approximately 80% of the Uniper segment's estimated Nordic power sales volume at EUR 18 per MWh for 2022 (at the end of the third quarter of 2021: 85% at EUR 22 per MWh) and approximately EUR 18 per MWh for 2023 (at the end of the third quarter of 2021: 55% at EUR 21 per MWh) and approximately EUR 30 per MWh for 2024.

The reported hedge ratios are based on the hedges and power generation forecasts of the Generation segment of the Uniper segment's Nordic generation. The underlying generation assets are defined to differ to some extent and thus are not fully comparable.

The reported hedge ratios may vary significantly, depending on Fortum's and Uniper's actions on the derivatives markets. Hedges are mainly financial contracts, most of them electricity derivatives quoted on Commodities.

Capital expenditure

Fortum estimates its capital expenditure, including maintenance but excluding acquisitions, to be approximately 1,500 million in 2022, of which the share of maintenance capital expenditure is estimated to be approximately 1,000 million, well below the level of depreciation.

Generation

The Generation segment's achieved Nordic power price typically depends on factors such as hedge ratios, hedge prices, spot prices, availability and utilisation of Fortum's flexible generation portfolio, as well as currency fluctuations. Excluding the potential effects from changes in the power generation mix (currently approximately 45 TWh), a EUR 1 per MWh change in the Generation segment's achieved Nordic power price will result in an approximately EUR 45 million change in the segment's annual comparable operating profit. The achieved power price also includes the results of optimisation of Fortum's hydro and nuclear generation, as well as operations in the physical and financial commodity markets.

Russia

In the Russia segment, the financial effect of the CSAs is expected to be negative in 2022, due to the impact of the expiry of the CSA period of one generation unit, partly offset by a higher bond yield.

For comments on the geopolitical uncertainty due to Russia's invasion on Ukraine, imposed sanctions and possible future sanctions and counter sanctions and their possible impacts on Fortum Group's Russian business and assets, please see section 'Events after the balance sheet date'.

Uniper

Excluding the potential effects from changes in the power generation mix, a EUR 1 per MWh change in the Uniper segment's power sales price for outright generation (hydro and nuclear, currently approximately 25 TWh) will result in an approximately EUR 25 million change in the segment's annual comparable operating profit. Uniper also has generation other than hydro and nuclear power, and the sensitivity for that generation is different and is not included in the previously mentioned sensitivity.

With regard to Uniper, reference is made to the guidance that the company publishes quarterly.

Income taxation

In 2022, the comparable effective income tax rate (excluding items affecting comparability) for Fortum is estimated to be in the range of 22-25%. Following the consolidation of Uniper, the weight of the profit in different jurisdictions has resulted in an upward trend in the lower end of the range of the tax rate guidance currently driven by the higher nominal tax rates in the Group's major operating countries.

Possible impacts, if any, of a global minimum tax as stated in the proposed EU directive from 20 December 2021, are not taken into account in this guidance.

Events after the balance sheet date

On 24 February 2022, Russia started a widespread invasion into Ukraine. As a consequence, the US, the UK amongst others have imposed sanctions targeting Russia's ability to access capital and financial markets, sanctioning numerous individuals and banks; as well as trading in general. These sanctions and possible sanctions as well as further reactions by the US, the EU and the UK could impact Fortum's operations in the region. Meanwhile, uninterrupted gas supply from Russia to Europe has continued. Fortum's Russian operations are running normally.

Given the uncertainty and risks arising from the geopolitical situation, including imposed sanctions and economic lives of assets; as well as on the commodity prices and related margining requirements in Europe, value of Fortum's Russian assets, including the exposure in the Nord Stream 2 pipeline project, was approximately 5.5 billion as of 31 December 2021. Fortum is currently assessing the impact of recent developments and measures, and specifically the following:

- Germany has halted the certification of the gas pipeline Nord Stream 2, while the US has sanctioned Stream 2 AG, its subsidiaries and the CEO. Fortum has, within its Uniper segment, a financial impact of approximately EUR 1 billion related to the Nord Stream 2 pipeline project.
- The Russian rouble (RUB) has depreciated significantly from the closing rate as of 31 December 2021. It prevails, it has a negative translation impact on Fortum Group's earnings, assets and liabilities in RUB.
- The above-mentioned events have led to an increase in European commodity prices and corresponding margining outflows for the Fortum Group. Due to the de-risking and financing measures taken, margining has deteriorated Fortum's overall liquidity situation.

Fortum actively monitors the situation in order to ensure continued compliance with prevailing rules and sanctions laws.

See the Risk management section in the Operating and financial review.

On 18 January 2022, Fortum announced that 1.3 GW portfolio of wind projects is being transferred from Fortum to RUSnano wind investment fund (50/50 joint venture) to a joint venture recently established with Bank GPF. The transfer, the joint venture of Fortum-Rusnano wind investment fund will be dissolved.

Sustainability

Sustainability at Fortum

Introduction

This section covers Fortum's non-financial reporting in accordance with the Finnish Accounting Act 1336/1997, Securities Market Act 746/2012 and Limited Liability Companies Act 624/2006. It also includes disclosures prepared in accordance with the EU Taxonomy Regulation Delegated Act of 6 July 2021. The reporting scope includes Uniper, which Fortum has consolidated as a subsidiary as of 31 March 2020.

In this report, selected sustainability key performance indicators that include Uniper are disclosed. Indicators following the same calculation principles have been consolidated and are disclosed as one figure. In cases where the definitions currently differ, only one figure for Fortum, excluding Uniper, is presented. No historical figures have been restated.

Fortum Group's business model is described in ► **Note 6**.

Uniper is a listed company in Germany and has its own sustainability processes, approach, and standalone interim and annual sustainability reporting. Uniper also prepares and publishes a Combined Separate Non-Financial Report in accordance with §315c in conjunction with §289c to §289e of the German Commercial Code. Uniper stand-alone disclosures prepared in accordance with the EU Taxonomy Regulation Delegated Act of 6 July 2021 are included in Uniper's Combined Separate Non-Financial Report.

Material non-financial aspects

Fortum's non-financial reporting includes information on the four mandatory aspects defined in the Finnish Accounting Act. These are: environmental matters, social and personnel matters, respect for human rights, and prevention of corruption and bribery.

Fortum reassessed its material topics in 2021. The materiality analysis was based on internal and external stakeholder surveys, including some 800 respondents, and an extensive desktop review of potential business impact with regard to regulation and expectations of capital markets. The desktop review also included an assessment of peers' material sustainability aspects and media analysis as well as an analysis of the correlation between the topics and the UN sustainable development goals (SDGs).

Based on the materiality analysis, Fortum's updated sustainability priority areas are:

Climate and resources	Personnel and society	Governance
Climate change and GHG emissions	Health, safety, and wellbeing	Business ethics and conduct
Emissions to air, land, and water	Diversity, equity, and inclusion	Corporate governance
Energy efficiency	Fair and attractive employer	Innovation and digitalisation
Circular economy and waste management	Human rights	Shared value creation
Biodiversity	Stakeholder engagement	Customer rights and satisfaction
Secure and affordable energy supply	Just transition	
Water use and optimisation	Corporate citizenship	

Fortum's sustainability performance is monitored and disclosed in interim and annual reporting. Fortum annual Sustainability Report with more extensive information on Fortum's sustainability performance.

Sustainability targets

Fortum updated its climate targets aligned with the goals of the Paris Agreement in December 2020 and carbon neutrality by 2050 at the latest. The target covers direct CO₂ emissions (Scope 1) and indirect CO₂ emissions (Scope 2 and 3). Fortum's roadmap to reduce emissions in Europe has also been defined. Fortum is committed to at least a 50% reduction in CO₂ emissions (Scope 1 and 2) in its European generation by 2030 compared to 2019) and to be carbon neutral (Scope 1 and 2) by 2035 at the latest.

Scope 3 emissions play a significant role in Fortum's total emissions. In December 2021, Fortum committed to reducing Scope 3 greenhouse gas emissions by 35% by 2035 at the latest (compared to base-year 2020).

Fortum had a target for biodiversity to conduct a minimum of 12 major voluntary measures that improve conditions of species and strengthen populations, covering all countries where Fortum has operations in 2021. The projects focus on threatened species or habitats, in particular, and in 2021 included restoring terrestrial habitats, improving fish migration and migratory fish populations, and combating invasive species.

For Fortum, excellence in safety and caring about both its own employees and contractors is the foundation of company's business and an absolute prerequisite for efficient and interruption-free production. Fortum's safety performance is measured as Total Recordable Injury Frequency (TRIF), for own personnel and contractors, and the aim is to reduce it by the end of 2025. Fortum also had a target for Lost Time Injury Frequency (LTIF), for own personnel and contractors: ≤1.2 in 2021.

Both Fortum and Uniper are supporters of the Task Force on Climate-related Financial Disclosures (TCFD). Fortum has a long-standing focus on mitigating climate change and adopted the reporting recommendations of the TCFD starting from the financial year 2019. Uniper disclosed its first TCFD report for 2021 as part of its non-financial reporting.

Fortum executed a review of its lobbying activities and practices during 2021. The review was published in December 2021 and is publicly disclosed on Fortum's website. The summary of the review will also be published as a part of Fortum's Sustainability Report in 2022 and thereafter on a yearly basis.

Group sustainability performance

	2021	2020
Climate and resources		
Total CO ₂ emissions ¹⁾ , million tonnes	68.7	48.7
Specific CO ₂ emissions from total energy production ¹⁾ , gCO ₂ /kWh	312	287
Asset availability of power generation plants ²⁾ , %	80.8	-
Major voluntary measures enhancing biodiversity, no.	13	-
Personnel and society		
Total Recordable Injury Frequency (TRIF), own personnel and contractors ¹⁾	2.2	2.3
Lost Time Injury Frequency (LTIF), own personnel and contractors ¹⁾	1.5	1.3
Severe occupational accidents ¹⁾ , no.	3	1
Sickness-related absences, %	3.6	2.9 *

Fortum consolidated Uniper as a subsidiary into its income statement from the second quarter of 2020. The figures for 2020 do not include Uniper for the first-quarter 2020.

1) 2020 figures include Uniper from the second-quarter 2020

2) The calculation principle changed due to alignment with Uniper. Therefore the figure for 2020 is not available. The 2021 figure includes power

ZZ) The calculation principle changed due to alignment with Gmpel. Therefore, the figure for 2020 is not available. The 2021 figure includes power generation from gas- and coal-fired power plants

* The figure does not include Unijer generation from gas- and coal-fired power plants.

Fortum's goal is to achieve excellent financial performance in strategically selected core areas through strong competence and responsible ways of operating. The financial targets include a target for capital structure (financial net debt/comparable EBITDA below 2x) and two different hurdle rates for new investments (WACC +100 BPS for green investments and WACC +200 BPS for other investments). Accordingly, Fortum aims to provide good returns for its owners, and its dividend policy stipulates to pay a stable, sustainable, and over time increasing dividend.

Fortum is a significant economic actor in its operating countries. The most significant direct monetary flows of Fortum's operations come from revenue from customers, procurements of goods and services from suppliers.

salaries, and taxes paid.

Fortum supports social development and wellbeing in its operating countries by, e.g., paying taxes. The tax benefits Fortum produces to society include not only corporate income taxes, but also several other taxes. Fortum's, excluding Uniper, approach to taxation and the principles that steer the tax management are presented in Fortum's Tax Principles disclosed on Fortum's website. Fortum publishes its tax footprint annually, and Uniper published its first tax footprint in spring 2021.

Fortum is included in several sustainability indices and has been assessed by many sustainability ratings. The list is published on Fortum's website. Fortum's sustainability reporting covers functions under Fortum's operational control, including subsidiaries in all its operating countries, unless otherwise stated.

Sustainability risks and opportunities

Fortum's operations are exposed to risks, which, if materialised, can have adverse effects on the environment, the safety and security of employees, contractors, and neighbouring societies. Key sustainability risks, including the safety and security of employees, contractors, and neighbouring societies, are reported to Fortum Executive Management and the Audit and Risk Committee as part of the annual risk review. Fortum's risks are presented in the Risk Management Report, which is part of the Operating and financial review.

As a separate listed company, Uniper applies its own processes aligned with its enterprise risk management framework. Uniper systematically identifies, assesses, and manages Environmental, Social and Governance (ESG) risks. Uniper's risk management processes include assessing external and internal ESG risks, including climate-related risks. In 2021, Uniper conducted a climate risk assessment in accordance with the TCFD recommendations. The impact of its net greenhouse gas emissions on the reporting threshold.

Climate change and the need for decarbonisation and resource efficiency are changing the energy industry in a profound way, and these changes also create new business opportunities for Fortum. Fortum has transformed its business model significantly over the years to become Europe's third largest CO₂-free power generator and is now well positioned to capture opportunities resulting from the energy transition. To be successful, the energy transition must balance sustainability, affordability and security of supply. It requires not only renewables, but also increasingly clean gas (e.g. hydrogen), energy storage and other flexible solutions to provide security of supply and to decarbonise industry, transportation, heating and buildings.

Fortum's strategic priorities address and provide solutions for these very areas: Fortum aims to decarbonise its operations and to strengthen and grow in CO₂-free power generation while leveraging its strong positioning in operations and to enable the energy transition. At the same time, Fortum aims to provide industrial and infrastructure customers with decarbonisation and environmental solutions, such as grid stability, waste-to-energy, and low-carbon industrial solutions, and to capture the opportunities in hydrogen as they become commercially viable.

Sustainability governance and policies

As sustainability is an integral part of Fortum's strategy, the highest decision making on sustainability and CSR matters falls within the duties of the members of the Board of Directors, who share joint responsibility in the

Fortum Executive Management decides on the sustainability approach and Group-level sustainability targets, and on the Group's annual planning. The Group's performance targets, including sustainability and climate-related targets, are approved by Fortum's Board of Directors. Fortum's line management is responsible for the implementation of Fortum's sustainability strategy, instructions and for day-to-day sustainability management and improvement plans.

The Uniper SE Management Board bears the overall responsibility for the adoption and implementation of Uniper's sustainability measures. Uniper's Chief Sustainability Officer (CSO) reports periodically to the Management Board on the progress of the implementation of the sustainability measures. The CSO is also responsible for the strategic sustainability activities. The Supervisory Board, which is Uniper's highest governance body, also fulfills a supervisory function in relation to the implementation of the sustainability measures. The Supervisory Board, also known as the Board of Directors, is responsible for the oversight and supervision of the company's management and the fulfillment of Uniper's sustainability obligations. Four of Fortum's Executive Managers, including the President of Fortum, are members of Uniper's Supervisory Board.

Realisation of the safety target (LTIF, own employees and contractors combined) was a part of the incentive (STI) programme in 2021. In the 2022 STI programme, the safety target contains the severity rate of Recordable Injuries (TRI) of own employees and contractors combined and the execution rate of safety lead

Fortum's long-term incentive (LTI) programme includes a climate-related metric. In the 2021–2023 LTI programme, the metric is linked to the reduction of coal-fired power generation capacity in line with Fortum's coal-exit plan. In the 2024–2026 LTI programme, the metric is linked to the reduction of absolute CO₂ emissions in the European fossil fleet, based on the company's net-zero plan. The target is related to the reduction of absolute CO₂ emissions in the European fossil fleet, based on the company's net-zero plan.

review addressing the Group's European generation portfolio and a pathway developed to reach Fortum Group's 2030 and 2035 climate targets. Uniper continues to follow its own STI and LTI plans. However, the safety metric (severity rate per TR) in the STI 2022 programme and the climate-related metric in the 2022–2024 LTI plan are applicable to both companies. Scaling of STI and LTI metrics are company-specific.

Sustainability management at Fortum is strategy-driven and based on its Values, Code of Conduct, Supplier Code of Conduct, sustainability-related policies, and other Group policies and their specifying instructions. Uniper continues to have its own separate Code of Conduct and Supplier Code of Conduct. Both companies' Codes of Conduct are based on similar fundamentals and they establish the basic principles of conduct that everyone must follow. They define how we treat each other, do business, and engage with the world. The companies' Supplier Codes of Conduct, both based on the ten principles of the UN Global Compact, outline the requirements for Fortum's and Uniper's suppliers and business partners.

Fortum follows and respects the International Bill of Human Rights, the United Nations Convention on the Rights of the Child, and the core conventions of the International Labour Organisation (ILO). Fortum also recognises in its operations the UN Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises, the International Chamber of Commerce's anti-bribery and anti-corruption guidelines, and the Bettercoal initiative's Code on responsible coal mining. Fortum is a participant of the UN Global Compact initiative and the UN Caring for Climate initiative. Uniper also follows the ten principles of the UN Global Compact, but is not a formal participant.

Business ethics

Zero tolerance for corruption and bribery is highlighted in both Fortum's and Uniper's Codes of Conduct and Supplier Codes of Conduct. In addition, separate instructions and guidelines have been created to address various topics, including but not limited to anti-bribery, compliance management, safeguarding company assets, conflict of interest, anti-money laundering, and competition law.

Fortum's Board of Directors has approved the company's Code of Conduct and Supplier Code of Conduct. Uniper's Code of Conduct and Supplier Code of Conduct have been approved by the Uniper Management Board.

The Codes of Conduct are regularly reviewed in order to ensure compliance with evolving company and regulatory requirements. Fortum's updated Code of Conduct and Supplier Code of Conduct were published in early 2021 and training on the updated Codes was organised during the year. The Code of Conduct online training, launched in November 2021, is mandatory for all employees. Uniper's updated Code of Conduct was published in early 2020, and a new compliance eLearning module was introduced for all Uniper employees in 2021. In addition, relevant individuals are regularly trained in policies and systems that help to prevent corruption.

Internal and external reporting channels are offered for reporting suspicions of misconduct. The channels are described in the Codes of Conduct and accessible on the companies' internal and external webpages. Suspected misconduct and measures related to ethical business practices and compliance with regulations are regularly monitored and assessed by Fortum's Audit and Risk Committee. Uniper's Compliance Management System includes quarterly compliance reports to the Uniper Management Board. Uniper's Audit and Risk Committee monitors compliance issues on a regular basis. Uniper Management Board's Compliance Commitment is published annually on the company's webpage in accordance with the German Governance Code.

During 2021, two new cases of corruption or bribery were confirmed in Fortum's operations and one was closed as unfounded.

Climate and resources

Fortum's key performance indicators for climate and resources are related to CO₂ emissions, security of biodiversity, and major Environmental, Health and Safety (EHS) incidents.

Fortum's Sustainability Policy together with the Minimum Requirements for EHS Management steer the management. Uniper has an HSSE & Sustainability Policy Statement and a HSSE and Sustainability Management Operational-level activities follow the requirements set forth in the ISO 14001 environmental management. 100% of Fortum's power and heat production worldwide has ISO 14001 certification.

Energy

Fortum Group's power generation is mainly based on natural gas-fired generation and on carbon dioxide-free nuclear power. Fortum targets to rapidly reduce the share of coal in power generation. A minor share of Fortum's power generation is currently based on solar and wind, but Fortum targets significant growth in this area over the next few years.

Fortum is also a large district heat producer. Heat is mainly produced at natural gas-fired and energy-efficient combined heat and power (CHP) plants. In addition, Uniper operates a large commodities trading business in natural gas storage sites, which play an important role in ensuring a secure and flexible gas supply.

Fortum wants to enable the energy transition by providing a reliable and affordable supply of low-carbon energy in the future, the energy system – and Fortum's asset portfolio – will be based on renewable energy, increased use of gas (e.g. hydrogen), and nuclear power. In addition, Fortum will continue to offer industrial and infrastructure services (e.g., waste-to-energy, grid stability services, as well as energy sales and storage).

In 2021, Fortum's power generation was 188.1 (142.1) TWh and heat and steam production was 33.4 (29.1) TWh. Fortum's total power generation was CO₂-free. In Europe, 64% of the power generation was CO₂-free. Fortum's power and heat generation and capacities also include figures from Fortum's share in associated companies and ventures that sell their production to the owners at cost.

Fortum uses various fuels, such as natural gas, uranium, coal, lignite, waste-derived fuels, and biomass to produce electricity, heat, and steam. The most significant fuel used in 2021 was natural gas.

An uninterrupted and reliable energy supply is critical for society to function. With planned preventive and condition monitoring, Fortum ensures that the power plants operate reliably to produce the electricity and heat needed by customers. The exceptional conditions caused by the Covid-19 pandemic continued in 2021. During challenging times Fortum's top priorities were to ensure the health and safety of its employees and to maintain business continuity. During the year, there were no interruptions in Fortum's energy production. Maintenance outages were, in general, also implemented as scheduled with careful planning and measures to protect the health of own and contractors' employees. In some cases, the duration of maintenance was extended to reduce the number of workers on site at the same time.

In 2021, the asset availability of Fortum's gas- and coal-fired power plants was, on average, 80.8%. The availability of Fortum's power generation includes planned outages in addition to unplanned technical unavailability.

Climate and greenhouse gas emissions

Fortum Group has committed to carbon neutrality by 2050 at the latest, in line with the goals of the Paris Agreement. Fortum's priority is to transform its own operations to carbon neutral by continuously strengthening and growing in CO₂-free power generation and by decarbonising its carbon-emitting energy production fleet.

In 2021, Fortum's direct CO₂ emissions were 68.7 (48.7) Mt. 57% of CO₂ emissions originated from Russian power and heat production. Of the total CO₂ emissions, 28.9 (17.5) Mt were within the EU and UK emissions trading system (ETS). The estimate for Fortum's free emission allowances in 2021 is approximately 0.4 (0.9) Mt.

Fortum's total CO ₂ emissions ¹⁾ (million tonnes, Mt)	2021	2020	2019
Total emissions	68.7	48.7	19.1
Emissions subject to ETS	28.9	17.5	2.1
Free emission allowances	0.4	0.9	0.7
Emissions not subject to ETS in Europe	0.7	0.7	0.7
Emissions in Russia	39.0	30.5	16.3

¹⁾ Fortum consolidated Uniper as a subsidiary into its income statement from the second quarter of 2020. The figures for 2020 do not include Uniper for the first-quarter 2020. The figures for full year 2019 do not include Uniper.

Fortum's greenhouse gas emissions are defined and reported according to the Greenhouse Gas (GHG) Protocol guidelines. In 2021, Fortum's direct Scope 1 GHG emissions were 69.0 (49.0) million CO₂-eq tonnes, indirect market-based Scope 2 GHG emissions 0.8 (0.8) million CO₂-eq tonnes, and indirect location-based Scope 2 GHG emissions 0.7 (0.6) million CO₂-eq tonnes.

During 2021, Fortum together with Uniper conducted an in-depth review of the Scope 3 GHG emissions inventory. Where possible, also the accounting methodologies of indirect Scope 3 GHG emissions were aligned with Fortum. As part of the review, and to offer a full transparency of the emissions, Scope 3 category 11 was expanded to include not only emissions from the use of fossil fuels sold to end-users, but also sold to resellers. This expansion of the accounting scope resulted in a significant increase of Scope 3 category 11 emissions.

In 2021, Scope 3 GHG emissions were estimated to be about 120 million CO₂-eq tonnes. Fortum's non-financial reporting does not include Scope 3 categories 5 and 10 in the calculation of total greenhouse gas emissions. These Scope 3 categories are disclosed in Fortum's Sustainability Report. The majority of Fortum's Scope 3 GHG emissions are caused by the use of fossil fuels sold both to end-users and resellers (2021: 79 million CO₂-eq tonnes). In addition, the Group's Scope 3 emissions originate from the procurement of fuels, transportation and distribution, electricity retail to customers, purchased goods and services, and from capital goods, i.e., investments.

Fortum's Scope 1 GHG emissions accounted for about 36% of total GHG emissions, Scope 2 GHG emissions accounted for less than 1%, and Scope 3 GHG emissions accounted for about 63%.

In 2021, Fortum's specific CO₂ emissions from total energy production were 312 (287) gCO₂/kWh.

In 2021, Fortum, excluding Uniper, achieved annual energy-efficiency improvements of 179 GWh/a.

EHS incidents

Major EHS incidents are monitored, reported, and investigated, and corrective actions are implemented. There were eight (16) major EHS incidents in Fortum's operations, excluding Uniper. The major EHS incidents were two (6) fires, one (0) explosion, three (8) leaks or spills, one (1) environmental non-compliance, and one (International Nuclear Event Scale) level 1 incident. The major EHS incidents did not have significant environmental impacts. As Uniper's definitions of major EHS incidents vary from the rest of the Fortum Group, Uniper's are currently not included in the reporting.

Water and biodiversity

Fortum uses large volumes of water at various types of power plants and in district heating networks. The water is used for cooling. In most cases, power plants do not consume water – the water is discharged to the same water system from where it was withdrawn.

In 2021, Fortum achieved its biodiversity target of conducting a minimum of 12 major voluntary measures for biodiversity. A total of 13 major measures were implemented. Fortum's operations, for example in hydro generation, can impact local biodiversity. Fuel procurement and flue-gas emissions may also have a negative biodiversity. On the other hand, increasing CO₂-free production mitigates the biodiversity loss caused by change, which is globally one of the greatest threats to biodiversity. Fortum has a Biodiversity Manual and an Action Plan in place to define the company's approach to biodiversity management. The Biodiversity Action Plan revised in 2021 and now also includes Uniper's biodiversity actions. The Biodiversity Manual, however, Fortum's, excluding Uniper, approach to biodiversity. During 2022, Fortum's target is to develop a science-based strategy to measure and enhance the biodiversity impacts of the Group's operations and the new development.

Personnel and society

Fortum's key performance indicators for personnel and society are related to operational and occupational employee health and wellbeing. In addition Fortum, excluding Uniper, annually measures its employee satisfaction with the One Fortum Survey.

Personnel

Fortum places a significant emphasis on an open and trusting corporate culture and highlighting systematic feedback on employees' performance and engagement. Diversity and equal opportunity are seen to contribute to competitiveness and innovation.

Fortum and Uniper Values and Codes of Conduct form the foundation for all daily work. Fortum's Policy and Leadership Principles guide personnel-related matters, excluding Uniper. For Uniper, the Uniper's Code of Conduct describes the core elements and guiding statements for leadership, teamwork and individual contribution.

the basis for the corporate culture. In 2021, Fortum and Uniper started together analysing their existing cultures, related strengths and improvement potential, as well as identifying potential roadblocks impacting further cooperation. The analysis investigates the companies' values, what kinds of principles guide their work, and what the companies have in common.

Fortum's operations are mainly based in the Nordic countries, Central Europe, the UK, Russia, and Poland. The total number of employees at the end of 2021 was 19,140.

Group personnel statistics	2021	2020 ¹⁾	2019
Number of employees, 31 December	19,140	19,933	8,191
Average number of employees	19,796	17,304 ⁴⁾	8,248
Total amount of employee benefits, EUR million	1,561	1,195	480
Departure turnover, % (of permanent employees)	11.2	7.4	11.2
Permanent employees, %	93.0	94.8	96.8
Full-time employees, %	96.5	98.2	97.7 ²⁾
Female employees, %	28	27	32
Females in management, %	27	27 ³⁾	30

¹⁾ Fortum consolidated Uniper as a subsidiary into its income statement from the second quarter of 2020.

²⁾ Figure includes only permanent, not temporary, employees.

³⁾ Calculation principle changed due to alignment with Uniper.

⁴⁾ 2020 comparative figure was revised to reflect the consolidation of Uniper from March 31, 2020.

Occupational safety

For Fortum, excellence in safety is the foundation of the company's business and an absolute prerequisite for efficient and interruption-free production. Fortum strives to be a safe workplace for the employees, contractors, and service providers who work for the company. For Fortum, the Sustainability Policy, the Minimum Requirements for EHS Management, and more detailed EHS manuals steer the work. For Uniper, the most important tools guiding safety efforts are the HSSE & Sustainability Policy Statement and the HSSE and Sustainability Improvement Plan. A certified ISO 45001 safety management system covers 99.3% of Fortum's power and heat production worldwide.

In 2021, Fortum launched new Safety Ground Rules to help keep safety on everyone's agenda at all times and to support the improvement of Fortum's safety performance. Fortum's divisions have also started work on roadmaps towards safety excellence during 2021–2025 and will continue to plan their activities in line with the new Safety Ground Rules and targets.

In 2021, Fortum together with Uniper focused on initiating the alignment of several key safety processes. These included, e.g., key safety performance indicators, contractor EHS management, and sharing of information on injury-related investigations and learnings. Uniper was also included in the Group's incident notification system. The alignment of processes and the implementation of a joint safety culture will continue in 2022. This is supported by the joint Executive Safety Leadership trainings and safety eLearning applicable for all of the Group's employees.

In 2021, Fortum's TRIF for own personnel and contractors was 2.2 (2.3), and the LTIF for own personnel and contractors was 1.5 (1.3). Thus, Fortum did not meet the set target for LTIF (≤1.2). Fortum strives for zero severe occupational accidents. In 2021, there were three (1) severe occupational accidents in the operations, one resulting in a fatality. The fatally injured person was working for a contractor company to reconstruct a guardhouse at Unipro's power plant site in Russia. A safe and healthy working environment is a priority for Fortum, and the Group will continue to do its utmost to improve safety performance.

Personnel wellbeing

Fortum's goal regarding workplace wellbeing activities is to promote the health and occupational safety and the functionality of the work community. Employees have access to a wide range of services, from ups to exercise and coaching programmes that also address stress management and mental wellbeing.

In 2021, the company's efforts concentrated on safeguarding personnel from the Covid-19 pandemic their physical and mental wellbeing in the exceptional conditions. The wellbeing programmes highlighted to mental energy, resilience, and physical health. Managers were supported in leading employees' well-being during a challenging period. Coordination teams established at the beginning of the pandemic at both Fortum and its subsidiaries continued to closely monitor the development of the pandemic and its impact on the companies' operations and personnel, and to agree on related actions.

Examples of measures to combat the Covid-19 pandemic include remote working in those positions in which physical presence is not required and a hybrid work model, in which the work week is divided between remote work days and practiced during such periods when the pandemic situation allows this. On-site work with special arrangements, such as staggered arrival, breaks and lunch, maintaining physical distance, masks, and enhanced cleaning.

Fortum, excluding Uniper, deployed a strategic initiative, Workforce 2.0, covering both long-term changes in term adaptations and actions related to the company's ways of working. Managers and employees were encouraged to take the initiative. Hybrid Work Model principles, including the expected changes in managers' leadership style, were initiated and continued throughout 2021 and collaborated partly with Uniper's equivalent initiative called Natio – New

Travel restrictions set at the start of the pandemic were eased for a short period in the autumn but were not used when the pandemic situation worsened towards the end of the year. Several measures have been implemented to support employees working remotely; examples include cloud-based IT solutions and that support flexible, mobile work arrangements. Also virtual wellbeing services and events have been offered to employees. According to an employee survey, 94% of respondents feel that they are managing their own work role.

In 2021, Fortum's percentage of sickness-related absences was 3.6.

Society

Reputation and customer satisfaction

Fortum's performance regarding reputation and customer satisfaction, excluding Uniper, is monitored annually by the One Fortum Survey. In 2021, the combined reputation index of all stakeholder groups based on the Survey decreased slightly to 70.5 (72.5) points, on a scale of 0–100. Fortum's overall reputation decreased among most of the stakeholder groups. Among NGOs the result remained stable. The customer satisfaction varied depending on the business area between 58 and 83 points (61–81), on a scale of 0–100.

Interruption-free customer service during the Covid-19 pandemic was ensured by enabling employees to work remotely. To support this, modern IT solutions were used successfully, and the company was able to provide good quality services for customers.

Supply chain

Fortum and Uniper expect their business partners to act responsibly and to comply with the requirements in their respective Codes of Conduct and Supplier Codes of Conduct. Fortum assesses the performance of

partners with supplier qualification and supplier audits. In 2021, Fortum, excluding Uniper, conducted four on-site supplier audits in China and in India. Due to the Covid-19 pandemic and travel restrictions, the possibilities to conduct on-site supplier audits have been very limited. Uniper applies its own processes for ESG Due Diligence and Know Your Counterparty. Both companies are members of the Bettercoal initiative and use the Bettercoal tools to improve sustainability in the coal supply chain.

Human rights

Fortum follows and respects internationally recognised human rights, which are included in the key human rights treaties. Respect for human rights is expressed in both Fortum's and Uniper's Codes of Conduct and Supplier Codes of Conduct. The UN Guiding Principles on Business and Human Rights are taken into account in own operations and in supply chain management.

Fortum, excluding Uniper, conducts a human rights assessment for investment projects – especially in new operating areas – and also for new countries where Fortum plans to expand the sales of products and services. In 2021, two new country assessments were made.

Uniper annually performs a worldwide assessment, which is based on a combination of economic and social indexes, to map key potential country-specific issues that may directly affect the company. The assessment findings contribute to the implementation of modified due diligence requirements and mitigation measures, such as the inclusion of specific contract clauses.

Corporate citizenship

Fortum, excluding Uniper, continued to steer its support to society and cooperation with local communities through its Corporate Social Responsibility (CSR) programme. The programme's focus areas, aligned with the company's strategic targets, are Climate, People, and Material Revolution. Steering of CSR activities is concentrated to a Fortum-wide Steering Group.

In 2021, Fortum continued to support charity organisations in order to help its local communities during the Covid-19 pandemic. In addition, Fortum engages in collaboration with universities through different research and development projects. In 2021, Fortum's, excluding Uniper, support for activities promoting the common good totalled approximately EUR 1.8 (2.5) million. In addition, the grants awarded by Fortum and Neste Foundation (earlier Fortum Foundation), not part of Fortum Group, totalled EUR 701,250 (612,500).

EU taxonomy

Introduction

The EU Taxonomy Regulation is a classification system for defining economic activities that can be considered environmentally sustainable. The regulation provides specific key performance indicators (KPIs) that entities are required to report for their environmentally sustainable economic activities. The regulation is being implemented with a phased entry into force with simplified reporting requirements.

The EU Taxonomy Regulation establishes six environmental objectives, two of which, the climate change mitigation and adaptation criteria, were published on 4 June 2021 in the Climate Delegated Act. The Complementary Climate Delegated Act on certain nuclear energy and gas activities was published on 2 February 2022. The Delegated Act for the remaining four environmental objectives will be published in 2022.

Fortum's disclosure has been prepared in accordance with the EU Taxonomy Regulation Delegated Act. For the financial year ending on 31 December 2021, Fortum reports the proportion of Taxonomy eligible and Taxonomy non-eligible activities in relation to the three KPIs (Sales, Operating expenses and Capital expenditures). Reporting on Taxonomy alignment will be done for the financial year ending on 31 December 2022. The disclosure includes Fortum's subsidiaries consolidated to the Group as of 31 December 2021.

Economic activities

In 2021, Fortum classified its economic activities to eligible and non-eligible corresponding to economic activities described in the Climate Delegated Act. Fortum's business operations were evaluated according to the economic activities listed in Annex I (climate change mitigation) and Annex II (climate change adaptation) related NACE codes provided in these descriptions. The review was done at power plant or individual business level. Fortum assessed climate change mitigation to be the most relevant objective against which the eligible economic activities was reviewed.

Eligible economic activities

Eligible economic activity is an activity that is described in the Climate Delegated Act. Annex I. Fortum's eligible activities are:

- Electricity generation from hydropower
- Storage of electricity
- District heating/cooling distribution
- Material recovery from non-hazardous waste
- Production of heat/cool from bioenergy
- Production of heat/cool using waste heat
- Electricity generation from wind power

Non-eligible economic activities

Non-eligible economic activity does not correspond to any activity description provided in the Climate Delegated Act. Fortum's non-eligible activities include electricity and commodities trading, fossil-based power and heat engineering services related to non-renewable assets, as well as administrative overheads.

In addition, Fortum has economic activities that are not currently covered by the EU Taxonomy, such as energy and natural gas, as well as waste-to-energy and circular economy activities.

Investments in renewable energy through partnerships

Fortum's investments in renewables, such as wind and solar power, are mainly done through partnerships. Fortum to efficiently utilise its key competences to develop, construct and operate power plants, whilst relying on the expertise of its partners. Fortum's investments in renewables are mainly done through partnerships (ventures and associates) or other forms of cooperation. This means that wind and solar power plants are mainly developed and operated during the construction phase, but not in the sales and operating phases. KPIs for capital expenditure KPI during the construction phase, but not in the sales and operating phases KPIs is

KPIs for climate change mitigation

Below are the proportions of eligible and non-eligible activities of the Sales, Operating expenses, and Capital expenditure for Fortum Group for the financial year ending 31 December 2021.

	Total	Eligible	Non-eligible*
	EUR million	%	%
Sales	112,400	2	98
Operating expenses	1,809	11	89
Capital expenditure	1,391	23	77

*) Includes non-eligible activities, activities currently not covered by the taxonomy, as well as the impact from divestments made during 2021.

The most significant eligible economic activity in Fortum Group is electricity generation from hydropower with an installed capacity of 8.4 GW (18% of total capacity) in the Nordics and Germany. While the construction of new hydropower plants is not currently planned, several maintenance and modernisation projects for the existing portfolio are expected in the future.

Definitions of the KPIs

Sales is based on the sales reported on Fortum's consolidated income statement (► Note 6). Fortum has significant trading-related (non-eligible) sales, which explains the considerably low proportion of eligible sales.

Capital expenditure consists of additions to property, plant and equipment, intangible assets, right-of-use assets, as well as additions through business combinations. See ► Note 3, ► Note 16, ► Note 17, and ► Note 34. Operating expenses consist of direct non-capitalised costs that are necessary to ensure the continued functioning of property, plant and equipment. These expenses include repairs and maintenance, building term rentals and similar costs, as well as other direct expenditures relating to the day-to-day servicing of the company.

Methodology for calculating KPIs

The financial data used for calculating the EU taxonomy KPIs has been retrieved from Fortum's financial statements based on the same data and Group accounting principles (see Notes to the consolidated financial statements) as Fortum's consolidated financial statements for the year ending 31 December 2021. Appropriate adjustments have been implemented to eliminate the risk of double counting.

Financial data has been allocated to eligible economic activities as follows:

- Majority of electricity sales has been allocated to eligible activities based on production volume.
- Other sales and operating expenses data is available in the source systems at the cost centre-level corresponding to individual sites. These cost centres have been allocated to eligible economic activities.
- Each significant capital expenditure investment project has been allocated to eligible economic activities.

Risk management

Risk management framework and objectives

The Group Risk Policy provides a risk management framework for Fortum, the purpose of which is to support business in managing risks effectively and to ensure compliance with relevant regulations. The Group Risk Policy includes an overview of Fortum's risk management systems consisting of the general principles of risk management, the main features of the risk management process and responsibilities for managing and controlling risks within the Group.

The risk management systems have been designed to support Fortum's Board of Directors, Audit and Risk Committee, Fortum's Executive Management as well as the operative business in fulfilling their duties in relation to risk management. The objectives of the risk management systems are to:

- support Fortum's business divisions and corporate functions (Fortum) in managing risks effectively and to ensure compliance with relevant regulations
- support business divisions in strategy execution,
- support business divisions in achieving agreed targets within acceptable risk levels so that the Group's ability to meet financial commitments is not compromised,
- ensure the understanding of the Group's material risks and uncertainties, and
- support the prevention of accidents that can have a severe effect on the health and safety of employees or third parties, and incidents that can have a material impact on Fortum's assets, reputation or the environment.

Risk management organisation

Fortum's Board of Directors approves the Group Risk Policy, and the President and CEO approves Fortum, excluding Uniper, risk management instructions covering commodity market risks, counterparty credit risks, and operational risks, as well as instructions for compliance management, EHS management, treasury and the governance framework for cyber and information security risks; all of which are aligned with the Group Risk Policy. Fortum's Divisions and Corporate Functions issue risk manuals and guidelines, as needed, which detail how the Group Risk Policy and relevant risk management instructions are implemented within their organisations.

Uniper is a separate listed company operating under German law and regulations with its own risk management systems, including risk policies which define the risk management organisation principles, processes and responsibilities. Uniper does therefore not directly apply the risk management systems applicable to Fortum's other Divisions and Corporate Functions. The risk management systems of Uniper, including the key risk management principles and processes, are materially in line with those of the rest of Fortum Group. The target is to further align the risk management systems in the future. For more information about Uniper's risk management systems, please see Uniper's annual report.

Corporate Risk Policy Structure

Approving body

Board of Directors

President and CEO

Division / Corporate Function Head

Group Risk Policy

Fortum Risk Instructions

Division / Corporate Function Risk manuals and Guidelines

Reviewing

Audit and

CFO

CRO

Risk Governance

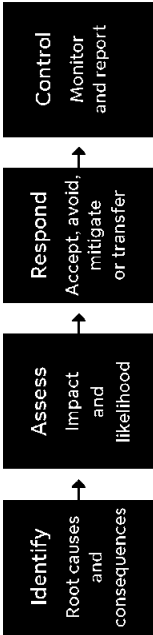
The main principle is that risks are managed at source, meaning that each Division and Corporate Function, as well as Uniper's Management Board, is responsible for managing risks that arise within their business or management systems, and for annually reviewing the Group Risk Policy and the Group's material risks and uncertainties. Corporate Risk Management, a function headed by the Chief Risk Officer (CRO), providing methods and tools which support the Divisions and Corporate Functions, excluding Uniper, in running a management process. Corporate Risk Management is responsible for assessing and reporting on the management in Divisions and Corporate Functions and for providing independent monitoring and report Group's material risk exposures to Fortum Executive Management (FEM), the ARC and the Board of Directors. Uniper, a separate listed company operating under German law and regulations, is consolidated to Fortum's consolidated financial statements, and reported as a separate segment. Four out of the six shareholders represent the Supervisory Board are from Fortum. Fortum also has a representative in Uniper's Audit and Risk Committee. Changes to the risk management systems, which are considered to be material within the governance framework, are reviewed by the Audit and Risk Committee of Uniper and informed to the Supervisory Board.

Principle of continuous improvement

Risk management is developed in accordance with the principle of continuous improvement, aiming at an optimised and continuously developing risk management process. The maturity level of the risk management process is annually assessed with a self-assessment procedure, and Corporate Risk Management determines goals for the development of risk management based on the results of the assessment.

In accordance with Fortum's values, the importance of risk management is raised by increasing the personnel's risk awareness and highlighting the positive features of risk-aware decision-making. Risk management at Fortum is continuously supporting and improving the application of Fortum's values in decision-making.

Risk management process



The risk management process consists of risk identification, risk assessment, response, and control processes and procedures. Uniper operates a separate risk management process from the rest of Fortum but is materially in line with Fortum's process and follows similar principles.

Both risk management processes are designed to support effective risk management and to ensure that risks are regularly monitored and followed-up. Identification is regularly carried out according to a structured process which includes analysis of root causes of the risk and consequences, if the risk materialises. Risks are assessed in terms of impact and likelihood or probability of the realisation of the risk. Impact is primarily assessed in monetary terms in relation to forecasted earnings and / or cash flows, but also in terms of health and safety, environment and reputation, where relevant. Identified risks have a risk owner responsible for responding to the risk. Risk responses can be to accept, avoid, mitigate or transfer the risk. Risk control processes and procedures, which include validating, monitoring, aggregating and reporting risks, are designed to ensure compliance with relevant external regulations and recommendations, as well as with internal policies, instructions, manuals and guidelines. This includes controls to ensure that risk exposures remain within approved limits and mandates related to, for example, credit and market risks.

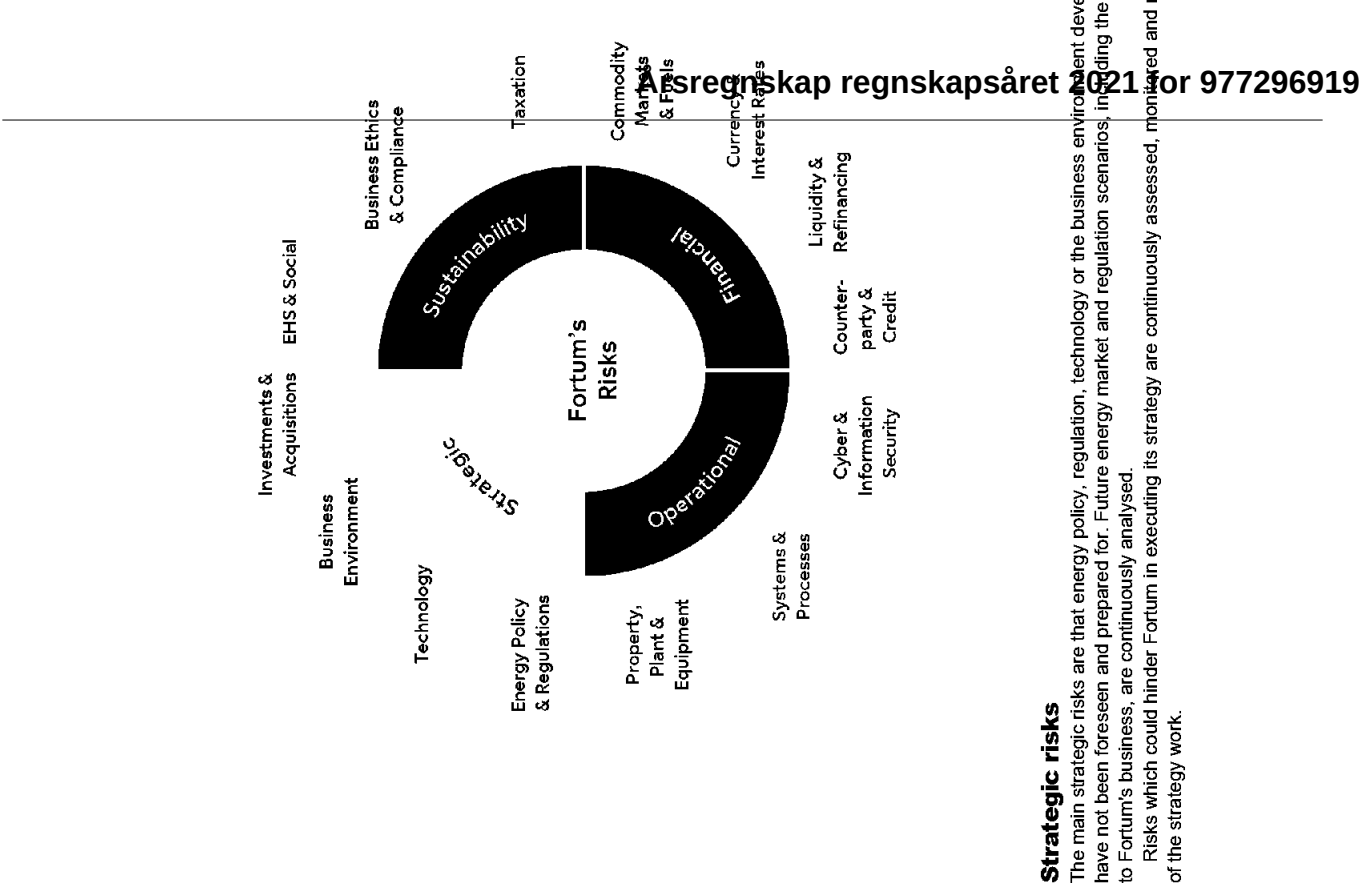
Risk factors

Fortum is exposed to a number of financial, operational, strategic, and sustainability-related risks both directly and indirectly through its subsidiaries, associated companies, and joint ventures. The associated companies and joint ventures have their own risk management systems. The principal associated companies and joint ventures are TVO, Forsmarks Kraftgrupp AB, Kemijoki Oy and TGC-1. For more information about these indirect risk exposures, please see each respective company's annual report.

Strategic risks

The main strategic risks are that energy policy, regulation, technology or the business environment development have not been foreseen and prepared for. Future energy market and regulation scenarios, including the to Fortum's business, are continuously analysed.

Risks which could hinder Fortum in executing its strategy are continuously assessed, monitored and of the strategy work.



Fortum operates in a global business environment and is therefore exposed to political and other risks which affect the macroeconomic development and consumer behaviour in the markets where Fortum operates. The current trend of nationalistic policies and protectionism may lead to trade restrictions or imposed sanctions which in turn could affect demand for Fortum's products and services, asset values and financing. Fortum continuously monitors how the business environment develops in its operating countries in order to be able to react quickly to market shifts and changes in consumer behaviour.

Fortum is the majority shareholder of Uniper, a separate listed company operating under German regulation, with an ownership of 78.0% as per 31 December 2021. The companies have initiated strategic alignment and agreed to co-operate in a number of areas including physical trading and optimisation of Nordic hydro operations, jointly developing a portfolio of solar and wind projects in Europe, and a joint growth strategy in hydrogen. Positive annual cash impact on a consolidated group basis is estimated to be approximately EUR 100 million. More than EUR 50 million of these annual benefits are gradually materialising by the end of 2023, reaching full annual impact in 2025. The ability of Fortum to deliver on its strategic targets and achieve the expected benefits depends on successful strategy execution and co-operation between the two companies.

Fortum is continuously assessing its' business portfolio and evaluates opportunities for acquisitions, investments and divestments primarily in the Nordic, EU and Russian markets. As part of the updated strategy, Fortum has announced several of growth areas for future investments including a sizeable renewables portfolio. Even if Fortum is able to identify candidates for acquisition or investment, it may be difficult to complete transactions. Competition for acquisitions or greenfield investments could limit Fortum's ability to grow, or could raise the prices and make them less attractive to Fortum. Furthermore, Fortum has concluded the strategic review of the heating and cooling businesses in the Baltics and its 50% stake in Stockholm Exergi by selling these assets. The ongoing Covid-19 pandemic and especially energy market volatility have led to increased uncertainty about macroeconomic development and possible impact on future regulation. As a result, there may currently be less potential investors, which could lead to planned divestments being postponed, or not being carried out as planned.

Energy policy and regulation risks

The energy sectors are heavily influenced by national and EU-level energy policies and regulations. Fortum's strategy has been developed based on scenarios of the future development of the regulatory environment in both existing and

Key risks related to the future development of energy and climate policies and circular economy-related regulatory framework development are listed below

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The inter-linkage of these issues create uncertainty as changes in policies in one area could undermine the effects of policy changes in other areas.

