

### **Highlights 2021**



New reduction target for Scope 3 GHG emissions;

by 2035 at the latest

Within less than one year, we have announced accelerated coal phase-out of six of our coal-fired power plants in Germany and the UK compared to the original timetable

Fortum and Uniper cooperation proceeds; the joint solar and wind development team announced its first investment to construct 380 MW of wind capacity in Finland

The safety of employees and contractors is Fortum's top priority; Safety Ground Rules launched

**Biodiversity target** 

achieved; Fortum conducted 13 major voluntary measures that improve the living conditions of species and strengthen populations

Increased corporate transparency is key; Fortum published its first Climate Lobbying Review

Fortum continued to support its personnel's wellbeing in pandemic conditions; 86% of survey respondents feel they can influence their work and 76% that their work is meaningful

Green light to the Loviisa Nuclear **Power Plant Environmental Impact** Assessment Report. Fortum to apply for a new operating license for both units until the end of 2050

Fortum was ranked 22nd overall and the best of the Finnish companies in

the European Women on Boards Gender Diversity Index 2021





### Fortum creates value

#### Input

#### **Human and intellectual capital**

- Close to 20,000 energy sector professionals, focus on diversity
- · Certified environment, health and safety management
- Corporate culture that encourages innovation and R&D;
   R&D expenses totalling EUR 61 million in 2021
- · Robust corporate governance and ethical business conduct
- Brand and reputation

#### Supply chain

· Purchases EUR 99.5 billion, including investments

#### Sources of energy

- · Hydro, solar, wind
- Natural gas, LNG, uranium, coal and lignite, biofuels, waste-derived fuels

#### **Assets**

- · Operations in more than 40 countries
- ~47.1 GW power generation capacity
- ~16.9 GW heat production capacity
- Hydropower plants, CHP, condensing and nuclear power plants; growing in solar and wind
- Gas storages and pipelines
- · Several waste-to-energy plants

#### **Financial**

- · Financial net debt EUR 789 million
- Total assets EUR 149.661 million

#### Fortum

#### **Purpose Statement**

Our purpose is to drive the change for a cleaner world. We are securing a fast and reliable transition to a carbon-neutral economy by providing customers and societies with clean energy and sustainable solutions.

#### Strategy

- Transform own operations to carbon neutral
- Strengthen and grow in CO<sub>2</sub>-free power generation
- Leverage strong position in gas to enable the energy transition
- · Partner with industrial and infrastructure customers

#### Output

#### **Products**

- 188 TWh power generation
- 36 TWh heat sales
- · Gas sales
- 64% of electricity generation CO<sub>2</sub>-free in Europe, 40% in all countries

#### Services and solutions

- · Power and heat sales
- Electricity and fuel trading services (e.g. gas)
- · Engineering services for customers
- Nuclear expert services
- District heating and cooling
- Electricity retail sales
- Environmental management and material efficiency services, incl. plastic recycling and refining, battery recycling, metals recycling, and ash treatment
- Hydrogen
- E-mobility charging solutions

#### Our carbon footprint

- · Coal-based power generation capacity, 9.3 GW
- Share of coal-based power generation of total power generation, 13%
- Share of coal-based revenue of total revenue, 1%
- CO<sub>2</sub>-free power generation, 75 TWh
- Specific CO<sub>2</sub> emissions from total energy production, 312 gCO<sub>2</sub>/kWh
- CO<sub>2</sub> emissions from total energy production, 68.7 Mt

#### **Impact**

#### **Economic impact**

- Profitability
- · Increased shareholder value
- · Dividends to shareholders
- Investments
- · Taxes to the public sector
- · Wages and benefits to employees
- · Payments to suppliers and partners
- · Interest to creditors

#### Social impact

- · Reliable supply of electricity, heat, and gas
- Smart energy solutions for industrial and infrastructure customers
- · Active customer participation in energy system
- Partnership opportunities for cities, start-ups, and research institutions
- Safe work environment and wellbeing for employees, contractors and suppliers
- · Opportunities in career development for employees

