FORTUM OYJ: N YHTIÖKOKOUS 2022 / ANNUAL GENERAL MEETING 2022 OF FORTUM CORPORATION

Osakkeenomistajien kysymykset ja Fortumin vastaukset / Shareholders’ questions and Fortum’s answers

Fortumin osakkeenomistajilla oli mahdollisuus lähettää kysymyksiä yhtiölle ennen yhtiökokousta. Kysymyksiä tuli määräaikaan 14.3.2022 klo 16 mennessä yhteensä kolmelta osakkeenomistajalta. Kysymykset on ryhmitelty aihealueittain ja niihin on vastattu tässä dokumentissa sillä kielellä, jolla ne on esitetty.

Fortum’s shareholders had the possibility to submit questions to the company prior to the Annual General Meeting. Fortum received questions from a total of three shareholders by the set deadline of 14 March 2022 4 p.m. (EET). The questions have been grouped by topic and answered in the same language as they were presented.

Note! Answer to question 29 updated on 25 March 2022:

Venäjän liiketoimintaan liittyvät kysymykset / Questions related to Russian business

1. Is Fortum considering ceasing its business operations in Russia, including both the company’s own Russia segment and Uniper’s Russian subsidiary Unipro?

   - On 3 March 2022, Fortum announced that it has stopped all new investment projects in Russia until further notice and will continue to reduce its thermal exposure in Russia.
   - As part of Fortum Group’s strategy to reduce its thermal exposure in Russia, Uniper has been preparing a possible divestment of its separately listed subsidiary Unipro in Russia. On 7 March 2022, Uniper announced that due to the current circumstances in Russia, this process was put on hold for the time being but aim to reinitiate this as soon as possible. Uniper also has announced that it will not make any new investments in Russia.

2. What about announced investments in Russia - will they continue (and new contracts would not be signed) or will all the announced and ongoing investments in Russia be stopped (for both Fortum and Uniper)? Please clarify.

   - Fortum has announced that it will not make new growth investment decisions in Russia. The Group’s Russian subsidiaries intend to complete the ongoing projects, however, this will depend on the possible restrictions.
   - Uniper also has announced that it will not make any new investments in Russia.
   - We are supplying power and heat locally in Russia. All Fortum Russian operations are currently running as normal, so we can fulfill our duties to our customers.
   - We comply with applicable laws and regulations, including sanctions.
• In case further escalation of events would hinder us from fulfilling our energy delivery commitments to our European customers, we would work with our respective regulators and governments to find a joint solution.

3. Is Fortum considering stopping all imports of energy from Russia? Including fuels used for the company’s own energy production (natural gas, coal, uranium and biomass) and fuels sold to third-party customers through Uniper’s trading business.

• In Finland, we will not buy coal, pellets or biomass for our power plants in Espoo and Meri-Pori from Russia for the time-being.
• For our Loviisa nuclear power plant in Finland, we currently procure fuel from the Russian fuel company TVEL. The current contract is valid until the end of our current operating licenses, i.e. until 2027 and 2030. Currently the plant has nuclear fuel in storage for up to two years. There are also alternative suppliers in the market that can cater for Loviisa.
• In Germany, Uniper has announced that it will not enter into new long-term supply contracts for natural gas with its counterparty in Russia. The longest duration of Russian gas LTCs run beyond 2030. Gas imports from Russia and Uniper’s LTCs cannot be easily replaced and Uniper is working to diversify its gas imports, moving into clean gases overtime. In the short term, Uniper is increasing LNG imports to Europe and has re-started the LNG terminal project in Wilhelmshaven. Uniper is also looking for alternatives to Russian coal and has decided not to extend its Russian coal supply contracts which run out at the end of 2022.

4. How much fossil or nuclear fuels did Fortum and Uniper import in 2021 from Russia? Who were the Russian counterparts? Please specify for gas, coal and nuclear fuels.

How much fossil or nuclear fuels did Fortum and Uniper import between January 1st of 2022 and February 23rd of 2022 from Russia? Who were the Russian counterparts? Please specify for gas, coal and nuclear fuels.

How much fossil or nuclear fuels did Fortum and Uniper import from February 24th of 2022 from Russia? Who are your Russian counterparts at this moment? Please specify for gas, coal and nuclear fuels.

• Fortum Group’s fuel usage per fuel type in tons, cubic meters and as energy in 2021 will be published in Fortum’s sustainability report 2021 latest by 28 March 2022. Fortum Group does not disclose the names of counterparties. The exception to this are Fortum’s (excluding Uniper) nuclear fuel supplier (TVEL) and coal suppliers, which are publicly disclosed on the company’s webpages: Fortum and coal | Fortum. The data presented is from 2020, as Fortum’s sustainability report 2021 is not published yet. Fortum’s fuel usage data is published annually.
• Uniper’s long-term import contracts with Russia play an essential role for the gas supply in Europe, especially in Germany which is completely dependent on natural gas
imports. Uniper's gas midstream business comprises a portfolio of around 370 TWh of long-term gas supply contracts: Of these, more than half originate from Russia. Uniper's gas supplier is Gazprom.