Russia

Fortum's business in Russia is exposed to political, economic and social uncertainties and risks resulting from changes in regulation, legislation, economic and social upheaval and other similar factors. Among the more significant risks are those arising from the establishment or enforcement of foreign exchange restrictions, which could effectively prevent Fortum from repatriating profits or liquidating assets, and changes in tax regulations or enforcement mechanisms, which could substantially reduce or eliminate any revenues derived from operations, and reduce significantly the value of assets related to such operations.

The ongoing political tensions between the EU, US and Russia, and the unpredictable nature of the threat of sanctions pose a risk for Fortum. Transactions from Russian units, Uniper's global trading business, as well as Uniper's financing of the Nord Stream 2 project; as well as gas supply from Russia, are the main sources of potential sanctions risk. The imposition of any further sanctions may have a direct and indirect impact on the business environment and may negatively affect the operations and value of certain investments in Russia. Fortum actively monitors the situation in order to ensure continued compliance with prevailing rules and applicable sanctions laws.

The main energy policy-related risks in Russia are linked to the development of the whole energy sector which to a large extent is regulated. Regulated sectors are inherently exposed to a risk of regulatory changes which could affect Fortum's operations.

For comments on the geopolitical uncertainty due to Russia's invasion on Ukraine, imposed sanctions and possible future sanctions and counter sanctions and their possible impacts on Fortum Group's Russian business and assets, please see ► Note 39.

Technology risks

Fortum's strategy includes investing in new or not yet commercially viable technologies, such as hydrogen production, which will support the transition towards a future low-carbon economy; as well as developing circular economy solutions, other renewable energy concepts and innovative solutions for its customers. There are risks inherent in investing in new technologies including if and when these will become economically viable, and protecting intellectual property rights. Technology risks are managed by assessing and monitoring the viability of new technology throughout its development cycle, and selectively developing and investing in a diversified portfolio of projects consisting of different technologies.

Sustainability risks

Corporate social responsibility and sustainable development are integral parts of Fortum's strategy. Fortum gives balanced consideration to economic, environmental and social responsibility aspects. Changes in laws, regulations and the business environment, including the views of our main stakeholder, can pose a risk if not identified and managed effectively. In order to identify and manage these risks, Fortum endorses a number of international voluntary charters, standards and guidelines in the area of sustainability, conducts stakeholder surveys annually in order to identify the most material issues for our stakeholders, engages with non-governmental organisations, and has defined internal policies and instructions on how to conduct business.

Environmental, health and safety and social risks

Operating power and heat generation plants, gas transmission and storage facilities, and circular economy involves the usage, storage and transportation of fuels and materials, including hazardous waste, that can have effects on the environment, and expose personnel, contractors and third parties to safety risks. Assessment of environmental risks and preparedness to operate in exceptional and emergency situations follows legislative requirements as well as the requirements in the environmental management standard (ISO 14001). The approach, based on the requirements in the operational health and safety standard (OHSAS 18001 or ISO 45001), applies to risks related to occupational health and safety, and how to operate in emergency situations.

Environmental, health and safety (EHS) risks as well as social risks related to the supply chain are evaluated through counterparty risk assessment, country risk assessment, supplier qualification as well as internal and external audits. Corrective and preventive actions are implemented when necessary. EHS and social risks are evaluated through investments. Environmental risks and liabilities in relation to past actions have been assessed and, where provisions have been made for future remedial costs. Mitigating climate change, adapting to it and driving innovation to a lower-carbon economy is an integral part of Fortum's strategy. Management of climate-related transition risks are discussed in detail under the heading Climate-related risks. As a separate listed company, Fortum applies its own processes aligned with its enterprise risk management to systematically identify, assess and manage Environmental, Social and or Governance (ESG) risks.

Tax risk

Tax risk refers to the risk associated with uncertainties, errors, failure in controls or disagreements in the interpretation of applicable tax laws and tax authority guidance, changes in operations, long-term profitability, changes in fiscal policies in one or multiple countries which could result in increased charges or financial loss. Fortum manages tax-related uncertainties by systematic planning and risk mitigating targeted tax provisions in a number of countries and is therefore exposed to these events in multiple countries. These risks may materialise as a tax authority-initiated process followed by a legal process in one or multiple jurisdictions with a court case, interpretation of local or EU law or tax treaties. In case multiple countries are involved, it may result in a legal agreement process defining the final stand in the case. A legal process may result in a tax assessment, income recognition or applicable tax rate on withholding in a business transaction. Risk may materialise as a revaluation of tax-related assets, so called deferred tax assets, and liabilities due to changes in operating tax provisions.

Fortum manages tax-related uncertainties by systematic planning and risk mitigating targeted tax provisions in all our operating countries. In order to do so, Fortum has specific tax principles and a Board of Directors and tax governance guidance setting the frame for tax management. As concrete risk actions, we have identified simplifying legal structures, moving towards digital solutions in data management and compliance, seeking strategic clearance from tax authorities, improving transparency towards stakeholders and clarifying accountabilities and responsibilities.

Business ethics and compliance risks

Fortum's operations are subject to laws, rules and regulations set forth by the relevant authorities. Fortum's regulatory bodies in all markets in which Fortum operates. Fortum aims to comply with all relevant laws, regulations, but the ability to operate in certain countries may be affected by future changes to local laws

Since Fortum trades financial instruments, it is exposed to risks arising from the implementation and amendment of financial market regulations and directives, such as the European Market Infrastructure Regulation (EMIR), the Regulation on Energy Market Integrity and Transparency (REMIT) and the Markets in Financial Instruments Directive (MiFID II). Potential changes to existing financial market regulation could significantly increase administrative burdens and result in the need for additional liquidity.

Fortum's operations in a variety of jurisdictions expose Fortum to various legal risks. These mainly comprise risks arising from threatened or pending legal proceedings regarding contract and price adjustments in connection with long-term supply or sales contracts, licensing matters, liabilities arising from acquired companies, as well as supplier disputes or disputes related to investment agreements.

Forum systematically identifies, assesses, mitigates and reports compliance risks, including risks related to business ethics, as part of the compliance management and risk management processes. Effective internal controls are a key mitigating activity and have been implemented to prevent the possibilities of unauthorised activities or non-compliance with relevant policies and instructions. Furthermore, continuous training and communication play a key role in increasing the awareness and ensuring the understanding of the importance of business ethics and compliance in the organisation. Regular trainings include mandatory e-learning to ensure coverage throughout the organisation.

Uniper has a separate Code of Conduct and Supplier Code of Conduct from the rest of the Fortum Group, both of which stress the importance of business ethics for all employees, contractors and partners. Zero tolerance for corruption and bribery is highlighted in the Codes of Conduct and Supplier Codes of Conduct. In addition, separate instructions and guidelines have been created to address e.g., anti-bribery, compliance management, safeguarding company assets, conflict of interest, anti-money laundering and competition law. Fortum and Uniper have agreed joint compliance priorities. Both companies have procedures for anti-corruption including prevention, oversight, reporting and enforcement based on the requirements prescribed in international legislation. The Supplier Codes of Conduct, which are based on the ten principles of the United Nations Global Compact, set of sustainability requirements for suppliers of goods and services.

Financial risks

Commodity market and fuel risks

Fortum's business is exposed to fluctuations in prices and availability of commodities used in the production, transmission and sale of energy products. The main exposure is toward electricity and gas prices and volumes, prices and volumes of emission allowances, and prices and availability of fuels. Fortum hedges its exposure to commodity market risks in order to reduce volatility in cash flow, and to increase the predictability of future results. For further information on hedge ratios, sensitivities and outstanding derivatives contracts, see ▶ Note 4.

Electricity price and volume risks

Forum is exposed to electricity market price movements and volume changes mainly through its power and heat generation.

In the Nordics and central European countries, market prices and, consequently, the amount of profitable production exhibit significant variation, for instance due to weather conditions, outage patterns in production and transmission lines, CO₂ allowance prices, fuel prices, as well as the amount of electricity demand. Electricity price risks in the Nordics and central European markets are mainly hedged by entering electricity derivatives contracts on exchanges such as the Nasdaq Commodities or the European Energy Exchange, as well as directly with counterparties active in the energy markets. The ability to efficiently implement hedging strategies is dependent on a well-functioning and liquid derivatives markets.

market. There is a risk of decreasing liquidity of especially Nordic electricity derivatives on the Nasdaq CME market. Alternatives, including the use of OTC derivative contracts and correlated products traded on other exchanges, are used to mitigate this risk. Hedging strategies are continuously evaluated as electricity and other commodity markets are subject to hydrological balance and other relevant parameters change. Hedging of the Generation segment's power is performed in EUR on a Nordic level, covering both Finland and Sweden; and the currency component of the currency component of these hedges in the Swedish entity is hedged. Uniper segment's Nordic power hedging is performed only in the Swedish entity is currently not hedged. Uniper segment's Nordic power hedging is performed only in the Swedish entity is currently not hedged.

In Russia, electricity and capacity prices are the main source of market risk. Capacity from newer units to capacity supply agreements where the price is set by the Russian Federation to ensure the return on investment. Capacity from old units has been sold until 2025 via capacity supply auctions which have already been sold. Electricity price exposure is partly mitigated through regulated fixed-price bilateral agreements, but the electricity sales is exposed to spot price risk. In the short-term, electricity prices and volumes are mainly changes in industrial demand, gas prices and weather-driven demand changes.

Emission and environmental value risks

The EU and the United Kingdom have emissions trading schemes to reduce the amount of CO₂ emissions. In the emissions trading schemes, there are other trading schemes in environmental values to replace in the emissions trading schemes. Part of Fortum's power and heat generation is subject to requirements of these schemes. There is no trading scheme in Russia for emissions or other environmental values. However, Russia has announced to comply with the Paris Agreement, but there is uncertainty related to how and when a possible carbon trading scheme will be implemented.

The main factors influencing the prices of CO₂ emission allowances and other environmental values are supply and demand, government policy, and the supply and demand balance. Fortum hedges its exposure to these prices and volumes by using CO₂ derivatives and environmental certificates.

Fuel and gas prices and volume risks

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The exposure to fuel price risk is mitigated through fixed-price physical delivery contracts, on the main fuel source for heat and power generation in Russia is natural gas, which is partially regulated, limited exposure. Long-term gas supply contracts are concluded with gas suppliers to ensure gas availability for

Long-term gas supply contracts of Uniper generally include the possibility for the customer and the supplier to adapt contractual terms to changed market conditions. This entails the major risk for Uniper that suppliers will impose conditions that are detrimental. In order to limit the risk, negotiations are conducted by the most experienced employees utilising all available internal and external expertise.

A deterioration in the economic situation or upheavals in the market for LNG could lead to a lower than planned utilisation of the long-term capacity booked in the regasification plants in Uniper's LNG business, and make it necessary to set up provisions for onerous contracts over the entire remaining booking period. Uniper strives to further increase the utilisation of this booked capacity, and thus improve the revenue situation.

Liquidity and refinancing risks

Fortum's business is exposed to liquidity and refinancing risks primarily through the need to finance the Group's business operations, including margining and collaterals issued for trading and hedging activities. Higher commodity prices increase the net margining payments which are mainly settled in cash. Fortum maintains a diversified financing structure in terms of debt maturity profile, debt instruments and geographical markets. Liquidity and refinancing risks are managed through a combination of cash positions and committed credit facility agreements. The credit risk of cash positions has been mitigated by diversifying the deposits to high-credit quality financial institutions and issuers of corporate debt.

Fortum Corporation is currently rated BBB with a stable outlook by both Fitch and S&P Global Ratings rating agencies. The key risk factors which could lead to a weakening credit metrics and potentially trigger rating downgrade include a persistent decline in European and Russian power prices, lower-than-expected amounts received from planned divestments, increase in leverage, deterioration of the geopolitical situation or high market volatility. A lowering of credit ratings, in particular to below investment grade level (BB+ or below) could affect access to the capital markets and increase the cost of new financing.

Uniper, a separate listed company operating under German laws and regulations, is currently also rated BBB with a stable outlook by S&P Global Ratings. The stable outlook on Uniper's rating reflects the outlook on the BBB rating of Fortum, which serves as a cap for Uniper's rating. A downgrade of Fortum's rating could lead to a corresponding downgrade of Uniper's rating. A downgrade from the current BBB investment grade rating to BBB- or below could negatively affect Uniper's liquidity as it would trigger counterparties', particularly in the trading business, right to demand additional collateral which would need to be provided via liquid assets or bank guarantees. The related risk is measured, monitored and managed against a given limit.

Fortum is targeting to maintain at least its current rating, and to strengthen its financial profile and to improve its business risk profile. Fortum and Uniper maintain an active dialogue with credit rating agencies to ensure understanding of Fortum and Uniper's aligned strategy and planned measures which target to achieve a financial and business profile that supports the current rating.

Currency and interest rate risks

Fortum's debt portfolio consists of interest-bearing liabilities and derivatives on a fixed- and floating-rate basis with differing maturity profiles. Fortum is exposed to cash flow risk from changes in interest rates mainly from interest-bearing liabilities and derivatives on a fixed- and floating rate basis. Additionally changes in general interest rate levels may have an impact on discount rates of various provisions like pension provisions and asset retirement obligations causing changes in the amount of interest-bearing debt and financial costs, but without a cash flow impact. Fortum manages the interest rate exposure through a duration mandate of the loan portfolio excluding leasing liabilities and

provisions, and cash flow at risk limit. Fortum uses different types of financing contracts and interest rate contracts to manage the interest rate exposure and evaluates and develops the strategies in order to find balance between risk and financing cost.

Fortum has cash flows, assets and liabilities in currencies other than EUR and is therefore exposed to exchange rates. Currency exposures are divided into transaction exposures (foreign exchange exposure contracted cash flows and balance sheet items where changes in exchange rates will have an impact on cash flows) and translation exposure (foreign exchange exposure that arises when profits and balance entities are consolidated at the Group level).

The main translation exposure is toward EUR/Russian Rouble (RUB), EUR/Swedish Krona (SEK) and Pound Sterling (GBP), arising from Fortum's extensive operations in Russia, Sweden and the United Kingdom. Fluctuations of the RUB, SEK and the GBP against the EUR could have an adverse effect on future results when consolidating and translating results and net assets in Russian, Swedish and UK affiliates into euro exposures in the Fortum Group are generally not hedged as the majority of these assets are considered strategic holdings.

Transaction exposure arises mainly from physical and financial trading of commodities, existing and new investments, external and internal financing and shareholder loans within the Group. Fortum hedges major exposures on a local level in the reporting currency of each legal entity in order to avoid exchange difference profit and loss statement. An exception is the Generation segment's hedging of power sales in Sweden currency component is currently not hedged.

Centralised treasury functions in Uniper and the Fortum Corporation separately coordinate currency risk and execute external hedges consisting of currency derivative contracts, which are matched against the future cash flow according to maturity. Derivatives are used exclusively to hedge existing foreign exchange proprietary trading.

Counterparty and credit risks

Fortum is exposed to counterparty risk whenever there is a contractual arrangement with an external counterparty including customers, suppliers, partners, banks, clearing houses and trading counterparties. Following in geopolitical tensions, counterparties of the Fortum Group could become subject to sanctions which may or future business relations. Fortum actively monitors the situation in order to ensure continuous compliance with prevailing rules and applicable sanctions laws.

Credit risk exposures-related hedging and trading arise through the use of physical delivery contracts and derivative instruments. The credit risk exposures are volatile and include both the replacement risk and risk. Exchange-traded derivatives are cleared through central clearing parties (CCPs) or through clearing OTC derivative contracts are concluded directly with a number of different counterparties, including energy and retailers, utilities, trading companies, industrial end-users and financial institutions active in the financial markets.

Due to the financing needs and management of liquidity, Fortum has counterparty credit exposure toward banks and financial institutions. The majority of the exposure is toward Fortum's key relationship banks, highly creditworthy institutions. Fortum also has exposure to the Russian financial sector in terms of deposits, financial institutions as well as to banks that provide guarantees for suppliers and contracting parties. Due to Russia have been concentrated to the most creditworthy state-owned or controlled banks as well as affiliated relationship banks.

Credit risk exposures relating to customers and suppliers are spread across a wide range of industrial counterparties, energy companies, government and municipal entities, utilities, small businesses, housing associations and private individuals over a range of geographic regions. The risk of credit losses in the electricity and heat sales business in Russia is deemed higher than in Fortum's other operating countries.

Fortum has routines and processes to identify, assess and control exposure. Credit checks are performed before entering or renewing commercial obligations and exposure limits are set for larger individual counterparties as well as for counterparty groups. Creditworthiness is monitored through the use of internal and external sources so that mitigating actions can be taken when needed. Mitigating actions include demanding collateral, such as guarantees, managing contract terms and contract length, and the use of netting agreements.

Operational risks

Operational risks are unexpected events which can lead to negative monetary, safety, environmental or reputational impacts as a result of inadequate or failed internal processes, systems or equipment, or from external events.

People and Process Risks

People risks include an inability to attract and retain the right competences, risks due to the loss of special skills and risks due to errors on the part of employees who have not been sufficiently trained, or who are not sufficiently qualified.

Specifically, in its commodity trading business, Uniper has particular expertise and key persons which, in case they were to leave, could have a tangible impact on Uniper Global Commodities earnings potential, business continuation, innovation and development. In order to reduce people risks, Fortum invests in the development and distribution of skills and succession planning. In addition, the existing compensation system for employees is regularly reviewed and adjusted.

Process risks are mainly caused by design failures or human errors. Mitigation includes process automation, testing and education. Process-related risks are assessed and controls for the most relevant risks are defined and implemented as part of the internal controls' framework. IT-system risk management is based on an IT Service Lifecycle Model, and related processes and practices which has been developed using reference frameworks such as COBIT and ITIL. Business continuity plans are in place for business-critical processes.

Property, plant and equipment

Operational events at power and heat generation, gas storage and distribution, fuel handling and recycling and waste facilities can lead to environmental and physical damages, business interruption, clean-up costs and third-party liabilities. Property, plant and equipment risks are primarily managed through condition monitoring and maintenance planning. In addition, Fortum's industrial assets are covered by insurance policies for property damage and business interruption risks which mitigates the impact of internal and external events, should they occur.

Hydro power

Fortum has a large number of hydro power plants and dams in the Nordics and Germany. A dam breach is a serious accident with the threat of possible significant damage downstream. A long-term programme is in place for improving the surveillance of the condition of dams, and for securing the discharge capacity in extreme flood situations. Third-party liabilities from dam failures are strictly the plant owner's responsibility. Together with other hydro power producers, Fortum has a shared dam liability insurance programme in place that covers Finnish and Swedish dam failure liabilities up to SEK 10,000 million (approximately EUR 1 billion).

Nuclear power

Fortum owns and operates the Loviisa nuclear power plant and is the owner of OKG AB which owns three power reactors in Sweden, of which one is in operation. Additionally, Fortum has minority interests in two Swedish nuclear power companies. Any severe accident or nuclear release in nuclear power plants has high costs, environmental damages and third-party liabilities. Both in Finland and Sweden, the assessment and improvement of nuclear safety is a continuous process performed under the supervision of the Radiation Safety Authority of Finland (STUK) and the Swedish Radiation Safety Authority (SSM) in Sweden.

Owners of nuclear facilities in Finland and Sweden have statutory liabilities for damages resulting from occurring in those nuclear facilities, and for accidents involving any radioactive substance connected to those facilities. Third-party liability related to nuclear accidents is strictly under the plant operator's responsibility be covered by insurance, or other financial cover. In Finland, as the operator of the Loviisa power plant, Fortum has a statutory liability insurance policy of SDR 600 million (Special Drawing Right) equivalent to approximately EUR 600 million. In Sweden, legislation requires that operators of nuclear power plants have a liability insurance or other the amount equivalent to EUR 1.2 billion per incident. As the renewed Nuclear liability law has come into force at the beginning of the year 2022, both in Finland and Sweden, legislation requires that operators of nuclear power plants to have a liability insurance or other financial cover in the amount equivalent to EUR 1.2 billion per incident.

In both Finland and Sweden, the future costs of the final disposal of spent fuel, the management of low-level intermediate-level radioactive waste and the decommissioning of the radioactive part of the nuclear power plant are provided for by a state-established fund to which nuclear power plant operators finance. Contributions to the fund should be sufficient to fully cover expected costs for handling all the produced radioactive waste, but there exists that future costs could exceed currently estimated fund provisions. If this were to occur, Fortum, as the owner, would be responsible for any such excess costs in relation to its share of operations and assets.

Asset project risks

Fortum's business activities involve construction, modernisation, maintenance and decommissioning of power and other energy industry facilities. There is a risk that construction costs exceed planned costs or that construction delays occur as a result of regulatory or permit issues, failure of key suppliers, being unable to obtain permits, or Covid-19 discontinuing the project. Asset projects also face environmental, health and safety risks. Asset projects may realise both for Fortum's own assets projects, or projects carried out through joint ventures or associates.

Managing asset project risk is an integral part of every project. Project managers are responsible for identifying project-related risks which may lead to delays, increased costs, negative impacts to the environment or to the health and safety of personnel and contractors are identified and assessed, and actions are taken to minimise such risks. The most significant asset projects are listed below.

Datteln 4: Permitting risk

Since 30 May 2020, the coal-fired power plant Datteln 4 with an installed capacity of approximately 1,050 MW is in commercial operation. Construction and operation are based on the currently granted emission permits issued by the district government of Munster and the project-based development plan No. 105a by the city of Datteln. The project continues to be the subject of several administrative lawsuits. In August 2021, the Higher Administrative Tribunal of North Rhine-Westphalia declared the development plan No. 105-Kraftwerk – by the city of Datteln as invalid, which allows for an appeal. The court decision is not yet legally binding. Uniper and the city of Datteln have submitted an admission complaint to obtain the right to appeal. If, as a result of the pending legal proceedings, the permit is not granted, the project will be discontinued.

or the development plan is declared ineffective, there is the risk that planned earnings cannot be realised. The coal exit law which entered into force in August 2020 has also not changed the potential for this permitting risk.

Nord Stream 2: Project Failure Risk

Uniper is involved in financing the Nord Stream 2 project. As part of this financing, there is a default risk for receivables from Nord Stream 2 AG, particularly in the event the project cannot be completed successfully. The main risks for the completion of the project are actual and potential United States sanctions. So far US sanctions have been issued against Russian-related entities involved in the project without impacting the completion of the pipeline construction. In July 2021 the US and Germany have come to an agreement on Nord Stream 2, Ukraine and climate protection. The construction of both pipelines is completed, they are filled with gas and the regulated part of the pipelines is waiting certification. Stream 2 AG has confirmed that they are working on to obtain the Independent Transmission system Operator certification from Bundesnetzagentur and complete the project. Due to increased geopolitical tensions on the Russian and Ukrainian border and after Russia recognising of the Luhansk and Donetsk, Germany has halted the certification of the gas pipeline Nord Stream 2 for time being. Uniper is currently analysing potential effects of the halted certification process on its financial position, net assets and results of operation.

For comments on the geopolitical uncertainty due to Russia's invasion on Ukraine, imposed sanctions and possible future sanctions and counter sanctions and their possible impacts on Fortum Group's Russian business and assets, please see ▶ **Note 39**.

Olkiluoto 3 project delay risk

In Finland, Fortum is participating in the country's fifth nuclear power plant unit, Olkiluoto 3 (OL3), through the shareholding in Teollisuuden Voima Oyj (TVO) with an approximately 25% share representing some 400 MW in capacity. Olkiluoto 3 EPR (OL3 EPR), currently under test production phase, was procured as a fixed-price turnkey project from a consortium formed by Areva GmbH, Areva NP SAS and Siemens AG. As stipulated in the plant contract, the consortium companies have joint and several liability for the contractual obligations. According to the latest schedule regular electricity production starts in July 2022.

The risk related to the planned completion refers to a situation in which commercial use cannot be launched as planned, which leads to additional costs of electricity for Fortum. During 2020, several risk management measures related to the OL3 EPR project have been executed to improve TVO's readiness to commission the OL3 EPR plant. For more information about these measures, please see TVO's annual report.

Cyber and information security risks

Fortum's business operations and customer-related services are dependent on well-functioning IT, communications and information management systems and processes. Due to the nature of the business, large amounts of data are processed, often in real-time, and used for operating critical infrastructure, including power stations and gas storage facilities, trading and hedging decisions, serving customers and in internal and external communication and reporting. Like all operators of critical infrastructure, Fortum is increasingly exposed to cyber security risks, including risks related to information and operational technology systems, digitalisation and privacy. Also, physical attacks against issuer's assets are possible and can have material impacts. Therefore, crisis management rehearsals have been kept to improve business resilience. The ongoing political tensions between the EU, United States and Russia, the overall probability of cyber risks has been increased.

Cyber and physical security risks, including risks related to information, operation technology (OT) and digitalisation, are managed in collaboration with corporate security, business divisions and other support functions. Focus area has

been OT cyber security capabilities to be able to improve resilience of the operations and production. The security instructions and procedures in place which set requirements for managing and mitigating cyber security regulation is increasing and is therefore being monitored by a special program.

Business divisions are responsible for business continuity planning and IT functions are responsible for continuity.

Climate-related risks

Mitigating climate change, adapting to it and driving the transition to a lower-carbon economy is an integral part of Fortum's strategy.

As a result, Fortum has committed to ambitious climate targets and to be carbon neutral as a Group by the latest in line with the goals of the Paris Agreement.

Management of climate-related risks is integrated into Fortum's and Uniper's respective risk management frameworks and follows the same governance and processes as for other material risk and uncertainties regularly identified and assessed through a structured process. Risk owners are assigned for managing they are regularly reported and followed-up in various management teams and expert forums. In Fortum Uniper, there is a specific review of the key climate-related risks by a group of experts from selected functions. Risks are reported to Fortum Executive Management team and the Audit and Risk Committee as part of review of material risks and uncertainties for the Fortum Group.

Climate-related risks are divided into two categories in accordance with the TCFD recommendations: physical and transition risks. The identified physical risks are generally found in the operational risk category, whereas transition risks are generally part of the strategic risk category. As Uniper currently does not apply the same approach related risks, the transition risks and physical risks described below have been assessed for Fortum, excluding Uniper. See ▶ **Note 2** on how climate-related matters are reflected in Fortum's consolidated financial statements.

Transition risks

Fortum's strategy is to a large extent built on taking advantage of the opportunities associated with the transition to a low-carbon economy and successfully mitigating the risks. The transition to a low-carbon economy poses strategic and operative risks related to changes in energy and climate policy and regulation, technology and the business environment in which Fortum operates. Climate change may impact to external markets and which can impact Fortum's financial and operative performance. Supply and demand, and the prices achieved, Fortum's products can be affected by a wide range of factors including political developments and consumer preferences for low-carbon energy. Additionally, Fortum's brand and reputation can be negatively impacted in stakeholder perception about Fortum's ability to deliver on its strategy.

The key risks related to climate policy and regulation include national climate policies or steering mechanisms for greenhouse gas reduction, renewable energy production and energy efficiency. The EU's tighter overlapping or inefficient mechanisms, such as diluting the EU emissions trading system (EU ETS), higher incineration and burning of various fuels, and a more regulated electricity market. In the context of national strategies, several countries have decided to phase out certain energy production technologies, such as nuclear. In case such political decisions are done without offering sufficient compensation, there is a risk of impairments or early retirement of existing assets, as well as social and dismantling costs. Furthermore, transition may curtail the expected useful lives of assets thereby accelerating depreciation charges. Fortum's market-based approach to decarbonisation with CO₂ pricing as a key tool, and clear criteria for capacity

Covid-19 Risks

Fortum has considered the potential impact of the Covid-19 pandemic on its business operations and overall effect in the consolidated financial statements not to be significant.

During 2020 and 2021, the Covid-19 pandemic resulted in new and partly unexpected risks as societal governments across the world implemented drastic measures to contain the spread of the disease. The Fortum have so far been limited, and the situation compared to the end of 2020 has improved. Fortum is monitoring the development of the pandemic and its potential impacts.

Fortum has assessed whether there are any indications for impairment based on internal and external information, such as the effects of the Covid-19. Based on the current pandemic situation and experience, not currently foresee that Covid-19 would have such long-term effects that it would impact the overall value of current assets, such as property, plant and equipment and intangible assets.

case such mechanisms are implemented. Additionally, increased demand flexibility is needed to cope with the expected increase in intermittent renewable production.

The transition to a low-carbon economy also poses risks if there emerge new, disruptive technologies that create cheap sources of flexibility or storage in the energy market. Additionally, if there is an accelerated decline in the cost of renewable energy, it could decrease the value of existing conventional power and heat generation assets. Fortum continuously monitors technology developments and selectively invests in innovative technologies. Fortum aims to grow a sizeable renewables portfolio, focusing on wind and solar primarily in Europe, and therefore, monitors the price development of renewables and evaluates both divestment and investment opportunities to optimise the portfolio with the aim of lower carbon emissions. As part of the updated strategy, Fortum is targeting to invest in hydrogen and clean gas solutions. Technological challenges, as well as pending regulation on hydrogen economy, could prevent or slow down the growth of hydrogen, negatively impacting any such investments and delaying the decarbonisation of natural gas and industrial sectors.

Increasing and broadening sustainability requirements, e.g., in the context of the EU Sustainable Finance taxonomy, could lead to a situation where a part of Fortum's CO₂ free or low carbon energy production is classified as non-sustainable, which might lead to higher capital costs for new investments. Additionally, there is a risk of increasing activity by NGOs which could affect key stakeholder perception. Fortum's exposure to these risks is increasing as a result of the consolidation of Uniper as a subsidiary with coal and gas-fired power generation assets. In order to mitigate these risks, Fortum focuses on the sustainability impacts of strategy and business decisions, communicating transparently about strategy implementation to key stakeholders, ensuring a broad base of investors and flexibility in financing. The aligned strategy for the Fortum Group includes a commitment to reduce its' coal exposure and reach a carbon neutral European generation by 2035 at the latest and reducing CO₂ emissions in European generation with at least 50% by 2030.

Physical risks

Fortum's operations and assets are exposed to external events, the frequency and magnitude of which may increase as a result of climate change. Changes in precipitation, inflows and temperatures and extreme weather events may affect power production as well as bioenergy supply and availability. Intense storms with, e.g., flash floods could increase the risk of dam breaches as well as causing local damages and production outages. Warmer weather may also lead to a need for new cooling or process water sources, and extreme warm and dry summer periods could result in forest fires which potentially damage assets or lead to grid outages restricting power supply. Fortum adapts its operations to the changing climate and takes it into consideration in production and maintenance planning, and in evaluating growth and investment projects. Climate change scenarios are considered in long-term dam safety investments so that extreme flooding situations can be managed.

Climate-change may affect the demand and supply of energy products due to changing weather patterns. This could lead to, e.g., lower and more volatile electricity and gas prices which negatively affect the revenues of power generation assets. Warmer weather may also impact the demand for heating to a larger extent than currently expected.

Fortum share and shareholders

Fortum Corporation's shares have been listed on Nasdaq Helsinki since 18 December 1998. The trading code is FORTUM. Fortum Corporation's shares are in the Finnish book entry system maintained by Euroclear Finland Ltd which also maintains the official share register of Fortum Corporation.

Share key figures

EUR	2021	2020	2019
Earnings per share	0.83	2.05	1.67
Cash flow per share	5.60	2.88	2.27
Equity per share	13.66	14.58	14.61
Dividend per share	1.14 ¹⁾	1.12	1.10
Payout ratio, %	137.3 ¹⁾	54.6	65.9
Dividend yield, %	4.2 ¹⁾	5.7	5.0

1) Board of Directors' proposal for the planned Annual General Meeting 28 March 2022.

For full set of share key figures, see the section ► Key figures in the Financial Statements.

Shareholders value, share price performance and volumes

Fortum's mission is to deliver excellent value to its shareholders. Fortum's share price has appreciated approximately 117% during the last five years, while Dow Jones European Utility Index has increased 47%. During the same period Nasdaq Helsinki Cap index has increased 52%. During 2021 Fortum's share price appreciated approximately 37%, while Dow Jones European Utility index increased approximately 5% and Nasdaq Helsinki Cap index increased approximately 21%.

In 2021, a total of 351.5 million (2020: 647.9) Fortum Corporation shares, totalling EUR 8,315 million, were traded on Nasdaq Helsinki. The highest quotation of Fortum Corporation shares during 2021 was EUR 27.96, the lowest EUR 19.72 and the volume-weighted average EUR 23.65. The closing quotation on the last trading day of the year 2021 was EUR 26.99 (2020: 19.70). Fortum's market capitalisation, calculated using the closing quotation of the last trading day of the year, was EUR 23,975 million (2020: 17,499).

In addition to the Nasdaq Helsinki, Fortum shares were traded on several alternative market places, for example at Cboe and Turquoise, and on the OTC market. During 2021, approximately 70% (2020: 68%) of Fortum's shares were traded on markets other than the Nasdaq Helsinki Ltd.

Share capital

Fortum Corporation has one class of shares. By the end of 2021, a total of 888,294,465 shares (2020: 888,294,465) had been issued. Each share entitles the holder to one vote at the Annual General Meeting. All shares are equal in value and carry an equal dividend. At the end of 2021 Fortum Corporation's share capital, paid in its entirety and entered in the share register, was EUR 3,046,185,953.00.

Shareholders

At the end of 2021 the Finnish State owned 50.76% of the company's shares. The Finnish Parliament has the right to reduce the Finnish State's holding in Fortum Corporation to no less than 50.1% of the company's shares and voting rights.

The proportion of nominee registrations and direct foreign shareholders was 25.8% (2020: 24.2%).

Shareholders, 31 December 2021

Shareholders	No. of shares
Finnish State	450,932,145
Varma Mutual Pension Insurance Company	14,950,143
Ilmarinen Mutual Pension Insurance Company	14,163,643
The Finnish Social Insurance Institution	6,430,620
Kurikan Kaupunki	6,033,603
Elo Mutual Pension Insurance Company	2,700,170
The State Pension Fund	1,703,144
OP-Finland	1,441,366
Mandatum Life Insurance Company Ltd.	1,295,108
OP-Henkivakuutus Ltd.	1,047,103
Danske Invest Finnish Equity Fund	1,039,228
Nordea Pro Finland Fund	795,149
Selgison & Co OMX Helsinki 25 Exchange Traded Fund (ETF)	101,149
Sigrid Jusélius Foundation	101,149
Nominee registrations and direct foreign ownership	101,149
Other	101,149
Total	888,294,465

Arsregnskap regnskapsåret 2021 for 977296919

By shareholder category	% of total amount of shares
Finnish shareholders	
Corporations	1.93
Financial and insurance institutions	1.73
General government	56.72
Non-profit organisations	1.44
Households	12.42
Non-Finnish shareholders	25.76
Total	100.00

Breakdown of share ownership, 31 December 2021

Number of shares owned	No. of shareholders	% of shareholders	No. of shares	% of total amount of shares
1-100	85,049	41.91	3,787,899	0.43
101-500	70,069	34.53	17,947,234	2.02
501-1,000	22,827	11.25	16,841,266	1.90
1,001-10,000	23,621	11.64	61,470,562	6.92
10,001-100,000	1,285	0.63	28,745,272	3.24
100,001-1,000,000	84	0.04	21,726,468	2.45
1,000,001-10,000,000	11	0.01	30,350,730	3.42
over 10,000,000	3	0.00	480,046,395	54.04
	202,949	100.00	660,915,826	74.40
In the joint book-entry account and in special accounts on 31 December			596	0.00
Nominee registrations			227,378,043	25.60
Total			888,294,465	100.00

Management shareholding 31 December 2021

At the end of 2021, the President and CEO and other members of the Fortum Executive Management own shares (2020: 281,308) representing approximately 0.03% (2020: 0.03%) of the total shares in the company. A full description of the shareholdings and interests in long-term incentive schemes of the President and other members of the Fortum Executive Management is shown in ► Note 10.

Authorisations from the Annual General Meeting 2021

In 2021, the Annual General Meeting decided to authorise the Board of Directors to decide on the repurchase of the company's own shares up to a maximum number of 20,000,000 shares, which corresponds to approximately 2.2% of all the shares in the company. These authorisations are effective until the next Annual General Meeting and for a period no longer than 18 months. These authorisations had not been used as per 2 March 2022.

Dividend policy

The dividend policy ensures that shareholders receive a fair remuneration for their entrusted capital, supports the company's long-term strategy that aims at increasing earnings and cash flow and thereby the dividend. The dividend, the Board of Directors looks at a range of factors, including the macro environment, the company's financial strength as well as future investment plans. Fortum Corporation's dividend policy is to pay a stable, sustainable dividend over time increasing dividend.

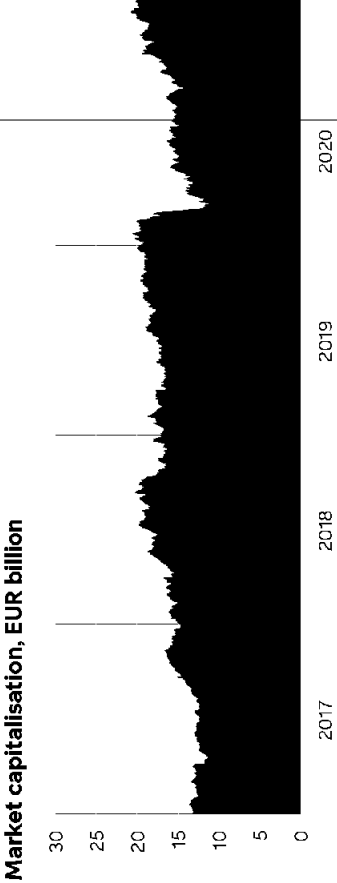
Dividend distribution proposal

The distributable funds of Fortum Corporation as at 31 December 2021 amounted to EUR 5,747,917,222 including the profit of the financial period 2021 of EUR 1,816,026,744. The company's liquidity is good and the dividend proposed by the Board of Directors will not compromise the company's liquidity.

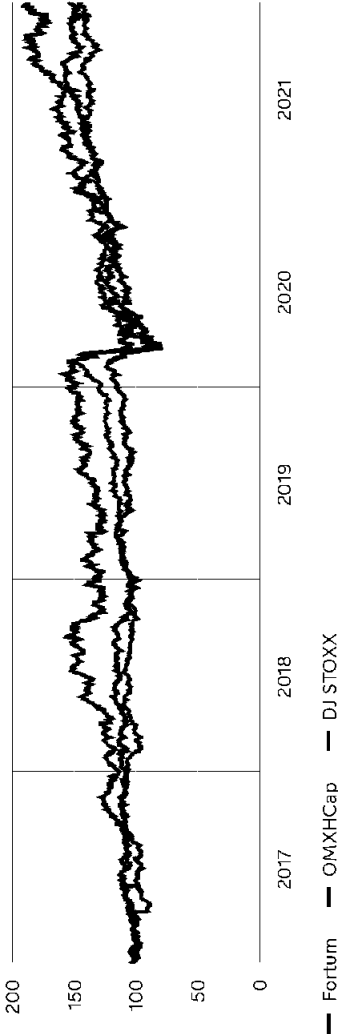
The Board of Directors proposes to the Annual General Meeting that a dividend of EUR 1.14 per share be paid for 2021.

Based on the number of registered shares as at 2 March 2022 the total amount of dividend would be EUR 1,012,655,690. The Board of Directors proposes, that the remaining part of the distributable funds be retained in the shareholders' equity.

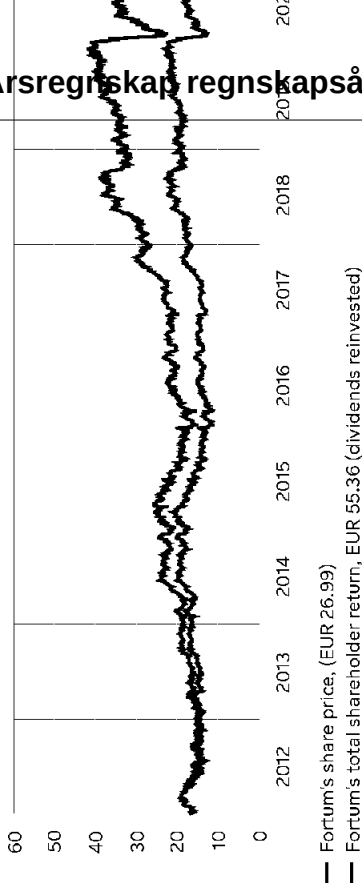
The Annual General Meeting is planned to take place on 28 March 2022 at 14:00 EEST.



Share quotations, index 100 = quote on 2 January 2017



Total shareholder return, EUR



Consolidated income statement

EUR million	Note	2021	2020
Sales	6	112,400	49,015
Other income	8	12,380	4,802
Materials and services	9	-105,170	-44,298
Employee benefits	10	-1,561	-1,195
Depreciation and amortisation	6, 16, 17	-1,281	-1,090
Other expenses	8	-14,232	-5,890
Comparable operating profit	6	2,536	1,344
Items affecting comparability	6, 7	-3,124	255
Operating profit	6	-588	1,599
Share of profit of associates and joint ventures	6, 18	192	656
Interest expense		-202	-170
Interest income		156	111
Other financial items - net		154	3
Finance costs - net	11	107	-56
Profit before income tax		-289	2,199
Income tax expense	12	175	-344
Net profit for the year		-114	1,855
Attributable to:			
Owners of the parent		739	1,823
Non-controlling interests		-852	32
		-114	1,855

Earnings per share for profit attributable to the equity owners of the company (EUR per share)

Basic	13	0.83	2.05
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As Fortum currently has no dilutive instruments outstanding, diluted earnings per share is the same as basic earnings per share.

EUR million	Note	2021	2020
Comparable operating profit		2,536	1,344
Impairment charges and reversals		-8	-8
Capital gains and other related items		2,68	2,68
Impact from acquisition accounting		-5,42	-5,42
Changes in fair values of derivatives hedging future cash flow		-29	-29
Other		-3,12	-3,12
Operating profit	6, 7	-588	1,599

See ► Definitions and reconciliations of key figures

Consolidated statement of comprehensive income

EUR million	Note	2021	2020
Net profit for the year		-114	1,855
Other comprehensive income			
Items that may be reclassified to profit or loss in subsequent periods:			
Cash flow hedges			
Fair value gains/losses		-1,365	-155
Transfers to income statement		117	45
Transfers to inventory/property, plant and equipment		1	2
Deferred taxes		265	21
Net investment hedges			
Fair value gains/losses		-15	48
Deferred taxes		1	-8
Exchange differences on translating foreign operations	4.3	322	-524
Share of other comprehensive income of associates and joint ventures	18	8	-250
Transfer to income statement due to impact from acquisition accounting		-	222
Other changes		20	-70
		-646	-667
Items that will not be reclassified to profit or loss in subsequent periods:			
Remeasurement of investments		-6	-28
Actuarial gains/losses on defined benefit plans	31	226	-244
Actuarial gains/losses on defined benefit plans in associates and joint ventures		29	67
		250	-205
Other comprehensive income/expense for the year, net of deferred taxes		-397	-873
Total comprehensive income for the year		-510	982
Total comprehensive income attributable to:			
Owners of the parent		185	1,052
Non-controlling interests		-695	-70
		-510	982

Other comprehensive income (OCI) includes items of income and expense that are recognised in the consolidated income statement. They include unrealised items, such as fair value gains and losses on financial instruments hedging future cash flows. These items will be realised in the consolidated income statement when the underlying hedged items are recognised. OCI also includes gains and losses on fair valuation of other investments, actuarial gains and losses from defined benefit plans and on comprehensive income in associated companies and translation differences.

Fair valuation of cash flow hedges mainly relates to fair valuation of derivatives, such as futures and options, where the hedging commodity sales price for future transactions, where hedge accounting is applied, when the price is higher (lower) than the hedging price, the impact on equity is negative (positive).

Translation differences from translation of foreign entities, mainly RUB and SEK.

Consolidated balance sheet

EUR million	Note	31 Dec 2021	31 Dec 2020
ASSETS			
Non-current assets			
Intangible assets ¹⁾	16	2,167	2,268
Property, plant and equipment and right-of-use assets	17	19,049	19,367
Participations in associates and joint ventures	18	2,461	2,912
Shares in Nuclear Waste Funds	29	3,515	3,445
Other non-current assets	20	570	479
Deferred tax assets	28	2,149	1,089
Derivative financial instruments	14, 15	17,096	2,946
Long-term interest-bearing receivables	21	2,392	2,402
Total non-current assets ¹⁾		49,399	34,908
Current assets			
Inventories ¹⁾	22	2,275	1,936
Derivative financial instruments	14, 15	65,392	7,531
Short-term interest-bearing receivables	21	715	598
Income tax receivables	28	161	156
Margin receivables	27	9,163	1,132
Trade and other receivables	23	14,856	8,906
Liquid funds	24	7,592	2,308
Total current assets ¹⁾		100,155	22,567
Assets held for sale	3	108	335
Total assets		149,661	57,810
LIABILITIES			
Non-current liabilities			
Interest-bearing liabilities	27		8,701
Derivative financial instruments	14, 15		16,657
Deferred tax liabilities	28		827
Nuclear provisions	29		3,891
Other provisions	30		4,108
Pension obligations, net	31		1,190
Other non-current liabilities	32		397
Total non-current liabilities			35,771
Current liabilities			
Interest-bearing liabilities	27		8,519
Derivative financial instruments	14, 15		71,947
Other provisions	30		2,299
Margin liabilities	27		985
Trade and other payables	33		16,477
Total current liabilities			90,226
Liabilities related to assets held for sale	3		-
Total liabilities			90,226
Total equity and liabilities			149,661

1) In 2021, CO₂ emission allowances included in Intangible assets were reclassified to Inventories. Comparatives have been reclassified accordingly. See ► Note 22 Inventories.

Consolidated statement of changes in total equity

Årsregnskap regnskap									
	Share capital	Share premium	Retained earnings	Other equity components			Owners of the parent	Non-controlling interests	
				Translation of foreign operations	Cash flow hedges	Other OCI items	OCI items associates and joint ventures		
EUR million									
Note									
Total equity 1 January 2021	3,046	73	13,097	-2,948	-158	-175	18	12,953	
IS Net profit for the year			739					739	
Translation differences				180	2	2		184	
Other comprehensive income					-982	207	37	-738	
Total comprehensive income for the year			739	180	-980	209	37	185	
Cash dividend	13		-995					-995	
Transactions with non-controlling interests			-15					-15	
Other			3					3	
BS Total equity 31 December 2021	3,046	73	12,830	-2,768	-1,138	34	54	12,131	
								1,534	
Total equity 1 January 2020	3,046	73	12,441	-2,459	-70	60	-108	12,982	
IS Net profit for the year			1,823					1,823	
Translation differences				-490	-1	-3	2	-32	
Other comprehensive income					-87	-231	40	-492	
Total comprehensive income for the year			1,823	-490	-88	-235	42	-70	
Cash dividend	13		-977					-977	
Changes due to business combinations	3							-160	
Impact from acquisition accounting	7		-84				84	2,847	
Transactions with non-controlling interests			-107					-	
Other			2					0	
BS Total equity 31 December 2020	3,046	73	13,097	-2,948	-158	-175	18	-247	
								1	
								2	
								12,953	
								2,624	

Translation differences

Translation of financial information from subsidiaries in foreign currency is done using the average rate for the income statement and the end rate for the balance sheet. The exchange rate differences arising from translation are primarily related to SEK to EUR are recognised in equity.

For information regarding exchange rates used, see ▶ **Note 1** Significant accounting policies. For information about translation exposure see ▶ **Note 4.3** Interest rate risk and currency risk.

Impact from acquisition accounting

Consolidation of an associated company results includes recording a share of the associated company's other comprehensive income (OCI). If an associated company is either divested or becomes a subsidiary, IFRS requires that these previously recorded OCI items are reclassified inside equity either via the consolidated income statement or directly to retained earnings, depending on the nature of the OCI item. Reclassification does not have an impact on total equity. The above resulted in EUR -84 million being reclassified in 2020 from OCI to retained earnings. See ▶ Note 7

Comparable operating profit and comparable net profit.

Cash flow hedges

The impact on equity attributable to owners of the parent from fair valuation of cash flow hedges mainly relates to fair valuation of commodity derivatives, such as futures and forwards, hedging commodity sales price of future transactions, where hedge accounting is applied. When commodity market price is higher (lower) than the hedging price, the impact on equity is negative (positive).

Cash dividends

A dividend for 2020 of EUR 1.12 per share, amounting to a total of EUR 995 million, was decided in the Annual General Meeting on 28 April 2021. The dividend was paid on 7 May 2021. See ▶ Note 13 Earnings and dividend per share.

Consolidated cash flow statement

EUR million	Note	2021	2020
Cash flow from operating activities			
Profit for the year		-114	1,855
Adjustments:			
Income tax expense		-175	344
Finance costs - net		-107	56
Share of profit/loss of associates and joint ventures		-192	-656
Depreciation and amortisation		1,281	1,090
Operating profit before depreciations (EBITDA)		693	2,688
Items affecting comparability		3,124	-255
Comparable EBITDA		3,817	2,434
Non-cash and other items ¹⁾		1,506	394
Interest received		75	46
Interest paid		-202	-208
Dividends received		124	121
Income taxes paid		-493	-267
Funds from operations ¹⁾		4,827	2,520
Change in working capital ¹⁾		144	35
Net cash from operating activities		4,970	2,555
Cash flow from investing activities			
Capital expenditures		-1,178	-1,101
Acquisitions of shares	16, 17	-294	-1,801
Proceeds from sales of property, plant and equipment	6	20	16
Divestments of shares and capital returns		3,863	1,244
Shareholder loans to associated companies and joint ventures		-8	-44
Change in margin receivables		-7,964	-552
Change in other interest-bearing receivables		-166	98
Net cash from/used in investing activities		-5,727	-2,140

EUR million	Note	2021	2020
Cash flow before financing activities			-75
Cash flow from financing activities			
Proceeds from long-term liabilities			3,431
Payments of long-term liabilities			-2,311
Change in short-term liabilities			5,361
Dividends paid to the owners of the parent			-991
Dividends paid to non-controlling interests	13		-17
Change in margin liabilities			641
Other financing items			41
Net cash from/used in financing activities			6,011
Net increase(+)/decrease(-) in liquid funds			5,255
Liquid funds 1 January			2,301
Foreign exchange differences in liquid funds			21
Liquid funds 31 December	23		7,599

¹⁾ In 2021, CO₂ emission allowances included in Intangible assets were reclassified to Inventories. The change is also reflected in other capital and 'Non-cash and other items' in the cash flow. Comparatives have been reclassified accordingly. See ▶ Note 22 Inventories and ▶ Note 23 Trade and other receivables and ▶ Note 33 Trade and other payables.