#### **Environmental impact**

- Contribution to climate change mitigation through transforming own operations to carbon neutral
- Investments in renewable energy production and clean gas (e.g. hydrogen)
- Flexible generation enabling increasing use of intermittent renewable energy sources
- Improved resource efficiency, recycling and recovery through circular economy services
- Removing hazardous waste from circulation, treatment and safe final disposal
- Improving air quality e.g. through advanced nitrogen oxide reduction solutions
- · Energy-efficiency improvements in operations
- Mitigation of environmental impacts in own operations



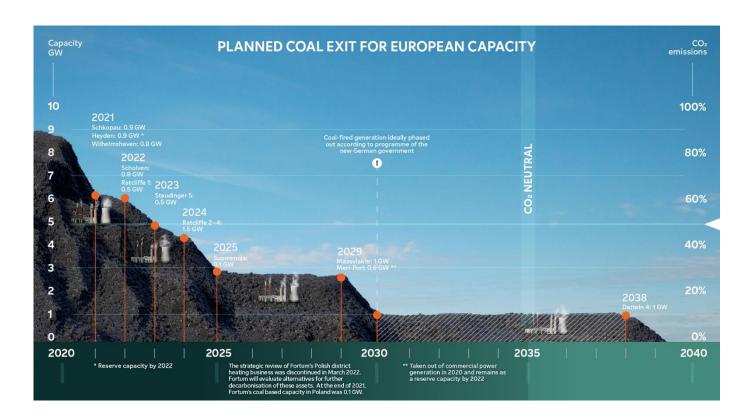






### **Ambitious climate targets**

- In 2021, we continued to implement our <u>strategy</u>: to drive the clean energy transition and deliver sustainable financial performance.
- We are committed to transform our own operations to carbon neutral:
  - globally (Scope 1, 2 and 3 emissions), in line with the goals of the Paris Agreement, by 2050 at the latest
  - in European generation (Scope 1 and 2) by 2035 at the latest
- Additionally, we will reduce:
  - CO<sub>2</sub> emissions (Scope 1 and 2) in our European generation by at least 50% by 2030 (compared to base-year 2019)
  - indirect GHG emissions (Scope 3) globally by 35% by 2035 at the latest (compared to base-year 2021).
- Achieving the targets requires:
  - phasing out and exiting coal: we will phase-out or exit about 8 GW of coal-fired power generation by 2030
  - transition to increasingly clean gas (e.g., hydrogen)
  - green investments: our target is to build 1.5-2 GW of new renewable energy capacity by 2025, primarily in Europe.





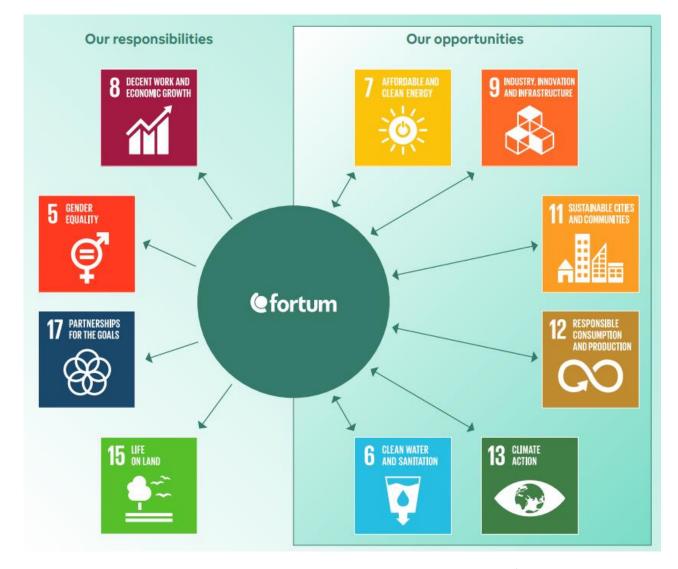
# We support the United Nations Sustainable Development Goals (SDG)





Fortum supports the Sustainable Development Goals.

#### **Key UN Sustainable Development Goals for Fortum**





### Our actions in 2021





We support an ambitious market —driven climate policy, and develop and provide customers with clean energy solutions that reduce CO<sub>2</sub> emissions

Fortum published its first Climate Lobbying Review



We offer and develop affordable and reliable energy solutions for customers, improve the energy efficiency of production, and invest in renewable energy.

Fortum and Uniper launched first joint wind development project in Finland





We aim to reduce environmental impacts of our own operations on aquatic and terrestrial ecosystems and biodiversity. We prevent customers' hazardous substances from ending up in water and land areas and treat contaminated materials safely.

