## **Questions to Fortum's AGM**

**QUESTION1** : According to several climate models, including Climate Analytics (2019) and IEA (NZE2050), it is evident that thermal coal generation must be rapidly phased out by 2030 with a short residual tail into late-2030s for some nations, mostly in the developing world. The UN Secretary General Mr. Guterres has voiced the same demand. Russia and the OECD countries like Germany are expected to be amongst those nations who will need to decommission their coal fleets well within the next decade.

Fortum has previously commented on its and Uniper's Russian coal assets by noting that "it is impossible" to run coal down in Russia. And directing the conversation to being a significant renewable energy producer in the country. Could Fortum provide detailed evidence to substantiate the claim mentioning each binding legal barrier that forbid or ban closures of coal plants and whether they legally supersede plant owners' right to decide for their own assets? While renewable energy generation remains important and imperative in Russia, it is not an adequate response to justify the ongoing burning of coal in the country. We ask the answer to be limited to the reasons why, to this day, Russian assets have not been given a phase-out plan and whether Fortum is willing to announce the final date for their operation.

As a follow up question, while the German coal exit law has provided a pathway for most coal plants (some reverse auctions still pending) to go offline, it does not prevent them to shut down earlier than the government's timeline. Will Fortum consider closing Datteln 4 within the next 10 years even if it never wins a government's tender to keep within the necessary coal phase-out timeline by 2030?

**QUESTION 2:** Fortum has made it clear that its decarbonisation pathway is heavily dependent on the timely scale-up of hydrogen to eventually transform the sizable fossil gas fleet that it has acquired from Uniper.

However, hydrogen as a product is not necessarily a low carbon technology: its green credentials depend directly on its mode of production. Over 95% of current hydrogen production is fossil fuel based (IRENA, 2018) and the current production of clean hydrogen is extremely moderate. Furthermore, electrolysis requires significant volumes of pure water that can have biodiversity implications.

While renewable hydrogen has a part to play in decarbonising the EU economy, it is also clear that producing it will demand considerable amounts of electricity, and hydrogen is a particularly wasteful form of using it. Thenecessary conversion process implies high energy losses. Especially if other sectors can be directly electrified (such as heating and transport). The required share of renewable energy sources (RES) in the power mix should be around 80% in order to gain environmental advantage in the use of hydrogen over direct electrification (Oeko-institut, 2019). Furthermore, any considerable amounts of hydrogen are not expected until the technology is mature and cost-competitive (i.e. not necessarily even in the next decades). This is why there are legitimate calls to allocate the scarce resource only to those sectors that are hard-to-abate, namely chemicals, steel and aviation/shipping.

Is Fortum willing to ensure that the hydrogen it plans to produce will only be used to decarbonise hard-to-abate sectors, not in power or heat? Will Fortum be able to commit to producing hydrogen using only excess/surplus renewable electricity (preferably powered by solar and wind), which would otherwise be curtailed due to grid congestion? How are biodiversity concerns factored into the production? If Fortum plans to commit to other forms of hydrogen, like blue hydrogen, how will it justify it since the company is expected to decarbonise? Is Fortum going to phase out its fossil gas even if the ramp-up of clean hydrogen is not achieved in time?

**QUESTION 3:** According to the Finnish Government Resolution on the State Ownership Policy (April 2020) "State-owned companies are required to take into account the Government's objective of a carbon neutral Finland by 2035 and the goals of the Paris Climate Convention to limit the rise in global temperature to 1.5 degrees" and "Companies need to recognise the impacts of their own operations on the climate, environment and biodiversity as well as establish ambitious goals in this respect compared with their peer companies".

In 2020, WWF Finland submitted Fortum a proposal for the AGM to decide to explicitly include the Paris Agreement 1.5 degree target to the Articles of Association. Fortum's management did not support the initiative and has also made clear that the company is unable to meet the science-based target, citing the carbon-heavy Russian fleet as one of the reasons. New direction for the company could have been enshrined in the new company strategy that was launched in December 2020, after the state's policy was published. However, the new strategy made it clear that Fortum will, in fact, increase its involvement in the gas business - diametrically opposing the state's Policy.

