SUSTAINABILITY REPORT 2012

Adding value

Next generation energy company | Fortum

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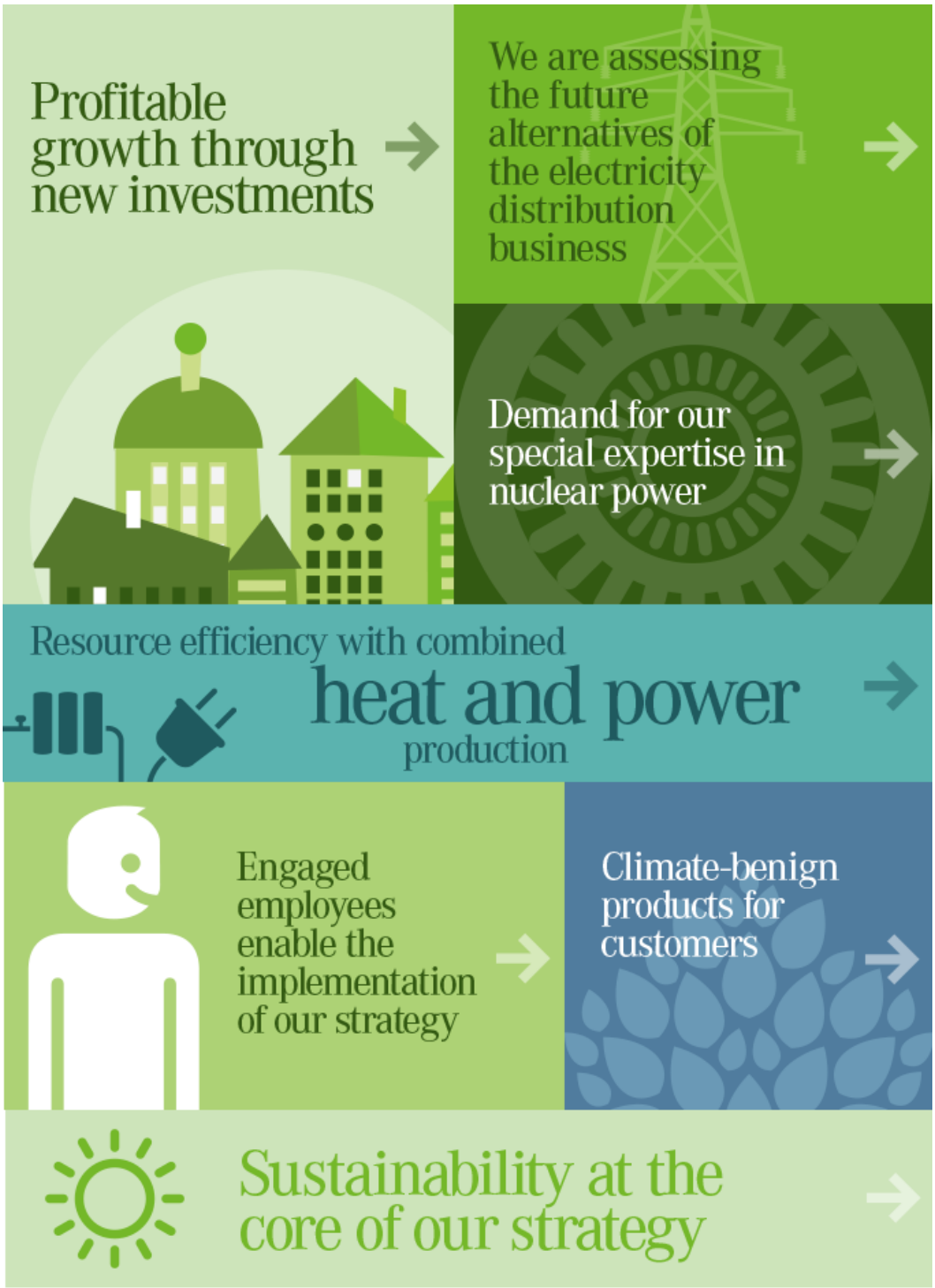
Sustainability Report 2012



Adding value through sustainable actions

Sustainability is integrated into our strategy, and we believe that it is one of the success factors for our business.

Adding value through sustainable actions

In 2012, we continued implementing our strategy of creating energy that improves life for present and future generations.

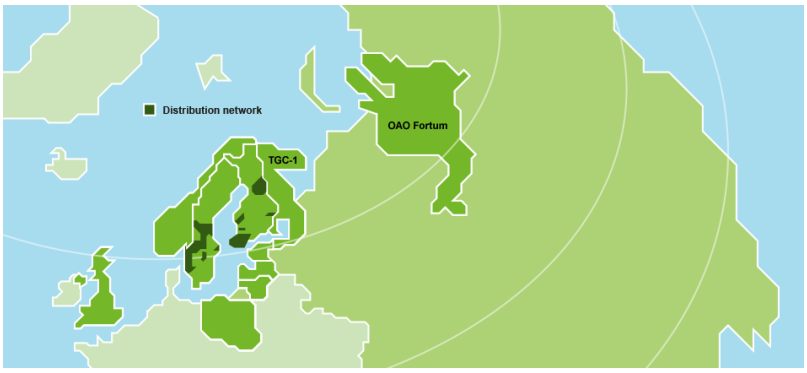
Fortum's sales were EUR 6.2 billion and comparable operating profit EUR 1.7 billion. The Group had about 10,400 employees at the end of 2012. Fortum Corporation's share is listed on NASDAQ OMX Helsinki.

The instability in the European economy has made our operating environment more challenging.

In order to maintain our strategic flexibility and to secure our competitiveness, we launched an efficiency programme aiming to strengthen the cash flow by over one billion euros in 2013–2014.

At the end of January 2013, Fortum decided to assess future alternatives of the electricity distribution business. We expect to complete the assessment during 2013.

Fortum's geographical areas



Fortum's operations focus on the Nordic countries, Russia, Poland and the Baltic countries. In the future, the integrating European and fast-growing Asian energy markets provide additional growth opportunities.

Finland

Power generation, capacity	5,040 MW
Heat production, capacity	2,804 MW
Distribution, customers (thousands)	633
Share of electricity customers	16%
Employees 31 Dec 2012	2,647
ISO 14001 certification	100%
OHSAS 18001 certification	70%
ISO 9001 certification	43%
CO_2 emissions	2.4 Mt

Sweden

Power generation, capacity	5,822 MW
Heat production, capacity	3,772 MW
Distribution, customers (thousands)	898
Share of electricity customers	12%
Employees 31 Dec 2012	2,050
ISO 14001 certification	100%
OHSAS 18001 certification	68%
ISO 9001 certification	32%
CO_2 emissions	0.7 Mt

Russia

Power generation, capacity	3,404 MW
Heat production, capacity	13,396 MW
Employees 31 Dec 2012	4,252
ISO 14001 certification	79%
OHSAS 18001 certification	79%
ISO 9001 certification	0
CO_2 emissions	15.6 Mt

Poland

Heat production, capacity	1,278 MW
Employees 31 Dec 2012	687
ISO 14001 certification	82%
OHSAS 18001 certification	82%
ISO 9001 certification	82%
CO_2 emissions	1.0 Mt

Lithuania

Heat production, capacity	36 MW
Employees 31 Dec 2012	103
ISO 14001 certification	100%
OHSAS 18001 certification	100%
ISO 9001 certification	100%
CO_2 emissions	0.01 Mt

Latvia

Power generation, capacity	4 MW
Heat production, capacity	191 MW
Employees 31 Dec 2012	103
ISO 14001 certification	95%
OHSAS 18001 certification	95%
ISO 9001 certification	95%
CO_2 emissions	0.06 Mt

Norway

Heat production, capacity	209 MW
Distribution, customers (thousands)	102
Share of electricity customers	3%
Employees 31 Dec 2012	145
ISO 14001 certification	100%
OHSAS 18001 certification	0%
ISO 9001 certification	100%
CO_2 emissions	0.004 Mt

Great Britain

Power generation, capacity	140 MW
Heat production, capacity	250 MW
Employees 31 Dec 2012	55
ISO 14001 certification	100%
OHSAS 18001 certification	90%
ISO 9001 certification	90%
CO_2 emissions	0.6 Mt

Estonia

Power generation, capacity	48 MW
Heat production, capacity	495 MW
Employees 31 Dec 2012	204
ISO 14001 certification	44%
OHSAS 18001 certification	44%
ISO 9001 certification	44%
CO_2 emissions	0.1 Mt

Group business structure (31 Dec 2012)

Division	Power	Heat	Russia	Electricity Solutions and Distribution (ESD)	
Business	The Division consists of Fortum's power generation, power trading and power capacity development as well as expert services for power and heat producers.	The Division consists of combined heat and power (CHP) generation, district heating activities and business-to-business heating solutions in the Nordic countries and other parts of the Baltic Rim.	The Division consists of power and heat generation and sales in Russia. It includes OAO Fortum and Fortum's over 25% holding in TGC-1.	The Division is responsible for Fortum's electricity distribution and sales activities. The division consists of two business areas: Distribution and Electricity Sales.	
Reporting segment	**Power**	**Heat**	**Russia**	**Distribution**	**Electricity Sales**
Geographic presence, production and distribution assets and/ or customer base	**Production in Finland, Sweden and Great Britain. Expert services worldwide.** In Finland and Sweden full or co-ownership in 191 hydropower plants, three condensing power plants and some tens of wind power plants. Two own nuclear reactors and eight co-owned nuclear power plant units. One CHP plant in Great Britain.	**Finland, Sweden, Norway, Poland, Lithuania, Latvia, Estonia** 18 CHP plants and several hundred heat boilers. Heat supply to one million homes in the Nordic countries, Poland and the Baltics.	**Russia** Eight CHP plants, several heat boilers and ~500 km trunk networks as well as heat supply to 172,000 customers Incl. >25% share (giving blocking minority) in TGC-1 in the north-western Russia.	**Finland, Sweden and Norway** 156,500 km of distribution lines, 53,000 transformers, three operation centres, and 1.6 million meters and customers in the Nordic countries.	**Finland, Sweden and Norway** 1.2 million customers.
Market position	Third largest power producer in the Nordic countries, among the 15 largest in Europe and Russia.	Leading heat supplier in the Nordic countries and Baltics, growth in Poland and the Baltics.	Sizable power and heat utility in Western Siberia and the Urals in Russia.	Largest electricity distribution operator in the Nordic countries.	Second largest electricity sales operator and a leading seller of eco-labelled and CO_2-free electricity in the Nordic countries.
Production capacity	Power 9,702 MW Heat 250 MW	Power 1,569 MW Heat 8,785 MW	Power 3,404 MW Heat 13,396 MW	-	-
Volumes	Total power generation 50.3 TWh/a Nordic power generation 49.2 TWh/a	Power sales 4.2 TWh/a Heat sales 19.7 TWh/a	Power sales 23.3 TWh/a Heat sales 26.4 TWh/a	Distribution network 26.6 TWh/a Regional network 17.3 TWh/a	Electricity sales 13.0 TWh/a
Sales	EUR 2,415 million	EUR 1,628 million	EUR 1,030 million	EUR 1,070 million	EUR 722 million
Share of Fortum's sales	35%	23%	15%	15%	10%
Comparable operating profit	EUR 1,144 million	EUR 266 million	EUR 68 million	EUR 317 million	EUR 38 million
Comparable EBITDA	EUR 1,258 million	EUR 476 million	EUR 189 million	EUR 526 million	EUR 39 million
Net assets	EUR 6,454 million	EUR 4,335 million	EUR 3,846 million	EUR 3,911 million	EUR 59 million
Comparable return on net assets	18.2%	6.8%	2.7%	8.7%	148.4%
Capital expenditures	EUR 190 million	EUR 464 million	EUR 568 million	EUR 324 million	EUR 1 million
Employees	1,846	2,212	4,253	870	509

Division	Power	Heat	Russia	Electricity Solutions and Distribution (ESD)	
Reporting segment	**Power**	**Heat**	**Russia**	**Distribution**	**Electricity Sales**
Business and result drivers	- Nordic power supply-demand balance, volatility and price; stability through hedging - About 90% of production is hydro and nuclear power: hydrological situation, nuclear power availability, and prices of fuels and emissions allowances important - Maintenance and assets lifetime management practices and costs - Investments into new or existing generation	- Steady growth through investments; newly commissioned CHP plants bring earnings - Fuel and CO_2 emissions allowance prices, fuel availability, flexibility and efficiency play a key role - Production primarily in CHP plants with power as an important earnings source: power supply/ demand balance, volatility and price affect profitability; stability through hedging - Heat and auxiliary product prices. - Heat demand: weather conditions as well as macro and local economy have an impact - Maintenance and asset lifetime management practices and costs	- Investment programme: earnings growth through new capacity and new volume - Power generation capacity prices, power supply-demand balance, price and volatility - Production mainly CHP with power as the primary earnings source: Power supply-demand balance as well as price level and volatility in the Urals/Western Siberia - Plant availability, production optimisation and efficiency upgrades - Fuel prices and availability as well as gas and electricity price ratio - Development of heat market in the long term and heat demand and tariffs in the short term - Maintenance and asset lifetime management practices and costs	- Growth through investments - Long-term optimised levels of investment and maintenance - Distribution volumes: weather conditions as well as macro and local economy have an impact - Stable earnings with regulated tariffs - Cost-efficiency and quality of service - Grid availability and service level; liability to compensate distribution interruptions - Maintenance and asset lifetime management practices and costs	- Growth in customer base through new offerings and innovative solutions - Margin between Nord Pool wholesale purchase and retail sales price levels; stability through efficient hedging
Strategy drivers	- Existing CO_2-free, flexible and market-driven production portfolio - Solid position and competence in hydro and nuclear production in the Nordic power market - Liberalisation and integration of European power market	- Need for increased resource-efficiency will increase CHP's competitiveness - Potential for increased usage of local biofuels and waste - Solid position and competence in flexible multi-fuel CHP production	- Liberalised and privatised power and heat market - Economic and power demand growth - Boosting efficiency of existing operations and bringing the ongoing investment programme to completion - Development of heat market - Potential for improved operations on the basis of current assets modernisation	- Cost efficiency through economies of scale and lean processes - Technical development utilised for a more efficient, reliable and smarter network enabling sustainable and energy-efficient solutions for customers - Unbundling and harmonisation of Nordic/ European electricity distribution sector	- Cost efficiency through economies of scale and lean processes - Potential for new businesses related to smart grid/system development -Solid position and competence in the downstream part of the Nordic power value chain - Liberalisation, integration and harmonisation of Nordic/ European retail electricity markets

Division	Power	Heat	Russia	Electricity Solutions and Distribution (ESD)	
Reporting segment	**Power**	**Heat**	**Russia**	**Distribution**	**Electricity Sales**
Risks[1)]	- Wholesale price of electricity in the Nordic region the key factor influencing business performance: drivers behind price development are the supply-demand balance, fuel and CO_2 emissions allowance prices as well as the hydrological situation - Business model based on integrated and freely-competed Nordic market: Changes in power market design as well as in national political/regulatory interventions, subsidy schemes, taxes or other levies are risks - Delays in capacity upgrade and new build projects may cause production losses - Fuel prices and power plant availability impact profitability - Changes in operation terms and licences may impact production and lifetime of assets	- Wholesale price of electricity a key factor influencing business performance: drivers behind price development are the supply-demand balance, fuel and CO_2 emissions allowance prices well as the hydrological situation - Power sold primarily on liberalised markets to which changes in market design could have a negative impact - Political/regulatory interventions, subsidy schemes, taxes or other levies are risks to both the power and heat business - Development of heat demand and price on national markets - District heating market design and price competitiveness - Energy efficiency in buildings and alternative heating solutions - Fuel prices and power plant availability impact profitability - Changes in operation terms and licences may impact production and lifetime of assets	- Delays in completion of ongoing investment programme - Wholesale price of electricity, influenced by supply-demand balance and fuel prices - Business model based on liberalised power and capacity market. Changes in market design and/or market rules could have a negative impact - Political/regulatory interventions, taxes or other levies are risks to both the power and heat business - District heating price regulation, heat demand and tariffs affect the heat business, which carries a smaller financial impact than the power business - Changes in operation terms and licences may impact production and lifetime of assets	- Business model regulated: Changes in regulation of reasonable return, investment obligations and other operating terms are key factors influencing business performance - Weather and especially storms may damage assets and cause liabilities to customers	- Business characterised by economies of scale and small margins: Successful hedging of margin between Nord Pool wholesale purchase and retail sales price a key factor influencing business performance - Business model based on freely-competed retail market: Changes in market design as well as national political/ regulatory interventions could impact profitability - Customer churn impacted by customer satisfaction and service as well as perceived price-quality ratio and company image

1) Not a comprehensive list, not in order of importance

Power Division

Fortum's Power Division is responsible for power generation and trading in the Nordic wholesale electricity markets and for providing expert services to electricity and heat producers globally.

Hydropower and nuclear power account for the majority of Fortum's production. In 2012, about 97% of the division's power generation was carbon dioxide-free and 50% was based on renewable energy sources. Its power plants in Finland and Sweden produced 49.2 terawatt-hours (TWh) of electricity in 2012 (2011: 48.1).

Fortum's hydropower capacity in Finland is about 1,500 megawatts (MW) and in Sweden about 3,100 MW. At the end of 2012, Fortum owned or co-owned 191 hydropower plants.

Focus on large-scale hydropower

Fortum is currently implementing a hydropower plant refurbishment programme that will increase the production and improve the efficiency and safety of the hydropower plants. The investment programme will increase Fortum's hydropower capacity by about 100 MW by 2020.

In 2012, Fortum started the multi-year refurbishment of the Pyhäkoski power plant in Finland. In Sweden, the Gammalängen and Långån power plants, among others, were refurbished. Fortum also launched a sizable refurbishment project of the Höljes power plant dam in Sweden; the refurbishment will bring the dam up to the latest dam safety requirements.

Fortum divested 100 small hydropower plants in Finland and Sweden in 2012 and early 2013. The total capacity of the divested small hydropower plants was about 102 MW, i.e. about 2% of Fortum's total hydropower capacity.

In 2012, Fortum continued preparations for the tender process for hydropower concessions in France.

Nuclear power safety assessments and improvements continued

In Finland, Fortum fully owns the Loviisa power plant and has a 26.6% shareholding in two Olkiluoto reactors. In Sweden, Fortum has a 22% shareholding in the production of the Forsmark power plant and a 43% shareholding in the production of the Oskarshamn power plant. Fortum's nuclear power capacity was 3,247 MW at the end of 2012. Projects related to modernisations and capacity upgrades continued at the Forsmark and Oskarshamn nuclear power plants in 2012.

Fortum is implementing a refurbishment programme that will increase the production and improve the efficiency and safety of the hydropower plants.

The nuclear accident at Fukushima raised a lot of concern about nuclear safety – and especially about preparedness for extreme external events. The national safety assessments launched for nuclear power and the European Union's nuclear power stress tests continued in 2012.

Fortum supplied thousands of kilos of granulated ion exchange materials, NURES®, for decontamination of the radioactive waters at the damaged Daiichi power plant in Fukushima, Japan.

At the end of the year, Posiva Oy, which is co-owned by Fortum and Teollisuuden Voima Oy, submitted a construction licence application for a final repository for spent nuclear fuel to the Ministry of Employment and the Economy in Finland.

Key figures, Power Division >

Heat Division

Fortum's Heat Division concentrates on combined heat and power (CHP) production and the distribution of district heating. During the year, Fortum continued its investments into new CHP production and developed new products for district heating and cooling.

Fortum owns 18 CHP plants in the Nordic countries, the Baltic countries and Poland. The company has extensive experience in CHP production, waste-to-energy, and district heating and cooling. Fortum's customers are businesses and private consumers. In terms of volume (including heat production reported in the Heat and Russia Divisions), Fortum is one of the largest heat producers in the world.

The Heat Division's heat sales volumes in 2012 amounted to 19.7 TWh (2011: 22.6) and power sales volumes totalled 4.2 TWh (2011: 6.2). Heat was produced mainly in the Nordic countries.

During 2012, Fortum divested heat operations in Finland and Estonia. Additionally, the restructuring of the Turku region energy production in Finland decreased the volumes. The power production in Finland was lower also due to the low power market price. Higher sales of CO_2 emission allowances contributed positively to the result and offset some of the lost volume.

New CHP production under construction

Construction of the four CHP plants in Järvenpää (Finland), Brista (Sweden), Jelgava (Latvia), and Klaipeda (Lithuania) advanced according to plan in 2012. Additionally, Fortum made an investment decision to construct a new, biofuel-fired CHP plant at the Värtan CHP plant in Stockholm, Sweden. The annual output of the new plant is estimated to be about 1,700 GWh (gigawatt-hours) heat and 750 GWh electricity. The share of bioenergy at the Värtan plant will grow from its 45% today to 70% when the new plant is completed, which is estimated to be in 2016.

In Stockholm, the construction of a new silo for biofuel and a new transporting system in connection with the Värtan plant has been started. The project is scheduled for completion at the end of 2013 and operational testing will start at the beginning of 2014. The investment will increase the use of biofuel at the plant and consequently will reduce the area's CO_2 emissions by 50,000 tonnes on a yearly basis.

New heat products and advantages for customers

In 2012, Fortum opened up the possibility for customers in Stockholm, Sweden, to sell the surplus heat they produce to Fortum's grid at market price. The aim is for all customers to be able to sell their surplus heat to the grid starting in 2014.

Combined heat and power production is an effective means to reduce the environmental impacts of energy production and to reduce CO_2 emissions.

Fortum also introduced new products for district heating customers in Sweden and Finland. Customers and tenant-owner associations can now choose between different types of products depending on their consumption profile and preference, rather than having only one option as earlier. Fortum is actively developing its district heating offering; in October 2012 it started a development project with three pilot customers in Finland.

Research and development brings new CHP solutions

Energy- and resource-efficient CHP is an effective means to reduce the environmental impacts of energy production and to reduce CO_2 emissions. CHP production can utilise a flexible mix of fuels, including local fuels, so that also the environmental impact associated with fuel transports is reduced.

In March, Fortum made a decision to invest about EUR 20 million in the commercialisation of new technology by building a bio-oil plant connected to the Joensuu power plant in Finland. Upon completion of the investment, in addition to electricity and heat, the plant will also produce bio-oil, which can be used to replace fossil fuels used in energy production. In the future, bio-oil has the potential to be used as a raw material for different biochemicals or traffic fuels. Energy produced with bio-oil reduces greenhouse gas emissions by more than 70% compared to fossil fuels.

Fortum is actively researching and developing other new CHP solutions that are even more sustainable, such as new biofuels. The Heat Division has tested the use of, e.g., olive pits and straw as fuel. At the Czestochowa CHP plant in Poland, new biomasses have been tested in collaboration with the local University of Technology. The project aims to increase the use of biomass at the plant and to replace coal with biomass.

Key figures, Heat Division >

Russia Division

Fortum's Russia Division produces and sells electricity and heat in Russia's biggest industrial regions. Electricity is sold on the wholesale market and heat on the local markets.

In 2012, the electricity sales in the Russia Division were 23.3 TWh and heat sales 26.4 TWh. At year end, the total capacity of the power plants was 3,404 MW electricity and 13,396 MW heat.

The Russia Division includes the subsidiary OAO Fortum, which operations are based in the metals producing area of Urals and the oil and gas rich Western Siberia. OAO Fortum has eight power plants with mainly gas-fired CHP capacity. The Division also includes Fortum's over 25% holding in the territorial generating company TGC-1 that operates in north-west Russia.

In August 2012, OAO Fortum's operations in Russia received ISO 14001 environmental certification. Consequently, the ISO 14001 certification rate of all Fortum operations is 95%.

In December 2012, Fortum's subsidiary in Russia, OAO Fortum, delisted its shares on the Moscow Stock Exchange. Stocks of OAO Fortum were excluded from the Moscow Stock Exchange List B already in October 2008 and had since been included in the unlisted securities section. More than 90% of OAO Fortum has been owned by Fortum Corporation since 2008.

Investment programme progressed

The key driver for Fortum's growth in Russia is the extensive investment programme under the Russian government's Capacity Supply Agreement (CSA), originally agreed upon in 2008. The plan is to conclude the investement programme by the end of 2014. OAO Fortum's total electricity production capacity will almost double upon completion of the investment programme, rising to over 5,100 MW due to power plant units using modern combined-cycle gas turbine technology.

The investment programme's biggest units are being constructed in Nyagan, in Western Siberia. Construction of the three 418-MW power plant units utilising energy-efficient gas turbine technology continued in 2012, but the commissioning of the two first units was slightly postponed. It is estimated that the Nyagan units will be commissioned during 2013.

During the second quarter of 2012, Fortum announced that it will build the last two units of its Russian CSA-backed investment programme in Chelyabinsk, where the energy needs of the metal industry are growing. Initially, the units were planned to be constructed in the Tyumen region. The new units will be constructed at the Chelyabinsk GRES plant and are estimated to be commissioned by the end of 2014. Additionally, the power plant's existing equipment will be modernised and the capacity increased. Upon completion of the projects, the total capacity of Chelyabinsk GRES will increase to 750 MW.

The last two units of Fortum's Russian investment programme will be built in Chelyabinsk, where the energy needs of the metal industry are growing.

Modernisation projects continued

In addition to the investment programme, Fortum continuously upgrades and modernises its power plants and heat distribution networks in Russia. The goal is to improve resource efficiency, reduce heat loss, ensure access to energy in cities and better serve customers.

Projects aiming to improve the energy efficiency of OAO Fortum's power plants continued in 2012. Installation of new gas turbine equipment was started at Chelyabinsk CHP-1; the equipment will increase the plant's total electricity production capacity by 88 MW. Modernisation of the plants will help to meet the electricity needs of industries in the region and improve the security of supply and energy efficiency.

Making heat networks energy efficient

Fortum is building modern and energy-efficient heat distribution systems for the cities in its operating areas in Russia. The modernisation of the Chelyabinsk district heating networks continued in 2012. In the project, the city's heat distribution network is being changed from a radial design to an encircling design to allow the load to be distributed more evenly.

Development of a modern heat distribution system will continue also in Tyumen. The infrastructure development programme being implemented in collaboration with the regional government will improve the reliability of heat delivery and decrease the amount of heat energy lost by one third in certain sections of the main distribution network.

Key figures, Russia Division >

ESD Division: Distribution

Fortum's Distribution business area owns, operates and develops regional and local electricity networks and supplies electricity to a total of 1.6 million customers in Finland, Sweden and Norway.

Fortum's electricity distribution network has a total length of approximately 156,000 km, which is the equivalent of nearly four times around the globe. Fortum aims to ensure a reliable and consistent supply of electricity to customers. The reliability of the electricity networks in Finland, Sweden and Norway was improved through more than 4,000 network projects in 2012.

At the end of January 2013, Fortum decided that the company will assess future alternatives of the electricity distribution business. Fortum expects to conclude the assessment during 2013.

Network reliability increasingly important

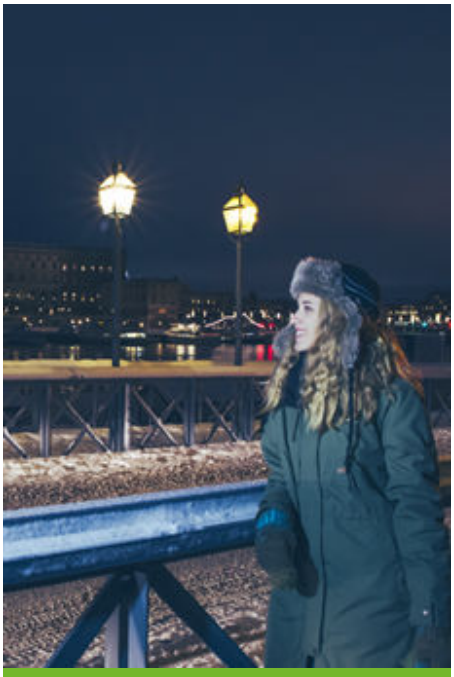
Fortum is continuously investing to renew, maintain and further improve reliability in the networks. In the Nordic countries, the reliability of electricity supply is at a very high level. The reliability of Fortum's electricity distribution is over 99.98%.

In Finland, the winter storms at the end of 2011 put an increased focus on the reliability of electricity distribution. In February 2012, Fortum established a new programme to accelerate the building of a weather-proof network in Finland. Investments in the Distribution business area in Finland, Sweden and Norway totalled EUR 324 million in 2012. The majority of these investments targeted new lines, replacing and isolating overhead lines, underground cables, automation of the critical parts of the grid and the rollout of smart metering.

Customer needs steer development of the electricity grids

An increased share of renewable energy, distributed energy systems and higher energy efficiency exert new demands on the grid. To meet future needs, Fortum continued to research smarter and more flexible grids in 2012.

In 2012, Fortum moved to the implementation phase of the research project Royal Seaport, in Stockholm, Sweden. In this sustainable urban area under construction, more flexible grids, energy storage and smart-home solutions can be tested. Fortum also finished a joint project with Skanska, ABB and KONE to develop an eco-conscious urban living concept in Espoo, Finland.



Investments in the Distribution business area in Finland, Sweden and Norway totalled EUR 324 million in 2012.

Network regulation should support society development

Electricity distribution is regulated by national authorities in order to support the development of society. While consumers and society demand higher reliability and more flexibility from electricity distribution, regulatory models should provide incentives for the investments.

A new network income regulatory period came into effect both in Finland and Sweden on 1 January 2012. In Finland, the Energy Market Authority (EMV) introduced some changes to the regulation model going in to the third regulatory period, 2012-2015. The industry found some of the changes unreasonable and appealed the new model to the Market Court. The Market Court ruling came in December 2012 and requires that sanctions, due to outages caused by big storms, have to have an annual maximum limit in the regulation model.

In Sweden, the Energy Market Inspectorate (EI) introduced a new network income regulation model with a first regulatory period of 2012-2015. With the new model, Sweden moved to a pre-regulation model where the allowed income for a four-year period is decided by EI in advance. Among other things, the new model introduced a transition rule that Fortum and approximately half of the Swedish network companies believe lacks legal ground. The network companies therefore appealed the new network regulation. During the fall, EI agreed to some adjustments to the model, but the court appeal continues.

Rollout of smart metering continues

The implementation of smart metering in Finland continues. By the end of 2012, 434,000 customers had received a new smart meter; and by the end of 2013, a total of 620,000 customers will have received new meters. Services and invoicing based on real consumption are the most noteworthy changes to the customers. The regulation on hourly meter reading will come into effect on 1 January 2014.

In Sweden, smart metering with monthly measurement was completed in 2009. During 2012, the Swedish Parliament passed a new bill on hourly measurement and, from 1 October 2012, customers with an electricity sales agreement requiring hourly resolution have been provided with hourly measurement.

The installation of new smart meters in Norway is planned to begin in 2014. The goal is for all 100,000 customers in Fortum's network area in Norway to be connected to the system by 2016. The regulation on hourly meter reading in Norway will come into effect on 1 January 2019.

Key figures, Electricity Solutions and Distribution >

ESD Division: Electricity Sales

Fortum is one of the leading electricity sales companies in the Nordic region. The company markets and sells electricity to 1.2 million customers in Sweden, Finland and Norway.

Fortum is one of the leading sellers of CO_2-free and eco-labelled electricity in the Nordic countries. In 2012, the company sold a total of 13.0 terawatt-hours (TWh) of electricity (2011: 14.4). The decrease in the electricity sales volume was due to the restructuring of the business customer segment; the restructuring was completed in 2011.

In 2012, Fortum continued to concentrate its electricity sales under its own brand. In September, Fortum sold its 18.7% ownership in the Swedish electricity retail sales company Dala Kraft AB to Swedish energy company Jämtkraft AB.

The changing retail markets

Fortum buys the electricity that it sells on the retail markets through the Nordic power exchange Nord Pool Spot. The wholesale market price is formed on the basis of the balance between electricity supply and demand.

About 350 electricity producers sell electricity in the Nordic wholesale market, where approximately the same number of retailers buy electricity and then re-sell it to customers on national retail markets. Consumers can choose their electricity supplier and companies compete for customers. Business is characterised by economies of scale and small margins.

The goal in upcoming years is to transition from national retail markets to a pan-Nordic electricity retail market. The development work aims for a model where the electricity supplier is the main contact for the customer also in electricity distribution-related issues, i.e. in issues related to the electricity possibly delivered by another company. The new operating model would improve customer friendliness and efficiency, but would require significant process and system development work.

In 2012, Nordic energy ministers supported the further development of the formation of a common Nordic consumer market. Also Fortum supports the creation of a pan-Nordic retail market.

Smart services save energy

The EU's Energy Efficiency Directive approved in 2012 requires energy companies to help their customers reduce energy consumption. At the same time, the customers' changing needs require electricity companies to offer smarter solutions for electricity consumption. Advancements in technology have enabled the hourly measurement of electricity consumption, the use of solar panels as part of own electricity usage, and easy-to-use customer service mobile

Interest and demand for electricity produced from renewable energy sources has steadily increased.

applications. These starting points enable the development of new products and services that complement the traditional product and service offering.

In 2012, Fortum commercially launched new smart solutions that give customers better opportunities to control their electricity consumption and reduce their costs. As a small-scale producer, a user of Fortum's solar panel kit can sell the surplus electricity they have produced to Fortum. The Fortum Fiksu product sold in Finland decreases customers' costs by utilising the cheapest hourly spot prices to heat the water boiler.

Origin of electricity matters

In recent years, the interest in and demand for eco-labelled electricity that is produced from renewable energy sources with a guarantee of origin has steadily increased.

Fortum has turned this into a competitive advantage, and the company is one of the leading sellers of CO_2-free electricity with a guarantee of origin in the Nordic countries. Fortum also offers electricity with the Finnish Association for Nature Conservation's EKOenergy label in Finland and with the Swedish Society for Nature Conservation's Good Environmental Choice label in Sweden. Since 2009, Fortum has offered all its household customers in Finland and Sweden only electricity agreements that are based on electricity produced without CO_2-emissions.

Key figures, Electricity Solutions and Distribution >

CEO's review

The unstable economic situation in Europe and globally – and the uncertainty regarding its duration – affected Fortum's business operations in 2012. We aim to ensure the prerequisites for our growth also in a continuing challenging market situation. That is why we continued investments to support long-term targets while also improving the efficiency of our current operations.

President and CEO
Tapio Kuula

Europe needs an internal energy market and effective emissions trading

Europe is facing sizable energy sector investments. Production plants must be refurbished, new plants must be built, and electricity transmission connections between countries must be added. We also need smart grids to meet the growing needs of society and the changing markets.

Energy sector investments are made for decades down the road, and that requires a stable energy policy. An ambitious emissions reduction target would send a very positive signal to the CO_2 markets and thus strengthen the long-term operating environment and increase predictability; it also would be an incentive for investments in low-carbon energy production. An alternative to emissions trading would mainly be national carbon taxes, which would further undermine the effectiveness of the internal market and would lead to tax competition between member states.

Strongly fluctuating renewable energy production and its privileged access to the grid has caused even negative market prices for electricity. This undermines the competitiveness of conventional electricity production. In the worst-case scenario, it leads to a situation in which both renewable energy production and the existing, fossil fuel-based capacity are subsidised. For this reason, many countries have adopted or are planning to adopt the so-called capacity payment mechanism to offset the impacts of national renewable energy subsidies. Capacity payments aim to ensure that a supply of electricity would be available also when solar and wind power cannot be produced.

The energy sector's future cannot be built on national solutions nor on public funding and subsidies. Market-driven solutions must be sought out from the EU's internal energy market, and we must advance resolutely towards Europe's energy and climate policy targets. The internal energy market and harmonised renewable energy steering mechanisms would bring significant savings in the EU compared to national measures.

A reasonably good year in a challenging environment

Fortum performed reasonably well in 2012, even though the operating environment was challenging and the demand for electricity didn't pick up. Electricity prices in the Nordic countries were one third lower than in the previous year, partially as a result of the exceptionally high precipitation levels. However,

through successful hedging, Fortum was able to achieve a satisfactory price level for electricity.

Earnings in 2012 were satisfactory at 1.59 euros per share. The per-share impact of Sweden's corporate tax rate reduction was 0.22 euros. Our goal is to maintain stability in the comparable net debt/EBITDA ratio also in the current operating environment. Last year, the amount of debt grew slightly higher than the target level, mainly due to our ongoing investment projects.

Because of these financial challenges and uncertainties related to the operating environment, in autumn we launched a two-year efficiency programme. Its goal is to lighten the cost structure, improve competitiveness, and strengthen the operating prerequisites based on our strategy. The programme has been integrated into the business planning and is progressing as expected. We saw the first impacts of the efficiency programme already in the fourth-quarter financial performance.

CO_2-free electricity for Nordic markets

The significantly lower electricity price level in the Nordic countries was offset by our record-high hydropower production, over 25 terawatt-hours (TWh). CO_2-free hydropower is Fortum's strength, and it accounted for about one third of our production. As the share of renewable energy in the markets grows, there is greater fluctuation in the electricity supply, and thus the importance of flexible, balancing hydropower production grows.

The availability of our nuclear power, meanwhile, was clearly short of expectations in 2012. Nuclear power accounted for nearly one third of our production. In particular, the long maintenance outage of the number one unit of the co-owned Oskarshamn nuclear plant in Sweden was disappointing. The outage caused Fortum an extra burden of about 50 million euros in the form of lost production. In 2013, we will transfer more of Fortum's nuclear power technology know-how for use also at our co-owned power plants.

In terms of availability and safety, Fortum's Loviisa nuclear power plant has traditionally ranked among the world's best. However, availability fell short of the previous year's level, due to the number one unit's extended maintenance outage (performed every eight years) and to three production outages. Continuous improvement of availability and safety are among our goals also this year, and we are investing in the construction of multiple back-up systems for cooling. The continuous improvement of safety is a prerequisite for nuclear power availability.

Fortum also has a 25-per cent stake in Teollisuuden Voima Oyj's (TVO) third nuclear power unit under construction. The Olkiluoto 3 project has proven to be challenging and has been pushed even further from its original timetable.

Demand for our special expertise in nuclear power

In 2012, Fortum made a significant sales agreement on the delivery of the Fortum-developed Nures ion exchange material to Fukushima, Japan. Using the material makes it possible to decrease the amount of radioactive liquids to a fraction of its former volume. Fortum's 2012 Innovation Award was given for the

development of the Nures material. The innovation is a good demonstration of our special expertise, which creates value for the surrounding community and drives energy-sector development forward.

Combined heat and power (CHP) production brings resource efficiency

In addition to hydro and nuclear power, Fortum is one of the world's biggest heat producers. In combined heat and power production, close to 90 per cent of the fuel's energy is utilised. We use a diverse range of energy sources flexibly in our CHP production, and we aim to increase the use of renewable fuels. The use of biomass and municipal and industrial waste at our European plants replaces other fuels and reduces greenhouse gas emissions.

The cornerstone of the world's first industrial scale bio-oil plant was laid in early November at the Fortum plant being built in Joensuu, Finland. The plant to be integrated with the Joensuu CHP plant will be comissioned in autumn this year. The integrated CHP/bio-oil plant will use biomass to produce electricity and district heat as well as 50,000 tonnes of bio-oil annually that is suitable for heat production.

We produce energy at CHP plants and heating plants in seven countries. In Stockholm, Fortum also has close to 20 years of experience in district cooling solutions for modern urban living. In Russia, Fortum operates in the developed industrial areas in the Urals and western Siberia where we are the leading supplier of district heat in the region.