Capital expenditures in cash flow do not include not yet paid investments. Capitalised borrowing costs interest paid.

Change in financial net debt

EUR million	Note	2021	2020
Financial net debt 1 January		7,023	4,833
Comparable EBITDA		3,817	2,434
Non-cash and other items ¹⁾		1,506	394
Paid net financial costs and dividends received		-3	-40
Income taxes paid		-493	-267
Change in working capital ¹⁾		144	35
Capital expenditures		-1,178	-1,101
Acquisitions		-294	-1,801
Divestments and proceeds from sale of property, plant and equipment		3,883	1,260
Change in interest-bearing receivables		-174	54
Dividends to the owners of the parent		-995	-977
Dividends to non-controlling interests		-171	-160
Other financing activities		43	-3
Net cash flow ("·" increase in financial net debt)		6,084	-173
Acquired financial debt		-	2,010
Foreign exchange rate differences and other changes		-150	6
Financial net debt 31 December	27	789	7,023

¹⁾ In 2021, CO₂ emission allowances included in intangible assets were reclassified to Inventories. The change is also reflected in change in working capital and 'Non-cash and other items' in the cash flow. Comparatives have been reclassified accordingly. See ► **Note 22** Inventories. The change in liabilities to return emission rights continues to be reported in non-cash and other items. See ► **Note 33** Trade and other payables.

Excludes financial net debt relating to assets held for sale. See ► **Note 3** Acquisitions, disposals and assets held for sale.

Additional cash flow information**Change in working capital**

EUR million	2021	2020
Change in interest-free receivables, decrease(+)/increase(-)	-5,892	-1,106
Change in inventories, decrease(+)/increase(-) ¹⁾	-192	306
Change in interest-free liabilities, decrease(-)/increase(+)	6,227	835
CF Total ¹⁾	144	35

¹⁾ In 2021, CO₂ emission allowances included in intangible assets were reclassified to Inventories. The change is also reflected in change in working capital and 'Non-cash and other items' in the cash flow. Comparatives have been reclassified accordingly. See ► **Note 22** Inventories. The change in liabilities to return emission rights continues to be reported in non-cash and other items. See ► **Note 33** Trade and other payables.

Capital expenditure in cash flow

EUR million	Note	2021	2020
Capital expenditure ¹⁾		1,111	1,111
Change in not yet paid investments, decrease(+)/increase(-)		7	7
Capitalised borrowing costs ¹⁾		-11	-11
CF Total		1,177	1,177

¹⁾ 2020 comparatives have been revised due to a revision of the lease adjustment following the finalisation of the purchase price allocation acquisition.

Acquisition of shares in cash flow

Acquisition of shares, net of cash acquired, amounted to EUR 294 million during 2021 (2020: 1,801). Acquired shares mainly relates to the acquisition of Uniper shares. For further information see ► **Note 3** Acquisitions and assets held for sale.

Divestment of shares in cash flow

EUR million	Note	2021	2020
Proceeds from sales of subsidiaries, net of cash disposed		933	933
Proceeds from sales and capital returns of associates and joint ventures		3	3
Proceeds from sales of other investments		3,18	2,901
CF Total		3,866	3,866

During 2021 Fortum completed the divestment of the 50% stake in the Swedish district heating and cooling company Stockholm Exergi, district heating business in the Baltics, the Pavagada II and the Rajasthan solar power plant in the Sørkjord wind park in Norway and eight small hydropower plants in Sweden. During 2020, Fortum completed the divestment of the district heating business in Järvenpää and Joensuu, Finland. The 80% stake in the Nordic wind portfolio and the 60% stake in the public charging point operator for electrical vehicles in the further information, see ► **Note 3** Acquisitions and disposals and assets held for sale.

1 Significant accounting policies

1.1 Basic information

Fortum Corporation (the company) is a Finnish public limited liability company domiciled in Espoo, Finland. Fortum's shares are traded on Nasdaq Helsinki. Fortum is a European energy company with activities in more than 40 countries. We provide our customers with electricity, gas, heating and cooling as well as smart solutions to improve resource efficiency.

These financial statements were approved by the Board of Directors on 2 March 2022. The Financial Statements are also published in accordance with the European Single Electronic Format (ESEF) reporting requirement. The audit firm, Deloitte Oy, has provided an independent auditor's reasonable assurance report on Fortum's ESEF Financial Statements in accordance with ISAE 3000 (Revised). The ESEF report is available at <https://www.fortum.com/about-us/investors/reports-and-presentations>.

1.2 Basis of preparation

The consolidated financial statements of Fortum Group for the year ended 31 December 2021 have been prepared in accordance with International Financial Reporting Standards (IFRS) and IFRIC Interpretations as adopted by the European Union. The notes to the consolidated financial statements also comply with the supplementing requirements of the Finnish accounting and company legislation.

The consolidated financial statements have been prepared under the historical cost convention, except for financial assets and financial liabilities (including derivative instruments) that are valued at fair value through profit and loss or other comprehensive income.

The figures in the consolidated financial statements have been rounded and consequently the sum of individual figures may deviate from the sum presented. Key figures have been calculated using exact figures. Unless otherwise indicated, all amounts are presented in millions of euro (EUR million).

1.3 Principles for consolidation

These consolidated financial statements comprise of the parent company, subsidiaries, joint ventures and associated companies.

Fortum Group was formed in 1998 by using the pooling-of-interests method for consolidating Fortum Power and Heat Oy and Fortum Oil and Gas Oy (the latter demerged to Fortum Oil Oy and Fortum Heat and Gas Oy 1 May 2004). In 2005 Fortum Oil Oy (current Neste Oy) was separated from Fortum by distributing 85% of its shares to Fortum's shareholders and by selling the remaining 15%. This means that the acquisition cost of Fortum Power and Heat Oy and Fortum Heat and Gas Oy has been eliminated against the share capital of the companies. The difference has been entered as a decrease in shareholders' equity.

1.3.1 Subsidiaries

Subsidiaries are defined as companies over which Fortum has control. Control exists when Fortum is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. See ▶ Note 3 Acquisitions, disposals and assets held for sale.

Intercompany transactions, balances and unrealised gains on transactions between Group companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred.

Where necessary, subsidiaries' accounting policies have been changed to ensure consistency with the parent company's accounting policies.

Certain subsidiaries and associated companies are not included in the consolidated financial statements for materiality grounds. These companies are accounted for outside the scope of IFRS 9 and measured at adjustments for any loss allowance.

Fortum Group subsidiaries are disclosed in ▶ Note 40 Group companies by segment. Group holding % owned via subsidiaries is based on the Fortum Corporation ownership % in the direct subsidiary times the ownership % of the direct subsidiary in the indirect subsidiary / associate / joint venture.

1.3.2 Associates

Associated companies are entities over which the Group has significant influence but not control, generating accompanying a shareholding of between 20% and 50% of the voting rights. The Group's interests in associated companies are accounted for using the equity method of accounting. See ▶ Note 18 Participations in associated companies and joint ventures.

1.3.3 Joint ventures

Joint ventures are arrangements in which the Group has joint control. Joint ventures are accounted for using the equity method of accounting. See ▶ Note 18 Participations in associated companies and joint ventures.

1.3.4 Non-controlling interests

Non-controlling interests in subsidiaries are identified separately from the equity of the owner of the parent company. Non-controlling interests are generally initially measured at the non-controlling interests' proportionate share of the acquiree's identifiable net assets. Changes in non-controlling interest due to changes in ownership of a subsidiary are accounted for as equity transactions. Subsequent to acquisition, the carrying amount of non-controlling interests is the amount of those interests at initial recognition plus the non-controlling interest's subsequent changes in equity. See ▶ Note 26 Non-controlling interests.

1.4 Measures for performance

According to the ESMA Guidelines on Alternative Performance Measures, an Alternative Performance Measure is understood as a financial measure of historical or future financial performance, financial position, or cash flow, that is not a financial measure defined or specified in the applicable financial reporting framework.

Fortum uses APMs, such as Comparable operating profit and Comparable EBITDA in the financial statements to support the transparency of underlying business performance when comparing results between different companies. Comparable operating profit and Comparable EBITDA are calculated as follows: Comparable operating profit is calculated as operating profit, excluding the effects of financial income and expenses, and the Group, as well as for the purpose of the Consolidated Financial Statements to support the transparency of underlying business performance when comparing results between different companies.

Items classified as items affecting comparability include accounting effects from valuation changes arising from the performance of business operations. Such items include fair value changes of financial assets and liabilities, hedging future cash flows where hedge accounting is not applied and fair value changes of physical assets and liabilities. Items affecting comparability are excluded from the Consolidated Financial Statements.

Further, business performance of operations cannot be compared from one period to another without adjustments. One-time items relating to capital gains and other related items, such as transaction costs arising from a

Impacts from acquisition accounting; significant impairments and reversals of impairments as well as other miscellaneous non-operating items, such as restructuring and cost management expenses. Such items are also treated as items affecting comparability.

According to IFRS 3, Business Combinations, transaction costs related to the acquisitions of subsidiary shares are recognised in the consolidated income statement. Such costs are presented in Capital gains and other within Items affecting comparability.

In 2021, Fortum introduced two new APMs to provide additional financial performance indicators to support meaningful comparison of underlying net profitability between periods.

- Comparable net profit is calculated as comparable operating profit +/- comparable share of profit/loss from associates and joint ventures +/- comparable finance costs – net +/- comparable income tax expense +/- comparable non-controlling interests
- Comparable earnings per share is calculated as comparable net profit divided by average number of shares during the period

See ▶ Note 7 Comparable operating profit and comparable net profit. Definitions are presented in the section ▶ Definitions and reconciliations of key figures.

Fortum's long-term financial target for capital structure is Financial net debt / comparable EBITDA below 2x. See ▶ Note 5 Capital risk management.

1.5 Foreign currency transactions and translation

1.5.1 Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the functional currency). The consolidated financial statements are presented in euros, which is the company's functional and presentation currency.

1.5.2 Transactions and balances

Transactions denominated in foreign currencies are translated using the exchange rate at the date of transaction. Receivables and liabilities denominated in foreign currencies outstanding on the balance sheet date are translated using the balance sheet date exchange rate. Exchange rate differences are recognised in the consolidated income statement. Net exchange differences relating to financing components are recognised in the income consolidated statement, except when deferred to equity as qualifying cash flow hedges. Translation differences on financial assets through other comprehensive income are included in Other equity components in equity.

1.5.3 Group companies

Income statement and cash flow statement of subsidiaries, whose functional currencies are not euro, are translated into euro using the average exchange rates; whereas the balance sheets of such subsidiaries are translated at the closing exchange rates on the balance sheet date. On consolidation, exchange rate differences arising from the translation of net investment in foreign entities, as well as borrowings and other currency instruments denominated in foreign currencies, are taken to equity. When a foreign operation is sold, such exchange differences recognised in the consolidated income statement as part of the gain or loss on sale. Goodwill and fair value arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and closing rate.

The balance sheet date rate is based on the exchange rate published by the European Central Bank date. The average exchange rate is calculated as an average of daily closing rates from the European Central Bank date.

Key exchange rates used in consolidated financial statements

	Average rate		Balance sheet date
	2021	2020	31 Dec 2021
United Kingdom (GBP)	0.8596	0.8897	0.8403
Norway (NOK)	10.1633	10.7228	9.9888
Poland (PLN)	4.5652	4.4430	4.5969
Russia (RUB)	87.1527	82.7248	85.3004
Sweden (SEK)	10.1465	10.4848	10.2503
United States (USD)	1.1827	1.1422	1.1326

1.5.4 Associates and joint ventures

Associates and joint ventures, whose measurement and reporting currencies are not euro, are translated into euro using the same principles as for subsidiaries.

1.6 Other significant accounting policies

Fortum describes other significant accounting policies in conjunction with the relevant disclosure information. The table below lists significant accounting policies and the financial statement note where they are presented, as well as the relevant IFRS standard

Accounting policy	Note	IFRS standard
Subsidiaries	► 3 Acquisitions, disposals and assets held for sale	IFRS 3, IFRS 10
Assets held for sale	► 3 Acquisitions, disposals and assets held for sale	IFRS 5
Financial instruments	► 4 Financial risk management	IAS 32, IFRS 7, IAS 39, IFRS 13
	► 14 Financial assets and liabilities by categories	
	► 15 Financial assets and liabilities by fair value hierarchy	
Segment reporting	► 6 Segment reporting	IFRS 8, IFRS 15
Revenue recognition	► 6 Segment reporting	IFRS 15
	► 23 Trade and other receivables	
Other income	► 8 Other income and other expenses	IFRS 15
Research and development costs	► 8 Other income and other expenses	IAS 38
Government grants	► 8 Other income and other expenses	IAS 20
Share-based payments	► 10 Employee benefits and Board remuneration	IFRS 2
Earnings per share	► 13 Earnings and dividend per share	IAS 33
Other shares and participations	► 14 Financial assets and liabilities by categories	IAS 32, IFRS 9
	► 20 Other non-current assets	IAS 36, IFRS 9
Fair value measurement	► 15 Financial assets and liabilities by fair value hierarchy	IFRS 13
Intangible assets	► 16 Intangible assets	IAS 38
Tangible assets	► 17 Property, plant and equipment and Right-of-use Assets	IAS 16
Joint arrangements	► 18 Participations in associated companies and joint ventures	IFRS 11, IAS 28, IFRS 12
	► 18 Participations in associated companies and joint ventures	IAS 28, IFRS 12
Investments in associates	► 18 Participations in associated companies and joint ventures	IAS 36
Impairment testing	► 19 Impairment testing	IAS 36
	► 22 Inventories	IAS 2
Trade receivables	► 23 Trade and other receivables	IFRS 9
Liquid funds	► 24 Liquid funds	IAS 7
Borrowings	► 27 Interest-bearing liabilities	IFRS 9
Income taxes	► 28 Income taxes on the balance sheet	IAS 12
Decommissioning obligation	► 29 Nuclear-related assets and liabilities	IFRIC 5
Provisions	► 30 Other provisions	IAS 37
Pensions and similar obligations	► 31 Pension obligations	IAS 19
Leases	► 34 Leases	IFRS 16
Contingent liabilities	► 36 Pledged assets and contingent liabilities	IAS 37
Events after the balance sheet date	► 39 Events after the balance sheet date	IAS 1

1.7 Uniper acquisition

On 8 October 2019, Fortum entered into agreements to acquire all the shares held by funds managed by Elliott Management Corporation and its affiliates ("Elliott") and Knight Vinke Energy Advisors Limited and its affiliates ("Knight Vinke"). Control over Uniper was acquired on 26 March 2020. On 31 March 2020, Fortum consolidated the consolidated statement of Uniper. The income statement impact from 26 March 2020 to 31 March 2020 was not material. The consolidated stake in Uniper was 73.4% on 31 March 2020, and 78.0% on 31 December 2021 (31 December 2020: 78.0%). Uniper was accounted for as an associated company until 31 March 2020.

The purchase price accounting for the Uniper acquisition was completed on 31 March 2021. No further adjustments were made to the purchase price allocation presented in the 31 December 2020 financial statements.

Fortum presented the preliminary purchase price allocation for the Uniper acquisition at 31 December 2020 in the following table. The preliminary purchase price allocation is based on the information available at the date of acquisition. The preliminary purchase price allocation is subject to change as more information becomes available. The preliminary purchase price allocation is based on the information available at the date of acquisition. The preliminary purchase price allocation is subject to change as more information becomes available.

Increase in the value of property, plant and equipment resulted in additional depreciation (EUR 16 million) and increase in the value of the lease liability (due to a lower discount rate) resulted in lower interest costs (EUR 16 million) in 2021. The lease adjustment was revised in the first quarter of 2021 in connection with the finalisation of the purchase price allocation for the Uniper acquisition. Excess of the acquisition value over the fair value of Uniper's net assets (EUR 1515 million) is recognised as goodwill. See » Note 3 Acquisitions, disposals and assets held for sale. In 2021, the purchase price allocation, Fortum was also required to assess the circumstances giving rise to items of the Uniper segment's income statement during the one-year window from the acquisition date, in the first quarter of 2021. Fortum adjusted impairments (EUR 22 million) and reversals of impairments (EUR 12 million) on the Uniper segment's opening balance sheet as at 31 March 2020, resulting in an increase in the Uniper segment's opening balance sheet value of EUR 10 million. These adjustments did not have an impact on Uniper's 31 March 2020 opening balance sheet value or on the Uniper segment's income statement.

1.8 New accounting standards, amendments and interpretations

New accounting standards, amendments and interpretations effective from 1 January 2021 do not have an impact on Fortum's consolidated financial statements.

New accounting standards, amendments and interpretations issued by the balance sheet date and effective for the period ended 31 December 2022, are not expected to have a material impact on Fortum's consolidated financial statements.

The preparation of IFRS consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities existing at the balance sheet date, as well as the reported amounts of revenues and expenses during the reporting period.

The table below lists the areas where management's accounting estimates and judgements are most critical to reported results and financial position; as well as where to find more information on the areas of critical accounting estimate and judgement:

Note	
3	Acquisitions, disposals and assets held for sale
14	Financial assets and liabilities by categories
15	Financial assets and liabilities by fair value hierarchy
16	Intangible assets
17	Property, plant and equipment and right-of-use assets
16	Intangible assets
17	Property, plant and equipment and right-of-use assets
18	Participations in associated companies and joint ventures
19	Impairment testing
18	Participations in associated companies and joint ventures
28	Income taxes on the balance sheet
37	Legal actions and official proceedings
29	Nuclear-related assets and liabilities
30	Other provisions
31	Pension obligations
34	Leases
35	Capital and other commitments

Fortum's power generation is mainly based on natural gas-fired generation, and carbon dioxide-free hydropower. Fortum targets to reduce the share of coal in power generation. Fortum is also a large producer of wood chips. In addition, Uniper segment operates a large commodities trading business and has natural gas storage facilities. Uniper also has a significant role in ensuring a secure and flexible gas supply.

Fortum's climate-related targets are reflected in the consolidated financial statements generally when they have been approved. Most significant impact on climate-related targets is to the following financial statements:

- For accounting treatment applied to emission allowances, see ▶ Note 22 Inventories.

Fortum has considered the potential impact of the Covid-19 pandemic on its business operations, and overall effect in the consolidated financial statements not to be significant

For geopolitical uncertainties, see ▶ **Note 4** Financial risk management and ▶ **Note 39** Events after the reporting date as well as Risk management section in the Operating and financial review

3 Acquisitions, disposals and assets held for sale

ACCOUNTING POLICIES SUBSIDIARIES

Acquisition of subsidiaries are accounted for using the acquisition method. The consideration transferred is measured as the aggregate of acquisition date fair values of acquired net assets. Identifiable assets acquired and liabilities assumed are measured initially at acquisition date fair values, irrespective of the extent of any minority interest. The excess of the cost of acquisition over the fair value of the identifiable net assets acquired is recorded as goodwill.

Subsidiaries are fully consolidated from the date on which control is transferred to the Group and are no longer consolidated from the date that control ceases. See ▶ Note 1.3 Principles for consolidation.

ASSETS HELD FOR SALE

Assets or disposal groups are classified as assets held for sale if their carrying amounts will be recovered principally through a sale transaction rather than through continuing use. For this to be the case, the asset, or the disposal group, must be available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such assets or disposal groups, and the sale must be highly probable. These assets, or in the case of disposal groups, assets and liabilities, are presented separately on the consolidated balance sheet and measured at the lower of the carrying amount and fair value less costs to sell. Assets classified as held for sale, or included in a disposal group classified as held for sale, are not depreciated.

CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS: UNIPER PURCHASE PRICE ALLOCATION

Preparing purchase price allocation requires management to make judgements when determining the fair value of the assets acquired and liabilities assumed. In the Uniper transaction, determining the fair values of property, plant and equipment and right-of-use assets, lease liabilities, provisions, contingent liabilities and long-term purchase obligations has required management judgement.

3.1 Acquisitions

EUR million	2021	2020
Gross investments in shares in subsidiary companies	210	3,646
Gross investments in shares in associated companies and joint ventures	44	119
Gross investments in other shares	36	42
Total	290	3,807

3.1.1 Acquisitions

Gross investments in shares during 2021 were EUR 290 million (2020: 3,807). Acquisition of subsidiary relate to the acquisition of Uniper shares. During 2021 Fortum invested EUR 35 million (2020: 44) in wine in Russia.

3.1.2 Uniper acquisition in March 2020

On 8 October 2019, Fortum entered into agreements to acquire all the shares held by funds managed by Management Corporation and its affiliates ("Elliott") and Knight Vinke Energy Advisors Limited and its affiliates ("Vinke"). The transaction was closed in two tranches. Control over Uniper was acquired on 26 March 2020 of the first tranche of the agreement, 19.6% of the shares. A liability for the maximum amount of shares tranche, 3.8% of the shares, was recognised on the acquisition date. The second tranche of the agreement on 8 May 2020 with the maximum amount of shares.

At 31 March 2020 Fortum's consolidated stake in Uniper was 73.4%. The total purchase consideration combined shareholding was EUR 2.6 billion, which increased Fortum's total investment in Uniper to EUR 2.6 billion.

EUR million

Acquisition of shares

Liquid funds in acquired companies

Acquisition of shares in cash flow

Interest-bearing liabilities in acquired companies

Other financial net debt in acquired companies

Gross investments in shares

Acquisition accounting

The purchase price allocation on the Uniper acquisition was completed on 31 March 2021. The value allocated mainly made to property, plant and equipment and right-of-use assets, participations in associated companies and lease liabilities, other provisions, and deferred taxes. Excess of the acquisition value over Uniper's net assets presented as goodwill. Fortum elected to measure non-controlling interest in Uniper based on the proportion of the proposed acquisition net assets.

Acquired net assets are presented in the following table.

	31 Mar 2020
EUR million	
ASSETS	
Goodwill	1,779
Other intangible assets	980
Property, plant and equipment and right-of-use assets	9,268
Participations in associates and joint ventures	750
Derivative financial instruments	21,958
Interest-bearing receivables	1,840
Shares in Nuclear Waste Funds	1,602
Margin receivables	413
Trade and other receivables	7,236
Deferred and income tax assets	1,021
Inventories	1,565
Liquid funds	1,328
Total assets	49,739
LIABILITIES	
Derivative financial instruments	21,084
Interest-bearing liabilities	1,575
Pension obligations	953
Nuclear provisions	1,758
Other provisions	3,935
Deferred and income tax liabilities	348
Margin liabilities	924
Trade and other payables	7,852
Total liabilities	38,428
Net assets on Uniper's balance sheet	11,312
Less goodwill on Uniper's balance sheet ¹⁾	-1,779
Net assets from Uniper excluding goodwill	9,533
Purchase consideration	2,587
Previously held equity interest	4,613
Acquisition value	7,201
Non-controlling interest on Uniper's balance sheet	-424
Non-controlling interest from Uniper acquisition	-2,423
Total non-controlling interest (NCI)	-2,847
Goodwill	515

1) Goodwill on Uniper's balance sheet is deducted as it is not an identifiable asset of Fortum according to IFRS.

Acquired net assets are based on Uniper's first quarter 2020 financial report published on 7 May 2020. Line items have been classified in accordance with Fortum's balance sheet categorisation and, as such, are comparable to Uniper's standalone balance sheet. Further, Fortum and Uniper are both co-owners in the same nuclear power plant. Fortum AB and Uniper AB are consolidated into Uniper Group as a subsidiary with a 45.5% minority ownership. Fortum's ownership in OKG AB, Fortum accounted for the shareholding in OKG AB as an associate until 31 March 2020, and consolidated OKG AB as a subsidiary from 31 March 2020.

Shareholding in Uniper has been acquired in stages as Fortum held 49.99% of Uniper shares prior to 26 March 2020. Under IFRS, the previously held associated company interest is fair value measured at the date of acquisition, and any gain or loss from the difference between the balance sheet value and the fair value of the interest is recognised to the consolidated income statement. The fair value of the previously held associated company interest was EUR 4,613 million. The fair value was based on Uniper share price at 26 March 2020, slightly above the market premium for significant influence. There are no significant unobservable inputs used in the valuation (market value). The interest as the fair value was approximately equal to the carrying amount.

Acquisition-related costs of EUR 20 million are included in items affecting comparability in the 2020 consolidated income statement. See ► Note 7 Comparable operating profit and comparable net profit.

3.1.3 Other share transactions

During 2021, the Fortum-Rusnano wind investment fund sold the 200-MW Kalmykia wind farm to the Fortum-Kalmykia joint venture. The Direct Investment Fund (RDIF) joint venture.

During 2020, Fortum's joint venture, the Fortum-Rusnano wind investment fund, sold the 50-MW Ulyanovsk-300-MW Rostov wind farms to a new joint venture established with RDIF aimed at the operation of renewable energy plants in Russia.

3.2 Disposals

EUR million

Gross divestments of shares in subsidiary companies

Gross divestments of shares in associated companies and joint ventures

Gross divestments of other investments

Total

3.2.1 Disposals of subsidiary companies

Disposals during 2021

On 22 June 2021, Fortum announced that it had signed an agreement to divest the 250-MW Paragada II Rajasthan solar power plants in India to Actis. The total consideration for the divestment on a cash and debt-free basis was EUR 280 million. The sale of Paragada II was completed in October 2021. Including the effect of deconsolidating of the net debt amounted to approximately EUR 280 million. The sale of Paragada II was concluded in October 2021 and the first phase of Rajasthan divestment in November 2021. Fortum's exempt sales gain of EUR 11 million in the 2021 comparable operating profit of the Cit Solutions segment was EUR 11 million in the 2021 comparable operating profit of the Cit Solutions segment.

In February 2020, Uniper signed an agreement with Saale Energie GmbH, a subsidiary of Energetický a průmyslový holding, a.s., on the sale of the interest in the Schkopau lignite-fired power plant.

Uniper is the operator of the power plant and holds a stake of about 58%. Saale Energie holds a stake of around 42% in the Schkopau power plant and took over Uniper's stake effective 1 October 2021.

On 12 March 2021, Fortum announced that it had signed an agreement to sell its district heating business in the Baltics to Partners Group. On 2 July 2021, Fortum concluded the sale. The total consideration of the sale amounted to approximately EUR 710 million. Fortum recorded a tax-exempt capital gain of EUR 254 million in the City Solutions segment's 2021 results.

On 2 March 2021, Fortum announced it had decided to construct the largest solar power plant in Russia through a joint venture established with RDIF. In December 2021, 78 MW of the capacity was commissioned and the remaining capacity will be commissioned in the second half of 2022. The power plant is based on capacities won by Fortum in CSA auctions in 2018 and 2019. In March 2021, Fortum sold the CSA-backed solar power project to the joint venture with RDIF, which had a positive effect of EUR 17 million in the 2021 comparable operating profit of the Russia segment.

In December 2020, Fortum decided to sell eight small hydropower plants in Sweden with an average annual power generation of 0.1 TWh to Downing Renewables & Infrastructure Trust plc. The total purchase price on a debt and cash free basis is EUR 64.5 million. The transaction closed on 2 February 2021.

Disposals during 2020

In December 2019, Fortum and Credit Suisse Energy Infrastructure Partners (CSEIP) signed an agreement whereby funds advised by CSEIP acquired an 80% stake in Fortum's Nordic wind portfolio. The total consideration on a debt- and cash-free basis was approximately EUR 170 million. The transaction, excluding the Sørfjord wind park, which was still under construction, was closed on 14 May 2020. The transaction on Sørfjord wind park was closed on 20 January 2021.

On 3 July, Fortum announced it had agreed to sell the district heating business in Järvenpää, Finland for EUR 37.5 million to a consortium consisting of Vantaa Energy Ltd, Infranode, and Keva. Fortum completed the transaction on 19 August 2020 and recorded a tax-exempt capital gain of EUR 291 million in the City Solutions segment's 2020 results.

On 27 April 2020, Fortum signed an agreement to sell 60% of its public charging point operator, Fortum Recharge AS, for electrical vehicles in the Nordics to Infracapital. The transaction closed on 29 May 2020, and Fortum recorded a tax-exempt capital gain of EUR 72 million in Other Operation's 2020 results. The cash consideration was EUR 87 million.

In December 2019, Fortum signed an agreement to sell its district heating business in Joensuu, Finland to Savon Voima Oyj. The total consideration on a debt- and cash-free basis was approximately EUR 530 million. The transaction was completed on 10 January 2020, and Fortum recorded a tax-exempt capital gain of EUR 431 million in the City Solutions segment's 2020 results.

Divestments of shares in subsidiaries - Impact on financial position
EUR million

Gross divestments of shares in subsidiary companies	1,1
Intangible assets and property, plant and equipment	8
Other non-current and current assets	1
Liquid funds	-2
Interest-bearing loans	-1
Other liabilities and provisions	6
Net assets divested	6
Reclassified to participations in associates and joint ventures	3
Result from transaction	3

3.2.2 Other disposals

On 20 September 2021, Fortum concluded the sale of its 50% ownership in the Swedish district heating company Stockholm Exergi Holding AB (publ) to a consortium of European institutional investors of APG, PGGM, Keva, and AXA. The signing of the transaction was announced on 30 June 2021. The total consideration on a debt- and cash-free basis was approximately EUR 2.9 billion. Fortum recorded a tax-exempt capital gain of 2,350 million in the City Solutions segment's 2021 results.

3.3 Assets held for sale

Assets held for sale at 31 December 2021 include equity investment in Javelin, UK (Uniper segment), a Öresundverket power plant in Malmö, Sweden (Uniper segment).

Assets held for sale at 31 December 2020 included Schkopau lignite-fired power plant (Uniper segment) wind park (Generation segment). The transaction on Schkopau power plant was closed on 1 October 2020 and the transaction on Sørfjord wind park on 20 January 2021.

EUR million

Assets held for sale

Intangible assets and property, plant and equipment and right-of-use assets	1
Deferred tax assets	0
Other non-current and current assets	1

BS Total

Liabilities related to assets held for sale

Interest-bearing liabilities	1
Deferred tax liabilities	0
Pension and asset retirement obligations	0
Other liabilities and provisions	0

BS Total

4 Financial risk management

Fortum's risk management framework, objectives, organisation and processes as well as a description of strategic, sustainability, financial and operational risks can be found in the Risk management section of the Operating and financial review (OFR).

Uniper was consolidated to Fortum as a subsidiary as of 31 March 2020, and Uniper is a separate reportable segment of Fortum. Additionally, Uniper is a separate listed company operating under German laws and regulations with its own risk management systems, including a set of risk policies defining the risk management organisation principles, processes and responsibilities. Uniper does not directly apply the risk management systems applicable to other Fortum segments, however, its key risk management principles and processes are materially similar.

4.1 Commodity market and fuel risks

Fortum's business is exposed to fluctuations in prices and availability of commodities used in the production, transmission and sales of energy products. The main exposure is toward electricity prices and volumes, gas prices and volumes, prices of emissions and prices and availability of fuels. Fortum hedges its exposure to commodity market risks in order to reduce volatility in cash flow and to increase the predictability of future results.

Risk management for commodity hedging and trading activities is based on general standards in the industry and involves the segregation of duties, as well as daily calculation, monitoring and reporting of results, positions and risks. Controls are in place to ensure exposures are kept within approved limits and mandates. Hedging involves the use of derivative financial instruments, as well as fixed-price physical delivery contracts.

Derivatives are also entered into for proprietary trading purposes which is conducted exclusively in compliance with strict internal and regulatory restrictions.

4.1.1. Sensitivity arising from commodity derivatives according to IFRS 7

Sensitivity analysis shows the sensitivity arising from financial commodity derivatives as defined in IFRS 7. Sensitivities are presented with most descriptive measure about the risk management and usage of derivatives in Uniper segment and Fortum's other segments.

Fortum, excluding Uniper

In the Fortum, excluding Uniper, derivatives are used for hedging purposes with hedge accounting applied to most hedging strategies. Sensitivities in the table below are calculated based on the electricity position as of 31 December. Positions are actively managed in the day-to-day business operations and therefore the sensitivities vary from time to time. Sensitivity analysis includes only the market risks arising from derivatives i.e. the underlying physical electricity sales and purchases are not included. Sensitivity is calculated with the assumption that electricity forward and futures quotations would change 1 EUR/MWh for the period Fortum, excluding Uniper, has derivatives.

Sensitivity according to IFRS 7

Effect	EUR million
Effect on profit before income tax	-/+
Effect on equity	-/+

Uniper segment

In Uniper segment, derivatives are used mainly for hedging, but also for proprietary trading purposes.

Commodity price risks in Uniper segment are measured based on a value-at-risk approach with 95% interval and take into account the amount of open position as well as the prices, their volatility and the liquidity of the respective markets. Value-at-risk figures are supplemented by stop-loss and volume based indicators. Value-at-risk figures are calculated on a daily basis. Additional portfolio-specific restrictions are set.

Based on the current Uniper portfolio, as of December 2021, the calendar year based weighted value takes market liquidities into account and ignores correlations between years, was EUR 1,422 million (2020: EUR 1,422 million), which is based on the average of the next three years.

4.1.2. Electricity price and volume risk

The exposure to Nordic electricity prices and normal volume fluctuations (e.g. due to weather-driven changes) is the largest commodity market risk exposure for Fortum in terms of impact to earnings. The exposure to electricity price risk is managed by entering into electricity derivatives contracts on exchanges such as Nasdaq Commodities or the European Energy Exchange, as well as with counterparties active in the energy and financial markets. The main objective of hedging is to reduce electricity price volatility on cash flows and to increase the predictability of future results. The generation mix in the Nordic region is dominated by hydropower, which is not sensitive to weather conditions. The generation mix in the UK segment have separate hedging strategies covering several years in the short- to medium term. The generation mix in the German segment is dominated by coal and gas, which are continuously evaluated as electricity and other market prices, the hydrological balance and other relevant parameters change.

Generation segment's hedging for power sales is performed in EUR on a Nordic level covering both Finland and Sweden. The currency component of these hedges in the Swedish entity is currently not hedged. Generation segment's hedging for the Nordic electricity market price is dependent on the hedge level for a given time period. As per 31 December 2019, approximately 75% of the Generation segment's estimated Nordic power sales volume was hedged for the period of 12 months.

Uniper segment's sensitivity to the Nordic electricity price is dependent on the hedge level for given in the table below. Uniper segment's Nordic generation hedges as per 31 December 2021 was approximately 80% at 18 EUR/MMWh and approximately 60% at 2022, and approximately 60% at 18 EUR/MMWh for 2023.

In the Russia segment, electricity prices are the main sources of market risk. The electricity price is highly volatile and is primarily determined by the gas price. Exposure is partly mitigated through regulated fixed-price bilateral agreements with the gas price. Exposure is partly mitigated through regulated fixed-price bilateral agreements, but it is not fully hedged. The Russia segment's electricity sales are exposed to spot price risk. There are no derivatives contracts in the Russia segment.

4.1.3 Commodity derivatives

The table below discloses Fortum Group's commodity derivatives for which hedge accounting according to IFRS 9 is applied. The fair values represent the values disclosed on the balance sheet. See also ▶ Note 14 Financial assets and liabilities by categories for accounting principles and ▶ Note 15 Financial assets and liabilities by fair value hierarchy for basis of fair value estimations.

Commodity derivatives subject to hedge accounting 2021

	Volume, TWh			Fair value, EUR million			
	Under 1 year	1-5 years	Over 5 years	Total	Positive	Negative	Net
Electricity derivatives	25	31	1	57	349	1,648	-1,298
Gas derivatives	30	-	-	30	335	1,750	-1,415
Netting against commodity exchanges ¹⁾					-215	-215	-
Total	55	31	1	87	469	3,183	-2,713

Commodity derivatives subject to hedge accounting 2020

	Volume, TWh			Fair value, EUR million			
	Under 1 year	1–5 years	Over 5 years	Total	Positive	Negative	Net
Electricity derivatives	28	28	1	58	237	410	-173
Netting against commodity exchanges ¹⁾					-89	-89	-
Total					148	321	-173

¹⁾ In Fortum, excluding Uniper, receivables and liabilities against commodity exchanges arising from standard derivative contracts with same delivery period are netted.

Maturity analysis of commodity derivatives

Amounts in the table are fair values.

EUR million	2021				2020			
	Under 1 year	1-5 years	Over 5 years	Total	Under 1 year	1-5 years	Over 5 years	Total
Commodity derivatives, assets	65,165	16,965	44	82,174	7,416	2,662	68	10,146
Commodity derivatives, liabilities	71,839	16,495	126	88,460	7,756	2,428	111	10,295

4.2 Liquidity and refinancing risk

Fortum's business is exposed to liquidity and refinancing risks primarily through the need to finance the business operations including margining and collateral issued for trading and hedging activities.

In addition to the margining risk, trading derivative financial instruments exposes the Group to a liquidity risk associated with having to provide rating-dependent financial collateral like cash or bank guarantees. A rating could trigger counterparties' right to demand additional collateral, which would need to be provided by bank guarantees.

The derivative instruments used by the Group are traded via exchanges and over-the-counter with counterparties based on bilateral margining agreements. Both ways of trading require the exchange of credit risks (margining payments). The sharp increase in commodity prices during latter part of 2021 has net margining payments significantly. Margin receivables from commodity hedging activities at balance EUR 9,163 million (2020: 1,132) and margin liabilities EUR 985 million (2020: 331).

Liquidity and refinancing risks are managed through a combination of cash positions and committed guarantee facility agreements with the core banks. The maturity profile of loans is monitored to ensure timely access to adequate liquidity for investments, loan maturities and margining required for commodity hedging activities. Cash pools of Uniper are not combined with the cash pools of its ultimate parent company Corporation.

Fortum's business is capital intensive and it has a diversified loan portfolio mainly consisting of long-term loans denominated in EUR and commercial papers. Long-term financing is primarily raised by issuing bonds under Corporation's Euro Medium Term Note programme, as well as through bilateral and syndicated loan facilities of different financial institutions.

In Fortum, financing is primarily raised on parent company level and funds are distributed internally through internal financing arrangements. For example, operations of PAO Fortum are mainly financed via equity long-term RUB denominated loans. The internal RUB loan receivables are hedged via external derivative offsetting the currency exposure for the parent company.

On 31 December 2021, 66% (2020: 85%) of the Group's total external loans was raised by the parent Fortum Corporation, and remaining 29% (2020: 6%) by the Uniper segment and 5% (2020: 9%) by other subsidiaries. At the end of 2021, financial net debt was EUR 789 million (2020: 7,023) and adjusted net debt EUR (2020: 9,784).

On 31 December 2021, loan maturities for the coming twelve-month period amounted to EUR 8,389 million (2020: 1,717), including EUR 3,129 million commercial papers, EUR 2,300 million revolving credit facilities and EUR 2,960 million long-term loans. Maturities in 2022 also include EUR 736 million loans with non-contractually determined maturities. At the end of the reporting period, the Group's liquid funds totalled EUR 7,592 million (2020: 2,308). L liquid funds include EUR 2,966 million (2020: 289) held by the Uniper segment. Russian subsidiaries held EUR 300 (2020: 244) of liquid funds in the form of cash and bank deposits.

Maturity of loans		2021
EUR million		
2022		8,389
2023		3,848
2024		867
2025		18
2026		772
2027 and later		2,251
Total		16,144

For more information on loans, see ▶ **Note 27** Interest-bearing liabilities.

Liquid funds, major credit lines and debt programmes 2021			
	EUR million	Total facility amount	Drawn amount
Liquid funds			
Fortum		4,626	
Uniper segment		2,966	
Total		7,592	300
of which in Russia			
Committed credit lines			
Fortum Corporation, EUR 1,750 million syndicated credit facility		1,750	1,750
Fortum Corporation, EUR 800 million bilateral credit facility		800	500
Uniper, EUR 1,800 million syndicated credit facility		1,800	1,800
Fortum Corporation, bilateral overdraft facilities		100	-
Total		4,450	4,050
Debt programmes (uncommitted)			
Fortum Corporation, CP programme EUR 1,000 million		1,000	988
Fortum Corporation, CP programme SEK 10,000 million		976	660
Uniper, CP programme EUR 1,800 million ¹⁾		1,800	1,480
Fortum Corporation, EMTN programme EUR 8,000 million		8,000	3,698
Uniper, Debt Issuance programme EUR 2,000 million		2,000	-
Total		13,776	6,826
Total		19,368	11,176

1) Link to Uniper EUR 1,800 million syndicated credit facility; available only for undrawn syndicated credit facility amount. Since whole Uniper syndicated credit facility was drawn, no Uniper CP limit available as of 31 December 2021.

Liquid funds, major credit lines and debt programmes 2020

EUR million	
Liquid funds	
Fortum	
Uniper segment	
Total	
of which in Russia	
Committed credit lines	
Fortum Corporation, EUR 1,750 million syndicated credit facility	
Fortum Corporation, EUR 1,450 million syndicated credit facility	
Uniper, EUR 1,800 million syndicated credit facility	
Fortum Corporation, bilateral overdraft facilities	
Total	
Debt programmes (uncommitted)	
Fortum Corporation, CP programme EUR 1,000 million	
Fortum Corporation, CP programme SEK 10,000 million	
Uniper, CP programme EUR 1,800 million	
Fortum Corporation, EMTN programme EUR 8,000 million	
Uniper, Debt Issuance programme EUR 2,000 million	
Total	

	2021		
	Under 1 year	1-5 years	Over 5 years
EUR million			
Interest-bearing loans	8,490	5,728	2,450
Interest rate and currency derivative liabilities	107	17	19
Interest rate and currency derivative receivables	-227	-87	-1
Total	8,371	5,659	2,468

4.3 Interest rate risk and currency risk

4.3.1 Interest rate risk

Fortum is exposed to cash flow risk from changes in interest rates mainly from interest-bearing liabilities and derivatives on a fixed- and floating rate basis. Additionally, changes in general interest rate level may have an impact on discount rates of various provisions, like pension provisions and asset retirement obligations, causing changes in the amount of adjusted net debt and finance costs without cash flow impact.

Fortum manages the interest rate exposure through a duration target of the loan portfolio (excluding lease liabilities and provisions), and cash flow at risk limit. Fortum uses different types of financing contracts and interest rate derivative contracts to manage the interest rate exposure, and evaluates and develops the strategies in order to find an optimal balance between risk and financing cost.

On 31 December 2021, the duration of Fortum's loan portfolio (including derivatives) was 1.7 years (2020: 2.0). Approximately 82% (2020: 76%) of the loan portfolio was on a floating rate basis, or fixed rate loans maturing within the next 12-month period. The flow risk, measured as the difference between the base case interest cost estimate and the worst-case scenario estimate for Fortum's loan portfolio for the coming 12 months, was EUR 63 million (2020: 16). The increase of flow risk is mainly driven by increase of new loans, especially floating loans, and a significant increase in interest rate volatilities at the end of 2021 in several currencies.

The average interest rate for the total loan portfolio, including derivatives in finance costs, was 1.3% at the balance sheet date (2020: 1.5%). Part of the external loans, EUR 925 million (2020: 634), have been swapped to RUB and the average interest cost for these loans, including cost for hedging the RUB, was 8.3% at the balance sheet date (2020: 6.2%). The average interest rate of EUR loans was 0.6% (2020: 0.9%).

Fortum uses interest rate derivatives and to large extend applies hedge accounting when hedging the loan portfolio of the Group. There is an ongoing reform of certain floating interest benchmark rates to alternative risk free rates (ARR) due to the forthcoming IBOR (Interbank Offered Rates) transition. Since EURIBOR (Euro Interbank Offered Rate) is expected to continue as the benchmark rate, as it has been already fully reformed, all hedges are expected to continue to be 100% effective with no impact on finance costs – net. In addition to significant EURIBOR exposure, the Group has interest rate derivatives in RUB and SEK and sees that the IBOR transition will not have significant impact on the value and effectiveness of these derivatives.

Fortum Group has no interest rate derivatives or external loans in currencies (USD, GBP) where the IBOR transition had impact already starting in year 2022 and thus there has not been any need to restructure the portfolio. Agreements with reference to EONIA (Euro Overnight Index Average) have been amended to ESTR (Euro Short Term Rate) during 2021. Fortum Group will continue to monitor the development of the IBOR transition.

4.3.2 Currency risk

Fortum's policy is to hedge major transaction exposures on a local level in the reporting currency of each legal entity in order to avoid exchange differences in the profit and loss statement. An exception is Generation segment's hedging of power sales in Sweden where the currency component is not hedged. Fortum Treasury and Uniper Treasury manage each own risks centrally by executing internal and external currency deals to mitigate the currency risk. Derivatives are used to hedge existing foreign exchange risks, not for proprietary trading.

Fortum transaction exposure, excluding Uniper

EUR million	2021			Net Position	Open Position	Net
	Position	Hedge				
RUB	744	-744		0	455	
SEK	-898	901		3	1,825	
PLN	499	-498		1	417	
NOK	748	-746		2	84	
INR	-	-		-	86	
USD	-36	37		1	-87	
Other	5	-2		3	-4	
Total	1,062	-1,052		11	2,777	

Fortum has cash flows, assets and liabilities in currencies other than EUR and is therefore exposed to foreign exchange rates. Currency exposures are divided into transaction exposures (foreign exchange exposures contracted or estimated cash flows and balance sheet items where changes in exchange rates will have earnings and cash flows) and translation exposure (foreign exchange exposure that arises when profits sheets in foreign entities are consolidated).

Transaction exposures arise mainly from physical and financial trading of commodities, exchange and investments, external and internal financing and shareholder loans. Contracted cash flow exposures are reduce volatility in future cash flows. These hedges normally consist of currency derivative contracts, which matched against the underlying future cash flow according to maturity. Fortum has currency cash flow hedges and without hedge accounting treatment under IFRS. Those currency cash flow hedges for which hedge not applied are mainly hedging commodity derivatives and create volatility in operating profit. There was ineffectiveness arising from cash flow hedges in 2021.

As of 31 December 2021, for Fortum, excluding Uniper, the one-day value-at-risk (VAR) with 99% confidence loans, receivables and derivatives was EUR 2.4 million (2020: 1.4) in the income statement and EUR 1.2 (2.4) in equity. Income statement sensitivity resulted mainly from cash flows in SEK and NOK and equity mainly from cash flows in PLN and USD. For Uniper, one-day VAR with 99% confidence from translation and borrowings in foreign currency and derivatives was EUR 19 million (2020: 18) and resulted primarily positions in GBP, USD and SEK.

Translation exposure position includes net investments in foreign subsidiaries and associated companies. Exposures in Fortum are generally not hedged as the majority of these assets are considered to be long-term holdings. In Fortum, this means mainly entities operating in Sweden, Russia and United Kingdom, whose is not euro.

Exchange differences arising from the translation of the net investment in foreign entities are taken into effect of exchange differences on equity attributable to equity holders mainly from RUB and SEK. The effect was EUR in 2021 (2020: -492). Part of this translation exposure has been hedged and the notional amount of foreign hedges were EUR -263 million in 2021 (2020: -238). The foreign currency hedge result amounted to EUR -2021 (2020: 53). There was no significant ineffectiveness arising from net investment hedges in 2021.

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Interest rate and currency derivatives by instrument 2021

EUR million	Notional amount Remaining lifetimes					Fair value	
	Under 1 year	1-5 years		Over 5 years		Total Positive	Negative
		years	years	years	years		
Hedge accounting							
Foreign exchange derivatives	282	136	-	-	417	9	2
Interest rate swaps	1,300	1,323	1,175	-	3,798	71	27
Cross currency swaps	214	47	-	-	261	30	2
Non-hedge accounting							
Foreign exchange derivatives	15,404	1,050	-	-	16,455	204	111
Interest rate swaps	-	34	-	-	34	0	0
Cross currency swaps	-	24	-	-	24	-	1
Total	17,200	2,613	1,175	1,175	20,989	315	143
Of which long-term						88	36
Short-term						227	107

Interest rate and currency derivatives by instrument 2020

EUR million	Notional amount Remaining lifetimes					Fair value	
	Under 1 year	1-5 years		Over 5 years		Total Positive	Negative
		years	years	years	years		
Hedge accounting							
Foreign exchange derivatives	304	88	-	-	392	4	5
Interest rate swaps	825	1,875	1,675	-	4,375	154	61
Cross currency swaps	14	261	-	-	275	38	3
Non-hedge accounting							
Foreign exchange derivatives	7,991	1,743	-	-	9,734	135	228
Interest rate swaps	-	20	-	-	20	-	0
Cross currency swaps	-	24	-	-	24	-	1
Total	9,134	4,010	1,675	1,675	14,819	331	299
Of which long-term						216	118
Short-term						115	181

4.4 Credit risk

Fortum is exposed to counterparty risk whenever there is a contractual arrangement with an external counterparty.

Credit risk exposures relating to financial derivative instruments are often volatile and include both the risk and the settlement risk. Exchange-traded derivatives are cleared through central clearing parties (CCPs) and clearing banks while over-the-counter (OTC) derivative contracts are concluded directly with a number of counterparties including energy wholesalers and retailers, utilities, trading companies, energy companies and end-users and financial institutions active in the financial and energy markets. Currency and interest rate derivatives are limited to investment grade banks and financial institutions. International Swaps and Derivatives Association (ISDA) Master agreements, which include netting clauses and in some cases Credit Support Agreements, are in place with most of these counterparties. The majority of commodity derivative contracts are investment-grade or comparable ratings. Master agreements, such as those published by ISDA and European Federation of Energy Traders (EFET), which include netting clauses, are in place with the majority of the counterparties. Due to the financing needs and management of liquidity, Fortum has counterparty credit exposure towards banks and financial institutions in the form of deposits and towards corporate issuers of commercial paper in the Nordic market. The majority of the exposure is towards Fortum's key relationship banks, which are high creditworthy institutions. Investments in commercial papers were all with investment grade issuers at 31 December 2021. Fortum also has exposure to the Russian financial sector in terms of deposits with financial institutions to banks that provide guarantees for suppliers and contracting parties. Deposits in Russia have been covered by the most creditworthy state-owned or controlled banks, as well as affiliates of key relationship banks. The creditworthiness of banks and financial institutions is monitored so that mitigating actions can be taken in a financial situation changes.