- In Finland, we do not buy coal, pellets or biomass for our power plants in Espoo and Meri-Pori from Russia for the time-being. Uniper will not extend Russian coal supply contracts which run out at the end of 2022. Uniper is executing its coal diversification strategy which is expected to be completed at the end of 2022 when the existing Russian coal supply contracts are finalised.

5. Fortum and Uniper announced to increasingly diversify their supply sources for gas and to not start any new long-term contracts for gas with Russia. Please specify the nature and scope of the existing long-term contracts with Russian counterparties. What is Fortum's and Uniper's current time frame to phase out all Russian fossil fuel and nuclear fuel supplies? Please specify for gas, coal and nuclear fuels.

- Over the years, we have decreased our exposure in Russian thermal production; by divesting the Tobolsk power plant in 2016 and Argayash power plant in 2021. Uniper divested its interest in the Yuzhno-Russkoye gas field in 2017. At the same time, we have been investing in wind and solar power. For now, we will not make new growth investment decisions in Russia and we will continue to reduce our thermal exposure in Russia.
- In July 2021, Fortum announced that the Chelyabinsk CHP-2 power plant will transition from the use of coal to gas which results in Fortum’s Russia Division discontinuing its use of coal by the end of 2022.
- For our Loviisa nuclear power plant in Finland, we currently procure fuel from the Russian fuel company TVEL. The current contract is valid until the end of our current operating licenses, i.e. until 2027 and 2030. Currently the plant has nuclear fuel in storage for up to two years. There are also alternative suppliers in the market that can cater for Loviisa.
- Uniper’s long-term import contracts with Russia play an essential role for the gas supply in Europe, especially in Germany. Today, Germany is completely dependent on natural gas imports. In 2021, Germany imported just under 90 bcm of natural gas and more than a half of that amount (approx. 55%) comes from Russia.
- Uniper's gas midstream business comprises a portfolio of around 370 TWh of long-term gas supply contracts (LTC): Of these, about a half originates from Russia. The longest duration of Russian gas LTCs run beyond 2030. Uniper is working with the German government in order to increase gas supply from alternative sources, including LNG. One example of this is the Wilhelmshaven LNG terminal project which Uniper recently restarted. In the current situation, the focus is on increasing European gas supply.

6. Of the approximately 200 TWh of long term supply contracts with Russia which will be kept in place: What is the duration of these ongoing contracts and when will they come to an end? Can the company provide a more detailed breakdown of these contracts, including duration, supply volume and price?
- The longest duration of Russian gas LTCs run beyond 2030. Due to confidentiality clauses, Uniper cannot provide details on those contracts beyond the above information.
- [gp.eu.en_.pdf](pitt.edu)

7. How does the company intend to replace or reduce this 200 TWh supply?
- See the answer above.

8. If the resurrection of the Wilhelmshaven LNG project is core to this, when is that expected to come online and what is the expected increase in costs to German consumers (given LNG will be more expensive than the existing Russian piped supply)
- Uniper has resumed its planning for an LNG terminal in Wilhelmshaven. These activities will be closely linked to our plans to make Wilhelmshaven a green energy hub, with green ammonia import and hydrogen production to fulfill more than 10% of the German hydrogen demand in 2030.
- The project has only recently been restarted and is currently being reevaluated. It is in the interest of all stakeholders to have the terminal in operations as soon as possible, but a concrete date cannot be specified yet. It is expected that it will take at least two years of development time and consequently, any cost estimate at this point of time is too early as it will depend on a variety of factors that still are unclear.

9. Please specify the origin of Fortum’s and Uniper’s fossil and nuclear fuel supply in 2021. Who were the most important supplier countries for gas, coal and nuclear fuels?
- The list of Fortum Group’s most significant origin countries of main fuels in 2021 will be published in Fortum’s Sustainability Report 2021 latest by 28 March 2022.

10. Is Fortum planning to change its supplier of nuclear fuel for the Loviisa nuclear power plants?
- Fortum procures fuel for its nuclear power plant in Loviisa in Finland from Russian TVEL fuel company. The current contract is valid until the end of current operating licenses 2027 (Loviisa 1) and 2030 (Loviisa 2). On 3 March 2022, Fortum announced the decision to apply for new operating licenses until 2050 for its Loviisa power plant. When Fortum applies for new operating license (lifetime extension), a new tendering process e.g. for nuclear fuel, will be initiated according to Fortum’s procurement procedures. Currently, Fortum has nuclear fuel in storage for approximately two years.