After the reform of the electricity wholesale market, the modernisation of the heat sector has also become a focus in Russia. The aim is to increase the investment interest in that country's heat sector.

Weather-proof electricity distribution to customers

We continued improving the weather-proofing of our electricity distribution network in 2012, after the 2011 year-end storms that demonstrated the vulnerability of electricity distribution in Finland.

We have improved our preparedness for power outage situations in electricity and heat distribution by deploying text message-based outage notifications for customers, by improving procedures in exceptional situations, and by training personnel. The enhanced preparedness was put to the test during a storm last autumn; our customers experienced minimal disruptions as a result of the storm. In 2012, the reliability of Fortum's electricity distribution increased to 99.98 per cent from the previous year's 99.90 per cent.

More customers and higher satisfaction

Last year, our customers gave Fortum a more favourable rating in the survey measuring the satisfaction of electricity sales and distribution customers in Finland, Sweden and Norway. In Sweden and Norway, we achieved our all-time best result. In Finland, customer satisfaction decreased slightly as a result of the

storms in late 2011. The long-term customer satisfaction trend has developed favourably in all three of these countries of operation.

The number of Fortum electricity customers increased in 2012. We now have more customers in Finland than ever before. I believe that new products, like solar panels and energy efficiency services, contributed significantly to our success. We will continue developing solutions that enable our customers to also sell electricity and heat back to Fortum as well as other new products that enable our customers to actively influence their energy consumption if so desired.

Sustainability targets renewed

Sustainability is an integral part of Fortum's strategy. Our goal is to advance in all sub-areas of sustainability. We are also committed to compliance with the principles of UN Global Compact initiative.

The good hydrological year enabled us to achieve our climate targets in 2012, and the share of CO_2-free electricity production grew from the previous year. In terms of energy efficiency, we fell slightly short of our target. We will continue our efforts to improve plant availability, energy efficiency and fuel quality, among other things. In Russia, where we have focused our operations in oil and natural gas production areas, our emissions have increased with the growth in the volume of operations.

The renewed sustainability targets came into force at the beginning of 2013. We emphasise Fortum's role in society and measure not only environmental targets, but also the company's reputation, customer satisfaction, and the security of power and heat supply.

Occupational safety must be improved every day

In terms of occupational safety development, I am both pleased and disappointed. The safety of our own personnel improved further, and the accident frequency decreased to an all-time low. Contractor safety development, meanwhile, didn't progress in the right direction: a fatal accident occurred in Russia and several serious accidents also happened during the year. I extend my sincere condolences to the family and co-workers of the victim.

To prevent serious accidents and also to reduce the number of less serious accidents, we will continue our determined efforts to improve occupational safety. The attitude of continuous improvement must be part of the daily routines of every Fortum employee and contractor.

The ISO 14001 environmental certification and OHSAS 18001 certification for occupational health and safety received by our subsidiary OAO Fortum's operations reflect a favourable trend.

Employee engagement is an integral part of strategy implementation

In 2012, we measured employee satisfaction by conducting the Fortum Sound survey. The results indicate a clearly stronger level of employee engagement compared to the previous survey three years ago. According to the survey, our strengths include teamwork, the possibility to influence the content of one's own work, and fair treatment of personnel. The survey was conducted in all of our countries of operation.

The Code of Conduct guiding the ethical activities of all Fortum employees was updated last year. By the end of February 2013, 99 per cent of the personnel had completed training related to the Code of Conduct.

A strong commitment to growth

Fortum's purpose is to create energy that improves life for present and future generations. Alongside emissions-free hydro and nuclear power and combined heat and power production, we are developing the use of biofuels and exploring solar, wind and wave energy opportunities. These are all part of the future energy system, which in the long-term will transition to solutions that are based on solar energy.

In 2013, we will commission the Järvenpää biopower plant in Finland, the Jelgava biopower plant in Latvia, and new, waste-fired power plants in Brista, Sweden, and Klaipeda, Lithuania. All four plants are energy-efficient, combined heat and power plants that reduce CO_2 emissions and increase the use of local fuels. In the latter part of 2012, we made an investment decision to build a biofuelled CHP plant in Stockholm. The plant will be commissioned in 2016.

Our goal is to complete the extensive Russian investment programme by the end of 2014. In addition to the three plants already completed, next we will commission three 400+ megawatt (MW) power plants in Nyagan within the original overall timetable; that will be followed by two almost 250-MW power plants in Chelyabinsk.

The Russian electricity market reform has been realised as promised by the country's government, and the overall market outlook there is more positive than in Europe.

We are pursuing growth in our current markets as well as in the integrating European and rapidly growing Asian markets. In France, we are continuing preparations for the upcoming hydropower concessions tender process. Succeeding in the tender process would give us an opportunity to grow the CO_2-free hydropower capacity. In India, we are exploring opportunities for CHP production for industry as well as solar power production.

We are assessing the future alternatives of the electricity distribution business

We initiated a project in the beginning of this year to assess the future alternatives of the electricity distribution business. Divestment is also among the alternatives being assessed.

Electricity distribution is a regulated business that yields a stable return. However, the distribution business would hold better value potential in a different kind of business structure, which would enable a bigger share of liabilities. The assessment is also impacted by the legislature's long-term goal to separate electricity distribution from electricity production and sales into a clearly detached, independent infrastructure business.

The results of the assessment will be available by the end of this year. We decided to communicate the issue already in the early phase of the assessment so that we can openly assess all alternatives and discuss them both internally and externally and to have a dialogue about the needs and views of the surrounding society.

Assessing the electricity distribution business alternatives does not affect our customers. We will also continue building a weather-proof grid, as planned. We are developing new products for electricity sales customers, and we intend to take the development of electricity market products forward as an industry frontrunner.

A strong platform for advancement

We will continue implementing our strategy in 2013. As a result of investment decisions made in recent years, we will commission a significant amount of new capacity this year. We are developing future energy production forms, like solar and wave energy, in addition to emissions-free hydropower and nuclear power, and CHP production. Also our efficiency programme is advancing and improves Fortum's preparedness to respond to opportunities afforded by the changing energy markets.

I want to thank Fortum employees in all of our countries of operation for the past year and for the effort put forth to achieve common goals. A thank you also goes to our shareholders for their investments – we will continue the work to grow shareholder value also this year.

Fortum's actions in 2012

Fortum's actions

13th Fortum Corporation's Chief Technology Officer Petra Lundström was chosen 2012 CTO of the Year in Finland

27th Cornerstone was laid at Fortum's new bio-CHP plant in Järvenpää, Finland

27th Russia's Market Council recognised Fortum as the leader in implementation of investment programmes

January

Events

1st EU presidency of Denmark began

17th European Nuclear Safety Regulators Group (ENSREG) stakeholder event on the so-called nuclear stress tests and peer reviews arranged in Brussels

Fortum's actions

1st Divestments of Fortum Energiaratkaisut Oy and Fortum Termest AS were completed

2nd Fortum and Nissan started collaboration in the development of a home charging unit for electric cars

16th Markus Rauramo was appointed as Fortum's new CFO and member of the Fortum Management Team

23rd Fortum started the VahvaVerkko project to strengthen the reliability of electricity distribution in all weather conditions

February

Events

24th Svenska Kraftnät announced plans to invest SEK 15.8 billion to the Swedish power grid during 2013-2015

Fortum's actions

1st Fortum introduced a text messaging service to inform customers about power outages

7th Fortum decided to build the world's first industrial-scale bio-oil plant in Joensuu, Finland

8th Fortum issued a SEK 2.75 billion bond

8th Fortum Foundation awarded scholarships totalling more than half a million euros

15th Fortum made a contract to supply decontamination material to purify radioactive liquids in Fukushima

30th Fortum completed divestments of small hydro power plants in Finland

March

Events

16th In Finland, the Ministry of Employment and the Economy published legislative proposals in response to the Christmas storms to improve the reliability of electricity distribution and to decrease the effects of outages

22nd Swedish government published conclusions on how to proceed regarding Third Party Access to district heating networks

Fortum's actions

10th Russia approved three Fortum power plant units as Joint Implementation projects

11th Fortum held its Annual General Meeting

23rd Fortum joined the Bettercoal initiative to promote sustainability in the supply chain of coal

27th Fortum and Finavia introduced 15 recharging stations for electronic devices at the Helsinki-Vantaa airport

April

Events

26th ENSREG presented its final report on the nuclear stress tests

Fortum's actions

11th Fortum decided to implement sizable refurbishments at the Imatra power plant, after which the plant will be Finland's biggest hydropower plant

16th Fortum Tutor programme received the UEFA Grassroots award

May

Events

8th EU Commission announced its Communication on State aid modernisation

Fortum's actions

4th Fortum started selling solar electricity from one of the biggest solar parks in the Nordic countries, the Glava Energy Centre in Värmland, Sweden

27th Fortum sold its heating network assets in Surgut, Russia

28th Fortum moved construction of the last two units of its Russian investment programme included in the Capacity Supply Agreement from Tyumen to Chelyabinsk

June

Events

6th EU Commission published a RES Communication, especially tackling the issue of integrating renewable energy into the internal energy market

13th Political agreement was reached on the content of the Energy Efficiency Directive (EED)

18th Council of European Union conclusions on the Energy 2050 Roadmap published

Fortum's actions

10th Fortum agreed to supply nitrogen oxides reduction technology to the Narva power plants in Estonia

July

Events

1st EU presidency of Cyprus began

25th EU Commission announced it wants to clarify the provisions of the EU ETS Directive on the timing of auctions of emission allowances

Fortum's actions

14th Fortum launched a solar panel package for consumers

29th Fortum's Annual Report was ranked number one in e.com's international evaluation

30th Fortum issued a one billion euro eurobond

August

Events

28th EU and Australia announced plans to link their emissions trading schemes by July 2018

Fortum's actions

3rd Fortum and Sitra decided on further funding for AWE Energy's wave energy project in Portugal

12th Fortum commercially launched Fortum Fiksu, a new electricity product

14th Fortum was listed again on Dow Jones Sustainability World Index (DJSI World) and on global Carbon Disclosure Leadership Index

21st Fortum sold its minority share in Swedish Dala Kraft

September

Events

20th Swedish Parliament passed legislation lowering the corporate income tax rate from 26.3% to 22%

Fortum's actions

16th Fortum was ranked in shared 1st place in Nordic Carbon Disclosure Leadership Index

19th Helena Aatinen was appointed Senior Vice President, Corporate Communications and member of the Fortum Management Team

19th Fortum launched an efficiency programme to maintain and strenghten the strategic flexibility and competitiveness as well as to improve the company's cash flow by more than EUR 1 billion

October

Events

4th EU Commission published its Communication on the nuclear stress tests

Fortum's actions

2nd The cornerstone was laid at Fortum's new bio-oil plant in Joensuu, Finland

2nd Fortum decided to modernise turbines at the Loviisa nuclear power plant – output to increase by 24 MW

6th Fortum received the first Kyoto Protocol's Joint Implementation emission reduction units (ERU) from Russia

8th Fortum's Sustainability Report 2011 was selected as the winner in the Corporate Responsibility Reporting competition in Finland

November

Events

14th EU Commission published a Blueprint to Safeguard Europe's Water Resources, giving guidance for the implementation of the Water Framework Directive (WFD) in the member countries

14th EU Commission published its proposal for a reform of the EU ETS, the proposal for back-loading of allowances, and a Carbon Market Report

15th EU Commission published its Communication on the development of the Internal Energy Market

Fortum's actions

20th Fortum decided to invest EUR 500 million in a new biofuelled CHP plant in Stockholm, Sweden

December

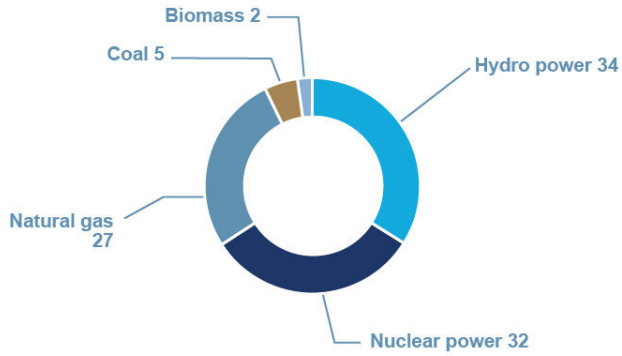
Events

3rd Council of European Union conclusions on the Commission RES Communication published

26th Nov - 8th Dec The international climate change conference organised in Doha ended with modest results. The Kyoto Protocol continues during 2013-2020 with an aim to finalise the global agreement by 2015

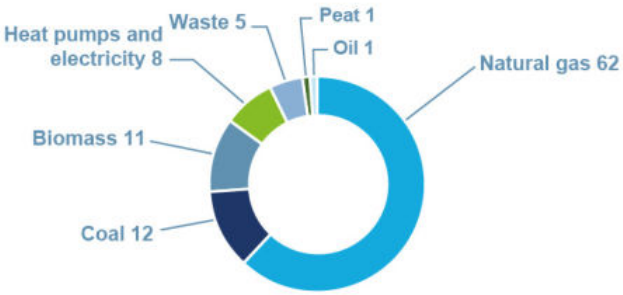
Sales and production

POWER GENERATION BY SOURCE [1], %



[1] Total power generation in 2012 was 73.1 TWh.

HEAT PRODUCTION BY SOURCE [1], %



[1] Total heat production in 2012 was 43.3 TWh.

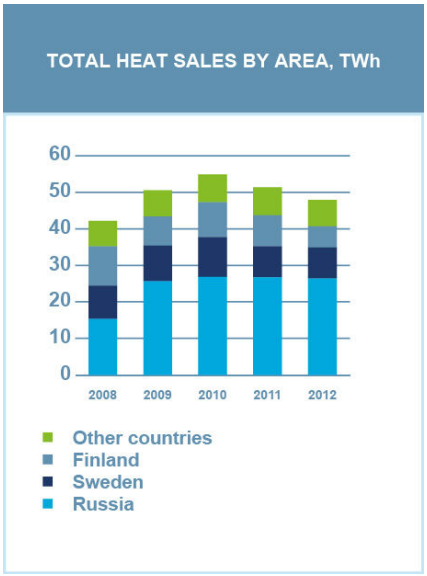
TOTAL ELECTRICITY PROCUREMENT BY TYPE, TWh

TOTAL ELECTRICITY SALES BY AREA, TWh [1]

[1] Power, Heat and Electricity Sales sell electricity to the Nordic power exchange or external customers and purchase electricity from the power exchange or other external sources. Fortum's power exchange transactions are calculated as a net amount of hourly sales at the Group-level. The Russia Division sells electricity to the Russian wholesale market.

Fortum's power generation by source

TWh	2012	2011	2010
Hydropower	25.2	21.0	22.0
Nuclear power	23.4	24.9	22.0
Thermal power	5.3	9.4	9.7
Total in EU and Norway	**53.9**	**55.3**	**53.7**
Thermal power in Russia	19.2	17.4	16.1
Total	**73.1**	**72.7**	**69.8**



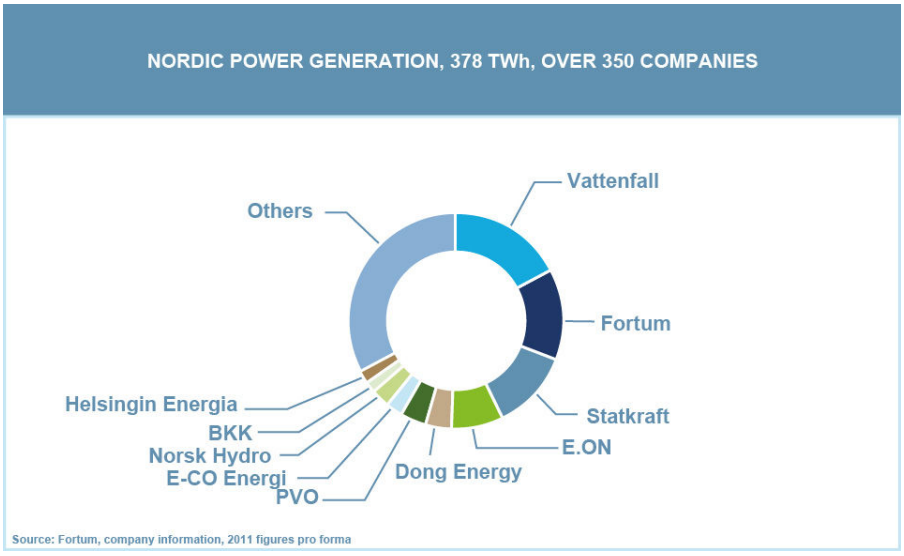
Fortum's power generation capacity, 31 Dec 2012

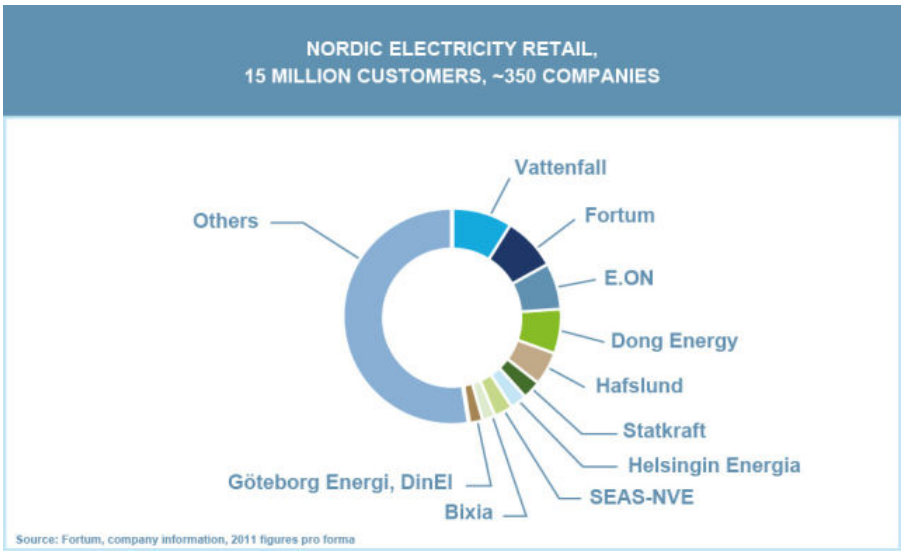
MW	Finland	Sweden	Russia	Other	Total
Hydropower	1,501	3,126			**4,627**
Nuclear power	1,460	1,787			**3,247**
Combined heat and power	598	518	3,404	407	**4,927**
Condensing power	1,481	297			**1,778**
Other	0	94		2	**96**
Total	**5,040**	**5,822**	**3,404**	**409**	**14,675**

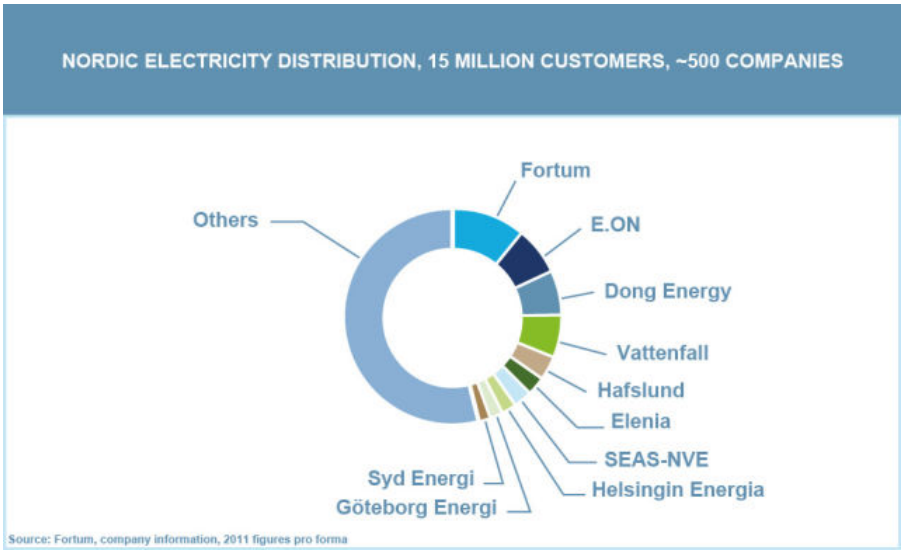
Fortum's heat production capacity, 31 Dec 2012

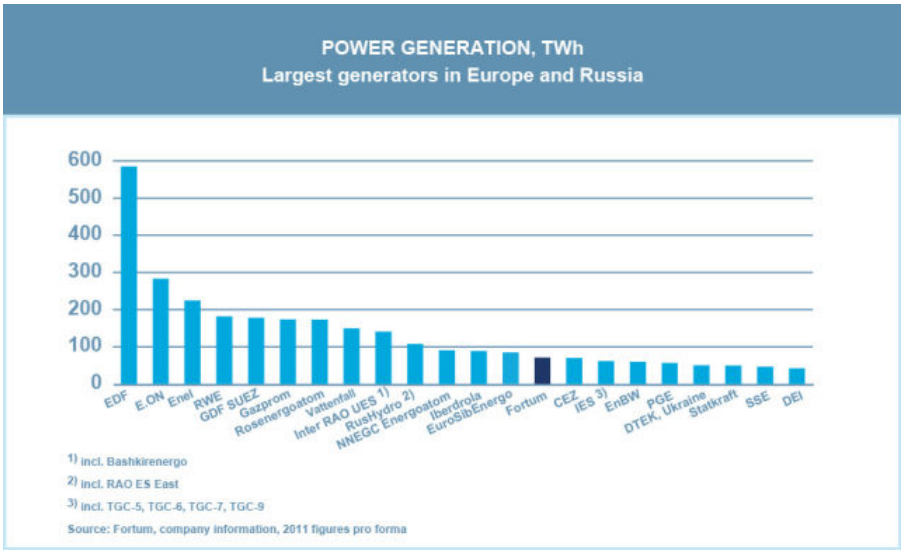
MW	Finland	Sweden	Russia	Other	Total
Heat	2,804	3,772	13,396	2,459	**22,431**

Market position

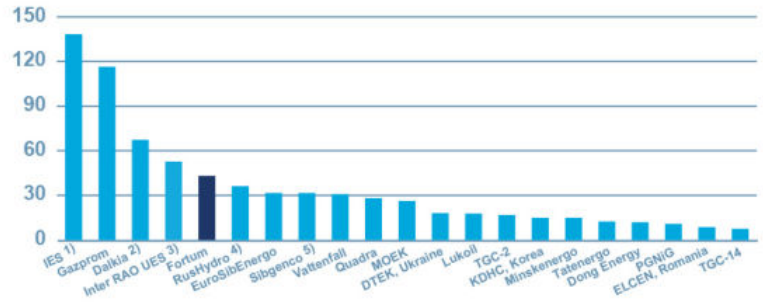





NORDIC ELECTRICITY DISTRIBUTION, 15 MILLION CUSTOMERS, ~500 COMPANIES
Fortum
E.ON
Dong Energy
Vattenfall
Hafslund
Elenia
SEAS-NVE
Helsingin Energia
Syd Energi
Göteborg Energi
Others
Source: Fortum, company information, 2011 figures pro forma

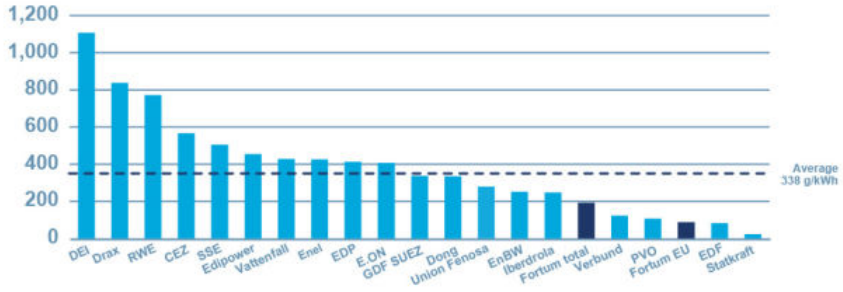

POWER GENERATION, TWh
Largest generators in Europe and Russia
600
500
400
300
200
100
0
EDF
E.ON
Enel
RWE
GDF SUEZ
Gazprom
Rosenergoatom
Vattenfall
Inter RAO UES 1)
RusHydro 2)
NNEGC Energoatom
Iberdrola
EuroSibEnergo
Fortum
CEZ
IES 3)
EnBW
PGE
DTEK, Ukraine
Statkraft
SSE
DEI
1) incl. Bashkirenergo
2) incl. RAO ES East
3) incl. TGC-5, TGC-6, TGC-7, TGC-9
Source: Fortum, company information, 2011 figures pro forma

HEAT PRODUCTION, TWh
Largest producers globally



1) incl. TGC-5, TGC-6, TGC-7, TGC-9
2) incl. energy services
3) incl. Bashkirenergo
4) incl. RAO ES East
5) incl. TGC-12, TGC-13
Heat production of Beijing DH not available.
Source: Fortum, company information, 2011 figures pro forma

SPECIFIC CO_2 EMISSIONS OF MAJOR UTILITIES IN EUROPE,
g CO_2/kWh electricity, 2011



Source: PWC & Enerpresse, Novembre 2012, Changement climatique et Électricité, Fortum
Note: All figures, except Fortum total, include only European generation.

Financial summary

Key financial figures

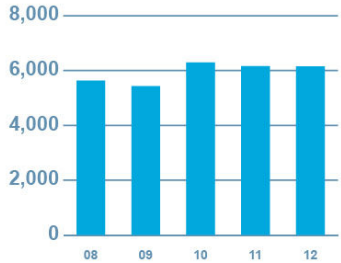
EUR million or as indicated	2012	2011	2010
Sales	6,159	6,161	6,296
EBITDA	2,525	3,008	2,271
Comparable EBITDA	2,403	2,374	2,396
Operating profit	1,861	2,402	1,708
Comparable operating profit	1,739	1,802	1,833
Profit for the period, owners of the parent	1,409	1,769	1,300
Capital employed	19,598	17,931	16,124
Interest-bearing net debt	7,814	7,023	6,826
Net debt / EBITDA	3.1	2.3	3.0
Comparable net debt / EBITDA	3.3	3.0	2.8
Return on capital employed, %	10.0	14.8	11.6
Return on shareholders' equity, %	14.3	19.7	15.7
Capital expenditure	1,558	1,408	1,222
Environmental and safety investments	63	82	91
Gross investments in shares	16	74	27
Net cash from operating activities	1,382	1,613	1,437
Emissions subject to EU's ETS, million tonnes CO_2	4.8	8.0	9.7
Free emission allocation, million tonnes CO_2	5.4	6.8	5.6
Support for society	5.8	4.6	5.2

Share key figures

EUR or as indicated	2012	2011	2010
Earnings per share	1.59	1.99	1.46
Cash flow per share	1.56	1.82	1.62
Equity per share	11.49	10.84	9.24
Dividend per share	1.00 (1	1.00	1.00
Payout ratio, %	62.9 (1	50.3	68.5
Dividend yield, %	7.1 (1	6.1	4.4

1) Board of Directors' proposal for the Annual General Meeting on 9 April 2013.

SALES, EUR million

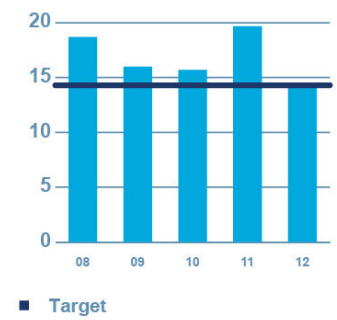


OPERATING PROFIT AND COMPARABLE OPERATING PROFIT, EUR million

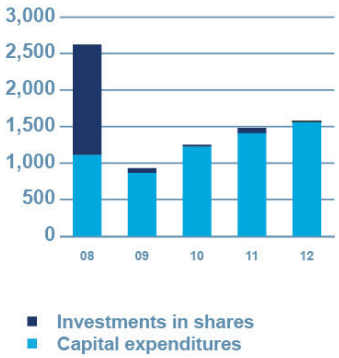
Monetary flows by stakeholder group

EUR million		2012	2011	2010
Generation of added value				
Customers	Income from customers on the basis of products and services sold, financial income and income from divestment of business activities or plants	6,398	7,129	6,432
Suppliers	Cash payments to suppliers of raw materials, goods and services	-2,989	-3,272	-2,923
Fortum produced added value		3,409	3,920	3,509
Distribution of added value				
Employees compensation	Wages, salaries, remunerations and other indirect employee costs	-556	-529	-507
Funders compensation	Dividends, interest and financial expenses paid to investors	-1,514	-1,431	-1,657
Public sector	Income and production taxes paid and support and donations	-593	-728	-642
Distributed to stakeholders		-2,663	-2,688	-2,806
Retained in business		**746**	**1,232**	**703**

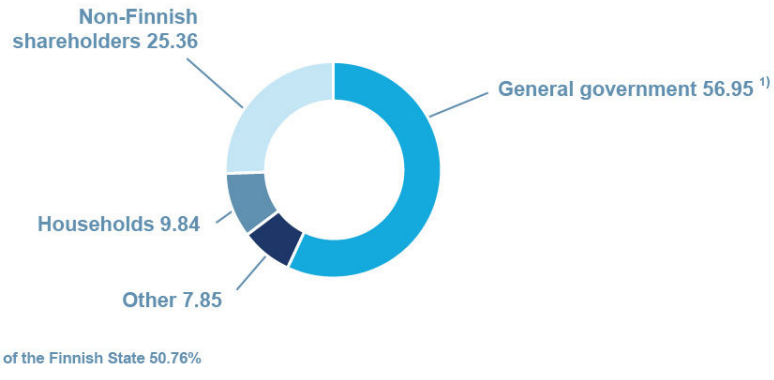
RETURN ON SHAREHOLDERS' EQUITY, %



CAPITAL EXPENDITURE AND GROSS INVESTMENTS IN SHARES, EUR million

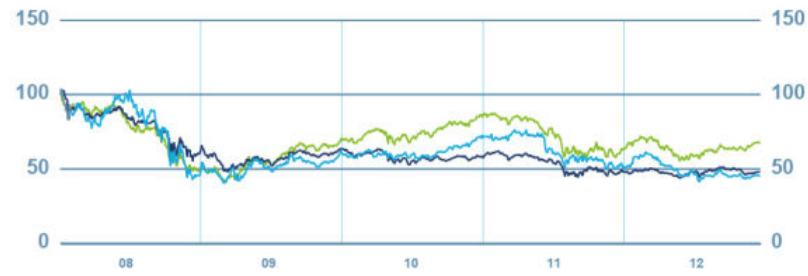


SHAREHOLDERS, BY SHAREHOLDER CATEGORY, %

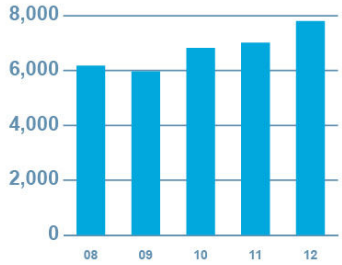


1) Holding of the Finnish State 50.76%

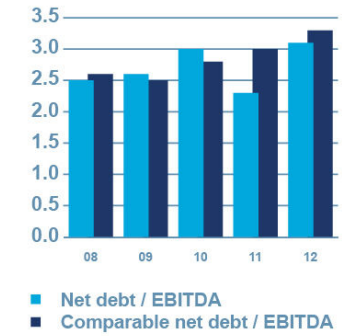
SHARE QUOTATIONS 2008–2012, INDEX 100 = QUOTE ON 2 JANUARY 2008



INTEREST-BEARING NET DEBT, EUR million



NET DEBT / EBITDA



Sustainability indexes

Expert assessments of sustainability and good rankings in significant sustainability indexes are important to Fortum because they support the development and continuous improvement of our operations.

In 2012, Fortum achieved its all-time highest scoring in the Carbon Disclosure Leadership Index (CDLI): 98 out of 100 points. Fortum shared first place in the Nordic CDLI. Additionally, Fortum was listed on the Dow Jones Sustainability World index for the tenth consecutive year.

Fortum was included in the Sustainability Yearbook 2012, published by the SAM Group, where Fortum's sustainability work was awarded the SAM Bronze Class. Additionally, Fortum was awarded a Prime Status (B-) rating by the German oekom research AG, and Fortum was ranked a Best in Class company fulfilling the Socially Responsible Investments (SRI) funds' criteria of the Norwegian banking group Storebrand.

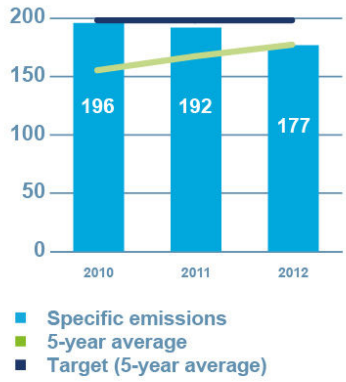
Fortum is listed in the STOXX Global ESG Leaders indexes, which list global leaders in terms of environmental, social and governance criteria, and in the NASDAQ OMX and GES Investment Service's OMX GES Sustainability Finland index, which compares the leading companies listed on the NASDAQ OMX Helsinki and their corporate responsibility.

Environmental summary

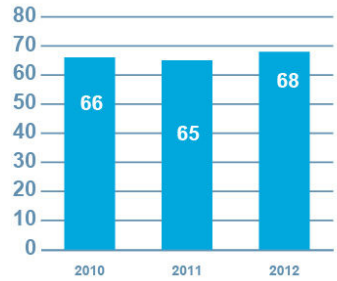
	2012	2011	2010
Carbon dioxide emissions, million tonnes	20.7	23.5	25.3
Sulphur dioxide emissions, tonnes	19,800	24,900	20,700
Nitrogen oxide emissions, tonnes	29,400	36,000	36,700
Particle emissions, tonnes	16,000	16,600	16,800
ISO 14001 certified operations (% of sales)	95	95	86
Specific CO_2 emissions of power generation, g/kWh	171	192	189
5-year average in the EU, g/kWh	60	67	69
Specific CO_2 emissions of total energy production, g/kWh	177	192	196
5-year average, g/kWh	179	169	157
Overall efficiency of fuel use, %	64	67	68
5-year average, %	67	68	69
Share of CO_2-free energy in power generation, %	68	65	66
Share of renewable energy in power generation, %	36	31	35
Share of renewable energy in heat production, %	20	16	18
Primary energy consumption, TWh	149	157	166
Utilisation rate of gypsum, %	42	89	92
Utilisation rate of ash, %	51	52	59
Environmental non-compliances	12	20	21
Water consumption, million m^3	3,679	3,853	3,860
of which cooling water, million m^3	3,582	3,746	3,550
Thermal load on waterways, TWh	17	21	23

SPECIFIC CO_2 EMISSIONS OF ELECTRICITY PRODUCTION IN 2010–2012, gCO_2/kWh

SPECIFIC CO_2 EMISSIONS OF TOTAL ENERGY PRODUCTION IN 2010–2012, gCO_2/kWh

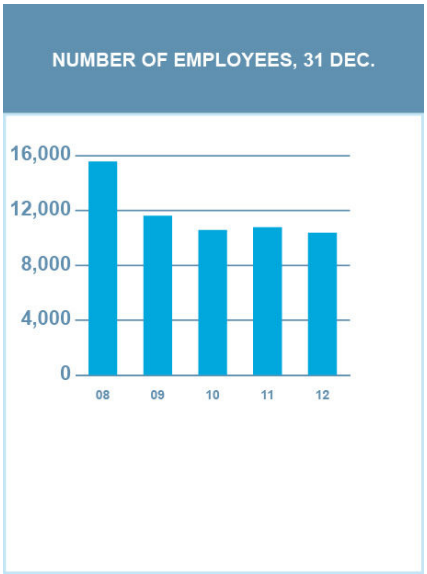


SHARE OF CO_2-FREE ELECTRICITY PRODUCTION, %



OVERALL EFFICIENCY OF FUEL USE IN 2010–2012, %

Social summary



	2012	2011	2010
Average number of employees	10,600	11,010	11,156
Number of employees, 31 December	10,371	10,780	10,585
of whom permanently employed	9,899	10,379	10,307
Departure turnover, %	12.0	13.7	-
Female employees, %	28	29	29
Females in management, %	35	34	27
Health care expenditure, EUR/person [1]	580	560	501
Number of sickdays	74,188	69,654 [2]	9,281 [3]
Sickness absence rate, %	3.1	-	-
Lost workday injury frequency (LWIF), Fortum personnel [4]	1.5	1.6	2.4
Lost workday injury frequency (LWIF), contractors [4]	3.8	3.2	5.0
Fatalities	1	1	1
OHSAS 18001 certified operations (% of sales)	70	60	27

1) In Finland

2) Includes Finland, Sweden, Poland and Russia

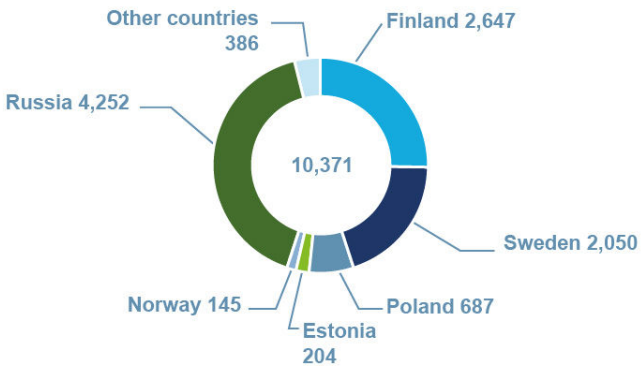
3) Includes Finland and Sweden

4) Injuries resulting in an absence of at least one day per million working hours.

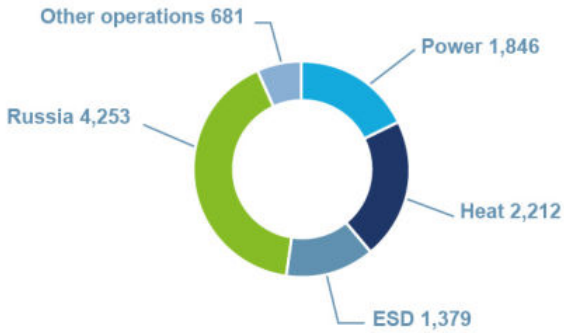
Fortum's personnel statistics from 2012, by country of operation

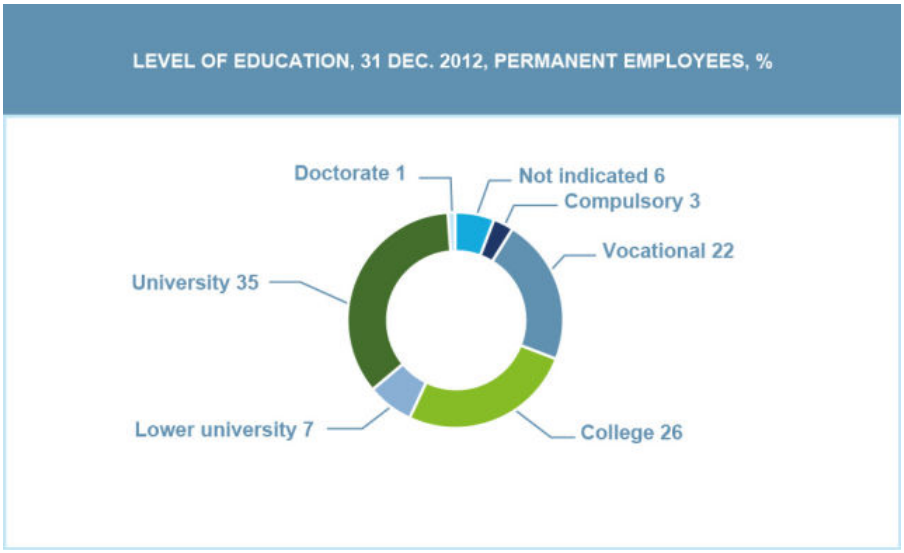
	Finland	Sweden	Russia	Poland	Other countries
Personnel at year-end	2,647	2,050	4,252	687	735
male	1,931	1,419	3,041	526	524
female	716	631	1,211	161	211
Personnel, average	2,698	2,068	4,299	807	728
Personnel expenses, 1,000 euros	221,048	192,751	83,375	17,747	40,633
Personnel expenses per person, 1,000 euros	81.9	93.2	19.4	22.0	55.8

PERSONNEL BY COUNTRY 31 DEC. 2012



PERSONNEL BY DIVISION, 31 DEC. 2012




LEVEL OF EDUCATION, 31 DEC. 2012, PERMANENT EMPLOYEES, %
Doctorate 1
Not indicated 6
Compulsory 3
Vocational 22
University 35
Lower university 7
College 26

Adding value through our long-term strategy

Fortum's mission, strategy and values

Mission

Fortum's purpose is to create energy that improves life for present and future generations. We provide sustainable solutions for society and deliver excellent value to our shareholders.