This has later been confirmed in the benchmarks published by Climate Action 100+. The benchmarks track the following metrics:

- (1) Net-zero GHG Emissions by 2050 (or sooner) ambition
- (2) Long-term (2036-2050) GHG reduction target(s)
- (3) Medium-term (2026-2035) GHG reduction target(s)
- (4) Short-term (up to 2025) GHG reduction target(s)
- (5) Decarbonisation strategy
- (6) Capital allocation alignment
- (7) Climate policy engagement\*
- (8) Climate Governance
- (9) Just Transition (not assessed for 2021)
- (10) TCFD disclosure

They reveal that Fortum fell short, in particular, when it comes to CAPEX (not meeting any criteria) and in the metrics that track short and medium term reductions. Worryingly, amongst all European peers assessed by CA100+, Uniper received the poorest score of all power utilities as it did not score positively on any of the metrics.

Furthermore, when comparing with the European energy companies - Fortum's peers once again - it is clear that the company is falling behind its competitors in both decarbonisation and ramp-up of the renewable energy fleet. Fortum's target to build 1.5-2 GW of new

onshore wind and solar power generation capacity by 2025. Meanwhile, ENGIE is adding 9 GW 2019-2021 alone. RWE plans to have 13 GW of renewables by 2022 (at 9.2 GW as it stands). This is not only evident within the European power sector but also amongst the Nordic peer companies facing similar challenges to phase out coal. Like Vattenfall and Orsted. Vattenfall has 3.9 GW wind and solar at advanced development stages. Based on the resulting portfolio of almost 7 GW in operation by 2023. Orsted has planned 30GW of installed capacity across renewable technologies and geographies by 2030. Also, Fortum's most significant competitor in the German market - RWE - has also pledged a much higher renewables pipeline and pledged to make hydrogen only based on renewables (not fossil gas, for example).

How is Fortum going to meet the demands of the State Ownership Policy?

**QUESTION 4:** Fortum/Uniper has been associated with several instances of harmful lobbying practices. These include threatening the Netherlands with an ISDS case over their coal exit by 2030. Furthermore, Uniper has been associated with calling for the inclusion of gas in the EU taxonomy (source: <u>57 INDUSTRY LEADERS CALL FOR ENHANCING GAS CONTRIBUTION TO DECARBONISATION</u>).

Will Fortum commit to announcing it will not pursue the ISDS case against the Dutch government or, in future, not use arbitration in any other geography instead of the local courts to challenge early retirements of its fossil assets? Will Fortum commit in public to withdrawing all lobby effort that its subsidiary has conducted to promote fossil gas in the EU decarbonisation plans?

**QUESTION 5:** Fortum has recently accelerated the integration of Fortum and Uniper and the changes made in the senior management have given Fortum an even greater leverage over Uniper. Uniper was the first company to publicly announce the possibility of an arbitration based on the Energy Charter Treaty back in 2019 and in the beginning of 2021 it was another German company, RWE, that proceeded with the ISDS case. To our understanding, Uniper is still in negotiation with the Dutch government about compensations related to the planned coal exit. What is the role of Fortum as a majority shareholder in this process and is Fortum planning to use its position to make sure the claim is withdrawn altogether and an agreement is reached with the Dutch government?

**QUESTION 6:** Fortum has vocally supported the expansion of the EU ETS to cover buildings and transport. What is the company's estimate on the impact of the scope expansion to its business. Does Fortum expect that to improve its market position through impacting primarily competitors? What is the cost implication if we assume similar carbon prices as at the moment (while recognizing the sectors might be separated from the overall ETS umbrella)?