11. Will Fortum follow Ørsted's example and donate the possible profits from its business related to Russia to humanitarian aid in Ukraine?
• As a general rule, the General Meeting of Shareholders decides on donations. For the AGM 2022, the Fortum Board of Directors has proposed (see AGM agenda item 18) that the Board of Directors be authorised to decide on donations in the total maximum amount of EUR 500,000. The authorisation would be effective until the next Annual General Meeting.

• In March 2022, Fortum Group donated EUR 400,000 to the Red Cross. The donation is directed to support humanitarian relief actions in Ukraine and for refugees in the neighboring countries.

12. What percentage of energy produced in Fortum’s Russian assets is sold in Russia?

• Fortum sells all its electricity generated in Russia to the Russian wholesale market.
• Heat is produced for the needs of local societies in Chelyabinsk and Tyumen. The heat market is regulated and the producers are required to provide heat to all at regulated prices.
• Together with our subsidiary Uniper, Fortum Group has 12 power plants in Russia with a combined power generation capacity of 15.5 gigawatts and heat production capacity of 10.2 gigawatts. In 2021, Fortum generated 71.9 terawatt-hours of electricity and produced 19.1 terawatt-hours of heat in Russia.

13. Fossil and nuclear fuel imports are the biggest source for financing Russia’s war against Ukraine, which includes uncounted war crimes like arbitrary shelling of civilian infrastructure, hospitals and nursery schools, the siege of entire cities and summary executions of civilians. Will Fortum and Uniper use their economic leverage and stop all imports of gas, coal and nuclear fuel from Russia immediately?

• We have outlined our position on Russian activities above, see answers to questions 1–3, 5.
• As an energy supplier, it is our duty to make our contribution to securing energy supply. Due to the existing contracts with Russia or Russian companies, we bear a special responsibility not only for ourselves, but also for large parts of the German industry and many households in Germany and across Europe. This view is fully in line with the political position in Europe and in particular Germany.

14. A coalition of Ukrainian NGOs has sent an open letter (https://en.ecoaction.org.ua/stop-import.html) to Fortum/Uniper and other important energy companies on 7 March. Will Fortum send an official response to the coalition? If so, when will this happen?

• Both Fortum and Uniper have sent their responses to the letter on 15 March 2022.

15. Uniper signed a MoU for a long-term agreement with the Russian company Novatec for the supply of fossil gas based ammoniac. Has Fortum already canceled this deal?
Negotiations with the Russian company Novatek on the import of ammonia have been put on hold.

Nord Stream 2:een liittyvät kysymykset / Questions related to Nord Stream 2

16. Uniper has announced its write-down of Nord Stream 2, but has not changed its financial outlook. How does Fortum broadly envisage the impact on its financial statements from exposure to Russia, in the short, medium and long term?

- Profit & Loss
- Cash flow
- Balance sheet

- On 3 March 2022, in conjunction with Fortum’s 2021 financial results, CEO Markus Rauramo outlined the share of the Group’s Russian exposure. The Group’s combined power generation capacity is 15.5 gigawatts (GW) and heat production capacity 10.2 GW. In 2021, we generated 71.9 terawatt-hours (TWh) of electricity and produced 19.1 TWh of heat in Russia. Our Russian generating assets and including the exposure in the Nord Stream 2 pipeline project carry a book value of approximately EUR 5.5 billion (31 Dec. 2021). In 2021, our Russian operations contributed approximately EUR 500 million in comparable operating profit, which corresponds to approximately 20% of the Group’s comparable operating profit. In addition, Uniper’s long-term gas contracts total approximately 370 TWh/a and approximately half of this amount is sourced from Russia.

- On 3 March 2022, Fortum also stated that the situation around the Russian businesses is very dynamic and keeps evolving on a daily – if not hourly – basis, and it is very difficult to predict the extent of impacts on our operations in the future.

- On 7 March 2022, it was announced that Uniper had decided to write down its full outstanding receivable related to the Swiss registered company Nord Stream 2 AG, which is the project company for the Nord Stream 2 project. Uniper is a financing partner in the project company and has a loan receivable of EUR 987 million which comprises both loan and accrued interest. The book value results from the loans originally provided to Nord Stream 2 (EUR 695 million) plus the current amount of accrued interests (EUR 292 million).

- Following the impairment, Fortum will no longer record the related interest income of approximately EUR 100 million annually. The impairment will be recorded in Fortum’s first quarter 2022 results in other financial items-net, but will be adjusted and will not affect the comparable net profit.