Biodiversity target for 2021 achieved



We focus on a circular economy and resource efficiency. We offer solutions to promote waste material recycling, reuse, efficient incineration, and safe final disposal of waste.

Expanding lithium-ion battery recycling capacity by building a new hydrometallurgical plant



We impact urban air quality by reducing flue-gas emissions at power plants. We also develop flexible and low-CO<sub>2</sub> district heating and cooling solutions, and e-mobility charging solutions.

New heat pump increases the use of waste heat in district heating in Espoo, Finland



We promote the good working conditions and safety of our own and contractors' employees and require service and goods suppliers to respect labour rights and anti-corruption principles.

New Safety Ground Rules launched



We advance innovations related to energy, clean hydrogen, digitalisation, circular economy, biomaterials, and electricity storage solutions.

Multiple projects to accelerate the development of a hydrogen economy in Europe



We support workplace diversity and provide equal opportunities to our personnel.

Fortum was ranked the best of the Finnish companies in the European Women on Boards Gender Diversity Index 2021



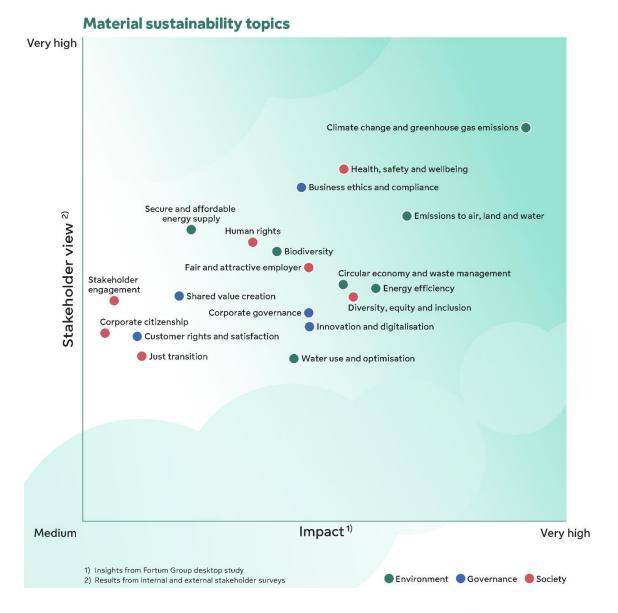
We cooperate with civil society organisations in our operating countries. We also have joint projects with cities, municipalities, and universities.

Fortum continued to support local communities and organisations through its CSR programme.



### Sustainability priorities

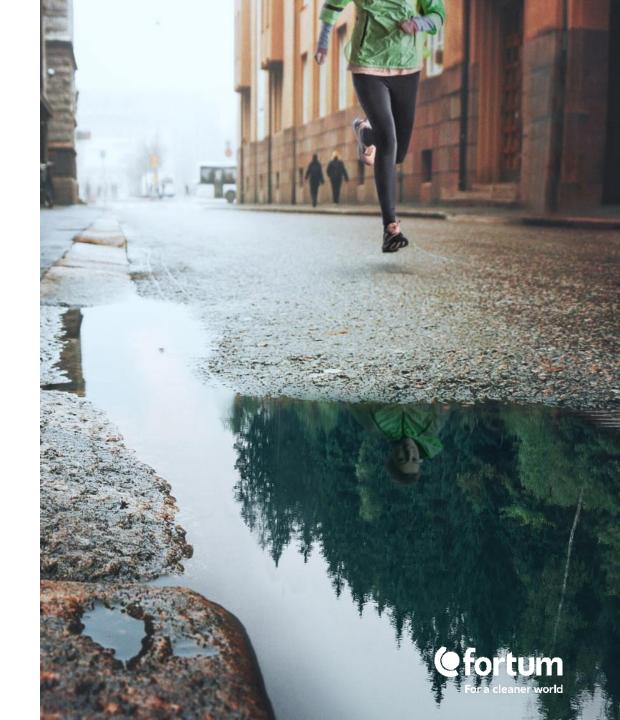
- In our operations, we take into consideration climate and resource issues as well as our impacts on personnel and society.
- Fortum reassessed its sustainability priorities in 2021 by conducting a sustainability materiality analysis.
- Our sustainability priorities are presented in the matrix.