Strategy

Build on the strong Nordic core | Create solid earnings growth in Russia | Build a platform for future growth

Strong competence in CO_2-free hydro and nuclear, efficient CHP production and energy markets

Values

Accountability | Creativity | Respect | Honesty

In line with our strategy, our core operations are based on carbon dioxide-free hydro and nuclear power production and on strong know-how in energy-efficient combined heat and power production.

Fortum's purpose is to create energy that improves life for present and future generations. We provide sustainable solutions for the society and deliver excellent value to our shareholders. Fortum's values – accountability, creativity, respect and honesty – form the foundation for all our activities.

The core of our strategy is our strong expertise in CO_2-free hydro and nuclear power and in efficient combined heat and power (CHP) production. Our strengths also include our solid experience in operating in the energy markets.

Sustainability is an integral part of Fortum's strategy. Business and responsibility are tightly linked, underlining the role of sustainable solutions as a competitive advantage. In its operations, Fortum gives balanced consideration to economic, social and environmental responsibility.

Future energy system

Fortum believes that the future energy system will be based on emissions-free and inexhaustible energy sources and on overall efficiency of the energy system.

In the future energy system – in a Solar Economy – energy from the sun will be used either directly as solar electricity and heat or indirectly as hydro, ocean, wind and bioenergy. On the journey towards a Solar Economy, traditional production forms will be further developed and used alongside solar-based production. In a Solar Economy, the energy system is more dynamic and smarter, enabling both centralised and distributed electricity production – through the active participation of electricity users.

Energy system changes slowly

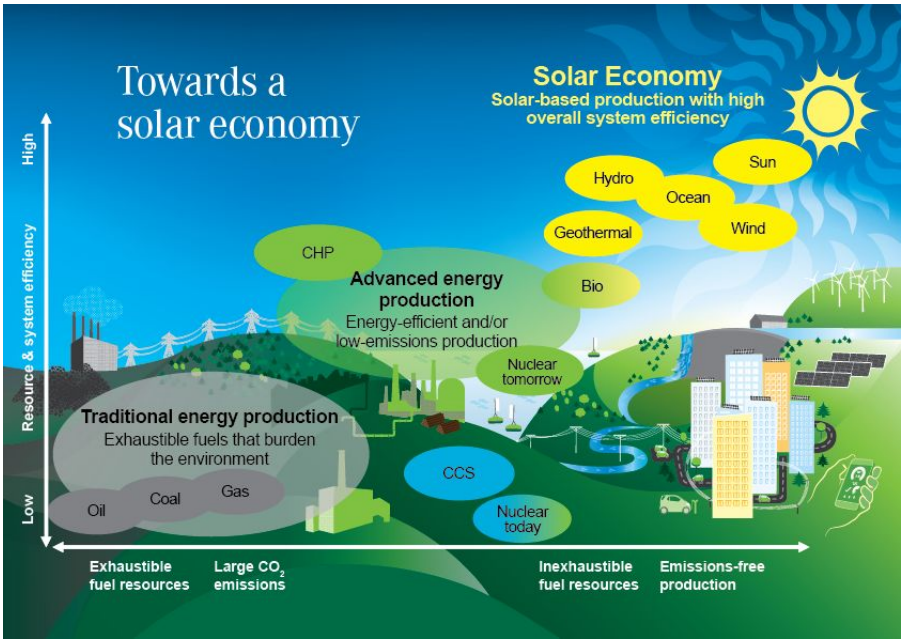
In the capital-intensive energy industry, investments can't be realised without a stable and predictable operating environment. Changes in the energy system are slow, and transitioning from the current energy system to a Solar Economy requires technology advancements as well as changes in the energy markets, the political operating environment, society's infrastructure and consumption habits over the course of several decades. Development of the operating environment is necessary for the investments required for a change in the energy system, while the length of the transition period and the cost are dependent on political decisions, society's priorities and technology advancements in production forms.

Fortum researches future energy forms

Fortum wants to promote both short- and long-term development of the energy system simultaneously. However, the current emission-free energy sources are not yet able to fulfil the energy demand of the modern and developing society; that is why in the short term we are continuing to widely utilise also traditional energy forms, and our goal is to do so even more efficiently.

Fortum is researching and developing new energy forms that in the longer term could offer significant business opportunities. In our R&D activities, we are focusing primarily on development activities that offer Fortum opportunities for growth and at the same time reduce emissions. Examples include solar and wave power, new CHP concepts, and new solutions for customers.

Our energy production in Europe is based mainly on CO_2-free energy sources. In Russia our production relies on fossil fuels.



Fortum's current energy production portfolio is still far from emissions-free energy future. Our production mix is twofold: in Europe strongly focusing on CO_2-free energy sources and in Russia based on fossil energy sources. The existing capacity will be used for decades and consequently we are bound to the related emissions far in the future.

Our production in Europe is mainly CO_2-free

In Europe, Fortum's energy production is based mainly on CO_2-free energy sources: hydro and nuclear power for electricity production and, to a large extent, biomass and waste-derived fuels for heat production. Virtually all of the new capacity to be commissioned in 2013 is CO_2-free. The investment decision made at the end of 2012 to build a new biomass-fired CHP plant in Värtan, Stockholm, and the pyrolysis plant under construction and to be integrated with the Joensuu power plant will increase our use of emissions-free energy sources.

In Russia fossil energy sources dominate

In Fortum's operating areas, the use of fossil fuels is likely to continue far into the future and along with the commissioning of the new production capacity our total emissions will increase.

In Russia, the legislative and political environment related to climate change mitigation differs significantly from that of Europe's. Russia has not committed to the second period of the Kyoto Protocol, and emissions have no commercial value in the country. Extensive development and profitability of low-carbon energy forms in Russia requires a change in the operating environment.

Due to the differences in the prices and availability of fuels, coal will account for a growing share of the fuels used in our Russian plants in the upcoming years. At the same time, we aim to use coal with a better quality and thereby reduce local environmental impacts.

In the longer term, possible changes in legislation and targets to limit carbon dioxide emissions can improve the competitiveness of renewable energy forms and promote the use of CO_2-free energy sources. Eventually, this could lead to the opportunity to use a more diverse mix of fuels, e.g. bio- and waste-derived fuels, at our Russian production plants.

Focus on energy efficiency in Russia

Since a significant reduction in CO_2 emissions is not possible with Fortum's current production capacity and fuel portfolio, Fortum aims to reduce emissions by improving energy efficiency. Energy efficiency can be improved when building new power plants to replace old, less efficient power plants and when refurbishing existing plants. Renewing district heat networks and improving the efficiency of heat distribution also have a key role in improving energy efficiency.

Our investment programme's new plants are mainly based on combined-cycle gas turbine (CCGT) technology, which represents best available techniques in natural gas combustion. This type of plant generates electricity with gas and steam turbines, and its efficiency in combined heat and power production is about 80-85%. However, some of the investment programme's plants, like Nyagan's three units (3*418 MW), are plants producing only electricity because of their geographical location, so their overall efficiency of fuel use is lower. In the vicinity of the plant there are no customers who could utilise the heat. Condensing power plants do not improve Fortum's total efficiency of energy use, nor do they reduce specific CO_2 emissions of our energy production in Russia.

Core areas of the strategy

The core of our strategy is our strong expertise in CO_2-free hydro and nuclear power and in efficient combined heat and power production.

Our strengths also include our solid experience in operating in the energy markets. Our business focus areas will continue to be developed through these competencies.

Build on the strong Nordic core

Hydro and nuclear power are CO_2-free production forms. They are also competitive in terms of variable costs. Hydro and nuclear power have a significant role in Fortum's production portfolio: In 2012 about 90% of Fortum's European electricity production was based on hydro and nuclear power located in the Nordic countries. Hydropower is particularly valuable in the integrating European energy market, where it can be used to balance out consumption peaks and the production fluctuations of wind and solar power.

Combined heat and power (CHP) production has a central role in our business throughout the Baltic region. Electricity produced in conjunction with district heat enables the use of bio- and waste fuels and also a more energy-efficient way to use traditional fossil fuels.

At the end of January 2013, Fortum decided that the company will assess the strategic position of its electricity distribution business. Fortum expects to conclude the assessment during 2013. Fortum has electricity distribution business in Finland, Sweden and Norway. The assessment has no impact on Fortum's electricity distiribution customers and excludes the company's electricity retail business.

Create solid earnings growth in Russia

Russia is the fourth biggest consumer of electricity globally and the growth of its electricity demand is outpacing that of the EU's. Fortum's investment programme is bringing new energy-efficient production units on stream; these will significantly grow the share of sales and profits that Fortum earns from its Russian operations. Completing the investment programme is a key priority for us.

Combined heat and power production has a central role in our business.

Build a platform for future growth

Alongside our current business operations, we are pursuing new growth and responding to future energy challenges. We are exploring combined heat and power production opportunities for industrial parks in India, where the power industry needs to respond to increasing demand created by population and economic growth. In France, we are continuing preparations for the upcoming hydropower concessions tender process.

We are also developing the solar power business through centralised large-scale production, commercial applications, as well as distributed household applications. Additionally, our research and development activities support the advancement towards a carbon dioxide-free future by promoting the adoption of new technologies.

Strategy realisation

Strategy core area	Achievements in 2012
Build on the strong Nordic core	• Securing profitability and cash flow through optimised trading and production with high availability • Ongoing hydropower refurbishments in Finland and Sweden • Divesting small-scale hydropower plants in Finland and Sweden • Supplying materials to decontaminate radioactive liquids at Fukushima, Japan • Sale of the Naantali power plant to Turun Seudun Maakaasu ja Energiantuotanto Oy • Finalising the sale of the heat-only business in Finland and Estonia • Starting construction of the bio-CHP plants in Järvenpää, Finland, and Jelgava, Latvia • Decision to invest in a new bio-CHP plant in Stockholm, Sweden • Sale of the minority holding in the electricity retail company Dala Kraft in Sweden • Investments in the VahvaVerkko programme to improve weather-proof distribution of electricity
Create solid earnings growth in Russia	• Focus on completing the investment programme • Moving investment programme units planned for Tyumen to Chelyabinsk • Sale of the Surgut heat network • Transfer of the first emission reduction units from Russia for Fortum's use
Build a platform for future growth	• Business development in solar power • Developing of business opportunities in India • Preparation for the hydropower concessions tender process in France • Decision to support the creation of a solar economy professorship at Lappeenranta University of Technology • Starting construction of a bio-oil plant in Joensuu, Finland • Introduction of solar panel packages and Fortum Fiksu electricity product for consumer markets • Research and development activities, e.g., in the areas of nuclear power, solar energy, wave power, smart grids, pyrolysis, torrefaction, and the potential integration of bioethanol production with CHP plants

Responsibility as part of business

At Fortum, business and responsibility are tightly linked, underlining the role of sustainable solutions as a competitive advantage. In our operations, we strive for balanced management of economic, social and environmental responsibility.

For Fortum, economic responsibility means competitiveness, performance excellence and market-driven production, which create long-term value and enable profitable growth. Fortum aims for performance excellence through continuous development of our operational efficiency and our core processes. A company that is financially strong is able to shoulder its responsibility for the environment, take care of its personnel, meet the needs of its customers and support the development of the entire society.

The efficient use of resources and the need to mitigate climate change are emphasised in Fortum's environmental responsibility. Our know-how in CO_2-free hydro and nuclear power production and in energy-efficient CHP production plays a key role in this. Through research and development activities, we are creating prerequisites for environmentally benign energy solutions.

In the area of social responsibility, Fortum's innovations and the secure supply of power and heat support the development of society and increase well-being. Fortum's sustainability approach also includes being a good corporate citizen and taking care of its own personnel and the surrounding community. Fortum promotes

well-being and safety in the work community, respect for individuals and mutual trust, and responsible operations in Fortum's supply chain and in society.

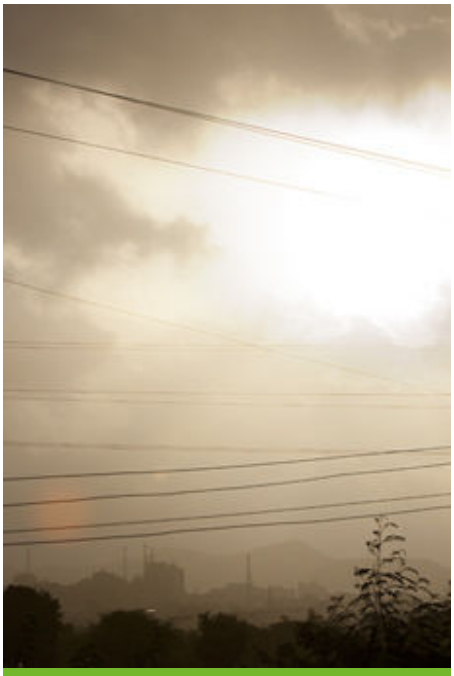
Principles of setting sustainability targets

The Fortum Management Team decides on Fortum's sustainability approach and Group-level sustainability target setting, which guide annual planning.

The divisions define detailed targets and develop action plans supporting the achievement of the targets, and they ensure that sustainability goals are included in the business goals. Group-level key sustainability indicators are reported quarterly and the detailed safety and environmental indicators monthly. The Fortum Management Team regularly monitors the achievement of the targets in its monthly meetings and in quarterly performance reviews.

Sustainability targets are based on the continuous improvement of operations. The targets were renewed in 2012 and came into force at the beginning of 2013. The targets emphasise Fortum's role in society and measure not only environmental targets, but also Fortum's reputation, customer satisfaction, and the security of supply of power and heat. As of the beginning of 2013, results of the sustainability indicators are also regularly reported to Fortum Board of Directors.

Sustainability targets affect every Fortum employee and are part of Fortum's short-term incentive scheme. The 2012 incentive scheme included an index that measured Fortum's reputation, media's satisfaction with the company's communication, and sustainability performance. In 2013, an index based on the One Fortum survey, measuring Fortum's reputation among the general public as well as customer satisfaction will be included.



Sustainability targets are based on the continuous improvement of operations.

Sustainability targets and results

Fortum's sustainability targets consist of Group-level key indicators and division-level indicators. In addition to these, Fortum has set targets for Group-wide projects, such as supply chain monitoring, promoting work well-being, and minimum requirements for the environment, occupational health and safety.

Group financial targets

	Target	2012	2011	2010	Change 12/11
ROCE, %	12	10.0	14.8	11.6	-32%
ROE, %	14	14.3	19.7	15.7	-27%
Capital structure:					
Comparable net debt / EBITDA	Around 3	3.3	3.0	2.8	10%
Net debt / EBITDA		3.1	2.3	3.0	35%

Fortum's sustainability targets and performance in 2012

Target period	Target setting	Target value	Performance 2012	Remarks for 2012
Climate targets over the next five years	Specific CO_2 emissions from power generation per kilowatt-hour in the EU as a five-year average	< 80 g/kWh	60 g/kWh	Emissions in 2012 were 42 g/kWh. 5-year average was 60 g/kWh (2011: 67).
	Specific CO_2 emissions from total energy production per kilowatt-hour as a five-year average	< 200 g/kWh	179 g/kWh	Emissions in 2012 were 177 g/kWh. 5-year average was 179 g/kWh (2011: 169). 5-year average has been increasing since 2008.
Other environmental targets over the next five years	Energy efficiency: Overall efficiency of fuel use as a five-year average (produced energy divided by the primary energy)	> 70%	67%	Efficiency in 2012 was 64%. 5-year average was 67% (2011: 68). 5-year average has been decreasing since 2008.
By year-end 2012	ISO 14001 environmental certification for operations in Russia	100%	79%	OAO Fortum's operations received certificate in August.
Year 2012	Lost workday injury frequency (LWIF) for own personnel	< 1	1.5	29 LWI accidents to own personnel in 2012, as many as in 2011. One fatal contractor accident in April.
Annually	Fortum included in the Dow Jones Sustainability Indexes World and Europe	World & Europe	1/2	Included in World Index but not in Europe Index.

Other sustainability targets and related performance

	Target	2012	2011	2010
Occupational safety				
Injury frequency (TRIF) [1], Fortum personnel	< 3.0	3.4	3.5	4.6
Injury frequency (LWIF) [2], contractors	< 3.5	3.8	3.2	5
Number of fatalities, Fortum personnel	0	0	0	1
Number of fatalities, contractors	0	1	1	0
Number of lost workday injuries, Fortum personnel	-	29	29	45
Number of lost workday injuries, contractors	-	57	45	43
Number of safety walks	8,920	17,507	15,324	8,790
Number of improvement proposals and near-miss reports	7,800	6,362	10,087	4,440
Environmental incidents and non-compliances				
Number of fires	[3	9	15	15
Number of harmful leaks into the environment, > 100 l	[3	11	28	15
Number of major environmetal incidents and permit violations	< 16	12	20	21
INES > 0 incidents	0	3	0	2
Supply chain management				
Supplier audits	9 [4	10	-	-

1) TRIF = Total recordable injury frequency, per one million working hours

2) LWIF =Lost workday injury frequency, per one million working hours

3) Target = Total number of fires and harmful leaks < 35

4) Three suppliers in risk countries / division, excluding Russia Division

Corporate sustainability targets in 2013

	Target
Reputation index	Target result 69.6 in One Fortum Survey
Customer satisfaction index (CSI)	CSI divisional scores at level “good” (70-74) in One Fortum Survey

Environmental responsibility	**Target**
Specific CO_2 emissions	
Electricity production in the EU	< 80 g/kWh, 5-year average
Total production (electricity & heat, all countries)	< 200 g/kWh, 5-year average
Energy efficiency	
Total efficiency of combustion (Definition: produced energy divided by the primary energy of fuel)	> 70%, 5-year average
Incidents and non-compliances	< 40 Fortum-wide
(Incl. fires, leaks, explosions, INES[1 > 0 events, dam safety incidents, environmental non-compliances)	

Social responsibility	**Target**
Security of supply	
SAIDI[2	< 110 minutes
CHP plant availability in Europe	> 92%
Lost workday injury frequency (LWIF)	< 1

1)International Nuclear Event Scale

2)System Average Interruption Duration Index

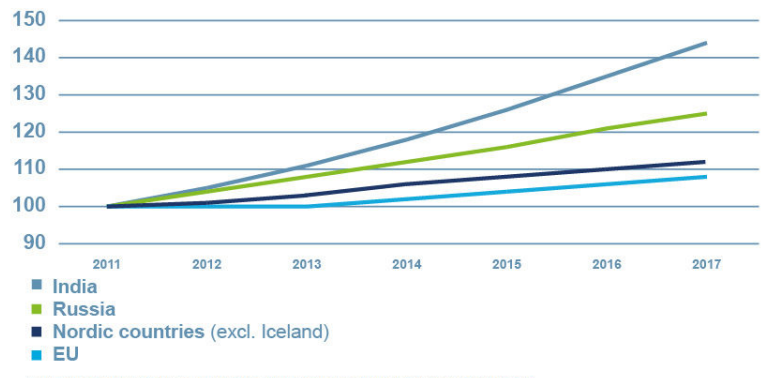
Market development

Global economic growth slowed in 2012 and Europe's economic situation was weak; development in Russia was steadier. The integration development of Europe's energy markets regressed due to the strengthening of national interests.

European power generators have committed to a challenging target to reduce carbon dioxide emissions, but the uncertainty of the regulatory environment is hampering progress in the desired direction.

In 2012, instead of European energy market integration, the strengthening of national interests led to an increase in subsidy systems, unforeseeable changes and overlapping cumulative effects that are inconsistent with the European energy and climate policy. At the same time, the oversupply of emission allowances and low prices undermine the functioning of the emissions trading system. In fact, an investment survey of European electricity companies indicates that the increase of political risk is considered the biggest obstacle to investments.

REAL GDP INDEX ESTIMATE RELATIVE TO 2011, %



Source: International Monetary Fund (IMF), World Economic Outlook Database, October 2012

Renewable energy production is largely based on political decisions and financial subsidies.

Global megatrends affect the energy business

As populations grow and economies develop, generally also their energy demand increases. The energy sector has a key role in ensuring that growth is sustainable. Fortum aims to meet the global challenges with its long-term strategy based on its solid energy expertise.

The rising affluence of the population and improvements in energy efficiency have increased the share of electricity in energy consumption. With electricity, it is possible to promote the beneficial use of natural resources and economic sustainability.

Globalisation

With globalisation the world's economies are becoming more dependent on each other and business cycles rarely occur on just a local level. The general development of the global economy has an impact on the energy sector through e.g., financial markets, fuel price development, localisation of industries and electricity demand.

New consumer aspirations

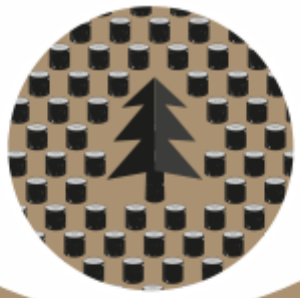
Urbanisation and the rise in living standards, particularly in the big growth centres of Asia, are changing consumer habits and increasing energy consumption. The growing environmental awareness of consumers in Europe is motivating energy companies to make their operations and service offering more eco-friendly.

Growing relative role of electricity

Diminishing natural resources, growing environmental problems and the rising prices of fuels are increasing electricity's relative share of total energy consumption. With electricity replacing other energy use, the total energy need decreases as the use of electricity is more efficient. This combined with CO_2-free electricity, produced with renewable energy sources or the nuclear power, will also result in decreased emissions.

Shifts in regulation

The liberalisation of the electricity markets and market integration are examples of the changes countries are making in an effort to boost efficiency in energy production and market functioning. These changes also attract investments in new and replacement capacity.

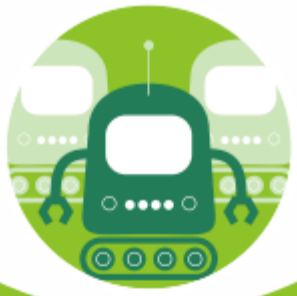


Resource scarcity and energy shortage

Growth in the global population and the rapid growth in energy demand in emerging economies impose huge challenges on the sufficiency of natural resources and energy supply. It is estimated that the global population is currently consuming one fourth more of the earth's resources than is sustainable. With the current development, the resource deficit deepens even further.

New economic powers

The focus of the global economy is shifting from the western hemisphere to Asia, driven by China and India. China has already taken its place as the world's second largest economy, and it is expected to surpass the United States by 2020.



Technology advances

Advances in technology – particularly in information technology – have been very fast in recent decades and have fundamentally changed business globally. Technology development is also in a key position in the pursuit for solutions to climate change.

Increasing environmental problems

Climate change and local environmental problems are challenges for which also the energy sector must find solutions. It is crucial to maximise efficiency in the use of the available natural resources and energy sources and to develop and implement new energy-saving and low-emitting technology.

Population growth

Fast population growth in developing nations is increasing the energy demand and requiring sizable new investments. Meanwhile, decelerating population growth and changes in the dependency ratio in developed countries are putting pressure on public sector spending and funding. The energy sector's aging production capacity requires extensive replacement investments.

Europe faces sizable energy investments

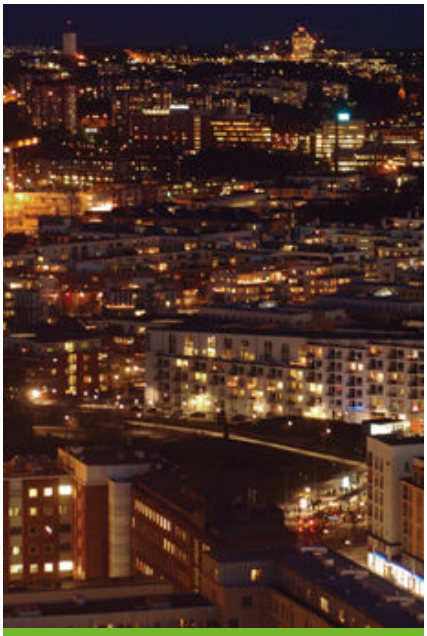
Investments in the energy sector are made decades ahead, so a predictable policy is important. However, in economically uncertain times governments have a growing desire to increase tax revenues, which contributes to the increased uncertainty in the energy sector's operating environment.

According to the International Energy Agency (IEA) and the European Commission, major energy investments will be needed in Europe in the upcoming 20 years. Close to a trillion, i.e. one thousand billion, euros will be needed by 2020 for investments in electricity production, transmission, distribution and storage, and investments of three trillion before 2030. According to a recent survey conducted by Eurelectric, the European electricity sector association representing the common interests of the electricity industry at the pan-European level, 45 out of 46 CEOs of European electricity companies estimated that only half of these necessary investments will be realised.

The same survey indicates that energy-sector leaders consider poorly predictable policy to be the main reason for the weak investment conditions. Other reasons are high capital expenses and low prices for carbon dioxide allowances, which do not adequately steer upcoming investments. The higher debt burden also impacts the willingness to invest.

The energy sector's growing policy risk is manifested in unpredictable market interventions that contradict the common energy and climate policy goals. An example of this at the national level is taxes that hamper investments in existing and new power plants – like the Finnish Government Programme's planned windfall tax targeting existing emissions-free hydropower and nuclear power plants. Taxation on hydropower and nuclear power was also raised in Sweden. Additionally, both countries restrict corporate interest deduction rights on internal financing; this particularly impacts unbundled and capital-intensive energy companies. Fortum calls for tax harmonisation with other policy objectives to improve predictability. National-level mechanisms also hamper the development of the EU's internal energy markets.

Read more about the Nordic electricity markets >



Close to a trillion euros will be needed by 2020 for investments in electricity production, transmission, distribution and storage.

Nordic electricity markets

Electricity market operations include electricity production, transmission and distribution, and electricity sales. Electricity production and sales are competitive businesses, while transmission and distribution are regulated.

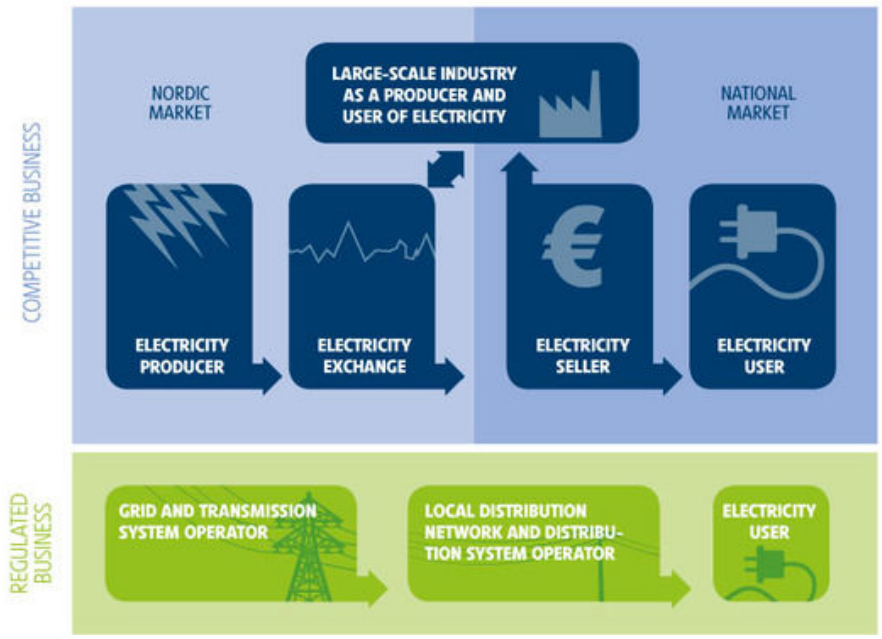
The Nordic countries were the first to establish a regional, multi-national electricity wholesale market. About three quarters of the electricity produced in the Nordic countries is traded on the Nordic electricity exchange (Nord Pool Spot). The producers use the rest of the electricity themselves or sell it directly to big industrial customers.

There are about 350 players in the Nordic wholesale electricity markets. The balance of supply and demand, the price of fuel and emission allowances, and the hydrological situation affect the wholesale price. Buyers and sellers alike can hedge their electricity wholesale and purchase prices with derivative contracts.

Electricity transmission and distribution companies operate regionally because it is not cost-efficient to build multiple electricity networks in the same area. Authorities monitor electricity transmission and distribution, its costs and the business practices of the companies engaged in this business. The transmission and distribution companies must treat all electricity producers and buyers equally, regardless of the producer or buyer of the electricity they are transmitting.

Electricity retailers buy their electricity mainly from the Nord Pool Spot and sell it to households and companies. The wholesale price of electricity has the biggest impact on the retail price. Taxes and other fees by authorities (including renewable energy subsidies) also impact the price.

NORDIC ELECTRICITY MARKET STRUCTURE



Power market models spark questions in Europe

A step forward was taken in 2012 in the implementation of the EU's energy market legislation and technical market codes. At the same time, the ramifications of previous policy decisions, such as the rapid growth in the share of intermittent renewable energy, started to make a clearer impact. Subsidising renewable energy has decreased the profitability of market-based and flexible reserve capacity in several countries. Some member states have planned capacity mechanisms to maintain reserve capacity on the markets. Without clear coordination at the EU level, in the worst-case scenario, they could crumble the current market model that is based on the price of electricity.

In November, the European Commission published a report about the development of Europe's internal energy markets. The report urges member states to make adequate investments in cross-border electricity transmission in order to improve resource efficiency and security of supply. The Commission sees the possible capacity mechanisms as a secondary alternative and, if adopted, the Commission supports the development of a pan-European practice. Fortum is of the opinion that the Commission should, in fact, define clear criteria for the use of possible national capacity mechanisms.

Energy market development in Russia

Discussions on renewing both power and heat markets have started in Russia.

Russia's Energy Minister has initiated a dialogue about the structure of future electricity markets and has proposed a new market model that would be applied starting in 2014. Regulatory authorities have been concerned that the capacity markets in their current form do not encourage efficiency improvements of old power plants or new investments beyond the long-term capacity supply agreements. The current system is considered expensive for end users.

Enforcement of the legislation on heat production, which took effect at the beginning of 2011, is continuing in Russia. Meanwhile, there has been progress in the elimination of cross-subsidies between electricity and heat as well as residential and big industrial customers. The country also has taken into use long-term heat tariff models, but, like the legislation on heat production, implementation remains unfinished. Modernisation of the heat sector in Russia is important, because it would be very difficult to achieve the energy-efficiency targets set for the country without it.

Read more about Russia's electricity markets >

Russian electricity markets

Liberalisation of the Russian wholesale electricity market was completed by the beginning of 2011. However, all generating companies continue to sell a part of their electricity and capacity – an amount equalling the consumption of households and a special group of consumers – under regulated prices. Households account for about 10% of the wholesale markets.

In addition to the wholesale electricity market, Russia also has an electricity capacity market, in which an electricity producer receives earnings for the production capacity it offers for market use. The purpose of the electricity capacity market is mainly to encourage new investments in electricity production.

The long-term capacity market rules were approved by the Russian Government in 2010 and have been applied from the beginning of 2011. The so-called old capacity, built before 2007, will compete in competitive capacity selection. The first competitive capacity selection in accordance with the new rules of the long-term capacity market was held in December 2010. The new generation capacity, built after 2007 under government Capacity Supply Agreements (CSA), will receive guaranteed payments for a period of 10 years. Prices for capacity under CSA are defined to ensure a sufficient return on investments.

Electricity consumption and price development

In spite of the precarious macroeconomic situation, the share of electricity in total energy consumption continues to grow. In the Nordic countries, demand for electricity recovered slightly from 2011. Industrial demand remained relatively stable, but private consumption continued to grow. In Russia, too, consumption grew slightly.

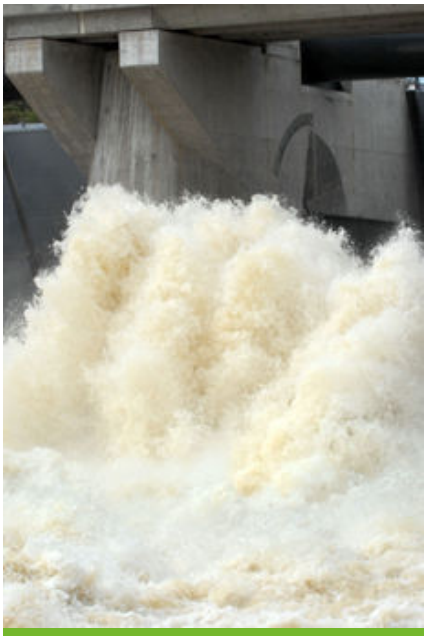
Electricity consumption in the Nordic countries in 2012 was 391 terawatt-hours (TWh) (2011: 384), i.e. about 2% more than the previous year. Precipitation in the region was abundant in 2012 and water reservoir levels remained historically high until the end of November. The record-setting hydrological situation resulted in a drop in the Nordic electricity prices.

In 2012, the average system price of electricity in Nord Pool Spot decreased by one third and was EUR 31.2/megawatt-hour (MWh) (2011: 47.1). Electricity prices in the Nordic countries were lower than in Continental Europe, and therefore electricity was exported almost continuously from the Nordic countries to Continental Europe. In Germany, the average spot price in 2012 was EUR 42.6/MWh (2011: 51.1).

Area price differences in the Nordic wholesale electricity markets were considerable, due to electricity transmission bottlenecks caused by numerous cable problems. Area prices in 2012 were significantly higher than Nordic system prices, particularly in Finland, but also in Sweden. Additionally, during 2012, the Finnish area price was impacted by lower imports from Russia compared to the year before.

The year's average area price in Finland (FI) was EUR 36.6/MWh (2011: 49.3). Sweden was divided into four price areas in the second half of 2011. The average area price in Stockholm (SE3) was EUR 32.3/MWh (2011: 47.9) and in Sundsval (SE2) EUR 31.8/MWh.

At the beginning of 2012, the market price for CO_2 emission allowances (EUA) was about EUR 6.6/tonne. During the year, CO_2 emission allowances traded at about EUR 5.7−9.5/ tonne, and at year-end the rate was about EUR 6.7/tonne.



The record-setting hydrological situation resulted in a drop in the Nordic system prices of electricity.

Slight rise in electricity price in Russia

In 2012, electricity consumption in Russia was 1,037 TWh (2011: 1,020). The corresponding figure in Fortum's operating area, in the First price zone (European part of Russia and the Urals), was 769 TWh (2011: 760).

In Russia, the electricity spot price, excluding capacity price, increased in 2012 by 1% to RUB 1,001/MWh (2011: 990) in the First price zone. The increase in the spot price was affected by the Russian Government's decision to raise natural gas prices as of 1 July 2012: the increase was about 15%. The spot price development, however, was under pressure in the beginning of the year due to restrictions in the pre-election period. The abundant nuclear and hydropower production combined with somewhat lower demand pressed prices later in the year.

The price for the capacity component of the electricity price for the so-called ”old” generation built prior to 2008 is determined by capacity selection in Russia. The generation capacity built after 2007 under the government capacity supply agreements receives guaranteed payments for a period of 10 years.

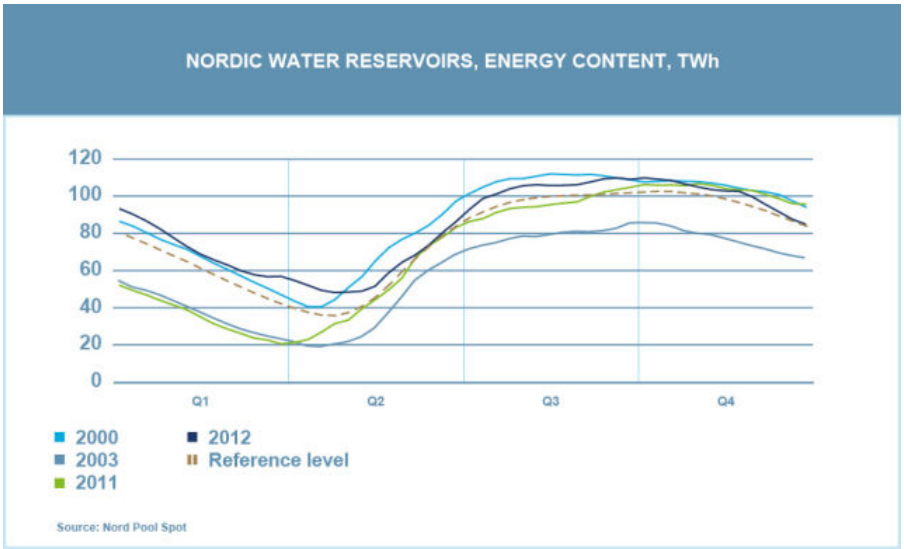
NORD POOL SPOT WEEKLY AVERAGE PRICES, EUR/MWh

Source: Nord Pool Spot

WHOLESALE PRICES FOR ELECTRICITY, EUR/MWh

1) Including weighted average capacity price

Source: Nord Pool Spot, NASDAQ OMX Commodities Europe, Bloomberg Finance LP, ATS, NP "Market Council", Fortum



Towards a global climate solution

In 2012, negotiations on the UN's new climate agreement continued at a slow pace. The development of a roadmap to a low-carbon economy continued in the EU. Meanwhile, the oversupply of emission allowances and low prices undermined the functionality of the emissions trading system.

International negotiations on the UN's new climate agreement continued in 2012. A step forward, however a modest one, was achieved in the negotiations at 18th Conference of the Parties (COP18), held in Doha, Qatar, in the latter part of 2012. The Kyoto Protocol will continue in 2013-2020 and a programme was drafted to work on a global climate agreement by 2015. As such, the agreement would take effect in 2020.

For the next four years, the United States is likely to have a cautious approach towards global climate negotiations and development of a national emissions trading system. The United States' commitment to a universal agreement is largely dependent on whether China and India will approve the absolute emissions reduction targets. However, there are regional trading schemes under development in the United States, as well as on other continents. In 2012, the EU and Australia agreed on the linking of their emissions trading schemes: the aim is to link the schemes partially in 2015 and fully in 2018.

EU’s roadmap to a low-carbon economy

In Europe, the dialogue continued about the four roadmaps presented by the Commission in 2011. The purpose of these roadmaps is to advance towards a low-carbon economy by 2050. The dialogue focused on setting emission reduction targets for the post-2020 period. The biggest reduction needs are focused on the energy sector, which should be practically carbon-free by 2050.