Credit risk relating to customers, suppliers and trading partners is spread across a wide range of industries, counterparties, energy companies, government and municipal entities, utilities, small businesses, housing and private individuals over a range of geographic regions. The majority of exposure is in the form of trade receivables from the sale of electricity, gas and heat in the Nordic market, continental Europe and Russia. The creditworthiness of customers, suppliers and trading partners is monitored so that mitigating actions can be taken in a financial situation changes.

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4.4.1 Credit quality of major financial assets

Fortum recognises loss allowance for expected credit losses on financial assets classified to amortised cost and equity investments. The impairment model is applied to financial assets such as trade receivables, deposits, commercial papers, and loan and other interest-bearing receivables. See ▶ Note 23 Trade and other receivables for details on expected credit losses recognised for trade receivables.

Expected credit loss is calculated on an individual contract basis for deposits, commercial papers and loan and other interest-bearing receivables. No impairment loss is recognised on cash in bank accounts since expected credit loss is immaterial due to low risk of default. The expected credit losses according to this model are based on assessment of the individual counterparty's risk of default. The risk of default is evaluated at each reporting date based on credit ratings to determine if credit risk has increased significantly. Whenever possible, the risk of default is derived from available market data (liquid credit default swaps or liquid debt instruments) which ensures that forward-looking information is considered. If there are no publicly available market data, an internal credit rating is applied. The value of collateral and other measures taken to reduce credit risk (e.g., credit default insurance) is included in the calculation of expected credit losses in the "loss given default" ratio.

A financial asset with an investment-grade rating is assumed to have low credit risk. A change of credit rating from investment to non-investment grade constitutes a significant increase in credit risk. If the credit risk on the financial asset has not increased significantly since the initial recognition, loss allowance equals to 12 month ECL. If the credit risk on the financial asset has increased significantly since initial recognition, loss allowance equals to the lifetime expected credit losses. There have been no significant increases in credit risk during 2021.

The loss allowance for interest-bearing receivables totalled EUR 16 million on 31 December 2021 (2020: 7). Amounts for interest-bearing receivables including bank deposits and derivative financial instruments recognised as assets are presented by counterparties in the following table.

All counterparties for currency and interest rate derivatives and the majority of counterparties for bank deposits have an external rating from S&P Global Ratings, Fitch and/or Moody's credit agencies. For counterparties rated by more than one rating agency, the lowest of the ratings is used to determine if it is investment grade.

In the commodity derivatives and commercial paper market, there are a number of counterparties not rated by S&P Global Ratings, Fitch or Moody's. For these counterparties, Fortum assigns an internal rating. The internal rating categories that are considered to be comparable to investment grade have similar financial metrics or display historical default rates which correspond to investment grade companies rated by S&P Global Ratings, Fitch or Moody's.

Credit quality of major financial assets

EUR million	2021	Carrying amount of which Carrying amount of non-investment grade or comparable
Receivables with investment grade or comparable rating		
Deposits, commercial papers and cash in bank accounts	7,342	-
Fair values of interest rate and currency derivatives	315	-
Fair values of derivatives on exchanges	27,856	-
Fair values of commodity derivatives	49,886	-
Loan and other interest-bearing receivables	1,036	-
Lease receivables	136	-
Total receivables with investment grade or comparable rating	86,571	-
Receivables with non-investment grade or comparable rating		
Deposits, commercial papers and cash in bank accounts	164	-
Fair values of commodity derivatives	4,433	-
Loan and other interest-bearing receivables	19	-
Receivable from SIBUR related to divested shares of OOO Tobolsk CHP	40	-
Total receivables with non-investment grade or comparable rating	4,656	-
Other receivables ¹⁾		
Loan receivables from associates and joint ventures	1,158	-
Restricted cash mainly given as collateral for commodity exchanges	59	-
Cash in other bank accounts	87	-
Total other receivables	1,304	-
Total	92,531	-

1) Other receivables include financial assets which have not been divided to investment-grade and non-investment-grade or comparable

Financial instruments subject to master netting agreements:

The following tables present the recognised financial instruments that are offset, or subject to enforceable master netting arrangements and other similar agreements but not offset. The column 'net amount' shows the impact on the Group's balance sheet if all netting rights were exercised.

Netting agreements for financial assets and liabilities 2021

EUR million	Gross amount	Gross amount netted in the balance sheet ¹⁾	Net amounts presented in the balance sheet	Conditional netting amount (netting agreements)	Financial collateral received /pledged	Net amount
Financial assets						
Interest-rate and currency derivatives	315	-	315	129	153	33
Commodity derivatives	87,019	4,845	82,174	56,383	-1,576	27,368
Trade receivables	12,916	-	12,916	5,651	0	7,265
Total	100,250	4,845	95,405	62,162	-1,423	34,666

EUR million

Financial liabilities						
Interest-rate and currency derivatives	143	-	143	129	5	9
Commodity derivatives	93,306	4,845	88,461	56,383	4,293	27,785
Trade payables	12,152	-	12,152	5,651	-	6,501
Total	105,600	4,845	100,755	62,162	4,298	34,295

¹⁾ In Fortum, excluding Uniper, receivables and liabilities from electricity and other commodity exchanges arising against standard derivative contracts with same delivery period are netted.

Netting agreements for financial assets and liabilities 2020

EUR million	Gross amount	Gross amount netted in the balance sheet ¹⁾	Net amounts presented in the balance sheet	Conditional netting amount (netting agreements)	Financial collateral received /pledged
Financial assets					
Interest-rate and currency derivatives	331	-	331	87	1
Commodity derivatives	10,939	793	10,146	5,290	-1
Trade receivables	7,115	-	7,115	3,692	
Total	18,386	793	17,593	9,069	

EUR million

Financial liabilities					
Interest-rate and currency derivatives	299	-	299	87	
Commodity derivatives	11,088	793	10,295	5,290	1
Trade payables	7,126	-	7,126	3,692	
Total	18,513	793	17,720	9,069	1

¹⁾ In Fortum, excluding Uniper, receivables and liabilities from electricity and other commodity exchanges arising against standard derivative contracts with same delivery period are netted.

5 Capital risk management

In December 2020, Fortum updated the strategy to drive the clean energy transition and deliver sustainable financial performance. Aligned with the goals of the Paris Agreement, Fortum targets carbon neutrality by 2050 with ambitious mid-term targets.

The updated strategy builds on four priorities:

- 'Transform own operations to carbon neutral',
- 'Strengthen and grow in CO₂-free power generation',
- 'Leverage strong position in gas to enable the energy transition', as well as
- 'Partner with industrial and infrastructure customers'.

Fortum's coal-fired generation capacity will be reduced by more than 50% by the end of 2025, to approximately 5 GW and Fortum targets carbon neutrality for the European generation by 2035 at the latest.

Fortum is focusing on growing a sizeable portfolio of onshore wind and solar based power generation primarily in Europe to make it a meaningful EBITDA contributor. The target is to build 1.5-2 GW of new capacity by 2025. This capacity will partly be built on our own balance sheet and partly through partnerships.

Further, Fortum aims to gradually transform its Russian asset portfolio towards renewables, while over time reducing our fossil exposure.

In parallel with the strategy alignment, Fortum and Uniper have together identified cooperation benefits expected to bring a positive cash impact of approximately EUR 100 million annually. More than EUR 50 million of these annual benefits are estimated to be achieved by the end of 2023, with full effect of approximately EUR 100 million annually in 2025 creating value for both companies and their shareholders.

Financial targets, dividend policy, and 2022 guidance for capital expenditure

Fortum continues to be committed to maintaining a rating of at least BBB. The long-term financial targets are:

- Financial net debt/comparable EBITDA below 2x, defined as Alternative Performance Measure.
- Hurdle rates for new investments based on weighted average cost of capital ("WACC")
 - +100 basis points for green investments
 - +200 basis points for other investments

Fortum's dividend policy is 'to pay a stable, sustainable, and over time increasing dividend'. Fortum's Board of Directors proposes a dividend of EUR 1.14 per share for the year 2021 with the target to increase the dividend going forward.

The estimated annual capital expenditure, for 2022 is approximately EUR 1,500 million, including maintenance and excluding acquisitions. The share of maintenance is estimated to be EUR 800 million.

In July 2021 S&P Global Ratings revised its long-term credit rating for Fortum to BBB, with a stable outlook (previously BBB with Negative Outlook). Fitch Ratings long-term credit rating for Fortum was also revised to BBB, with a stable outlook (previously BBB with Negative Outlook).

S&P Global Ratings long-term credit rating for Uniper was also revised in September 2021 to BBB, with a stable outlook. In July 2021, S&P Global Ratings also revised its long-term rating for Uniper to BBB, with a stable outlook (previously BBB with Negative Outlook).

In January 2022, S&P Global Ratings affirmed both Fortum's and Uniper's rating of BBB with a stable outlook.

Financial net debt/comparable EBITDA ratio

EUR million	MM
+Interest-bearing liabilities	
- BS Liquid funds	
- Non-current securities	
- Collateral arrangement securities	
- Securities in interest-bearing receivables	
- BS Margin receivables	
+ BS Margin liabilities	
+ Net margin liabilities	
Financial net debt	
IS Operating profit	
+ IS Depreciation and amortisation	
EBITDA	
- IS Items affecting comparability	
Comparable EBITDA	

Financial net debt/comparable EBITDA

See ► Note 7 Comparable operating profit and comparable net profit for details on items affecting comparability.
► Note 27 Interest-bearing liabilities, including further details of the financing and liquidity status and see ► Definitions and reconciliations of key figures.

Comparable EBITDA is defined as an alternative performance measure and used as a complement in the structure target 'Financial net debt-to-Comparable EBITDA'.

6 Segment reporting

SIGNIFICANT ACCOUNTING POLICIES REVENUE RECOGNITION

Fortum's operations comprise the provision of gas, electricity, heating and cooling as well as global energy trading and optimisation and waste management services. Revenue streams can be divided into five groups: gas sales, power sales to wholesale markets, power sales to retail customers, heating sales and waste treatment sales.

Revenue is recognised when goods are transferred or services are performed, i.e. when a performance obligation is satisfied and control of the good or service underlying the particular performance obligations is transferred to the customer. Revenue is shown at the price that Fortum expects to be entitled to and it is presented net of rebates, discounts, value-added tax and selective taxes, such as electricity tax. Revenues also include the surcharge mandated by the German Renewable Energy Sources Act in the Uniper segment. Revenues include effects from physically settled contracts for which own use exemption cannot be used according to IFRS 9, see • Note 7 Comparable operating profit and comparable net profit. Accounting policies for the different revenue streams are described below.

POWER SALES TO WHOLESALE MARKETS AND THROUGH BILATERAL CONTRACTS

Physical electricity trades to wholesale markets are made at a spot price and thus there are no variable elements. Electricity sales are recognised on delivery at the price defined in the wholesale market. Fortum is also selling power to industrial customers and municipalities through bilateral contracts. These contracts can include fixed price components that are recognised in line with the customer's actual consumption profile, when the nature of the performance obligation is to deliver power instead of standing-ready to deliver power. When Fortum is acting as an agent in electricity trade by granting access to Nord Pool power trading system, Fortum presents the bilateral trades between Fortum and the customer on a net basis and only the service fee is recorded as revenue.

POWER SALES TO RETAIL CUSTOMERS

Fortum's contracts with consumer and business customers cover electricity sales, while the distribution service is delivered by the transmission company operating the local network. There is only one performance obligation, which is to stand-ready to supply electricity to the customer. The transaction price generally includes both a fixed monthly charge and a variable fee based on the volume of electricity supplied. As Fortum's promise is to stand ready to deliver electricity, the fixed and variable components are recognised based on the fees chargeable from the customer. If automated meter reading is not available, electricity consumption between the last meter reading and the end of the month is estimated.

HEAT SALES

In many areas the district heating service covers both the distribution and sale of heat. Fortum is usually responsible for delivering the whole service, even when heat is being produced by a third party, and is acting as a principal for heat sales as well. There is only one performance obligation, which is to stand-ready to supply heat to the customer. The fees charged from the customer generally comprise a fixed monthly charge and a variable fee based on the volume of

heat supplied. As Fortum's promise is to stand ready to deliver heat, the fixed and variable components are based on the fees chargeable from the customer. In Russia and Poland there are also areas where Fortum only the heat production facilities while some third party is responsible for the distribution of heat. In the performance obligation is to supply heat and revenue is recognised based on the volume of heat that Fortum to charge from the customer.

GAS SALES

Revenues are generated from sales of gas via traded markets, as well as to industrial customers and include hedges settled through physical delivery, which are recognised when delivery takes place and are transferred to the customer. Gas sales include also revenues earned from the transportation of gas. Contracts generally contain one performance obligation for which the entire transaction price is recognised.

For physically settled transactions that are in the scope of IFRS 15 (own-use transactions), revenue based on contract prices, as these reflect the economic character of the transactions and the contract consideration amounts. If IFRS 15 provides for a different method, for example when constraint on various considerations is applicable, contract prices are adjusted accordingly.

Gas contracts can also include fixed price components that are recognised in line with the customer's consumption profile, when the nature of the performance obligation is to deliver gas instead of standing-ready to deliver gas.

WASTE TREATMENT SALES

Majority of revenue from waste management services arises from fees charged for receiving waste from industrial customers (i.e. gate fees). The fee is usually determined based on the volume of waste received, there are no variable components in pricing. Fortum is required to treat the waste and this performance obligation is satisfied when treatment is performed. Transportation of the waste forms another performance obligation. Fees for waste treatment services are separately agreed in the contract and correspond to the price that would be payable for these services separately. Revenue for transportation service is recognised when the service has been completed.

Waste treatment sales include also various types of soil and landfill site projects, which mostly take place at customer sites. Fees charged are invoiced based on payment schedules agreed with the customer. The benefit of the construction work simultaneously when the construction work proceeds, and revenues are recognised over time. Progress of the construction is best measured either through costs incurred or the completed area of the construction site.

NETTING AND INTER-SEGMENT TRANSACTIONS

Generation and City Solution segments sell their electricity production to Nord Pool and Consumer Solution segments buy its electricity from Nord Pool. For these segments' eliminations of sales include eliminations of sales purchases with Nord Pool that are netted at Group level on an hourly basis and posted either as revenue or expense depending on if Fortum is a net seller or net buyer during any particular hour. Intersegment sales, expenses, and results for the different business segments are affected by intragroup deliveries, which are eliminated on consolidation. Inter-segment transactions are based on commercial terms.

6.1 Business structure

Fortum's reportable segments are Generation, Russia, City Solutions, Consumer Solutions and Uniper. Other Operations includes corporate functions, R&D and technology development projects.

Fortum revised its reportable segments following the consolidation of Uniper as a subsidiary on 31 March 2020, and reports Uniper as a separate segment.

Uniper was accounted for as an associated company until 31 March 2020 with three-month time lag, which meant that Fortum's first quarter results included Fortum's share of Uniper results from 1 October 2019 to 31 March 2020 reported in Other Operations. See also ► **Note 18** Participations in associated companies and joint ventures.

Further, reporting of both the Uniper segment and the Generation segment were impacted by adjustments for the joint ownership in the Swedish nuclear company, OKG Aktiebolag (OKG AB). Fortum and Uniper are co-owners in the Swedish nuclear company OKG AB. OKG AB is consolidated into Uniper Group as a subsidiary with a 45.5% minority representing Fortum's ownership in OKG AB. Fortum accounted for the shareholding in OKG AB as an associated company until 31 March 2020. On 31 March 2020, OKG AB was consolidated as a subsidiary to Fortum Group. Fortum has adjusted Uniper's standalone income statement and balance sheet numbers in respect of Fortum's shareholding in OKG AB, as well as adjusted operating profit, share of profit/loss in associates and joint ventures and net assets of OKG AB recorded in the Generation segment. Consequently, the Group's subsidiary, OKG AB, is split between the two segments according to ownership.

6.2 Segment structure

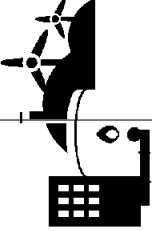
Fortum discloses segment information in a manner consistent with internal reporting to Fortum's Board of Directors. Fortum's reportable segments are Generation, Russia, City Solutions, Consumer Solutions and Uniper. Other Operations includes corporate functions, R&D and technology development projects.

6.3 Definitions for segment information

Fortum's segment information discloses the financial measurements used in financial target setting and management's follow up of financial performance and allocation of resources in the Group's performance process. See ► **Note 1.4** Measures for performance.

Segment reporting is based on the same accounting policies as Fortum Group.

Description of reportable segments:

Group				
Reportable segments	Generation	Russia	City Solutions	Consumer Solutions
	 Generation is responsible for Nordic power generation. The segment comprises CO₂-free nuclear, hydro, and wind power generation, as well as power portfolio optimisation, trading, market intelligence, thermal power for the capacity reserve, and global nuclear services. The segment does not include the Nordic hydro and nuclear power generation or the trading activities of Uniper. As of 31 March 2020, the segment includes Generation's proportionate share of OKG.	 The Russia segment comprises power and heat generation and sales in Russia. The segment includes Fortum's fully owned power plants and its joint ventures for building and operating approximately 3.4 GW of renewable power generation and for power and heat sales, as well as Fortum's more than 29% holding in TGC 1. These joint ventures and the associated company are accounted for using the equity method. The segment does not include Uniper's Russian subsidiary Unipro.	 City Solutions is responsible for sustainable solutions for urban areas. The segment comprises heating, cooling, waste-to-energy, and other circular economy solutions, as well as solar power generation, services, and development of new biomass-based businesses. The business operations are located in the Nordics, Poland, and India. The segment has also included Fortum's 50% holding in Stockholm Exergi, which was a joint venture accounted for using the equity method. Stockholm Exergi Holding AB was divested in September 2021. The segment does not include the operations of Fortum's subsidiary Uniper.	 Consumer Solutions is responsible for the electricity and gas retail businesses in the Nordics, Poland and Spain, including the customer service and invoicing businesses. Fortum is the largest electricity retail business in the Nordics, with approximately 2.2 million customers across different brands in Finland, Sweden, Norway, Poland and Spain. The business provides electricity as well as related value-added and digital services.
				 The Uniper segment comprises Fortum's ownership in Uniper, a subsidiary of Uniper is a leading international energy company with activities in more than 40 countries. The segment comprises the secure provision of energy related services. Its main activities are generation in Europe and Russia as energy trading and optimisation, which reports in three business segments – European Generation, Global Commodities and Power Generation – in its financial statements. Approximately 50% of the power generation capacity is gas-based, 30% coal-based, hydro- or nuclear-based. The segment Uniper's proportionate share of OKG.

6.4 Segment information

Consolidated income statement

EUR million	Generation ¹⁾		Russia		City Solutions ¹⁾		Consumer Solutions		Uniper		Other Operations	
	Note	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2020
Power sales ¹⁾		2,690	1,878	761	791	205	121	2,253	1,057	28,365	16,994	0
Heat sales		-	-	137	134	612	516	-	-	437	191	-
Gas sales		167	84	-	-	1	1	225	139	59,577	22,176	-
Waste treatment sales		0	-	-	-	250	252	-	-	-	-	5
Other sales		42	44	8	4	235	185	144	70	17,612	5,154	-
Sales		2,899	2,006	906	929	1,302	1,075	2,622	1,267	105,992	44,514	140
Internal eliminations		-143	-421	-3	-2	-39	-64	-14	-2	-29	0	-110
Netting of Nord Pool transactions ²⁾												
IS External sales		2,756	1,585	903	927	1,264	1,012	2,608	1,264	105,964	44,514	30
Comparable EBITDA		1,299	886	404	394	317	239	123	153	1,789	856	-94
IS Depreciation and amortisation		-189	-164	-142	-143	-182	-191	-71	-63	-668	-494	-35
IS Comparable operating profit		1,110	722	261	251	135	47	52	90	1,120	363	-129
Impairment charges and reversals		-	2	-35	-	-	-	-	-	-48	0	-
Capital gains and other related items		50	0	1	1	2,608	723	0	0	9	-13	14
Impact from acquisition accounting		-	-	-	-	-	-	-	-	-	-	-
Changes in fair values of derivatives hedging future cash flow		-107	-12	0	0	-72	5	443	39	-5,688	-706	-
Other		1	0	-	-	-	-	-	-	-294	386	-
IS Items affecting comparability	6, 7	-56	-11	-34	1	2,536	728	443	39	-6,021	-333	8
IS Operating profit		1,054	711	227	252	2,671	775	495	129	-4,901	29	-134
Comparable share of profit/loss of associates and joint ventures ³⁾		11	13	62	47	42	57	-	-	39	38	0
IS Share of profit/loss of associates and joint ventures	18	36	29	62	47	42	57	-	-	51	54	0

¹⁾ Sales, both internal and external, include effects from realised hedging contracts. Effect on sales can be negative or positive depending on the average contract price and the realised spot price. Power sales in Fortum, excluding Uniper, contains realised result from commodity derivatives, which have accounting status under IFRS 9, but have been considered operatively as hedges.

²⁾ Sales and purchases with Nord Pool Spot are netted on Group level on an hourly basis and posted either as revenue or cost depending on whether Fortum is a net seller or net buyer during any particular hour.

³⁾ Comparable share of profit/loss of associates and joint ventures for 2020 has been recalculated following the introduction of comparable net profit APM in 2021.

Segment assets and liabilities

EUR million	Note	Generation		Russia		City Solutions		Consumer Solutions		Uniper		Other Operations	
		2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
Non-interest-bearing assets		6,066	5,780	1,923	2,020	2,874	3,512	1,496	780	26,616	20,646	283	270
BS Participations in associates and joint ventures		18	1,005	961	577	74	612	-	-	671	729	32	33
Eliminations													
Total segment assets		7,071	6,742	2,601	2,597	2,949	4,123	1,496	780	27,286	21,375	315	303
Interest-bearing receivables	21												4
BS Deferred tax assets	28												
Other assets													9
BS Liquid funds	24												
Total assets													14
Segment liabilities		735	508	93	166	492	445	371	215	22,315	13,943	190	167
Eliminations													2
Total segment liabilities	28												9
BS Deferred tax liabilities													11
Other liabilities													1
Total liabilities included in capital employed	27												1
Interest-bearing liabilities													14
BS Total equity													
Total equity and liabilities													

Gross investments / divestments

EUR million	Note	Generation		Russia		City Solutions		Consumer Solutions		Uniper		Other Operations	
		2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
Gross investments in shares	3	7	70	36	48	2	114	-	0	9	3	237	372
Capital expenditure ¹⁾	16, 17	168	158	47	43	161	219	68	57	673	635	15	34
Gross divestments of shares	3	129	171	18	0	3,870	895	0	10	88	69	19	81

1) In 2021, 2020 comparatives were revised due to a revision of the lease adjustment following the finalisation of the purchase price allocation for the Uniper acquisition.

Comparable operating profit including Comparable share of profit of associates and joint ventures and Comparable return on net assets

EUR million	Generation		Russia		City Solutions		Consumer Solutions	
	Note	2021	2020	2021	2020	2021	2020	2021
Comparable operating profit		1,110	722	261	251	135	47	52
Comparable share of profit/loss of associates and joint ventures ¹⁾	7, 18	11	13	62	47	42	57	-
Comparable operating profit including comparable share of profit of associates and joint ventures ¹⁾		1,121	735	323	298	177	104	52
Segment assets at the end of the year		7,071	6,742	2,601	2,597	2,949	4,123	1,496
Segment liabilities at the end of the year		735	508	93	166	492	445	371
Comparable net assets		6,336	6,234	2,508	2,431	2,456	3,679	1,125
Comparable net assets average ²⁾		6,221	6,006	2,516	2,693	2,915	3,679	746
Comparable return on net assets, % ¹⁾		18.0	12.2	12.9	11.1	6.1	2.8	6.9

1) Comparable share of profit/loss of associates and joint ventures for 2020 has been recalculated following the introduction of comparable net profit APM in 2021.

2) Average net assets are calculated using the opening balance of the financial year and each quarter's closing value.

3) Fortum consolidated Uniper into its balance sheet as of 31 March 2020 and, from the second quarter of 2020, consolidated Uniper's results into its income statement. Comparable net assets average and Comparable return on net assets for the Uniper segment are presented from 2021 onwards as months is available.

Employees

	Generation		Russia		City Solutions		Consumer Solutions		Uniper ¹⁾		Other Operations	
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
Number of employees 31 December	1,116	1,143	2,627	2,935	1,766	2,093	1,176	1,048	11,494	11,751	961	963
Average number of employees ¹⁾	1,153	1,163	2,862	2,969	1,964	2,051	1,091	1,216	11,751	8,945	976	959

1) 2020 comparative figure was revised to reflect the consolidation of Uniper from March 31 2020.

6.5 Group-wide disclosures

The Group's operating segments operate mainly in the Nordic countries, Germany, United Kingdom, Russia and the Netherlands.

The Group's domicile is Finland.

The table below presents sales by geographical area based on customer location. Capital expenditure, assets and personnel are reported where assets and personnel are located. Participations in associates and joint ventures are not presented by location since these companies may have business in several geographical areas.

Due to the large number of customers and the variety of business activities, there is no individual customer whose business volume is material to Fortum's total business volume.

Sales by geographical area based on customer location

EUR million	2021	2020
Nordics	10,848	4,754
Germany	24,248	12,223
Russia	1,935	1,610
United Kingdom	30,933	9,618
Other Europe ¹⁾	35,864	19,195
Other ¹⁾	8,572	1,615
IS Total	112,400	49,015

¹⁾ The category Other Europe was introduced in 2021 and comparatives have been reclassified accordingly.

Nordic power production is not presented by country since Nordic power production is mainly sold through Nord Pool.

Capital expenditure by country

EUR million	2021	2020
Finland	160	160
Germany ¹⁾	285	290
Russia	177	158
Sweden	186	186
United Kingdom	127	89
Other countries ²⁾	182	262
Total ¹⁾	1,116	1,146

¹⁾ In 2021, 2020 comparatives were revised due to a revision of the lease adjustment following the finalisation of the purchase price allocation for the Uniper acquisition. In 2021, Norway has been included in Other and comparatives have been reclassified accordingly.

²⁾ In 2021, Norway was included in Other countries and comparatives have been reclassified accordingly.

Non-current assets by country

EUR million	2021
Finland ¹⁾	3,0
Germany ¹⁾	4,7
Russia	4,5
Sweden	7,4
United Kingdom	9
Other and eliminations ¹⁾	3,0
Total ¹⁾	23,6

¹⁾ In 2021, CO₂ emission allowances included in Intangible assets were reclassified to Inventories. Comparatives have been reclassified to Note 22 Inventories.

Non-current assets include intangible assets, property, plant and equipment and right-of-use assets as participations in associates and joint ventures.

Number of employees on 31 December by country

	2021
Finland	2,3
Germany	4,9
Russia	6,9
Sweden	1,7
United Kingdom	1,0
Other	2,1
Total	19,1

6.6 Other revenue-related disclosures

Fortum anticipates revenues of EUR 1,340 million (2020: 922) from unsatisfied performance obligations to gas and bilateral electricity contracts. Of this total, EUR 453 million is attributable to 2022 (2020: EUR 2021) and EUR 887 million to years after 2022 (2020: EUR 688 million to years after 2021).

7 Comparable operating profit and comparable net profit

7.1 Reconciliation of operating profit to comparable operating profit

Fortum uses Alternative performance measures (APMs) in the financial target setting and forecasting. Management's follow up of financial performance of segments and the Group as well as allocation of resources in the Group's performance management process. The business performance of the operations cannot be compared from one period to another without adjusting for items affecting comparability and therefore they are excluded from Comparable operating profit and Comparable EBITDA. Definitions are presented in the section » Definitions and reconciliations of key figures.

Reconciliation of operating profit to comparable operating profit 2021

EUR million	Unadjusted	Impairment charges and reversals	Capital gains and other related items	Changes in fair values of derivatives hedging future cash flow	Other	Reported
Sales	166,218	-	-	-53,817	-	112,400
Other income	70,209	-1	-2,682	-55,010	-136	12,380
Materials and services	-217,515	-	-	112,198	148	-105,170
Employee benefits	-1,718	-	-	-	156	-1,561
Depreciation and amortisation	-1,364	83	-	-	-	-1,281
Other expenses	-16,419	-	1	2,054	131	-14,232
IS Comparable operating profit	-	83	-2,681	5,424	299	2,536
IS Items affecting comparability	-	-83	2,681	-5,424	-299	-3,124
IS Operating profit	-588					-588

Reconciliation of operating profit to comparable operating profit 2020

EUR million	Unadjusted	Impairment charges and reversals	Capital gains and other related items	Impact from acquisition accounting	Changes in fair values of derivatives hedging future cash flow	Other
Sales	42,517	-	-	-	-	6,499
Other income	10,517	0	-784	-	-	-4,679
Materials and services	-38,286	-	-	-	-	-5,805
Employee benefits	-1,206	-	-	-	-	-
Depreciation and amortisation	-1,092	-1	-	-	-	-
Other expenses	-10,851	-	20	222	-	4,659
IS Comparable operating profit	-	-2	-765	222	675	-675
IS Items affecting comparability	-	2	765	-222	-	-
IS Operating profit	1,599					

Impairment charges and reversals

Impairment charges and reversals of previously recognised impairments are adjusted from depreciation amortisation and presented in items affecting comparability. Impairments in 2021 include EUR 40 million connection with the sale of the Schkopau lignite power plant in Germany (Uniper segment), and a tax-d cash impairment of EUR 35 million in connection with the sale of the Argayash CHP plant in Russia (Ru

Capital gains and other related items

Capital gains and other related items include capital gains and transaction costs from acquisitions, which from other income and other expenses, respectively.

Capital gains and other related items in 2021 include EUR 2,350 million gain from the sale of the 50% Swedish district heating and cooling company, Stockholm Exergi Holding AB, EUR 254 million gain from district heating business in the Baltics, and EUR 50 million gain from the sale of eight small heat power Sweden. See » Note 3.2 Disposals. Capital gains and other related items in 2020 included EUR 431 mill the divestment of the district heating business in Joensuu, Finland; EUR 291 million gain from divestment heating business in Järvenpää, Finland; and EUR 72 million gain from the divestment of Fortum Research & Development. See » Note 3.2 Disposals; as well as Uniper acquisition-related costs of EUR 20 million (see » Note 3.1 Acq

Impact from acquisition accounting

Consolidation of an associated company results includes recording a share of the associated company's other comprehensive income (OCI). If an associated company is either divested or becomes a subsidiary, IFRS requires that these previously recorded OCI items are reclassified inside equity either via the consolidated income statement or directly to retained earnings, depending on the nature of the OCI item. Reclassification does not have an impact on total equity.

The above reclassification resulted in a one-time, non-cash income statement impact of EUR -222 million on 31 March 2020 when Uniper became Fortum's subsidiary. This amount represented a part of Fortum's share of Uniper's OCI for the time when Uniper was an associated company, with no impact to Fortum's total equity. The amount mainly related to exchange rate differences arising from translation of foreign operations recorded by Uniper. Fortum's share of Uniper's non-recyclable other comprehensive income, EUR -84 million, was reclassified to retained earnings. See Consolidated statement of changes in equity.

Changes in fair values of derivatives hedging future cash flow

Unrealised changes in the fair values of financial derivative instruments hedging future cash flows that do not qualify for hedge accounting and physical contracts that are treated as derivatives are recognised in items affecting comparability. For additional information, see ► Note 14 Financial assets and liabilities by categories.

Impacts from settlement of physical contracts that have been treated as derivatives are adjusted to sales and materials and services to reflect the contract pricing as opposed to market pricing ("contract pricing adjustment"). Adjustments are needed to improve the understanding of the financial performance when comparing results from one period to another.

Other

Other includes mainly restructuring expenses, adjustments to certain provisions, and reversals of temporary reductions in current assets.

7.2 Reconciliation from operating profit to comparable net profit

In 2021 Fortum introduced two new APMs to provide additional financial performance indicators to support meaningful comparison of underlying net profitability between periods, Comparable net profit and Comparable earnings per share.

EUR million	2021	Note
IS Operating profit	-6	
IS Items affecting comparability	3,1	6, 7, 1
IS Comparable operating profit	2,5	
IS Share of profit/loss of associates and joint ventures	1	
Adjustments to share of profit/loss of associates and joint ventures	18	
Comparable share of profit/loss of associates and joint ventures	1	
IS Finance costs - net	1	
Adjustments to finance costs - net	-1	11
Comparable finance costs - net	.	
Comparable profit before income tax	2,6	
IS Income tax expense	1	
Adjustments to income tax expense	-7	
Comparable income tax expense	-6	
IS Non-controlling interests	8	
Adjustments to non-controlling interests	-1,1	
Comparable non-controlling interests	-2	
Comparable net profit	1,7	
Comparable earnings per share, EUR	13	2
Comparable share of profit/loss of associates and joint ventures	13	2
Share of profit/loss of associates and joint ventures is adjusted for significant items, similar to adjustments arriving at comparable net profit, in those entities that are classified as Fortum's principal associates and For more information on Fortum's principal associates and joint ventures, see ► Note 18 Participations in companies and joint ventures. Uniper was Fortum's associated company until 31 March 2020.		
Comparable finance costs - net	13	2
Finance costs – net are adjusted for e.g. nuclear-related items recognised in other financial items - net, changes on financial items, as well as impairment charges and reversals of previously recorded impairment financial items.		
Comparable income tax expense	13	2
Income tax expense is adjusted for tax impacts on items affecting comparability, adjustments to finance rate changes and other onetime adjustments.		
See also ► Definitions and reconciliations of key figures.		

8 Other income and other expenses

ACCOUNTING POLICIES

Gains and losses on derivative financial instruments reported gross within other income and other expenses mainly include impacts from derivative financial instruments in Uniper segment. These consist of derivatives representing economic hedging relationship for which hedge accounting according to IFRS 9 is not applied, and to limited extent transactions conducted in connection with proprietary trading. Other income and expenses exclude unrealised fair value changes of derivatives hedging future cash flows and physical contracts that are treated as derivatives which are recognised in items affecting comparability. For additional information see ▶ Note 7 Comparable operating profit and comparable net profit, and ▶ Note 14 Financial assets and liabilities by categories. Gains and losses on exchange rate differences reported within other operating income and expenses consist primarily of realised and unrealised gains and losses from the translation of foreign currency receivables and liabilities in Uniper segment.

GOVERNMENT GRANTS

Government grants are recognised at their fair value when there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions. Government grants are deferred and recognised in the income statement to match with the related costs.

8.1 Other income

EUR million	2021	2020
Gains on derivative financial instruments	11,442	3,989
Gains on exchange rate differences	659	636
Other	279	177
IS Total	12,380	4,802

8.2 Other expenses

EUR million	2021	2020
Losses on derivative financial instruments	12,240	4,339
Losses on exchange rate differences	716	521
IT and telecommunication costs	302	248
Other	974	781
IS Total	14,232	5,890

Gains and losses on derivative financial instruments include net realised gain of EUR 336 million (2020: loss -7) on non-hedge accounted derivatives hedging cash flow, and net unrealized loss of EUR 1,015 million (2020: 318) on non-hedge accounted commodity derivatives for which the offsetting change in value of the underlying hedged asset, such as inventory or receivable, is recognized within operating profit and currency derivatives.

The major components recorded in 'Other' are the external operation and maintenance costs of power and heat plants, expenses relating to properties and other operative expenses.

Auditors' fees

EUR million

Deloitte
Audit fees
Audit-related assignments
Tax assignments
Other assignments
Total
PwC
Audit fees
Audit-related assignments
Tax assignments
Other assignments
Total 1)

1) PwC fees are presented for the period after consolidating Uniper as a subsidiary on 31 March 2020.

Deloitte Oy is the appointed auditor until the next Annual General Meeting in 2022. PricewaterhouseCoopers SE. Wirtschaftsprüfungsgesellschaft ("PwC Germany") is the appointed auditor of the subsidiary Uniper SE. Audit fees include fees for the audit of the consolidated financial statements, review of interim reports for the audit of Fortum Corporation and its subsidiaries. Audit-related assignments include fees for assurance sustainability reporting, and other assurance and associated services related to the audit. Tax assignments for tax advice services. Other assignments consist of advisory services.

9 Materials and services

EUR million

Materials
Transmission costs
External services
IS Total

Materials consists mainly of coal, gas and nuclear fuels.

Materials include EUR 773 million (2020: 624) purchased from associates and joint ventures and hydro power purchased at production cost (including interest costs and production taxes) and purchased from third parties. See ▶ Note 38 Related party transactions.

10 Employee benefits and Board remuneration

EUR million	2021	2020
Wages and salaries	1,190	913
Pensions		
Defined contribution plans	74	51
Defined benefit plans	75	64
Social security costs	172	133
Share-based incentives	7	9
Other employee costs	43	26
IS Total	1,561	1,195

The compensation package for Fortum's employees consists of salaries, fringe benefits, short-term incentives, profit sharing paid to the Personnel Fund (in Finland) and long-term incentives.

For further information on pensions see ► Note 31 Pension obligations.

10.1 Short-term incentives

As a main principle, all employees are covered by the programme or alternatively by a business specific or a comparable local variable pay arrangement. Short-term incentive (STI) programmes are designed to support the achievement of the Group's financial and other relevant targets on an annual basis.

The Board of Directors determines the performance criteria and award levels for the Fortum Executive Management. The awards are based on the achievement of Group financial performance, divisional targets and individual targets. The target incentive opportunity is 20% and the maximum incentive opportunity is 40% of the annual base salary. The Board of Directors assesses the performance of the President and CEO and the members of the Fortum Executive Management on a regular basis.

Awards for other employees are based on a combination of Group, divisional, functional and personal or team targets. The targets are set in annual performance discussions held at the beginning of each year. Awards under the STI programme are paid solely in cash.

10.2 Long-term incentives

Fortum and Uniper have separate long-term incentive programmes: Fortum's share-based long-term incentive (LTI) programme supplemented by restricted share programme, and Uniper's non-share-based performance cash plan.

The purpose of long-term incentive programmes is to support the delivery of sustainable long-term performance, align the interests of management with those of shareholders, and support in committing and retaining key individuals.

LTI programme provides participants with the opportunity to earn company shares. Under the LTI programme, subject to the decision of the Board of Directors, a new LTI plan commences annually. The Board of Directors' participation of the Fortum Executive Management members in each annually commencing LTI plan. Subject to the decision by the Board of Directors, the President and CEO is authorised to decide on individual participants' potential maximum awards for other participants than the Fortum Executive Management in accordance with the nomination guidelines approved by the Board of Directors. Participation in the LTI plan precludes the individual being a member in the Fortum Personnel Fund.

Each LTI plan begins with a three-year earnings period, during which participants may earn share rights. Performance criteria set by the Board of Directors are fulfilled. If the minimum performance criteria are not achieved, the combined gross value of all variable compensation cannot exceed 120% of the person's annual salary for any calendar year. After the earnings period has ended and the relevant taxes and other employment-related costs have been deducted, participants are paid the net balance in the form of shares.

For LTI plans commencing in 2017 and later, the share awards are not subject to a minimum lock-up period. However, Fortum Executive Management members' aggregate ownership of Fortum shares has to be greater than or equal to their annual salary. Those members, whose aggregate ownership of Fortum shares does not meet the required level, are required to retain at least 50% of the shares received until the required level is met. For LTI plan commenced in 2016, any shares awarded to Fortum Executive Management members are subject to one- or three-year lock-up period.

The Restricted share programme is supplementing the current LTI programme. The Restricted share programme follows the main terms and conditions of the general LTI programme with the exception that the awards are delivered after the three-year plan period independent of performance measures, subject to continued retention. The Restricted share programme is designated for special purposes defined by the Board of Directors.

The Board of Directors has the right to revise the targets set in the incentive plans, deviating from the plan on achievement of the set earnings criteria, or to discontinue any ongoing incentive plan.

The share plans under the LTI arrangement are accounted for as partly equity- and partly cash-settled. The earned reward that the participants receive in shares is accounted for as an equity-settled transaction for participants receiving cash only, the total arrangement is accounted for as cash-settled transaction. The recognised as an expense during the earnings period with a corresponding increase in the liabilities for shares settled in cash, and a corresponding increase in equity for the transactions settled in shares. The social charges to the arrangement payable by the employer are accrued as a liability. The liabilities for share-based plans are social charges at the end of the year 2021 was EUR 12 million (2020: 12), including EUR 9 million (2020: 9) equity.

At year end 2021, approximately 150 key employees are participants in at least one of the ongoing LTI

Shares granted

The following table presents changes in the number of share rewards (for LTI plans 2017 onwards):

	2021	2020
1 January	1,603,146	1,717,656
Granted	920,517	630,475
Settled	-410,830	-434,607
Expired or forfeited	-294,740	-310,378
Outstanding 31 December	1,818,093	1,603,146

At year end 2021, for plans started before 2017, number of shares under lock-up was 38,531 shares.

In 2021, Uniper SE introduced a non-share-based performance cash plan for Uniper SE's board of management and selected management personnel. The plan is granted in annual tranches, with a three-year performance period for each tranche. Uniper SE did not have any ongoing performance plans at the end of 2020.

10.3 Uniper's Supervisory Board compensation

Fortum's President and CEO and some Fortum Executive Management members are members in the Supervisory Board of Uniper SE. From 2021 onwards, Supervisory Board compensation will be fully paid out as fixed compensation. Until 2021, members received a component of 20% of their compensation in the form of variable compensation. That variable compensation was granted as a right to a future payment in the form of virtual shares. The variable compensation is paid in cash after the end of the four-year earnings period.

10.4 Employee share savings programme

The purpose of Fortum's employee share savings programme is to motivate Fortum employees to invest and retain ownership in the company.

The programme includes annually commencing savings periods during which employees can save a proportion of their salaries and purchase Fortum shares with the accrued savings.

For each savings period participants will, as a gross reward, be granted one matching share for each two purchased savings shares after approximately three years from the beginning of the savings period. The prerequisites for receiving matching shares are that the participant holds the purchased savings shares until the end of the holding period, and that his or her employment has not ended before the end of the holding period.

Each plan consists of one-year savings period followed by two-year holding period. Shares are purchased with the accumulated savings at the market price quarterly after the release of Fortum's interim reports. The programme is accounted for as an equity-settled transaction, and the cost related to matching shares is recognised as expense during the vesting period.

10.5 Fortum Personnel Fund

The Fortum Personnel Fund (for employees in Finland only) has been in operation since 2000. The Board of Directors determines the criteria for the fund's annual profit-sharing bonus. Members of the personnel fund are the permanent and fixed-term employees of the Group.

The profit-sharing received by the fund is distributed equally between the members. Each employee's divided into a tied amount and an amount available for withdrawal. It is possible to transfer a maximum from the tied amount to the amount available for withdrawal each year.

The fund's latest financial year ended at 30 April 2021 and the fund then had a total of 2,508 members. At the end of April 2021 Fortum contributed EUR 0.4 million (2020: 1.7) to the personnel fund as an annual sharing bonus based on the financial results of 2020. The combined amount of members' shares in the 20 million (2020: 18).

10.6 The President and CEO and the Fortum Executive Management (FEM) remuneration

The Fortum Executive Management (FEM) consists of nine members, including the President and CEO. Table presents the total remuneration of the President and CEO and the FEM and takes into account the FEM during the year. The expenses are shown on accrual basis.

Management remuneration

	2021	2020
	Markus Rauramo, President and CEO ²⁾	Pekka Lundmark, President and CEO ²⁾
EUR thousand		
Salaries and fringe benefits	1,559	3,727
Performance bonuses ¹⁾	423	896
Share-based incentives ¹⁾	1,006	2,276
Pensions (statutory)	311	829
Pensions (voluntary)	315	536
Social security expenses	69	405
Total	3,683	8,670

¹⁾ Based on estimated amounts.

²⁾ In addition to the information provided in the above table, the estimated compensation for the membership in the Supervisory Board of the President and CEO Markus Rauramo was EUR 305 thousand (2020:101), and for other FEM members, EUR 240 thousand (2020:101). This compensation is for the period that Uniper has been consolidated as subsidiary.

The annual contribution for the President and CEO Markus Rauramo's pension arrangement is 20% of his compensation. The annual fixed compensation consists of base salary and fringe benefits. The President's retirement age is determined in accordance with the Finnish Employees' Pension Act. In cases of resignation terminated before the retirement age, the President and CEO is entitled to retain the benefits accrued in the pension arrangement. The annual contribution for the President and CEO Pekka Lundmark's pension arrangement is the annual salary. The annual salary consisted of base salary and fringe benefits.

For the other members of the FEM, the retirement age varies between 62 and 65, or is determined in accordance with the Finnish Employees' Pension Act. According to Group policy, all new supplementary pension arrangements

defined contribution plans. The pension premium for FEM members is 20% of the annual base salary. In the end of 2021, the additional pension arrangements for the President and CEO and other FEM members are defined contribution pension plans and thus no liability has been recognised on the balance sheet. In 2020, a pension liability of EUR 1,283 thousand was recognised on the balance sheet related to the defined benefit plans for FEM members.

In the event that Fortum decides to give notice of termination to the President and CEO, he is entitled to the salary for the notice period (6 months) and a severance pay equal to 6 months' salary. For other FEM members, the notice period for both parties is six months, and in case the company terminates the contract, members are entitled to the salary for the notice period and a severance pay equal to 6 months' salary, except for one member who is entitled to a payment of 18 months' salary in case of notice by the company.

Number of shares delivered to the management

The table below shows the number of shares delivered to the President and CEO and other FEM members under the LTI arrangements. FEM members whose aggregate ownership of Fortum shares does not yet fulfil the shareholding requirement are required to retain at least 50% of the shares received until the required level of shareholding is met.

	2021	2)	2020	3)
FEM members at 31 December 2021	25,921	12,273		
Markus Rauramo, CEO from 1 July 2020	-	N/A		
Nabahat Albayrak, member of FEM from 1 June 2021	20,013	36,417		
Alexander Chuvaev ¹⁾	N/A	N/A		
Eveliina Dahl, member of FEM from 1 May 2021	-	N/A		
Bernhard Günther, member of FEM from 1 February 2021	4,555	5,656		
Per Langer	3,046	N/A		
Simon-Erik Ollus, member of FEM from 29 March 2021	5,985	6,787		
Mikael Rönnblad	N/A	N/A		
Nora Steiner-Forsberg, member of FEM from 1 May 2021				
Former FEM members				
Arun Aggarwal, member of FEM until 17 November 2021	5,304	4,012		
Pekka Lundmark, CEO until 1 July 2020	N/A	28,527		
Risto Penttinen, member of FEM until 30 April 2021	4,906	6,612		
Arto Rätty, member of FEM until 31 May 2021	4,476	5,392		
Sirpa-Helena Sormunen, member of FEM until 30 April 2021	4,992	6,230		
Tiina Tuomela, member of FEM until 29 March 2021	-	7,239		
Total	79,198	119,145		

1) Estimated number of shares after local tax and tax-related deductions. Due to local legislation, share rights will be paid in cash instead of shares.

2) Share delivery based on share plans 2016-2020.

3) Share delivery based on share plan 2017-2019.

10.7 Board of Directors and management shareholding

On 31 December 2021, the members of the Board of Directors owned a total of 5,000 shares (2020: 9,540), which corresponds to 0.00% (2020: 0.00%) of the company's shares and voting rights.

Number of shares held by members of the Board of Directors

Board members at 31 December 2021

Veit-Matti Reinikkala Chair
Anja McAlister, Deputy Chair
Luisa Delgado
Essimari Kairisto
Teppo Paavola
Philipp Rösler
Annette Stube

Former Board members

Eva Hamilton
Matti Lievonon
Klaus-Dieter Maubach

Total

The President and CEO and other members of the FEM owned a total of 224,369 shares (2020: 281,300) corresponds to approximately 0.03% (2020: 0.03%) of the company's shares and voting rights.

Number of shares held by members of the Fortum Executive Management

FEM members at 31 December 2021

Markus Rauramo
Nabahat Albayrak
Alexander Chuvaev
Eveliina Dahl
Bernhard Günther
Per Langer
Simon-Erik Ollus
Mikael Rönnblad
Nora Steiner-Forsberg

Former FEM members

Arun Aggarwal
Risto Penttinen
Arto Rätty
Sirpa-Helena Sormunen
Tiina Tuomela

Total

Arsregnskap regnskapsåret 2021 for 977296919

10.8 Board remuneration

The Board of Directors comprises five to ten members who are elected at the Annual General Meeting for a one-year term of office, which expires at the end of the first Annual General Meeting following the election. The Board of Directors consists of seven members at the end of 2021.

The Annual General meeting confirms the yearly compensation for the Board of Directors. Board members are not offered any long-term incentive benefits or participation in other incentive schemes. There are no pension arrangements for the Board members. Social security costs EUR 2 thousand (2020: 6) have been recorded for the fees in accordance with local legislation in respective countries.

Fees for the Board of Directors

EUR thousand	2021	2020
Chair	77.2	77.2
Deputy Chair	57.5	57.5
Chair of the Audit and Risk Committee ¹⁾	57.5	57.5
Members	40.4	40.4

¹⁾ If not Chairman or Deputy Chairman simultaneously.

Every member of the Board of Directors receives a fixed yearly fee and additional fees for each meeting attended.

A meeting fee of EUR 600 is paid for Board and Committee meetings. For Board members living outside Finland in Europe, the meeting fee is EUR 1,200; for Board members living outside Europe, the meeting fee is EUR 1,800. For Board and Committee meetings held as a telephone conference, the meeting fee is paid as EUR 600 to all members. No fee is paid for decisions made without a separate meeting.