### **Ethical business approach**

- The Fortum <u>Code of Conduct</u> defines how we treat others, engage in business and safeguard our corporate assets.
- The <u>Supplier Code of Conduct</u> defines how we expect our suppliers and business partners to operate, including sustainability requirements. It is based on the principles of the United Nations Global Compact initiative.



### Targets and performance 2021, Climate and resources



### **Targets**

#### Climate:

- Reduction of CO<sub>2</sub> emissions (Scope 1 and 2) in European generation by at least 50% by 2030 (compared to base-year 2019)
- Carbon neutral (Scope 1 and 2) in European generation by 2035 at the latest
- Carbon neutral globally (Scope 1, 2 and 3 GHG emissions), in line with the goals of the Paris Agreement, by 2050 at the latest
- Reduction of Scope 3 indirect GHG emissions by 35% by 2035 at the latest (compared to base-year 2021)

#### **Biodiversity:**

 Number of major voluntary measures enhancing biodiversity ≥12 in 2021



### **Key performance indicators**

- 100% of ISO 14001 environmentally certified operations in power and heat production
- Investments to CO<sub>2</sub>-free production MEUR 335
- Specific carbon dioxide emissions from total energy production 312 gCO<sub>2</sub>/kWh
- Share of CO<sub>2</sub>-free energy production in power generation in Europe 64%
- Biodiversity target achieved by conducting 13 major voluntary measures
- Asset availability of gas-fired and coal-fired power plants, 80.8%



### Targets and performance 2021, Personnel and society







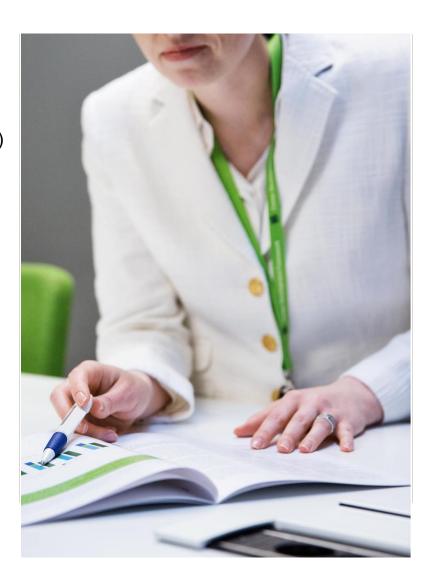




### **Targets**

#### Safety:

- Total Recordable Injury Frequency (TRIF)
   <1.0 by the end of 2025</li>
- Lost Time Injury Frequency (LTIF), for own personnel and contractors: ≤1.2 in 2021
- 0 severe accidents



### **Key performance indicators**

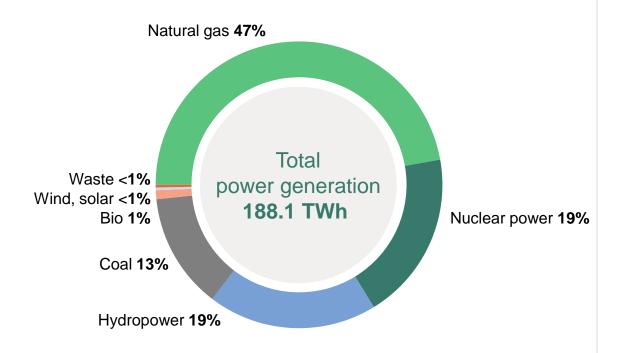
- 99.3% of ISO 45001 safety certified operations in power and heat production
- Total Recordable Injury Frequency (TRIF) 2.2
- Lost Time Injury Frequency (LTIF) 1.5
- Severe accidents 3
- Number of employees, 31 December 19,140
- Female employees 28%
- Support to society MEUR 1.8\*