It is important to gain certainty about the climate policy and the post-2020 targets as soon as possible. The EU must at the first opportunity set an ambitious carbon dioxide emissions target for 2030. However, overlapping targets for example for renewable energy should not be set for beyond 2020. Additionally, national subsidies for renewable energy sources must be gradually phased out.

Need of restructuring the EU's emissions trading scheme

Several national subsidy mechanisms for renewable energy have displaced the role of emissions trading and have thus hampered the development of market-driven solutions and the common market. The role of the EU’s emissions trading system (ETS) as a promoter of a low-carbon energy future was called into question more loudly in 2012. The ETS has been overshadowed by the weakened economy and national policies and measures. Additionally, the oversupply of emission allowances and the more volatile and lower than expected prices have undermined the system. This is due to the slowdown in economic growth and overlapping steering mechanisms e.g. in renewable energy and energy efficiency.

In 2012, the Commission proposed changes to the timing of auctions of emission allowances and structural changes of the scheme. The purpose is to postpone the auctioning of 900 million emission allowances from the first years of the period 2013-2020 towards the end of the period (back-loading). Alternatives to the structural reform include e.g. increasing the reduction target for emissions for 2020, tightening the annual linear emissions reduction factor, and expanding the ETS to new sectors. Decisions on timing of auctions will be made in 2013.

It is important to maintain the emissions trading system as the primary climate instrument. In addition to the system’s long-term structural reform, also short-term changes are needed. After postponing the timing of the allowance auctions, emissions allowances should be permanently withdrawn (set-aside).

A proposal for sustainability criteria for solid biomass

The Commission is currently preparing sustainability criteria for solid biomass and biogas; the proposal is expected to be ready in 2013. Subsequently, biomasses that fail to satisfy the sustainability criteria will no longer be classified as CO_2-free; the carbon emissions would be calculated on the basis of combustion. The biomass in question would not be allowed to be taken into account when calculating the realisation of renewable energy targets, nor would it receive renewable energy subsidies.

Research and development supporting business

The purpose of Fortum's research and development is to improve competitiveness and to create a foundation for new, profitable business. We assess each new development project against the criteria of business potential, carbon dioxide emissions reduction and resource efficiency.

Research and development (R&D) activities help Fortum to develop a sustainable, carbon dioxide-free future. Its focus areas are continuous improvement of current operations, enabling of growth opportunities and development of an emissions-free energy system in the long-term.

The main areas of R&D activities are:

- The advanced technologies included in Fortum's existing energy system. In this area, nuclear power is our most important research area. In addition, we are also developing integrated combined heat and power systems, i.e. CHP+ plants.
- New technologies and solutions supporting development of the energy system towards the future solar economy. Targets of development in this area include solar and ocean energy as well as sustainable urban solutions.

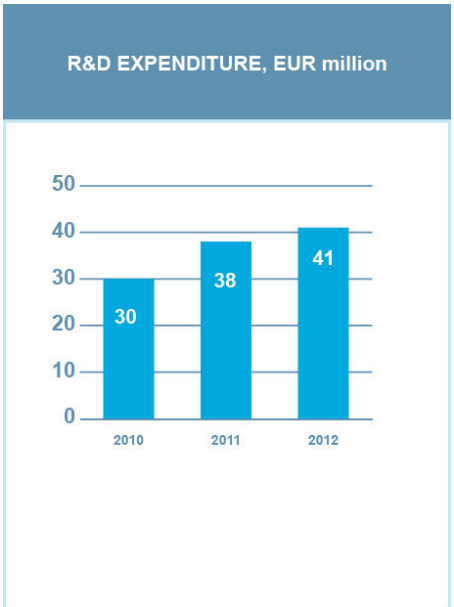
Fortum's total R&D expenditure in 2012 was EUR 41 million (2011: 38), which corresponds to 0.7% of sales (2011: 0.6%).

Ion exchange materials developed through Fortum's long-term research were delivered to Japan to decontaminate the radioactive water.

Safety at the core of nuclear power research

In 2012, Fortum's nuclear R&D activities focused on the research for the safe final disposal of spent nuclear fuel. Safety and availability of nuclear power plants were developed by concentrating on, among other things, to the aging management of nuclear power plants and the concrete structures.

In addition to improving safety, Fortum's nuclear power research focuses on maintaining and developing the expertise in existing and potential new nuclear power technologies. For example, ion exchange materials developed through Fortum's long-term research were delivered to the damaged Daiichi power plant in Fukushima, Japan, to decontaminate the radioactive water.



New combined heat and electricity solutions

In 2012, Fortum made a decision to build a bio-oil plant based on fast pyrolysis technology in Joensuu, Finland. The bio-oil plant, globally the first of its kind on an industrial scale, will be integrated with the existing combined heat and power plant.

Additionally, the production and use of biocoal as well as bioethanol production processes were researched, and the use of power plant flue gases in algae cultivation was tested. Fortum also participated in CLEEN Ltd.'s carbon capture and storage (CCS) programme, which focused on CHP plant solutions and future innovations in the sector.

Wave and solar energy and sustainable urban living

Wave energy-related research and development continued in 2012. We continued collaboration on the development of wave energy technology with AW-Energy Oy. Additionally, we started construction of a wave power park in Sotenäs, Sweden, together with Seabased AB. After completion, the wave power park will be the world's biggest full-scale demonstration project. In France, we continued wave power research and development work with DCNS. In 2012, Fortum started business development related to solar energy.

In 2012, we also continued the research on sustainable urban solutions and the development of services for customers. For example, development of the smart grid for the Royal Seaport project in Stockholm advanced to the implementation phase. We participated in a new research programme on efficient energy use (EFEU) with CLEEN Ltd. Fortum's key areas in the EFEU programme are energy-efficient heating and cooling solutions, climate-benign power and heat production chains, and energy-efficient service business models integrated with new

technology. We also continued the development of electric transport solutions by launching collaboration with Nissan on the fast charging of electric vehicles.

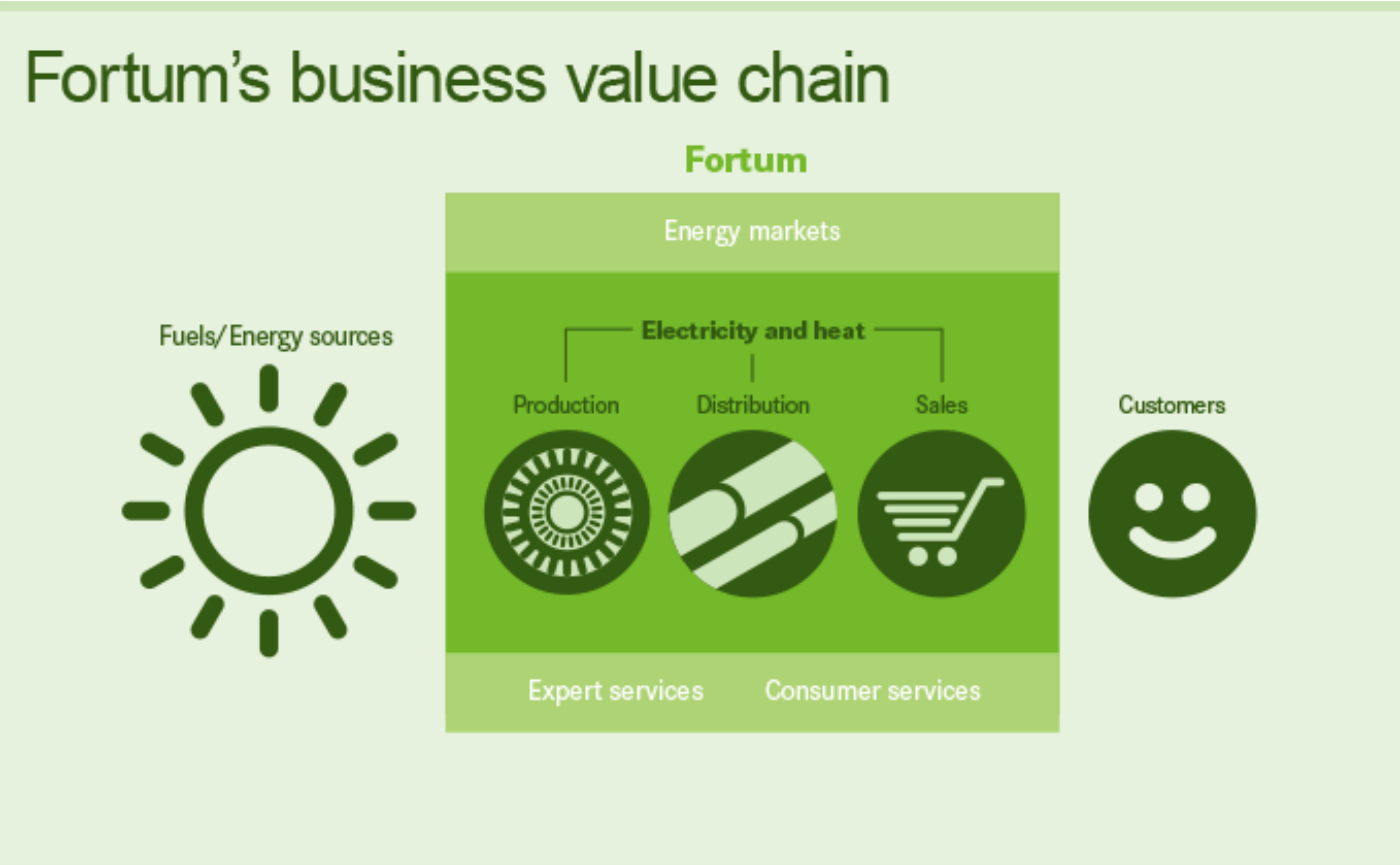
Adding value through our business

Fortum's activities cover the production, sales and distribution of electricity and heat as well as energy-sector expert services.

We produce electricity and heat in an environmentally benign manner using versatile energy sources. We distribute energy to our customers while taking into consideration long-term, sustainable community planning.

Energy companies have a significant role in mitigating climate change, because the majority of greenhouse gases come from the production and consumption of energy. Fortum's investments pursue a financially profitable balance that provides the possibility to increase capacity and reduce emissions. In line with our strategy, we invest in carbon dioxide-free hydro and nuclear power production and in energy-efficient combined heat and power (CHP) production.

We produce economic added value for our stakeholder groups. We support the functioning of society by e.g. compensating debt investors and shareholders, paying taxes, employing people and supporting non-profit activities. As part of our daily business, we strive to minimise the negative impacts of our operations. We act responsibly, and we aim to ensure that our business partners act responsibly and comply with our Code of Conduct and Supplier Code of Conduct.



Impacts of energy sources

Climate

- Harvesting biomass reduces carbon sinks unless replantation is managed.
- Fossil fuels are used in mining operations and in harvesting biomass, resulting in greenhouse gases.
- Natural gas pipelines leak some methane, which is a greenhouse gas.
- Sea and road transports and the pumping of natural gas use fossil fuels, which generate greenhouse gases.

Health and safety

- Mining operations pose health and safety risks for workers and local residents.
- Coal handling, especially loading and unloading, may cause adverse effects on the local environment and workers.

Water systems

- The damming of rivers and hydropower construction change the natural state of water systems.
- Hydropower production may impact biodiversity and fishing and the recreational use of water systems.
- Impurities from coal mines and peat bogs may be released into water systems.
- Transporting fuels via waterways involves environmental risks such as oil spills.

Other environmental aspects

- Fossil fuels and uranium are exhaustible natural resources and biomass resources are limited.
- Mining operations and the draining of peat bogs have a local impact on soil, groundwater and landscape.
- Harvesting biomass may have an impact on biodiversity and on the visual landscape.
- Use of waste-derived energy saves natural resources and reduces the load on landfills.

Society

- Mining, harvesting and processing fuels have a significant employment impact and increase social and economic well-being.
- They also involve social risks, in terms of land ownership, human rights, labour rights and living conditions of communities near the fuel source.
- Transportation and distribution of fuels have a positive impact on local employment and this increases well-being.

Fortum's actions to reduce impacts in 2012

1. The origin and sustainability of fuels was the target of increased focus in purchasing. We assess the level of operations of our fuel suppliers through e.g. pre-selection and supplier audits: we performed a total of 264 pre-selections of all suppliers and audited ten of them.
2. Fortum became a member of the Forest Stewardship Council (FSC) and continued an active dialogue within the framework of the WWF Global Forest & Trade Network and the Roundtable of Sustainable Palm Oil organisation.
3. Fortum joined the Bettercoal initiative to promote the principles of sustainable development in coal mining. Bettercoal's Code of Conduct-related stakeholder event was held in Russia in November.
4. Fortum's experts assessed the fuel supplier's uranium mine operations in Russia. Fortum regularly assesses the quality, environmental, and health and safety management systems of its nuclear fuel suppliers and the manufacturing of nuclear fuel assemblies.
5. Of Fortum's purchases, fuels accounted for about EUR 1,057 million, of which the share of fossil fuels was about EUR 910 million and biofuels about EUR 130 million.
6. Fortum used 6.1 terawatt-hours of biomass and other biofuels in energy production, and increasing the use of bioenergy was researched at several of our power plants.
7. Fortum used over 800,000 tonnes of waste-derived fuels in Sweden and Finland, accounting for 1.8% of the energy content of total fuel use. The use of waste-derived fuels reduces the use of natural resources.
8. Fortum reports the greenhouse gas emissions from the fuel chain, including indirect emissions from the production and transportation of fuels, in line with the GHG Protocol. The indirect emissions from the transportation of coal, oil and wood fuels were approximately 125,000 tonnes.

Impacts of energy production

Climate

- CO_2 emissions from fossil fuels and peat contribute to climate change.
- Hydro, nuclear, wind and solar power production do not result in CO_2 emissions in the production phase.
- The use of bioenergy is CO_2 neutral.
- Fossil fuels used in the transportation of waste and by-products generate greenhouse gases.
- Landfills release methane.

Society

- Energy production enables modern society to function and has many economic impacts on society.
- Energy companies generate steady and long-term economic well-being in society.
- Nuclear waste management and disposal is a highly sensitive issue in society, and is subject to political and public acceptance.
- Utilisation of waste in energy production reduces costs for society.

Health and safety

- Flue-gas emissions may have an impact on air quality and health.
- Nuclear fuel is radioactive, but in normal use nuclear power production has no impact on human health or the environment.
- Health and safety risks are related to the handling of hazardous and radioactive waste. The handling of spent nuclear fuel in particular requires long-term research and planning before final disposal.

Other environmental aspects

- Production and maintenance create e.g., ash, gypsum, scrap metal and waste oils.
- Production plants have impacts on the visual landscape and on land use.
- Utilisation of ash and gypsum reduces the amount of waste into landfills and the need for natural materials.
- Landfills and dumping areas have impacts on the visual landscape and on land use, and may release impurities into the soil and groundwater.
- The use of waste-derived energy saves natural resources and reduces the load on landfills.

Water systems

- Hydropower regulation has an impact on water flows and surface levels and may impact fishing and recreational use.
- Cooling waters increase the temperature of water systems locally, while heat pumps cool water systems.
- Small amounts of impurities may be carried along with wastewaters from production plants into water systems.
- Impurities from landfills or ash basins may be released into water systems.

Fortum’s actions to reduce impacts in 2012

1. 68% of Fortum’s electricity production was carbon dioxide-free, an increase of 3 percentage points from the previous year.
2. Refurbishments of hydropower plants and dams and voluntary activities to mitigate the impacts of hydropower production continued. Fortum started a sizable power plant dam refurbishment project in Höljes, Sweden. A multi-year refurbishment project was launched at the Pyhäkoski power plant in Finland. In Sweden, the Gammelänge and Långå hydropower plants were refurbished. The hydropower refurbishment projects implemented during the year resulted in 9.5 MW of additional capacity, and an annual hydropower production increase of about 9.1 GWh.
3. To offset hydropower production’s environmental impacts on the fishing industry, Fortum restocked about 1.2 million fish fry in Sweden and Finland.
4. The approximately 15,000-cubic-meter expansion of the Loviisa nuclear power plant’s final repository for low- and intermediate-level radioactive waste was commissioned in the latter part of the year.
5. At the end of the year, the Fortum and Teollisuuden Voima Oyj jointly owned Posiva Oy submitted a construction licence application for a final repository for spent nuclear fuel to the Finnish Radiation and Nuclear Safety Authority.
6. CHP production accounted for 32% of our electricity production and 79% of our heat production. New biomass- and waste-fired CHP plants were under construction in Klaipeda, Lithuania; Jelgava, Latvia; Brista, Sweden; and Järvenpää, Finland.
7. Fortum launched construction of a pyrolysis technology-based bio-oil production plant in Joensuu, Finland. The plant will be integrated with the Joensuu CHP plant. Bio-oil will replace the use of fossil fuel in heat production.

8. 51% of Fortum's ash and 42% of its gypsum was utilised. Utilisation of by-products reduces the use of natural resources.
9. The environmental burden from Russia's thermal power plants was reduced by increasing the use of higher quality coal. At the two biggest sources of emissions, a 44% reduction in particle emissions was achieved and a 34% reduction in SO_2 emissions per used tonne of coal, compared to 2010. To reduce the load on waterways, improvements were implemented in wastewater handling at plants by e.g. separating and reducing water flows through coal-fired power plant ash basins.
10. Fortum started construction of a wave energy park together with Seabased AB in Sotenäs, Sweden. Fortum also started developing the solar energy-related business.

Impacts of energy distribution

Health and safety

- The electric and magnetic fields in the immediate vicinity of power lines and transformers may have adverse impacts on health.

Other environmental aspects

- Building and maintenance of overhead power lines impacts the environment, land use and the visual landscape.
- Underground cables improve the reliability of electricity distribution and reduce environmental impacts.
- The construction of district heat networks causes temporary disruptions locally, but the operation of the network does not have any major known impacts on the environment.

Society

- Overhead power lines are more vulnerable to weather conditions like storms.
- Power outages have a substantial impact on modern society, which is dependent on electricity.
- Disruptions in heat delivery cause adversities for heat consumers.

Fortum's actions to reduce impacts in 2012

1. Distribution business area invested a total of EUR 324 million, the majority of which in smart meters, underground cables, overhead lines and substations. The System Average Interruption Duration Index (SAIDI) per customer was 103 minutes in Fortum's electricity distribution network.
2. Fortum improved communication during electricity distribution outages by introducing a text messaging service for customers in the Nordic countries; the service provides information about power outages to electricity distribution customers. In widespread distribution outages, information is also available through social media channels and Fortum's website. Customer service resources during widespread power outages were also increased.
3. In Finland, Fortum launched the VahvaVerkko project to improve the reliability of electricity distribution. The goal is to add about 90,000 Fortum customers to the already 200,000 customers within the sphere of weatherproof distribution by the end of 2014. By 2020, the goal is to reduce the number of power outages by half and to double the number of customers within the sphere of weatherproof distribution. In Sweden, implementation of the SäkraNät investment programme continued.
4. Losses in power distribution were reduced by increasing automatic meter management, optimising network operations, increasing transmission capacity in the lines with the highest loads and replacing obsolete transformers with new, more energy-efficient ones.
5. In Russia, Fortum continued modernising the district heat networks in Chelyabinsk and Tyumen.

Impacts of energy use

Climate

- When electricity and district heat replace less efficient energy forms in consumption, e.g. electricity replacing fossil fuels in traffic, the impact on the climate is reduced.

Society

- Electricity is a requisite for a functioning and safe society. In the smart energy system of the future, consumers can take an active role by being both an electricity producer and consumer. Consumers are able to actively control their energy use and costs.

Other environmental aspects

- The use of electricity instead of other energy sources improves resource efficiency and reduces the environmental burden.
- District heating reduces air pollution and the local environmental burden when it replaces distributed heat production.

Fortum’s actions to reduce impacts in 2012

1. In Finland, all electricity sold to private customers in Finland was CO_2-free and produced by hydropower and wind power. All electricity in Sweden was sold with an environmental value.
2. By the end of the year, Fortum had installed smart meters for 434,000 customers in Finland. In Sweden, new meters had already been installed for all customers back in 2009. In Norway, the installation of new smart meters is planned to begin in 2014.
3. Installation of smart meters was started in Jelgava, Latvia. All of Fortum's district heat customers in Finland, and the majority in Sweden and Latvia are already within the sphere of smart metering. Smart metering and control systems offer heat network customers the opportunity to affect their own heat consumption.
4. In Finland and Sweden, Fortum’s carbon-neutral heat product gave customers the opportunity to impact their carbon dioxide emissions.
5. Fortum offered customers energy advice, energy-efficiency consulting, and energy-saving products, like energy consumption metering devices (e.g. Home Display).

Hydropower saves scarce natural resources

Hydropower is the most traditional and significant form of renewable energy globally. One third of Fortum's annual electricity production is hydropower.

Carbon dioxide-free and renewable hydropower is one of the most important means for mitigating climate change and saving scarce natural resources. Hydropower's energy is derived from the sun, which drives the continuous hydrological cycle.

Regulating power is needed for the electricity system

In the Nordic electricity market, hydropower is the most important production form in balancing the production and consumption of electricity. Other renewable energy forms, like wind and solar power, need hydropower for regulating power. Hydropower is particularly suitable as the fastest regulating power, because hydropower plants can be started up or shut down quickly. With water stored in the reservoirs, production can be shifted to periods when electricity consumption is highest. Hydropower can also be used to manage sudden disruptions in the power grid.

One third of Fortum's electricity production is hydropower

In 2012, Fortum's hydropower production in the Nordic countries was 25.2 terawatt-hours (TWh), accounting for 34% of its electricity production. The share fluctuates annually depending on the hydrological situation.

Fortum's hydro power production capacity in the Nordic countries is about 4,600 MW. At year-end 2012, we owned or co-owned 191 hydropower plants in Sweden and Finland. The plants with the largest capacity are located on the Dalälven, Indalsälven and Ljusnan rivers in central Sweden and on the Oulujoki, Kemijoki and Vuoksi rivers in Finland.

In 2012 and early 2013, we divested 100 small hydropower plants in Finland and Sweden. The capacity of the small hydropower plants sold was a total of 102 MW, which corresponds to a total of 2% of Fortum's entire hydropower capacity. We divested the small hydropower plants so that we can focus our resources on large-scale hydropower. In 2012, we also continued preparations for the tender processes for hydropower concessions in France.

In the Nordic electricity market, hydropower is the most important production form in balancing the production and consumption of electricity.

FORTUM'S HYDROPOWER PLANTS IN SWEDEN AND FINLAND

Hydropower refurbishments in 2012

Our refurbishment programme for existing hydropower capacity continued in 2012 with the launch of a multi-year refurbishment project at the Pyhäkoski power plant in Finland. In Sweden, the Gammelänge and Långå power plants, among others, were refurbished. Refurbishments can improve the efficiency and safety of hydropower plants and can reduce environmental risks, thanks to modern, more environmentally benign technology. The refurbishments implemented in 2012 resulted in 9.5 MW of added capacity, and an annual hydropower production increase of about 9.1 GWh.

Reducing hydropower's environmental impacts

Fortum actively participates in mitigating the impacts of hydropower and in research related to the impacts of hydropower. As a result of careful operation, Fortum's hydropower plants had no significant permit non-compliances in 2012.

The most significant environmental impacts of hydropower are caused by the construction of plants and dams and dredging of riverbeds. Hydropower can alter river systems, shorelines, and the routes and natural flow rates of rivers. Regulating the level of water in lakes and rivers affects the aquatic habitat as well as other uses of the water systems.

The permit conditions for Fortum's hydropower plants and lake regulation define the limits for surface water levels and flow rate variations in the water systems. The permits also define obligations to prevent and to compensate for environmental impacts.

There was exceptionally high summer flooding in the Oulujoki water system in Finland in 2012, but the regulation was in line with the permit also during the flood situation. The Vuoksi water system also had more water than normal, and Fortum had to resort to numerous spillages.

To compensate for the environmental impacts of hydropower production on the fish industry, in 2012 Fortum restocked about 260,000 salmon and sea trout smolts, and 330,000 sea whitefish smolts in Finland. In inland water systems, restocking of lake trout, pike perch, European grayling and whitefish were planned based on the wishes of fisheries areas and fisheries collectives. About 520,000 salmon and rainbow trout smolts and 50,000 eels were restocked in Sweden's water systems.

Voluntary projects within the framework of Fortum's Environmental Fund also helped to lessen the environmental impacts of hydropower. In Finland, the flood meadows of Kiantajärvi lake were restored and the rehabilitation of fish habitats in the Vuoksi river was planned. Several projects and research studies to improve the fish habitat were carried out in Sweden. In Dalarna, two dams were removed from the Oreälven river tributaries to facilitate the migration of fish. In 2012, Fortum participated in fish migration research in the Oulujoki water system in Finland and the Klarälven river in Sweden.

Fortum restocked about 1.2 million fry in Swedish and Finnish watercourses in 2012 to compensate for the environmental impacts of hydropower production.

Improving dam safety

Hydropower dam safety is the responsibility of the owner, and the condition of the dams is monitored in accordance with the safety inspection programmes approved by the dam authority.

Fortum is continuously improving the safety of its hydropower plant dams. In Sweden, Fortum started a sizable power plant dam refurbishment project at Höljes, one of Sweden's largest dams. The project will bring the dam up to current dam safety requirements.

Nuclear power has an important role in mitigating climate change

Nuclear power is used to produce electricity in a climate-benign and safe manner. Nuclear power has a central role in Fortum's energy production.

Nuclear power accounted for 13% of the world's and 28% of the EU's electricity production in 2010. New investments in the sector have advanced slowly, particularly in Europe, due to the Fukushima accident and the economic crisis. While some countries are discontinuing nuclear power, we believe that nuclear power will maintain its position globally. Carbon dioxide-free nuclear power has an important role in mitigating climate change. The efficiency of nuclear power could be still improved significantly in the future in combined heat and power production.

Fortum's nuclear power

In 2012, Fortum's nuclear power production was 23.4 terawatt-hours (TWh), i.e. 32% of the company's electricity production. In Finland, in addition to the Loviisa power plant, we have a 26.6% share in Olkiluoto's two reactors and a 25% share in the third reactor under construction. In Sweden, Fortum has a 22% share in Forsmark's production and a 43% share in Oskarshamn's production. Fortum's nuclear power production capacity is 3,247 MW.

Availability and safety

In 2012, the load factor describing the availability of our Loviisa nuclear power plant was 87.4% - good by international standards. However, compared to recent years, the load factor was lower as a result of extended annual maintenance (once in eight years) on the Loviisa 1 unit and due to three production stoppages during the operating period. The Loviisa power plant produced 7.61 TWh of electricity, which was about 10% of the electricity production in Finland. During the year the plant recorded three incidents impacting safety (level 1 on the INES scale used by the International Atomic Energy Agency). The incidents did not cause any danger to people, the environment or the power plant. According to the IAEA definition, INES 1-incidents do not pose a risk but do indicate a lack of safety provisions.

Availability in co-owned plants was good, excluding Oskarshamn 1 and Oskarshamn 3. The prolonged repairs at Oskarshamn 1 continued, and the plant was shut down for the entire year.

The Swedish Radiation Safety Authority (SSM) decided in December to step up the monitoring of the Oskarshamn nuclear power plant by placing the plant under

Carbon dioxide-free nuclear power has an important role in mitigating climate change.

special supervision. A programme to improve the operations has been launched at the plant.

Modernisations and capacity upgrades continued

A decision has been made to modernise the Loviisa power plant's high-pressure turbines in 2014–2017. The modernisation will increase the plant's nominal output by a total of 24 MW. The project will help us ensure the reliable electricity production of the plant units to the end of their operational lifetime.

Projects related to capacity upgrades continued at the Forsmark and Oskarshamn nuclear power plants. The test run period of Forsmark 2's planned capacity upgrade was postponed to spring 2013. The test run programme of Oskarshamn 3's capacity upgrade was completed as planned by the end of 2012. After the capacity upgrade, Oskarshamn 3 became the world's largest boiling water reactor with a power output of 1,400 MW. The modernisation and capacity upgrade project of Oskarshamn 2 focused on the planning of the plant modifications to be carried out in 2013 and 2015.

TVO completed plant upgrades and further improved the safety of the Olkiluoto nuclear power plant during 2010-2012. As a result, the power output of both Olkiluoto 1 and Olkiluoto 2 increased by approximately 20 MW each.

Reducing nuclear power's environmental impacts

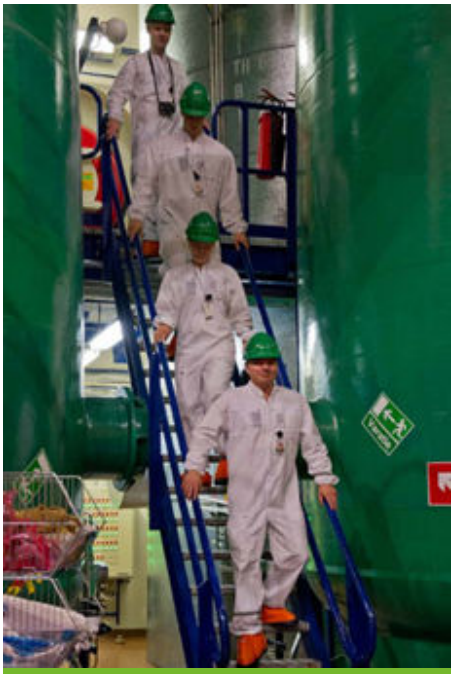
Under normal conditions, nuclear power production does not have any health or environmental impacts. Nuclear power's most significant factors are related to nuclear safety, nuclear waste management, and the thermal load of cooling waters.

The most significant environmental impact of a nuclear power plant during operation is the increased water temperature in the immediate vicinity of the plant as a result of cooling water, when sea water cooling is used. In 2012, the Loviisa power plant's thermal load into the sea was 15.2 TWh. Based on temperature measurements, the cooling water has raised the surface water temperature by 1−2 degrees within a 1−2 kilometre radius of the cooling water discharge location.

The thermal load into the sea could be reduced by making the nuclear power plant a combined heat and power plant. This would increase the power plant's energy efficiency by several tens of per cents. So far, this type of solution has not been realised in the world on a large scale.

Development of nuclear waste management

The waste generated during nuclear power plant operation is treated within the sphere of either conventional (non-radioactive) or radioactive waste management. As in a normal work environment, conventional waste is generated in e.g. the transportation of goods and in office work, and it is handled by an external waste management company. Depending on its activity, radioactive waste is sorted into either low-, intermediate- or high-level radioactive waste. The Loviisa power plant's low- and intermediate-level radioactive waste is disposed of in a final repository built in the plant area. The roughly 15,000 cubic meters of expansion to the final repository were taken into use late in 2012. A handling system for liquid waste is planned for completion in 2014. High-level radioactive nuclear waste will be disposed of in the nuclear waste final repository to be constructed in Olkiluoto, Eurajoki.



Nuclear safety is an essential part of Fortum's research and development activities, accounting for over half of the company's R&D expenditure.

Final disposal of nuclear waste

In Finland and Sweden, the producers of nuclear waste are responsible for management and final disposal of the nuclear waste and for the related costs.

The practical implementation of the final disposal of spent nuclear fuel from the Loviisa and Olkiluoto nuclear power plants is handled by Posiva Oy, which is co-owned by Fortum and Teollisuuden Voima Oyj. The spent nuclear fuel will be placed in Olkiluoto's final repository in Eurajoki. Posiva submitted its construction licence application for a final repository for spent nuclear fuel to the Ministry of Employment and the Economy at the end of 2012. Readiness to start the final repository operations is estimated to be around 2020.

In Sweden, Svensk Kärnbränslehantering AB (SKB) handles the final disposal of the existing plants' spent nuclear fuel. In March 2011, the company submitted an application for a construction licence for an encapsulation and final disposal facility; the application is under review by the authorities. The final repository is planned to be in Forsmark.

Developing nuclear safety

Developing nuclear power safety is based on continuous improvement of technology and operations. Nuclear safety is an essential part of Fortum's research and development activities, accounting for over half of the company's R&D expenditure.

Nuclear safety and preparedness for extreme external events, in particular, were actively discussed after the Fukushima accident in 2011. Consequently, the European Union launched nuclear power safety assessments, the so-called stress tests; in addition to these, national safety assessments have also been carried out. In October 2012, the European Commission published its final report on the nuclear stress tests. According to the safety assessments, the design basis for Fortum's nuclear power plants in Finland and Sweden are proper in terms of external events.

In December 2012, the Radiation and Nuclear Safety Authority (STUK) in Finland submitted in its national action plan to the European Nuclear Safety Regulators Group (ENSREG). The actions planned at the Loviisa power plant can be implemented within the framework of the annual maintenance programmes. The most important development measures are related to the planning of air-cooled cooling towers that are independent of sea water and improved flood protection in case of the very improbable exceptionally high sea water level.

In Sweden, the Oskarshamn and Forsmark plants have presented their safety improvement plans to the Swedish Radiation Safety Authority. The authority will require the plants to have e.g. independent emergency feed water systems and stronger focus on analysing the aging of the plants.

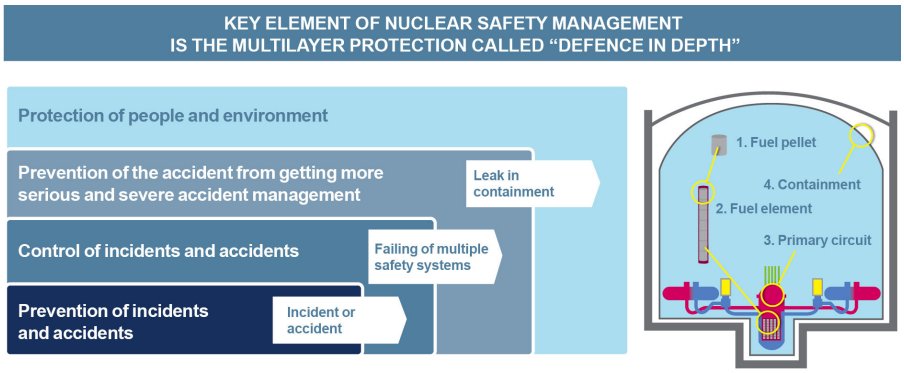
Continuous improvement of nuclear safety

We are developing the safety of our nuclear power plants in line with a principle of continuous improvement. In 2012, the Loviisa power plant's technical safety enhancements included, e.g., replacement of the Loviisa 1 unit's discharge valve, renewal of the pressurised spray system, and sluice gate modification of the seawater systems reducing the risk of flooding.

The goal of Fortum's R&D related to nuclear power is to ensure first-rate nuclear safety and nuclear waste management as well as good efficiency of fuel use. In addition to its own research programmes, Fortum participates in Finnish national research programmes and in the development of Swedish nuclear power research.

Independent nuclear safety assessment

It has become an increasingly common practice internationally for nuclear power companies to have their own independent nuclear safety assessment unit. At Fortum, this is the responsibility of the Nuclear Safety Oversight unit; its task is to review the impacts of different factors on safety. Fortum's own operating experiences and those of other nuclear power plants, as well as the results of peer and authority assessments are combined with plant- and company-specific nuclear safety and quality expertise.



Efficiency through combined heat and power production

Combined heat and power production (CHP) substantially increases the efficiency of primary energy use. Fortum has strong expertise in CHP.

CHP technology combines heat and power production and, in some cases, also production of cooling energy into one process. In terms of fuels, CHP is a flexible method of energy production; the benefits of its different products – district heat, steam, cooling, as well as new products, like bio-oil – enable sustainable energy production.

CHP improves the efficiency of primary energy use

With the scarcity of global natural resources, resource efficiency – both in production and use of energy – will be further emphasised. It is vital for the environment to utilise the available natural resources and energy sources as efficiently as possible. CHP has an important role in enhancing resource efficiency, as it substantially increases the efficiency of primary energy use. Almost 90% of the primary energy of fuel can be utilised in the CHP process.

Fortum has strong expertise in CHP

Fortum has extensive experience in CHP production in Finland, Sweden, Russia, Poland, the Baltic countries and Great Britain. We own 19 CHP plants in Europe and eight, mostly gas-fired, CHP plants in Russia. In 2012, CHP production accounted for 32% of our total power production and 79% of our total heat production.

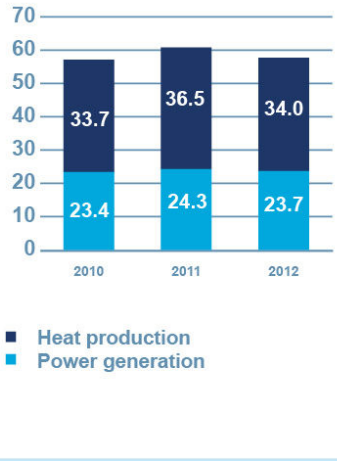
Fortum provides district heat in dozens of cities, including Stockholm (Sweden), Espoo (Finland), Wroclaw and Czestochowa (Poland), as well as Chelyabinsk, Tyumen and Tobolsk (Russia). A significant share of Fortum's district heat is produced in CHP plants. Fortum's CHP plants also produce heat, steam and cooling for industry.

Diverse use of fuels

Fortum utilises a diverse and flexible mix of energy sources in its CHP production, and aims at increasing the use of renewable fuels. In Europe, we use biomass and bioliquids, peat, waste-derived fuels, natural gas, coal and oil for fuel. In Russia, natural gas and coal are used for fuel. In 2012, Fortum used a total of 6.1 terawatt-hours (TWh) of biomass and other biofuels. The amount slightly decreased from 2011.

Fortum utilises a diverse and flexible mix of energy sources in its CHP production.

POWER AND HEAT GENERATION AT CHP PLANTS IN 2010–2012, TWh



Increasing the use of bioenergy was researched at many power plants during 2012. At the Värtan power plant in Sweden, testing the use of olive stones in the fuel mix continued. Altogether 14,400 tonnes were burned and their share in the fuel used was 4%. At the Czestochowa CHP plant in Poland, the share of biomass in fuel use increased from 22% to 32% during 2012. Fortum is also a leading user of municipal waste in the Nordic and Baltic countries. Utilising municipal waste is an essential part of sustainable waste management because it can reduce the amount of waste that would otherwise end up in landfills.

USE OF BIOMASS AND WASTE IN 2010–2012, TWh

Availability of CHP plants at a good level

High availability of a power plant is extremely important both from an economic and environmental point of view. High availability enables cost-efficient and safe use of a power plant and reliable energy delivery. Unscheduled shut-downs result in production losses, a strain of power plant components and energy losses. Consequently, the availability of power plants has a direct impact on the profitability of energy production.

Energy availability is the most common form of availability reported at power plants. Since the beginning of 2013 Fortum has set the availability of its European CHP plants as one sustainability performance indicator. The target level is 92%. In 2012, the availability figure was 87%.

New CHP capacity under construction

Fortum is continuously building new combined heat and power capacity. Our long-term investment programme emphasises replacing heat-only plants with new CHP plants. New CHP plants utilising biomass and waste are currently under construction in Klaipeda, Lithuania; Jelgava, Latvia; Brista, Sweden; and Järvenpää, Finland. Additionally, Fortum is building a pyrolysis technology-based plant producing bio-oil at the Joensuu CHP plant, in Finland.

Reducing CHP's environmental impacts

Due to its high energy efficiency, emissions from CHP production per produced energy unit are low compared to the separate production of electricity and heat.

CHP production is based on the combustion of fuels, and its most significant environmental impacts are related to flue-gas emissions, emissions to water, and wastes and by-products, like ash and desulphurisation products. The impacts of CHP production on the environment can be reduced with the use of various combustion and flue gas cleaning technologies and by shifting from fossil fuels to renewable fuels.