17. Has Uniper returned its loan(s) covering EUR 987 million (of which EUR 695 million principal and EUR 292 million accrued interest) for Nord Stream 2, and to which lender(s)?
• Under the contractual agreements, Uniper – in its role as a lending partner – has provided financing to Nord Stream 2, and not the other way around. Accordingly in this context, there is nothing to be returned from Uniper.
• On 7 March 2022, Fortum announced that Uniper had decided to write down its full outstanding receivable related to the Swiss registered company Nord Stream 2 AG, which is the project company for the Nord Stream 2 project. Uniper has a loan receivable of EUR 987 million which comprises both loan and accrued interest. The book value results from the loans originally provided to Nord Stream 2 (EUR 695 million) plus the current amount of accrued interests (EUR 292 million).
• Following the impairment, Fortum will no longer record the related interest income of approximately EUR 100 million annually. The impairment will be recorded in Fortum’s first quarter 2022 results in other financial items –net, but will be adjusted and will not affect the comparable net profit.

Strategiaan liittyvät kysymykset/ Strategy-related questions

18. Fortum obviously made the wrong strategic decision to heavily rely on a huge gas portfolio, mostly from Russia. Will this now finally lead to a complete turn-around of the company’s strategy? Will new investment be made into wind and solar instead of fossil gas or fossil based blue hydrogen or ammonia?

• Fortum’s strategy is unchanged. Our strategy is 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 at the latest with ambitious mid-term targets. Our future growth will be driven by CO₂-free power generation and clean gas, sustainably transforming our own operations to become carbon neutral and engaging customers and society to decarbonise. Our strategy’s main pillars are: 1) Transform own operations to carbon neutral 2) Strengthen and grow in CO₂-free power generation 3) Leverage strong position in gas to enable the energy transition and 4) Partner with industrial and infrastructure customers.

19. Peer companies such as Enel, EDF or Orsted have far more ambitious expansion plans for renewables. Looking at the top tiers, e.g. Engie has a 40-fold higher target for wind and solar for 2030 than Fortum/Uniper. Will Fortum now finally speed up its transition to renewables more rapidly? If so, please specify with regard to management and capex decisions.

• Fortum announced on 3 March 2022 that the company estimates its capital expenditure, including maintenance but excluding acquisitions, to be approximately EUR 1,500 million in 2022, of which the share of maintenance capital expenditure is estimated to be approximately EUR 800 million, well below the level of depreciation.
• We will also focus 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. Fortum is already the 3rd largest
CO$_2$-free power generator in Europe.

Taloudelliseen asemaan ja suojauksiin liittyvät kysymykset / Topics related to financial position and hedging

20. What is Fortum's currency exposure to the Russian Rouble? What is the expected impact on the company's financial position?

- The Russian rouble (RUB) has depreciated significantly from the closing rate as of 31 December 2021. If this prevails, it has a negative translation impact on Fortum Group’s earnings, assets and liabilities denominated in RUB. 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 into euro using the closing exchange rates on the balance sheet date. (see note 1.5.3)


- Uniper did not restructure its debt in 2021; Uniper was largely a debt-free company until then. Due to highly volatile and strongly increasing commodity market prices, Uniper extended its set of financing tools by new financing measures like an intercompany financing with Fortum (in total EUR 8 billion) and a facility granted by state-owned KfW bank (EUR 2 billion) to meet liquidity needs based on its business activities, mostly related to gas mid-stream activities and Nordic power hedgings.

What is the exposure to this debt of:
- Uniper / Unipro?

- All newly implemented financing measures are dedicated to Uniper. Unipro maintains own financings for working capital etc. (due to legal reasons) and was not part of the liquidity financing exercise in 2021.

Direct Russian operations of Fortum?

- The financing measures have no relation to Fortum’s (excluding Uniper) operations in Russia.

For what purpose was a much higher percentage of debt raised than returned before the debt restructuring?

- Uniper did not restructure its debt in 2021; Uniper was largely a debt-free company until then. Due to highly volatile and strongly increasing commodity market prices Uniper extended its set of financing tools by new financing measures like an intercompany financing with Fortum (in total EUR 8 billion) and a facility granted by state-owned KfW bank (EUR 2 billion) to meet liquidity needs based on its business
activities, mostly related to gas mid-stream activities and Nordic power hedgings.

22. Please explain the huge increase in current financial receivables since 2020. For example what is behind the increase in ‘margining’ receivables from EUR 898 million at end-2020 to EUR 7,866 million at end-2021 (as per Uniper Annual Report page 184). What is the reason for the huge increase in derivative financial instruments in both balance sheets (asset and liability side) of Fortum and Uniper?