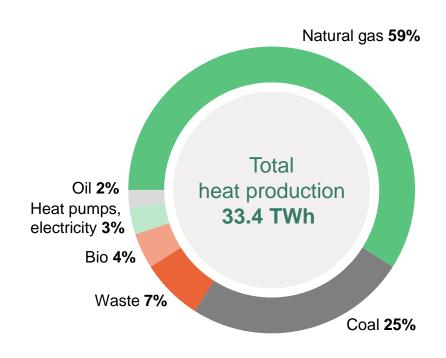
<sup>\*</sup> Excluding Uniper

### Fortum's power generation and heat production by source

### Fortum's power generation in 2021

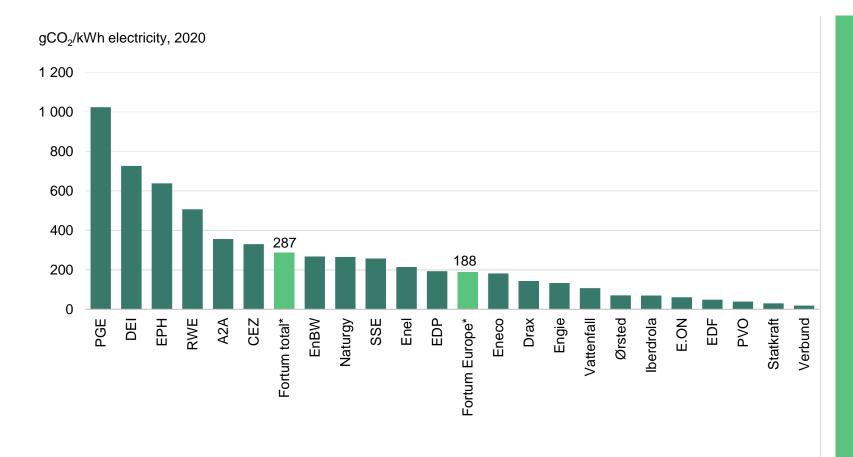


### Fortum's heat production in 2021





### Specific CO<sub>2</sub> emissions of major utilities in Europe



Fortum in Europe

Share of CO<sub>2</sub>-free power in

Fortum's generation in 2021

64%

Fortum total

40%



<sup>\* &</sup>quot;Fortum total" and "Fortum Europe" include specific carbon dioxide emissions from power and heat production in 2020. "Fortum total" and "Fortum Europe" include Uniper from the second-quarter of 2020. All other figures, except "Fortum total" and "Fortum Europe", include European power generation in 2020. For some companies the PwC figures might also include heat production.

Source: PwC, October 2021, Climate change and Electricity, Fortum"

# We invest in CO<sub>2</sub>-free energy and energy efficiency

- We invest in renewable energy production: solar, wind and hydropower.
  - At the end of 2021, we announced the investment decision for the construction of the 380-MW wind farms in Närpes and in Kristinestad, Finland.
  - In the first quarter of 2022, Fortum won the right to build two solar power plants in India with total capacity of 800 MW.
- Activities in 2021:
  - Refurbishments of hydropower plants in Sweden and Finland produced 5 MW of new CO<sub>2</sub>-free production capacity\*
  - Energy savings of 179 GWh/a achieved by investing in energy-efficiency improvement projects\*



<sup>\*</sup> excluding Uniper

### Security of energy supply

- Energy availability of our power plants is at a good level:
  - asset availability of Fortum's gas-fired and coal-fired power plants was, on average, 80.8%.
- The load factor of the Loviisa nuclear power plant: 92.9%; among the highest in the world for this type of plants.
- We aim to keep district heating distribution interruptions short.



## Reducing our impact on the environment

- 100% of our electricity and heat production operations were ISO 14001 environmentally certified.
- During 2022, we are committed to develop a science-based strategy to measure and enhance the biodiversity impacts of the Group's operations and new developments.