The overall efficiency of fuel use in CHP production is high compared to the separate production of electricity and heat, and therefore the emissions per produced energy unit are lower. Compared to separate production, CHP reduces the environmental impacts when the heat produced by the plant can be utilised in the surrounding area of the production plant. With CHP, also the thermal load into water systems in the form of waste heat is significantly reduced.

The main way to reduce the environmental impacts of CHP production is to shift from fossil fuels to renewable fuels. This reduces carbon dioxide, sulphur dioxide and particle emissions, and, depending on the combustion technique, there is also a reduction in nitrogen oxide. The environmental impacts of CHP plants are regulated by plant-specific environmental permits, which set limitations for emissions and obligations for monitoring and reporting emissions.

In 2012, Fortum continued preparations for the investments needed to fulfil the new emissions requirements set by the Industrial Emissions Directive (IED) from 2016 onwards in the EU countries. The IED tightens the emissions requirements for practically all Fortum's thermal power plants (CHP plants and condensing power plants). In Russia, efforts are made to reduce the environmental impacts of Fortum's CHP production by using better quality coal, which reduces sulphur dioxide and particle emissions per produced energy.

At Fortum's plants in Europe, by-products and waste are utilised and recycled as efficiently as possible. In 2012, the utilisation rate for ash was 51% and for gypsum 42%. In Russia, ash is stored in ash basins because there is no demand for ash usage.

The impacts of thermal power plants on water systems are caused by the thermal load of cooling water, the release of solids, and nitrogen, phosphorus and heavy metal emissions. In CHP production, the need for cooling water is minimal and thus the thermal load into water systems is low. Wastewater from power plants is cleaned mechanically, chemically or biologically before being released into water systems. The wastewater of some plants is piped into municipal wastewater networks. In recent years, Fortum's Russian plants have had repeated exceedances of wastewater permit conditions; to remedy the situation, improvements to the wastewater treatment process were implemented at the plants in 2012.The measures included, among others, the separation and reduction of water flows from the coal-fired plants through ash basins.

Energy efficiency through district heat

District heat and combined heat and power production have proved to be key solutions in achieving Europe's energy-efficiency targets.

Effective incentive mechanisms are needed to realise new investments and to achieve better energy efficiency. The goal should be competitive, local heat markets where district heat is one option among other heating methods, like electricity, heat pumps, and heat only boilers fuelled by wood, pellets or gas.

The majority of Eastern Europe's district heating systems are in need of refurbishment. In fact, there is a continuous political debate under way in many countries about the best heat market models and the pricing of district heat. Fortum has studied and compared the regulatory practices applied in different areas of Europe. Based on the assessment, it is clear that district heat companies should be offered effective and appropriate financial incentives to support competitive district heating and to secure heat distribution. In 2012, Fortum engaged in discussions about the development of district heat and CHP with numerous pan-European and local organisations.

The goal should be competitive, local heat markets where district heat is one option among other heating methods.

Securing reliable energy distribution

The reliable delivery of energy is a priority for Fortum. When developing the distribution network, we take into consideration customer needs and long-term, sustainable community planning.

Fortum owns and operates regional and local electricity networks and supplies electricity to about 1.6 million customers in Finland, Sweden and Norway. The total length of the company's electricity network is approximately 156,000 km, which is almost four times the circumference of the earth.

In January 2013, Fortum decided to assess the future alternatives, including divestment, of its electricity distribution business. The assessment is expected to be concluded during 2013.

In addition to the electricity network, Fortum owns and operates about 1,400 km of district heat network in Finland, 2,400 km in Sweden, 860 km in Poland, 300 km in the Baltic countries and 480 km in Russia. Additionally, in Stockholm Fortum owns the world's biggest district cooling network, which consists of 204 kilometres and has a capacity of 350 MW.

Smarter, more reliable electricity distribution

Electricity distribution reliability is becoming increasingly important for society and its abundant use of electricity. The needs of consumers and society alike demand smart electricity networks.

Fortum continuously invests in network updates and maintenance and in further improving security of supply. In 2012, the Distribution business area invested in Finland, Sweden and Norway a total of EUR 324 million. The majority of these investments targeted smart meters, underground cables, overhead lines and substations that function as junctions in electricity distribution. Network automation for the critical parts of the grid also has been increased.

Shortening and decreasing power outages

Through its electricity network investments, Fortum aims to make the network smarter and to decrease and shorten power outages. In 2012, the system average interruption duration indicator (SAIDI) per customer in Fortum's network was 103 minutes, and the customer average interruption duration indicator (CAIDI) was 61 minutes. Fortum has set a SAIDI target of <110 minutes for 2013.

Fortum is focusing more strongly on developing a weather-proof network. Underground cabling is becoming more common, and it is Fortum's preferred way of building the new network.

After the widespread damages caused by the winter storm in Finland in 2011, Fortum launched the VahvaVerkko project aiming to improve reliability of electricity distribution at an accelerated pace and, by the end of 2014, to add 90,000 more Fortum customers to the 200,000 who are already within the scope of weather-proof electricity distribution in Finland. The long-term goal is to cut the number of power outages in half and to double the number of customers currently within the scope of weather-proof distribution in Finland by 2020.

In Sweden, the SäkraNät network investment program continued. The initial target of the programme, launched in 2006 following the winter storm Gudrun, was to cut the outage times for Fortum's customers in the rural network areas by half in five years. This target was reached in 2010 but the programme is still continuing. During 2012, Fortum has put additional focus on the network in Hälsingland in central Sweden, the area that was most affected by the winter storms at the end of 2011.

Fortum's electricity network investments increase the reliability of electricity distribution and make the grid smarter.

Smart meters make the grid smarter

A smart grid gives electricity users better opportunities to influence their own energy consumption. In essence, this means flexible electricity transmission that adjusts to demand fluctuations. Fortum is currently installing smart electricity meters for its electricity network customers in Finland. The aim is to install new meters for approximately 620,000 customers by the end of 2013. By the end of 2012, 434,000 customers had received a new meter.

In Sweden, Fortum installed new meters for all its customers in 2009. The installation of new meters in Norway is planned to begin in 2014, where a total of 100,000 households and small businesses in Fortum's electricity network area will be connected to the new system by 2016.

Reducing the environmental impacts of energy distribution

Energy distribution is a key element of society's infrastructure, and the uninterrupted distribution of energy supports a functioning society.

Construction, use and maintenance of the energy distribution network impact the surrounding environment. Environmental impacts are reduced through careful operational planning and technology solutions and by practicing environmentally benign ways of operating.

Electricity distribution operations

When planning an electricity distribution network, the impacts on land use, the landscape and nature are taken into consideration. Through the planning, zoning and permit processes, the aim is to find the best solution for society for securing electricity distribution.

In the construction phase of a distribution network, environmental impacts are caused by e.g. the removal of trees, construction traffic, noise and dust. In the construction phase of a distribution network, waste and environmental aspects are taken into consideration already in the contractor selection process, and environmental impacts are reduced through careful operational planning and by practicing environmentally benign ways of operating.

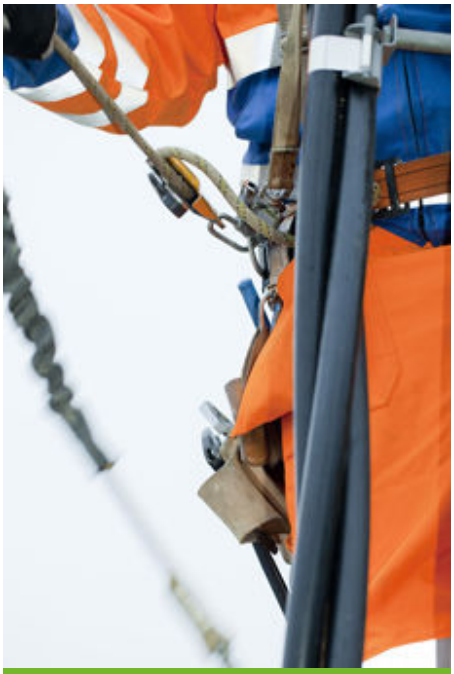
The distribution network is inspected, maintained and renewed regularly. Improvements in electricity distribution reliability are achieved through underground cabling, by moving power lines from the forests to the roadsides and public areas whenever possible, and by clearing power line corridors.

Underground cabling also protects biodiversity and reduces the impact on the landscape and birds. Bird collisions are reduced by mounting marker balls on overhead lines and landing perches on poles.

Efforts are made to recycle waste material that is created in the construction and renewal of distribution networks. In 2012, Fortum's distribution operations created 7,800 tonnes of waste, 86% of which was recycled and 14% was disposed of in landfills. Contaminated soil areas from transformer oil leaks are cleaned as quickly as possible. New transformers sit on oil trays to prevent oil from seeping into the environment in the event of an accident. In Norway, the aim is to use biogradeable oil in transformers located in groundwater areas.

District heat operations

The environmental impacts of district heat distribution occur in the network construction phase. They are temporary in nature and common to other construction projects in society.



The distribution network is inspected, maintained and renewed regularly.

With the exception of occasional water leaks, there are no environmental impacts arising from the use of district heat networks.

Uninterrupted heat distribution a priority

The uninterrupted supply of district heat is important, particularly in the cold conditions of the north. Fortum is continuously improving the reliability of its district heat networks by repairing faults found during scheduled maintenance and by investing in new network when needed.

As a result of interruptions caused by various reasons, district heat customers in the Nordic countries are without heat supply for only 1–2 hours per year on average. About half of the interruptions are caused by damage to the network and the work to repair it, and half are for some other reason, like network refurbishment work and connecting new customers to the district heat network. In general, new connections and district heat network branching can be implemented without interrupting heat distribution.

When doing repair work that will cause an interruption in distribution, the aim is to schedule the work outside the heating season.

Heat losses a challenge in Russia

In Russia, Fortum produces more than 90% of the district heat demand of the cities Tyumen, Chelyabinsk, Tobolsk and Ozerk. Fortum is aiming to build modern and energy-efficient heat distribution systems in the cities within its operating area. Refurbishment measures can reduce heat losses from district heat networks by 20–30%.

Fortum continued the modernisation of the Chelyabinsk district heat network infrastructure in 2012. The city's radial heat distribution network will be changed to one with an encircling pipeline. Development of a modern heat distribution network also continued in Tyumen.

Smart meters also for the heat network

Smart metering and control systems give also heat network customers the opportunity to influence their own heat consumption. With smart meters, data is received in real-time and heat consumption monitoring is more efficient.

All Fortum's district heat customers in Finland have been within the sphere of smart metering since the beginning of 2010. In Sweden and Latvia, the majority of customers are also within the sphere of smart metering. In Jelgava, Latvia, installation of automated smart meters started in 2012.

District heating is an energy-efficient way to heat population centres.

Purchasing and investments

Fortum is a significant purchaser of goods and services. Investments and fuels make up a big part of Fortum's purchases.

Of our purchases, EUR 1.6 billion (2011: 1.4), targeted investments. The biggest investments were made in Russia (EUR 568 million) and in Sweden (EUR 492 million).

Along with investments, fuels (1,057 million in 2012) make up a significant part of Fortum's purchases. We purchase fuels from international and local suppliers. Our fossil fuel purchases totalled about EUR 910 million, biomass and bioliquids about EUR 130 million and nuclear fuel about EUR 20 million.

The rest of our purchases (EUR 1.6 billion in 2012) consist of other operational goods and services. The figure includes electricity purchased by the Electricity Sales business area from the Nordic wholesale electricity market for the retail sales. Purchases of other goods and services are related to those used in operation and maintenance, and to other services, like IT, marketing and travel.

In 2012, Fortum had about 15,200 suppliers of goods and services. Our purchasing volume was EUR 4.2 billion (2011: 4.3). About half of the purchasing volume, excluding the purchases from the Nordic wholesale electricity market, were purchased from suppliers operating in Europe, mostly in Finland, Sweden and Poland. About one third of the total volume of purchases came from risk countries. These purchases mainly consisted of fuel purchases from risk countries and the Russia Division's local purchases in Russia.

Purchases [1] excluding investments in 2011-2012

EUR million	2012	2011
Nordic countries	1,612	1,903
Russia	769	692
Poland	161	148
Estonia	36	64
Other countries	99	44
Total	**2,677**	**2,851**

[1] Includes purchases of fuel, power and other materials and services.

Investments

Fortum's growth strategy is based on carbon dioxide-free hydro and nuclear power production and on energy-efficient combined heat and power production.

In 2012, Fortum invested EUR 1,574 million (2011: 1,482) in capital expenditures and shares. Investments, excluding acquisitions, were EUR 1,558 million (2011: 1,408), of which 482 million (2011: 278) targeted CO_2-free* production.

In hydropower, during the year Fortum continued preparations for the tender process for hydropower concessions in France. The company also continued refurbishments of its hydropower plants in Finland and Sweden.

In 2012, we continued investments in nuclear power through capacity upgrades at our co-owned plants at Forsmark and Oskarshamn in Sweden. Furthermore, the company has an approximately 25% stake in Teollisuuden Voima Oyj (TVO), which is currently building the Olkiluoto 3 nuclear power plant unit in Finland. Additionally, we are participating in TVO's project to build a fourth nuclear power plant unit at Olkiluoto. The project's bidding and engineering phase started in 2012.

**) includes: hydro, nuclear, wind, wave and solar power as well as electricity and heat production from bioenergy and waste-derived fuels*

New CHP plants to Finland and Sweden

In 2012, Fortum continued the construction of four combined heat and power (CHP) plants in Brista, Sweden; Järvenpää, Finland; Jelgava, Latvia; and Klaipeda, Lithuania.

In addition, Fortum decided to invest about EUR 20 million in a new bio-oil plant, which will be constructed at the Joensuu power plant. In December, Fortum Värme, Fortum's subsidiary (co-owned with the City of Stockholm) decided to invest in a new biomass-fired CHP plant in Stockholm. The value of the investment is approximately EUR 500 million and the plant is planned to be commissioned in 2016.

Investments in electricity distribution

In the Nordic countries, Distribution business area invested EUR 324 million, the majority of which was used to improve the electricity network. After the extensive damage caused by the winter storm in Finland, the Vahva Verkko project was launched to improve the reliability of electricity distribution at an accelerated pace. Additionally, the installation of smart meters for electricity network customers in Finland continued. In Sweden, the SäkraNät network investment program continued.

Investment programme in Russia continued

Fortum has an EUR 2.5 billion capacity investment programme in Russia. The programme consists of eight units, three of which have already been commissioned. The value of the remaining part of the investment programme, calculated at the exchange rates prevailing at the end of December 2012, is estimated to be approximately EUR 540 million as of January 2013.

The investment programme's biggest units (3 x 418 MW) are being constructed in Nyagan, Western Siberia. Fortum estimates that the units will be commissioned during 2013.

In summer 2012, Fortum announced that the last two 250-MW units of the investment programme will be built at Chelyabinsk GRES power plant in the Urals. The units are planned to be commissioned by the end of 2014. Fortum also plans to modernise and upgrade the existing equipment of the power plant.

Divesting non-strategic operations

In 2012, Fortum divested several of its holdings that are not central to the company's strategy. Among others, small hydropower plants in Finland and Sweden were sold to focus the company's resources on large-scale hydropower. Additionally, small heat business operations were divested in order to focus on larger-scale CHP production.

Electricity network operations in Estonia were also divested during the year (Fortum Elekter was sold to Imatran Seudun Sähkö), and the share in the Dalarna electricity retail company in Sweden was sold. In Russia, Fortum sold its heat network located in Surgut to the city's electricity and heat distribution company; Surgut is remotely located compared to Fortum's other operations and Fortum didn't have its own CHP production in Surgut.

Fortum's European investment plan until 2014

Fortum's near-term investments in additional capacity at the end of 2012

	Type	Electricity capacity MW	Heat capacity MW	Supply starts [1]
Power				
Hydro refurbishment	Hydropower	10		2013
Blaiken, Sweden	Wind power	30		2013
Heat				
Klaipeda, Lithuania	Waste (CHP)	20	60	Q1 2013
Järvenpää, Finland	Biofuel (CHP)	23	63	Q2 2013
Jelgava, Latvia	Biofuel (CHP)	23	45	Q3 2013
Brista, Sweden	Waste (CHP)	20	57	Q4 2013

1) Start of commercial operation, preceded by test runs, licensing, etc.

Fortum's Russian investment plan until 2014

Fortum's near-term investments in additional capacity at the end of 2012

	Type	Electricity capacity MW	Heat capacity MW [2]	Supply starts [1]
Russia				
Nyagan 1	Gas (CCGT)	418		Q1 2013
Nyagan 2	Gas (CCGT)	418		1H 2013
Nyagan 3	Gas (CCGT)	418		2H 2013
Chelyabinsk GRES	Gas (CCGT)	2 *248	2 *175	2H 2014

1) Start of capacity sales, preceded by test runs, licensing, etc.

2) New heat capacity already built in Chelyabinsk CHP-3 (56 MW) and Tyumen CHP-1 (256 MW). Total new heat capacity will be 662 MW.

Sustainable management of supply chain

Fortum expects its business partners to act responsibly and to comply with the Fortum Code of Conduct and Supplier Code of Conduct.

The Fortum Code of Conduct provides the basis for ethical business conduct, and Fortum's Supplier Code of Conduct sets the basic sustainability requirements for suppliers of services and goods. The Supplier Code of Conduct is based on the principles of the United Nations Global Compact and is divided into four sections: business practices, human rights, labour standards and the environment. The Supplier Code of Conduct is implemented in all Fortum's operating countries and it is included in all purchase agreements exceeding 50,000 euros.

Pre-selection and supplier audits to support assessment

We assess the level of operations of our business partners through pre-selection and supplier audits. Pre-selection includes a supplier questionnaire and verification of credit. The supplier questionnaire is used to identify general and sustainability-related practices, and it helps suppliers to understand Fortum's expectations for compliance with the Supplier Code of Conduct. The supplier questionnaire also helps to identify potential high-risk suppliers and thus the need for further actions.

The Supplier Code of Conduct is instructed to be used also in the Russia Division, and in 2013 the target is to implement Corporate instructions regarding supplier pre-selection. In 2012, the current practices related to supplier selection were reviewed.

We started sustainability-related supplier audits in 2012. A goal was set to audit three risk-country suppliers in each division, excluding the Russia Division. Fortum's classification of risk countries is based on the ILO's Decent Work Agenda, the UN Human Development Index, and Transparency International's Corruption Perceptions Index. The goal was reached in the Heat Division (a total of 5 audits) and in the Power Division (3 audits), but not in ESD (1 audit). In 2013, Fortum will continue the supplier audits, again with the goal in each division to audit additional three risk-country suppliers or suppliers otherwise classified as high-risk suppliers. The intention is to start the audits also in the Russia Division.

The audit assesses the supplier's compliance with the requirements in Fortum's Supplier Code of Conduct. If non-compliances are found, the supplier makes a plan for corrective actions and we monitor the implementation of it. In the supplier audits conducted in 2012, the most significant non-compliances were related to occupational safety and overtime hours.

Supplier audits conducted by Fortum in 2012

MARCH 2012
- Biomass audit in Russia
- Biomass audit in Russia

APRIL 2012
- Bioliquid audit in Brazil

JUNE 2012
- Materials audit in Russia
- Biomass audit in Poland
- Materials audit in Latvia

AUGUST 2012
- Bioliquid audit in Malaysia

OCTOBER 2012
- Materials audit in Hungary

NOVEMBER 2012
- Materials audit in Slovenia

DECEMBER 2012
- Materials audit in Estonia

Own personnel as auditors

Fortum's own personnel are responsible for the supplier audits. Auditors receive 1.5 days of internal training, during which they review the requirements of the Supplier Code of Conduct, the sub-areas to be audited, and the tools to be used to verify compliance with the requirements. After the training, supplier audits are started together with an experienced auditor. Our goal is to train auditors from different divisions and operating countries. In 2012, we trained a total of seven auditors from Finland and Sweden.

Responsible fuel purchasing

Fortum actively participates in the discussion about responsible fuel purchasing with companies in the sector and with stakeholders.

Fuels represent a significant purchasing category at Fortum, EUR 1,057 million in 2012. An increasing attention is being paid to the origin and sustainability of the fuels in purchasing.

Natural gas

In 2012, the natural gas used in Fortum's operations in Russia, the Baltic countries, Poland and Finland originated from Russia, where the gas is purchased from several suppliers. Gas used in Sweden's operations originated from Norway. In Great Britain, Fortum purchases natural gas from the national gas network and it originates mostly from the Britain and Norwegian gas fields in the North Sea.

Coal

In 2012, all of the coal used by Fortum in Finland and Sweden originated from Russia. Coal used in Polish power plants mainly originated from Poland, but there were also small amounts imported from Russia and the Czech Republic. Fortum's Russian power plants used coal from Russia and Kazakhstan.

In 2012, Fortum joined the Bettercoal initiative to promote the principles of sustainable development in coal mining. Bettercoal's Code of Conduct-related stakeholder event was held in Russia in November 2012.

Biomass and bioliquids

In 2012, the majority (77%) of the biomass used by Fortum consisted of wood pellets, wood chips and industrial wood residues that originated from Finland,

In 2012, the majority of the biomass used consisted of wood pellets, wood chips and industrial wood residues.

Sweden and Poland. Other types of biofuels were acquired from, for example, Malaysia, United States, and Sweden.

Fortum recognises the challenges related to the origin of biomass and other biofuels and develops measures to verify the traceability and sustainability of fuels. Fortum's goal is to create a system in 2013 to monitor the volume of certified wood-based biomass used as fuel.

In Sweden, Fortum's subsidiary Fortum Värme is a participant of the WWF Global Forest & Trade Network (GFTN) through GFTN Sweden. Additionally, Fortum Värme has been a member of the Roundtable of Sustainable Palm Oil (RSPO) since 2005 and became a member of the Forest Stewardship Council (FSC) in 2012.

Uranium

Loviisa's fuel assemblies are completely of Russian origin. The Dalur uranium mine received ISO 14001 environmental certification in September 2012. The supplier's goal is to get certification also for the other mines supplying uranium to Fortum. The zirconium material manufacturing plant and the plant responsible for manufacturing uranium oxide pellets and fuel assemblies also have ISO 14001 and OHSAS 18001 certification.

Fortum carries out regular reviews of the quality, environmental, and health and safety management systems of its nuclear fuel suppliers and the manufacturing of nuclear fuel assemblies. In 2012, Fortum's experts reviewed the fuel supplier's uranium mine in Russia. A similar visit is scheduled for summer 2013.

Origin of fuels used at Fortum in 2012 [1)]

Fuel	Country of origin
Biomass	Sweden, Finland, Poland
Coal	Russia, Poland, Kazakhstan, Czech Republic
Natural gas	Russia, UK, Norway
Uranium	Russia
Oil	Mainly Russia
Peat	Finland, Estonia

1) The biggest countries of origin based on the purchasing volumes in 2012

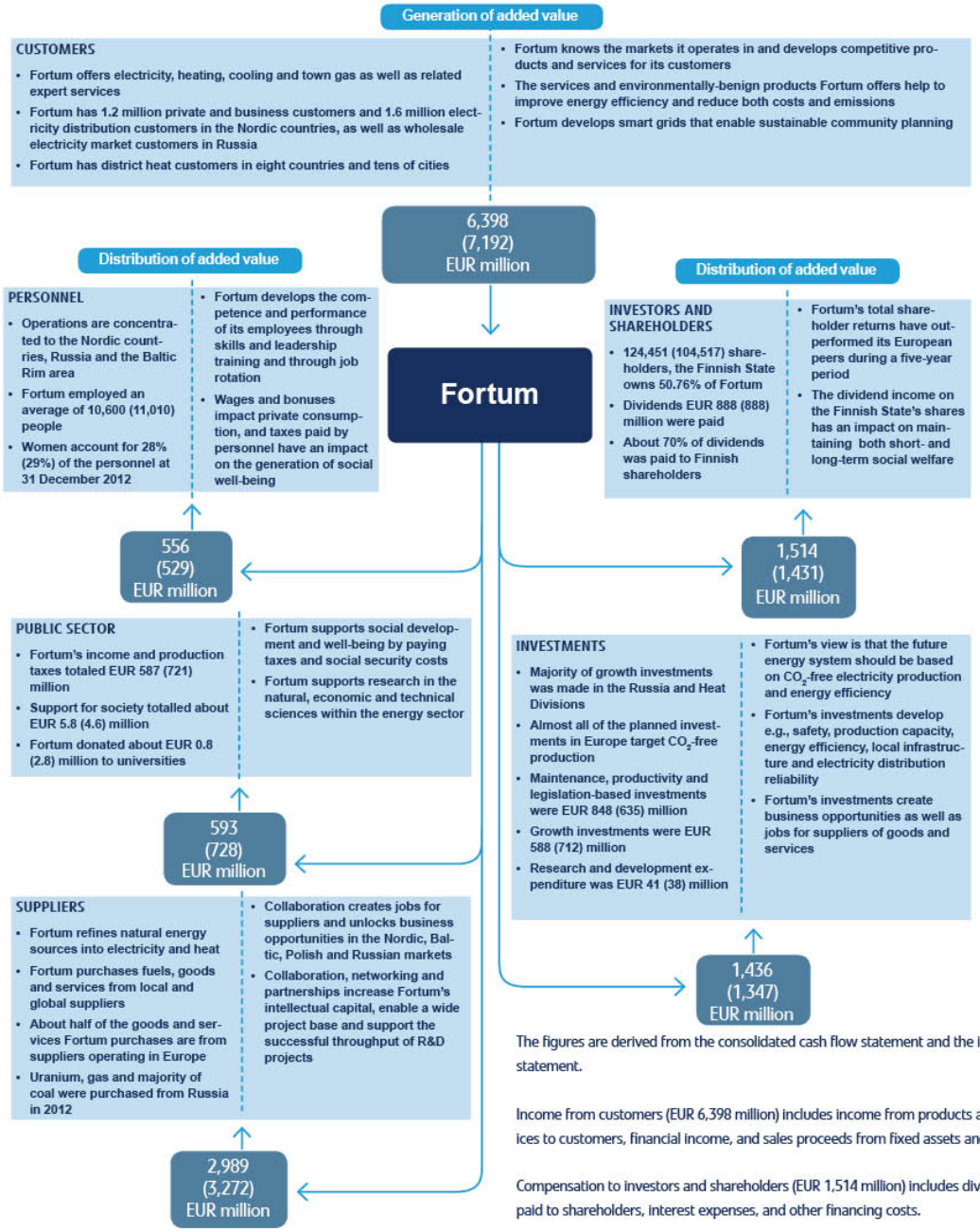
Fuel use by country in 2012, GWh

	Biomass and liquids	Waste fuel	Natural gas	Coal	Peat	Uranium	Other fuels
Russia			69,111	4,924			14
Finland	1,445	227	3,075	4,806	426	24,709	209
Sweden	2,941	2,052	106	1,458			349
Poland	529		154	2,965			5
Great Britain			3,204				83
Other countries	1,174		395		322		17

Generating value for stakeholders

FORTUM'S ECONOMIC IMPACTS

Fortum's operations have both direct and indirect economic impacts. The impacts of Fortum's operations on the most important stakeholders in 2012 (the corresponding figure for 2011 is in parentheses):



The figures are derived from the consolidated cash flow statement and the income statement.

Income from customers (EUR 6,398 million) includes income from products and services to customers, financial income, and sales proceeds from fixed assets and shares.

Compensation to investors and shareholders (EUR 1,514 million) includes dividends paid to shareholders, interest expenses, and other financing costs.

Fortum and taxation

Fortum's policy is to pay taxes on the earnings, production, employment and property of each of the Group's businesses in accordance with each country's local regulations.

Fortum operates in accordance with its shareholders' interests and takes into consideration taxation aspects:

- by supporting Fortum's overall strategy
- by ensuring that the management of tax issues is in line with prevailing laws and regulations
- by paying particular attention to communicating the required information transparently, accurately and at the correct time to tax authorities and investors

Fortum's goal is to handle tax issues in the most appropriate way rather than simply to minimise taxation. Taxation aspects are taken into account in decision making, and they can have an impact on, for example, the choice of a country for business operations. It is Fortum's policy to concentrate its corporate functions in EU countries and to avoid tax havens. Fortum has participations in two tax haven companies: for insurance-technical reasons, in the fully-owned captive insurance company in Guernsey; and in the Cayman Islands, a stake in the Nature Elements Asia Renewable Energy and Cleantech Fund L.P., which makes research and development investments. Fortum's earnings from both companies are subject to normal taxation in Finland.

In 2012, Fortum launched two tax appeals. In Sweden, a tax appeal was submitted regarding the right to deduct interest in computing taxable income, and in Belgium regarding taxation of a financing company. Decisions on the appeals are expected during 2015. More information is available in Financials 2012.

In 2012, Fortum's total tax rate was 29.0% (EUR 562 million). The share attributable to income taxes payable for Fortum's financial period was EUR 203 million.

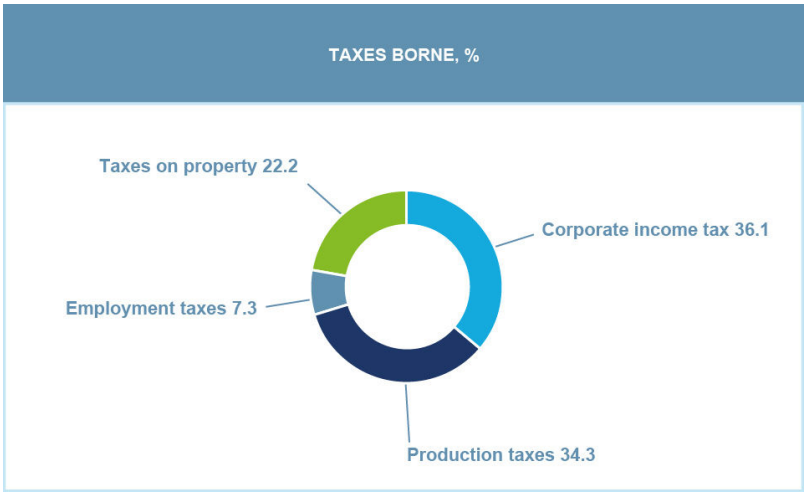
Taxes borne in 2011-2012

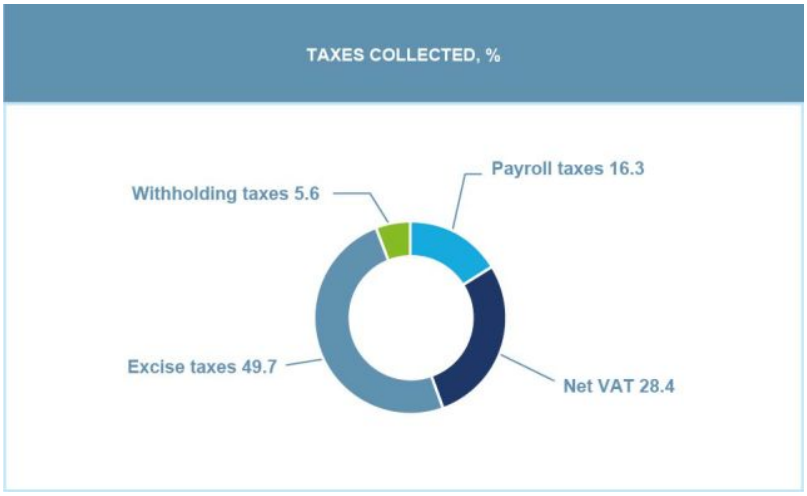
	Finland		Sweden		Russia		Poland		Estonia		Norway		Other countries		Total	
EUR million	**2012**	**2011**	**2012**	**2011**	**2012**	**2011**	**2012**	**2011**	**2012**	**2011**	**2012**	**2011**	**2012**	**2011**	**2012**	**2011**
Corporate income tax[1)]	97	105	93	154	1	-1	2	1	1	0	0	0	9	26	203	285
Production taxes	49	68	140	142	2	2	1	1	0	0	0	0	1	0	193	213
Employment taxes	4	3	28	27	4	3	1	1	1	1	2	2	1	2	41	39
Taxes on property	12	12	86	87	19	14	5	5	0	0	1	1	2	2	125	121
	162	**188**	**347**	**410**	**26**	**18**	**9**	**8**	**2**	**1**	**3**	**3**	**13**	**30**	**562**	**658**

[1)] Corporate income tax includes current taxes booked as cost for the year and adjustments to the previous year's current taxes. Excluding custom duties, insurance premium tax payments, VAT leakage, subsidies and pension related payments in social security fees.

Taxes collected in 2011-2012

	Finland		Sweden		Russia		Poland		Estonia		Norway		Other countries		Total	
EUR million	**2012**	**2011**	**2012**	**2011**	**2012**	**2011**	**2012**	**2011**	**2012**	**2011**	**2012**	**2011**	**2012**	**2011**	**2012**	**2011**
Payroll taxes	54	54	41	39	10	10	4	3	1	1	3	2	4	4	117	113
Sales VAT	543	523	767	884	324	222	60	52	14	24	50	59	46	40	1,804	1,804
VAT on purchases	488	594	608	769	328	277	51	47	18	19	38	40	69	40	1,600	1,786
Excise taxes	156	157	166	178	0	0	0	0	0	0	33	33	2	0	357	368
Withholding taxes	39	40	0	0	0	0	1	1	0	0	0	0	0	0	40	41
	1,280	**1,368**	**1,582**	**1,870**	**662**	**509**	**116**	**103**	**33**	**44**	**124**	**134**	**121**	**84**	**3,918**	**4,112**





Adding value for our stakeholders

Fortum interacts with millions of people through its businesses.

We create value for our stakeholders

Fortum interacts with numerous local communities and millions of people through its businesses. In 2012, an average of 10,600 (2011: 11,010) people worked at Fortum. We are a significant employer in our areas of operation, and we take care of the well-being of our personnel. We offer our customers climate-benign products and services that meet their needs, and we strive to ensure the uninterrupted supply of electricity and heat. We engage in active collaboration with our partners and society's decision-makers to build a sustainable energy future.

Customers' expectations	Fortum's actions
Customer relationship and products • Safe and reliable electricity company, care-free relationship, good service • Fair pricing; straight-forward, accurate billing • Support for efficient and smart energy use, environmentally benign products	**Our products and customer relationship management** • We offer the right kinds of products to meet customer needs, and we strive to maintain a safe, easy and long-term relationship with our customers • We develop customer service know-how, and we serve our customers also via the web and mobile services • We offer our customers guarantee of origin-labelled electricity and climate benign heat products, and we develop new products and services for customer needs • In product development, we invite our customers to participate in customer advisory councils and development projects • We offer customers information about their own energy consumption and provide energy-conservation consultation and energy-efficiency services
Energy distribution and production • Security of energy supply • Efficient energy production • Responsible operations in society	**Energy production and distribution, and our activities in society** • We invest in improving the distribution network and communicate effectively about outages • We promote the use of environmentally benign forms of energy and efficient energy production • We take environmental, social and economical aspects into equal consideration in our operations

Services and goods suppliers' expectations	Fortum's actions
Fortum's business operations • Good financial position and ability to take care of the agreed obligations • Responsible operations • Good reputation (e.g. Fortum as a good customer reference)	**Fortum's business and purchasing principles** • We comply with the Fortum Code of Conduct and the agreed regulations and ways of operating in purchasing • We use a professional purchasing process that is consistent with good purchasing principles (including public procurements) • We conduct supplier audits and pre-selection in a systematic manner • We aim to achieve our financial targets and we monitor the development of our reputation
Business relations with suppliers • Fair and equal treatment of suppliers • Long-term business relations benefitting both parties • Development of suppliers' business and products/ services	**Supplier relationship management** • We are implementing a more systematic supplier relationship management model with our most important suppliers • We have adopted a category management-based business model in our most significant purchasing categories • We have joint development projects with some suppliers • We create new business opportunities for our suppliers • We continuously develop our own know-how

Personnel's expectations	Fortum's actions
Employment relationship • Job security • Equal treatment • Performance-based wages	**Employment relationship** • At the end of 2012, 95.4% of our personnel were permanent employees • We respect the culture and values of individuals and groups and we support equality • We offer performance-based wages and commit to uniform guidelines and tools in remuneration
Working environment • Work well-being and safe working conditions • Opportunities for professional development • Recognition of work contribution • Open interaction	**Working environment** • We promote the overall well-being of our employees with safe working conditions, a motivating atmosphere and projects that improve well-being • We aim for continuous development of personnel competence, we promote career advancement and opportunities for job rotation • We offer our personnel the opportunity to participate in operational planning and to influence the content of their own work • We develop the quality of leadership and management skills • We support employees in change situations • We comply with the Fortum Code of Conduct

Investors' and shareholders' expectations	Fortum's actions
• High-yield share • Risk management • Responsible operations	• We aim to achieve our financial targets • We have paid dividends throughout our entire listed history • According to our dividend policy, we aim to pay a dividend which corresponds to an average payout ratio of 50 to 60% • We compensate investors as agreed • We manage our risks and operate in line with our Code of Conduct

Authorities' and decision makers' expectations	Fortum's actions
• Compliance with laws and regulations • Paying taxes • Dialogue • Transparency and reliable reporting	• We comply with laws and regulations • We participate in the society's activities by paying taxes and dividends (the Finnish State owns 50.76% of Fortum's shares) • We engage in an active dialogue with authorities and decision makers about key issues in the energy sector • We report and communicate actively and openly, and our reports are assured by a third party

Energy-sector organisations' expectations	Fortum's actions
• Advocating for shared interests • Dialogue	• We advocate on behalf of shared interests • We publish position papers and our views on energy-sector development

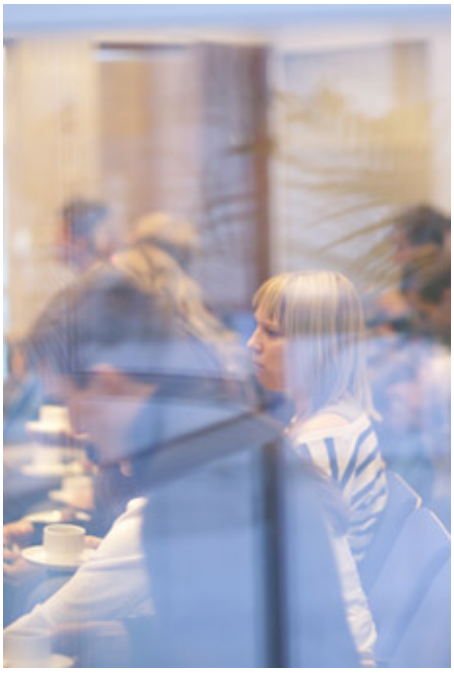
General public's expectations	Fortum's actions
• Activities for the good of society • Fair pricing • Transparency • Reasonable financial returns and fairness in management remuneration	• We participate in society's activities by paying taxes and by developing the energy sector to meet society's needs • We communicate actively and openly • We support non-profit activities

Media's expectations	Fortum's actions
• Relevant, reliable and transparent communication	• We communicate actively and openly • We are easily accessible through the media phone line

Non-governmental organisations' expectations	Fortum's actions
• Operational responsibility • Environmentally benign investments • Promoting renewable/efficient energy production • Collaboration projects, open interaction and dialogue • Reliable reporting	• We communicate actively and openly • We engage in collaboration with Finnish and Swedish nature conservation associations regarding our environmentally benign electricity products • We collaborate with organisations in the responsible procurement of wood fuel material, in the Green Office certification of our head office, and in our numerous sponsorship projects • We monitor NGO activities and engage in dialogue • Our reports are assured by a third party

Local communities' expectations	Fortum's actions
• Plant safety • Elimination of noise and emissions • Safeguarding biodiversity and recreational use of nature • Support and donations to local communities • Dialogue and collaboration	• We manage our risks and operate in line with our Code of Conduct • We improve local infrastructure and the safety of our plants through investments • We are a good employer and neighbour • We communicate actively and openly, we meet with local residents and customers • We support local community activities

Stakeholder engagement



Collaboration with different stakeholder groups helps Fortum to assess and meet the expectations that important stakeholder groups have towards the company.