- During the early winter season, the very volatile commodity markets with unprecedentedly high prices resulted in significantly higher margining requirements for European market participants. Fortum’s subsidiary Uniper is hedging its asset positions with forward commodity sales, which are often subject to margining payments. When commodity prices increase, the mark-to-market value of those deals decline, which triggers additional margining payments for Uniper. When the underlying gas and power positions go into delivery or commodity prices decline, the margining payments are returned to Uniper.

23. Saisimmeko lisätietoja johdannaisten käytöstä ml. tausta suojauslaskennan käytön tasolle (joka on esitetty tilinpäätöksen kohdassa 4.1.3.), sekä riskienhallinta ja varautuminen vakuusvaatimuksiin?


b. Fortum on aktiivisesti pienentänyt vakuusvaatimuksista siirtämällä vakuutuksien poistemiseksi. Vakuusvaatimukset suoritetaan aktiivisesti ja tilannetta uudelleenarvioidaan markkinahintojen ja valuuttatransatensiin tarvittavien likvideettipuskureiden varmistamiseksi myös äärimmäisissä skenaarioissa.

24. Saisimmeko lisätietoja EUR 9.2 miljardin vakuusvaatimuksen palautumisesta?

a. Johdannaismarkkinoinstrumenteilla käydyään kauppaan pörssissä ja OTC-markkinoilla valikoitujen vastapuolten kanssa perustuen kahdenväliisiin vakuusvaatimuksiin. Tarvittavien käteisvakuutuksien määrä on riippuvainen kaupankäyntivolyymistä kyseisellä markkinalla sekä johdannaisten kohde-etuutena olevien tuotteiden tulevista markkinahinnoista. Tästä johtuen Fortum ei julistaa näkyvää liittyen vakuutuksien


Uniperin liiketoimintaan liittyvät kysymykset / Questions related to Uniper business

25. Saisimmeko lisätietoja Uniperin kaasutuonnin korvaavuusjärjestelyiden etenemisestä.

- Kuten Fortum tiedotti 14.3.2022, Fortumin ja Uniperin käsitys on, että mikäli kaasin
  tuonnissa Venäjältä Saksaan olisi merkittävä katkoja eli kaasun tuontia rajoitettaisiin
  Eurooppaan, Saksassa astuisi voimaan laissa määritelty hätätila. Tällaisessa
  hätätilanteessa Saksan liittovaltion verkkoviranomainen (Bundesnetzagentur) vastaisi
  kaasin jakelusta yhteistyössä EU:n viranomaisten kanssa ja niiden valvonnassa.
  Fortumin ja Uniperin käsityksen mukaan tällaisessa tilanteessa Uniper olisi vapautettu
  velvollisuudestaan korvaavia kaasuvolyymejä markkinoilta.

- Fortum myös julkisti 3.3.2022 yhtiön toimitusjohtaja Markus Rauramon lausunnon,
  jossa todetaan muun muassa kuinka Ukrainan-kriisi osoittaa Euroopan
  energiasiirtymällä olevan kiire. Euroopan omavaraisuus energia-asioissa on noussut
  yhtä tärkeääksi kuin energian puhtaaksi, kohtuuhintaisuun ja toimitusvarmuus. Edistämme
  tästä tavoitetta investoimalla eri puolilla Eurooppaa puhtaaseen sähköön, entistä
  puhtaampaan kaasun ja joustavuutta lisäävän ratkaisuina.

- Samassa 3.3.2022 julkaistussa lausunnossa Fortumin toimitusjohtaja Markus Rauramo
  totesi, että Fortum käy jatkuvaa keskustelua Suomen ja Saksan hallitusten kanssa siitä,
  kuinka Fortum-konserni voi tukea toimitusvarmuutta hiilestä luopuvassa Euroopassa.

26. Gas storage: How will the gas storage capacities in Austria / Germany be filled before
  next winter?

- Security of supply is a systemic issue and therefore high on the agenda of regulators
  across Europe and particular Germany.

- Adequate regulatory measures are currently under discussion. Uniper will continue to
  contribute to security of supply with its broad portfolio of e.g. storage capacities and
  with the LNG portfolio.

27. Post-merger integration: Why has there been a delay in the reorganisation of business
  segments since the merger of Fortum and Uniper? As both Fortum and Unipro have
  assets in Russia, is it due to announced plans to divest Unipro? Will Fortum’s and
  Uniper’s operations be consolidated per country and per segment, not only in financial
  terms?

- Fortum is the majority shareholder of Uniper with the ownership of 78% (31.12.2021).
  However, Uniper is a separate listed company operating under German law and
  regulations. Fortum consolidates Uniper as a subsidiary and reports it as a separate
  reporting segment.
28. What was the rationale for the decision to divest Unipro, taken last year - Are there any repercussions to Fortum's intention to acquire 100% of Uniper?