Board members are entitled to travel expense compensation in accordance with the company's travel policy.

Compensation for the Board of Directors

EUR thousand

Board members at 31 December 2021

Veit-Matti Reinikkala, Chair from 28 April 2021
 Anja McAlister, Deputy Chair from 28 April 2021
 Luisa Delgado, member of the board from 28 April 2021
 Essimari Kairisto, Chair of the Audit and Risk Committee from 23 April 2020
 Teppo Paavola, member of the board from 23 April 2020
 Philipp Rösler
 Annette Stube, member of the board from 23 April 2020

Former Board members

Eva Hamilton, member of the board until 28 April 2021
 Kim Ignatius, Chair of the Audit and Risk Committee and member of the board until 23 April 2020
 Matti Lievonon, Chair until 28 April 2021
 Klaus-Dieter Maubach, Deputy Chairman and member of the board until 29 March 2020 ¹⁾

Total

¹⁾ In addition to the information provided in the above table, the estimated compensation for the membership in the Supervisory Board of the company for the period from 1 January 2020 to 31 December 2020 was EUR 51 thousand (2020:157). In 2020 this compensation is for the period that Uniper has been a member of the Supervisory Board.

11 Finance costs – net

EUR million	Note	2021	2020
Interest expense			
Borrowings		-170	-186
Leasing and other interest expenses ¹⁾		-49	-23
Capitalised borrowing costs ¹⁾	17	16	39
IS Total		-202	-170
Interest income			
Loan receivables and deposits		135	96
Leasing and other interest income		21	16
IS Total		156	111
Other financial items - net			
Return from nuclear funds, nuclear fund adjustment and unwinding of nuclear provisions	29	146	19
Fair value changes, impairments and reversals		-1	29
Unwinding of discounts on other provisions and pension obligations	30, 31	3	-45
Other financial expenses and income		5	0
IS Total		154	3
IS Finance costs - net		107	-56

Comparable finance costs - net

EUR million	2021	2020
IS Finance costs - net	107	-56
Adjustments to finance costs - net		
Return from nuclear funds, nuclear fund adjustment and unwinding of nuclear provisions	-146	-19
Fair value changes, impairments and reversals	1	-29
Comparable finance costs - net	-38	-103

¹⁾ In 2021, 2020 comparatives were revised due to a revision of the lease adjustment following the finalisation of the purchase price allocation for the Uniper acquisition.

In 2021, Fortum introduced a new Comparable net profit APM. See more information in ► Note 1 Significant accounting policies and ► Definitions and reconciliations of key figures.

Interest expenses on borrowings totalled EUR 170 million (2020: 186) including interest expenses on loan receivables and other loan receivables, and EUR 24 million (2020: 26) interest cost – net from derivatives hedging the loan expenses from leases were EUR 32 million (2020: 21) and other interest expenses were EUR 16 million (2020: 16). Interest income, EUR 156 million (2020: 111), includes EUR 128 million (2020: 88) interest income from loan receivables and other loan receivables, and EUR 7 million (2020: 8) from deposits. Interest income was EUR 15 million (2020: 12) and other interest income was EUR 5 million (2020: 4).

Return from Nuclear Funds include interest income from the Finnish Nuclear waste fund and changes in the Swedish Nuclear waste fund. The change between 2021 and 2020 in unwinding of discount on other pension obligations comes mainly from a positive effect of changes in discount rates on other provisions segment. For additional information see ► Note 29 Nuclear-related assets and liabilities, ► Note 30 Other provisions and ► Note 31 Pension obligations.

Interest rate and currency derivatives in finance costs – net

EUR million	2021
Interest rate and cross currency swaps	
Interest expenses on borrowings	
Exchange rate difference from derivatives	
Rate difference in fair value gains and losses on financial instruments ¹⁾	
Total fair value change of interest rate derivatives in finance costs - net	
Foreign exchange derivatives	
Interest expenses on borrowings	
Exchange rate difference from derivatives	
Rate difference in fair value gains and losses on financial instruments	
Total fair value change of currency derivatives in finance costs - net	
Total	

¹⁾ Fair value gains and losses on financial instruments include fair value change of hedging derivatives in fair value hedge relationships (2020: -2).

12 Income tax expense

12.1 Profit before tax		
EUR million	2021	2020
Finland	561	1,088
Germany	-3,186	269
Russia	455	403
Sweden	2,195	-65
United Kingdom	-824	-102
Other	509	606
IS Total ¹⁾	-289	2,199

¹⁾ Profit before taxes in 2020 includes contribution from Uniper for the period of 1 April to 31 December 2020 since Uniper was consolidated as a subsidiary from 31 March 2020.

Profit before tax by country represents the respective countries' part of total profit before tax for Fortum Group according to IFRS, based on the same accounting principles as consolidated financial statements. This means that the respective country's profits include such items as share of profits from associates and joint ventures, and effects of accounting for nuclear provisions, which are not included in taxable profits in the local subsidiaries.

12.2 Major components of income tax expense by country

EUR million	2021	2020
Current taxes		
Finland	1,088	1,088
Germany	-3,186	269
Russia	455	403
Sweden	2,195	-65
United Kingdom	-824	-102
Other	509	606
Total	-8	1,199
Deferred taxes		
Finland	606	606
Germany	-269	-269
Russia	-403	-403
Sweden	65	65
United Kingdom	102	102
Other	1,088	1,088
Total	1,088	1,088
Adjustments recognised for current tax of prior periods		
Finland	1,088	1,088
Germany	-269	-269
Russia	-403	-403
Sweden	65	65
United Kingdom	102	102
Other	1,088	1,088
Total	1,088	1,088
IS Income tax expense		
	-8	2,199

12.3 Income tax rate reconciliation

The table below explains the difference between the theoretical enacted tax rate in Finland compared to the tax rate in the consolidated income statement.

EUR million	2021	%	2020	%
Profit before tax	-289		2,199	
Tax calculated at nominal Finnish tax rate	58	20.0	-440	20.0
Differences in tax rates in other jurisdictions	341	118.0	-52	2.4
Tax rate changes	32	11.2	4	-0.2
Tax exempt capital gains	561	194.1	167	-7.6
Impact of acquisition accounting	-	-	-70	3.2
Tax exempt income and other non-deductible expenses ¹⁾	-14	-4.9	24	-1.1
Share of profit of associates and joint ventures	32	11.1	189	-8.6
Taxes related to dividend distributions ¹⁾	-12	-4.2	-24	1.1
Tax effects of changes in value and non-recognition of deferred taxes	-851	-294.6	-129	5.9
Other items	9	3.2	-16	0.7
Adjustments recognised for taxes of prior periods	20	6.9	3	-0.1
IS income tax expense	175	60.7	-344	15.7

¹⁾ Taxable dividends related to Germany, included in Taxes related to dividend distributions, were in 2021 reclassified to Tax exempt income and other non-deductible expenses in order to better reflect the nature of these taxes. Comparatives have been reclassified accordingly.

Key tax indicators:

- The weighted average applicable income tax rate for 2021 is 141.9% (2020: 22.1%).
- The effective income tax rate in the income statement for 2021 is 60.7% (2020: 15.7%).
- The comparable effective income tax rate for 2021 is 24.2% (2020: 24.1%). In 2021, Fortum introduced net profit APM, which resulted in recalculation of the comparable effective income tax rate. 2020 comparatives have been recalculated accordingly.

See ▶ Note 7 Comparable operating profit and comparable net profit and ▶ Definitions and reconciliation figures.

The major items affecting the effective income tax rate are as follows:

- The differences in tax rates in other jurisdictions increased the rate by 118.0% (2020: 2.4%), mainly Germany.
- Due to the loss before taxes in 2021, the one-time tax-free capital gains increased the rate by 194.1% (2020: 7.6%). Gains mainly relate to the sale of Stockholm Exergi Holding AB in Sweden.
- Tax effects of changes in value and non-recognition of deferred taxes during 2021 reduced the effective income tax rate by -294.6% (2020: 5.9%), mainly related to derivative financial instruments and provisions in Germany.

13 Earnings and dividend per share

ACCOUNTING POLICIES EARNINGS PER SHARE

Basic earnings per share is calculated by dividing the net profit attributable to the owners of the parent company by the weighted average number of ordinary shares in issue during the year, excluding ordinary shares purchased by the Group and held as treasury shares.

DIVIDENDS

Dividends proposed by the Board of Directors are not recognised in the financial statements until they have been approved by the company's shareholders at the Annual General Meeting.

13.1 Earnings per share

Earnings per share, basic

	2021	2020
IS Profit attributable to owners of the parent (EUR million)	739	1,823
Weighted average number of shares (thousand)	888,294	888,294
Basic earnings per share (EUR)	0.83	2.05

As Fortum currently has no dilutive instruments outstanding, diluted earnings per share is the same as basic earnings per share.

Comparable earnings per share

	2021	2020
Comparable net profit (EUR million)	1,778	1,483
Weighted average number of shares (thousand)	888,294	888,294
Comparable earnings per share (EUR)	2.00	1.67

In 2021, Fortum introduced a new APM, Comparable earnings per share. See more information in ► Note 1 Significant accounting policies and ► Definitions and reconciliations of key figures.

13.2 Dividend per share

A dividend in respect of 2021 of EUR 1.14 per share, amounting to a total dividend of EUR 1,013 million, was decided in the Annual General Meeting on 2 March 2022, is to be proposed at the planned Annual General Meeting in 2022. These Financial statements do not reflect this dividend.

A dividend for 2020 of EUR 1.12 per share, amounting to a total of EUR 995 million, was decided in the Annual General Meeting on 28 April 2021. The dividend was paid on 7 May 2021.

A dividend for 2019 of EUR 1.10 per share, amounting to a total of EUR 977 million, was decided in the Annual General Meeting on 23 April 2020 and the dividend was paid on 5 May 2020.

14 Financial assets and liabilities by categories

ACCOUNTING POLICIES FINANCIAL ASSETS

Fortum classifies its financial assets in the following categories according to IFRS 9: financial assets at amortised cost, financial assets at fair value through profit or loss and financial assets at fair value through other comprehensive income. The classification is made at initial recognition and depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them.

In order for the financial asset to be classified and measured at amortised cost or fair value through other comprehensive income, it needs to give rise to cash flows that are solely payments of the principal and interest on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level. When the SPPI criteria is not met, financial assets are classified to fair value through profit or loss category.

Financial assets are presented as non-current assets unless they are held for trading, expected to be realised within 12 months at the closing date or they have a maturity of under 12 months at closing date. These are classified as current assets.

FINANCIAL ASSETS AT AMORTISED COST

Fortum measures financial assets at amortised cost when the financial asset is included in the held-to-collect business model with fixed or determinable payments that are payments of amount outstanding or interest on it. They arise when the Group provides money, goods or services directly to a debtor. Financial assets at amortised cost include non-derivative financial assets with fixed or determinable payments that are not quoted in an active market.

Financial assets at amortised cost are subject to impairment using expected credit loss (ECL) model. Gains and losses from derecognition of the asset are recognised in profit and loss.

FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

Financial assets at fair value through profit or loss include financial assets held for trading in the short term, financial assets designated upon initial recognition irrevocably as fair value through profit or loss and financial assets mandatorily recognised at fair value through profit or loss according to IFRS 9. Derivatives are classified as held for trading unless they are designated as effective hedging instruments.

Gains and losses arising from changes in the fair value are included in the income statement in the period in which they arise.

FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

Other equity investments designated at fair value through other comprehensive income are not subject to impairment assessment and accumulated reserves are not recycled to profit or loss upon derecognition. Dividends received are recognised in profit and loss.

Investments designated at fair value through other comprehensive income mainly consist of other equity investments coming from the acquisition of Uniper which the Group has elected to designate irrevocably at fair value through other comprehensive income.

DERECOGNITION

Fortum derecognises financial assets when the rights to receive cash flows from the assets have expired or the Group has substantially transferred the risks and rewards of the assets outside of the Group.

IMPAIRMENT

Fortum recognises an allowance for expected credit losses (ECL) according to IFRS 9 for financial assets at amortised cost. See further information on ECL in ► Note 4.4.1 Credit quality of major financial assets and Trade and other receivables.

Financial assets measured at fair value through profit or loss are not included in ECL assessment as already measured at fair value. A financial asset is written-off when there is no reasonable expectation of the contractual cash flows.

FINANCIAL LIABILITIES

All financial liabilities are recognised initially at fair value. In the case of loans and borrowings and payable transaction costs are deducted. In subsequent periods, all financial liabilities, except derivatives and financial assets, which the Group has at initial recognition irrevocably designated at fair value through profit or loss, are amortised cost; any difference between proceeds (net of transaction costs) and the redemption value is recognised as interest cost over the period of the borrowing using the effective interest rate method.

Derivative financial instruments entered into by the Group, that are not designated as hedging instruments, are classified as liabilities at fair value through profit and loss. Amortisation of the effective interest rate and losses of liabilities are recognised in the income statement.

Group's financial liabilities include trade and other payables, loans and borrowings and derivative financial liabilities. Borrowings or portion of borrowings being hedged with a fair value hedge are recognised at fair value through profit or loss. Derecognition of financial liabilities takes place when the Group has fulfilled the contractual obligations.

ACCOUNTING FOR DERIVATIVE FINANCIAL INSTRUMENTS AND HEDGING ACTIVITIES

Within the ordinary course of business, the Group routinely enters into sale and purchase transactions in commodities. Contracts that were entered into and continue to be held for the purpose of receipt or delivery of a commodity in accordance with the Group's expected sale, purchase or usage requirements are not within the scope of IFRS 9 ("own use exemption"). Physical contracts to buy or sell a non-financial item, which are fair value option to off-set accounting mismatch, or where own use exemption or hedge accounting cannot be applied, are fair valued through the income statement.

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently remeasured at their fair value. Gains and losses resulting from the initial fair value measurement of a derivative (one's gains and losses) are eliminated against the corresponding derivative asset or liability. The initial fair value of a derivative is determined based on valuation model with input parameters that are unobservable from active markets or whose initial fair value is evidenced by a quoted price in an active market for an identical contract or a valuation technique that uses only data from observable markets, gains and losses from the initial measurement are accounted for similarly to gains or losses on the subsequent measurement.

The method of recognising the resulting gain or loss on the subsequent measurement depends on whether the derivative is designated as a hedging instrument eligible for hedge accounting, and if so, the nature of the hedged item. The Group designates certain derivatives as either: (1) hedges of highly probable forecast transactions

flow hedges); (2) hedges of the fair value of recognised assets or liabilities, or unrecognised firm commitments (fair value hedge); or (3) hedges of net investments in foreign operations.

The Group documents at the inception of the transaction the relationship between hedging instruments and hedged items, whether the hedged item is one or several risk components separately or in aggregation, as well as its risk management objective and strategy for undertaking various hedge transactions. When applying hedge accounting the Group also documents its assessment, of whether the derivatives that are used in hedging transactions are meeting the hedge accounting effectiveness criteria: (1) there is an economic relationship between the hedged item and the hedging instrument, (2) the effect of credit risk does not dominate the value changes that result from that economic relationship; and (3) the hedge ratio of the hedging relationship is the same as applied in the risk management. The Group also documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective by assessing the prospective capacity of the derivatives in offsetting changes in fair values or cash flows of hedged items. Hedge accounting is discontinued only when the hedging relationship ceases to meet the hedge effectiveness criteria.

CASH FLOW HEDGE

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges are recognised in equity. Gain or loss relating to the ineffective portion is recognised immediately in the income statement. Amounts accumulated in equity are recycled in the income statement in the periods when the hedged item will affect profit and loss (e.g. when the forecasted sale that is hedged takes place). However, when the forecast transaction that is hedged results in the recognition of a non-financial asset (e.g. inventory) or a liability, the gains and losses previously deferred in equity are transferred from equity and included in the initial measurement of the cost of the asset or liability. When a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in equity is recognised in the income statement when the forecast transaction is ultimately also recognised in the income statement. When a forecasted transaction is no longer expected to occur, the cumulative gain or loss that was reported in equity is immediately recognised in the income statement.

Fortum hedges its exposure to commodity market risks and applies hedge accounting by risk components. Hedge accounting is applied to Nordic electricity price risk, where the Nordic area priced physical electricity delivery is commonly divided into three risk components: (1) system price risk, (2) electricity price area difference risk (EPAD) and (3) currency risk. For each of these separate risk components there are specific derivative contracts available, which each are being effective hedges for the associated risk components.

In addition, hedge accounting is applied to certain derivative contracts hedging gas price risk. These are physically settled fixed-price forward and futures contracts, for which the own-use exemption cannot be applied (failed own-use contracts), where the contract constitutes an effective hedge of cash flows of the gas volumes to be delivered ("all-in-one" hedge).

FAIR VALUE HEDGE

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recorded in the income statement, together with any changes in the fair value of the hedged asset or liability that are attributable to the same risk.

If the hedge no longer meets the criteria for hedge accounting, the adjustment to the carrying amount of the hedged item for which the effective interest method is used is amortised to profit or loss for the periods until maturity of the hedged item.

NET INVESTMENT HEDGING IN FOREIGN OPERATIONS

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in equity; the gain or loss on the ineffective portion is recognised immediately in the income statement. Gains and losses accumulated in equity are included in the income statement when the foreign operation is disposed of.

DERIVATIVES THAT DO NOT QUALIFY FOR HEDGE ACCOUNTING

Certain derivative instruments representing economic hedging relationships do not qualify for hedge accounting and losses on non-hedge accounted derivatives for which the offsetting impact of the hedged item is recognised in the income statement. Unrealised operating profit are reported in other income and other expenses in the income statement. Unrealised changes of non-hedge accounted commodity derivatives hedging future cash flow and physical contracts accounted for as derivatives within the scope of IFRS 9 are recognised in items affecting comparability in the income statement. Gains and losses on interest rate and currency derivative instruments are recognised in financial statement with corresponding hedge items. Financial assets and liabilities in the tables below are split into categories in accordance with IFRS 9. They are further divided into classes which are the basis for valuing a respective asset or liability. Further information is found in the Notes mentioned in the table.

Financial assets by category 2021

EUR million	Note	measured at fair value	measured at carrying amount	measured at fair value	measured at carrying amount	measured at fair value	measured at carrying amount
Financial instruments in non-current assets							
Other non-current assets	20	316		136		118	
Derivative financial instruments	4						
Commodity derivatives			16,955		53		
Interest rate and currency derivatives			34		5		
Long-term interest-bearing receivables	21	2,125		147			119
Financial instruments in current assets							
Derivative financial instruments	4						
Commodity derivatives			64,750		416		
Interest rate and currency derivatives			170		34		
Trade receivables	23	12,916					
Other receivables	23	1,927		13			
Short-term interest-bearing receivables	21	145		553			17
Liquid funds	24	7,545		47			
Total		24,974	81,909	897	507	118	136

Financial assets by category 2020

Kap regnskapsåret 2021 för									
Note	EUR million	hedge accounting, fair value hedges	Non-hedge accounting	Other financial assets	Cash flow hedges	Other equity investments	Lease receivables		
Financial instruments in non-current assets									
20	Other non-current assets	291		70		118			
4	Derivative financial instruments								
	Commodity derivatives		2,707		23				
	Interest rate and currency derivatives		46		36				
21	Long-term interest-bearing receivables	134		116			181		
Financial instruments in current assets									
4	Derivative financial instruments								
	Commodity derivatives		7,292		125				
	Interest rate and currency derivatives	20	89		6				
23	Trade receivables		7,115						
23	Other receivables		1,728	62					
21	Short-term interest-bearing receivables		145	437			16		
24	Liquid funds		2,262	46					
Total		154	10,133	732	190	118	196		

Financial liabilities by category 2021

Financial liabilities by category 2021							
EUR million	Note	Amortised cost	Fair value through profit or loss			Fair value through other comprehensive income	Lease liabilities
			Hedge accounting, fair value hedges	Non-hedge accounting	Other financial liabilities		
Financial Instruments in non-current liabilities							
Interest-bearing liabilities	27	6,087	1,669 ¹⁾				945
Derivative financial instruments	4			16,373		248	
Commodity derivatives				8		18	
Interest rate and currency derivatives			9				
Financial Instruments in current liabilities							
Interest-bearing liabilities	27	7,840			549		130
Derivative financial instruments	4						
Commodity derivatives				68,905		2,934	
Interest rate and currency derivatives			2	103		2	
Trade payables	33	12,152					
Other liabilities	33	425					
Total		26,503	1,680	85,390	549	3,202	1,075
¹⁾ Fair valued part of bond in fair value hedge relationship.							

Financial liabilities by category 2020

Financial liabilities by category 2020							
EUR million	Note	Amortised cost	Fair value through profit or loss			Fair value through other comprehensive income	Lease liabilities
			Hedge accounting, fair value hedges	Non-hedge accounting	Other financial liabilities		
Financial Instruments in non-current liabilities							
Interest-bearing liabilities	27	5,746	2,145 ¹⁾				894
Derivative financial instruments	4			2,462		77	
Commodity derivatives			25	63		30	
Interest rate and currency derivatives							
Financial Instruments in current liabilities							
Interest-bearing liabilities	27	1,284			432		161
Derivative financial instruments	4						
Commodity derivatives				7,512		244	
Interest rate and currency derivatives			10	167		4	
Trade payables	33	7,126					
Other liabilities	33	972					
Total		15,128	2,180	10,203	432	356	1,055
¹⁾ Fair valued part of bond in fair value hedge relationship.							

15 Financial assets and liabilities by fair value hierarchy

ACCOUNTING POLICIES

Fair value measurements are classified using a fair value hierarchy i.e. Level 1, Level 2 and Level 3 that reflects the significance of the inputs used in making the measurements.

FAIR VALUES UNDER LEVEL 1 MEASUREMENT HIERARCHY

The fair value of financial assets and liabilities classified as Level 1 is based on unadjusted quoted prices in active markets at the closing date. Level 1 consist e.g. commodity derivatives traded in active markets.

FAIR VALUES UNDER LEVEL 2 MEASUREMENT HIERARCHY

The fair value of financial assets and liabilities classified as Level 2 is based on observable input parameters, which are other than quoted prices.

The fair value of financial instruments traded in active markets in Level 2 is calculated using prices derived from quoted market prices at the closing date. Known calculation techniques, such as estimated discounted cash flows, are used to determine fair value of interest rate and currency financial instruments. The fair value of interest-rate swaps is calculated as the present value of the estimated future cash flows. The fair value of forward foreign exchange contracts is determined using forward exchange market rates at the closing date. Fair values of options are determined by using option valuation models. The fair value of financial liabilities is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the Group for similar financial instruments. The counterparty credit risk has been taken into account when determining fair value. The credit risk is determined based on a portfolio valuation in a bilateral approach covering both Fortum's own credit risk (debt value adjustment) and the credit risk of the corresponding counterparty (credit value adjustment).

The Group bases the calculation on existing market conditions at each closing date. Financial instruments traded in active markets are standardised products that are either cleared via exchanges or widely traded in the market. Trading commodity derivatives is mitigated by clearing trades through exchanges or by limiting trades to counterparties considered to be creditworthy, or secured by credit worthy guarantees. Financial derivatives with credit worthy financial institutions with investment grade ratings.

FAIR VALUES UNDER LEVEL 3 MEASUREMENT HIERARCHY

The fair value of financial assets and liabilities classified as Level 3 is based on unobservable input parameters. Level 3 consist mainly investments in unlisted shares classified as other investments for which the fair value is reliably measured and derivative financial instrument for which the fair value has been determined using techniques with unobservable inputs. The input parameters of Level 3 of the fair value hierarchy for equity are specified taking into account economic developments and available industry and corporate data. The credit risk has been adjusted when determining the fair value.

	Note	Level 1		Level 2		Level 3		Netting ¹⁾		Total
		2021	2020	2021	2020	2021	2020	2021	2020	
Financial assets										
EUR million										
In non-current assets										
Other investments	20	71	75	46	43	99	70			216
Derivative financial instruments										
Commodity derivatives	4									
Hedge accounting				62	52			-9	-29	53
Non-hedge accounting		5,136	1,030	11,708	1,563	207	138	-96	-24	16,955
Interest rate and currency derivatives	4									
Hedge accounting				54	170					54
Non-hedge accounting				34	46					34
Interest-bearing receivables		111	98			36	17			147
In current assets										
Derivative financial instruments										
Commodity derivatives	4									
Hedge accounting		50		572	185			-207	-60	416
Non-hedge accounting		22,876	2,851	45,575	5,090	326	6	-4,028	-655	64,750
Interest rate and currency derivatives	4									
Hedge accounting				57	26					57
Non-hedge accounting				170	89					170
Other receivables				13	62					13
Interest-bearing receivables		596	432		46	4	5			600
Total		28,840	4,486	58,291	7,372	672	237	-4,340	-768	83,465

1) Receivables and liabilities from standard electricity and other commodity derivative contracts against exchanges with same delivery period are netted in Fortum, except in Uniper-segment.

Financial liabilities

EUR million	Note	Level 1		Level 2		Level 3		Netting ²⁾		Total
		2021	2020	2021	2020	2021	2020	2021	2020	
In non-current liabilities										
Interest-bearing liabilities ¹⁾	27			1,669	2,145					1,669
Derivative financial instruments										
Commodity derivatives	4									
Hedge accounting										
Non-hedge accounting				257	106			-9	-29	248
Interest rate and currency derivatives	4	4,874	634	11,336	1,598	259	254	-96	-24	16,373
Hedge accounting										
Non-hedge accounting				27	56					27
In current liabilities				8	63					8
Interest-bearing liabilities										
Derivative financial instruments	27			549	497					549
Commodity derivatives										
Hedge accounting	4			2,721	304			-207	-60	2,934
Non-hedge accounting		420		52,531	5,612	86	10	-4,028	-655	68,905
Interest rate and currency derivatives	4	20,316	2,545							
Hedge accounting				4	14					4
Non-hedge accounting				103	167					103
Total		25,610	3,179	69,205	10,561	345	264	-4,340	-768	90,822

1) Fair valued part of bonds in fair value hedge relationship.

2) Receivables and liabilities from standard electricity and other commodity derivative contracts against exchanges with same delivery period are netted in Fortum, except in Uniper-segment.

At the end of December 2021, the net fair value of commodity derivatives was EUR -6,225 million, including assets of EUR 82 billion and liabilities of EUR -149 million in December 2020, including assets of EUR 10 billion and liabilities of EUR -149 million in December 2020, including assets of EUR 88 billion (EUR -149 million in December 2020, including assets of EUR 10 billion and liabilities of EUR -149 million in December 2020, including assets of EUR 88 billion).

The increase from December 2020 mainly relates to derivative financial instruments in the Uniper segment resulting from higher market prices for commodities.

Net fair value amount of interest rate and currency derivatives was EUR 171 million, including assets EUR 315 million and liabilities EUR 143 million. Fortum has cash collateral agreements with some counterparties. At the end of December 2021, Fortum had received EUR 152 million from collateral agreements. The received cash has been booked as short-term liability.

During 2021 there has been no transfers between Level 1 and Level 2.

Changes in fair value hierarchy Level 3

EUR million	1 Jan 2021		Purchases	Sales	Settlements	Gains / losses in income statement		Transfers into level 3	Transfers out of level 3	Gains / losses in OCI
On balance sheet, net										
Other investments	70	31				-3		52	-52	1
Commodity derivatives, fair values	382			166		219				
Commodity derivatives, day-1 gains and losses	-501			-100		26				
Interest-bearing receivables	22	19				-6	5			
Total on balance sheet, net	-27	50		66	18	221		52	-52	1

16 Intangible assets

ACCOUNTING POLICIES

Intangible assets, except goodwill, are stated at historical cost less accumulated amortisation and impairment losses; and amortised on a straight-line basis over their expected useful lives.

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at each closing date. An asset's carrying amount is written down to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount. See further information on the impairment testing in ► Note 19 Impairment testing.

Economic lives and book values intangible assets reflect approved actions towards Fortum's climate-related targets.

GOODWILL

Goodwill represents the excess of the cost of an acquisition over the fair value of the Group's share of net identifiable assets of the acquired subsidiary, associate or joint venture at the date of acquisition. Goodwill on acquisitions of subsidiaries is included in intangible assets and tested annually for impairment. Goodwill on acquisition of associates and joint ventures is included in investments in associates and joint ventures and is tested for impairment as part of the overall balance. Goodwill is carried at cost less accumulated impairment losses. Impairment losses on goodwill are not reversed. Gains and losses on disposal of an entity include the carrying amount of goodwill relating to the entity sold.

CONTRACT-BASED INTANGIBLE ASSETS

Majority of contract-based intangible assets are concession rights in Germany, which are valued at amortised costs. The remaining useful life of concession rights is approximately 30 years.

RESEARCH AND DEVELOPMENT COSTS

Research and development costs are recognised as expense as incurred and included in other expenses in the consolidated income statement. If development costs are expected to generate future income, they are capitalised as intangible assets and depreciated over the period of the income streams.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS:

ASSIGNED VALUES AND USEFUL LIVES IN ACQUISITIONS

In an acquisition acquired intangible and tangible assets are fair valued and their remaining useful lives are determined. Management believes that the assigned values and useful lives, as well as the underlying assumptions, are reasonable. Different assumptions and assigned lives could have a significant impact on the reported amounts.

The Group has significant carrying values in property, plant and equipment, intangible assets and participations in associated companies and joint ventures which are tested for impairment according to the accounting policy. See further information on the impairment testing in ► Note 19 Impairment testing.

EUR million	Goodwill		Contract-based			Other ¹⁾	
	2021	2020	2021	2020	2020	2021	2020
Cost 1 January	1,069	612	1,328	-	-	1,514	921
Translation differences and other adjustments	22	-58	29	-	-	27	-53
Acquisition of subsidiary companies ²⁾	-	515	-	1,349	-	-	523
Capital expenditure	-	-	-	-	-	118	124
Disposals	-	-	-1	-	-	-21	-12
Sale of subsidiary companies	-70	-	-22	-	-	-58	-4
Transfer to assets held for sale ²⁾	-	-	-	-22	-	-	-
Reclassifications	-	-	-	-	-	6	15
Cost 31 December	1,021	1,069	1,334	1,328	1,586	1,514	1,514
Accumulated depreciation 1 January	-	-	794	-	850	426	426
Translation differences and other adjustments	-	-	29	-1	-	16	-15
Acquisition of subsidiary companies ²⁾	-	-	-	809	-	-	324
Disposals	-	-	-1	-	-	-20	-14
Sale of subsidiary companies	-	-	-22	-	-37	-	-3
Transfer to assets held for sale ²⁾	-	-	-	-22	-	-	-
Reclassifications	-	-	-	-8	-	-	1
Depreciation for the year	-	-	20	15	144	130	130
Impairment charges	-	-	-	-	2	-	-
Accumulated depreciation 31 December	-	-	820	794	955	850	850
BS Carrying amount 31 December	1,021	1,069	514	534	632	664	664

1) In 2021, CO₂ emission allowances included in Intangible assets were reclassified to Inventories. Comparatives have been reclassified to Inventories.

2) See ► Note 22 Inventories.

2) See ► Note 3 Acquisitions, disposals and assets held for sale.

Goodwill in groups of cash-generating units

Goodwill is allocated to operating segments corresponding to groups of cash-generating units that benefit from the synergies of the acquired goodwill.

EUR million	2021	2020
Uniper	515	515
Consumer Solutions	223	214
Russia	144	134
City Solutions	137	205
Total	1,021	1,069

Other intangible assets

Other intangible assets include customer contracts, and costs for software products and software licenses.

17 Property, plant and equipment and right-of-use assets

ACCOUNTING POLICIES

Property, plant and equipment mainly include power and heat production-related buildings, structures and waterfalls rights, and other buildings and machinery.

Property, plant and equipment are stated at historical cost less accumulated depreciation and impairment. The consolidated balance sheet. Historical cost includes expenditure that is directly attributable to the acquisition of the asset. Borrowing costs are included in the cost of qualified assets. Additionally, the cost of an item of property, plant and equipment includes the estimated cost of its dismantlement, removal or restoration when there is a contractual obligation towards a third party, or a legal obligation.

Acquired assets on the acquisition of a new subsidiary are stated at their fair values at the date of acquisition. See ▶ Note 30 Other provisions for information about asset retirement obligations, ▶ Note 29 Nuclear power plants and liabilities, for information about provisions for decommissioning nuclear power plants and ▶ Note 30 Other provisions for information about right-of-use assets.

Land, water areas and waterfalls rights are not depreciated since they have indefinite useful lives.

Depreciation on other assets is calculated using the straight-line method to allocate their cost to their estimated useful lives, as follows:

- Buildings and structures: 10-50 years
 - Machinery and equipment: 3-65 years
- Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as only when it is probable that future economic benefits associated with the item will flow to the Group and the cost can be measured reliably. All other repairs and maintenance expenses are charged to the income statement during the financial period in which they are incurred.

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at each closing date. An asset's carrying amount is written down to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount. See further information on the impairment testing in ▶ Note 19 Impairment of assets.

Economic lives and book values of property, plant and equipment reflect approved actions towards related targets.

BORROWING COSTS

Borrowing costs directly attributable to the construction of qualifying assets are added to the cost of those assets. Qualifying assets are assets that take a substantial time to get ready for their intended use or sale.

EUR million	Land and waterfall rights		Buildings and structures		Machinery, equipment and other		Advances paid and construction in progress		Total
	2021	2020	2021	2020	2021	2020	2021	2020	
Cost 1 January	4,436	2,578	10,400	4,103	32,285	8,667	1,602	419	48,723
Translation differences and other adjustments ¹⁾	-75	219	145	-259	444	-224	41	-41	554
Acquisition of subsidiary companies ²⁾	-	1,636	-	6,414	-	22,825	-	3,088	-
Capital expenditure ^{1) 3)}	6	6	56	35	232	346	754	668	1,046
Additions to right-of-use assets	34	-	41	97	97	57	-	-	173
Decreases in right-of-use assets	-	-	-11	-60	-21	-29	-	-	-32
Nuclear asset retirement cost	-	-	-	-	56	172	-	-	56
Disposals	-14	-1	-33	-51	-337	-191	-8	-23	-392
Sale of subsidiary companies ²⁾	-17	-1	-257	-89	-602	-117	-100	-2	-975
Transfer to assets held for sale ²⁾	-	-3	-	-126	-	-1,375	-	-	-
Reclassifications	2	4	233	336	841	2,154	-1,116	-2,507	-41
Cost 31 December	4,371	4,436	10,574	10,400	32,996	32,285	1,172	1,602	49,113
Accumulated depreciation 1 January	280	1	5,936	1,765	22,983	3,877	157	-	29,357
Translation differences and other adjustments	4	7	143	-68	180	110	-2	12	325
Acquisition of subsidiary companies ²⁾	-	265	-	4,124	-	18,679	-	1,263	-
Disposals	-10	-1	-32	-48	-331	-179	-1	-8	-373
Sale of subsidiary companies ²⁾	-1	-	-78	-39	-269	-53	-	-	-348
Decreases in right-of-use assets	-	-	-1	-3	-12	-29	-	-	-13
Transfer to assets held for sale ²⁾	-	-	-	-118	-	-1,156	-	-	-
Depreciation for the year	5	7	180	164	932	774	1	1	1,117
Impairment charges	-	-	19	-	15	-	-	-	34
Reclassifications	-	-	-3	160	-40	959	8	-1,111	-35
Accumulated depreciation 31 December	279	280	6,164	5,936	23,460	22,983	162	157	30,064
BS Carrying amount 31 December	4,093	4,156	4,410	4,464	9,536	9,302	1,010	1,445	19,049

1) 2020 comparatives were revised in 2021 due to a revision of the lease adjustment following the finalisation of the purchase price allocation for the Uniper acquisition.

2) See Note 3 Acquisitions, disposals and assets held for sale

3) Includes EUR 50 million (2020: 39) of other asset retirement costs.

18 Participations in associated companies and joint ventures

ACCOUNTING POLICIES

The Group's interests in associated companies and jointly controlled entities are accounted for using the cost method of accounting. Assets acquired and liabilities assumed in the investment in associates or joint ventures are initially at their fair values at the acquisition date. The excess of the cost of acquisition over the fair value of the identifiable net assets acquired is recorded as goodwill.

The Group's share of its associates or joint ventures post-acquisition profits or losses after tax, and its share of the adjustments to the fair values of the assets and liabilities assumed are recognised in the income statement. The cumulative post-acquisition movements are adjusted against the carrying amount of the investment. The Group's share of post-acquisition adjustments to associates or joint ventures equity that has not been recognised in the associate's or joint venture's income statement, is recognised directly in Group's shareholder's equity against the carrying amount of the investment.

When the Group's share of losses in an associate or a joint venture equals or exceeds its interest in the joint venture, including any other unsecured receivables, the Group does not recognise further losses, but continues to incur obligations or made payments on behalf of the associate or joint venture.

Material unrealised gains on transactions between the Group and its associates or joint ventures are recognised in the consolidated financial statements to the extent of the Group's interest in the associate or joint venture. Material unrealised losses are also recognised in the consolidated financial statements to the extent of the Group's interest in the associate or joint venture unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies adopted for joint ventures have been changed where necessary to ensure consistency with the policies adopted for associates.

If more recent information is not available, the share of the profit of certain associated or joint ventures is included in the consolidated accounts based on the latest available information.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

Management is required to make significant judgements when assessing the nature of Fortum's interests in associates and when considering the classification of Fortum's joint arrangements. In the classification, emphasis is placed on the legal form of the arrangement, the substance of the arrangement, the decision making, legal structure, financing and risks of the arrangements.

Management judgement is required when testing the carrying amounts for participations in associated companies and joint ventures for impairment. See ▶ Note 19 Impairment testing for more information.

18.1 Principal associated companies and joint ventures

Nature of the relationship	Forsmarks			TGC-1	TVO Oyj
	Kraftgrupp AB	Kemijoki Oy			
Classification	Co-owned nuclear company	Co-owned hydro company	Energy company (listed)	Co-owned nuclear company	
	Associated company	Associated company	Associated company	Joint venture	
Segment	Generation,				
Domicile	Uniper Sweden	Generation Finland	Russia	Generation Finland	
Ownership interest, % ¹⁾	34	58	Russia 29.99		26
Votes, %	34	28	29.99		26

¹⁾ Kemijoki and TVO have different series of shares. The ownership interest varies due to the changes in equity assigned to the different share series. The ownership interests for 2020 for Kemijoki Oy and TVO were 58% and 26% respectively.

Shareholdings in power production companies

Power plants are often built jointly with other power producers. Under the consortium agreements, each owner is entitled to electricity in proportion to its share of ownership, or other agreements, and each owner is liable for an equivalent portion of costs. The production companies are not profit making, since the owners purchase electricity at production cost, including interest cost and production taxes. The share of profit of these companies is mainly IFRS adjustments (e.g. accounting for nuclear-related assets and liabilities) and depreciations on fair value adjustments from historical acquisitions since the companies are not profit making under local accounting principles.

Fortum has material shareholdings in such power production companies (mainly nuclear and hydro) that are consolidated using equity method either as associated companies (Forsmarks Kraftgrupp AB and Kemijoki Oy) or as joint venture (Teollisuuden Voima Oyj (TVO)).

In Sweden, nuclear production company shareholding is 34.0% ownership of the shares in Forsmarks. Excluding non-controlling interests in the subsidiaries, Fortum's participation in the company is 29.7%, which share of electricity produced that Fortum can sell further to the market. The minority part of the electricity is invoiced further to each minority owner according to their respective shareholding and treated as pass-through. In Finland, Fortum has an ownership in power production company TVO that has two series of shares. The shareholders to electricity produced in the different power plants owned by TVO. Shares in series A electricity produced in nuclear power plants Olkiluoto 1 and 2 and Fortum owns 26.6% of these shares. To electricity in the nuclear power plant currently under test production phase, Olkiluoto 3, and Fortum's this share series is 25.0%.

See also Associated companies in Note 29 Nuclear-related assets and liabilities. The most significant hydro production company shareholding is 63.8% of the hydro shares and 26.7% monetary shares in Kemijoki Oy. Each owner of hydro shares is entitled to the hydropower production in hydro shareholding.

Shareholdings in other principal associated companies and joint ventures

Fortum has also other shareholdings in listed companies, such as Territorial Generating Company 1 (TGC-1) shareholding in TGC-1 is accounted for as an associated company as Fortum has representatives in the Directors of the company. The share of profit of TGC-1 is accounted for based on previous quarterly information updated information as at 31 December is not available for financial statements.

Changes in shareholdings in principal associated companies and joint ventures

On 20 September 2021, Fortum concluded the sale of its 50% ownership in the Swedish district heating company Stockholm Exergi Holding AB (publ). See also Note 3.2.2 Other disposals.

On 31 March 2020 Fortum consolidated Uniper as a subsidiary, meaning that Uniper is no longer included in participations in associated and joint ventures on Fortum's consolidated balance sheet. Fortum and Uniper owners in the Swedish nuclear company OKG AB. Fortum accounting for the shareholding in OKG AB as a company until 31 March 2020, and consolidated OKG as a subsidiary from 31 March 2020. See also Note 3.2.2 Other disposals. acquisition in March 2020.

Summarised financial information of the principal associated companies in 2021

EUR million	Forsmarks			TGC-1		
	Kraftgrupp AB	Kemijoki Oy	31 Dec 2020	31 Dec 2020	30 Sept 2021	30 Sept 2021
Balance sheet	2,619	483	1,863	1,863		
Non-current assets	441	7	273	273		
Current assets	2,899	323	213	213		
Non-current liabilities	128	116	223	223		
Current liabilities	33	52	1,700	1,700		
Equity	33	52	1,548	1,548		
Attributable to the owners of the parent	-	-	153	153		
Attributable to non-controlling interests	-	-	-	-		
Statement of comprehensive income						
Sales	561	53	1,136	1,136		
Profit or loss	-1	1	104	104		
Attributable to the owners of the parent	-1	1	103	103		
Attributable to non-controlling interests	-	-	2	2		
Total comprehensive income	-1	1	105	105		
Attributable to the owners of the parent	-1	1	103	103		
Attributable to non-controlling interests	-	-	2	2		
Reconciliation to carrying amount in Fortum Group						
Group's interest in the equity of the associate	12	30	409	409		
1 January	-	-	31	31		
Change in share of profit and OCI items	-	-	-14	-14		
Dividends received	-	-	39	39		
Translation differences and other adjustments	-	-	-	-		
Group's interest in the equity of the associate 31 December	12	30	464	464		
Fair values on acquisitions and different accounting principles ¹⁾	479	149	-8	-8		
Carrying amount 31 December	491	179	456	456		
Market value of listed shares ²⁾						
			135	135		

¹⁾ Impact of different accounting principles include mainly IFRS adjustments for nuclear-related assets and liabilities, capitalised borrowing costs and fair value adjustment for the acquired assets and liabilities. Fortum records its share of nuclear-related assets and liabilities in its nuclear associated companies according to equity method. The basis for recognition is similar as for Loviisa power plant, see accounting principles in ▶ Note 29 Nuclear-related assets and liabilities.

²⁾ The market quotation is impacted by the limited free float of TGC-1 share.

Summarised financial information of the principal associated companies in 2020

EUR million	Forsmarks			Kraftgrupp AB			Kemijoki Oy		
	31 Dec 2019	31 Dec 2020	31 Dec 2021	31 Dec 2019	31 Dec 2020	31 Dec 2021	31 Dec 2019	31 Dec 2020	31 Dec 2021
Balance sheet	2,641	2,641	2,641	2,641	2,641	2,641	2,641	2,641	2,641
Non-current assets	423	423	423	423	423	423	423	423	423
Current assets	2,889	2,889	2,889	2,889	2,889	2,889	2,889	2,889	2,889
Non-current liabilities	141	141	141	141	141	141	141	141	141
Current liabilities	34	34	34	34	34	34	34	34	34
Equity	34	34	34	34	34	34	34	34	34
Attributable to the owners of the parent	-	-	-	-	-	-	-	-	-
Attributable to non-controlling interests	-	-	-	-	-	-	-	-	-
Statement of comprehensive income									
Sales	543	543	543	543	543	543	543	543	543
Profit or loss	-	-	-	-	-	-	-	-	-
Attributable to the owners of the parent	-	-	-	-	-	-	-	-	-
Attributable to non-controlling interests	-	-	-	-	-	-	-	-	-
Total comprehensive income	-	-	-	-	-	-	-	-	-
Attributable to the owners of the parent	-	-	-	-	-	-	-	-	-
Attributable to non-controlling interests	-	-	-	-	-	-	-	-	-
Reconciliation to carrying amount in Fortum Group									
Group's interest in the equity of the associate	8	8	8	8	8	8	8	8	8
1 January	-	-	-	-	-	-	-	-	-
Change in share of profit and OCI items	-	-	-	-	-	-	-	-	-
Dividends received	3	3	3	3	3	3	3	3	3
Translation differences and other adjustments	-	-	-	-	-	-	-	-	-
Group's interest in the equity of the associate 31 December	12	12	12	12	12	12	12	12	12
Fair values on acquisitions and different accounting principles ¹⁾	444	444	444	444	444	444	444	444	444
Carrying amount 31 December	456	456	456	456	456	456	456	456	456
Market value of listed shares ²⁾									
	-	-	-	-	-	-	-	-	-

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Summarised financial information of the principal joint ventures

EUR million	2021		2020		Stockholm Exergl AB
	31 Dec 2021	TVO Oyj 31 Dec 2021	TVO Oyj 31 Dec 2020	31 Dec 2020	
Balance sheet		7,946	7,691	2,663	
Non-current assets		716	490	274	
Current assets		172	161	1	
of which cash and cash equivalents					
Non-current liabilities		5,967	5,599	1,461	
of which non-current interest-bearing liabilities		4,599	4,569	1,023	
Current liabilities		632	539	316	
of which current financial liabilities		449	429	173	
Equity		2,063	2,043	1,161	
Attributable to the shareholders of the company		2,063	2,043	1,160	
Attributable to non-controlling interests		-	-	1	
Statement of comprehensive income					
Sales	1 Jan 2021 - 31 Dec 2021	1 Jan 2020 - 31 Dec 2020	1 Jan 2020 - 31 Dec 2020	1 Jan 2020 - 31 Dec 2020	
Depreciation and amortisation	299	275	589		
Interest income	-44	-45	-144		
Interest expense	5	12	-		
Income tax expense or income	-42	-40	-18		
Profit or loss	-20	-	-22		
Other comprehensive income	44	-22	-14		
Total comprehensive income	25	-22	70		
Attributable to the shareholders of the company	25	-22	70		
Reconciliation to carrying amount in Fortum Group					
Group's interest in the equity of the joint venture at 1 January	518	462	563		
Change in share of profit and OCI items	5	-	35		
Dividends received	-	-	-41		
Investments	-	63	-		
Translation differences and other adjustments	-	-6	24		
Group's interest in the equity of the joint venture 31 December	523	518	580		
Fair values on acquisitions and different accounting principles ¹⁾	3	3	-61		
Carrying amount 31 December	526	521	519		

¹⁾ Impact of different accounting principles include mainly IFRS adjustments for nuclear-related assets and liabilities and capitalised borrowing costs. Fortum records its share of nuclear-related assets and liabilities in its nuclear associated companies according to equity method. The basis for recognition is similar as for Lovisa power plant, see accounting principles in ► Note 29 Nuclear-related assets and liabilities.

Summarised financial information of the principal joint ventures

18.2 Participations in and share of profits from associated companies and joint ventures

Participations in associated companies and joint ventures on the balance sheet			
EUR million	2021	2020	
Principal associates	1,111	511	
Principal joint ventures	51	31	
Other associates	31	51	
Other joint ventures	51	2,411	
BS Total	2,404	2,404	

Changes in participation during the year

2021			
EUR million	Associated companies	Joint ventures	Associated companies
Opening balance 1 January	1,508	1,404	5,177
Acquisitions ¹⁾	-	-	-
Investments	6	39	53
Share of profit of associates and joint ventures	104	88	-4
Dividend income received	-37	-76	-2
Divestments and capital returns ²⁾	-18	-551	-4,661
Reclassifications ¹⁾	-152	94	-1
OCI items in associates and joint ventures	-1	39	-12
Translation differences and other adjustments	26	-	-
Carrying amount at 31 December	1,435	1,026	1,511

¹⁾ Acquisitions and reclassifications in 2020 mainly relate to Uniper consolidation at 31 March 2020.
²⁾ Divestments and capital returns mainly related to the sale of Stockholm Exergl AB.

During 2021 Fortum received EUR 113 million (2020: 116) in dividends from associates and joint ventures. EUR 42 million (2020: 41) was received from Stockholm Exergl.
For information about investments and divestments of shares in associated companies, see Note 3 disposals and assets held for sale.

Share of profit of associates and joint ventures

EUR million	2021	2020
Principal associates		
Formarks Kraftgrupp AB	46	46
Kemijoki Oy	-1	-1
TGC-1	33	24
Principal associates, total	77	69
Principal joint ventures		
TVO Oyj	-3	21
Principal joint ventures, total	-3	21
Other associates ¹⁾	27	490
Other joint ventures	91	76
IS Total	192	656

¹⁾ In 2020, included share of profit of EUR 469 million from Uniper SE.

Comparable share of profit of associates and joint ventures

EUR million	2021	2020
IS Share of profit/loss of associates and joint ventures	192	656
Adjustments to share of profit/loss of associates and joint ventures	-38	-
Comparable share of profit/loss of associates and joint ventures	154	656

In 2021, Fortum introduced a new Comparable net profit APM. See more information in ► Note 1 Significant accounting policies and ► Definitions and reconciliations of key figures.

There are no unrecognised share of losses of associated companies and joint ventures.

Uniper

Fortum previously accounted for Uniper as an associated company with a three-month time lag as Fortum's annual report before Uniper's financial information was available. In the first quarter of 2020, Fortum revised its reporting schedule and publishes annual and interim reports after Uniper. Fortum's first quarter 2020 results already include Uniper's results from 1 October 2019 to 31 March 2020.