We engage in an active dialogue with the different stakeholders associated with our operations, and we strive to find a balance between their varying expectations. We conduct annual stakeholder surveys, and we monitor and assess the public dialogue in the countries where we operate. The survey results are utilised in business planning and development. Feedback from customers drives the development of our products and services. Additionally, our activities in national and international organisations help to deepen our understanding of global sustainability issues and their relation to our business.

We report openly about the dialogue and impacts of our operations. The most important target groups in terms of our annual reporting are shareholders, investors, analysts, decision makers and the media. We also take into consideration other important stakeholder groups, like employees, customers, services and goods suppliers, and non-governmental organisations.

We serve customers

Fortum develops products and services that meet the needs of its customers, ensures the reliable delivery of electricity and heat, and builds future energy solutions.

Fortum has 1.2 million electricity customers and 1.6 million electricity distribution customers in Finland, Sweden and Norway. The company has district heat customers in dozens of cities in eight countries. In 2012, we introduced numerous new consumer products and improved communication in power outage situations. We also continued investments to improve reliability of the distribution network.

Customer satisfaction is of utmost importance to Fortum. We regularly assess customer satisfaction and feedback so that we can better meet customers' expectations. We involve customers also in the development of existing and new products and services.

Customer satisfaction is of utmost importance to Fortum.

Climate-benign products for customers

Fortum sells electricity to private and business customers and heat to companies, municipalities and private customers. An increasing number of customers require a guarantee of origin for the electricity they buy, i.e. information about the way the electricity is produced.

In 2012, all electricity sold to private customers in Finland was CO_2-free, produced by hydropower and wind power. The origin of hydropower and wind power was guaranteed with European Guarantees of Origin or with the EKOenergy label of the Finnish Association for Nature Conservation.

In 2012, all electricity in Sweden was sold with an environmental value. Customers can choose either the Fortum Enkel product, which is electricity produced from a mix of wind power and hydropower, or they can choose either wind or hydropower as their energy source. The Fortum Enkel product has the Swedish Society for Nature Conservation's Good Environmental Choice label.

Electricity sold as a 100% wind power or hydropower product is based on the European Guarantee of Origin certificate.

In Sweden, customers who don't choose eco-labelled electricity receive electricity produced with nuclear power, which is carbon dioxide-free in the production phase. Also customers in Norway are offered CO_2-free electricity produced 100% with renewable energy.

Energy-efficiency products and services

In 2012, Fortum introduced new energy-efficiency products and services that give consumers a lot of information about their electricity consumption and enable consumers to automatically or actively control their electricity consumption and to produce some electricity for their own use or sell some of it to Fortum. The Fortum Kotinäyttö (Home Display) for consumers shows the household's electricity consumption in real-time. The data makes it easy to identify the most significant opportunities to save energy and thus facilitates the timing and planning of energy conservation measures.

The Fortum Fiksu (Fortum Smart) product, targetting customers who have electrically heated water boilers, automatically shifts the heating of the water boiler to the hours when electricity costs are lowest. Shifting the heating to the hours when electricity prices are cheapest evens out consumption peaks and help customers to reduce their electricity bill. An electricity agreement with hourly-based pricing makes it possible to take advantage of the lowest hourly rates.

With the Fortum Solar Kit connected to the grid, customers can replace some of their purchased electricity with their own electricity production. By signing a special agreement with Fortum, customers can sell their own surplus electricity that they have produced to Fortum at a wholesale electricity price.

Fortum actively promotes the adoption of electric vehicles and develops solutions that enable smart charging of electric vehicle batteries based on the electricity market situation and price.

Fortum actively monitors the development of the **Nordic electricity retail market** in its product development.

Nordic electricity retail market

The continuous development of the Nordic electricity retail market improves competition and expands the service selection. The role of consumers also becomes more active. The adoption of smart electricity meters and new energy-efficient services and the development of distributed small-scale production, among other things, help consumers to better manage their own energy consumption and thus also their electricity bill and carbon footprint.

In 2012, noteworthy initiatives regarding the exchange of information were made in the EU and the Nordic countries. They aim to improve the efficiency of

business processes and the handling of bigger volumes of meter data and to harmonise the billing of electric energy and electricity transmission fees.

Climate-benign heat products

A climate-neutral heat product is available for district heating customers in Finland and Sweden. This product allows customers to offset the greenhouse gases of district heating by purchasing international emission reduction units.

In 2012, Fortum introduced new products for district heating customers in Sweden and Finland. Customers and co-ops can now choose between different products based on their consumption profile and preferences, rather than having just one alternative. The district heat product offering is actively developed, and a services development project with three pilot customers was launched in October 2012 in Finland.

Services for customers

In 2012, Fortum developed its customer channels and invested in distribution network improvements.

Fortum introduced a text message service to provide its electricity distribution customers in the Nordic countries with information about power outages. Widespread distribution disruptions are also communicated through social media channels and on Fortum's website. The customer service capacity also has been increased to serve customers in widespread power outage situations.

Fortum increased its investments in weather-proof network construction in Finland with the VahvaVerkko project launched in February 2012. The goal is to have 90,000 more customers within the sphere of the weather-proof network by the end of 2014. A long-term goal is to cut the number of power outages by half. Additionally, the aim is to double the number of customers within the sphere of the weather-proof network by 2020.

In Sweden, the SäkraNät project improving electricity distribution reliability continued with a focus on grid areas in central Sweden.

Services for heat customers

Fortum is improving the reliability of its district heating network by repairing malfunctions detected in conjunction with regular maintenance and by investing in new networks when needed. Smart metering and control systems give heating network customers the opportunity to influence their own heat consumption. All of Fortum's district heating customers in Finland and the majority of Fortum's district

heating customers in Sweden and Latvia are within the sphere of smart metering. In Jelgava, Latvia, installation of automated smart meters started in 2012.

In 2012, Fortum opened up the possibility for customers in Stockholm, Sweden, to sell the surplus heat they produce to Fortum's heating network at market price. The first agreements were signed with customers in June, and many customers have signed letters of intent.

Fortum is actively developing heating services also in Russia by modernising the heating networks in Chelyabinsk and Tyumen. Launched in 2011, the modernisation of Chelyabinsk district heating networks continued in 2012. In the project, the city's heat distribution network is being changed form radial design to an encircling desing to allow the load to be distributed evenly.

The infrastructure development programme under way in Tyumen will improve the reliability of heat distribution and reduce the amount of heat energy lost by one third in the main distribution network.

Demand-side management

Fortum increases its customers' electricity demand flexibility by offering products that are based on different pricing models and by promoting smart electricity meters.

In market-based, hourly-priced electricity retail products, the price for electricity is based on the hourly spot price on the Nord Pool Spot electricity exchange. Along with electricity products based on hourly pricing, Fortum also sells traditionally priced electricity; its price is based on the price development of electricity futures on the Nasdaq OMX Commodities. Customers can choose an electricity agreement with prices that are updated based on changes in the market price, for example, every month, every three months, or every two years.

Alternatives for electricity distribution pricing

Currently, pricing in electricity distribution for the majority of business customers is based on the electrical power used. Household electricity distribution customers, in turn, have the option to choose a two-time metering and tariff, making the electricity price lower at night. The system is particularly suitable for distribution customers with electrically heated water boilers. Hourly-based monitoring of consumption will offer opportunities also for the development of transmission tariffs and load services. Load management services are also available for large-volume customers.

Smart metering

Distribution's sizable smart meter project is a significant step towards promoting demand flexibility. Replacing old electricity meters with hourly-based meters improves load management and increases opportunities for energy savings. In Finland, customers can monitor their electricity consumption online through the VALPAS service virtually in real-time; they can also compare their own consumption against their comparison group's electricity usage and see the impact that various measures have on their own consumption. This way, customers get a better picture of their electricity usage and can also have an impact on it.

Legislation on hourly-based electricity metering in Finland will take effect on 1 January 2014. In Finland, about 620,000 of Fortum's distribution customers will have received new meters before the end of 2013. By the end of 2012, about 434,000 customers had received new meters. In Sweden, the installation of smart meters for customers was completed earlier. In Norway, the planning of the smart meter system is continuing, and the preliminary legislation on it will take effect on 1 January 2019.

Aiming for engaged and satisfied employees

The aim of Fortum's personnel strategy is to promote the commitment and well-being of employees in line with the company's business goals.

In 2012, the focus was on increasing personnel engagement, continuous development of competence, advancing overall well-being at work, and clarifying Fortum-wide HR processes. At the end of 2012, Fortum had 10,371 employees, of which the majority, 4,252, worked in Russia.

Employee survey: Stronger engagement

In addition to employee satisfaction, the Fortum Sound employee survey also measured employee commitment to the business, to customers and to shared goals. The sub-areas of the survey included e.g. leadership, well-being, operational excellence, customer orientation and sustainability. The previous survey was conducted in 2009.

The 2012 survey was completed by 7,528 Fortum employees, a response rate of 79% (2009: 81%). In light of the survey's reference material, Fortum's strengths were overall well-being at work, teamwork, and the possibility to influence the content of one's own work. Employee engagement rose to 65% (Fortum Sound

2009: 60%). The 2010 launch of the Leading Performance & Growth (LPG) initiative to develop the corporate culture contributed to the positive development. Fortum's development targets identified on the basis of the survey are improving internal collaboration and strengthening customer orientation.

Overall well-being at work is good

91% of the employees responding to the survey feel they have the work capacity to perform their duties effectively.

The majority of the respondents feel there is a good balance between their work and personal life, and 90% of Fortum employees enjoy being part of their own team. Additionally, employees feel that safe ways of working have been well embraced at Fortum.

Key behaviours as part of everyday activities

Fortum's key behaviours have been defined as challenge, co-create, coach and celebrate. According to the Sensor survey that measures the realisation of the LPG initiative, Fortum's key behaviours have become an increasingly visible part of everyday activities. Compared to 2011, the results for all key behaviours have improved.

In 2012, the connection between the LPG initiative and the strategy and business planning was strengthened. For example, a Team Assignment tool is used in the Heat Scandinavia organisation to clarify goals, roles and responsibilities. The tool helps to link the goals of the teams and the individuals to the business goals.

Leadership Impact is a leadership development programme that is enhancing productivity and developing the leadership skills of managers. In 2012, over 500 managers from different countries participated in the programme.

Fortum's revised Code of Conduct familiar to the entire personnel

Fortum's Code of Conduct defines the general principles on how we treat others, how we engage in business and how we safeguard our corporate assets. The Code of Conduct was adopted in 2007 and revised in spring 2012. By the end of February 2013, 99% of the personnel had completed the training for the updated Code of Conduct. The training will continue in 2013.

Positive employer image

In a survey of students and young professionals, conducted by the employer branding company Universum, in 2012 Fortum ranked among the top ten ideal employers in Finland. Finnish technology engineering students ranked Fortum as the 5th most interesting company in Finland (2011: 8th) and young

At Fortum, safe ways of working have been well embraced.

professionals in the technology field as the 2nd most interesting company. In the Swedish Universum student survey, the company ranked 30th (2011: 26th) among master's-level technology students.

According to the Fortum Sound employee survey, employees consider Fortum to be a good employer and would recommend it as a workplace to their friends and family.

Group-level HR processes

Fortum's six Group-level HR processes are:

- Manage Strategic HR Planning
- Recruit and Select Employees
- Develop Employees
- Reward and Retain Employees
- Re-deploy and Retire Employees
- Manage Employee Information

Defining and implementing the common processes will continue in 2013 - 2014, when the focus also will be on developing processes based on comparable metrics in order to monitor operational efficiency in detail and to develop HR services in a more systematic way.

In 2012, all of Fortum's operating countries used common processes in performance development discussions, talent management, and recruiting.

Increasing employee engagement and development

One of the most important development projects in 2012 was the implementation of the Career Development Framework model to improve employee engagement and development.

The aim of the Career Development Framework is to:

- Align human resources management with Fortum's strategy
- Ensure future leadership through effective talent management
- Develop clear role and competence descriptions to clarify expectations for employees
- Promote career development with consistent employee development
- Harmonise rewarding practices

The practical rollout of the model started in spring 2012. The first target group consisted of approximately 1,000 employees from the Nordic countries, Poland

and the Baltic countries. Development and implementation of the model will continue in 2013.

Group-level criteria for talent management

The Group-wide Talent Management model was renewed in 2012. The key criteria for competence were defined as operating in line with the company's values, achieving set goals, and the sub-areas of leadership competence. The goal is to ensure sufficient expertise and leadership potential to realise the strategy, achieve profitability and growth.

Employee mobility

In 2012, Fortum's Employee Mobility concept was created to clarify procedures in different job rotation situations nationally and internationally. In addition, the concept defines various mobility models and the related conditions of employment. The aim is to have models for monitoring and developing internal mobility at Fortum.

Combining personal and strategic goals

Fortum strives to put the company's strategic goals into practice at the organisation, team and employee level. The key implementation tool is the Performance Development Process (PDP), which is used to ensure the realisation of business goals also at the individual level.

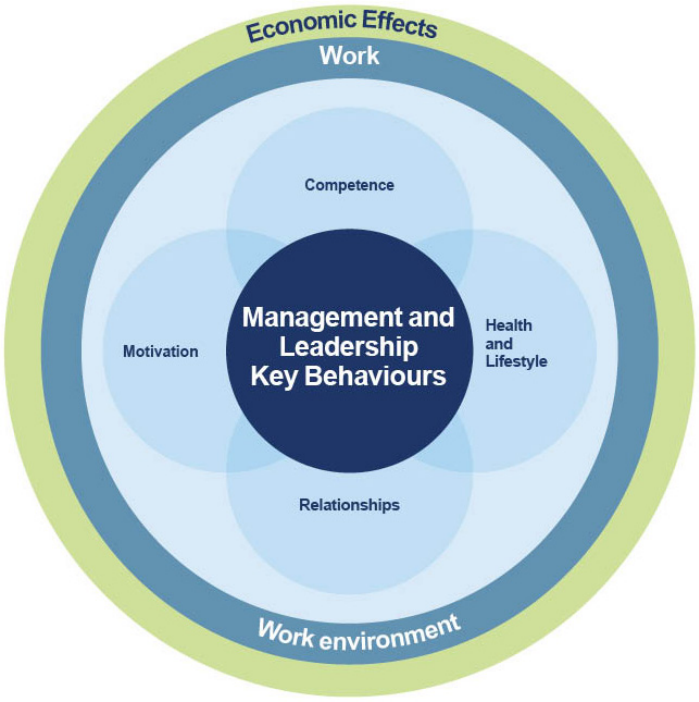
The PDP process is applicable to all permanent employees, but in 2012 the electronic tool covered only 64% of the personnel. Fortum is able to follow the completion of PDP process only for those employees who have the possibility to use the electronic tool. Of these, 96% participated in the PDP process.

ForCARE – A model for overall well-being at work

ForCARE is Fortum's model for overall well-being at work, which promotes health and work safety, employee work capacity and work community functionality. The overall situation regarding well-being at work was mapped in 2012.

The ForCARE model emphasises the personal responsibility that each individual in the work community has for their own well-being and competence and for working together to develop the well-being of the work community. A new index measuring overall well-being was included in the Fortum Sound employee survey in 2012. Among other things, it measured opinions related to the openness of the dialogue in the work community, personal accountability, and the level of challenge of work tasks. The result of the index was 3.88 (on a scale of 1-5).

In addition to the overall work well-being index, work well-being is also monitored with other Group-level key indicators, such as the ratio between actual retirement age and the statutory start of the retirement pension. In 2012, 137 people retired from Fortum (2011: 151). The figure includes age-related, early and disability retirement. The average retirement age was 61. In 2012, Fortum had 769 (2011: 773) employees who were over the age of 60.



The subareas of the ForCARE model for overall well-being at work

Other successful well-being projects

Fortum's ForCARE well-being programme was continued with country-specific projects in which shared operating models are tailored to align with each country's legislation. Additionally, a shared model is being developed and will be used to determine what impacts the psycho-social factors in the work environment and work community have on well-being at work.

The goal in developing well-being at work is to support the work communities' effective interaction in change situations and to offer regular opportunities for open dialogue between management and employees. Supervisors and subordinates assess the realisation of well-being also in the Performance Development Process (PDP).

Improving occupational safety

We want to be a company where the employees and the contractors and service providers that work for us can come to work safely and leave for home at the end of the work day unharmed. We believe that all work injuries are preventable when the competence and the right attitude prevails, when potential risks are addressed and when measures are taken to protect against them.

The systematic work to improve occupational safety continued in 2012. The lost workday injury frequency (LWIF) per million work hours for Fortum's own personnel was 1.5 (2011: 1.6). The LWIF for contractors was 3.8 (2011: 3.2). In 2012, one fatal accident involving a contractor's employee occurred at the Nyagan construction site in Russia. Additionally, there were more injuries to contractors in the European operations than in the previous year.

The situation in plant safety improved compared to 2011. There were 20 incidents of fires and chemical leaks of over 100 litres in 2012 (2011: 44). There were three INES 1 (International Nuclear Event Scale) events at the Loviisa plant (2011: 0). They didn't cause any injuries to people or damage to the plant or the environment.

During the year Fortum defined new safety ground rules, renewed the safety video and safety handbook, and updated the occupational safety training programme "Stop and think". In addition to lowering the injury frequency, a Group-wide target, starting 1.1.2013, was also defined for environmental and safety incidents (fires, leaks, explosions, dam and nuclear safety incidents, and environmental non-compliances).

Contractor safety

The management of contractor occupational safety – from the selection of contractors to the final assessment of the work – was developed during the year. A common management model will be adopted throughout Fortum in 2013. Contactor safety was also taken more widely into the target setting and the management incentive system.

The Electricity Solutions and Distribution Division took into use a new online training programme aimed at contractors and a new practice for assessing contractors. As a new practice, regular safety meetings were taken into use with the companies identified as having had the biggest shortcomings in occupational safety. The measures defined after the fatal injury of a contractor in Sweden in 2011, such as better guidelines for routine electrical work, were implemented in Norway and Finland, in addition to Sweden.

The Power and Heat Divisions developed work permit practices, improved the occupational safety management of contractors performing annual maintenance, and improved the work safety of those working in investment projects.

The fatal injury of a contractor in spring 2012 in the Russia Division cemented the need for improved implementation of Fortum's occupational safety practices for the contractors working in projects.

Goal-oriented safety improvement

Implementation of the minimum requirements defined in 2011 for environmental, health and safety (EHS) management progressed at the power plants with current situation analyses and development measures. The minimum requirements will be fully implemented in 2013. A new reporting and management system for EHS non-compliances was developed and tested in 2012, and its implementation will be decided on in 2013.

The Power Division continued implementation of the "365 safe days" programme by completing the safety refresher training and by expanding the training to cover also permanent contractors at the biggest power plants. Another focus area was electrical safety; an e-learning package was created to support it. The same training was used also in other divisions.

In the Fortum Heat Division, it was agreed to expand the use of the proactive safety index, developed in Sweden, to other countries in 2013. A new safety model covering the entire investment project was tested in CHP projects, and it was agreed that it would be used in CHP projects in 2013.

In Poland, the integration of the Zabrze and the Bytom plants with Fortum continued according to plan. The work focused on occupational safety and on plant safety investments for handling coal dust and plant start-ups. The results were excellent: there were no fires or leaks at the plants and only one injury resulting in an absence.

The ISO 14001 environmental certification and OHSAS 18001 occupational health and safety certification processes advanced as planned in Poland; the certification audits are scheduled for the first half of 2013.

The most important measures in the Baltic operations were the "Stop and think" safety training and the active work of the EHS team. In Sweden, the efforts to reduce fires and chemical leaks were successful. Improvements were made especially in the safe handling of bio-oil.

The Russia Division continued implementing the EHS plan to improve work and plant safety. OHSAS 18001 certification progressed and Fortum passed the certification audit in December 2012. Elimination of the asbestos risk in Russia is also part of the EHS programme goals. During the year, about 320 tonnes of asbestos were removed and procedures for the handling and removal of asbestos were improved.

Suppliers

Please see page 95, Purchasing and investments.

Authorities and organisations in the sector

Collaboration with authorities is important in the energy sector. Fortum engages in an active dialogue on key issues in the energy sector and annually publishes several comments and position papers on relevant topics.

At the EU level and in our countries of operation, we are involved in 78 sector associations and organisations. We actively present our views on energy policy issues and offer our energy sector expertise to decision makers and organisations in the sector.

Public affairs themes in 2012

In 2012, Fortum's public affairs activities in Finland focused on items in the government programme. In Sweden, we were active partners in an investigation focusing on the possibilities of opening access to third parties in the district heat network. In Poland, Fortum contributed to advancing energy legislation renewal. Fortum also signed the Declaration of the Polish Business Circles for Sustainable Development. It confirms the commitment of Polish companies to the strategic goals outlined in the 2050 Sustainable Development Vision for Polish Business report.

In the Baltic countries, we focused on legislation on renewable energy production and district heat sales. Fortum and the Foreign Investors Council in Latvia (FICIL) collaborated in the discussion about Latvia's energy strategy, which was under development.

In Russia, Fortum arranged numerous meetings with decision makers focusing on energy efficiency and Russian electricity and heat market legislation. In summer 2012, Fortum hosted a group of authority representatives from Tyumen visiting Stockholm. The group was introduced to local urban planning and waste handling systems. In 2012, we also published a review on Russian energy policy.

At the EU level, our representatives discussed issues related to the EU's internal energy market with officials from the European Commission and from different countries' EU representations. In March 2012, Fortum updated the company's information in the Transparency Register maintained jointly by the European Parliament and European Commission. The register offers information about organisations that aim to influence EU decision making.

Our obligation is to share our views on energy policy.

Energy-sector organisations

Fortum participates in several national and international energy-sector and sustainability organisations. The list below includes the most significant of them.

International collaboration partners

At the EU level, Fortum is involved with the following organisations and funds:

Eurelectric is the sector association which represents the common interests of the whole electricity industry at pan-European level.

Euroheat & Power is the international association of district heating and cooling.

Foratom is the trade association for the nuclear energy industry in Europe. Its main purpose is to promote the use of nuclear energy in Europe by representing the interests of this industrial sector.

RECS International (Renewable Energy Certificate System): Within the framework of this organisation, Fortum is working with 90 other, mainly European, companies to prepare rules and a system for the international trade of renewable energy certificates.

World Bank's Prototype Carbon Fund (PCF): Fortum is a shareholder in this fund, which invests in CO_2-reducing joint implementation projects in Eastern Europe and in clean development mechanism projects in developing countries. The emissions reductions achieved by the PCF are distributed to shareholders according to their share of ownership.

Testing Ground Facility (TGF): Fortum is an shareholder in the Nordic Environment Finance Corporation's (NEFCO) Testing Ground Facility.

Bettercoal is an organisation that aims for continuous improvement in responsible operations in the coal supply chain.

World Energy Council (WEC): Fortum is a member of WEC via the national committees in Finland and Sweden.

COGEN Europe promotes development of joint production in Europe and globally.

Finnish collaboration partners

Finnish Energy Industries (ET) is an industrial policy and labour market policy association representing the electricity and district heating industry in Finland.

Confederation of Finnish Industries (EK): Fortum cooperates with this leading business organisation in Finland.

Swedish collaboration partners

Svensk Energi: Fortum is a member of the Swedish power producers' branch organisation.

Svensk Fjärrvärme: Fortum is a member of the Swedish district heat producers' organisation.

Elforsk: is an energy-sector research organisation.

Värmeforsk: is an energy-sector research organisation.

Swedish Energy Agency: Fortum has representatives in the Agency's development programmes.

Svenskt Näringsliv: Fortum has representatives in different committees of the Confederation of Swedish Enterprise.

Norwegian collaboration partners

Energi Norge is a national non-profit energy industry organisation.

Fjernvarmeforeningen is a Norwegian district heating industry association.

NORWEA is a wind power organisation.

Polish collaboration partners

Responsible Business Forum: Fortum became a member in 2012.

Polish District Heating Chamber of Commerce links companies that have operations related to district heat.

Polish Chamber of Biomass is an organisation promoting the position of biomass in future energy policy.

Scandinavian Polish Chamber of Commerce supports dialogue between Scandinavian companies operating in Poland and Polish authorities and organisations, and develops business relations between Scandinavia and Poland.

Polish Association of Energy Traders is a politically independent organisation active in the development of energy-sector legislation.

Polish CHP Association
Polish Regional Chamber of Trade and Industry

French collaboration partners

French-Finnish Chamber of Commerce

Russian collaboration partners

Market Council for organising an efficient system of trading in wholesale and retail electricity and capacity market

Council of Power Producers

Russian Union of Industrialists and Entrepreneurs is an independent NGO operating at the federal and regional level to promote the interests of entrepreneurs and the industry.

Association of the European Businesses in the Russian Federation represents and promotes the interests of European companies conducting business in Russia.

Shareholders

Fortum Corporation's shares are listed on the NASDAQ OMX Helsinki exchange.

At the end of 2012, Fortum had 124,451 shareholders. The Finnish State owned 50.76% of Fortum's shares. Of the shares, 25.4% were in foreign ownership (2011: 28.3%).

Read more about share and shareholders.

The Finnish State owns 50.76% of Fortum.

We serve the media and the general public

From the media's perspective, Fortum's operations are especially interesting because the company is one of the biggest listed companies in Finland and is one of the biggest players also in Sweden in the energy sector.

The State's majority ownership in the company also increases interest both by the media and the general public. In other countries where it operates, Fortum is a foreign leader in the energy sector.

Fortum's communications is directed by the laws and regulations governing the communications of listed companies. Additionally, Fortum communicates in accordance with the company's communications principles, which emphasise impartial, correctly-timed and open communication. Fortum engages in a continuous dialogue with the media at financial press conferences held quarterly and during other visits, and by giving interviews and responding to daily media contacts.

A particular focus in 2012 was on strengthening Fortum's crisis communication preparedness. A staffed Media Desk service was launched in Finland; it had previously been implemented in Sweden. The use of social media was deployed both for continuous communications and especially for communicating electricity and heat outages and engaging in a direct dialogue with customers.

Fortum's Crisis Communications Guidelines were updated to cover key exceptional situations and drills of different situations – especially power outages – were held. Additionally, 183 Fortum employees working in the ESD Division's customer service received training in crisis preparedness. Moreover, the load handling capacity of the Fortum's internet sites was improved and separate communications channels for authorities were established for major power outages.

Fortum engages in a continuous dialogue with the media.

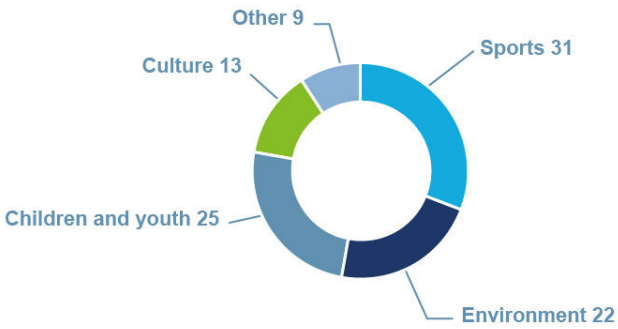
Support for society

We support organisations and communities working for the common good in the countries where we operate. The goal is for sponsorship collaboration to be mutually beneficial.

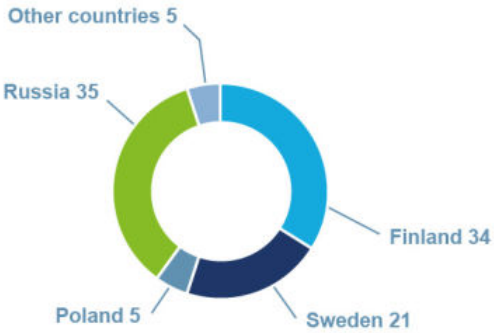
In 2012, Fortum's support for activities promoting the common good totalled about EUR 5.8 million (2011: 4.6), of which the share of grants awarded by the Fortum Foundation was about EUR 780,000 (2011: 700,000). Fortum Foundation supports

research, education and development in natural and technical sciences as well as economics within the energy area. In addition, Fortum donated about EUR 757,000 (2011: 2.8 million) to universities in Finland for R&D cooperation.

FORTUM'S SUPPORT FOR SOCIETY IN 2012 BY TARGET, %



FORTUM'S SUPPORT FOR SOCIETY IN 2012 BY COUNTRY, %



Collaboration with organisations

We engage in collaboration with environmental organisations regarding the eco-labelling of electricity products, and we participate in projects related to environmental conservation and maintaining biodiversity. In addition, many of our sponsorhip programmes are implemented in co-operation with organisations.

Part of the funding for the environmental projects comes from the sales of eco-labelled electricity. In Sweden, we are a member in the WWF Global Forest and Trade Network promoting responsible forestry. In 2012, we joined the Bettercoal initiative promoting sustainability principles in coal mining.

Sponsorship programmes

Our sponsorship programmes focus on environmental and social responsibility, and the projects target mainly on young people and local activities. Fortum has collaborated with the John Nurminen Foundation since 2006. The collaboration was extended last year with a four-year letter of intent. Fortum will support the Clean Baltic Sea projects with EUR 75,000-100,000 yearly between 2012 and 2015.

Support for youth sporting activities

In Finland, physical activities for children and young people are supported through the Fortum Tutor programme and Para School Day events. Fortum Tutor, implemented in collaboration with the Football Association of Finland, develops the skills of junior football coaches in over 60 municipalities. Annually, the programme reaches about 20,000–30,000 families. The Fortum Para School Day tour, implemented in collaboration with the Finnish Paralympics Committee, encouraged the physical activities of children and young people at six schools around Finland in 2012.

The joint programme by Fortum and the Finnish Association for Swimming Instruction and Life Saving (FSL) teaches child water safety and alertness to entire families. The Fortum Vesikoulu (Water School) events held around Finland taught water safety to over 1,000 preschoolers. About 6,500 visitors participated in the related events in 2012.

A workshop project, implemented in Finland together with Bass Campus ry, and a project implemented in Poland with the Ulica organisation and the local sports academy AWF Katowice inspire and guide local youth to get involved in activities they are interested in and to develop personal strengths.

Fortum supports youth sporting activities with the Para School Day events.

Environmental knowledge for young people in Sweden

In Sweden, Fortum co-operated with Städa Sverige, the environmental association of local sports organisations, to get young people more interested in environmental issues. In a pilot project, over 200 youngsters cleaned up 190 km of river banks in Fortum's hydro power areas in Värmland, Hälsingland and Härjedalen, where about 280,000 people live.

Collaboration with associations is also carried out in many projects with local communities.

Fortum as a responsible neighbour

Fortum works closely with local communities in the municipalities where it has power plants.

We take local communities into account in power plant maintenance and improvement work, and we meet with local residents at open-house days at the plants, for example. Fortum is also an important employer at the local level. We are a significant tax payer in our operating areas, and our investments improve the local infrastructure.

Examples of Fortum activities with local communities in 2012:

- In Finland and Sweden, Fortum's Environmental Fund supported projects to reduce the adverse environmental impacts of hydropower production and to promote biodiversity in built-up water systems. The company collaborates with local authorities, fishermen and environmental organisations. In a number of projects, river basins are being restored and habitats for fish and freshwater pearl mussels are being improved.

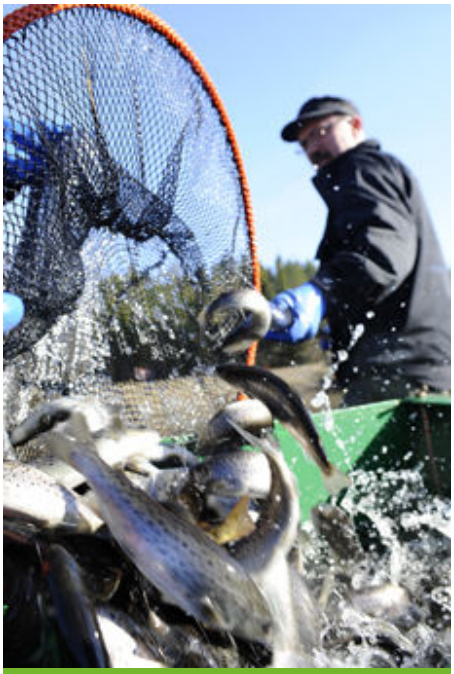
- After the winter storm in December 2011, we met with our customers at town hall-style meetings held in municipalities that had suffered the worst storm damage in Fortum's network area. The topics discussed at the events included management of the storm situation, compensation procedures and improvements to be made in the future. With the VahvaVerkko project launched after the storm, we are improving delivery reliability of electricity distribution and reinforcing the electricity network in many different ways. The progress of the project was presented to local residents at monthly meetings around Finland and through direct mail and local media.

- In the flooding of the Oulujoki river in Finland we inspected areas of damage reported by local residents and agreed upon joint projects to repair the damages.

- Loviisa nuclear power plant published a stakeholder magazine called Naapurina voimala (Power plant as a neighbour) and held regular discussions with the representatives of the city of Loviisa, Finland.

- In the past two years Fortum has engaged in an active dialogue with local authorities, politicians and organisations in France about hydropower development.

- Fortum is involved in a variety of lighting projects in cities and municipalities. The company funds the planning and construction of energy-efficient lighting for sites voted on by local residents. The projects were implemented in Lohja and Espoo in Finland and at two sites in Stockholm, Sweden.



In Finland and Sweden, Fortum's Environmental Fund supported projects to reduce the adverse environmental impacts of hydropower production.

- In the first half of the year, close to 300 housing cooperatives in Stockholm participated in a competition to conserve heating energy. The energy saved during the competition totalled over 10,000 megawatt-hours, which is equivalent to the annual heat consumption of about 550 single-family homes.

- In Russia, Fortum supported various projects at its power plant locations in Chelyabinsk, Tyumen, Tobolsk and Nyagan. On a local level, we support a children's sports school and an ice hockey team as well as various cultural and residential events.

- In Poland, Fortum met local residents in different events organised in the municipalities where it has power plants. Open-house events were organised at the CHP plants in Zabrze and Czestochowa. In addition, Fortum organised a Sport City event in the aqua park in Bytom and participated in the opening of the Euro 2012 Fan Zone together with the city of Czestochowa.

Stakeholder views

The Fortum sustainability themes that are most important to stakeholder groups are selected on the basis of the materiality assessment, the yearly One Fortum survey and the business value chain.

In 2012, the following issues important in terms of our company's operations were among the topics of public discussion in the company's market areas.

- Secure supply of electricity: Severe storms in the 2011-2012 winter season caused power outages for hundreds of thousands of Finns.

  Read more about the reliability of Fortum's electricity distribution.

- Exceptionally heavy rains caused flooding in Fortum's hydropower areas in spring in Sweden and in late summer in Finland 2012.

  Read more about Fortum's actions in the flood situation in Oulujoki.

- Nuclear safety: The results of the EU's stress tests for nuclear power plants sparked a discussion about plant safety, particularly in Sweden in autumn 2012.

  Read more about Fortum's nuclear power safety.

- Nuclear power investments in Finland: In October 2012, E.ON withdrew from Fennovoima's nuclear power investment project in Finland. This sparked a public debate about the development of energy needs and the possible need for new nuclear power investments in Finland. Read more about Fortum's nuclear power and the market development.

- Corporate taxation: In autumn 2012, corporate tax payments were a topic of debate in the public dialogue.

  Read more about Fortum's tax payments.

- Fortum's investment programme in Russia is regularly a focus of interest by the press and investors.

  Read more about the progress of Fortum's investment programme in Russia.

- Energy legislation and development of the energy markets were important issues in the dialogue with authorities in our different operating countries and at the EU level.

  Read more about our operating environment.

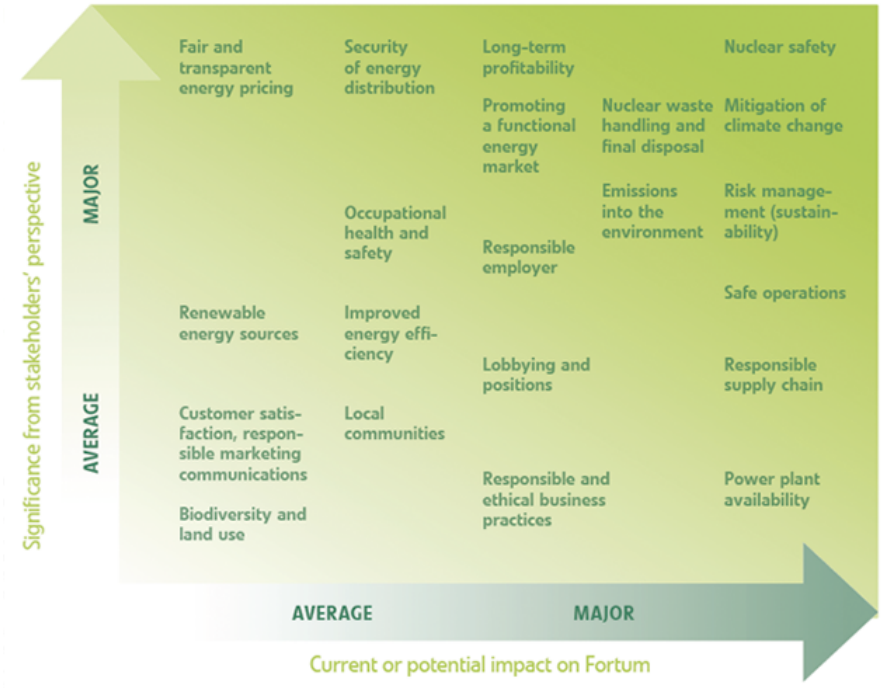
Fortum's VahvaVerkko and SäkraNät projects aim to improve reliability of electricity distribution.

Materiality assessment

Fortum made a comprehensive stakeholder analysis in 2010. Since then, Fortum has assessed material issues for different stakeholders based on themes raised from the yearly One Fortum stakeholder survey and in the company's dialogue with stakeholders.

The graphic illustrates the main sustainability themes that emerged in the materiality assessment.

Assessment of sustainability aspects



One Fortum survey measures stakeholder expectations

Fortum annually measures customer and stakeholder satisfaction as well as development of the company's reputation and the factors that impact it through the extensive One Fortum survey.

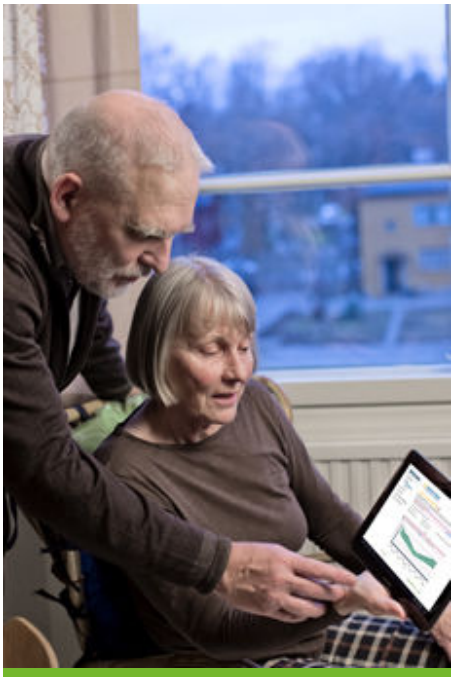
The survey covers customers, governmental bodies, capital markets, non-governmental organisations and opinion leaders as well as Fortum's personnel. In 2012, the survey was conducted in Finland, Sweden, Norway, Poland, the Baltic countries and Russia. For the Power Division, the survey also covered customers in Germany and Great Britain. In Finland and Sweden, the survey covered the general public as well. In 2012, Russia's public administration and heat customers were new target groups included in the survey. In addition, Fortum monitors customer satisfaction through regular EPSI customer satisfaction surveys in Finland, Sweden and Norway.