#### In 2021:

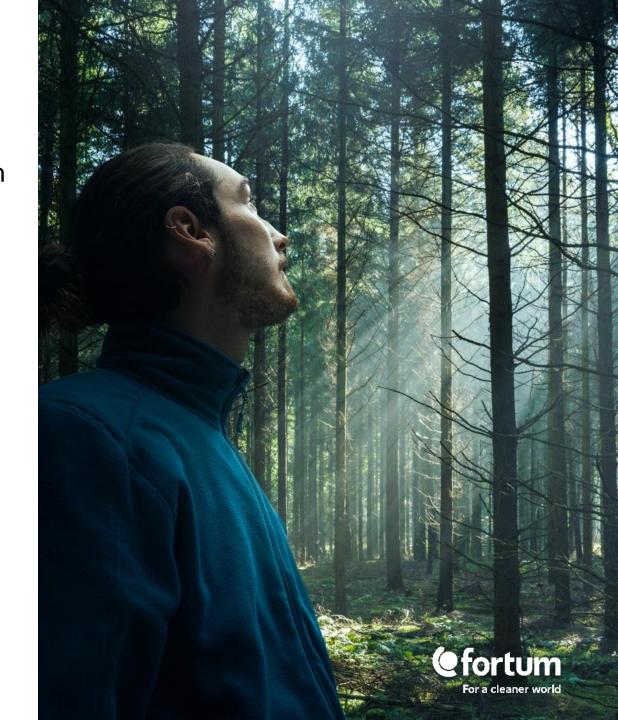
- We carried out fish obligations, valued at about EUR
   2.2 million in hydropower production\*
- We did habitat improvements around Fortum's hydropower plants, removed multiple dams, protected endangered species, and implemented a hydraulic dam bypass solution for fish.



<sup>\*</sup> excluding Uniper

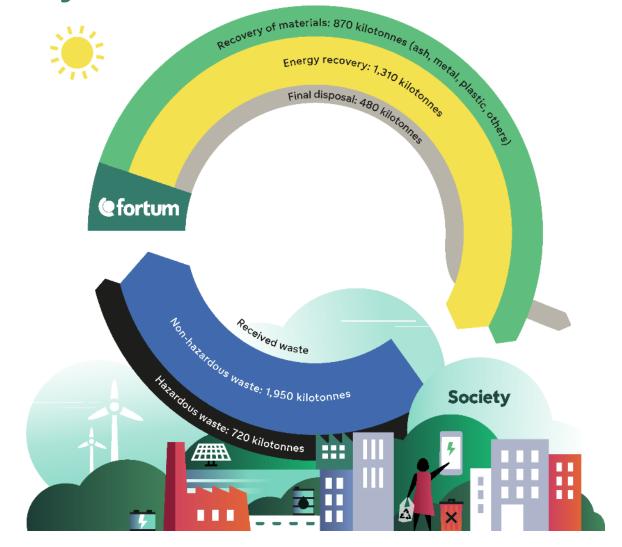
### **Biodiversity**

- We aim to improve biodiversity in connection with our operations.
- We carry out biodiversity-related projects.
- We collaborate with our stakeholders in biodiversity projects.
- Biodiversity target for 2021 achieved: Fortum conducted 13 major voluntary measures that improve the living conditions of species and strengthen populations.



### Fortum's role in the circular economy

- We offer waste management services for customers in the Nordic countries, Central Europe, and Poland.
- The waste received from our customers is recovered as material or energy or delivered to final disposal.
- We strengthened our position in the recycling of high value materials:
  - investment decision for a new hydrometallurgical plant in Harjavalta, Finland
  - a new mechanical EV battery recycling process line in Ikaalinen, Finland was opened.





### Customer satisfaction as a goal

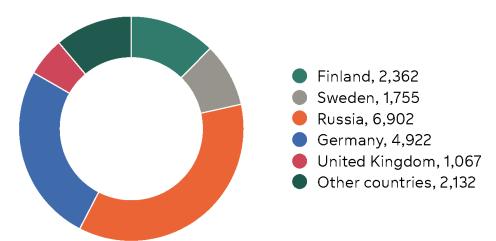
- Customer satisfaction is a top priority in implementing our strategy and in growing our business.
- Our customer satisfaction continues to be at a good level in most business areas.



### Personnel

- 19,140 energy and circular economy professionals
- 28% of the personnel are women
- 27% of the management are women
- 95% in permanent employment
- Employee turnover 10.4%
- Sickness-related absences 3.6%

### Number of employees by country, 31 December 2021

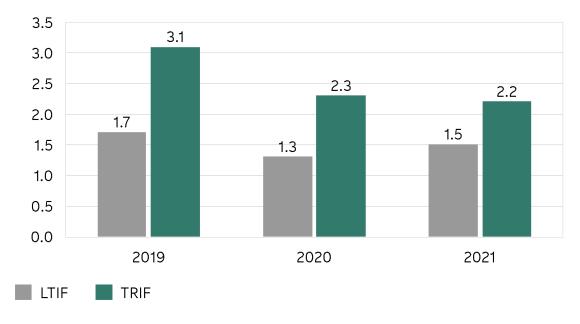




### Safe workplace for employees and contractors

- Excellence in safety is the foundation of Fortum's business and an absolute prerequisite for efficient and interruption-free production.
- We have an ambitious safety target: Total Recordable Injury Frequency (TRIF) <1.0 by the end of 2025.
- In 2021, we launched the new Safety Ground Rules to help keep safety on everyone's agenda at all times and to continue improving our safety performance.