**QUESTION 7:** Please lay out how Fortum's strategy will become compliant with the 1.5 degree goal of the Paris Agreement. Please explain the necessary intermediate steps, especially with regard to Uniper and its heavily fossil fuel based portfolio. Finland has a coal phase out law, which prohibits the use of coal by 2029. Will Fortum as a state-owned company follow this example and close (not sell) its and Uniper's remaining coal power plants in the same period of time to ensure a certain amount of consistency?

**QUESTION 8:** As the new chair of Uniper's advisory board, is Markus Rauramo aware of the fact that Uniper is still buying and trading coal from Drummond, a US-based coal mining company active in Colombia, whose actual and former CEOs Miguel Linares and Augusto Jimenez have been charged with complicity in gross human rights violations? Does Drummond meet the compliance standards of Fortum? If not, will Fortum draw any consequences? (Source: <u>Top-level Drummond managers charged with financing paramilitaries - Peace Organization PAX</u>)

**QUESTION 9:** Fortum's Russian coal suppliers SUEK, KRU and Kaproben are frequently criticized for environmental damages, water, air and soil pollution caused by the mining operations. Apart from that there have been allegations about the violation of community rights, money laundering, corruption and even the illegal selling of coal from Eastern Ukraine by Kaproben. How did Fortum assess and address these allegations? Has Fortum ever stopped a business relationship with a Russian coal company as a result of a negative compliance check? If so, will Fortum implement the same procedures for Uniper as soon as possible? (Source: Why 'Blood Coal' is Critical for Russian Success in Ukraine)

**QUESTION 10:** According to the latest Uniper Annual Report the Fortum subsidiary has started sourcing up to 1.5 billion cubic meters (bcm) of fossil gas per year from the Baku-based *State Oil Company of the Azerbaijan Republic (SOCAR).* Does this business counterpart meet the Fortum compliance standards with regard to human rights, corruption, money laundering? How do you evaluate SOCAR's role as a major source of income for Azerbaijan's authoritarian president Aliyev and his Government? How do you evaluate Uniper's long-term contract with SOCAR from a climate perspective?

**QUESTION 11:** Fortum's subsidiary Uniper is one of the investors of the controversial Nord Stream 2 pipeline. As Fortum/Uniper will trade gas from Nord Stream 2, could you please specify the compliance check steps that Fortum/Uniper are undertaking to ensure that the extraction of fossil gas for Nord Stream 2 will not lead to environmental damages or human rights violations. Please specify, for which gas extraction sites you are planning to do compliance checks. Could you also give an estimate of the amount of green hydrogen to be transported via Nord Stream 2 in the upcoming years according to your estimations?

**QUESTION 12:** Back in May 2013, Uniper signed a 20-year long-term year contract with Canadian investor Pieridae for the delivery of 4.8 MTPA of LNG annually on a "take or pay" basis from Goldboro. The take or pay provision requires Uniper to partly pay for the LNG even in the case that Uniper doesn't want to buy the full contracted volumes. At least 1.5 MTPA of the LNG have to be brought into the German gas market. Otherwise, the Canadian investor won't receive the crucial multi-billion loan guarantee from the German government. It is the promise of this loan guarantee that has kept an uncommercial project alive for over seven years – without any major development since 2013.

The Canadian and German activists/groups opposing the climate hostile and financially highly risky project approached Fortum and Finnisch officials with letters sent Nov 26, 2020, and Feb 9, 2021 (<u>Open letter to Finland - LNG Goldboro\_Nov262020.pdf</u> & <u>Reply\_Fortum</u> <u>letter-LNG-Goldboro\_9 Feb 21.pdf</u>) to outline our concerns and the risks for Fortum's shareholders and the Finnish state.

In exactly the same way, the same activists approached the Canadian Prime Minister Trudeau and Nova Scotia's Premier Iain Rankin - sharing their concerns about the sustainability of the project and asking the Canadian officials not to grant Pieridae a government loan (<u>Goldboro LNG project 'would be difficult' without federal funding, says</u> <u>Pieridae</u>).