- Fortum continuously reviews, rotates, optimises businesses to create further value and to enable new growth in strategic areas. In particular, Fortum has a good track-record in transforming and decarbonising assets and businesses.
- The decision by Uniper to start a divestment process of Unipro is in line with statements to over time reduce the Group’s Russian exposure. Uniper announced on 7 March 2022 that due to the current situation, Uniper has halted the process for the time being and it will be restarted as soon as it is feasible.

29. When does Fortum expect to achieve 100% ownership of Uniper? Has this process been put on hold?

- Our cooperation stepped up in 2021 on several levels and in particular in the three strategic areas that were announced in December 2020: 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 will continue to further deepen our cooperation. Our focus is clearly on the business where we see the fastest and most necessary progress. We see progress on the business front as quite independent from the ownership aspect and any further investment into Uniper would be a financial consideration. (Sentence updated 25 March 2022, previously: We see progress on the business front as quite independent from the ownership aspect and for us Uniper is a financial investment.)
- We have said that our target is to achieve financial cooperation benefits of approximately EUR 100 million by the end of 2025. These benefits are expected to materialise gradually with a half of it achieved by the end of 2023.

30. In your financial report 2021 Fortum states that the company and especially Uniper’s gas business profited from the higher power and gas prices. This significantly contributed to the Group’s comparable operating profit which increased by 89%. Can you please state how much Uniper profits from the even higher gas prices since the beginning of the year and especially since the beginning of the invasion of the Ukraine?

- We do not provide guidance on the Fortum result and we do consequently not comment on the financial performance of any ongoing quarter or reporting time period.
Ilmastotavoitteisiin sekä ympäristövaikutuksiin liittyvät kysymykset / Questions related to climate targets and environmental impact

31. Yhtiön Scope 1 päästöt ovat nousseet merkittävästi syksyn tasosta vuoden 2021 lopulle, mistä tämä johtuu?


32. Gas clean-up’ strategy

Does management have a concrete plan for the gradual decarbonization of its gas plants, with key steps, timeline and projected costs? When will it be published?

What are the expected costs for retrofitting gas power plants to burn 5%, 20% and 100% hydrogen?

What is Fortum’s plan for securing a supply of low carbon hydrogen to its power plants?

Given the expected high and volatile gas prices, will the company amend its ‘colour-blind’ view towards hydrogen sources, and omit blue hydrogen as a solution?

What are the expected hydrogen volumes required to achieve carbon neutrality of power by 2035? Can these volumes be satisfied with renewable hydrogen alone?

What is the required price of supplied hydrogen for Fortum to consider the fuel cost-competitive with gas for power generation?

- Fortum Group’s strategic targets regarding gas include both secure supply of gas and transition to clean gas over time.
- Uniper is firmly committed to ensuring that our gas power plants are operated as soon as possible with climate-neutral fuels in line with the timeframes for climate neutrality in Germany and the EU. In this way we avoid a lock-in of CO2 and stranded investments. For example, Uniper works together with Siemens and GE to explore, assess, and develop technology options for decarbonization of the gas power fleet.
- Fortum Group’s strategic target is to build on first-mover position in hydrogen.
- With respect to the “colors” of hydrogen, in principle we still consider blue and turquoise hydrogen to be sensible technologies on the way to a green hydrogen economy, but these gases are not feasible due to the current gas price development and the aim to diversify Europe’s gas supply. To build up a hydrogen economy in the upcoming years,
for example Germany cannot produce the green hydrogen by itself, we will have to import hydrogen. At the moment the price of hydrogen is not competitive.

- The hydrogen economy is at a nascent stage, and the regulatory environment will be crucial in defining how rapidly hydrogen can contribute to the decarbonisation of the economy, especially hard to abate sectors. All forms of CO2-free electricity are needed for hydrogen production, and regional differences need to be acknowledged in the hydrogen requirements.

33. To what extent does Fortum’s plan to achieve “European generation carbon neutral latest by 2035 (Scope 1, 2)” depend on the following:

1) Increased generation from wind, 2) Increased generation from solar, 3) Reduction of demand (e.g. increased electrification of end-uses, demand response, grid flexibility, energy efficiency, etc.), 4) Conversion of coal-fired to biomass-fired power plants, 5) Conversion of coal-fired to gas-fired power plants, 6) Conversion of gas-fired to hydrogen-fired power plants, 7) Blue Hydrogen, 8) The purchasing of Carbon offsets to claim net zero (without achieving absolute zero emissions), 9) Other technologies or methods (please specify)?