### Injury Frequencies LTIF 1) and TRIF 2), own personnel and contractors 3)

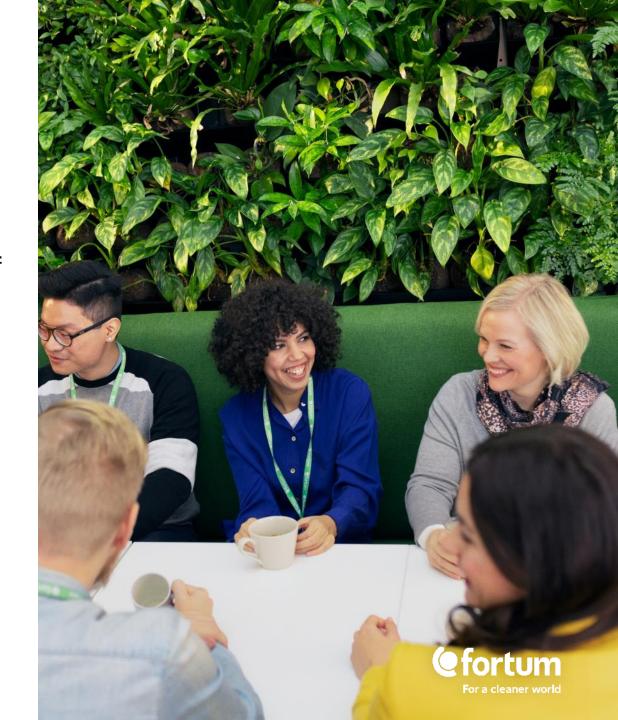


- 1) LTIF = Lost Time Injury Frequency, injuries per million working hours
- 2) TRIF = Total Recordable Injury Frequency, injuries per million working hours
- 3) Uniper consolidated as of Q2/2020



### **Diversity and equal opportunity**

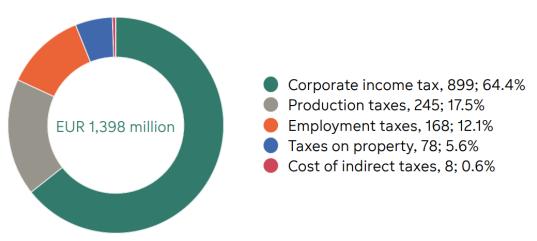
- We believe in Open Leadership and in creating a safe and inspiring work environment and company culture that help our people thrive.
- We promote equal treatment and opportunities of our employees regardless of, e.g., ethnicity, gender or age.
- Fortum is a participant in the Equal by 30 campaign, a global effort to reach gender parity in the energy sector by 2030.
- Fortum was ranked the best of the Finnish companies, and 22nd overall, out of the 668 European listed companies included in the European Women on Boards Gender Diversity Index 2021.

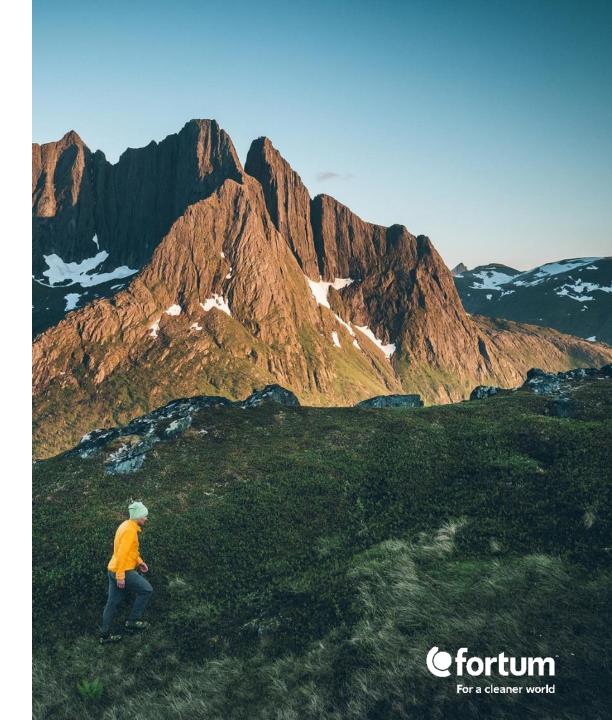


### Responsible tax payer

- We always pay taxes in the country where the business operations are located and where the added value is generated.
- We annually publish our <u>Tax Footprint</u>.