Fortum's share of Uniper's IV/2019 profits, EUR 162 million, included a reversal of the adjustment which was already made in IV/2019 related to the impact from the reinstatement of the UK capacity market. Fortum's reversal of EUR 389 million (after tax) related to the negative impact of Uniper's IV/2019 impairments.

Fortum's share of Uniper's I/2020 profits, EUR 307 million, included a reversal of EUR 61 million after the negative impact of Uniper's I/2020 impairments.

In the purchase price allocation for the acquisition of 49.99% of the shares in Uniper, Fortum recorded an adjustment of EUR 613 million (after tax), relating to political and regulatory risks of certain generation assets of Uniper. If Uniper reports negative impacts relating to these generation and production assets, Fortum assesses the potential need to use this fair value adjustment to reverse these negative impacts. Fortum and concluded to use the fair value adjustment to reverse the majority of this negative impact from the information reported by Uniper in their IV/2019 and I/2020 results.

The remaining fair value adjustment from the purchase price allocation for the acquisition of 49.99% of the shares in Uniper ceased to exist on 31 March 2020. Following the consolidation of Uniper as a subsidiary, Fortum's new purchase price allocation. See ► Note 3.1.2 Uniper acquisition in March 2020.

19 Impairment testing

ACCOUNTING POLICIES

The carrying values of goodwill, other intangible assets, property, plant and equipment, right-of-use assets, and non-financial investments are reviewed regularly for indication of impairment.

Indications of impairment are business-specific and are thus analysed separately by each segment; and include risks, such as changes in electricity and fuel prices, regulatory/political risks relating to energy taxes, price regulations, and limitations to the lifetime of assets.

Impairment testing is performed if there is an indication of impairment; and the asset is written down to its recoverable amount if its carrying amount is greater than the estimated recoverable amount.

In addition, goodwill and other intangible assets that have an indefinite useful life, and as such are not subject to amortisation, are tested annually for impairment, even if there is no indication of impairment. Impairment testing is performed and documented annually in connection with the long-term forecasting process.

Annual impairment testing is performed on a cash-generating unit level. Fortum defines cash-generating unit as the smallest group of assets that generate cash flows that are independent of the cash flows generated by other assets.

Goodwill is allocated to groups of cash-generating units that benefit from the synergies of the acquired goodwill. Fortum uses value in use to establish the recoverable amount of cash-generating units. Value in use is determined by discounting future cash flows expected to be derived from group of assets. The carrying amount of group of cash generating units comprises net operating assets, including goodwill and fair value adjustments arising from acquisitions. Non-financial assets, other than goodwill, that have been impaired in the past are reviewed for possible reversal of impairment at each reporting date.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS: ASSUMPTIONS RELATED TO IMPAIRMENT TESTING

Impairment testing is forward-looking and requires management to make certain assumptions, as explained below. The recoverable amounts of cash-generating units are determined by value in use calculations. These calculations are based on estimated discounted future cash flows in local currency from most recent, long-term forecast, and / or long-term assumptions approved by management. Cash flows cover an explicit forecast period of six years. The explicit forecast period is longer than five years as significant assets used by the business, such as power plants, have useful lives exceeding 20 years. Cash flow projections beyond the explicit forecast period are estimated by extrapolating projections using a steady or declining growth rate.

The period covered by cash flows is related to the useful lives of the assets being reviewed for impairment. The growth rate used to extrapolate the cash flow projections until the end of assets' useful lives is in line with the assumed inflation, taking into consideration market outlook forecast. Cash flows arising from future investments, such as new plants, are excluded; unless projects have been started, in which case the cash outflow needed to complete the started projects is included. In Russia, the generation capacity built after 2007 under the Russian Government's Capacity Supply Agreements receives guaranteed capacity payments for a period of 10 years after commissioning.

The discount rates reflect current assessments of the time value of money and relevant market risk premiums specific to each cash generating unit, reflecting risks and uncertainties for which the future cashflow estimates have not been adjusted.

Preparation of these cash flow estimates requires management to make assumptions relating to future targets are reflected in the assumptions used in the impairment testing.

Key assumptions used in impairment testing are presented below, as well as the basis for determining each assumption. Assumptions are based on internal and external data that are consistent with observable information, when applicable.

Key assumptions	Basis for determining the value for key assumptions
Power market development, recycling and waste solutions market development	Historical analysis and prospective forecasting
Regulation framework	Current market setup and prospective forecasting (e.g. CSA mechanism in Russia)
Utilisation of power plants and treatment facilities	Past experience, technical assessment and forecasted market demand
Forecasted maintenance investments	Past experience, technical assessment and planned maintenance
Discount rate	Mostly market-based information

Annual impairment testing

Annual impairment testing was performed as at 31 December 2021. The table below presents long-term discount rates used in impairment testing by cash generating units:

Discount rate %	2021
Consumer Solutions ¹⁾	4.5-5.4
City Solutions ¹⁾	4
Russia	11
Uniper ¹⁾	4.6-11

¹⁾ Discount rate depends on location and type of business.

At 31 December 2021, the recoverable values were greater than their carrying values and therefore no impairment was booked.

The Group has considered the sensitivity of key assumptions as part of the impairment testing. When the consequential effect of the change on the other variables has also been considered. The calculations are based on estimated future EBITDA levels, and changes in discount rate. Management estimates the possible change in the discount rate used, or in future earnings would cause the carrying amount to exceed the recoverable amount in any group of cash generating units.

20 Other non-current assets

EUR million	2021	2020
Other investments	254	224
Interest-free receivables	316	255
BS Total	570	479

Other investments mainly include certain subsidiaries that are not included in the consolidated financial statements on materiality grounds, accounted for outside the scope of IFRS 9 and measured at cost (see ► Note 40 Group companies by segment); as well as shares in unlisted companies.

Interest-free receivables mainly include prepaid expenses.

21 Interest-bearing receivables

EUR million	2021	2020
Interest-bearing receivables	2,971	2,804
Finance lease receivables	136	196
Total	3,107	3,000

EUR million	2021		2020	
	Carrying amount	Fair value	Carrying amount	Fair value
Long-term loan receivables from associates and joint ventures	1,138	1,185	1,113	1,161
Non-current securities	111	111	98	98
Other long-term interest-bearing receivables	1,024	1,024	1,010	1,010
Total long-term interest-bearing receivables	2,273	2,320	2,221	2,270
Collateral arrangement securities	549	549	432	432
Other short-term interest-bearing receivables	149	149	151	151
Total short-term interest-bearing receivables	698	698	582	582
Total	2,971	3,018	2,804	2,852

Long-term interest-bearing receivables include receivables from associated companies and joint ventures of EUR 1,138 million (2020: 1,113). These receivables include EUR 955 million from Swedish nuclear companies, Forsmarks Kraftgrupp AB and Ringhals AB (2020: 964), which are mainly funded with shareholder loans, pro-rata to each shareholder's ownership.

22 Inventories

ACCOUNTING POLICIES

Inventories are stated at the lower of cost and net realisable value being the estimated selling price for less applicable variable selling expenses and other production costs. Cost is generally determined using average cost method.

Inventories which are acquired for the purpose of buying and selling commodities in the near future, from the fluctuation in market price, are stated at fair value less cost to sell.

EMISSION ALLOWANCES

In 2021, CO₂ emission allowances were reclassified from Other intangible assets to Inventories in order the nature of these assets.

Inventories include CO₂ emission allowances for covering emissions caused by power and heat production. Emission allowances received free of charge are accounted at nominal value. Purchases of CO₂ emissions meeting the IFRS 9 "own use"-criteria, are accounted for at contracted purchase price. Purchases of CO₂ allowances, which have failed to meet the "own use"-criteria, and are thus accounted for as derivative recognised at market price applicable at the time of delivery.

CO₂ emission costs are settled by returning the emission allowances. The obligation for CO₂ emissions presented in Other payables, see ► Note 33 Trade and other payables. To the extent that the Group and its subsidiaries have CO₂ emission allowances to cover the emission costs, the obligation is measured at the carrying amount of those allowances. Shortfall of allowances needed to cover the settlement obligation is valued at the current market value.

The emission cost is recognised in the consolidated income statement within materials and services.

EUR million	2021	2020
Raw materials and supplies	7	7
Goods purchased for resale	1,2	1,2
Emission rights and green certificates ¹⁾	1	1
Other	1	1
BS Total	2,2	2,2

¹⁾ In 2021, CO₂ emission allowances were reclassified from Intangible assets to Inventories. Comparatives have been reclassified accordingly.

Raw materials and supplies mainly consist of fuels consumed in the production process, or in the rendering and inventory, in particular, coal, uranium and nuclear fuel rods. Goods purchased for resale include gas inventories. Other mainly consists of work in progress and finished goods.

Inventories stated at fair value less costs to sell total EUR 74 million (2020: 45).

23 Trade and other receivables

ACCOUNTING POLICIES

Trade receivables include revenue based on an estimate of electricity, gas, heat and cooling already delivered but not yet measured and not yet invoiced.

Impairment losses for trade receivables are calculated according to the expected credit loss (ECL) model. Loss allowances on trade receivables are measured at an amount equal to lifetime expected credit losses.

An allowance is made on the balance sheet for the expected future credit losses and remains on the balance sheet until it is written off as a credit loss or reversed. Allowances may remain on the balance sheet for several years pending the outcome of collection processes and court proceedings. Write-off policies differ by country depending on local legislation and assessment of recovery possibilities. For large trade receivables, ECL is calculated for the individual customer based on the estimated probability of default and expected recovery rate for the customer. These estimates are derived from available market data when possible, or based on the customer's rating. Adjustments are made if there are indications of decreased creditworthiness, e.g. based on payment behaviour. ECL for trade receivables from small customers are calculated on portfolio basis by country and business segment. The credit loss allowances are based on historical analysis of losses when possible, or on average default rates for customers based on externally available information. These rates are adjusted if there are any forward-looking indicators showing changes in expected credit losses. Trade receivables overdue more than 180 days are generally considered to be credit-impaired and allowances are made for the full amount, adjusted for expected recovery rates.

EUR million	2021	2020
Trade receivables	12,916	7,115
Other	1,940	1,790
BS Total	14,856	8,906

Other category includes other operating assets, accrued income and prepaid expenses.

Trade receivables Ageing analysis of trade receivables

	2021			2020
	Gross allowance	Expected credit loss	Expected credit loss rate, %	Expected credit loss allowance
EUR million				
Not past due	12,662	14	0	6,988
Past due 1-30 days	192	5	2	60
Past due 31-90 days	22	9	42	21
Past due 91-180 days	34	16	48	18
Past due more than 181 days	204	154	75	206
Total	13,114	198	2	7,293

Changes in expected credit loss allowance

EUR million	
1 January	
Expected credit loss allowance recognised during the year	
Write-offs	
Acquisition of subsidiary companies	
Translation differences and other changes	
31 December	

The majority of impaired trade receivables relate to the Russia and Uniper segments.

Trade receivables by currency (Gross)

EUR million	
EUR	9
USD	1
GBP	
NOK	
SEK	
RUB	
PLN	
Other	
Total	13

Trade receivables are arising from a large number of customers mainly in EUR, USD, GBP and NOK with a concentration of risk.

For further information regarding credit risk management and credit risks, see ► Counterparty and credit risk. Operating and financial review and ► Note 4.4 Credit risk.

24 Liquid funds

ACCOUNTING POLICIES

Cash and cash equivalents in Liquid funds include cash in hand, deposits held at call with banks and other short-term, highly liquid investments with original maturities of three months or less. Cash and cash equivalents, deposits and commercial papers are measured at amortised cost. Fixed-term securities are measured at fair value through profit or loss. Drawn amount of bank overdrafts are shown within borrowings in current liabilities on the balance sheet. Trading-related cash collaterals are included in margin receivables and otherwise restricted cash is treated as short-term interest-bearing receivables.

EUR million	2021	2020
Cash at bank and in hand	3,858	834
Deposits and securities with maturity under 3 months	3,687	1,063
Cash and cash equivalents	7,545	1,898
Deposits and commercial papers with maturity more than 3 months	-	363
Securities, fixed-term with maturity more than 3 months	47	46
Deposits and securities, maturity over 3 months but less than 12 months	47	410
BS Total	7,592	2,308

At the end of the reporting period, the Group's liquid funds totalled EUR 7,592 million (2020: 2,308). Liquid funds include EUR 2,966 million (2020: 289) held by the Uniper segment. Russian subsidiaries held EUR 300 million (2020: 244) of liquid funds in the form of cash and bank deposits.

Liquid funds totalling EUR 7,342 million (2020: 2,107) are placed with counterparties that have an investment grade credit rating.

At the end of the reporting period, Fortum had undrawn committed credit facilities amounting to EUR 400 million. The undrawn facilities consisted of EUR 300 million of the total new EUR 800 million bilateral revolving credit facility maturing in December 2022 with borrower's one-year extension option and EUR 100 million committed overdraft limits that are valid until further notice.

The EUR 1,750 million revolving credit facility with maturity in June 2023 and Uniper's revolving credit facility of EUR 1,800 million with maturity in September 2025 were both totally drawn in December 2021.

For further information regarding credit risk management and credit risks, see » Note 4.4 Credit risk.

25 Share capital

Number of registered shares 1 January and 31 December
Share capital, EUR million, 1 January and 31 December

2021
888,294,465
3,046

Fortum Corporation has one class of shares. By the end of 2021, a total of 888,294,465 shares had been issued. All share entitles the holder to one vote at the Annual General Meeting. All shares entitle holders to an equal share of the net assets of Fortum Corporation at the end of 2021 Fortum Corporation's share capital, paid in its entirety and entered in the trade register, was EUR 3,046,185,953.00.

Fortum Corporation's shares are listed on Nasdaq Helsinki. The trading code is FORTUM. Fortum Corporation's shares are in the Finnish book entry system maintained by Euroclear Finland Ltd.

Details on the President and CEO and other members of the Fortum Executive Management Team's remuneration and interest in the equity incentive schemes is presented in » Note 10 Employee benefits and Board remuneration.

25.1 Authorisations from the Annual General Meeting 2021

In 2021, the Annual General Meeting decided to authorise the Board of Directors to decide on the repurchase of the company's own shares up to a maximum number of 20,000,000 shares, which corresponds to approximately 2.25% of all the shares in the company. These authorisations are effective until the next Annual General Meeting and, in any event, for a period no longer than 18 months. These authorisations had not been used by the end of March 2022.

25.2 Convertible bond loans and bonds with warrants

Fortum Corporation has not issued any convertible bonds or bonds with attached warrants, which would entitle the bearer to subscribe for Fortum shares. The Board of Directors of Fortum Corporation has not issued any convertible bonds or bonds with attached warrants. The General Meeting of shareholders to issue convertible bond loans or bonds with warrants has not been decided at the General Meeting of shareholders to issue convertible bond loans or bonds with warrants to increase the share capital.

26 Non-controlling interests

Principal non-controlling interests

EUR million	2021	2020
Uniper, Germany	1,318	2,430
Fortum Oslo Varme AS Group, Norway	150	147
Other	66	48
BS Total	1,534	2,624

EUR million	Uniper 2021	Uniper 2020 ¹⁾
Sales	105,992	44,154
Loss/profit for the period	-4,122	4

Dividends paid to non-controlling interests
Total cash flows

Current assets	91,093	18,414
Current liabilities	95,331	17,781
Current net liabilities/assets	-4,238	633

Non-current assets	27,683	11,729
Non-current liabilities	25,782	10,729
Non-current net assets	1,901	1,000

Net liabilities/assets	-2,337	1,633
of which attributable to non-controlling interests	1,318	2,430

Ownership interests held by non-controlling interests (%)

¹⁾ Uniper's income statement and cash flow information are included from 1 April 2020.

27 Interest-bearing liabilities

Financial net debt and adjusted net debt

EUR million	2021	2020
+ Interest-bearing liabilities	17,220	17,220
- BS Liquid funds	7,511	7,511
- Non-current securities	1	5
- Collateral arrangement securities	6	9
- Securities in interest-bearing receivables	-6	-9
- BS Margin receivables	9,119	9,119
+ BS Margin liabilities	9	9
+/- Net margin liabilities/receivables	-8,110	-8,110
Financial net debt	9,110	9,110

+ BS Pension obligations	1,118	1,118
+ Other asset retirement obligations	8	8
- BS Share of Finnish and Swedish Nuclear Waste Funds	3,515	3,515
+ BS Nuclear provisions	3,813	3,813
+ Nuclear provisions net of assets in Nuclear Waste Funds	3	3
+ Total provisions net of assets in Nuclear Waste Funds	2,410	2,410
Adjusted net debt	3,220	3,220

Financial net debt decreased during the year by EUR 6,234 million from EUR 7,023 million to EUR 789 million in December 2021. Liquid funds increased by EUR 5,284 million from EUR 2,308 million to EUR 7,592 million in December 2021. The higher commodity prices lead to higher margin requirements and the net margin receivables therefore increased by EUR 7,378 million from EUR 801 million to EUR 8,179 million in December 2021. Bearing liabilities increased by EUR 6,558 million from EUR 10,662 million to EUR 17,220 million in December 2021. Fortum has a collateral arrangement to release cash from the Nordic Power Exchange. The arrangement presented with equal amounts, EUR 549 million (2020: 432), as a short-term interest-bearing receivable.

Underfunded pension obligations and asset retirement obligations, net of share in nuclear waste fund in adjusted net debt.

Loans

Interest-bearing liabilities			
EUR million	2021	2020	
Non-current loans	7,756	7,891	
Current loans	8,389	1,716	
Total loans	16,144	9,607	
Non-current lease liabilities	945	894	
Current lease liabilities	130	161	
Total lease liabilities	1,075	1,055	
Total	17,220	10,662	
EUR million	2021	2020	
Bonds	2,706	3,758	
Loans from financial institutions	3,715	2,556	
Reborrowing from the Finnish State Nuclear Waste Management Fund	916	1,145	
Lease liabilities	945	894	
Other long-term interest-bearing liabilities	419	433	
BS Total long-term interest-bearing liabilities	8,701	8,785	
Current portion of long-term bonds	999	500	
Current portion of loans from financial institutions	468	20	
Current portion of other long-term interest-bearing liabilities	264	14	
Commercial paper liabilities	3,129	260	
Current portion of lease liabilities	130	161	
Collateral arrangement liability	549	432	
Other short-term interest-bearing liabilities	2,980	490	
BS Total short-term interest-bearing liabilities	8,519	1,877	
Total	17,220	10,662	

Loans

EUR million	Effective interest rate, %	Carrying amount	Repricing			Fair value at 31 December 2021
			Under 1 year	1-5 years	Over 5 years	
Bonds	1.9	3,705	1,107	1,752	846	3,919
Loans from financial institutions	0.6	4,183	3,553	630	-	4,222
Reborrowing from the Finnish State Nuclear Waste Management Fund	0.5	1,165	1,165	-	-	1,213
Other long-term loans	2.6	433	221	-	212	463
Total long-term loans ¹⁾	1.2	9,487	6,047	2,382	1,058	9,817
Collateral arrangement liability	0.8	549	549	-	-	549
Commercial paper liabilities	0.2	3,129	3,129	-	-	3,129
Other short-term loans	0.4	2,980	2,980	-	-	2,980
Total short-term loans	0.3	6,658	6,658	-	-	6,658
Total ²⁾	0.8	16,144	12,704	2,382	1,058	16,475

1) Includes current portion of long-term loans of EUR 1,731 million (2020: 534).

2) The average interest rate on loans and derivatives was 1.3% (2020: 1.5%).

The interest-bearing liabilities increased in 2021 by EUR 6,558 million to EUR 17,220 million (2020: 10,662 million). The amount of short-term loans increased by EUR 5,476 million, and at the end of the year the amount of short-term loans was EUR 6,658 million (2020: 1,182). The increase is mainly due to the use of commercial paper programmes, which increased by EUR 2,869 million to EUR 3,129 million on 31 December 2021.

In May 2021 Fortum repaid a maturing bond of EUR 500 million.

In December 2021 Fortum signed new bilateral financing agreements to further strengthen the liquidity.

These agreements consisted of a EUR 400 million bank loan maturing in September 2024, a EUR 500 million bank loan (maturing in June 2023 with extension option of eight months) and a revolving credit facility of EUR 800 million (maturing in December 2022 with extension option of one year), of which EUR 500 million was drawn as of 31 December 2021. Additionally, Fortum withdrew the core revolving credit facility EUR 1,750 million in December 2021.

In December 2021 Uniper extended the existing EUR 400 million bank loan, maturing in September 2022, to mature in March 2023 and signed a new EUR 150 million bank loan with maturity in January 2024. Additionally, Uniper withdrew a revolving credit facility EUR 1,800 million in December 2021.

Current portion of long-term loans, EUR 1,731 million, consist of EUR 1,000 million bond maturing in September 2022, EUR 450 million term loan and EUR 281 million other loans. The EUR 450 million term loan is part of the EUR 2,000 million loan originally maturing in October 2022 of which EUR 1,550 million was prepaid in December 2021.

The average interest rate for the portfolio of EUR loans was 0.6% at the balance sheet date (2020: 0.9%). The average interest rate on total loans and derivatives was 1.3% at the balance sheet date (2020: 1.5%). Part of the external loans, EUR 925 million (2020: 634), have been swapped to RUB and the average interest cost for these loans, including cost for hedging the RUB, was 8.3% at the balance sheet date (2020: 6.2%).

For more information, see ► **Note 4** Financial risk management ► **Note 34** Leases and ► **Note 36** Pledged assets and contingent liabilities.

Reconciliation of interest-bearing liabilities

EUR million	1 Jan 2021 subsidiary companies	Divestment of subsidiary companies	Cash flow from financing activities ¹⁾	Non-cash changes/Valuation differences/Change in consolidation	Lease liabilities
Bonds	4,258		-500	-52	
Reborrowing from the Finnish State Nuclear Waste Management Fund	1,145		21		
Financial and other interest-bearing liabilities	4,204	-202	7,120	35	173
Lease liabilities	1,055		-152		173
Total	10,662	-202	6,488	-17	173
EUR million	1 Jan 2020 subsidiary companies	Acquisition of subsidiary companies	Cash flow from financing activities ¹⁾	Non-cash changes/Valuation differences/Change in consolidation	Lease liabilities
Bonds	4,251			7	
Reborrowing from the Finnish State Nuclear Waste Management Fund	1,185		-40		
Financial and other interest-bearing liabilities	1,144	557	2,414	-61	38
Lease liabilities	108	1,018	-105	-5	38
Total	6,688	1,575	2,269	-60	38

¹⁾ Repayments and borrowings.

Bond issues

Issued/Maturity	Interest basis	Interest rate, %	Effective interest, %	Currency	Nominal value in million
Fortum Corporation EUR 8,000 million EMTN Programme ¹⁾					
2012/2022	Fixed	2.250	2.344	EUR	1,000
2019/2023	Fixed	0.875	0.996	EUR	1,000
2019/2026	Fixed	1.625	1.638	EUR	1,750
2019/2029	Fixed	2.125	2.247	EUR	1,750
2013/2023	Floating	Stibor 3M+1.13		SEK	1,000
2013/2043	Fixed	3.500	3.719	EUR	100

Total outstanding carrying amount 31 December 2021

¹⁾ EMTN = Euro Medium Term Note

28 Income taxes on the balance sheet

ACCOUNTING POLICIES

The tax currently payable is based on taxable profit for the year. Taxable profit differs from profit as reported in the consolidated income statement, because of items of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax is provided in full, using the balance sheet approach on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, if the deferred tax arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss, it is not accounted for. Deferred tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the closing date and are expected to apply when the related deferred tax asset is realised or the deferred tax liability is settled.

Deferred tax assets are recognised to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised. Deferred tax assets are set off against deferred tax liabilities if they relate to income taxes levied by the same taxation authority.

Deferred tax is provided on temporary differences arising from investments in subsidiaries, associates and joint ventures, except where the timing of the reversal of the temporary difference is controlled by the Group, and it is probable that the temporary difference will not be reversed in the foreseeable future.

The Group recognises liabilities for anticipated tax dispute issues based on estimates of whether additional taxes will be due. No provision will be recognised in the financial statements if Fortum considers the claims unjustifiable. Therefore, if taxes regarding ongoing tax disputes have to be paid before final court decisions, they are booked as a receivable. Where the final outcome of these matters is different from the amounts that were initially recorded, such differences will impact the income tax and deferred tax provisions in the period in which such determination is made.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS: ASSUMPTIONS AND REGARDING FUTURE TAX CONSEQUENCES

Fortum has deferred tax assets and liabilities which are expected to be realised through the income statement over extended periods of time in the future. In calculating the deferred tax items, Fortum is required to make assumptions and estimates regarding the future tax consequences attributable to differences between the carrying amounts of assets and liabilities as recorded in the financial statements and their tax basis.

Assumptions made include the expectation that future operating performance for subsidiaries will be in line with historical levels of operating results, recoverability periods for tax loss carry-forwards will not change, a prudent tax laws and rates will remain unchanged into foreseeable future. Fortum believes that it has prudent assumptions regarding its deferred tax balances.

Fortum continually evaluates the probability of utilising deferred tax assets and considers various factors in addition to the actual and planned earnings of the past, take into account medium-term and long-term projections for recognising deferred tax assets is an estimate by management of the extent to which it is probable that there will be sufficient taxable profit in the foreseeable future against which the unused tax losses, tax credits and other temporary differences can be offset.

Assumptions and estimates regarding main uncertain tax positions are supported by external legal advice and expert opinion.

If the actual final outcome (regarding tax disputes) would differ negatively from management's estimate, the Group would need to increase the income tax liability by EUR 11 million at 31 December 2021.

28.1 Deferred taxes on the balance sheet

EUR million	2021			2020
	1 Jan	Change	31 Dec	
BS Deferred tax assets	1,089	1,060	2,149	77
BS Deferred tax liabilities	-952	125	-827	-865
Net deferred taxes	138	1,184	1,321	-788

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax liabilities and when the deferred income taxes relate to the same fiscal authority.

Movement in deferred tax assets and liabilities 2021

EUR million	Intangible assets	Property, plant and equipment and right-of-use assets	Pension obligations	Provisions	Derivative financial instruments	Tax losses and tax credits carry-forward	Other
1 January 2021	-241	-1,228	542	1,273	-63	168	-312
Charged to income statement	44	-282	-156	395	1,258	-23	-161
Charged to other comprehensive income	-	-	-98	-	269	-	0
Exchange rate differences, reclassifications and other changes	-2	-44	-20	-10	11	1	0
Acquisitions and disposals	0	2	-	0	0	0	-3
31 December 2021	-200	-1,551	268	1,658	1,476	146	-476

Movement in deferred tax assets and liabilities 2020

EUR million	Intangible assets	Property, plant and equipment and right-of-use assets	Pension obligations	Provisions	Derivative financial instruments	Tax losses and tax credits carry-forward	Other
1 January 2020	-104	-823	25	-17	33	63	36
Charged to income statement	-10	-123	-8	-141	197	25	-84
Charged to other comprehensive income	-	-3	135	-	27	-	-1
Exchange rate differences, reclassifications and other changes	6	122	238	177	3	12	-281
Acquisitions and disposals ¹⁾	-133	-447	159	1,254	-323	73	28
Transfer to assets held for sale	-	46	-7	-	-	-5	-10
31 December 2020	-241	-1,228	542	1,273	-63	168	-312

¹⁾ Acquisition and disposals included EUR 579 million from the acquisition of Uniper at 31 March 2020. See ▶ Note 3 Acquisition, disposals and assets held for sale.

Historically, Fortum had significant deferred tax liabilities owing to its investments in non-current assets that are depreciated faster for tax than for accounting purposes. Through the acquisition of Uniper, Fortum now has significant deferred tax assets on derivative financial instruments. Deferred tax assets on derivative financial instruments increased during 2021 due to decrease in the net fair value of the unrealised commodity derivatives caused by high commodity prices.

Expiry of tax losses carried forward and recognised deferred tax assets

EUR million	2021		2020	
	Tax losses	Deferred tax asset losses	Tax asset losses	Deferred tax asset
Tax losses carried forward without expiration date ¹⁾	675	132	789	137
Tax losses carried forward with expiration date	58	8	166	31
Total	733	139	955	168

¹⁾ Majority relates to Germany, United Kingdom and Sweden.

Deferred tax assets are recognised for tax losses carried forward to the extent that realisation of the related tax benefit through future profits is probable.

Amount of temporary differences, tax losses carried forward and tax credits for which no deferred tax asset was recognised due to uncertainty of utilisation:

EUR million	2021	2020
Temporary differences ¹⁾	4,910	2,437
Tax losses carried forward ²⁾	463	468
Tax credits	3	4
Total	5,376	2,909

¹⁾ Majority relates to Germany.

²⁾ Majority relates to Uniper segment, and do not expire.

Deferred tax liabilities were not recognised on temporary differences of EUR 164 million (2020: 374) for investments in subsidiaries, branches, and associates and joint ventures to the extent that Fortum can control the reversal effect, and it is probable that temporary differences will not be reversed in the foreseeable future.

28.2 Income tax receivables

EUR million	2021	2020
Belgium	113	113
Other	48	43
BS Total	161	156

Income tax receivable in Belgium relates to income tax assessments for the years 2008–2012. Additional taxes of EUR 113 million were paid and, based on a supporting legal opinion, booked as an income tax receivable. See ▶ Note 37 Legal actions and official proceedings.

Other income tax receivables reflect corporate income taxes paid mainly in relation to the financial year, as well as payments according to received tax audit assessments in relation to previous years.

29 Nuclear-related assets and liabilities

ACCOUNTING POLICIES

Fortum owns Lovisa nuclear power plant in Finland, and through the acquisition of Uniper, OKG Aktiefonds AB, Barsebäck Kraft AB (Barsebäck) nuclear power companies in Sweden. Fortum and Uniper are co-owners of the Swedish nuclear company OKG AB. In Fortum's consolidated balance sheet, Shares in Nuclear Waste Funds are presented separately on the balance sheet, and the related part of the Nuclear Waste Funds are both presented separately on the balance sheet. Fortum's shares in the Nuclear Waste Funds are accounted for according to IFRIC 5, Rights to interest in decommissioning, restoration and environmental rehabilitation funds which states that the fund assets are measured at the lower of fair value or the value of the related liabilities since Fortum does not have control or joint control over the Nuclear Waste Funds. The Nuclear Waste Funds are managed by governmental authorities. The related provisions for decommissioning and the provision for disposal of spent fuel.

The fair values of the provisions are calculated according to IAS 37 by discounting the separate future cash flows which are based on estimated future costs and actions already taken. The initial net present value of the provisions is included in the income statement. The provision for spent fuel covers the future disposal costs for fuel used until the end of the accounting period. Costs for disposal of spent fuel are expensed during the operating time based on fuel usage. The impact of possible changes in the estimated future cash flow for related costs is recognised immediately in the income statement based on the accumulated amount of fuel used until the end of the accounting period. The related interest unwinding of the provision is recognised in other financial items - net.

The interest income and possible fair valuation effects on the Nuclear Waste Funds assets are presented in other financial items - net. Fortum's actual share of the Nuclear Waste Funds can be higher than the carrying value of the Fund in the consolidated balance sheet. The legal nuclear liability should be fully covered by payments and guarantees to the Nuclear Waste Funds in Finland. The same applies in Sweden for the nuclear power plants that are taken out of operation. For Swedish nuclear power plants in operation the nuclear liability should be fully covered at the end of the plants operating lifetime. The difference between the legal liability and provisions can be material per power plant, as the legal liability is discounted while the provisions are and in Sweden the legal liability is based on different assumptions than in Finland.

The annual fees to the Fund are based on changes in the legal liability, the return generated in the Nuclear Waste Funds and incurred costs of taken actions. Fortum also has minority interests in nuclear power companies, including Teollisuuden Voima Oyj (TVO) in Finland and Forsmarks Kraftgrupp AB (Forsmark) in Sweden. The minority shareholdings are classified as associates and joint ventures and are consolidated with equity method. Both the Finnish and the Swedish companies are non-profit making, i.e. electricity production is invoiced to the owners at cost according to typical GAAP.

policies of the associates regarding nuclear-related assets and liabilities have been changed where necessary to ensure consistency with the policies adopted by the Group.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS: ASSUMPTIONS MADE WHEN ESTIMATING PROVISIONS RELATED TO NUCLEAR PRODUCTION

The provision for future obligations for nuclear waste management including decommissioning of Fortum's nuclear power plants and related spent fuel is based on long-term cash flow forecasts of estimated future costs. The main assumptions are technical plans, timing, cost estimates and discount rate. The technical plans, timing and cost estimates are approved by governmental authorities.

Any changes in the assumed discount rate would affect the provision. If the discount rate used would be lowered, the provision would increase. For the power plants where the actual Share of the Nuclear Waste Fund is higher than the provision an increase in provisions would be offset by an increase in the recorded share of Fortum's part of the Nuclear Waste Funds on the balance sheet. The total effect on the income statement would be positive since the decommissioning part of the provision is treated as an asset retirement obligation. This situation will prevail as long as the actual Share of the Nuclear Waste Fund is higher than recognised in the balance sheet and IFRS is limiting the carrying value of the assets to the amount of the provision since Fortum does not have control or joint control over the fund.

Based on Finnish and Swedish laws, Fortum has legal obligations to fully fund the legal liabilities decided by the governmental authorities, for decommissioning of the power plants and disposal of spent fuel through the Nuclear Waste Funds.

Both in Finland and in Sweden nuclear operators are legally obligated for the decommissioning of the plants and the disposal of spent fuel (nuclear waste management). In both countries the nuclear operators are obligated to secure the funding of nuclear waste management by paying to government operated nuclear waste funds. The nuclear operators also have to give securities to guarantee that sufficient funds exist to cover future expenses of decommissioning of the power plant and the disposal of spent fuel.

29.1 Nuclear-related assets and liabilities for consolidated nuclear power

EUR million

Carrying values on the balance sheet

BS Nuclear provisions

BS Fortum's share of the Nuclear Waste Funds

Fortum's share of the fair value of the net assets in the Nuclear Waste Funds in Finland and Sweden
Share of fund not recognised on the balance sheet

Nuclear provision and fund accounted according to IFRS

Nuclear provisions include the provision for decommissioning and the provision for disposal of spent fuel value of the nuclear provisions, calculated according to IAS 37, increased by EUR 25 million compared 2020, totalling EUR 3,891 million at 31 December 2021.

Fortum's share of the Nuclear Waste Funds are from an IFRS perspective overfunded by EUR 408 million. Fortum's share of the Funds on 31 December 2021 was EUR 3,924 million and the carrying value on the balance sheet was EUR 3,515 million. The Fund on Fortum's balance sheet can at maximum be equal to the amount of the provision according to IFRS. As long as the Fund is overfunded from an IFRS perspective, the other financial items adjusted positively if the provisions increase more than the Fund, and negatively if the provision decreases more than the actual value of the fund.

Legal liability for Loviisa nuclear power plant

The legal liability on 31 December 2021, decided by the Ministry of Economic Affairs and Employment in 2021, was EUR 1,148 million.

The legal liability is based on a cost estimate, which is updated every year, and a technical plan, which is updated every three years. The legal liability is determined by assuming that the decommissioning would start at the year following the assessment year and discounting is not applied in determining the amount.

Fortum's share in the Finnish Nuclear Waste Fund

According to Nuclear Energy Act, Fortum is obligated to contribute funds in full to the State Nuclear Waste Fund to cover the legal liability. Fortum contributes funds to the Finnish State Nuclear Waste Management on the yearly funding obligation target decided by the governmental authorities in connection with the decommissioning of the legal liability. The current funding obligation target decided in December 2021 is EUR 1,148 million.

Nuclear provisions		
EUR million		
1 January	2021	2020
Increase in provisions	3,866	813
Acquisition of subsidiary companies	211	476
Provision used	-	2,412
Unwinding of discount	-189	-155
Exchange rate differences	65	62
	-62	258
BS 31 December	3,891	3,866
BS Fortum's share in the Nuclear Waste Funds	3,515	3,445

Borrowing from the State Nuclear Waste Management Fund

Participants in the Finnish State Nuclear Waste Management Fund are allowed to borrow from the fund according to certain rules. Fortum uses the right to borrow back and has pledged shares in Kemijoki Oy as security for the loans. The loans are renewed yearly. See ▶ Note 27 Interest-bearing liabilities and ▶ Note 36 Pledged assets and contingent liabilities.

OKG and Barsebäck nuclear power plants in Sweden

In Sweden, Svensk Kärnbränslehantering AB (SKB), a company owned by the nuclear operators, takes care of all nuclear waste management related activities on behalf of nuclear operators. SKB receives its funding from the Swedish Nuclear Waste Fund, which in turn is financed by the nuclear operators.

Nuclear waste fees and guarantees are normally updated every three years by governmental decision after a proposal from the Swedish Radiation Safety Authority (SSM). From September 2018, the proposal is prepared by the National Debt Office. The proposal is based on cost estimates done by SKB and the license holders. An updated technical plan for nuclear waste management was decided by SKB in September 2019 and was handed in to SSM in the end of 2019. In December 2020 the Swedish government decided the waste fees and guarantees for 2021 only. Nuclear waste fees paid by licensees with a unit/units that are still in operation are currently based on future costs with the assumed lifetime of 50 years for each unit of a nuclear power plant. The fee is calculated in relation to the energy delivered and set as an amount of öre (1 öre = SEK 0.01) per kWh delivered. For Barsebäck, which have no units in operation, the fee is determined as a fixed fee in SEK per year.

29.2 Nuclear power plants in associated companies and joint ventures

Forsmark and TVO are non-profit making companies, i.e. electricity production is invoiced to the owners at cost. Invoiced cost is accounted for according to local GAAP. In addition to the invoiced electricity production cost, Fortum makes IFRS adjustments to comply with Fortum's accounting principles. These adjustments include also Fortum's share of the companies' nuclear waste funds and nuclear provisions.

The tables below present the 100% figures relating to nuclear funds and provisions for the companies as well as Fortum's net share.

Nuclear-related assets and liabilities relating to associated companies (100%)

EUR million

Carrying values with Fortum assumptions ¹⁾

Nuclear provisions

Share of the State Nuclear Waste Management Fund

of which Fortum's net share consolidated with equity method

Fortum's share of the fair value of the net assets in the Nuclear Waste Funds

Receivables from the waste fund that are overfunded (underfunded) from an IFRS perspective

TVO's share of the fund not recognised in the balance sheet

¹⁾ Accounted for according to Fortum's accounting principles.

TVO's legal liability, provision and share of the fund are based on the same principles as described above

nuclear power plant.

Participants in the Finnish State Nuclear Waste Management Fund are allowed to borrow from the fund

certain rules. Fortum is using the right to reborrow funds through TVO based on its ownership. See more

▶ Note 27 Interest-bearing liabilities.

Forsmark's provision and share of the fund are based on same principles as described above for OKG

Barsebäck nuclear power plants.

Status of TVO's Olkiluoto 3 project

In Finland, Fortum is participating in the country's fifth nuclear power plant unit, Olkiluoto 3 (OL3), through shareholding in Teollisuuden Voima Oyj (TVO) with an approximately 25% share representing some 40% of the capacity. Olkiluoto 3 (OL3), currently under test production phase, was procured as a fixed-price turnkey consortium (Plant Supplier) formed by Areva GmbH, Areva NP SAS and Siemens AG. As stipulated in the contract, the consortium companies have joint and several liability for the contractual obligations.

In March 2018, TVO signed a comprehensive settlement agreement with the plant supplier consortium Areva NP, Areva GmbH, and Siemens AG as well as with Areva Group parent company Areva SA, a company owned by the French State. The settlement agreement concerned the completion of the OL3 project and disputes, and it entered into force in late March 2018. The supplier consortium companies committed to the funds dedicated to the completion of the OL3 project will be adequate and will cover all applicable periods, including setting up a trust mechanism funded by Areva companies to secure the financing of the completing the OL3 project. During the period under review, replenishing the trust was finished according to the 2018 Global Settlement Agreement (GSA), but it was replenished according to the amendment agreement entered into force in July 2021.

TVO and the Areva–Siemens consortium negotiated since summer 2020 on the terms of the OL3 project completion. In addition, the Areva companies were preparing a financial solution which ensure the necessary funding for the companies to complete the OL3 project. The parties reached a consensus in their negotiations regarding the main principles of the OL3 project completion in May 2021, and the agreements regarding the amendments to the OL3 project 2018 Global Settlement Agreement (GSA) were signed in June 2021. Certain conditions had to be fulfilled in order for the agreements to enter into force, and all conditions were fulfilled on 13 July 2021.

Key matters of the agreement were:

- The Areva companies' trust mechanism, established in the GSA of 2018 was replenished in July with EUR 432.3 million
- Both parties are to cover their own costs as of July 2021 until end of February 2022.
- In the case that the plant supplier consortium companies would not complete the OL3 project until the end of February 2022, they would pay an additional compensation for delays, depending on the date of completion.
- In connection with the agreement entering into force, the plant supplier paid EUR 206.9 million of the EUR 400.0 million delay compensation as agreed in the GSA 2018.

The Radiation and Nuclear Safety Authority (STUK) granted a fuel loading permit for the OL3 plant unit in March 2021, and the fuel loading was completed in April 2021. The completion of fuel loading meant that OL3 is now a nuclear power plant in use. On 16 December 2021, STUK granted TVO permission for making the reactor critical and conducting low power tests. The first criticality of OL3 was reached on 21 December 2021. OL3's electricity production starts in March 2022, once the plant unit has been connected to the national grid. Regular electricity production starts in July 2022.

Nuclear-related guarantees

In addition to nuclear waste fees nuclear power companies provide guarantees for any uncovered liability and unexpected events.
For more information regarding Fortum's guarantees given on behalf of nuclear companies, see ▶ **Note 36** Pledged assets and contingent liabilities.

30 Other provisions

ACCOUNTING POLICIES

Provisions are recognised when the Group has a present legal or constructive obligation to a third party and a past events, it is probable that an outflow of resources will be required to settle the obligation and the amount can be reliably estimated.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation at the reporting date using a discount rate that reflects current market assessment of the time value of money. An increase in the estimated cash flows, the discount rate also includes the risks specific to the obligation. An increase in the provision due to the passage of time and changes in provisions due to changes in discount rate is recognised as interest expense in the consolidated income statement. Changes in provisions, except for asset retirement obligations, are recognised in the consolidated income statement.

ASSET RETIREMENT OBLIGATIONS

Asset retirement obligations for the decommissioning or dismantling of property, plant and equipment are recognised when there is a contractual obligation towards a third party or a legal obligation. The obligation is based on detailed cost estimates validated by external experts.

The asset retirement obligation is recognised as part of the cost of an item of property, plant and equipment when the asset is put in service. Costs are depreciated over the remainder of the asset's useful life. Changes in asset retirement obligations are recognised in property, plant and equipment on the consolidated balance sheet. An item of property, plant and equipment has already been fully depreciated when changes are recognised in the consolidated income statement.

ONEROUS CONTRACT PROVISIONS

An onerous contract provision is recognised for a contract under which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it. Unavoidable costs are the excess obligation from the performance under the contract, and any potential penalties or losses arising in the event of non-performance.

ENVIRONMENTAL PROVISIONS

Environmental provisions are recognised based on the current interpretation of environmental laws and regulations when it is probable that a present obligation has arisen, and the amount of such liability can be reliably estimated. The obligation is generally based on detailed cost estimates validated by external experts.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS: ASSUMPTIONS MADE WHEN ESTIMATING PROVISIONS

Provisions for present obligations require management judgment in determining whether it is probable that an outflow of economic benefits will be required to settle the obligation. Estimation is required in determining the value of the amount recognised as a provision is based on the best estimate of unavoidable costs required to settle the obligation at the end of the reporting period. When estimating unavoidable costs, management may be required to consider all possible outcomes and their associated probabilities, risks and uncertainties surrounding the events and circumstances, as well as making assumptions of the timing of payment. Estimation is also required in determining the rate used to discount provisions to present value. Changes in estimates of timing or amounts of costs required to settle the obligation may become necessary as time passes and/or more accurate information becomes available.

EUR million	Supplier- and customer-related	Asset retirement	Power production-related	Gas distribution-related	Environmental remediation and similar	Personnel-related	Other
1 January 2021	948	821	643	378	261	247	933
Increase in provisions	2,355	50	15	142	10	216	163
Provisions used	-159	-6	-1	-107	-16	-72	-80
Unused provisions reversed	-182	-	-	-56	-2	-20	-68
Exchange rate differences and other changes	-66	9	-	-	-	1	66
Unwinding of discounting	-2	-2	-4	-2	-	-4	-1
31 December 2021	2,893	872	653	354	253	368	1,013
BS Of which current provisions	1,836	29	-	-	11	149	274
BS Of which non-current provisions	1,057	843	653	354	242	219	739

Provisions for asset retirement obligations consist of obligations for conventional and renewable energy power plants, including the conventional plant components in the nuclear power segment, that are based on legally binding civil and public regulations; as well as provisions for environmental improvements at gas storage facilities. The majority of the provision is estimated to be used within 45 years.

Provisions for supplier- and customer-related obligations include EUR 2.6 billion (2020: 0.5) of onerous contract provisions for procurement of electricity sales contracts for which the own-use exemption under IFRS 9 is applied, and infrastructure purchase contracts used in the gas storage business. See ▶ Note 35 Capital and other commitments. Additions to supplier-related provisions mainly relate to Uniper segment's electricity sales contracts for which the own-use exemption under IFRS 9 is applied. The provision increased to account for increased electricity prices and the associated higher purchasing costs. Purchases are, however, hedged using derivative financial instruments whose fair value measures offsetting effects recognised in items affecting comparability (see ▶ Note 7 Comparable operating profit and comparable net profit). Future cash outflows from the utilisation of the provision are offset by cash inflows from the hedged measures.

Power production-related provisions consist mainly of provisions from the hydroelectric power business. The majority of the provision is estimated to be used within 60 years.

Gas distribution-related provisions consist mainly of onerous contract provisions for gas transportation and regasification. The majority of the provision is estimated to be used within 13 years.

Environmental provisions mainly include provisions for redevelopment and water protection measures, the rehabilitation of contaminated sites, and other environmental improvement measures. The majority of the provision is estimated to be used within 22 years.

Personnel-related provisions mainly include provisions for performance-based compensation components, long-service bonus obligations, in-kind obligations, restructuring and other deferred personnel costs. The majority of the provision is estimated to be used within 42 years.

Other provisions include EUR 0.3 billion (2020: 0.3) provisions for risk-related contingencies, as well as a number of individually immaterial items.

For provisions for decommissioning, and provision for disposal of spent fuel for nuclear production, see ▶ Note 29 Nuclear-related assets and liabilities.

31 Pension obligations

ACCOUNTING POLICIES

The Group companies have various pension schemes in accordance with the local conditions and practices in the countries in which they operate. The schemes are generally funded through various pension vehicles including payments to insurance companies. Group's pension funds and other separate arrangements. The Group has both defined benefit and defined contribution plans.

For defined benefit plans, pension costs are assessed using the projected unit credit method. The cost of providing pensions is charged to the Income statement as to spread the service cost over the service lives of employees. Current and past service cost, as well as gains or losses from settlements are reported under personnel costs. The net interest is reported in financial items.

The defined benefit obligation is calculated annually on the balance sheet date and is measured as the present value of the estimated future cash flows using interest rates of high-quality corporate bonds, or similar, that have terms to maturity approximating to the terms of the related pension liability. The plan assets for pensions are valued at market value. The net liability recognised on the balance sheet is the defined benefit obligation at the closing date less the fair value of plan assets.

Any net asset position that might arise from offsetting the present value of the defined benefit obligations against the corresponding fair value of plan assets is recognised taking into account the applicable asset restrictions. Such an asset position is reported in Other non-current assets on the balance sheet.

In the case of a plan amendment, curtailment or settlement (each a "plan event") occurring in a defined benefit plan during an annual reporting period, the current service cost and the net interest on the net liability or asset are remeasured for the remainder of the reporting period after the plan event. The actuarial assumptions applicable as of the date of the plan event are to be used as the basis for such remeasurement. When the benefits of a plan are changed, or when a plan is curtailed, the resulting change in the present value of the defined benefit obligation that relates to past service, or the gain or loss related to a curtailment is recognised immediately in profit or loss. Gains or losses on settlements of defined benefit plans are recognised when the settlement occurs.

Remeasurements of the net defined benefit liability or asset include actuarial gains and losses that may arise especially from differences between estimated and actual variations in underlying assumptions about demographic and financial variables; and, additionally, from developments in these assumptions as of each reporting date. Additionally included is the difference between the actual return on plan assets and the interest income on plan assets contained in the net interest result, as well as any change in the effect of the asset ceiling, excluding amounts already included in net interest. Remeasurement results and related deferred taxes are recognised in full in the period in which they occur and are reported in the statement of comprehensive income.

The Group's contributions to defined contribution plans are charged to the income statement in the period to which the contributions relate.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS:

ASSUMPTIONS USED TO DETERMINE FUTURE PENSION OBLIGATIONS

The present value of the pension obligations is based on actuarial calculations that use several assumptions. Any changes in these assumptions will impact the carrying amount of pension obligations.

Fortum's pension arrangements

Finland

The statutory pension benefits (as determined in Employee's Pension Act /TYEL) in Finland provide the pension coverage for old age, disability and death of a family provider. The benefits are insured with an company, and determined to be defined contribution plans.

In addition, the Group has historical old-age and survivor pension benefits with the Fortum Pension Fund and employees' representatives. The Fortum Pension Fund is a closed fund managed by a Board, consisting of limited number of people. The promised benefit is defined in the rules of the Fund, mostly at a maximum salary basis. The salary basis is an average of the ten last years' salaries, which are indexed by a consumer price index to the accounting year. After retirement the benefits payable are indexed yearly with the TYEL-index.

The Fund is operating under the regulation from the Financial Supervisory Authority (FSA). The liability covered according to the regulations. The national benefit obligation related to the defined benefit plans that the promised benefit is fully funded until retirement.