- Fortum has a solid plan for and a track record of decarbonising its value chain. Our coal-exit is proceeding well and 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, and will cease the use of coal in our Russia segment by the end of 2022.

- By 2030, Fortum will phase out or exit about 8 GW of coal-fired power generation. We will also strengthen and grow in CO2-free power generation.

- Fortum’s carbon neutrality target (Scopes 1 and 2) relates to absolute emissions, not to carbon intensity, thus only reduction of absolute emissions play a role here. But when it comes to solar and wind, Fortum Group has the target to build 1.5-2 GW new renewable capacity by 2025.

- The Group is implementing technical upgrades, improving production processes, and pursuing operational excellence which will increase power plants’ efficiency. Improving energy efficiency enables us to conserve energy, make more efficient use of the fuels we burn, and reduce our emissions.

- With respect to site conversions of Uniper:
  - A key facet of Uniper’s decarbonisation plan is exiting coal in Europe.
  - Uniper has designed masterplans for all coal sites scheduled for closure to ensure that they have a viable future in greener energy world.
  - Uniper will for example convert Scholven power station site in West-Central Germany to gas, meaning that two high-efficiency gas turbines will replace the existing coal-fired plant.
  - Uniper intends to transform Wilhelmshaven power plant on Germany’s North Sea coast, which closed at the end of 2021, into a green hydrogen hub that by 2030 can meet 15% of the country’s hydrogen needs.

- We will not rule out also to use carbon off-setting.
34. Will Fortum now finally set up a climate strategy with a concrete phase-out date for gas in line with 1.5 degrees as e.g. a no gas in the power sector in advanced economies by 2035? Will the company now stop their plans to even increase their gas portfolio by 2035 compared to now?

- The Group’s 2035 decarbonisation target for the European Generation includes also gas power stations. Fortum Group – and the German government – sees gas powered power stations crucial for the energy transition to keep up security of supply.
- Together e.g. with GE and Siemens Uniper is working on solutions, that gas power stations will be able use green gas / green hydrogen as a fuel source.
- For commodities such as natural gas, a target on scope 3 means that we will work together with our upstream and downstream counterparty to reduce scope 3 emissions along the value chain (e.g. to modernize the gas infrastructure).
- In 2035, the role of gas depends on various factors, including secure, competitive and environmentally sustainable options to generate power and heat.

35. In the context of the need to end business relationships with Russian companies such as Gazprom which are financing the war in the Ukraine, we’d like to ask questions about the future gas supply of Fortum and Uniper:

In your answer to last year’s AGM questions Fortum admitted that the human rights situation in Azerbaijan is not satisfactory. How do you evaluate that SOCAR as a state company is a main source of income for the Aliyev regime who has direct control of the company and who started a war on Armenia in 2020? Will SOCAR once more meet Fortum’s compliance standards since the company has even taken an active part in that war with spreading war propaganda plus is a financial source for the Aliyev’s regime known for human rights abuses? Will you take consequences for the long-term contract of Uniper with SOCAR for fossil gas supply? Or does Fortum even plan to increase the gas supply from Azerbaijan?

- Uniper acts in accordance with the Universal Declaration of Human Rights, the United Nations Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises and the German National Action Plan on Business and Human Rights.
- In Uniper’s due diligence processes, all circumstances that may be directly or indirectly relevant to the contracting party are considered.
- Uniper is aware of the consequences of the armed conflict in the disputed region of Nagorno-Karabakh and the International Court of Justice provisional measures issued in December 2021 to protect certain rights claimed by Armenia. Uniper acknowledges that both Parties are ordered to refrain from any action which might aggravate or extend the dispute.
- When doing business with SOCAR it is our duty to monitor the ESG risk profile of this company on a regular basis. Currently the company is seen as medium-risk counterparty, based on external data provider service. For medium-risk counterparties Uniper’s approach is first to establish ongoing dialogue on the most material topics which we can influence over time.
- In 2021 through this engagement critical topics were addressed, in particular in relation to a) renewable energy; b) energy efficiency, c) methane emissions.
In relation to human rights impacts following the 2020 armed conflict, we hope that clarity will be made and responsibilities identified. Until then, we must abide to our contractual obligations and foster continuous improvement of our suppliers’ ESG performances.

36. Gas supply from Qatar is also very controversial from a human rights perspective. Does Qatar play an important role in Fortum’s and Uniper’s plans to diversify the fossil gas supply?