The survey results are examined by Fortum's top management, and they are used for planning and development of the company's business.

Fortum's reputation clearly improved

The One Fortum survey results indicate that, compared to the 2011 results, Fortum's reputation has developed favourably in all stakeholder groups, except customers. Fortum has the strongest reputation within the capital markets and the weakest amongst the general public. According to the 2012 results, development has been most favourable amongst non-governmental organisations and opinion leaders. The results also clearly improved amongst personnel and the general public. Fortum's reputation amongst customers in Finland was slightly weaker than before, which also affects the overall rating received from the customer target group. The survey indicates that customer satisfaction has improved significantly amongst the ESD Division's business customers. For other customers, satisfaction has remained at the previous year's level.

In 2012, as in the previous year, Fortum's leadership, operations and financial performance were given high scores. In social responsibility, last year's focus area, results improved significantly amongst all stakeholder groups. The results of two other development areas, customer orientation and Fortum as an employer, also improved compared to 2011. All three areas continue to be important targets of development for the company's operations.



The One Fortum survey covers customers, governmental bodies, capital markets, non-governmental organisations, opinion leaders and personnel.

Stakeholder quotes

Fortum's stakeholders include investors, customers, employees, suppliers, and various partners. Stakeholders tell their views on Fortum's activities.

Personnel: Krzysztof Karolczyk, Fortum Poland

"I have been working for Fortum since 2004 when I started as a sustainability trainee. For the last three years, I was the Head of Sustainability in Poland, and since December 2012, I've been a CHP plant development manager. In my opinion, Fortum is an employer with many opportunities for career development. Job rotation and competence development processes create diverse opportunities for employees who want to expand their expertise."

Customer: Kim Särs, Director of Real Estate, LähiTapiola Kiinteistövarainhoito

"The business centre complex in Tapiola, Espoo owned by Kiinteistö-Tapiola will be connected to Fortum's district heating and cooling network. The solutions used must be sustainable and represent new concepts and technology. Fortum and district cooling were preferred also because of the aesthetic and maintenance-free aspects of the solution. With Fortum's solution, we get one-stop shopping for the entire service. The operational reliability and the more even indoor air temperature that district cooling brings will also improve the customer comfort."

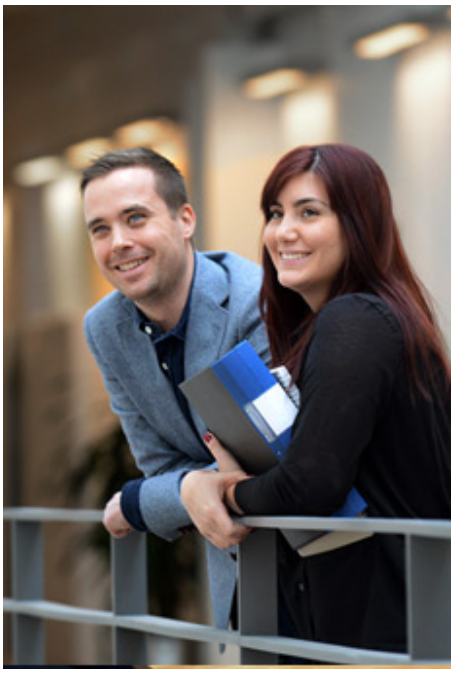
Fortum has extensive experience in district cooling and the company has been involved in developing one of the world's largest district cooling solutions in Stockholm.

Minister for International Development and state ownership steering issues: Heidi Hautala

"Responsibility is the key to success for all companies today. I am glad that sustainability is directly at the core of Fortum's strategy. Fortum is an important player in the energy sector also globally, so Fortum has good prerequisites to make solutions for sustainable energy use available to an increasing number of people. As a Minister, I hope that Fortum will actively express its needs related to the promotion of sustainability also to the state authorities.

Fortum is a strategically important company for the Finnish State. Securing energy supply is naturally an important national interest. Fortum is also an important source of revenue for the State, because about half of the dividends received by the State come specifically from Fortum."

Jesper Peterson: "Companies selling eco-labelled electricity based on hydroelectric power also have to allocate money to an environmental fund."



Supplier: Maxim S. Kushnarev, Marketing & Sales Director, ARMZ Uranium Holding Co., Russia

"ARMZ Uranium Holding Co., a mining division of Russian State Atomic Energy Corporation ROSATOM, is one of the top three uranium-mining companies by production and ranked second in terms of mineral-resource base.

The uranium produced by ARMZ enterprises located in Russia is used in the fabrication of the fuel supplied to the Loviisa Nuclear Power Plant (NPP). Representatives from Fortum, which operates the NPP, visited three ARMZ enterprises. Thus they assessed uranium production technology in terms of sustainable development and environmental impact.

In 2012, JSC Dalur, part of the management structure of ARMZ Uranium Holding Co., was granted ISO 9001:2008 Quality Management System certification and ISO 14001:2004 Environmental Management System certification. Our objective is to obtain certification for other Russian enterprises and create a company-wide integrated quality management system within ARMZ Uranium Holding Co.

Cooperation with Fortum is facilitating implementation of these plans."

Supplier: Biofuel supplier in Brazil, Óleos Pirapora

”For us, the audit conducted by Fortum was a big help and useful because it provided us with improvement suggestions. The audit was also beneficial for our employees, and Fortum’s way of doing the audit with direct interviews enabled better understanding and commitment.”

We assess the level of operations of our business partners through pre-selection and supplier audits. We started sustainability-related audits of service and goods suppliers in 2012. One of the suppliers we audited during the year was our Brazilian biofuel supplier.

Partner: John Liljelund, AW-Energy

"Despite Europe's weakening economic situation, investments in so far unexploited renewable energy technologies have remained substantial. The wave energy sector is moving from pilot projects towards commercial projects, and our WaveRoller technology is one of the absolute best in the sector. The commitment of industrial partners, energy companies and politicians is vitally important in the commercialisation phase.

For AW-Energy, the collaboration with big industrial players and institutional investors has not only increased financial security, it has also accelerated contact establishment with important stakeholders. A good example of this has been the collaboration with the energy company Fortum. Fortum's established position combined with the pioneering WaveRoller technology has paved the way to new projects."

AW-Energy is a Finnish wave power company with Fortum as a shareholder. The WaveRoller technology developed by AW-Energy generates electricity from the back and forth movement of the waves (so-called surge phenomenon).

Partner: Jesper Peterson, Product Manager, Dept. of Ecolabelling and Green Consumption, Swedish Society for Nature Conservation (SSNC)

"It is becoming clearer than ever that nuclear power and fossil based energy are not viable options. There are problems with the final disposal of nuclear waste and risks associated with uranium mining. The serious climate situation requires rapid changes and strong measures to reduce greenhouse gas emissions. It is time to choose a path and the SSNC believes that the future energy system needs to be based on renewable energy sources with a strong focus on energy efficiency.

The SSNC is happy that Fortum sells the SSNC's own eco-labelled electricity "Good Environmental Choice". Choosing this electricity helps to reduce environmental impact as well as rectify the damage that renewable energy production causes. Companies selling eco-labelled electricity based on hydroelectric power also have to allocate money to an environmental fund. Fortum has worked actively with their environment fund and funded a number of environmental projects, approved by the SSNC. This work is important and shows the way to sustainable energy."

The Swedish Society for Nature Conservation (SSNC) is a non-profit organisation. Care for the environment and people's health are their driving forces.

GRI Content Index

STANDARD DISCLOSURES PART I: Profile Disclosures

1. Strategy and Analysis

Profile Disclosure	Description	Reported	Global Compact	Page	Remarks
1.1	Statement from the most senior decision-maker of the organization.	Fully reported		CEO's Review	
1.2	Description of key impacts, risks, and opportunities.	Fully reported		Our Strategy/Market Development	

2. Organizational Profile

Profile Disclosure	Description	Reported	Global Compact	Page	Remarks
2.1	Name of the organization.	Fully reported		Fortum in Brief/Group Business Structure	
2.2	Primary brands, products, and/or services.	Fully reported		Fortum in Brief/Group Business Structure	
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.	Fully reported		Fortum in Brief/Group Business Structure	
2.4	Location of organization's headquarters.	Fully reported		Fortum in Brief/Group Business Structure	
2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	Fully reported		Fortum in Brief/Fortum's geographical areas	
2.6	Nature of ownership and legal form.	Fully reported		Fortum Financials 2012/The Fortum share and shareholders	
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	Fully reported		Fortum in Brief/Group Business Structure	
2.8	Scale of the reporting organization.	Fully reported		Fortum in Brief/Group Business Structure	
				Fortum in 2012/Sales and production	
2.9	Significant changes during the reporting period regarding size, structure, or ownership.	Fully reported		Our business/Investments	
				GRI/Reporting principles	
2.10	Awards received in the reporting period.	Fully reported		Fortum in 2012/Financial summary/ Sustainabilty indexes	Fortum's Sustainability Report 2011 was selected as the winner in the Corporate Responsibility Reporting

					competition in Finland.
				Fortum's actions in 2012/ November	

3. Report Parameters					
Profile Disclosure	**Description**	**Reported**	**Global Compact**	**Page**	**Remarks**
3.1	Reporting period for information provided.	Fully reported		GRI/Reporting principles	
3.2	Date of most recent previous report.	Fully reported		GRI/Reporting principles	
3.3	Reporting cycle (annual, biennal, etc.).	Fully reported		GRI/Reporting principles	
3.4	Contact point for questions regarding the report or its contents.	Fully reported		Contacts	
3.5	Process for defining report content.	Fully reported		Stakeholder views/Materiality	
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers).	Fully reported		GRI/Reporting principles	
3.7	State any specific limitations on the scope or boundary of the report.	Fully reported		GRI/Reporting principles	
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	Fully reported		GRI/Reporting principles	
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report.	Fully reported		GRI/Reporting principles	
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g.,mergers/ acquisitions, change of base years/ periods, nature of business, measurement methods).	Fully reported		GRI/Reporting principles	
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	Fully reported		GRI/Reporting principles	
3.12	Table identifying the location of the Standard Disclosures in the report.	Fully reported		GRI Content Index	
3.13	Policy and current practice with regard to seeking external assurance for the report.	Fully reported		Assurance Statement	

4. Governance, Commitments, and Engagement					
Profile Disclosure	**Description**	**Reported**	**Global Compact**	**Page**	**Remarks**
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	Fully reported		Fortum Financials 2012/Corporate Governance	
4.2	Indicate whether the Chair of the highest governance body is also an executive officer.	Fully reported		Fortum Financials 2012/Corporate Governance	
4.3	For organizations that have a unitary board structure, state the number and gender of members of the highest governance body that are independent and/or non-executive members.	Fully reported		Fortum Financials 2012/Corporate Governance	
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	Fully reported		Social responsibility/Employees and work conditions	The shareholders have the right to make decisions over company matters in a General Meeting of Shareholders and to ask questions about the issues covered in the meeting. The operations and duties of the Annual General Meeting and the Board of Directors are explained in the Fortum Financials.
				Fortum Financials 2012/ Organisation and governing bodies of the Group	
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).	Fully reported		Fortum Financials 2012/ Remuneration	
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	Fully reported		Fortum Financials 2012/Corporate Governance	

4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees, including any consideration of gender and other indicators of diversity.	Fully reported		Fortum Financials 2012/Corporate Governance	
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	Fully reported		Fortum's strategy/Responsibility as part of business	
				GRI/Sustainability management	
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	Fully reported		Fortum Financials 2012/Corporate Governance	As of the beginning of 2013, results of the sustainability indicators are regularly reported to Fortum Board of Directors.
				Fortum Financials 2012/Risk management	
				Our Strategy/Principles of setting sustainability targets	
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	Fully reported		Fortum Financials 2012/Corporate Governance	The Board of Directors conducts an annual self-assessment.
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	Fully reported		GRI/Sustainability management	Sustainability assessment is part of every acquisition and investment.
				Fortum Financials 2012/Risk management	
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	Fully reported		GRI/Sustainability management	
				Our stakeholders/Authorities and organisations	
4.13	Memberships in associations (such as industry associations) and/or national/ international advocacy organizations in which the organization: * Has positions in governance bodies; * Participates in projects or committees; * Provides substantive funding beyond routine membership dues; or * Views membership as strategic.	Fully reported		Our stakeholders/Authorities and organisations	
4.14	List of stakeholder groups engaged by the organization.	Fully reported		Our stakeholders	

4.15	Basis for identification and selection of stakeholders with whom to engage.	Fully reported		Our stakeholders/Materiality	
				Our stakeholders/One Fortum survey	
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	Fully reported		Our stakeholders	
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	Fully reported		Our stakeholders/Stakeholder views	

STANDARD DISCLOSURES PART II: Disclosures on Management Approach (DMAs)

G3.1 DMAs	Description	Reported	Global Compact	Page	Remarks
DMA EC	**Disclosure on Management Approach EC**				
Aspects	Economic performance	Fully reported		GRI/Management approach to economic responsibility	
	Market presence	Fully reported		Our Strategy/Market Development	
				Fortum in 2012/ Market position	
	Indirect economic impacts	Fully reported		GRI/Management approach to economic responsibility	
DMA EN	**Disclosure on Management Approach EN**				
Aspects	Materials	Fully reported		GRI/Management approach to environmental responsibility	
				Fortum Sustainability policy	
	Energy	Fully reported		GRI/Management approach to environmental responsibility	
				Fortum Sustainability policy	
	Water	Fully reported		GRI/Management approach to environmental responsibility	
				Fortum Sustainability policy	
	Biodiversity	Fully reported		GRI/Management approach to environmental responsibily	
				Fortum Sustainability policy	
				Biodiversity guidelines	
	Emissions, effluents and waste	Fully reported		GRI/Management approach to environmental responsibility	
				Fortum Sustainability policy	
	Products and services	Fully reported		GRI/Management approach to environmental responsibility	
				Fortum Sustainability policy	
	Compliance	Fully reported		GRI/Management approach to environmental responsibility	
				Fortum Sustainability policy	
	Transport	Fully reported		GRI/Management approach to environmental responsibility	
				Fortum Sustainability Policy	
				Fortum's response to DCP	
	Overall	Fully reported		GRI/Management approach to environmental responsibility	
				Fortum sustainability policy	
DMA LA	**Disclosure on Management Approach LA**				
Aspects	Employment	Fully reported		GRI/Human resources and well-being management	
				Fortum HR Policy	
	Labor/management relations	Fully reported		GRI/Human resources and well-being management	
				Fortum HR Policy	
	Occupational health and safety	Fully reported		GRI Management approach to occupational health and safety	
	Training and education	Fully reported		GRI/Human resources and well-being management	

				Fortum HR Policy	
	Diversity and equal opportunity	Fully reported		GRI/Human resources and well-being management	
				Fortum HR Policy	
	Equal remuneration for women and men	Fully reported		GRI/Human resources and well-being management	
				Fortum HR Policy	
DMA HR	**Disclosure on Management Approach HR**				
Aspects	Investment and procurement practices	Fully reported		Investment evaluation and approval procedure	
	Non-discrimination	Fully reported		GRI/Human resources and well-being management	
				Fortum HR Policy	
	Freedom of association and collective bargaining	Fully reported		GRI/Human resources and well-being management	
				Fortum HR Policy	
				Fortum Code of Conduct	
				Fortum Supplier Code of Conduct	
	Child labor	Fully reported		GRI/Human resources and well-being management	
				Fortum HR Policy	
				Fortum Code of Conduct	
				Fortum Supplier Code of Conduct	
	Prevention of forced and compulsory labor	Fully reported		GRI/Human resources and well-being management	
				Fortum HR Policy	
				Fortum Code of Conduct	
				Fortum Supplier Code of Conduct	
	Security practices	Fully reported		GRI/Human resources and well-being management	
				Fortum HR Policy	
				Fortum Code of Conduct	
				Fortum Supplier Code of Conduct	
	Indigenous rights	Fully reported		Investment evaluation and approval procedure	
	Assessment	Fully reported		GRI/Human resources and well-being management	
				Fortum HR Policy	
				Fortum Code of Conduct	
				Fortum Supplier Code of Conduct	
				Investment evaluation and approval procedure	
	Remediation	Fully reported		GRI/Human resources and well-being management	
				Fortum HR Policy	
				Fortum Code of Conduct	
				Fortum Supplier Code of Conduct	
				Investment evaluation and approval procedure	

DMA SO	Disclosure on Management Approach SO				
Aspects	Local communities	Fully reported		Our stakeholders/Local communities	
				Our stakeholders/Stakeholder quotes	
	Corruption	Fully reported		Fortum Code of Conduct	
				Supplier Code of Conduct	
	Public policy	Fully reported		Sustainability policy	
				Corporate relations and communications policy	
	Anti-competitive behavior	Fully reported		Fortum Code of Conduct	
				Supplier Code of Conduct	
	Compliance	Fully reported		Fortum Code of Conduct	
				Supplier Code of Conduct	
DMA PR	**Disclosure on Management Approach PR**				
Aspects	Customer health and safety	Fully reported		Our stakeholders/Customers	
	Product and service labelling	Fully reported		Our stakeholders/Customers	
	Marketing communications	Fully reported		Fortum Code of Conduct	
	Customer privacy	Fully reported		Fortum Code of Conduct	
	Compliance	Fully reported		Fortum Code of Conduct	

STANDARD DISCLOSURES PART III: Performance Indicators

Economic					
Performance Indicator	Description	Reported	Global Compact	Page	Remarks
Economic performance					
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	Fully reported		EC1	
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	Fully reported	x	EC2	
EC3	Coverage of the organization's defined benefit plan obligations.	Fully reported		Fortum Financials 2012/Pensions	
EC4	Significant financial assistance received from government.	Not reported			
Market presence					
EC5	Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation.	Not reported	x		
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	Partially reported		EC6	Local purchasing volumes presented in euros, not as percentages. A guiding policy on local purchasing is not available.
				Responsible fuel purchasing	
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.	Partially reported	x	EC7	Local hiring policy not available.
Indirect economic impacts					
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	Partially reported		EC8	On a larger scale, Fortum's investments in infrastructure – especially in the districting heating network in Russia – can be considered as providing public benefit, even though the investments also have economic benefits.

				Fortum's economic impacts	
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.	Partially reported		EC9	Negative, indirect economic impacts have not been analysed. Benchmarking has not been done.
				Fortum's economic impacts	
EU6	Management approach to ensure short and long-term electricity availability and reliability	Partially reported		Fortum in Brief/Group Business Structure	
				Our Business/Energy Distribution	
EU7	Demand-side management programs including residential, commercial, institutional and industrial programs	Fully reported		Our Stakeholders/Customers	
EU8	Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development	Partially reported		Our Strategy/Research and Development	
EU9	Provisions for decommissioning of nuclear power sites	Fully reported		Financials 2012/Summary of significant accounting policies (see 1.25 Assets and liabilities related to decommissioning of nuclear power plants and the disposal of spent fuel)	
				Financials 2012/Note 34 Nuclear related assets and liabilities	
EU10	Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime.	Fully reported		EU10	
				Our Strategy/Market Development	
				Our Business/Fortum's European investment plan	
				Our business/Fortum’s Russian investment plan	
EU11	Average generation efficiency of thermal plants by energy source and regulatory regime.	Partially reported		EU11	Generation efficiency of thermal plants reported for total production, without the breakdown required in the indicator.
EU12	Transmission and distribution losses as a percentage of total energy.	Fully reported		EU12	

Environmental					
Performance Indicator	**Description**	**Reported**	**Global Compact**	**Page**	**Remarks**
Materials					
EN1	Materials used by weight or volume.	Fully reported	x	EN1	

EN2	Percentage of materials used that are recycled input materials.	Fully reported	x	EN2	
Energy					
EN3	Direct energy consumption by primary energy source.	Fully reported	x	EN3	
EN4	Indirect energy consumption by primary source.	Partially reported	x	EN4	Primary energy sources for purchased electricity are not exactly known.
EN5	Energy saved due to conservation and efficiency improvements.	Fully reported	x	EN5	
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	Fully reported	x	EN6	Fortum offers electricity products produced with renewable energy sources. We also offer energy efficiency advice and devices (e.g. home displays) which help our customers to control their electricity consumption.
EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	Partially reported	x	EN7	Achieved reductions are not reported.
Water					
EN8	Total water withdrawal by source.	Fully reported	x	EN8	
				Environmental summary	
EN9	Water sources significantly affected by withdrawal of water.	Fully reported	x	EN9	
EN10	Percentage and total volume of water recycled and reused.	Fully reported	x	EN10	
Biodiversity					
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	Fully reported	x	EN11	
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	Partially reported	x	EN12	Impacts have not been described in detail.

EN13	Habitats protected or restored.	Partially reported	x	EN13	Size of habitats has not been reported.
				Reducing hydropower's environmental impacts	
				Reducing the environmental impacts of energy distribution	
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.	Fully reported	x	EN14	
				Reducing hydropower's environmental impacts	
				Reducing the environmental impacts of energy distribution	
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	Partially reported	x	EN15	No comprehensive study has been made on threatened species.
Emissions, effluents and waste					
EN16	Total direct and indirect greenhouse gas emissions by weight.	Fully reported	x	EN16	
				Environmental summary	
EN17	Other relevant indirect greenhouse gas emissions by weight.	Fully reported	x	EN17	
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	Fully reported	x	EN18	
				Hydropower saves scarce natural resources	
				Emissions, effluents and waste/ Increasing the use of biomass	
				CHP/Diverse use of fuels	
				Fortum's European investment plan	
EN19	Emissions of ozone-depleting substances by weight.	Fully reported	x	EN19	
EN20	NOx, SOx, and other significant air emissions by type and weight.	Partially reported	x	EN20	The whole list of heavy metals has not been reported, only mercury.
				Environmental summary	
EN21	Total water discharge by quality and destination.	Partially reported	x	EN21	Waste water volumes have not been reported by type of treatment.
				Reducing CHP's environmental impacts	
				Environmental summary	
EN22	Total weight of waste by type and disposal method.	Partially reported	x	EN22	Waste volumes have not been reported in detail by type of treatment.
				Reducing nuclear power's environmental impacts	

				Final disposal of nuclear waste	
				Environmental summary	
EN23	Total number and volume of significant spills.	Fully reported	x	EN23	
EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.	Not reported	x		Not relevant for Fortum
EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.	Fully reported	x	EN25	
Products and services					
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	Partially reported	x	EN26	
EN27	Percentage of products sold and their packaging materials that are reclaimed by category.	Not reported	x		Not relevant for Fortum
Compliance					
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	Partially reported	x	EN28	Possible disputes have not been reported.
Transport					
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	Partially reported	x	EN29	Measures to mitigate environmental impacts have not been reported.
Overall					
EN30	Total environmental protection expenditures and investments by type.	Fully reported	x	EN30	

Social: Labor Practices and Decent Work

Performance Indicator	Description	Reported	Global Compact	Page	Remarks
Employment					
LA1	Total workforce by employment type, employment contract, and region, broken down by gender.	Fully reported		LA1	
				Social summary	
LA2	Total number and rate of new employee hires and employee turnover by age group, gender, and region.	Fully reported	x	LA2	
				Social summary	
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	Fully reported		LA3	
				Financial summary	
				EC3	

LA15	Return to work and retention rates after parental leave, by gender.	Not reported			
Labor/management relations					
LA4	Percentage of employees covered by collective bargaining agreements.	Partially reported	x	LA4	Fortum does not monitor the unionisation of its employees.
LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements.	Fully reported	x	LA5	
Occupational health and safety					
LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.	Fully reported	x	LA6	
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region and by gender.	Partially reported	x	LA7	Rates of injury are not reported by country, occupational diseases reported only in Finland.
				Social summary	
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	Fully reported	x	LA8	
LA9	Health and safety topics covered in formal agreements with trade unions.	Not reported	x		
Training and education					
LA10	Average hours of training per year per employee by gender, and by employee category.	Not reported			
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	Partially reported		LA11	Programs for managing career endings not reported
LA12	Percentage of employees receiving regular performance and career development reviews, by gender.	Fully reported		LA12	
Diversity and equal opportunity					
LA13	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity.	Partially reported	x	LA13	Minority groups are not reported.
				Social summary	
				Fortum Financials 2012/The Board of Directors	

Equal remuneration for women and men					
LA14	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation.	Partially reported	x	LA14	Only reported in Finland and Sweden and among white collar workers.

Social: Human Rights					
Performance Indicator	**Description**	**Reported**	**Global Compact**	**Page**	**Remarks**
Investment and procurement practices					
HR1	Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening.	Partially reported	x	HR1	Total number and percentage are not reported.
HR2	Percentage of significant suppliers, contractors and other business partners that have undergone human rights screening, and actions taken.	Partially reported	x	HR2	Percentage is not reported
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	Partially reported	x	HR3	Training hours are not reported.
Non-discrimination					
HR4	Total number of incidents of discrimination and corrective actions taken.	Fully reported	x	HR4	
Freedom of association and collective bargaining					
HR5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights.	Fully reported	x	HR5	
				LA4	
Child labor					
HR6	Operations and significant suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor.	Fully reported	x	HR6	
HR					
HR7	Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor.	Fully reported	x	HR7	
Security practices					
HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of	Not reported	x		

	human rights that are relevant to operations.				
Indigenous rights					
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken.	Not reported	x		
Assessment					
HR10	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments.	Not reported			
Remediation					
HR11	Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms.	Not reported			
EU16	Policies and requirements regarding health and safety of employees and employees of contractors and subcontractors	Fully reported		EU16	
EU17	Days worked by contractors and subcontractor employees involved in construction, operation and maintenance activities	Fully reported		LA1	
EU18	Percentage of contractor and subcontractor employees that have undergone relevant health and safety training	Partially reported		EU18	Percentage is not reported.

Social: Society					
Performance Indicator	**Description**	**Reported**	**Global Compact**	**Page**	**Remarks**
Local communities					
SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs.	Partially reported		SO1	Percentage is not reported.
SO9	Operations with significant potential or actual negative impacts on local communities.	Not reported			
SO10	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities.	Not reported			
Corruption					
SO2	Percentage and total number of business units analyzed for risks related to corruption.	Partially reported	x	SO2	Percentage is not reported.
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures.	Partially reported	x	SO3	Percentage is not reported.
SO4	Actions taken in response to incidents of corruption.	Fully reported	x	SO4	

Public policy					
SO5	Public policy positions and participation in public policy development and lobbying.	Fully reported	x	SO5	
				Our stakeholders	
				Our stakeholders/Authorities and organisations	
SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	Fully reported	x	SO6	
				EC8	
Anti-competitive behavior					
SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.	Fully reported		SO7	
Compliance					
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.	Fully reported		SO8	
EU19	Stakeholder participation in the decison making process related to energy planning and infrastructure development	Partially reported		EU19	Projects are not reported.
EU21	Contingency planning measures, disaster/emergency management plan and training programs, and recovery/ restoration pland	Partially reported		EU21	Specific projects/ models are not reported on a local level.

Social: Product Responsibility					
Performance Indicator	**Description**	**Reported**	**Global Compact**	**Page**	**Remarks**
Customer health and safety					
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	Not reported	x		
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.	Not reported	x		
Product and service labelling					
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	Partially reported	x	PR3	Persentage is not reported.
PR4	Total number of incidents of non-compliance with regulations and	Not reported	x		

	voluntary codes concerning product and service information and labeling, by type of outcomes.				
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	Fully reported		PR5	
				Our Stakeholders/Customers	
Marketing communications					
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	Not reported			
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.	Fully reported		PR7	
Customer privacy					
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	Not reported	x		
Compliance					
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.	Fully reported		PR9	
EU28	Power outage frequency	Fully reported		EU28	
EU29	Average power outage duration	Fully reported		EU29	

Sustainability management

Fortum aims for a balanced management of economic, environmental and social responsibility in the Group's operations. Sustainability management is strategy-driven and is based on the company's values, the Code of Conduct, and the policies and their specifying guidelines defined at the Group level. We comply with laws and regulations. All of our operations are guided by good governance, effective risk management, adequate controls and the internal audit principles supporting them.

Guiding policies and international commitments

In 2012, Fortum defined and harmonised its Group-level policies. The renewed policies require the Board's approval, and the approval procedure is scheduled for spring 2013. Fortum's renewed policies will be publicly presented on Fortum's website after the Board's approval. Our main policies and guidelines supporting sustainability include:

- Code of Conduct
- Supplier Code of Conduct
- Sustainability policy (including environmental, and occupational health and safety policies)
- Human resources policy
- Group risk policy
- Sponsorship steering document
- Group manual on investment evaluation and approval procedure
- Group instructions on Competition Law
- Group instructions on anti-corruption and anti-bribery
- Group instructions for safeguarding Fortum's assets
- Group instructions for conflicts of interest
- Biodiversity guidelines

Fortum respects and supports the United Nations Universal Declaration of Human Rights, the United Nations Convention on the Rights of the Child, and the core conventions of the International Labour Organisation (ILO). Additionally, Fortum recognises in its operations the statutes of 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 has been a member of the UN Global Compact initiative since June 2010.

Management approach to economic responsibility

Fortum's economic responsibility emphasises strong financial performance, profitable growth and added value over the long term. A company that is financially strong is able to be responsible for the environment, take care of its personnel, meet the needs of its customers, support the development of society and produce added value for its different stakeholders. Strong financial performance and growth must be achieved in compliance with sustainability principles and the company's target setting. Every new research and development project is assessed against carbon dioxide-free and resource efficiency criteria. Likewise, every new investment proposal is assessed against sustainability criteria as part of Fortum's investment evaluation and approval procedure.

Fortum's key financial figures are prepared and presented in compliance with International Financial Reporting Standards (IFRS). Fortum uses the information presented in the financial statements as well as the applicable Global Reporting Initiative (GRI) indicators for reporting economic responsibility and discloses in its Sustainability Report some figures that are collected as part of the financial statement process, but are not included in the actual financial statements.

Economic performance indicators >

Management approach to environmental responsibility

Environmental responsibility at Fortum emphasises the efficient use of natural resources and the need to mitigate climate change, and highlights our know-how in CO_2-free hydro and nuclear power production and in energy-efficient CHP production. Research and development activities create requisites for environmentally benign energy solutions.

Fortum's environmental management is based on the Group's policies and commitments as well as the international ISO 14001 standard; the goal is for all operative functions to have ISO 14001 environmental certification. At the end of 2012, the certification rate of Fortum's operations was 95%. Sullom Voe's operations in Great Britain were certified in 2012. OAO Fortum's operations in Russia received ISO 14001 certification in August 2012. Preparations for certification of OAO Fortum's district heat network operations continued during the year. The certification rate is based on the share of sales generated in certified operations (2012 net sales values) out of Fortum's total sales.

Environmental performance indicators >

Management approach to occupational health and safety

Fortum's safety management emphasises the company's strategic intent to create a safe workplace for all individuals working in Fortum's operations. We believe that all work injuries are preventable. Safety management is based on the Group's policies and commitments as well as Group-level guidelines and Group-defined minimum requirements for environmental and occupational health and safety work. Fortum's goal is for all operative functions to have OHSAS 18001, occupational health and safety certification.

At the end of 2012, the certification rate of Fortum's operations was 70%. In January 2012, certification was awarded to Fortum Jelgava, which represents 95% of the operations in Latvia. Measures to obtain certification for the Russia Division's operations in 2012 continued. OAO Fortum passed the certification audit in December 2012. The Electricity Solutions and Distribution (ESD) Division does not have OHSAS 18001 certification.

In reporting injuries, Fortum complies with the principles of the United States Occupational Safety & Health Administration (OSHA) and the ILO's Practice on Recording and Notification of Occupational Accidents and Diseases (1995) to the extent that they conform to the legislation in Fortum's countries of operation.

Social performance indicators, occupational health and safety >
Read more: Wellbeing at work >
Read more: Occupational safety >

Human resources and well-being management

Fortum aims to have engaged and satisfied employees. We want to create attractive career and development opportunities for individuals to continuously grow their professional skills and know-how. Fortum's Code of Conduct and HR policy guide HR practices, which are supported by Group-level HR processes: strategic planning, recruiting, personnel development, benefits and remuneration, and career and personal data management.

We value diversity and foster fair treatment and equal opportunity in recruitment, remuneration, development and advancement of employees, regardless of race, religion, political opinion, gender, age, national origin, language, sexual orientation, marital status and disability. The implementation of the HR practices is monitored through employee surveys, annual performance and development reviews as well as other feedback channels.

The focus areas of Fortum's HR management in 2012 were the continuous development of employee engagement and competence, development of Group-wide HR processes, management training promoting performance and well-being, talent and successor planning, and improvement of employer image.

ForCARE is Fortum's well-being programme that comprehensively covers issues related to employee well-being. The programme's goals are to promote health and safety, support the employees' capacity to work throughout their career and promote the functionality of work communities at Fortum. Each member of the work community is responsible for their own well-being and competence and for the mutual development of well-being.

The ForCARE model is used in Finland, Sweden and Norway. The aim is to implement the model in all countries of operation. It will be customised according to each country's legislation in collaboration with local occupational safety organisations, the personnel and management.

Social performance indicators, employees and work conditions >
Read more: ForCARE - A model for overall well-being at work >

Human rights

Fortum's approach to human rights is described in Fortum's Code of Conduct, Supplier Code of Conduct and Human Resources policy. Fortum endorses the UN Universal Declaration of Human Rights, the UN Convention of the Rights of the Child, and the key conventions of the International Labour Organisation. Additionally, Fortum recognises the statutes of the OECD Guidelines for Multinational Enterprises, the International Chamber of Commerce's anti-bribery and anti-corruption principles and rules, and the Bettercoal initiative's Code on responsible coal mining. Fortum has been a member of the United Nations Global Compact initiative since June 2010.

Social performance indicators, human rights >
Read more: Sustainable management of the supply chain >

Society

Fortum's Code of Conduct guides our management approach to society. Fortum follows good business practices in all of its operations. We compete fairly and ethically and work within the framework of applicable competition laws and Group competition instructions. We avoid all situations where our own personal interests may conflict with the interests of the Fortum Group. We base our customer relations on honesty and trust. We treat our suppliers and subcontractors fairly and equally and choose them based on merit, and with the expectation that they will consistently comply with our requirements and with Fortum's Supplier Code of Conduct. In all relationships with customers and suppliers, we comply with Fortum's guidelines and ethical principles. Notably, we never accept or give a bribe or other improper payment for any reason.

As an active corporate citizen, Fortum offers expert advice to decision makers and non-governmental organisations in energy-related issues. Fortum as a company does not support, directly or indirectly, any political parties or other political organisations, nor does it participate in financing election campaign for any candidates.

Through our business, Fortum interacts with millions of people. According to our Sustainability Policy, we want to develop our operations in co-operation with our stakeholders. Open, honest and proactive communication and listening to our stakeholders are of key importance when targeting our strategic aims. Special attention is paid to the local communities and people around our production plants.

Social performance indicators, community >
Read more: Support for society >
Read more: Stakeholder engagement >

Sustainability organisation and responsibilities

At Fortum, responsibility for issues related to sustainability lies with division and Group function management, and ultimately the President and CEO and the Board of Directors. The Board of Directors has not appointed any of its members specifically conversant in sustainability and thus relies on the information and expert statements provided by the Fortum Management Team and the Group's sustainability experts. Fortum's corporate governance is discussed in the 2012 Financial Statements.

The Corporate Sustainability unit, which has been part of the Finance function since 1 November 2012, is responsible for coordinating and developing sustainability at the Group level. The Finance function also includes the Legal, Risk, Mergers and Acquisitions, Strategy, Purchasing and Internal Audit units, which the Sustainability unit closely collaborates with. Also the cooperation with the Communications and Corporate Relations and Public Affairs units is part of everyday activities.The Chief Financial Officer reports to the CEO and is a member of the Fortum Management Team. The CFO also participates in Fortum's Board meetings.

The Corporate Sustainability unit is responsible for the operations of the Group's sustainability networks. Regularly operating networks include the Climate network, which convened 5 times in 2012, and the Environment, Health and Safety (EHS) network, which met 6 times. As of January 1, 2013, the working model of the networks has been renewed and made more efficient by combining the Climate and EHS networks. Corporate Sustainability gives sustainability approval (environmental, occupational health, safety and social impacts) for all significant investments, acquisitions and divestments as part of Fortum's investment evaluation and approval procedure.

At Fortum, the responsibility of line management is emphasised. Fortum's line management is responsible for environmental and safety management, and the realisation of targets is part of Fortum's incentive system. The main indicators in defining incentive pay are injury frequency, the number of fires, leaks and other non-compliances. Sustainability targets are also part of the short-term incentive programme.

Sustainability target-setting principles >

Sustainability targets and performance >

Reporting principles

Fortum's Annual Report consists of two parts: the Financials and the integrated Sustainability Report. The theme for reporting is "Adding value". The entire Annual Report will be published online in Finnish and English on Fortum's website.

This report reviews Fortum's operations in 2012 and also contains some information from January-February 2013. The 2011 Sustainability Report was published in April 2012, and the 2013 report will be published in April 2014.

The report structure is divided into six sections. The first section describes Fortum as a company and provides key information in terms of production capacity, customers, personnel, certified management systems and carbon-dioxide emissions. The Group's business structure by division and a summary of the key achievements in 2012 are also presented. The second section focuses on Fortum's strategy and sustainability's core role in it, as well as on market development. Fortum's business value chain and the role of different production and distribution forms in it are discussed in the third section of the report. Fortum's key stakeholder groups and their expectations about Fortum's sustainability work are discussed in the fourth section. The standard disclosures of the Global Reporting Initiative (GRI) Guidelines are presented in the fifth section. The report's case examples are in the sixth section.

Individuals providing more information related to the report can be found on the contacts page.

Report scope and boundary

Reporting related to operations and management covers all functions under Fortum’s control, including subsidiaries in all countries of operation. The consolidation includes the parent company Fortum Corporation and all the companies in which Fortum Corporation has the power to govern the financial and operating policies and in which it generally holds, directly or indirectly, more than 50% of the voting rights. Possible deviations to this principle are reported in conjunction with information applying different boundaries.

The reporting of management practices does not fully cover Fortum’s minority ownerships, and thus the defining of the scope of reporting is not fully compliant with the GRI Boundary Protocol. According to the GRI Boundary Protocol, entities with 50% ownership or less and with significant sustainability impacts should be included in the management approach disclosures. In Fortum’s case, management practices of the Olkiluoto nuclear power plant (26% ownership), Kemijoki Oy (18% ownership in equity capital, 64% ownership in hydropower shares) and Turun Seudun Maakaasu ja Energiantuotanto Oy (49.5% ownership) in Finland and the management practices of the Forsmark (26% ownership) and Oskarshamn (46% ownership) nuclear power plants in Sweden are excluded from the reporting.