#### Total taxes borne 2021, EUR million and %





### Responsible supply chain

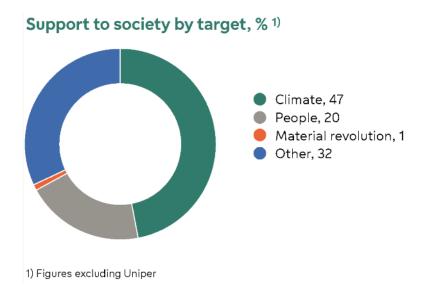
- Our key tools in sustainable supply chain management are <u>Fortum's Supplier Code of</u> <u>Conduct</u>, supplier qualification and supplier audits.
- Supplier sustainability audits are conducted for suppliers with recognized risks to assess compliance with the Supplier Code of Conduct.
- Fortum is a member of the Bettercoal initiative, and we use the Bettercoal Code and tools to monitor and improve sustainability of our coal supply chain.
  - At year-end 2021, Fortum Group's coal volume purchased via direct contract from Bettercoal suppliers was 67%.





### **Corporate citizenship**

- We support activities promoting the common good in society.
- We cooperate with communities and organisations through Fortum's Corporate Social Responsibility (CSR) programme.
- In 2021, Fortum's, excluding Uniper, support for activities promoting the common good totalled about MEUR 1.8.





### Fortum is a forerunner in sustainability

Our purpose is to drive the change for a cleaner world. We are securing a fast and reliable transition to a carbon-neutral economy by providing customers and societies with clean energy and sustainable solutions. This way we deliver excellent shareholder value.

### 3<sup>rd</sup> largest CO<sub>2</sub>-free generator in Europe

CO<sub>2</sub>-free power generation, including renewable and nuclear power, was 75 TWh in 2021. 64% of power generation in Europe, and 40% of total power generation was CO<sub>2</sub>-free.

### Specific CO<sub>2</sub> emissions

Fortum's specific CO<sub>2</sub> emissions from total energy production in Europe were 231 gCO<sub>2</sub>/kWh in 2021, and 312 gCO<sub>2</sub>/kWh globally.

### **Growing in solar and wind**

Targeting a multi-gigawatt wind and solar portfolio, which is subject to the build-operate-transfer business model. Targeting an indicative growth capex of EUR 3 billion for 2021-2025, of which 50-55% to renewables.

### **Signatory of TCFD**

Fortum is an official signatory of TCFD as of March 2021



### Fortum is listed in several sustainability indices and ratings:













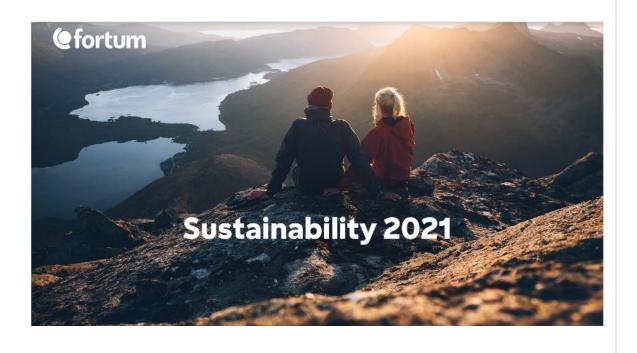






### **Sustainability reporting 2021**

### Sustainability 2021



- Fortum's TCFD\* report for 2021 is included in the Sustainability 2021 report's section Climate, pages: 27–41 and in <u>Financials 2021</u>, pages: 25–28 and 39–40.
- Fortum's Non-Financial Information report is included in the Financials 2021, pages: 12 and 25–31.



<sup>\*</sup> Task Force on Climate-related Financial Disclosures