- In the current situation it is of highest priority to maintain the existing energy flows, and at the same time find ways and means to make the gas supply for Germany and Europe more diverse and thus less vulnerable to geopolitical risks.
- In order to further diversify the portfolio and as requested by the German government, Uniper plans to bring LNG directly to the German market.
- Target markets are South America, the Middle East, and Asia, particularly Southeast Asia.
- Uniper has over the years increased its long term capacity at the Isle of Grain and Gate terminals in order to import LNG into Europe from a diverse source of global supply.
- In line with Uniper’s plan to expand our diversified gas business and progressively decarbonize it, Uniper began to conduct ESG due diligence of individual projects and deals. Uniper believes that working with strategic gas suppliers to mitigate ESG risks along the value chain can have significant positive impacts for communities involved and for the planet as a whole.

37. Fossil gas has a huge climate effect and growing evidence about methane leaks in the supply chain clearly show that fossil gas must be phased out in the next decades completely. Fossil gas supply remains a problematic task due to Russia’s war against Ukraine, the human rights problems related to big gas exporters like Azerbaijan or Qatar or the negative impact of fracking in the US or environmental and cultural impacts in Australia. Is Fortum aware of any alternative supply sources for fossil gas from Russia which are apart from the severe climate impacts not causing any environmental (e.g. through fracking or impacts to marine life etc.) or human rights problems (e.g. state energy companies of governments known for human right violations)? How do Fortum and Uniper evaluate the future of gas in the companies’ overall strategy?

- See the answer above.

Muut / Miscellaneous

Norilsk Nickeliin (Nornickel) liittyvät kysymykset / Questions related to Norilsk Nickel

38. Following Moscow’s invasion of Ukraine, Fortum announced it will not make new investments in Russia. To what extent does this decision affect your current and planned projects and business relationships with Norilsk Nickel (Nornickel)? To what extent does this decision affect your cooperation with Nornickel and BASF to build a battery recycling cluster in Harjavalta, Finland? Have you conducted
environmental and human rights due diligence in relation to your business relationships with Nornickel? If yes, what are the results? If not, do you plan to conduct such due diligence? Please also state the reasons if you not conduct such due diligence.

- Fortum Recycling & Waste proceeds with its projects in Harjavalta, Finland, as initially planned. Both Fortum’s pilot plant and our new plant under construction are investments in Finland, not in Russia, both are also 100% Fortum owned. Norilsk Nickel Harjavalta Oy, a company registered in Finland, is one of Fortum’s counterparties in the cluster and one of the raw materials used is metal containing waste originating from e.g. Norilsk Nickel Harjavalta Oy site.
- As part of the investing process, Fortum has conducted its standard sustainability assessment addressing the activities of its counterparties. Fortum complies with all applicable laws and regulations, including sanctions, and is following the present situation closely. Neither Norilsk Nickel Harjavalta Oy nor its parent are currently sanctioned.
- The geopolitical situation further highlights the importance for investing in the Finnish and European battery value chain and thus the need for finding ways to sustainably improve the local availability of raw materials that are critical for the manufacture of batteries and help improve the recycling of industrial waste in Europe in general.

39. In November 2021 more than 50 miners were killed in a mine accident at the Listvyazhnaya mine in the Kemerovo region. Poor safety measures are the probable cause of the accident. Has Fortum or Uniper investigated the circumstances of the accident? Did Fortum or Uniper get coal deliveries from this mine?

- Neither Fortum or Uniper has been purchasing coal from this supplier in the past years.
- Both Fortum and Uniper are members of Bettercoal Initiative. Since the supplier in question is also a Bettercoal supplier, the Bettercoal secretariat is engaging with the company to understand the exact causes of the accident and the actions necessary to prevent such an accident in the future.

40. The Scarborough LNG gas in Australia project will produce levels of pollution which are equivalent to 15 coal-fired power stations and is planned in one of the most culturally and environmentally important areas of Western Australia. Are you aware of the climate impacts, risks for marine life and threats to 40,000-year-old Aborigine art which are linked to the gas extraction in Scarborough? Are you also aware of the two major court cases and local owner and public protests against the project in Australia? Will you cancel the sale and purchase agreement with the developer of the project, Woodside?

- We are aware of the court cases and the recent rejection of the supreme court against CCWA’s (Conservation Council of Western Australia) challenges against Woodsides Scarborough project (1st March).
From the very beginning Uniper has been closely engaging with Woodside which is putting all the effort needed to ensure that Uniper’s environmental and social standards are met in Woodsides operations. Due to state of the art infrastructure Uniper expects low CO2 and methane emissions in the new gas field of the Scarborough project.

Uniper is in regular exchange with Woodside to enhance transparent reporting of GHG emissions. As one part of the agreement, Woodside provides quarterly reports to measure the relevant GHG emissions related to our purchases. Those reports are based on the Oil and Gas Methane Partnership (OGMP) standards.

We are also aware of potential negative impacts on marine life and cultural heritage which is why Uniper is also engaging with Woodside closely on these potential issues.