However, this move prompted Uniper's partner Pieridae to reach out to the signatories of the letter and - in an outrageous attempt to silence them - threatened them with legal action (Company behind proposed Goldboro LNG plant threatens environmentalist with legal action / Fortum/Uniper's partner Pieridae attempts to silence activists).

We ask Fortum the following questions: Are you aware of the high financial risks related to the LNG Goldboro project (also highlighted by this apparent desperate action of Uniper's partner) that wasn't capable of lifting off for over 8 years now? Will you distance yourself publicly from the behaviour of your partner Pieridae by also affirming that this is not the way Fortum/Uniper considers their partner to behave towards reasoned opposition to projects that do also pose a financial and reputational risk for Fortum/Uniper and their stakeholders?

**QUESTION 13:** What concrete measurements is Fortum taking to reduce upstream methane emissions? Additionally, what goals has Fortum set itself in terms of reducing upstream methane emissions, and how are these goals monitored?

**QUESTION 14:** Currently, Fortum is using country-specific emission factors in order to assess their scope 3 emissions. At the same time, latest satellite technology increasingly enables companies to directly measure possible methane emissions occurring in their supply chain instead of calculating them. As the issue has been gaining more attention recently, a company's credibility in this area increasingly depends on their ability to credibly assure that they have this issue under control, i.e. through using direct measurements in the areas of origin for their used gas. Is Fortum planning on applying satellite-based measurement technologies, especially with regards to Russia, in order to improve their database when it comes to methane emissions in their value chain?

**QUESTION 15:** Are you planning on engaging with partners about possible methane leakages in the supply chain, e.g. via inquiries to your partners?

**QUESTION 16:** Fortum's subsidiary Uniper is a major shareholder in Javelin Global Commodities (28%, according to Uniper's AR 2020). Javelin Global Commodities has the contract for purchasing and marketing all of the coal from the new Woodhouse Colliery mine planned in the UK.

Woodhouse Colliery will be the first new deep coal mine in the UK for 30 years. There has been strong opposition to the project on environmental and economic grounds. We cannot open new coal mines and avoid catastrophic climate change. The mine is projected to increase the UK's climate-damaging greenhouse gas emissions by 0.4Mt CO2e per year, wrecking the commitments made under the 2016 Paris Agreement, and the UK's 6th carbon budget.

The UK's Climate Change Committee has said all coal, including coking coal, should be phased out by 2035. The committee has also pointed out that coking coal use in steelmaking could be displaced completely by 2035, using a combination of hydrogen direct reduction and electric arc furnace technology to meet their recommendation that UK ore-based steelmaking be near-zero emissions by 2035. Steel firms in Europe and beyond have committed to significant reductions in carbon emissions this decade in Europe typically by 25 to 30%, and to be carbon neutral by 2050.

The project risks the creation of a stranded asset as the mine may be required to close only a few years after it opens. By locking us into high-carbon steel production, the UK steel industry risks falling behind in these technological developments.

As well as restrictions on greenhouse gas emissions, the mine is likely to face problems with the sale of coal to UK steelmaking due to the level of sulphur. British Steel has informed Cumbria County Council: "The sulphur content of the coal is an issue for British Steel currently due to our operations and blend sulphur limit." The council stated: "the level of sulphur content would need to be managed to supply a product currently suitable for British Steel, and it is not clear whether this can be achieved." (Exclusive: Case for Cumbrian mine undermined by doubt over UK market for coking coal).

Labour practices at other projects that Javelin Global Commodities have been involved in give rise to serious concerns about their relationship with the communities in which they operate. Javelin Global Commodities had a key role in marketing coal for Blackjewel, which had millions of dollars in outstanding wages (<u>US coal producer Blackjewel files for Chapter 11 bankruptcy: filing</u>).

How can Fortum justify involvement (via shareholding in Javelin Global Commodities) in the West Cumbria Coal mine- a project that would risk breaching commitments made under the Paris Climate Agreement, and the UK's 6th carbon budget? Where do you expect to find a market for the coal, given the increasing regulation on greenhouse gases and sulphur content in steel production?