Germany

The majority of active and former employees are covered by occupational benefit plans in addition to the retirement benefits. The benefits offered under these plans primarily include retirement, disability and survivor benefits. The majority of the reported pension obligation for the active employees arises from the "BAS-Plan" and "Zukunftssicherung" plan, that have been closed to the new hires since 2008. The only plan open to new hires is the defined contribution-oriented benefit plan, which is based on "units of capital".

The benefit expense for all these plans is dependent on compensation, and is determined at different rates based on the ratio between compensation and the contribution limit in the statutory retirement pension plans. The plans contain different interest rate assumptions. Up to, and including 31 December 2017, the fixed interest rate assumptions had applied for both the "BAS-Plan" and the "Zukunftssicherung" plan. From 1 January 2018, the units established have earned interest at a rate that is linked to market rates and hedged by applying government minimum interest rates. An annual review is performed, taking market developments into account, to determine the pension units should be formed based on the guaranteed minimum interest rates or by applying a higher interest rate can be increased to a maximum of 6.0% per year. Pension units granted through 31 December 2017 remain unchanged by this adjusted interest calculation. The units of capital established under the open contribution-oriented benefit plan earn interest at the average yield of long-term government bonds of the Republic of Germany observed in the fiscal year.

Future pension increases at a rate of 1% per year are guaranteed for certain individuals including a limited number of active employees. For the remaining eligible individuals, pensions are adjusted mostly in line with the rate of inflation in a three-year cycle.

Pension plans are funded through designated pension vehicles that are legally distinct from the company. The plan assets are funded in form of "Pensionskassen" and a Group-wide pension fund as well as in the form of Contractual Trust Arrangement (CTA). Only the "Pensionskassen" vehicles and the pension fund are subject to regulatory provisions in relation to the investment of capital and funding requirements. For the CTA, there are funding rules stipulated in corporate agreements.

United Kingdom

The Group operates three pension plans in the United Kingdom, one defined contribution plan and two defined benefit plans. The defined benefit plans were closed for new hires from 2005 and 2008, respectively. Since the closure of these plans, new hires have been joining the open defined contribution plan.

Benefit payments under the existing defined benefit pension plans are adjusted either by fixed increases or by reference to an index, as measured by the United Kingdom Retail Price Index ("RPI") or the Consumer Price Index ("CPI") (the increases are limited to a fixed maximum amount).

Plan assets are administered by a trust which is independent from the group and wholly responsible for the investment of the plan assets.

The Pension Regulator in the United Kingdom requires a valuation of the funding of pension plans in the United Kingdom to be performed at least once every three years. The last valuation was made on 31 March 2019.

Main risks relating to defined benefit plans

Typical risk factors for defined benefit plans are changes in discount rates, risks related to other actuarial assumptions, as well as investment and volatility risks.

Change in discount rate

The discount rate used to calculate the defined benefit obligation (according to IFRS) depends on the value of corporate bond yields as at the reporting date. A decrease in yields increases the benefit obligation that is often only partially offset by an increase in the value of fixed income holdings.

Risk related to other actuarial assumptions

Assumptions for future inflation, salary levels and mortality are used for actuarial calculations. Should the actual outcome differ from these assumptions, the liability may increase.

Investment and volatility risk

Pension plan assets are allocated to different asset classes based on the statutory legislation or investment strategy of the corresponding pension plan. Depending on the pension plan, underlying investment management plans are updated on a regular basis. If the return of the fund's assets is not enough to cover the raise in liability and benefit payments over the financial year, then, in certain legislations, the employer has to fund the deficit with contributions, unless the fund has sufficient covering.

Movement in the net defined benefit liability

EUR million	Defined benefit obligation		Fair value of plan assets		Net as at
	2021	2020	2021	2020	
1 January	4,636	529	-3,117		-406
Included in consolidated income statement ¹⁾					
Current service cost	73	52	-	-	-
Past service cost	30	11	-	-	-
Settlements	-4	-	1	-	-
Net interest	43	50	-31	-36	-36
	142	112	-28	-35	-35
Included in OCI					
Remeasurement gains(-)/losses(+)	-297	820	-121	-366	-366
Actuarial gains/losses arising from changes in financial assumptions	-279	835	-	-	-
Actuarial gains/losses arising from experience adjustments	-18	-16	-	-	-
Return on plan assets (excluding amounts included in net interest expense)	-	-	-122	-166	-166
Exchange rate differences and other changes	52	-9	-50	8	8
	-245	811	-171	-58	-58
Other					
Contributions paid by the employer	-	-	-64	-59	-59
Benefits paid	-95	-66	90	61	61
Acquisitions of subsidiary companies	-	3,288	-	-2,443	-2,443
Transfer to assets held for sale	-	-38	-	-22	-22
31 December	4,437	4,636	-3,290		-317
Present value of funded defined obligation					
Fair value of plan assets					
Funded status					
Present value of unfunded obligation ²⁾					
Net liability arising from defined benefit obligation					
Pension assets included in other non-current assets on the balance sheet					
BS Pension obligations on the balance sheet					

¹⁾ Net interest is presented in financial items in the income statement. The rest of costs related to defined benefit plans are included in defined benefits plans in the staff cost specification in ► **Note 10** Employee benefits and Board remuneration) and in items affecting the profit or loss.

²⁾ The unfunded obligation mainly relates to Germany.

Contributions expected to be paid during 2022 total EUR 70 million.

Fair value of plan assets

EUR million	2021			2020		
	Quoted	Unquoted	Total	Quoted	Unquoted	Total
Equity instruments	1,327	8	1,335	972	177	1,149
Debt instruments	1,025	183	1,208	947	174	1,120
Cash and cash equivalents	-	104	104	-	156	156
Real estate	-	234	234	-	228	228
Investment funds	396	-	396	105	-	105
Other assets	0	14	14	0	359	359
Total	2,748	543	3,290	2,023	1,094	3,117

A specification of plan assets has not been available for pension plans financed through an insurance company. In these cases, the fair value of plan assets has been included in other assets.

In 2021 plan assets in the United Kingdom were partly transferred from unquoted to quoted.

Derivatives used to hedge the risks have been allocated to the respective asset classes.

The actual return on plan assets totalled EUR 145 million (2020: 405).

Amounts recognised on the balance sheet by country 2021

EUR million	Finland			United Kingdom			Other countries	Total
	Finland	Germany	United Kingdom	Finland	Germany	United Kingdom		
Present value of funded obligations	283	3,147	719	256	4,405			
Fair value of plan assets	-251	-2,122	-756	-161	-3,290			
Deficit(+)/surplus(-)	32	1,025	-36	93	1,115			
Present value of unfunded obligations	-	26	-	6	32			
Net asset(-)/liability(+) on the balance sheet	32	1,051	-36	99	1,146			
Pension asset included in non-current assets	-	7	36	1	44			
BS Pension obligations on the balance sheet	32	1,058	-	100	1,190			

Amounts recognised on the balance sheet by country 2020

EUR million	Finland			United Kingdom		
	Finland	Germany	United Kingdom	Finland	Germany	United Kingdom
Present value of funded obligations	294	3,396	655			
Fair value of plan assets	-242	-2,074	-642			
Deficit(+)/surplus(-)	51	1,322	12			
Present value of unfunded obligations	-	28	-			
Net asset(-)/liability(+) on the balance sheet	51	1,350	12			
Pension asset included in non-current assets	-	-	-			
BS Pension obligations on the balance sheet	51	1,350	12			

The principal actuarial assumptions used

	2021			2020		
	Finland	Germany	United Kingdom	Finland	Germany	United Kingdom
%						
Discount rate	1.00	1.20	2.00	0.30	0.30	0.30
Future salary increases	2.30	2.30	3.00	2.50	2.50	2.50
Future pension increases	2.40	1.80	3.10	2.60	2.60	2.60
Rate of inflation	2.10	1.80	3.20	2.30	2.30	2.30

The discount rate in Finland is based on high quality European corporate bonds with maturity that best estimates the estimated term of the defined benefit pension plans. The discount rate in Germany is based on the return on quality EURO corporate bonds available at the end of the respective fiscal year, and take into account the duration of the respective underlying benefit obligations. The United Kingdom discount rate is based on specific returns on high-quality corporate bonds available at the end of the respective fiscal year and take the average duration of the respective underlying obligations.

The discount, inflation, salary growth and pension growth rates, as well as mortality are the key assumptions calculating defined benefit obligations. Changes in the key actuarial assumptions would lead to the following the present value of the defined benefit obligations:

Sensitivity of defined benefit obligation to changes in assumptions

Change in the assumption	Impact to the pension obligation increase(+)/ decrease(-)
0.5% increase in discount rate	-9.1%
0.5% decrease in discount rate	10.5%
0.5% increase in benefit	3.2%
0.5% decrease in benefit	-2.8%
0.5% increase in salary growth rate	1.0%
0.5% decrease in salary growth rate	-0.9%
10% increase in mortality	-2.9%
10% decrease in mortality	3.3%

A 10% decrease in mortality would result in higher life expectancy of beneficiaries, depending of the age of each individual beneficiary. At the end of 2021, the life expectancy of a 63-year-old male retiree would increase by approximately one year, if mortality were to decrease by 10%.

The sensitivities indicated are computed based on the same methods and assumptions used to determine the present value of the defined benefit obligations. If one of the actuarial assumptions is changed for the purpose of computing the sensitivity of results to changes in that assumption, all other actuarial assumptions are included in the computation unchanged. Potential correlation effects between the individual actuarial assumptions are not taken into account when computing sensitivities. When considering sensitivities, it must be noted that the change in the present value of the defined benefit obligations resulting from changing multiple actuarial assumptions simultaneously is not necessarily equivalent to the cumulative effect of the individual sensitivities.

Maturity profile of the undiscounted defined benefit obligation on 31 December 2021

EUR million	Future benefit payments
Maturity under 1 year	97
Maturity between 1 and 5 years	428
Maturity between 5 and 10 years	668
Maturity between 10 and 20 years	1,563
Maturity between 20 and 30 years	1,448
Maturity over 30 years	1,563

The weighted average duration of defined benefit obligation at 31 December 2021 is 21 years.

32 Other non-current liabilities

EUR million	2021
Contract liabilities	2
Connection fees	2
Other	2
BS Total	3
Connection fees include refundable fees paid by the customer when connected to district heating network	
Connection fees were refundable until 2013.	

33 Trade and other payables

EUR million	2021
Trade payables	12,1
Accrued expenses and deferred income	2
Accrued personnel expenses	7
Accrued interest expenses	1
Contract liabilities	1
Other accrued expenses and deferred income	1,5
Other liabilities	7
Liability to return emission rights ¹⁾	4
Current tax liability	4
Other	4
BS Total	16,4
¹⁾ For additional information see ► Note 22 Inventories.	

Contract liabilities comprise mainly of project and waste management services that are invoiced but not reporting date.

The management considers that the amount of trade and other payables approximates fair value.

34 Leases

ACCOUNTING POLICIES
LESSEE ACCOUNTING

The Group leases mainly gas storage facilities, office buildings and land areas. The Group recognises all leases, with the exception of short-term (i.e. lease term less than 12 months) and low value leases as right-of-use assets with a corresponding lease liability at the date at which the leased asset is available for use by the Group.

Right-of-use assets and lease liabilities are initially recognised on the consolidated balance sheet at future fixed lease payments over the lease term. Lease payments are discounted to present value. Right-of-use assets are depreciated on a straight-line basis over the lease term, or the useful life of the leased asset if shorter, and reviewed periodically for indication of impairment.

When the future lease payments are revised due to changes in index-linked considerations or the lease term changes, the right-of-use asset and the corresponding lease liability is remeasured. Any differences arising on reassessments are recognised in the consolidated income statement.

Interest expense on lease liabilities is presented within Interest expense in the consolidated income statement. In the consolidated cash flow statement, the principal portion of the lease payment is presented under Payments of long-term liabilities, and the interest portion as Interest paid under Funds from operations. Variable lease payments, as well as costs for leases not capitalised due to exemptions in the standard, are expensed to consolidated income statement.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS:
ESTIMATES TO DETERMINE LEASE LIABILITY

Calculation of the lease liability requires certain assumption based input factors. The main estimates are related to the lease term, the discount rate, as well as the determination whether a contract contains a lease.

In determining the lease term, management considers all facts and circumstances that create an economic incentive to exercise an extension option, or not to exercise a termination option. Extension options are only included in the lease term if the lease is reasonably certain to be extended. The lease term is reassessed if underlying circumstances are significantly changing.

Lease payments are discounted to present value using an incremental borrowing rate. The incremental borrowing rate is determined based on reasonable third party financing conditions considering the length of the lease term and the currency of cash flows.

A contract is or contains a lease if the Group has the right to control the use of an identified asset for a period of time in exchange for a consideration. A capacity portion of an asset is an identified asset if it is physically distinct, or if the Group has the right to use substantially all the capacity of the asset during the lease term.

LESSOR ACCOUNTING

Leases in which the Group acts as the lessor and substantially all the risks and rewards arising from the use of the leased asset are transferred to the lessee are classified as finance leases. Finance lease receivables mainly relate to certain electricity delivery contracts.

In this type of lease, the present value of the minimum lease payments is recorded as a receivable. Interest income from such arrangements is recognised over the lease term, using the effective interest method.

34.1 Amounts recognised in consolidated financial statements

Lessee	
EUR million	
In consolidated income statement	
Depreciation, of which	
Land	
Buildings and structures	
Machinery and equipment	
Interest expense on lease liabilities ¹⁾	
Expense relating to short-term leases within Other expenses	
Income from subleasing right-of-use assets	
On consolidated balance sheet	
Additions to right-of-use assets, of which	
Land	
Buildings and structures	
Machinery and equipment	
Acquisition of subsidiary companies, of which	
Land	
Buildings and structures	
Machinery and equipment	
Carrying amount of right-of-use assets, of which	
Land	
Buildings and structures	
Machinery and equipment	
Lease liabilities	
In consolidated cash flow statement	
Cash outflow for leases	

¹⁾ In 2021, 2020 comparatives were revised due to a revision of the lease adjustment following the finalisation of the purchase price at Uniper acquisition.

Maturity of undiscounted lease liabilities

EUR million	2021
Due within one year	154
Due after one year and within five years	433
Due after five years	758
Total	1,344

See ► **Note 4** Financial risk management, ► **Note 17** Property, plant and equipment and right-of-use assets, and
 ► **Note 27** Interest-bearing liabilities for more information.

Lessor

EUR million	2021	2020
In consolidated income statement		
Interest income from finance lease	15	12
Rental income from operating lease	30	24
On consolidated balance sheet		
Lease receivables	136	196
Current	17	16
Non-current	119	181

Maturity analysis of undiscounted lease payments - Finance leases

Due within 1 year	26	28
Due in 1 to 2 years	23	28
Due in 2 to 3 years	23	28
Due in 3 to 4 years	23	27
Due in 4 to 5 years	22	27
Due in more than 5 years	92	175
Total undiscounted lease payments	209	314
Interest component	73	116

34.2 Lease commitments

Possible additional lease payments amounting to EUR 128 million were not included in the measurement of lease liabilities on 31 December 2021.

35 Capital and other commitments

Capital and other commitments are contractual or regulatory obligations that are not recognised as liabilities in the consolidated balance sheet, or disclosed as contingent liabilities.

35.1 Capital commitments

EUR billion	2021
Property, plant and equipment and intangible assets	

Capital commitments at 31 December 2021 include Uniper segment's commitments of EUR 0.5 billion, for outstanding investments in connection with the expansion and modernisation of existing generation assets.

35.2 Long-term purchase commitments

EUR billion	Due within one year	Due after one year
Gas	15.0	6
Electricity	0.2	0.2
Transportation and storage	0.8	0.2
Other	0.2	

Gas

Gas for supplying industrial customers is usually procured by means of long-term purchase contracts with international producers of natural gas. Such contracts are generally take-or-pay in nature. The prices paid for gas are normally tied to market reference prices, as dictated by market conditions and the procurement of gas from wholesale market customers. The conditions of these long-term contracts are reviewed at least once (usually every three years) as part of contract negotiations and may change accordingly. In the absence of a pricing review, a neutral board of arbitration makes the final binding decision. Financial obligations for these contracts are calculated based on the same principles that govern internal budgeting. Further, the conditions in the individual contracts are also considered in the calculations.

Electricity

Contractual obligations for the purchase of electricity relate in part to purchases from resellers and energy suppliers, especially those under procurement contracts for the wholesale portfolio.

Transportation and storage

Purchase commitments for transportation and storage are for long-term commitments for contracts that are not capitalised on the balance sheet as they do not meet the definition of a lease. Purchase commitments exclude any onerous part of the commitment that is included in provisions. See ▶ **Note 30** Other provisions.

35.3 Other commitments to associates and joint ventures

Teollisuuden Voima Oyj (TVO) is building Olkiluoto 3, the nuclear power plant, which is funded through external loans, share issues and shareholder loans according to shareholders' agreement between the owners of TVO. At end of December 2021, Fortum had EUR 232 million (2020: 232) outstanding receivables regarding Olkiluoto 3 and is additionally committed to providing at maximum EUR 100 million. TVO shareholder loan is classified as participation in joint ventures. For more information, see ▶ **Note 29** Nuclear-related assets and liabilities.

35.4 Other commitments

Fortum has committed to providing financing to Voimaosakeyhtiö SF for its participation in the Fennovoima nuclear power project in Finland. Remaining commitment is EUR 69 million.

In June 2018, the Swedish Government approved the legislation regarding Sweden's national strategy for implementation of the EU's Water Framework Directive. The largest hydro industry companies will create a common hydro-power fund to finance large parts of the environmental actions needed. The fund will have a total financial cap of SEK 10 billion to be paid over a 20-year period, and the largest operators will contribute to the fund proportionately based on their respective market share of hydro-power production. Fortum's share is 31% of the funds' total financing.

36 Pledged assets and contingent liabilities

ACCOUNTING POLICIES

PLEGDED ASSETS

Pledged assets are given to a lender as security for a loan, trading or other commitment. If the borrower or the party is unable to make the agreed payments, the lender can use the pledged assets to mitigate its loss. Assets at Fortum mostly consist of securities and real estate mortgages.

CONTINGENT LIABILITIES

A contingent liability is disclosed when there is a possible obligation that arises from past events and which is only confirmed by one or more doubtful future events; or when there is an obligation that is not recognised in the balance sheet because it is not probable that an outflow of resources will be required, or the amount of the obligation cannot be reliably estimated.

36.1 Pledged assets

For debt

Pledges at 31 December 2021 total EUR 269 million (2020: 291), including EUR 269 million (2020: 269) given to Kenijoki Oy pledged as a security for borrowing from the Finnish State Nuclear Waste Management Fund.

Real estate mortgages at 31 December 2021 total EUR 41 million (2020: 275). 2020 mainly included mortgages given for Solar operations in India amounting to EUR 139 million and mortgages given for Fortum Tarto amounting to EUR 96 million. These operations were disposed during 2021.

For other commitments

Real estate mortgages at 31 December 2021 total EUR 81 million (2020: 105) being real estate mortgages given to the Finnish State Nuclear Waste Management Fund. These are given as a security for the unconditional legal liability and unexpected events relating to future costs for decommissioning and disposal of spent nuclear fuel at Loviisa nuclear power plant. According to the Nuclear Energy Act, Fortum is obligated to contribute to the State Nuclear Waste Management Fund to cover the legal liability. Any uncovered legal liability relating to the payments to the fund. The size of the securities given is updated yearly in the second quarter based on decisions regarding the legal liabilities and the funding target which are determined at the end of the period. ▶ **Note 29** Nuclear-related assets and liabilities.

36.2 Contingent liabilities

In relation to divestment of shareholdings, Fortum has entered into indemnification agreements, which cover the customary representations and warranties, as well as environmental damage and tax contingencies. Any obligations that may exist are covered in the first instance by provisions of the companies sold before Fortum itself is required to make any payments. Moreover, the Fortum Group has commitments under which it assumes joint and several liability arising from its interests in civil-law companies, non-corporate commercial partnerships and consortia in which it participates.

Fortum's 100% owned subsidiary Fortum Heat and Gas Oy has a contingent liability, based on the Finnish Companies Act's (734/1978) Chapter 14a Paragraph 6, with Neste Oyj following the demerger of Fortum Oil and Gas Oy in 2004.

36.3 Guarantees relating to Nuclear operations

With respect to the activities of the Swedish nuclear power plants, the companies of the Swedish nuclear units have issued guarantees for OKG, Forsmark and Barsebäck to governmental authorities in accordance with the Swedish law. There are two types of guarantees given. The Financing Amount is given to cover Fortum's share of the uncovered part in the Nuclear Waste Fund, assuming no further production and that no further nuclear waste fees are paid in. The uncovered amount is calculated by the authorities and is based on the difference between the expected costs and the funds to cover these costs at the time of the calculation. The Supplementary Amount constitutes a guarantee for deficits that can arise as a result of unplanned events. The amounts for the guarantees are normally updated every third year by governmental decision. In addition, the licensees are responsible for all costs related to the disposal of low-level radioactive waste.

Owners of nuclear facilities in Finland and Sweden have statutory liabilities for damages resulting from accidents occurring in those nuclear facilities and for accidents involving any radioactive substance connected to the operation of those facilities. Third-party liability relating to nuclear accidents is strictly under the plant operator's responsibility.

In Finland, as the operator of the Loviisa power plant, Fortum has a statutory liability insurance policy of SDR 600 million, approximately EUR 700 million (Special Drawing Right). The liability in Finland will increase to EUR 1.2 billion from 1 January 2022 due to updated law on third-party liability.

In Sweden, the Swedish Parliament passed a law on 1 July 2010 that requires the operator of a nuclear power plant in operation to have a liability insurance or other financial cover in the amount equivalent to EUR 1.2 billion per incident. The conditions enabling this new law took effect 1 January 2022 and were thus not yet in place at 31 December 2021. Nevertheless, the Swedish government decided to increase the insured amount from 1 January 2019 by amending the existing legislation. Accordingly, the liability per incident at 31 December 2021 is henceforth limited to SDR 1,000 million, approximately EUR 1.2 billion.

The necessary insurances for the affected nuclear power plants have been purchased. Same type of insurance policies are in place also for the operators where Fortum has minority interest.

The guarantee given on behalf of Teollisuuden Voima Oyj to the Finnish State Nuclear Waste Management Fund increased following the fuel loading in Olkiluoto 3, and amounts to EUR 122 million (2020: 26). The guarantee covers the unpaid legal liability due to periodisation as well as risks for unexpected future costs.

For information regarding nuclear-related assets and liabilities see ► **Note 29** Nuclear-related assets and liabilities.

37 Legal actions and official proceedings

Various routine court actions, arbitration proceedings, tax and regulatory investigations and proceedings are pending against entities of the Group, and further actions or proceedings may be instituted or asserted in the addition to disputes under public law, this in particular includes legal actions and proceedings on contract and price adjustments initiated in response to market upheavals and the changed economic situation in the gas sectors (also as a consequence of the energy transition) and concerning anticompetitive and fraudulent practices in general commercial contract disputes.

The aforementioned proceedings include several court and arbitration proceedings with major customers and suppliers, also initiated in some instances by the Group, concerning contract amendments and price adjustments in long-term supply contracts and procurement options for electricity and gas, as well as long-term contract capacity in response to the altered situation brought about by market upheavals, and also reimbursement of some of these cases, the validity of the price-adjustment clauses applied, and of the contracts in their entirety. Long-term LNG and gas procurement contracts generally include the option for producers and adjust the terms in line with changed market conditions. On this basis, the Group is currently involved in arbitration proceedings and continuously conducts extensive negotiations with producers. The possibility of disputes cannot be excluded. Applying the provisions of IAS 37.92, Fortum is making no additional disclosures in proceedings presented or on the associated risks or measures taken, particularly because such disclosures would prejudice their outcome.

Furthermore, proceedings are pending concerning the clarification of regulatory requirements. Applying the provisions of IAS 37.92, Fortum is making no additional disclosures on the proceedings presented or on the associated risks taken, particularly because such disclosure could prejudice their outcome.

Public-law disputes are pending, in particular, in connection with the operating license and the planning of a coal power plant in Datteln, Germany. Applying the provisions of IAS 37.92, Fortum is making no additional disclosures in proceedings presented or on the associated risks or measures taken, particularly because such disclosures would prejudice their outcome.

Tax cases

On 16 June 2020, the Court of Appeal of Ghent, Belgium, ruled in favour of Fortum on Fortum's income tax appeal in Belgium for the year 2008. The decision concerns Fortum's Belgian financing company, Fortum EIF NV, internal financing to a Swedish group company for financing of an acquisition in Russia. The Belgian tax authorities argued that Fortum EIF should not benefit from the notional interest deduction regime in Belgium and disallowed the Court of Appeal ruling. In September 2020, the Belgian tax authorities filed an appeal to the Supreme Court of Appeal.

The additional taxes claimed for 2008 amount to EUR 36 million. Fortum has similar tax cases pending for 2009-2012 and expects the remaining years to follow the decisions for 2008. The disputed amount for y totals EUR 113 million. All taxes have been paid and recognised as income tax receivables. Should the the Court of Appeal of Ghent become final, the possible repayment of the disputed amounts would have a positive cash flow effect for Fortum.

For critical accounting estimates regarding uncertain tax positions, ► **Note 28** Income taxes in the balance sheet, also ► **Note 12** Income tax expense.

38 Related party transactions

38.1 The Finnish State and companies owned by the Finnish State

At the end of 2021, the Finnish State owned 50.76% of the company's shares (2020: 50.76%). The Finnish Parliament has authorised the Government to reduce the Finnish State's holding in Fortum Corporation to no less than 50.1% of the share capital and voting rights.

All transactions between Fortum and other companies owned by the Finnish State are on arm's length basis.

38.2 Board of Directors and Fortum Executive Management

The key management personnel of the Fortum Group are the members of Fortum Executive Management and the Board of Directors.

Fortum has not been involved in any material transactions with members of the Board of Directors or Fortum Executive Management. No loans exist to any member of the Board of Directors or Fortum Executive Management at 31 December 2021.

The total compensation (including pension benefits and social costs) for the key management personnel for 2021 was EUR 13 million (2020: 11). See ▶ Note 10 Employee benefits and Board remuneration for further information on the Board of Directors and Fortum Executive Management remuneration and shareholdings.

38.3 Associated companies and joint ventures

In the ordinary course of business, Fortum engages in transactions with associated companies, joint ventures, and other related parties. These transactions are on the same commercial terms as they would be with third parties, except for some associates and joint ventures, as noted below.

Fortum owns shareholdings in associated companies and joint ventures which own hydro and nuclear power plants. Under consortium agreements, each owner is entitled to electricity in proportion to its share of ownership, or based on other agreement. In turn, each owner is liable for an equivalent portion of costs, regardless of output. These associated companies and joint ventures are not profit making since the owners purchase electricity at production cost, including interest costs and production taxes. See ▶ Note 18 Participations in associated companies and joint ventures.

Uniper

On 31 March 2020, Uniper SE was reclassified from an associated company to a subsidiary. Transactions with Uniper Group companies are presented until 31 March 2020, but balances with Uniper Group companies were excluded from 31 March 2020 since Uniper was consolidated as a subsidiary. In addition, balances with any Uniper Group's related parties that have become Fortum Group's related parties through the acquisition are disclosed from 31 March 2020. See ▶ Note 3 Acquisitions, disposals and assets held for sale.

38.4 Balances and transactions with related parties

Transactions with associates, joint ventures and other related parties

EUR million	Associated Companies ¹⁾		Joint Ventures		Other related parties ¹⁾	
	2021	2020	2021	2020	2021	2020
Sales	188	147	28	51	14	3
Interest income on loan receivables and other income	328	94	22	3	17	7
Purchases	568	478	185	130	20	16

Balances with associates, joint ventures and other related parties

EUR million	Associated Companies ¹⁾		Joint Ventures		Other related parties ¹⁾	
	2021	2020	2021	2020	2021	2020
Receivables						
Long-term interest-bearing loan receivables	1,009	1,031	129	82	-	-
Trade and other receivables	4	98	70	183	30	26
Liabilities						
Long-term loan payables	-	-	228	293	-	-
Trade and other payables	12	94	138	150	9	96

¹⁾ A related party was in 2020 classified as Other related party instead of Associated Company. Comparatives have been corrected to reflect this change.

Other related parties are entities that are not consolidated on materiality grounds. For more information on Significant accounting policies.

In addition, Fortum has long-term purchase commitments of approximately EUR 1.9 billion for 2021 and 2022 from associates and joint ventures.

See also ▶ Note 29 Nuclear-related assets and liabilities and ▶ Note 36 Pledged assets and contingent liabilities for details on commitments related to associates and joint ventures.

Transactions with Russian joint ventures

In June 2021, the Fortum-Rusnano wind investment fund sold the 200-MW Kalmykia wind parks to the Fortum-Russian Direct Investment Fund (RDIF) joint venture. Fortum recorded a gain of EUR 11 million from the transfer in the share of profits from associates and joint ventures.

On 2 March 2021, Fortum announced it had decided to construct the largest solar power plant in Russia through a joint venture established with RDIF. The power plant is based on capacities won by Fortum in CSA auctions in 2018 and 2019. In March 2021, Fortum sold the CSA-backed solar power project to the joint venture with RDIF.

During 2020, Fortum's joint venture, the Fortum-Rusnano wind investment fund, sold the 50-MW Ulyanovsk 2 and the 300-MW Rostov wind farms to a new joint venture established with RDIF aimed at the operation of renewable power plants in Russia. Fortum recorded a gain of EUR 9 million from the transfer of the Rostov wind farm in the share of profits from associates and joint ventures.

38.5 Pension funds

The Fortum pension funds in Finland, Germany, Russia, Sweden and the United Kingdom are stand-alone legal entities which manage pension assets related to part of the pension coverage in these countries. In 2021, Fortum paid a total of EUR 64 million (2020: 59) direct contribution to these pension plans. See ▶ Note 31 Pension obligations.

The assets in the pension fund in Finland include Fortum shares representing 0.04% (2020: 0.04%) of the company's outstanding shares. The loan granted by Fortum's Finnish pension fund has been secured by real estate mortgages of EUR 41 million (2020: 41).

39 Events after the balance sheet date

On 24 February 2022, Russia started a widespread invasion into Ukraine. As a consequence, the US, the UK and other countries have imposed sanctions targeting Russia's ability to access capital and financial markets, sanctioning numerous individuals and banks, as well as trading in general. These sanctions and possible further reactions by the US, the EU and the UK could impact Fortum's operations in Russia. Meanwhile, uninterrupted gas supply from Russia to Europe has continued. Fortum's Russian operations are running normally.

Given the uncertainty and risks arising from the geopolitical situation, including imposed sanctions and counter sanctions and their consequences, there may be significant impact to the fair value of Fortum's Russian assets, including the exposure in the Nord Stream 2 pipeline project, was approximately 5.5 billion as of 31 December 2021. Fortum is currently assessing the impact of recent developments and measures, and specifically the following:

- Germany has halted the certification of the gas pipeline Nord Stream 2, while the US has sanctioned 2 AG, its subsidiaries and the CEO. Fortum has, within its Uniper segment, a financial receivable of EUR 1 billion related to the Nord Stream 2 pipeline project.
- The Russian rouble (RUB) has depreciated significantly from the closing rate as of 31 December 2021. As a result, it has a negative translation impact on Fortum Group's earnings, assets and liabilities denominated in RUB.

- The above-mentioned events have led to an increase in European commodity prices and corresponding outflows for the Fortum Group. Due to the de-risking and financing measures taken, this has not materially deteriorated Fortum's overall liquidity situation.

Fortum actively monitors the situation in order to ensure continued compliance with prevailing rules and sanctions laws.

See the Risk management section in the Operating and financial review.

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On 18 January 2022, Fortum announced that 1.3 GW portfolio of wind projects is being transferred from Rusnano wind investment fund (50/50 joint venture) to a joint venture recently established with Bank GPF. The transfer, the joint venture of Fortum-Rusnano wind investment fund will be dissolved.

40 Group companies by segment

- G = Generation
R = Russia
C = City Solutions
CS = Consumer Solutions
U = Uniper
O = Other Operations
- 1) Shares held by the parent company
2) Subsidiary not consolidated due to materiality grounds (valued at cost)
3) Associated company or joint venture valued at cost due to materiality grounds

Group holding % for companies owned via subsidiaries is based on the Fortum Corporation ownership % in the direct subsidiary times the ownership % of the direct subsidiary in the indirect subsidiary/associate/joint venture as of 31 December 2021.

Subsidiaries by segment

Entity Name	Domicile	Segment	Group holding, %
Böle Vindkraft Ab/Oy	Finland	G	60.0
Brändskogen Vindkraft Ab Oy	Finland	G	100.0
CrisolteQ Oy	Finland	C	100.0
Ekopartherit Turku Oy	Finland	C	51.0
Fincumet Oy	Finland	C	100.0
Fortum Alku Oy	Finland	O	100.0
Fortum Asiakaspalvelu Oy	Finland	CS	100.0
Fortum Assets Oy	Finland	O	100.0
Fortum Clean Oy	Finland	O	100.0 ¹⁾
Fortum CS Oy	Finland	CS	100.0
Fortum Growth Oy	Finland	C, G, R	100.0
Fortum Heat and Gas Oy	Finland	C, O	100.0 ¹⁾
Fortum Markets Oy	Finland	CS	100.0
Fortum Norm Oy	Finland	O	100.0 ¹⁾
Fortum Oyj	Finland	O	100.0
Fortum Power and Heat Holding Oy	Finland	G	100.0
Fortum Power and Heat Oy	Finland	C, CS, G, O, R	100.0 ¹⁾
Fortum Real Estate Oy	Finland	O	100.0 ¹⁾
Fortum RES Oy	Finland	O	100.0
Fortum Waste Solutions Oy	Finland	C	100.0 ¹⁾
Katajamäen Tuulivoima Oy	Finland	G	100.0
Koillis-Pohjan Energiantuotanto Oy	Finland	G	100.0
Kotimaan Energia Oy	Finland	CS	100.0

Kristinestad-Tjock Vindpark Ab	Finland	
Molpe Vindkraft Ab/Oy	Finland	
Närpes Vindkraft Ab/Oy	Finland	
Oy Pauken Ab	Finland	
Oy Tersil Ab	Finland	
Oy Tertrade Ab	Finland	
Penkkisuon Tuulivoima Oy	Finland	
Pjalex Vindkraft Ab/Oy	Finland	
Poikel Vindkraft Ab/Oy	Finland	
Uniper Global Commodities Canada Inc.	Canada	
Uniper Trading Canada Ltd.	Canada	
Barry Danmark ApS	Denmark	
Fortum Waste Solutions A/S	Denmark	
Fortum CFS Eesi OU	Estonia	
Barry France SAS	France	
Fortum France S.A.S	France	
Liquis France SASU	France	
BauMineral GmbH	Germany	
Deutsche Flüssigerdgas Terminal beschränkt haftende oHG	Germany	
DFTG-Deutsche Flüssigerdgas Terminal Gesellschaft mit beschränkter Haftung	Germany	
Donau-Wasserkraft Aktiengesellschaft	Germany	
Fortum Deutschland SE	Germany	
Fortum Service Deutschland GmbH	Germany	
Freya Bunde-Eizel GmbH & Co. KG	Germany	
Freya Bunde-Eizel Verwaltungsgesellschaft mbH	Germany	
Gemeinschaftskraftwerk Irsching GmbH	Germany	
Hydropower Evolutions GmbH	Germany	
Induboden GmbH & Co. Industriewerte OHG	Germany	
Kokereigasnetz Ruhr GmbH	Germany	
Liquis GmbH	Germany	
Lubmin-Brandov Gastransport GmbH	Germany	
Mainkraftwerk Schweinfurt Gesellschaft mit beschränkter Haftung	Germany	
METHA-Methanhandel GmbH	Germany	
Mittlere Donau Kraftwerke Aktiengesellschaft	Germany	
Obere Donau Kraftwerke Aktiengesellschaft	Germany	
Plugsurffing GmbH	Germany	
RGE Holding GmbH	Germany	
Rhein-Main-Donau GmbH	Germany	
Rheinsee 875 V V GmbH	Germany	

RMD-Consult GmbH Wasserbau und Energie	Germany	U	78.0	Fortum P&H Ireland Limited	Ireland	O
RuhrEnergie GmbH, EVR	Germany	U	78.0	Fortum Participation Ltd	Ireland	O
traconn GmbH	Germany	U	78.0 ²⁾	Uniper Renewables Italy S.r.l.	Italy	U
Uniper Anlagenservice GmbH	Germany	U	78.0	UPT Global Alternatives S.C.S. SICAV-SIF	Luxembourg	U
Uniper Beteiligungs GmbH	Germany	U	78.0	Ergon Holdings Ltd	Malta	U
Uniper BioMethan GmbH	Germany	U	78.0	Ergon Insurance Ltd	Malta	U
Uniper Energy Sales GmbH	Germany	U	78.0	E.ON Benelux Geothermie B.V. (in liquidation)	Netherlands	U
Uniper Energy Storage GmbH	Germany	U	78.0	Fortum 2 B.V.	Netherlands	O
Uniper Exploration & Production GmbH	Germany	U	78.0	Fortum 3 B.V.	Netherlands	C
Uniper Financial Services GmbH	Germany	U	78.0	Fortum Finance B.V.	Netherlands	O
Uniper Global Commodities SE	Germany	U	78.0	Fortum H&C B.V.	Netherlands	C
Uniper Holding GmbH	Germany	U	78.0	Fortum Holding B.V.	Netherlands	O
Uniper HR Services Hannover GmbH	Germany	U	78.0	Fortum Hydro B.V.	Netherlands	O
Uniper Hydrogen GmbH	Germany	U	78.0	Fortum Power Holding B.V.	Netherlands	O
Uniper International Holding GmbH	Germany	U	78.0	Fortum Russia B.V.	Netherlands	C
Uniper IT GmbH	Germany	U	78.0	Fortum SAR B.V.	Netherlands	O
Uniper Kraftwerke GmbH	Germany	U	78.0	Fortum Star B.V.	Netherlands	C
Uniper Market Solutions GmbH	Germany	U	78.0 ²⁾	Plugsurfing B.V.	Netherlands	O
Uniper Renewables GmbH	Germany	U	78.0 ²⁾	PolarSolar B.V.	Netherlands	O
Uniper Risk Consulting GmbH	Germany	U	78.0	Uniper Benelux Holding B.V.	Netherlands	U
Uniper Ruhrgas International GmbH	Germany	U	78.0	Uniper Benelux N.V.	Netherlands	U
Uniper SE	Germany	O, U	78.0	Uniper Energy Trading NL Staff Company B.V.	Netherlands	U
Uniper Solar 1 WHV GmbH	Germany	U	78.0 ²⁾	Uniper Gas Transportation and Finance B.V.	Netherlands	U
Uniper Systemstabilität GmbH	Germany	U	78.0	Uniper Hydrogen Netherlands B.V.	Netherlands	U
Uniper Technologies GmbH	Germany	U	78.0	Uniper Infrastructure Asset Management B.V.	Netherlands	U
Uniper Wärme GmbH	Germany	U	78.0	Uniper Ruhrgas BBL B.V.	Netherlands	U
Untere Iller GmbH	Germany	U	46.8 ²⁾	Uniper Technologies B.V.	Netherlands	U
Fortum Insurance Ltd	Guernsey	O	100.0	Utilities Center Maasvlakte Leftbank b.v.	Netherlands	U
Uniper Hungary Energetikai Kft.	Hungary	U	78.0	E.ON Ruhrgas Nigeria Limited	Nigeria	U
Fortum Charge & Drive India Private Limited	India	O	73.1	Fortum Consumer Solutions AS	Norway	C\$
Fortum India Private Limited	India	C	100.0 ¹⁾	Fortum Fiber AS	Norway	C\$
Solar One Energy Private Limited	India	C	100.0	Fortum Forvaltning AS	Norway	C\$
SolarXL Alpha Energy Private Limited	India	C	100.0	Fortum Hedging AS	Norway	G
SolarXL Beta Energy Private Limited	India	C	100.0	Fortum Kundesenter AS	Norway	C\$
SolarXL Gamma Energy Private Limited	India	C	100.0	Fortum Markets AS	Norway	C\$
Uniper India Private Ltd.	India	U	78.0 ²⁾	Fortum Oslo Varme AS	Norway	C
PT Fortum Energy Solution	Indonesia	C	95.0	Fortum Plastics Recycling Norway AS	Norway	C
Fortum eNext Ireland Ltd	Ireland	C	100.0	Fortum Strøm AS	Norway	C\$
Fortum Finance Ireland Designated Activity Company	Ireland	O, C, G	100.0 ¹⁾	Fortum Teller AS	Norway	C\$
Fortum Global Finance Designated Activity Company	Ireland	O	100.0	Fortum Waste Solutions Norway AS	Norway	C

Hallingkraft AS	Norway	CS	100.0	Fortum Sweden AB	Sweden	O
NorgesEnergi AS	Norway	CS	100.0	Fortum Vindkraft Sverige 1 AB	Sweden	G
Fortum Marketing and Sales Polska S.A.	Poland	CS	100.0	Fortum Vindkraft Sverige 2 AB	Sweden	G
Fortum Network Czeŝochowa Sp. z o.o.	Poland	C	100.0	Fortum Vindkraft Sverige 3 AB	Sweden	G
Fortum Network Plock Sp. z o.o.	Poland	C	100.0	Fortum Waste Solutions AB	Sweden	C
Fortum Network Wroclaw Sp. z o.o.	Poland	C	100.0	Fortum Waste Solutions Holding AB	Sweden	C
Fortum Power and Heat Polska Sp. z o.o.	Poland	C, O	100.0	Göta Energi AB	Sweden	CS
Fortum Service Poland Sp. z o.o.	Poland	O	100.0	Kolbäckens Kraft KB	Sweden	U
Fortum Silesia SA	Poland	C	100.0	Mellansvensk Kraftgrupp Aktiebolag	Sweden	G, U
Fortum Sprzedaz Sp. z o.o.	Poland	CS	100.0	Nordgroup Waste Management AB	Sweden	C
Uniper Renewables Poland sp. z o.o.	Poland	U	78.0 ²⁾	OKG Aktiebolag	Sweden	G, U
Fortum-New G 3 Limited Liability Company	Russia	R	100.0	Oreälvens Kraftaktiebolag	Sweden	G
Fortum-New G 5 Limited Liability Company	Russia	R	98.2	Sävar Vindkraft AB	Sweden	G
Joint Stock Company Chelyabenergoemont	Russia	R	100.0	Stensjön Kraft AB	Sweden	G, U
LLC Bugulchanskaya Solar power station	Russia	R	98.2	Sydskraft AB	Sweden	U
OOO Agro-industrial Park «Siberia»	Russia	U	65.3 ²⁾	Sydskraft Försäkring AB	Sweden	U
OOO Unipro Engineering	Russia	U	65.3 ²⁾	Sydskraft Hydropower AB	Sweden	U
PAO Fortum	Russia	R	98.2	Sydskraft Nuclear Power AB	Sweden	U
PAO Unipro	Russia	U	65.3	Sydskraft Nuclear Services AB	Sweden	U
Uniper NefteGaz LLC	Russia	U	65.3 ²⁾	Sydskraft Thermal Power AB	Sweden	G
Ural Heat Networks Company Joint Stock Company	Russia	R	98.2	Sydeholm Kraft Aktiebolag	Sweden	U
HQ Services Limited	Rwanda	C	49.0	Vänerlandskraft-OKG-delägama Aktiebolag	Sweden	G
Uniper Energy Asia Pacific Pte. Ltd.	Singapore	U	78.0 ²⁾	Uniper Energy DMCC	United Arab Emirates	U
Uniper Energy Southern Africa (Pty) Ltd.	South Africa	U	78.0 ²⁾	Uniper Energy Fujairah FZE	United Arab Emirates	U
Escandhava de Electricidad S.L.U	Spain	CS	100.0	Uniper Energy Services MENA DMCC	United Arab Emirates	U
Barsebäck Kraft AB	Sweden	U	78.0 ²⁾	Fortum Carlisle Limited	United Kingdom	C
Blåsön Kraft AB	Sweden	G, U	89.0	Fortum Energy Ltd	United Kingdom	O
Blåsön Nät AB	Sweden	G, U	89.0	Fortum Glasgow Limited	United Kingdom	C
Blybergs Kraftaktiebolag	Sweden	G	66.7	Fortum O&M(UK) Limited	United Kingdom	C
Brännälven Kraft AB	Sweden	G, U	81.9	Holford Gas Storage Limited	United Kingdom	U
Bullerforsens Kraft Aktiebolag	Sweden	G	88.0	IVO Energy Limited	United Kingdom	G
Energikundservice Sverige AB	Sweden	CS	100.0	South Clyde Energy Recovery Holdings Ltd	United Kingdom	C
Fortum 1 AB	Sweden	R	100.0	Uniper Energy Limited	United Kingdom	U
Fortum Energy AB	Sweden	CS	100.0	Uniper Energy Trading UK Staff Company Limited	United Kingdom	U
Fortum Fastigheter AB	Sweden	O	100.0	Uniper Global Commodities London Ltd.	United Kingdom	U
Fortum Markets AB	Sweden	CS	100.0	Uniper Global Commodities UK Limited	United Kingdom	U
Fortum Produktionsnät AB	Sweden	G	100.0	Uniper Holdings Limited	United Kingdom	U
Fortum Ren AB	Sweden	O	100.0	Uniper Hydrogen UK Limited	United Kingdom	U
Fortum Skott AB	Sweden	O	100.0	Uniper Technologies Limited	United Kingdom	U
Fortum Sverige AB	Sweden	C, G, O	100.0	Uniper UK Corby Limited	United Kingdom	U

Financial key figures

For information of Alternative Performance Measures used by Fortum, see ► Definitions and reconciliations of key figures and ► Note 1 Significant accounting policies.

In 2021, Fortum introduced two new Alternative Performance Measures (APM) to provide additional financial performance indicators to support meaningful comparison of underlying net profitability between periods: Comparable net profit, and Comparable earnings per share. Comparable net profit is shown after non-controlling interest and adjusted for items affecting comparability, as well as adjustments to share of profit of associates and joint ventures, net finance costs, income tax expenses, and non-controlling interest. Comparable earnings per share is calculated from comparable net profit. For more information, see ► Definitions and reconciliations of key figures and ► Note 7 Comparable operating profit and comparable net profit.

EUR million or as indicated	2021	2020	Change 21/20 %
Income statement			
Reported			
Sales	112,400	49,015	129
EBITDA	693	2,688	-74
Operating profit	-588	1,599	-137
- of sales %	-0.5	3.3	
Share of profit/loss of associates and joint ventures	192	656	-71
Profit before income tax	-289	2,199	-113
- of sales %	-0.3	4.5	
Profit for the period	-114	1,855	-106
- of which attributable to owners of the parent	739	1,823	-59
Comparable			
EBITDA	3,817	2,434	57
Operating profit	2,536	1,344	89
Share of profit/loss of associates and joint ventures	154	656	-77
Net profit (after non-controlling interests)	1,778	1,483	20
Financial position and cash flow			
Capital employed	30,885	26,239	-89
Financial net debt	789	7,023	-67
Adjusted net debt	3,227	9,784	-72
Capital expenditure and gross investments in shares	1,407	4,953	-72
- of sales %	1.3	10.1	
Capital expenditure	1,116	1,146	-3
Net cash from operating activities	4,970	2,555	95

Fortum consolidated Uniper into its balance sheet as of 31 March 2020 and, from the second quarter consolidated Uniper's results into its income statement. In the first quarter of 2020, Uniper was consolidated associated company into Fortum's income statement. The main reason for the change in cumulative figure comparison to the year 2020 is thus the consolidation of Uniper.

EUR million or as indicated	2021	2020
Key ratios		
Return on shareholders' equity, %	-0.8	1
Interest coverage	-12.7	2
Interest coverage including capitalised borrowing costs	-9.4	1
Gearing, %	6	
Equity-to-assets ratio, %	9	
Financial net debt/comparable EBITDA	0.2	
Other data		
Dividends	1,013 ¹⁾	9
Research and development expenditure	61	
- of sales %	0.1	
Average number of employees ²⁾	19,796	17,3

1) Board of Directors' proposal for the planned Annual General Meeting on 28 March 2022.

2) 2020 comparative figure was revised to reflect the consolidation of Uniper from March 31, 2020.

See ► Definitions and reconciliations of key figures.

Share key figures

EUR or as indicated	2021	2020	Change 21/20 %
Data per share			
Earnings per share	0.83	2.05	-60
Comparable earnings per share	2.00	1.67	20
Cash flow per share	5.60	2.88	94
Equity per share	13.66	14.58	-6
Dividend per share	1.14 ¹⁾	1.12	2
Payout ratio, %	137.3 ¹⁾	54.6	
Dividend yield, %	4.2 ¹⁾	5.7	
Price/earnings ratio (P/E)	32.5	9.6	
Share prices			
At the end of the period	26.99	19.70	
Average	23.65	17.20	
Lowest	19.72	12.25	
Highest	27.96	23.46	
Other data			
Market capitalisation at the end of the period, EUR million	23,975	17,499	
Trading volumes ²⁾			
Number of shares, 1,000 shares	351,450	647,869	
In relation to weighted average number of shares, %	39.6	72.9	
Average number of shares, 1,000 shares	888,294	888,294	
Diluted adjusted average number of shares, 1,000 shares	888,294	888,294	
Number of registered shares, 1,000 shares	888,294	888,294	

1) Board of Directors' proposal for the planned Annual General Meeting on 28 March 2022.

2) Trading volumes in the table represent volumes traded on Nasdaq Helsinki. In addition to the Nasdaq Helsinki, Fortum shares were traded on several alternative market places, for example at Boati, Cboe and Turquoise, and on the OTC market as well. During 2021, approximately 70% (2020: 68%) of Fortum's shares were traded on markets other than the Nasdaq Helsinki Ltd.

See ► Definitions and reconciliations of key figures.

Segment key figures

Sales by segment, EUR million	2021	2020
Generation	2,899	2,006
- of which internal	143	421
Russia	906	929
- of which internal	3	2
City Solutions	1,302	1,075
- of which internal	39	64
Consumer Solutions	2,622	1,267
- of which internal	14	2
Uniper	105,992	44,514
- of which internal	29	0
Other Operations	138	140
- of which internal	104	110
Eliminations and Netting of Nord Pool transactions	-1,459	-916
Total	112,400	49,015

Comparable operating profit by segment, EUR million	2021	2020
Generation	1,110	722
Russia	261	251
City Solutions	135	47
Consumer Solutions	52	90
Uniper	1,120	363
Other Operations	-142	-129
Comparable operating profit	2,536	1,344
Impairment charges and reversals	-83	2
Capital gains and other related items	2,681	765
Impact from acquisition accounting	-	-222
Changes in fair values of derivatives hedging future cash flow	-5,424	-675
Other	-299	386
Operating profit	-588	1,599

Comparable EBITDA by segment, EUR million	2021	2020
Generation	1,220	1,240
Russia	421	430
City Solutions	929	930
Consumer Solutions	1	1
Uniper	1,075	1,700
Other Operations	-1	-1
Total	3,645	3,800
Depreciation and amortisation, EUR million	2021	2020
Generation	1	1
Russia	1	1
City Solutions	1	1
Consumer Solutions	1	1
Uniper	6	6
Other Operations	1	1
Total	12	12

Comparable share of profit of associates and joint ventures by segment, EUR million	2021	2020
Generation	1	1
Russia	1	1
City Solutions	1	1
Uniper	1	1
Other Operations	1	1
Total	5	5

1) Comparable share of profit/loss of associates and joint ventures for 2020 has been recalculated following the introduction of comparables in 2021.

Share of profit of associates and joint ventures by segment, EUR million		2021	2020
Generation		36	29
Russia		62	47
City Solutions		42	57
Uniper		51	54
Other Operations		0	470
Total		192	656
Capital expenditure by segment, EUR million		2021	2020
Generation		168	158
Russia		47	43
City Solutions		161	219
Consumer Solutions		68	57
Uniper		673	635
Other Operations		15	34
Total		1,116	1,146
Gross investments in shares by segment, EUR million		2021	2020
Generation		7	70
Russia		36	48
City Solutions		2	114
Consumer Solutions		-	0
Uniper		9	3
Other Operations		237	3,572
Total		290	3,807
Gross divestments of shares by segment, EUR million		2021	2020
Generation		129	171
Russia		18	0
City Solutions		3,870	895
Consumer Solutions		0	10
Uniper		88	69
Other Operations		19	81
Total		4,122	1,226

Comparable net assets by segment, EUR million		2021	2020
Generation		6,33	2,5
Russia		2,5	2,5
City Solutions		2,4	2,4
Consumer Solutions		1,1	1,1
Uniper		4,9	4,9
Other Operations		1	1
Total		17,5	17,5

Comparable return on net assets by segment, %		2021	2020
Generation		11	11
Russia		11	11
City Solutions		11	11
Consumer Solutions		11	11
Uniper ¹⁾		11	11

¹⁾ Fortum consolidated Uniper into its balance sheet as of 31 March 2020 and, from the second quarter of 2020, consolidated Uniper income statement. Comparable return on net assets for the Uniper segment are presented from 2021 onwards as information for 2020 is not available.

Average number of employees		2021	2020
Generation		1,1	1,1
Russia		2,8	2,8
City Solutions		1,9	1,9
Consumer Solutions		1,0	1,0
Uniper ¹⁾		11,7	11,7
Other Operations		9	9
Total ¹⁾		19,7	19,7

¹⁾ 2020 comparative figure was revised to reflect the consolidation of Uniper from March 31, 2020.

Definitions and reconciliations of key figures

Alternative performance measures

Business performance	Definition	Reason to use the measure	Reference to reconciliation	Business performance	Definition	Reason to use the measure
Comparable EBITDA	Operating profit + depreciations and amortisations - items affecting comparability	Comparable EBITDA is representing the underlying cash flow generated by the total Group and segments. Used as a component in the capital structure target of Financial net debt to Comparable EBITDA.	Note 5 Capital risk management	Impact from acquisition accounting	Non-cash accounting impact resulting from reclassifying part of Uniper's other comprehensive income to the income statement when Uniper was consolidated as a subsidiary.	Component used in calculating comparable operating profit and comparable EBITDA.
Comparable operating profit	Operating profit - items affecting comparability	Comparable operating profit is used in financial target setting and forecasting. Management's follow up of financial performance and allocation of resources in the group's performance management process.	Income statement	Changes in fair values of derivatives hedging future cash flow	Effects from financial derivatives hedging future cash flows where hedge accounting is not applied or own use exemption cannot be used according to IFRS 9 and are adjusted from other income or expenses to sales and materials and services respectively when calculating Fortum's alternative performance measures.	Component used in calculating comparable operating profit and comparable EBITDA.
Items affecting comparability	Impairment charges and reversals + capital gains and other related items + impact from acquisition accounting + changes in fair values of derivatives hedging future cash flow + other	Component used in calculating comparable operating profit and comparable EBITDA.	Income statement	Other	Restructuring and cost management expenses, and other miscellaneous non-operating items, which are adjusted mainly from materials and services or employee benefits.	Component used in calculating comparable operating profit and comparable EBITDA.
Impairment charges and reversals	Impairment charges and related provisions (mainly dismantling), as well as the reversal of previously recorded impairment charges. Impairment charges are adjusted from depreciation and amortization, and reversals from other income.	Component used in calculating comparable operating profit and comparable EBITDA.	Income statement	Comparable share of profit/loss of associates and joint ventures	Share of profit/loss of associates and joint ventures +/- significant adjustments for share of profit /loss in principal associates and joint ventures.	Component used in calculating comparable net profit and comparable return on net assets.
Capital gains and other related items	Capital gains and transaction costs from acquisitions, which are adjusted from other income and other expenses respectively. Profits are reported in comparable operating profit, if this reflects the business model.	Component used in calculating comparable operating profit and comparable EBITDA.	Income statement	Comparable finance-costs - net	Finance costs – net +/- return from nuclear funds, nuclear fund adjustment and unwinding of nuclear provisions +/- fair value changes on financial items +/- impairment charges and reversals of previously recorded impairment charges on financial items.	Component used in calculating comparable net profit.

Business performance	Definition	Reason to use the measure	Reference to reconciliation	Capital structure	Definition	Reason to use the measure
Comparable profit before income tax	Comparable operating profit +/- comparable share of profit/loss of associates and joint ventures +/- comparable finance costs – net.	Subtotal in comparable net profit calculation.	Note 7 Comparable operating profit and comparable net profit	Comparable net assets	Non-interest-bearing assets - non-interest-bearing liabilities - provisions (non-interest-bearing assets and liabilities do not include finance-related items, tax and deferred tax and assets and liabilities from fair valuations of derivatives used for hedging future cash flows).	Comparable net assets is a component in Comparable return on net assets calculation where return on capital allocated directly to the businesses is measured.
Comparable income tax expense	Income tax expense excluding taxes on items affecting comparability, adjustments to finance costs – net, tax rate changes and other onetime adjustments.	Component used in calculating comparable net profit.	Note 7 Comparable operating profit and comparable net profit	Financial net debt / comparable EBITDA	Financial net debt Comparable EBITDA	Financial net debt to comparable EBITDA is Fortum's long-term financial target for capital structure.
Comparable net profit	Comparable operating profit +/- comparable share of profit/loss of associates and joint ventures +/- comparable finance costs - net +/- comparable income tax expense +/- comparable non-controlling interests.	Comparable net profit is used to provide additional financial performance indicators to support meaningful comparison of underlying net profitability between periods.	Note 7 Comparable operating profit and comparable net profit	Comparable net debt / EBITDA	Interest-bearing net debt Comparable EBITDA	Comparable net debt to EBITDA was the capital structure target of the Group until Q1 2020.
Comparable return on net assets, %	Comparable operating profit + comparable share of profit/loss in associates and joint ventures Comparable net assets average	Comparable return on net assets is used in financial target setting and forecasting, management's follow up of financial performance and allocation of resources in the group's performance management process.	Note 6 Segment reporting	Adjusted net debt	Financial net debt + underfunded pension obligations and asset retirement obligations, net of share in nuclear waste funds	Financial net debt is used in the follow-up of the indebtedness of the group and it is a component in the capital structure target of Financial net debt to Comparable EBITDA.
Adjustment for profit/loss in associates and joint ventures	Adjustment for material items affecting comparability.	Share of profit/loss in associates and joint ventures is included in profit component in the comparable return on net assets calculation and the adjustments are done based on similar components as in Items affecting comparability.	Note 6 Segment reporting	Interest-bearing net debt	Interest-bearing liabilities - liquid funds	Until Q1 2020 interest-bearing net debt was used in the follow-up of the indebtedness of the group. In the capital structure especially as a component in the long-term over-the-cycle financial target of Comparable net debt to EBITDA in the Group.

Capital structure Definition Reason to use the measure Reconciliation

Return on capital employed (ROCE), % Profit before taxes + interest and other financial expenses Capital employed average x 100 efficiently invested capital was used. N/A

Capital employed Total assets - total non-interest bearing liabilities Capital employed is the book value of the invested capital and it was used as a component when calculating the Return of capital employed in the group. N/A

See ▶ Note 1.4 Measures for performance and ▶ Note 7 Comparable operating profit and comparable net profit.

Other key figures Share based key figures

Earnings per share (EPS)	Profit for the period - non-controlling interests Average number of shares during the period
Comparable earnings per share	Comparable net profit Average number of shares during the period
Cash flow per share	Net cash from operating activities Average number of shares during the period
Equity per share	Shareholders' equity Number of shares at the end of the period
Payout ratio, %	Dividend per share Earnings per share x 100
Dividend yield, %	Dividend per share Share price at the end of the period x 100
Price/earnings (P/E) ratio	Share price at the end of the period Earnings per share
Average share price	Amount traded in euros during the period Number of shares traded during the period
Market capitalisation	Number of shares at the end of the period x share price at the end of the period
Trading volumes	Number of shares traded during the period in relation to the weighted average number of shares during the period

Other key figures

EBITDA	Operating profit + depreciations and amortisations
Funds from operations (FFO)	Net cash from operating activities before change in working capital
Capital expenditure	Capitalised investments in property, plant and equipment and intangible assets including maintenance, productivity, growth and investments required by legislation including borrowing costs capitalised during the construction period. Maintenance investments expand the lifetime of an existing asset, maintain usage/availability and/or maintains reliability. Productivity investments improve productivity in an existing asset. Growth investments' purpose is to build new assets and/or to increase customer base within existing businesses. Legislation investments are done at certain point of time due to legal requirements.
Gross investments in shares	Investments in subsidiary shares, shares in associated companies and joint ventures and other investments. Investments in subsidiary shares are net of liquid funds and grossed with interest-bearing liabilities and other items included in financial net debt in the acquired company.
Return on shareholders' equity (ROE), %	Profit for the year _____ x 100 Total equity average
Gearing, %	Financial net debt _____ x 100 Total equity including non-controlling interests
Equity-to-assets ratio, %	Total equity including non-controlling interests _____ x 100 Total assets
Interest coverage	Operating profit _____ Net interest expenses
Interest coverage including capitalised borrowing costs	Operating profit _____ Net interest expenses - capitalised borrowing costs
Average number of employees	Based on monthly average for the whole period

Tax key figures

Effective income tax rate, %	Income tax expense _____ x 100 Profit before income tax
Comparable effective income tax rate, %	Comparable income tax _____ x 100 Comparable profit before income tax excluding share of profit/loss from associated companies and joint ventures
Weighted average applicable income tax rate	Sum of the proportionately weighted share of profits before taxes of each of the group's country multiplied by an applicable nominal tax rate of the respective countries.

Reconciliations of alternative performance measures

Comparable EBITDA

EUR million	Note	2021	2020
IS Operating profit		-588	1,599
+ IS Depreciation and amortisation		1,281	1,090
EBITDA		693	2,688
- IS Items affecting comparability	7	3,124	-255
Comparable EBITDA		3,817	2,434

Comparable operating profit

EUR million	Note	2021	2020
IS Operating profit		-588	1,599
- IS Items affecting comparability	7	3,124	-255
IS Comparable operating profit	7	2,536	1,344

Items affecting comparability

EUR million	Note	2021	2020
Impairment charges and reversals		-83	2
Capital gains and other related items	3	2,681	765
Impact from acquisition accounting		-	-222
Changes in fair values of derivatives hedging future cash flow		-5,424	-675
Other		-299	386
IS Items affecting comparability	7	-3,124	255

Comparable net profit

EUR million	Note	
IS Net profit	-1	-1
- IS Items affecting comparability	7	3,124
- Adjustments to share of profit/loss of associates and joint ventures	18	-1
- Adjustments to finance costs - net	11	-1
- Adjustments to income tax expenses		-7
- IS Non-controlling interests		8
- Adjustments to non-controlling interests		-1,1
Comparable net profit	7	1,7

Comparable earnings per share

EUR million	Note	
Comparable net profit, EUR million	7	1,7
Average number of shares during the period, 1 000 shares		888,2
Comparable earnings per share, EUR		2

Financial net debt and adjusted net debt

EUR million	Note	31 Dec 2021	31 Dec 2020
+ Interest-bearing liabilities		17,220	10,662
- BS Liquid funds		7,592	2,308
- Non-current securities		111	98
- Collateral arrangement securities		549	432
- Securities in interest-bearing receivables		660	530
- BS Margin receivables		9,163	1,132
+ BS Margin liabilities		985	331
+/- Net margin liabilities/receivables		-8,179	-801
Financial net debt	27	789	7,023
+ BS Pension obligations		1,190	1,520
+ Other asset retirement obligations		872	821
- BS Share of Finnish and Swedish Nuclear Waste Funds		3,515	3,445
+ BS Nuclear provisions		3,891	3,866
+ Nuclear provisions net of assets in Nuclear Waste Funds		375	421
+ Total provisions net of assets in Nuclear Waste Funds		2,438	2,762
Adjusted net debt		3,227	9,784

Financial net debt/comparable EBITDA

EUR million	Note	2021	2020
+ Interest-bearing liabilities		17,220	10,662
- BS Liquid funds		7,592	2,308
- Non-current securities		111	98
- Collateral arrangement securities		549	432
- Securities in interest-bearing receivables		660	530
- BS Margin receivables		9,163	1,132
+ BS Margin liabilities		985	331
+/- Net margin liabilities/receivables		-8,179	-801
Financial net debt	27	789	7,023
IS Operating profit		1,190	1,520
+ IS Depreciation and amortisation		872	821
EBITDA		3,515	3,445
- IS Items affecting comparability		3,891	3,866
Comparable EBITDA		375	421
Financial net debt/comparable EBITDA		2,438	2,762
		3,227	9,784

Årsregnskap regnskapsåret 2022

	EUR	Note	2021	2020
Sales		2	138,653,366	115,411,878
Other income		3	8,154,517	6,973,020
Employee benefits		4	-54,312,599	-44,908,024
Depreciation, amortisation and write-downs		8	-10,476,708	-8,582,395
Other expenses			-123,370,573	-107,095,843
Operating loss			-41,351,995	-38,201,364
Financial income and expenses		6	1,658,966,966	1,514,790,424
Profit before appropriations and income tax			1,617,614,971	1,476,589,060
Appropriations			-909,896	-
Group contributions received ¹⁾			235,685,000	233,438,000
Profit before income tax			1,852,390,074	1,710,027,060
Income tax expense		7	-36,363,330	-31,505,510
Profit for the year			1,816,026,744	1,678,521,550

Balance sheet

EUR	Note	31 Dec 2021
Other current receivables	9	18,236,847
Deposits and securities (maturity over three months)		-
Cash and cash equivalents		4,240,206,975
Liquid funds		4,240,206,975
Total current assets		4,774,486,560
Total assets		28,106,817,462
EQUITY		
Shareholders' equity	10	
Share capital		3,046,185,953
Share premium		2,821,690,902
Hedging reserve		-13,279,837
Retained earnings		3,945,170,314
Profit for the year		1,816,026,744
Total equity		11,615,794,077
Accumulated appropriations		909,896
Provisions for liabilities and charges		343,198
LIABILITIES		
Non-current liabilities		
External interest-bearing liabilities	11, 13, 14	6,446,656,334
Interest-bearing liabilities to Group companies		5,562,468,774
Interest-bearing liabilities to associated companies		22,507,037
Derivative financial instruments	13, 14	3,050,594
Other non-current liabilities		27,589,524
Total non-current liabilities		12,336,272,463
Current liabilities		
External interest-bearing liabilities	11	3,828,37,491
Interest-bearing liabilities to associated companies		6,701,555
Trade and other payables to Group companies	12	37,846,355
Trade and other payables to associated companies	12	475,327
Derivative financial instruments	13, 14	1,263,596
Trade and other payables	12	86,997,502
Total current liabilities		4,154,97,827
Total liabilities		16,491,770,290
Total equity and liabilities		28,106,817,462

Cash flow statement

EUR 1,000	2021	2020
Cash flow from operating activities		
Profit for the year	1,816,027	1,678,522
Adjustments:		
Income tax expense	36,363	31,506
Group contributions	-235,685	-233,438
Finance costs - net	-1,658,967	-1,514,790
Depreciation, amortisation, write-downs and appropriations	11,320	8,582
Operating profit before depreciation (EBITDA)	-30,942	-29,619
Non-cash flow items		
Interest and other financial income received	-2,975	2,623
Interest and other financial expenses paid	34,307	34,970
Dividends received	-72,118	-51,724
Group contributions received	1,582,270	1,129,720
Realised foreign exchange gains and losses	233,438	286,059
Income taxes paid	127,949	-75,092
	-63,226	-35,403
Funds from operations	1,808,703	1,261,534
Other short-term receivables increase(-)/decrease(+)	1,664	-915
Other short-term payables increase(+)/decrease(-)	-460	19,729
Change in working capital	1,204	18,814
Net cash from operating activities	1,809,907	1,280,348
Cash flow from investing activities		
Capital expenditures	-12,027	-13,215
Acquisition of shares and capital contributions in subsidiaries	-	-8
Acquisition of other shares	-52	-
Proceeds from sales of shares	126,504	921,162
Proceeds from sales of property, plant and equipment	1,415	148
Change in interest-bearing receivables and other non-current assets	-2,129,895	-2,092,580
Net cash used in investing activities	-2,014,054	-1,184,492
Cash flow before financing activities	-204,147	95,856

EUR 1,000	2021
Cash flow from financing activities	
Proceeds from long-term liabilities	2,674,819
Payment of long-term liabilities	-2,095,218
Change in cashpool liabilities	1,232,838
Change in short-term liabilities	1,915,137
Dividends paid	-995,268
Net cash from financing activities	2,732,307
Net increase(+)/decrease(-) in liquid funds	2,528,160
Liquid funds at the beginning of the year	1,712,047
Liquid funds at the end of the year	4,240,207

Notes to the Parent Company Financial Statements, FAS

1 Accounting policies and principles

The financial statements of Fortum Oyj for the year ended 31 December 2021 are prepared in accordance with Finnish Accounting Standards (FAS).

1.1 Sales

Sales include sales revenue from actual operations and exchange rate differences on trade receivables, less discounts and indirect taxes such as value added tax.

1.2 Other income

Other income includes gains on the sales of property, plant and equipment and shareholdings, as well as all other operating income not related to the sales of products or services, such as rents.

1.3 Foreign currency items and derivative instruments

Transactions denominated in foreign currencies have been valued using the exchange rate at the date of the transaction. Receivables and liabilities denominated in foreign currencies outstanding on the balance sheet date have been valued using the exchange rate quoted on the balance sheet date. Exchange rate differences have been entered in the financial net in the income statement.

Fortum Oyj enters into derivative contracts mainly for hedging foreign exchange and interest rate exposures in Fortum Group.

Fortum Oyj applies IFRS 9 Financial Instruments standard for derivative instruments and hedge accounting in statutory financial statements. Accounting principles on financial derivatives, see ▶ Note 4 Financial risk management.
▶ Note 14 Financial assets and liabilities by categories and ▶ Note 15 Financial assets and liabilities by fair value hierarchy in the Consolidated financial statements.

1.4 Income taxes

Income taxes presented in the income statement consist of accrued taxes for the financial year and tax adjustments for prior years.

1.5 Shares in group companies

The balance sheet value of shares in group companies consists of historical costs less write-downs. If the estimated future cash flows generated by a non-current asset are expected to be permanently lower than the carrying amount, an adjustment to the value is made to write-down the difference as an expense. If the basis for the write-down can no longer be justified at the balance sheet date, it is reversed.

1.6 Intangible assets and Property, plant and equipment

The balance sheet value of intangible assets and property, plant and equipment consists of historical costs less depreciation and possible write-downs. Intangible assets and Property, plant and equipment are depreciated on a straight-line depreciation based on the expected useful life of the asset.

The depreciation is based on the following expected useful lives:

Machinery and equipment	3 – 15 years
Intangible assets	5 – 10 years

1.7 Pension expenses

Statutory pension obligations are covered through a compulsory pension insurance policy or Group's own pension fund. Costs for pension fund are recorded in the income statement based on contributions paid pursuant to the pension laws and regulations.

1.8 Long-term incentive schemes

Costs related to the Fortum long-term incentive plans are accrued over the earnings period and the related costs are booked to the balance sheet.

1.9 Provisions

Foreseeable future expenses and losses that have no corresponding revenue to which Fortum is committed to settle, and whose monetary value can be reasonably assessed, are entered as expenses in the income statement and included as provisions on the balance sheet.

2 Sales by market area

EUR 1,000	2
Finland	66
Other countries	72
Total	138

3 Other income

EUR 1,000	2
Rental and other income	8
Total	8

4 Employee benefits

EUR 1,000	2021	2020
Personnel expenses		
Wages, salaries and remunerations	43,226	35,938
Indirect employee costs		
Pension costs	6,822	5,129
Other indirect employee costs	1,549	1,188
Other personnel expenses	2,715	2,654
Total	54,313	44,908

	2021	2020
	Markus Rauramo, President and CEO from 1 July 2020	Markus Rauramo, Pekka Lundmark, President and CEO until 1 July 2020
EUR 1,000		
Compensation for the President and CEO		
Salaries and fringe benefits	1,559	808
Performance bonuses ¹⁾	423	82
Share-based incentives ¹⁾	1,006	249
Pensions (statutory)	311	140
Pensions (voluntary)	315	158
Social security expenses	69	31

¹⁾ Based on estimated amounts.

EUR 1,000	2021	2020
Compensation for the Board of Directors		
	504	593

The compensation above is presented on accrual basis. Paid salaries and remunerations for the President and CEO Markus Rauramo were EUR 2,821 thousand (2020: 808).
For the President and CEO Markus Rauramo the retirement age is determined in accordance with the Finnish Employees' Pension Act. The pension obligations are covered through insurance company.
Board members are not in an employment relationship or service contract with Fortum, and they are not given the opportunity to participate in Fortum's STI or LTI programme, nor does Fortum have a pension plan that they can opt to take part in. The compensation of the board members is not tied to the sustainability performance of the Group.

See » Note 10 Employee benefits and Board remuneration and » Note 31 Pension obligations in the Consolidated financial statements.

Average number of employees	2
5 Auditor's fees	
EUR 1,000	2
Audit fees	
Audit-related assignments	
Tax assignments	
Total	

Deloitte Oy is the appointed auditor until the next Annual General Meeting, to be held in 2022. Audit fees for the audit of the consolidated financial statements, review of the interim reports as well as the fees for Fortum Oyj. Audit-related assignments include fees for assurance of sustainability reporting and other associated services related to the audit. Tax assignments include fees for tax advice services.

6 Financial income and expenses	
EUR 1,000	2
Dividend income from group companies	1,582
Interest and other financial income from group companies	42
Interest and other financial income from associated companies	
Gains on sale of shares	101
Interest and other financial income	
Exchange rate differences	
Changes in fair values of derivatives	9
Interest and other financial expenses to group companies	-2
Interest and other financial expenses	-74
Total	1,658
Interest income	38
Interest expenses	-71
Interest costs - net	-33

7 Income tax expense

EUR 1,000	2021	2020
Taxes on regular business operations	-10,774	-15,182
Taxes on group contributions	47,137	46,688
Total	36,363	31,506
Current taxes for the period	36,421	32,116
Current taxes for prior periods	-15	-1
Changes in deferred tax	-43	-610
Total	36,363	31,506

8 Non-current assets

EUR 1,000	Total
Intangible assets	
Cost 1 January 2021	65,175
Additions	12,148
Disposals	-9,218
Cost 31 December 2021	68,104

Accumulated depreciation 1 January 2021	30,512
Disposals	-4,050
Depreciation for the year	8,896
Accumulated depreciation 31 December 2021	35,358
Carrying amount 31 December 2021	32,746
Carrying amount 31 December 2020	34,662

Property, plant and equipment

EUR 1,000	Machinery and equipment	Advances paid a construction progre
Cost 1 January 2021	10,502	3,302
Additions and transfers between categories	511	2,211
Disposals	-1,123	-7
Cost 31 December 2021	9,890	4,806
Accumulated depreciation 1 January 2021	6,502	
Disposals	-727	
Depreciation for the year	1,516	
Accumulated depreciation 31 December 2021	7,292	
Carrying amount 31 December 2021	2,598	4,806
Carrying amount 31 December 2020	4,000	3,302

Investments

EUR 1,000	Shares in Group companies	Participation in Group companies	Receivables from Group companies	Receivables from Group companies	Other non-current assets
Cost 1 January 2021	17,346,949	5,656	5,045,167	16,690,806	8,177
Additions 1)	-25,317		2,005,558		
Cost 31 December 2021	17,321,633	5,656	7,050,725	16,700,806	8,177
Accumulated write-downs 1 January 2021	1,145,010	5,656	-	15,270,000	7,177
Accumulated write-downs 31 December 2021	1,145,010	5,656	-	15,270,000	7,177
Carrying amount 31 December 2021	16,176,623	0	7,050,725	1,504,404	1,000
Carrying amount 31 December 2020	16,201,940	-	5,045,168	1,416,000	1,416

1) Additions regarding shares comprise acquisitions of shares and capital contributions and reclassification between other non-current assets and investments.

9 Other current receivables

EUR 1,000	2021	2020
Other current receivables from group companies		
Trade receivables	14,435	12,209
Group contribution and other receivables	359,560	233,438
Accrued income and prepaid expenses	3,086	2,974
Total	377,082	248,621
Other current receivables		
Trade receivables	719	79
Other receivables	3,236	3,289
Accrued income and prepaid expenses	14,282	18,814
Total	18,237	22,182

See ▶ Note 4.2 Liquidity and refinancing risk in the Consolidated financial statements.

10 Changes in shareholders' equity

EUR 1,000	share capital	share premium	hedging reserve	retained earnings	Total
1 January 2021	3,046,186	2,821,691	-24,202	4,940,060	10,783,735
Cash dividend				-994,890	-994,890
Change in hedging reserve			10,923		10,923
Profit for the year				1,816,027	1,816,027
31 December 2021	3,046,186	2,821,691	-13,279	5,761,197	11,615,794
1 January 2020	3,046,186	2,821,691	-19,534	4,238,662	10,087,004
Cash dividend				-977,124	-977,124
Change in hedging reserve			-4,668		-4,668
Profit for the year				1,678,522	1,678,522
31 December 2020	3,046,186	2,821,691	-24,202	4,940,060	10,783,734
EUR 1,000				2021	2020
Distributable funds					
Retained earnings 31 December				5,761,197	4,940,060
Hedging reserve				-13,280	-24,202
Total				5,747,917	4,915,858

11 Interest-bearing liabilities

EUR 1,000	2
External interest-bearing loans	
Bonds	2,706,
Loans from financial institutions	3,086,
Other long-term interest-bearing loans	689,
Total long-term interest-bearing loans	6,481,
Current portion of long-term bonds	999,
Current portion of loans from financial institutions	462,
Other short-term interest-bearing loans	2,375,
Total short-term interest-bearing loans	3,837,
Total ¹⁾	10,319,

Maturity of external interest-bearing loans

Årsregnskab	EUR 1,000
2022	
2023	
2024	
2025	
2026	
2027 and later	
Total ¹⁾	

See ▶ Note 4.2 Liquidity and refinancing risk and ▶ Note 27 Interest-bearing liabilities in the Consolidated financial statements.

External interest-bearing loans due after five years ¹⁾

EUR 1,000	
Bonds	845,
Other long-term loans	755,
Total	1,601,

Other interest-bearing loans due after five years

EUR 1,000	227,127
Interest-bearing loans to associated companies	227,127
Total	227,127

Non-discounted cash flows of interest-bearing loans and their maturities, see ▶ Note 13 Financial derivatives

12 Trade and other payables

EUR 1,000	2021	2020
Trade and other payables to group companies		
Trade payables	5,273	1,615
Deposits from group companies and other liabilities	29,573	29,616
Accruals and deferred income	-	116
Total	34,846	31,347
Trade and other payables to associated companies		
Accruals and deferred income	1,475	4,019
Total	1,475	4,019
Trade and other payables		
Trade payables	23,098	25,370
Other liabilities	4,443	6,137
Accruals and deferred income	61,456	102,945
Total	88,998	134,453

13 Financial derivatives**Interest rate and currency derivatives by instrument 2021**

EUR 1,000	Notional amount Remaining lifetimes					Fair value		
	Over							
	Under 1 year	1-5 years	Over 5 years	Total	Net	Positive	Negative	Net
Hedge accounting								
Foreign exchange derivatives	482,534	271,364	-	753,898	10,838	10,891	-52	
Interest rate swaps	1,300,000	1,322,558	1,175,000	3,797,558	71,385	26,972	44,413	
Cross currency swaps	214,384	46,957	-	261,341	29,996	1,963	28,032	
Non-hedge accounting								
Foreign exchange derivatives	13,700,810	331,925	-	14,032,734	85,461	119,935	-34,474	
Interest rate swaps	-	34,145	-	34,145	273	93	180	
Cross currency swaps	-	23,656	-	23,656	-	836	-836	
Total	15,697,728	2,030,606	1,175,000	18,903,334	197,954	160,690	37,264	
Of which long-term					59,506	37,051	22,455	
Short-term					138,448	123,640	14,808	

Interest rate and currency derivatives by instrument 2020

EUR 1,000	Notional amount Remaining lifetimes					Fair value		
	Over							
	Under 1 year	1-5 years	Over 5 years	Total	Net	Positive	Negative	Net
Hedge accounting								
Foreign exchange derivatives	450,201	177,048	-	627,249	8,802	8,802	-	
Interest rate swaps	825,000	1,874,658	1,675,000	4,374,658	153,721	153,721	6	
Cross currency swaps	14,056	261,341	-	275,397	38,182	38,182	-	
Non-hedge accounting								
Foreign exchange derivatives	9,529,153	572,978	-	10,102,131	196,345	196,345	11	
Interest rate swaps	-	19,932	-	19,932	-	-	-	
Cross currency swaps	-	23,656	-	23,656	-	-	-	
Total	10,818,410	2,929,613	1,675,000	15,423,023	387,050	387,050	18	
Of which long-term					186,647	186,647	7	
Short-term					210,403	210,403	11	

Maturity analysis of interest-bearing loans and derivatives

Interest-bearing loans are non-discounted expected cash flows including future interest payments and a maturity analysis of interest-bearing loans and derivatives is presented in the maturity analysis sheet.

Interest rate and currency derivatives represent the fair value of the derivatives on the balance sheet.

EUR 1,000	2021					2020				
	Over					Over				
	Under 1 year	1-5 years	Over 5 years	Total	Net	Under 1 year	1-5 years	Over 5 years	Total	Net
Interest-bearing loans	4,006,987	5,034,504	2,000,842	11,042,334	948,619	4,842,650	4,842,650	2,998,619	12,683,919	2,998,619
Interest rate and currency derivatives	123,640	18,540	18,510	160,690	114,628	35,934	35,934	35,934	105,802	35,934
Interest rate and currency derivative receivables	-138,448	-29,386	-30,120	-197,954	-210,403	-104,419	-104,419	-85,461	-294,300	-85,461
Total	3,992,179	5,023,659	1,989,233	11,005,070	852,844	4,773,165	4,773,165	2,950,092	12,484,419	2,950,092

Interest-bearing loans include loans from the State Nuclear Waste Management Fund and Telenor. These loans are renewed yearly and the related interest payments are ten years in the table above.

14 Derivatives and liabilities by fair value hierarchy

Fair value measurements are classified using a fair value hierarchy, i.e. Level 1, Level 2 and Level 3 that reflects the significance of the inputs used in making the measurements. For further information see accounting principles in Fortum consolidated accounts ▶ Note 15 Financial assets and liabilities by fair value hierarchy.

Derivatives at fair value in financial assets

EUR 1,000	Level 1			Level 2			Level 3			Total	
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2020
In non-current assets											
Derivative financial instruments											
Interest rate and currency derivatives											
Hedge accounting			54,867	171,797					54,867	171,797	
Non-hedge accounting			4,639	14,851					4,639	14,851	
In current assets											
Derivative financial instruments											
Interest rate and currency derivatives											
Hedge accounting											
Non-hedge accounting											
Total			197,954	397,050					197,954	397,050	

Derivatives and liabilities at fair value in financial liabilities

EUR 1,000	Level 1			Level 2			Level 3	
	2021	2020	2021	2020	2021	2020	2021	2020
In non-current liabilities								
Interest-bearing liabilities ¹⁾								
Derivative financial instruments								
Interest rate and currency derivatives								
Hedge accounting								
Non-hedge accounting								
In current liabilities								
Derivative financial instruments								
Interest rate and currency derivatives								
Hedge accounting								
Non-hedge accounting								
Total			1,829,762	2,331,595				

1) Fair valued part of bond in the fair value hedge relationship.

Net fair value amount of interest rate and currency derivatives was EUR 37 million (2020: 21) million, including 197 million (2020: 397) and liabilities, EUR 161 million (2020: 187). Fortum Corporation has cash collateral agreements with some counterparties. At the end of December 2021, Fortum Corporation received EUR 40 million (2020: 109) from Credit Support Annex agreements. The received cash has been used to settle short-term interest-bearing liability.

15 Contingent liabilities and other commitments

EUR 1,000		2021	2020
On own behalf			
Other contingent liabilities			
On behalf of group companies			
Guarantees			
On behalf of associated companies			
Guarantees			
Total			

In 2021 Fortum signed an EUR 8 billion credit facility agreement with Uniper comprising tranches for both a shareholder loan and a parent company guarantee. As a part of the intra-group credit facility agreement, Fortum Oyj provided a guarantee facility of EUR 4 billion to Uniper, of which EUR 2 billion parent company guarantee was outstanding at 31 December 2021.

Operating lease commitments

EUR 1,000	2021	2020
Due within one year	5,727	7,884
Due after one year and within five years	17,294	19,322
Due after five years	3,010	7,093
Total	26,031	34,299

16 Related party transactions

See ▶ Note 38 Related party transactions in the Consolidated financial statements.

Investments in group companies, associated companies and other holdings

	No. of shares	Holding %
Investments in group companies	units	
Fortum Waste Solutions Oy	3,520,800	100.00
Fortum Heat and Gas Oy	2,000,000	100.00
Fortum Clean Oy	100	100.00
Fortum Norm Oy	250	100.00
Fortum Power and Heat Oy	91,197,543	100.00
Fortum Real Estate Oy	2,000,000	100.00
Fortum Holding B.V.	61,062	100.00
Fortum India Private Ltd	1	0.10
Fortum Finance Ireland Designated Activity Company	25,000	100.00
Fortum Sweden AB	1,000,000	100.00
Investments in associated companies		
Wello Oy	272,828	18.60
Other holdings		
AW-Energy Oy	2,854,688	3.43
Clic Innovation Oy	100	3.80
East Office of Finnish Industries Oy	1	5.88
Green Industry Park Oy	19	19.00
Prototype Carbon Fund	N/A	

17 Events after the balance sheet date

On 24 February 2022, Russia started a widespread invasion into Ukraine. As a consequence, the US, the UK amongst others have imposed sanctions targeting Russia's ability to access capital and financial markets, sanctioning numerous individuals and banks; as well as trading in general. These sanctions and possible sanctions as well as further reactions by the US, the EU and the UK could impact Fortum's operations in Russia. Meanwhile, uninterrupted gas supply from Russia to Europe has continued. Fortum's Russian operations are running normally.

Given the uncertainty and risks arising from the geopolitical situation, including imposed sanctions and counter sanctions and their consequences, there may be significant impact to the fair value of economic lives of assets; as well as on the commodity prices and related margining requirements in Europe. The value of Fortum's Russian assets, including the exposure in the Nord Stream 2 pipeline project, was approximately 5.5 billion as of 31 December 2021. Fortum is currently assessing the impact of recent developments and measures, and specifically the following:

- Germany has halted the certification of the gas pipeline Nord Stream 2, while the US has sanctioned Stream 2 AG, its subsidiaries and the CEO. Fortum has, within its Uniper segment, a financial interest in approximately EUR 1 billion related to the Nord Stream 2 pipeline project.
- The Russian rouble (RUB) has depreciated significantly from the closing rate as of 31 December 2021. It has a negative translation impact on Fortum Group's earnings, assets and liabilities in RUB.

- The above-mentioned events have led to an increase in European commodity prices and corresponding margining outflows for the Fortum Group. Due to the de-risking and financing measures taken, Fortum actively monitors the situation in order to ensure continued compliance with prevailing rules and sanctions laws.

See the Risk management section in the Operating and financial review.

On 18 January 2022, Fortum announced that 1.3 GW portfolio of wind projects is being transferred from Ruskano wind investment fund (50/50 joint venture) to a joint venture recently established with Bank GPF. The transfer, the joint venture of Fortum-Ruskano wind investment fund will be dissolved.

Signatures for the operating and financial review and financial statements

Espoo, 2 March 2022

Veli-Matti Reinikkala

Anja McAlister

Philipp Rösler

Teppo Paavola

Essimari Kairisto

Annette Stube

Luisa Delgado

Markus Rauramo
President and CEO

The auditor's note

Our auditor's report has been issued today.

Espoo, 2 March 2022

Deloitte Oy
Audit Firm

Jukka Vattulainen
Authorised Public Accountant (KHT)

Auditor's report

(Translation of the Finnish original)

To the Annual General Meeting of Fortum Oyj

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of Fortum Oyj (business identity code 1463611-4) for the year ended 31 December, 2021. The financial statements comprise the consolidated income statement, consolidated statement of comprehensive income, consolidated balance sheet, consolidated statement of changes in total equity, consolidated cash flow statement and notes to the consolidated financial statements, including a summary of significant accounting policies, as well as the parent company's income statement, balance sheet, cash flow statement and notes to the financial statements.

In our opinion

- the consolidated financial statements give a true and fair view of the group's financial position, financial performance and cash flows in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU,
- the financial statements give a true and fair view of the parent company's financial performance and financial position in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements.

Our opinion is consistent with the additional report submitted to the Audit Committee.

Basis for Opinion

We conducted our audit in accordance with good auditing practice in Finland. Our responsibilities under practice are further described in the Auditor's Responsibilities for the Audit of the Financial Statements report.

We are independent of the parent company and of the group companies in accordance with the ethical requirements that are applicable in Finland and are relevant to our audit, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

In our best knowledge and understanding, the non-audit services that we have provided to the parent company and the group companies are in compliance with laws and regulations applicable in Finland regarding these services. We have not provided any prohibited non-audit services referred to in Article 5(1) of regulation (EU) 537/2014.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on each of these matters.

We have also addressed the risk of management override of internal controls. This included, but was not limited to, the risk of management bias that represented a risk of material misstatement due to fraud.

Key audit matter

Fair value of commodity derivatives and liquidity

Refer to Notes 4, 6, 7, 8, 9, 14, 15 and 27

- Fortum's business is exposed to fluctuations in prices and availability of commodities used in the production, transmission and sales of energy products. The main exposure is toward electricity and gas prices and volumes, prices and volumes of emission allowances, and prices and availability of fuels relating to Fortum's sales EUR 112,400 million (EUR 49,015 million) and materials EUR 103,923 million (EUR 43,377 million). Fortum hedges its exposure to commodity market risks in order to reduce volatility in cash flow and to increase the predictability of future results. The fair values of derivatives and their changes may have a material effect on Fortum's financial statements. Higher commodity prices increase the net margining payments which are mainly settled with cash. As a result of the recent increase in commodity prices, the cash-flow risk related to margin calls on the Group's hedges has increased substantially during 2021.
- In December 31, 2021, assets related to commodity derivative financial instruments in Fortum's consolidated balance sheet amounts to EUR 82,147 million (EUR 10,417 million) and liabilities to EUR 88,458 million (EUR 10,295 million). The Margin receivables related to the derivative financial instruments amounted EUR 9,163 million (EUR 1,132 million) and liabilities to EUR 985 million (EUR 331 million). Changes in the fair value of derivatives hedging future cash flows in items affecting the comparability in the income statement amount to EUR -5,424 million (EUR -675 million) and cash flow hedges in other equity components to EUR -1,138 million (EUR -158 million).

How our audit addressed the key audit matter

- Our audit procedures included the assessment of Fortum's internal controls related to derivative transactions, hedging activities and the determination of fair values.
- We have assessed the appropriateness of the valuation models used by Fortum, including the assumptions used in the models. We have validated model input data with observable external information.
- We have conducted audit procedures regarding the existence and completeness of open derivative contracts.
- We have assessed the appropriateness of accounting application according to the requirements of IFRS 9.
- We have assessed the risk scenario prepared by Fortum over further price changes and impact to liquidity requirements for margin calls and Fortum's ability to meet liquidity requirements for the next 12 months.
- We have assessed the appropriate presentation of derivatives and the liquidity measures in the consolidated financial statements.

- Due to the increased commodity prices at the year-end 2021, mitigating actions were taken to increase liquidity and reduce the positions exposed to margin calls. To manage this volatility and high price levels, Fortum took financing measures to secure its liquidity position and ability to cover changes in margin requirements. In December 2021, Fortum withdrew revolving credit facility of EUR 1,750 million to manage sufficient liquidity for possible further increases in commodity prices and consequent further additional requirement of collateral payments. Furthermore, Fortum signed new bilateral financing agreements to mitigate the liquidity position. These agreements consisted of a EUR 400 million term loan and a EUR 500 million term loan and a revolving credit facility of EUR 800 million, of which EUR 500 million was drawn as of 31 December 2021.

Key audit matter	How our audit addressed the key audit matter	Key audit matter	How our audit addressed the key audit matter
Valuation of property, plant and equipment and goodwill Refer to Notes 1, 2, 3, 16, 17 and 19.	- The consolidated balance sheet includes property, plant and equipment amounting to EUR 18,319 million (EUR 18,641 million) and goodwill amounting to EUR 1,021 million (EUR 1,069 million). - At the end of each reporting period management has to assess whether there is any indication that asset may be impaired. If any such indication exists, the recoverable amount of the asset is estimated. Goodwill is subject to annual impairment test. - The main assumptions used in the valuation of energy and heat production property, plant and equipment and goodwill relate to the estimated future operating cash flows and the discount rates that are used in calculating the present value. - The potential indicators for impairment are among other things changes in electricity and fuel prices, regulatory/political risk relating to energy taxes, price regulations and limitations to the lifetime of production assets, coupled with changes in anticipated impacts arising from climate change. - The assumptions used in the valuation of the balances in question require management judgment. - Estimates are also made in an acquisition when determining the fair values and remaining useful lives of acquired intangible and tangible assets.	Shares in Nuclear Waste Funds and Nuclear provisions Refer to Notes 2 and 29.	- Fortum's balance sheet includes Nuclear related provisions amounting to EUR 3,891 million (EUR 3,866 million) and Fortum's share of the Nuclear Waste Management Fund amounting to EUR 3,515 million (EUR 3,445 million). - Fortum's nuclear related provisions and the related part of the Nuclear Waste Management Fund are both presented separately in the balance sheet as disclosed in note 29. - Fortum's share in the Nuclear Waste Management Funds is accounted for according to IFRIC 5 which states that the fund assets are measured at the lower of fair value or the value of the related liabilities. - Due to complexity and materiality, the accounting treatment for nuclear decommissioning is complex and requires application of special accounting practice and management judgment when forming estimates for the basis of accounting such as technical plans, timing, cost estimates and discount rate.
	- We have evaluated the process how management has assessed the indicators for potential impairment. We have performed audit procedures on impairment models relating to material cash generating units. - We have obtained entity's impairment testing documentation for goodwill and energy production assets and tested and evaluated the rationale of key assumptions applied by management on a sample basis, including commodity price forecasts, profit and cash flow forecasts, terminal values, foreign exchange rates and the selection of discount rates. - We have compared, that the forecasts used in the impairment testing calculations are based on forecasts approved by management. - We challenged management's assumptions and judgments with reference to historical data and, where applicable, external benchmarks. - We assessed the models used in the impairment testing and carried out our testing for the sensitivity calculations. - We have assessed management's assessment of climate change impact to Fortum's business and how this has been taken into account in determining the cashflows used in impairment testing. - We assessed the adequacy of related disclosures in the financial statements.		

We draw your attention to the note 39. "Events after the balance sheet date" of the financial statements, which describes the uncertainties and risks caused by the geopolitical situation which may have impact to fair value of assets and on the commodity prices and related margining requirements in Europe. Our opinion is not modified in respect of this matter.

The Board of Directors and the President and CEO are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU, and of financial statements that give a true and fair view in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements. The Board of Directors and the President and CEO are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's responsibilities for the Audit of the Financial Statements

As part of an audit in accordance with good auditing practice, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, 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 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 override of internal control.
- Obtain an understanding of internal control relevant to the audit 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 parent company's or the group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, including any significant deficiencies in internal control that we identified during the audit, and the results of our tests of internal control.

We also provide those charged with governance with a statement that we have complied with relevant requirements regarding independence, and communicate with them all relationships and other matters reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters of significance in the audit of the financial statements of the current period and are therefore required to describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter. When, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of communication, we communicate this fact and our reasons for not communicating the matter.

Information on our audit engagement

Other Information

The Board of Directors and the President and CEO are responsible for the other information. The other information comprises the Operating and Financial Review and the information included in the Financials, but does not include the financial statements and our auditor's report thereon. We have obtained the Operating and Financial Review from this auditor's report, and the Financials is expected to be made available to us after the date of this auditor's report.

Our opinion on the financial statements does not cover the other information.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. With respect to Operating and Financial Review, our responsibility also includes considering whether the Operating and Financial Review has been prepared in accordance with the applicable laws and regulations.

In our opinion, the information in the Operating and Financial Review is consistent with the information in the financial statements and the Operating and Financial Review has been prepared in accordance with the applicable laws and regulations.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Other opinions

We support that the financial statements should be adopted. The proposal by the Board of Directors regarding the use of the profit shown on the balance sheet is in compliance with the Limited Liability Companies Act. We support that the Board of Directors of the parent company and the President and CEO should be discharged from liability for the financial period audited by us.

Espoo, 2 March 2022

Deloitte Oy
Audit Firm

Jukka Vattulainen
Authorised Public Accountant (KHT)

Auditor's assurance report of ESEF financial statements

(Translation of the Finnish Original)

Independent auditor's report on the ESEF consolidated financial statements of Fortum Oyj

To the Board of Directors of Fortum Oyj

We have performed a reasonable assurance engagement on whether the iXBRL tagging of the consolidated financial statements in the ESEF consolidated financial statements (FORTUMOYJ-2021-12-31-fi.zip) of Fortum Oyj (1463611-4) for the financial year 1 January - 31 December 2021 has been prepared in accordance with the requirements of Article 4 of Commission Delegated Regulation (EU) 2018/815 (ESEF RTS).

Responsibilities of the Board of Directors and the Managing Director

The Board of Directors and Managing Director are responsible for the preparation of the report of the Board of Directors and financial statements (ESEF financial statements) that comply with the requirements of ESEF RTS. This responsibility includes:

- preparation of ESEF financial statements in XHTML format in accordance with Article 3 of ESEF RTS
- tagging the consolidated financial statements in the ESEF financial statements with iXBRL tags in accordance with Article 4 of ESEF RTS, and
- ensuring consistency between ESEF financial statements and audited financial statements.

The Board of Directors and the Managing Director are also responsible for such internal control as they determine is necessary to enable the preparation of ESEF financial statements in accordance with the requirements of ESEF RTS.

Auditor's Independence and Quality Control

We are independent of the company in accordance with the ethical requirements that are applicable in Finland and are relevant to the engagement we have performed, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

The auditor applies International Standard on Quality Control 1 and, accordingly, maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

Auditor's Responsibilities

In accordance with the engagement letter, we express an opinion on whether the tagging of the consolidated financial statements in the ESEF financial statements has been prepared in all material respects in accordance with the requirements of Article 4 of ESEF RTS. We conducted a reasonable assurance engagement in accordance with the Standard on Assurance Engagements ISAE 3000.

The engagement includes procedures to obtain evidence on:

- whether the tagging of the consolidated financial statements in the ESEF financial statements has been prepared in all material respects in accordance with the requirements of Article 4 of ESEF RTS, and
- whether the ESEF financial statements are consistent with the audited financial statements.

The nature, timing and extent of the procedures selected depend on the auditor's judgment. This includes the assessment of the risk of material departures from the requirements set out in ESEF RTS, whether due to fraud or error. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion, the tagging of the consolidated financial statements in the ESEF financial statements (FORTUMOYJ-2021-12-31-fi.zip) of Fortum Oyj for the financial year 1 January - 31 December 2021 has been prepared in all material respects in accordance with the requirements of Article 4 of ESEF RTS.

Our audit opinion on the consolidated financial statements of Fortum Oyj for the financial year 1 January - 31 December 2021 has been expressed in our auditor's report dated 2 March 2022. In this report, we do not express an audit opinion or any other assurance conclusion on the consolidated financial statements.

Espoo, 2 March 2022

Deloitte Oy
Audit Firm

Jukka Vattulainen
Authorised Public Accountant (KHT)