Information from previous years is presented as pro forma information, i.e., presented on the basis of the organisation and the functions of each year; the impacts of ownership changes in production facilities, for example, have not been updated afterwards in the previous key indicators.

Capacity changes

New and acquired capacity

Capacity and assets acquired during the year are included in the reporting starting from the date of possession. The same applies to the new capacity built and the new assets commissioned during the year.

Leased and divested capacity

The Kirkniemi power plant's capacity was leased out for the entire period when it was in Fortum's ownership. Ownership of the power plant was transferred to Sappi Fine Paper Europe on 15 November 2012. The production and emissions of the leased capacity are not included in Fortum's specific emissions figures, in order to present an accurate view on emissions in relation to production. However, the Kirkniemi power plant has been included in the absolute emissions figures until 15 November.

The business and environmental permits of the Naantali power plant were transferred in the beginning of 2012 to the responsibility of Turun Seudun Maakaasu ja Energiantuotanto Oy. During January, Fortum also completed the divestments of Fortum Energiaratkaisut Oy and the small-scale hydropower plants in Finland and the divestment of Fortum Termest AS and Fortum Elekter AS in Estonia. In 2012, Fortum also sold small-scale hydropower plants in Sweden and its district heat network in Surgut, Russia. These functions are not included in the 2012 sustainability reporting.

Measurement and calculation principles

Data for economic performance indicators is collected from the audited financial statements and from financial accounting and consolidation systems.

The environmental information of the report covers the plants for which Fortum is the legal holder of the environmental permit. Normally, Fortum is the majority shareholder of such plants, but the company can be the holder of a plant's environmental permit also when it is a minority shareholder. In such cases, the plant information is reported in its entirety, but only the share of production and emissions corresponding to Fortum's share of ownership is calculated in the specific emissions figures.

Fortum utilises a Group-wide database with instructions for collecting site-level environmental, health and safety data. Sites are responsible for data input, emissions calculations and assurance. The Corporate Sustainability unit compiles all data and is responsible for published sustainability information.

Fortum's CO_2 emissions subject to the EU Emissions Trading Scheme are annually verified at the site-level by external verifiers. Direct and indirect greenhouse gas emissions have been reported in accordance with the Greenhouse Gas Protocol and based on the Greenhouse Gas Analysis performed by an external consultant.

Fortum's human resources (HR) management system HeRMeS is currently used in Finland, Sweden, Norway and Poland, excluding the Zabrze and Bytom functions, and it is the main system for all employee-related personal and job data. Other social responsibility data, such as occupational health-related data, originates from various source systems and is collected by the relevant contact persons and delivered to Corporate Sustainability in the format recommended by GRI.

Global Compact reporting

Fortum has been a member of the United Nations Global Compact initiative since June 2010. This report describes the realisation of the Global Compact's ten principles in Fortum's operations. Global Compact approves the use of the indicators in the GRI G3.1 Guidelines in Communication on Progress (COP) reporting. The GRI index presents the indicators used to measure Fortum's performance in fulfilling the principles of human rights, labour standards, the environment and anti-corruption.

Assurance

Fortum's Sustainability Report 2012 is published online in Finnish and English and can be read at annualreporting2012.fortum.com. The report is based on the GRI G3.1 guidelines. The Finnish version of the Sustainability Report is given limited assurance by Deloitte & Touche Oy, Fortum Corporation's financial auditors. The assurance scope covers the material presented at annualreporting2012.fortum.com in Finnish.

In addition to G3.1. guidelines Fortum has also reported when applicable, some of the indicators presented in the Electric Utility Sector Supplement of the GRI. Sector specific additions to G3.1. indicators have not been acknowledged. Fortum has conducted a self-assessment on the comprehensiveness of the reporting, as required by the GRI. The application level has also been reviewed by the assurance provider, and both parties are in agreement that Fortum has followed application level B+ of the GRI 3.1 Guidelines. In its reporting, Fortum has also adhered to the AA1000 Accountability Principles Standard (AA1000 APS).

The report content is not updated after assurance, and any amendments to the content will be reported the following year.

Assurance statement >

Economic performance

EC1 Direct economic value generated and distributed

Fortum analyses the economic impacts and produced prosperity from its operations to different stakeholders in its operating countries and market areas. These include shareholders and investors, customers, employees, suppliers of services and goods, and the public sector. In terms of suppliers, Fortum analyses its impact also globally, paying special attention to risk countries.

In 2012, the difference between added value generated and distributed to stakeholders was EUR 746 million (2011: 1,232) for the development of own operations.

Read more: Generating value for stakeholders >

Read more: Fortum and taxation >

Monetary flows by stakeholder group

EUR million		2012	2011	2010
Generation of added value				
Customers	Income from customers on the basis of products and services sold, financial income and income from divestment of business activities or plants	6,398	7,129	6,432
Suppliers	Cash payments to suppliers of raw materials, goods and services	-2,989	-3,272	-2,923
Fortum produced added value		3,409	3,920	3,509
Distribution of added value				
Employees compensation	Wages, salaries, remunerations and other indirect employee costs	-556	-529	-507
Funders compensation	Dividends, interest and financial expenses paid to investors	-1,514	-1,431	-1,657
Public sector	Income and production taxes paid and support and donations	-593	-728	-642
Distributed to stakeholders		-2,663	-2,688	-2,806
Retained in business		**746**	**1,232**	**703**

Breakdown of Fortum's Added value by operating country 2011-2012

EUR million	Capital expenditure		Employee costs		Taxes[1)]		Total	
	2012	2011	2012	2011	2012	2011	2012	2011
Finland	338	239	221	209	137	250	696	698
Sweden	492	392	193	181	367	440	1,052	1,013
Russia	568	670	83	80	19	15	670	765
Estonia	10	12	5	7	1	0	16	19
Poland	19	18	18	21	10	8	47	47
Norway	36	19	17	14	2	1	55	34
Other countries	95	58	19	17	49	7	163	82
Total	**1,558**	**1,408**	**556**	**529**	**585**	**721**	**2,699**	**2,658**

1) Includes paid income taxes, production taxes and property taxes

Investments are not recognised in the calculation of distributed added value in accordance with GRI, but Fortum has included investments in its own assessment of economic impacts, as their annual volume and impact on society is significant.

Capital expenditure by country

EUR million	Finland		Sweden		Estonia		Poland		Norway		Other countries		Total	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Power														
Hydropower	12	9	86	60	-	-	-	-	-	-	-	-	98	69
Nuclear power	53	34	-	-	-	-	-	-	-	-	-	-	53	34
Fossil-based electricity	4	8	-	-	-	-	-	-	-	-	-	-	4	8
Renewable-based electricity	1	-	27	16	-	-	-	-	-	-	-	-	28	16
Other	1	1	-	2	-	-	-	-	-	-	6	1	7	4
Total Power	**71**	**52**	**113**	**78**	**-**	**-**	**-**	**-**	**-**	**-**	**6**	**1**	**190**	**131**
Heat														
Fossil-based heat	9	5	12	5	-	-	3	8	-	-	-	-	24	18
Fossil-based electricity	-	2	-	-	-	-	1	2	-	-	-	-	1	4
Renewable, of which	66	22	150	84	-	-	-	-	-	-	87	56	303	162
Waste	0	-	106	71	-	-	-	-	-	-	47	47	153	118
Biomass	66	22	41	11	-	-	-	-	-	-	40	8	147	41
Other	-	-	3	2	-	-	-	-	-	-	-	1	3	3
District heat	12	9	33	32	10	10	15	8	21	7	0	1	91	67
Other	12	12	32	34	0	-	-	-	-	-	1	-	45	46
Total Heat	**99**	**50**	**227**	**155**	**10**	**10**	**19**	**18**	**21**	**7**	**88**	**57**	**464**	**297**
Distribution	158	118	151	157	0	2	-	-	15	12	-	-	324	289
Electricity Sales	-	5	0	-	-	-	-	-	-	-	1	-	1	5
Other	10	14	1	2	-	-	-	-	-	-	-	-	11	16
Total exl. Russia segment	**338**	**239**	**492**	**392**	**10**	**12**	**19**	**18**	**36**	**19**	**95**	**58**	**990**	**738**

Russia		
Fossil-based electricity	535	627
Fossil-based heat	32	43
Other	1	0
Total Russia	**568**	**670**
Total incl. Russia	**1,558**	**1,408**

EC2 Financial implications and other risks and opportunities for the organisation's activities due to climate change

Climate change poses both regulatory and physical risks as well as opportunities for Fortum. As energy production and use is the largest source of greenhouse gases, the energy sector has a central role in building a low-carbon future. The energy industry has established visions and roadmaps of the future energy system and is prepared to invest in new climate-benign production capacity, provided that the supporting policy framework and preconditions of society are in place.

The primary impact of climate regulation for Fortum is the price of carbon dioxide in the EU's emissions trading and the cost arising from it. This also determines the financial value for the reduction of emissions. The price of CO_2 increases the production cost of fossil-based energy, but it also raises the prices of energy products. The best way to reduce the risk related to the price of carbon dioxide is to increase CO_2-free and low-carbon production capacity. Fortum is continuously developing its energy production capacity and looking for opportunities to reduce emissions. In 2012, the focus was on power plant energy-efficiency measures.

In 2012, about 93% of Fortum's electricity production in the EU was CO_2-free. In 2012, Fortum had a total of 79 (2011: 102) plants in six member states within the EU's emissions trading scheme. About 95% of the CO_2 emissions in the EU area were included in the emissions trading system. In 2012, Fortum was granted 5.4 million tonnes in free emissions allowances. The company's emissions in the EU emissions trading scheme were 4.8 million tonnes. Thus, in terms of emissions allowances, Fortum showed a surplus.

Fortum's CO_2 emissions and emissions allowances in 2010-2012

Million tonnes	2012	2011	2010
Total emissions	20.7	23.5	25.3
Emissions subject to ETS	4.8	8.0	9.7
Free emissions allocation	5.4	6.8	5.6
Emissions in Russia	15.6	14.7	14.6

In the third ETS period, 2013–2020, the volume of Fortum's free emissions allowances will decrease significantly, because electricity production has to purchase allowances from the market or auctions. Only in Poland and the Baltic countries will Fortum's CHP plants receive free allowances also for electricity production on the basis of the derogation rules of the Emissions Trading Directive.

In Russia, Fortum's CO_2 emissions are growing in upcoming years as a result of the increased energy production capacity. In Russia, carbon dioxide emissions have economic value for now only through the Joint Implementation (JI) mechanism. The mechanism could be utilised only during the Kyoto period 2008–2012, but not beyond that. Fortum received the first emission reduction units (ERU) in October from Russia. These ERUs originated from OAO Fortum's new power plant unit at Tyumen CHP-1. A total of 1,626,949 ERUs had been transferred from Russia to Finland by the end of 2012 from the JI projects in which Fortum participated directly. Fortum doesn't expect to receive significant volumes of ERUs in 2013.

Fortum is also participating in two international climate funds, the Prototype Carbon Fund (PCF) and the Testing Ground Facility (TGF). In 2012, Fortum received a total 127,360 emission reduction units from these funds. Of the emission reduction units

received, 74,176 were CER units, 30,976 were ERUs, and the rest other emission reduction units. Fortum estimates to receive a cumulative total of about 1,500,000 units during the fund's operating period.

Fortum is exposed to physical risks of climate change, including changes in weather patterns that may change energy demand and supply from, e.g., hydropower plants. More frequent and intensive storms may impact the operation and maintenance of the distribution network. Higher precipitation may affect hydropower production, dam safety and bioenergy supply. In addition to climate change mitigation, Fortum is also taking measures to adapt its operations to climate change and to take impacts into consideration in e.g. production planning and in evaluating growth projects.

Concern about climate change is expected to result in an increasing demand for low-carbon and energy-efficient energy products and solutions. Fortum's know-how in CO_2-free hydro and nuclear power and in energy-efficient CHP as well as research and development in the future energy system and technologies, like wave and solar energy, can prove to be a competitive advantage. Fortum is investing in CO_2-free production in Europe and sees business opportunities in providing climate-benign energy solutions for sustainable urban living and the electrification of transport.

Read more: Market development >

Read more: Low-carbon society >

EC3 Coverage of the organisation's defined benefit plan obligations

Fortum's pension arrangements conform to the local regulations and practices in each country where Fortum companies operate; these are discussed in the notes of the Financials 2012.

Market presence

EC6 Policy, practices and spending on local suppliers

Fortum buys fuels, goods and services from international and local suppliers. A significant part of Fortum's procurements are related to investments. Fortum classifies purchases as local for those countries in which Fortum has operations. The most significant purchases, excluding investments, are from the Nordic countries (EUR 1,612 million) and Russia (EUR 769 million).

Fuels accounted for about EUR 1,057 million of the total annual purchasing volume. Fossil fuels accounted for about EUR 910 million, biofuels about EUR 130 million and nuclear fuel about EUR 20 million.

Purchases [1] excluding investments in 2011-2012

EUR million	2012	2011
Nordic countries	1,612	1,903
Russia	769	692
Poland	161	148
Estonia	36	64
Other countries	99	44
Total	**2,677**	**2,851**

[1] Includes purchases of fuel, power and other materials and services.

In 2012, Fortum's investments, excluding acquisitions, were EUR 1,558 million (2011: 1,408), of which 482 million (2011: 278) was for CO_2-free production. Investments totalled 25% of sales (2011: 22%). Fortum's investments have a significant local impact, as

they create business and job opportunities for local suppliers and develop the local infrastructure. The biggest investments were made in Russia, EUR 568 million (2011: 670), and in Sweden, EUR 492 million (2011: 392). Investments in renewable energy forms were EUR 429 million (2011: 247).

EC7 Local hiring procedures and proportions of local senior management

In local hiring, Fortum uses advertised recruitment and direct search methods. In Sweden, 100% of the senior management are locals. In addition to the locals, in Finland there is one Polish manager and in Russia one German manager. In Poland, the only Vice President position is held by a Finn.

Indirect impacts

EC8 Development and impact of infrastructure investments and services provided primarily for public benefit, through commercial in-kind or pro bono engagement

Fortum supports organisations and communities working for the common good in the countries where it operates. The goal is for sponsorships to be mutually beneficial. Collaboration in research and development projects with Nordic universities in particular is significant.

In 2012, Fortum's support for public benefit totalled about EUR 5.8 million (2011: 4.6), of which the share of grants awarded by the Fortum Foundation was EUR 780,000 (2011: 700,000). The purpose of the Fortum Foundation is to support research, education and development in natural, technical and economical sciences within the energy industry. In 2012, Fortum Foundation granted scholarships to 48 students. In addition to this, Fortum donated about EUR 757,000 (2011: 2.8 million) to universities in Finland for R&D cooperation.

Fortum's investments in infrastructure – especially in the districting heating network in Russia – provide public benefits. However, as Fortum's investments in district heating networks have also economic and environmental benefits, they are not regarded as the investments referred to in the GRI.

The amount donated to non-profit targets is decided by Fortum's Board of Directors. Donations are not awarded for any kind of political activities, religious organisations, authorities, municipalities or local administrations, nor are they ever part of business agreements.

EC9 Understanding and describing significant indirect economic impacts, including the extent of impacts

Fortum supports social development and well-being by, e.g., increasing local employment and paying taxes, salaries and social security costs. The tax benefits Fortum produces for society include income taxes and taxes related to the business operations – such as property and fuel taxes. Fortum also has pass-through taxes, such as the value added tax, and withholding taxes, which Fortum is obligated to collect and report on behalf of the government.

The dividend income on the shares of the Finnish State has an impact on maintaining social infrastructure.

Fortum's direct and indirect economic impacts >

Availability and reliability

EU10 Planned capacity against projected electricity demand over the long term, by energy source and regulatory regime

Fortum is currently investing substantially in new energy production capacity both in Russia and Europe. In Russia, Fortum is committed to a EUR 2.5 billion investment programme that will increase electricity capacity by 2,400 MW and heat capacity by 662 MW. The last units in the programme are scheduled for commissioning in 2014. The Russian investment programme is based mainly on natural gas, whereas the investments in Europe (~800 MW electricity and 225 MW heat, under construction) target mainly CO_2-free production.

Fortum's European investment plan >

Fortum's Russian investment plan >

Energy sector development in Europe >

Electricity market development in Russia >

System efficiency

EU11 Average generation efficiency of thermal plants

Fortum has a Group-level target (>70%) for overall efficiency of fuel-use as a 5-year average. Efficiency in 2012 was 64.2% (2011: 67.1%) and the 5-year rolling average 66.9% (2011: 68.3%). Fortum's target setting is based on the present production portfolio, planned new capacity both in Europe and Russia, as well as planned actions for increased efficiency and flexible fuel use.

Read more: Efficiency through combined heat and power production >

EU12 Transmission and distribution losses as a percentage of total energy

Fortum's power transmission and distribution losses totalled 1.4 TWh in 2012 (2011: 1.4 TWh). This corresponds to 3.3% of the total volume of power transmission and distribution (2011: 3.3%). Guarantees of origin (CO_2-free electricity) were acquired for all the electricity purchased for network losses.

Read more: Smarter, more reliable electricity distribution >

Read more: Uninterrupted heat distribution a priority >

Materials

EN1 Materials used by weight or volume

Fuel use

Fortum's materials and energy use mainly consists of fuels. Fortum produces electricity and heat from a diverse range of energy sources: in Europe mostly from renewable and low-carbon energy sources and in Russia from fossil fuels. In its operations, Fortum aims to use natural resources efficiently and sparingly. In order to decrease the environmental impacts, operations are continuously improved with modern technology as well as efficient operating and maintenance procedures.

Energy content of the fuels is described in EN3.

Fuel consumption in 2010-2012

	2012	2011	2010
Natural gas, million m^3	7,844	7,909	8,092
Coal, 1000 t	2,536	3,587	3,938
Biomass, 1000 t	1,790	1,439	2,797
Waste fuels, 1000 t	806	754	520
Peat, 1000 t	269	254	465
Fuel oil, 1000 t	49	100	242
Other fuels, 1000 t	4	54	69
Nuclear fuel, t	21	23	25

Other materials use

In addition to fuels, other materials used on a large-scale in energy production include chemicals for flue-gas cleaning, e.g., limestone, ammonia and urea.

Use of chemicals in 2010-2012, t

	2012	2011	2010
Chemicals used for climate protection	58,000	69,000	70,000
Chemicals for water treatment	13,000	14,000	na
Other chemicals and additives	8,600	3,200	15,000
Lubricants	200	470	na

EN2 Recycled materials used

Waste-derived fuels from industrial and municipal waste are recycled input materials and are used for heat and electricity production in waste incineration plants and in co-combustion with other fuels.

In 2012, Fortum used 806,000 tonnes of waste-derived fuels in Sweden and Finland. About 35,000 tonnes of the waste-derived fuels used in Sweden originated from Norway and 2,300 tonnes from the UK (combustible municipal waste, EWC 191210). Fortum

and the waste supplier companies hold the licences for waste import. Fortum is responsible for reporting its annual imports of waste to the authorities. During the year, Fortum imported to Sweden test waste shipments from Italy and Scotland totalling about 7,000 tonnes.

In 2012, recycled input materials accounted for 14% of the Fortum's fuel use volume (excluding natural gas) and 1.8% of the fuels' energy content.

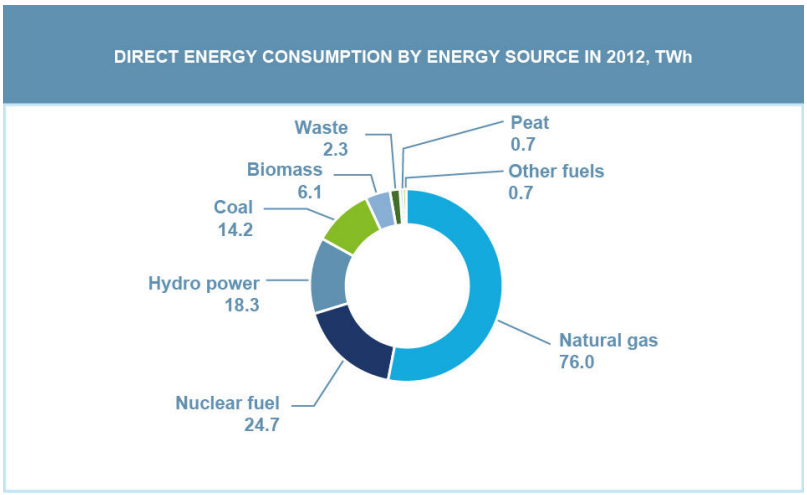
Energy

EN3 Direct energy consumption by primary energy source

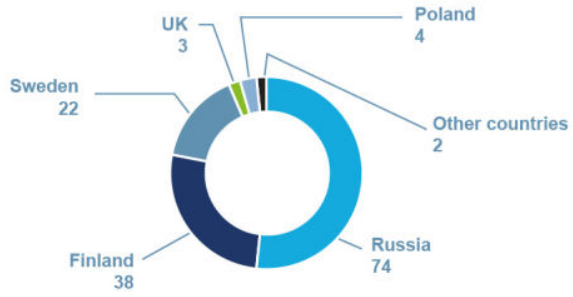
Fortum's direct primary energy consumption in own energy production in 2012 was 143 terawatt-hours (TWh). The most significant primary energy sources were natural gas, uranium and hydropower.

The figures shown below for Fortum's power and heat production by energy source in 2010–2012 include production from own power plants and shared companies. Energy consumption of shared companies is not included in the primary energy consumption reported above.

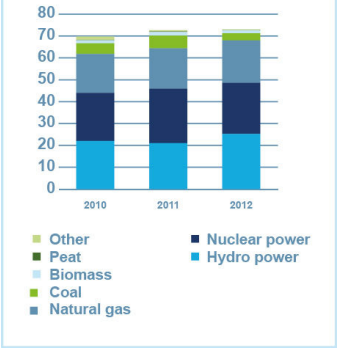
In 2012, renewable energy sources accounted for 36% of Fortum's power generation and 20% of its heat production.



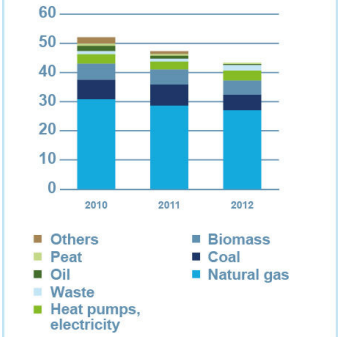
DIRECT ENERGY CONSUMPTION BY COUNTRY IN 2012, TWh



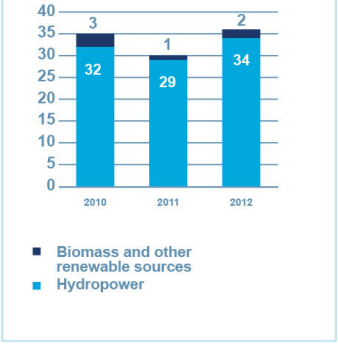
FORTUM'S POWER PRODUCTION BY ENERGY SOURCE IN 2010–2012, TWh



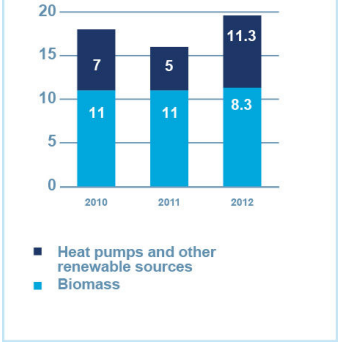
FORTUM'S HEAT PRODUCTION BY ENERGY SOURCE IN 2010-2012, TWh



SHARE OF RENEWABLE ENERGY SOURCES IN FORTUM'S POWER PRODUCTION IN 2010–2012, %



SHARE OF RENEWABLE ENERGY SOURCES IN FORTUM'S HEAT PRODUCTION IN 2010–2012, %



EN4 Indirect energy consumption

Fortum's indirect energy consumption in 2012 was 5.8 TWh. The largest part of this is electricity and heat acquired from external sources for operating power plants and compensating network losses in power distribution.

A major part of the external heat originates from the Enocell pulp mill in Finland and is produced from biomass. Electricity is bought from various suppliers and the exact primary energy sources are not known. Guarantees of origin (CO_2-free electricity) were acquired for all the electricity for network losses.

External energy purchases have been converted to primary energy by assuming 75% energy efficiency for power production and 85% energy efficiency for heat production.

Indirect primary energy consumption in 2012

	GWh
External heat supply	2,583
Electricity for distribution network losses	1,909
Other external electricity supply	1,282

EN5 Energy saved due to conservation and efficiency improvements

In combustion-based energy production, Fortum aims to utilise the fuel as efficiently as possible. In 2012, Fortum's efficiency of fuel use was 64.2% (2011: 67.1%), while the corresponding target is 70% as a five-year average.

Energy-efficient CHP production, in which up to 90% of the energy content of the fuel can be utilised, is Fortum's most important tool to increase the efficiency of fuel use. In 2012, CHP plants accounted for 32% (2011: 29%) of Fortum's total electricity production and 79% (2011: 71%) of heat production.

The implementation of the energy analyses, energy-efficiency training and technology measures related to Fortum Power and Heat Oy's 2008–2016 energy-efficiency programme continued in 2012. The goal of the programme is to improve energy efficiency in power plants in Sweden, Finland and Great Britain by 600 GWh per year. The main focus is on improving power plant efficiency and on increasing the capacity of CO_2-free production. About 30 projects will be implemented every year. In 2012, the efficiency improvements resulted in an energy savings of about 95 GWh (2011: 90 GWh).

Hydropower refurbishment projects were completed in Pyhäkoski, Finland, and Bergvik, Sweden, and continued at the Gammalänge and Långå power plants in Sweden. A tool for monitoring operational energy efficiency in real-time was developed in 2012 for the Suomenoja and Joensuu power plants, and an Ecotuning™ energy efficiency report was compiled at the Kuusamo plant. Additionally, the optimisation of the district heat networks continued in Stockholm.

Fortum is participating in the European electricity sector's Energy Wisdom programme and reports on its projects that improve energy efficiency and reduce greenhouse gases. The Energy Wisdom reports are available at www.eurelectric.org/EWP.

EN6 Initiatives to provide energy efficient or renewable energy-based products and services

Fortum is contributing to a low-carbon society by offering energy products and services that can help mitigate climate change and improve energy efficiency also in other sectors of society. A more detailed description of environmentally benign products is given in EN26.

Fortum provides customers with energy advice, offers energy-efficiency consulting and energy-saving products, like energy consumption metering devices (e.g. Kotinäyttö/Home Display).

EN7 Initiatives to reduce indirect energy consumption and reductions achieved

Own use of energy in a power plant can be reduced with structural modifications, systematic and preventive maintenance, and by training personnel in the optimal operation and monitoring of the plant's operational economy.

Fortum has invested in automatic meter management in power distribution in Sweden and Finland in recent years. This improves the quality of loss data and creates new possibilities for load management, which in turn reduces distribution losses. Losses in power distribution can also be reduced by optimising network operations, increasing transmission capacity in lines with the highest loads and replacing obsolete transformers with new, more energy efficient ones. The impact of an individual measure is often minor and even the cumulative impacts can only be seen over the longer term. However, in the long term the network load tends to grow, which makes quantification of energy efficiency very difficult.

Fortum's power distribution losses in 2012 were 1,432 GWh, which is a little higher than in the previous year (2011: 1,401 GWh). In 2012, the losses accounted for 3.3% (2011: 3.3%) of total power distribution volume. The volume of power distribution increased to 26.6 TWh (2011: 26.1 TWh) and the volume of regional power transmission to 17.3 TWh (2011: 16.7 TWh).

The volume of electricity acquired from external sources for operating power plants and heat boilers was 962 GWh, which is 1% less than in the previous year (2011: 969 GWh).

Water

EN8 Total water withdrawal by source

In 2012, Fortum abstracted a total of 3,680 (2011: 3,850) million cubic meters of water, of which the majority, 3,580 million m^3 (2011: 3,750) , was used as cooling water in thermal power plants. Direct sea water cooling is applied at the condensing power plants in Finland. When cooling water flows through the condenser, its temperature rises, but the volume of water remains unchanged.

Fortum's power plants in Russia use cooling towers where part of the water is evaporated into the atmosphere. In Russia, water is used also for pumping ash from coal-fired power plants into ash ponds.

In hydropower production, all the water runs through turbines, so the water volume and quality remain unchanged. Hydropower production is not included in the above mentioned figures for water withdrawal.

Water withdrawal by country in 2010-2012, million m^3

	2012	2011	2010
Finland	1,538	2,071	-
Russia	2,130	1,777	-
Great Britain	1.9	2.5	-
Sweden	8.9	1.2	-
Poland	0.6	0.8	-
Other countries	0.3	0.4	-

Water withdrawal by source in 2010-2012, million m^3

	2012	2011	2010
Sea water	1,500	1,950	2,070
Fresh surface water	2,160	1,880	1,780
Tap water	5.5	6.1	6.0
Other source	15.7	15.1	2.5

Water use in 2010-2012, million m^3

	2012	2011	2010
Cooling water	3,582	3,746	3,555
Process and auxiliary water	97	107	304
Recycled water	9.5	36.0	8.2

EN9 Water sources significantly affected by withdrawal of water

Fortum withdraws water from the sea, lake or river, and the withdrawn volume is small compared to the watercourse volume and flow, thus none of these water sources is significantly affected. Water scarcity is not an issue in the operation areas of Fortum's power plants.

In Poland, Fortum uses mainly municipal tap water. Poland is Fortum's only area of operation defined as a water-stressed area. Fortum's power and heat plants in Poland are mostly small. The aggregated water consumption is about 800,000 m^3 annually. No risk of shortage in the municipal water supplies has been identified in the cities in which Fortum operates. All of our operations in water-stressed areas have ISO 14001 environmental certification.

EN10 Percentage and total volume of water recycled and reused

The volume of water recycled in 2012 was 9.5 million m^3, which was 10% of the process water intake.

Biodiversity

EN11 Location and size of land holdings in areas of high biodiversity

Fortum owns and operates several energy production facilities adjacent to protected areas. Eight protected areas in a total of about 10,500 hectares are located within 500 metres from Fortum's Finnish power plants. The areas consist of natural conservation programme areas, nature and wilderness conservation areas, and Natura 2000 areas. In Sweden, there are 37 different types of conservation areas in a total of about 40,000 hectares within the same distance from power plants. A more comprehensive list of the areas that are close to conservation areas and in Fortum's possession is available here.

In Finland, the areas close to power plants are protected mainly for their scenic values. Fortum's real estate at the Untra hydropower plant on the Dalälven river in Sweden contains Natura 2000 areas, and there is also a large conservation and Natura 2000 area located directly downstream from the plant. Outside of this conservation area, Fortum has voluntarily protected the area in its ownership. There are conservation areas also in the vicinity of other power plants. In the Eura municipality in Finland, the Kauttua power plant is located near the Haronlahti Natura 2000 area. In Stockholm county in Sweden, there are conservation areas located close to five of Fortum's CHP plants.

Fortum's hydropower plants on a pop-up map >

EN12 Description of significant impacts of activities, products, and services on biodiversity

Fortum's impacts on biodiversity – flora and fauna species – are often local and mainly linked to the use of land and water areas and the exploitation of renewable energy sources. Fortum's activities in hydropower production and electricity distribution may have a negative impact in areas of high biodiversity. In some cases, the impacts of hydropower production are related to dams, which prevent fish migration and reduce the number of rapids as habitats. Fortum's discharge waters into water systems, particularly cooling and runoff waters have only a minor impact on water systems and the related habitats and aquatic biodiversity.

Utilising fuels (for example, peat and biomass) in heat production can affect biodiversity. Fortum does not have its own fuel production, so there is no direct impact on biodiversity. Biodiversity aspects are taken into consideration in fuel purchasing.

EN13 Habitats protected or restored

The first phase of restoration of Kiantajärvi lake's flood meadows in Finland was implemented by creating nesting areas for birds in collaboration with the Centre for Economic Development, Transport and the Environment (ELY) and the municipality. Removing the Nimisjärvi dam created habitats for fish and benthos. The impact on the landscape in the area was considered to be good, but the effects on birds, flora and aquatic fauna can be assessed only after a few years after restoration.

In Sweden, two dams on Ore river tributaries were removed and thus bringing access to migrating fish. The impacts of the measure will be monitored in 2013. In the vicinity of the Untra power plant on the Dalälven river, Fortum manages the company's forests in an area of 260 hectares in line with the environmental management plan to protect the very rich biodiversity in the area. Continuous use of environmentally benign forest management practices will be monitored with ecological surveys.

Fortum has also made a feasibility study on possible fish restoration measures downstream from the Krångede hydro power plant. Habitat modelling was carried out in the same area to study possible spawning areas and habitats suitable for graylings and restoration possibilities. However, no decision on habitat restorations has been made because additional studies are still needed.

Fortum's hydropower plants on a pop-up map >

EN14 Managing impacts on biodiversity

Fortum's biodiversity guidelines set the principles for taking biodiversity into consideration and for managing the impacts of the company's operations on biodiversity. Fortum recognises that biodiversity is an essential element of sustainable development on a global and local scale.

The main impacts on biodiversity are assessed in the pre-feasibility phase of any project, e.g., a hydropower project, before the investment decision. Biodiversity impacts are assessed in depth as part of the EIA (Environmental Impact Assessment) process. If an investment project impacts a specific species, it may result in modification to the plant design or in the initiation of measures to preserve or restore the ecological value.

For example, a dam safety project to retrofit the Untra hydropower plant dam to withstand calculated design flood flows will be implemented in the coming years. Together with biology experts, Fortum has carried out a thorough study and has agreed on modifications that will decrease local impacts.

Fortum compensates for the environmental impacts caused by its hydropower production by stocking several fish species. Work on biodiversity action plans for hydropower production is under way. In 2013, river-specific plans on environmental measures will be completed.

Fortum's Environmental Fund supports projects that reduce the adverse environmental impacts of hydropower production and support biodiversity in built-up water systems. Some of the Fund's assets originate from the sales of "EKOenergia" electricity in Finland and "Good Environmental Choice" eco-labelled electricity in Sweden. Additionally, the Fund also contains other voluntary

funding by Fortum for environmental measures. In 2012, the Fund spent about EUR 770,000 on various projects. All projects are typically carried out in cooperation with authorities, municipalities and research institutes. Read more about the projects implemented in 2012.

In electricity network operations, underground cabling protects biodiversity and reduces the impact on the landscape and birds. Measures to prevent bird collisions and electric shocks include isolation of the live parts of the network and mounting marker balls on overhead lines and landing perches on poles. Whenever possible, new networks are constructed in public areas and along road sides.

In biomass and biofuel purchases, Fortum aims to increase the share of certified wood fuel. This kind of fuel originates from sustainable energy sources in which e.g. biodiversity is taken into consideration. Read more about Fortum's activities to increase the traceability and sustainability of bioenergy.

EN15 Species with extinction risk with habitats in areas affected by operations

Fortum has not conducted a comprehensive study on the presence of species with extinction risk in the vicinity of its operating areas, but is continuously increasing the awareness of the endangered species in the vicinity of its power plants.

Saimaa ringed seal (*Pusa hispida saimensis*) is classified in Finland as an extremely endangered species on the IUCN's red list. Fortum has long been working to protect this species with the Finnish Association for Nature Conservation. There have been a few years when Fortum has altered water flows in the Vuoksi river to enhance the survival of seal calves in their nests. The Saimaa ringed seal is an example of a species on which Fortum's activities have a positive impact.

One important threatened species in Finnish and Swedish rivers is the freshwater pearl mussel. Several projects related to restoration of the mussel habitat will be implemented within the framework of Fortum's Environmental Fund in 2013. Fortum also funds Karlstad University's research project that is producing information about the freshwater pearl mussel reproduction and the significance of the origin of the mussel's host fish (trout) on the life-cycle of mussels.

A threatened sedge species, *Carex heleonaste*, grows close to the Laforsen hydropower plant on the Ljusnan river in Sweden. To protect this threatened species, annual maintenance work is carried out to ensure good living conditions for this species.

In Sweden, Fortum is participating in an eel (*Anguilla anguilla*) conservation project and research together with seven hydropower companies and the Swedish Agency for Marine and Water Management (Havs och vattenmyndigheten).

Emissions, effluents and waste

EN16 Total direct and indirect greenhouse gas emissions

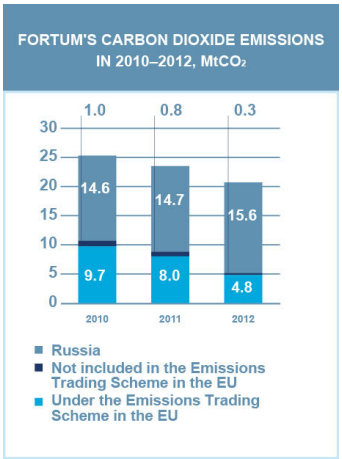
Carbon dioxide (CO_2)

In 2012, Fortum emitted 20.7 million (2011: 23.5) tonnes of CO_2. Of this amount, 76% resulted from the Russian operations, 12% from Finland and 5% from Poland. Fortum's total emissions decreased from the previous year, mainly because Naantali Power Plant was assigned to Turun Seudun Maakaasu ja Energiantuotanto Oy and only a small volume of coal condensing power was produced in Finland. Emissions in Russia increased by 0.9 million tonnes from 2011.

The specific CO_2 emission of total energy production decreased to 177 g/kWh (2011: 192). The five-year average, including 2012, increased to 179 g/kWh (2011: 169) as a consequence of the increased share of Russian energy production in the total mix and increased emissions in Russia. The specific CO_2 emission from total energy production has been increasing during the last five years, although we still are below the target level. The increase in the specific emission is a result of the increased share of our Russian energy production based on natural gas and coal.

Fortum's total and specific CO_2-emissions will further increase as a consequence of the commissioning of the new production capacity in Russia. The share of coal in our Russian fuel mix is increasing due to economic and availability reasons.

The specific CO_2 emission of power production in the EU was 42 g/kWh (2011: 88) and the five-year average, including 2012, was 60 g/kWh (2011: 67).



Total greenhouse gas emissions

Fortum reports greenhouse gases in accordance with the principles of the Greenhouse Gas Protocol recommended by the Global Reporting Initiative (GRI), where emissions are categorised into scope 1, scope 2 and scope 3 emissions. The reporting covers direct and indirect CO_2, methane (CH_4) and dinitrogen oxide (N_2O) emissions. Indirect emissions are calculated using literature-based emission factors and assumptions on different parts of the fuel chains. In the beginning of 2013 we started a development process regarding the revised Corporate Value Chain (Scope 3) Accounting and Reporting -standard and we aim to disclose a greenhouse gas inventory meeting the new standard during 2013.

In 2012, about 80% of Fortum's greenhouse gas emissions were direct CO_2 emissions (scope 1), which are generated when burning fossil fuels to produce electricity and heat. Additionally, the direct emissions include the CO_2 emissions of company cars. The share of indirect emissions from electricity, heat and steam purchased from outside sources (scope 2) was less than 1% of all greenhouse gas emissions. Indirect emissions from the production and transportation of fuels, from employee air travel and from the use of our products (scope 3) accounted for about 19% of greenhouse gas emissions.

The share of carbon dioxide of CO_2 equivalent emissions was about 88% and the share of other greenhouse gases (CH_4 and N_2O) was about 12%.

Total greenhouse gas emissions, 2010-2012, $MtCO_2eq$

	2012				2011				2010			
	CO_2	CH_4	N_2O	Total	CO_2	CH_4	N_2O	Total	CO_2	CH_4	N_2O	Total
Scope 1	20.7	0.1	0.2	21.0	23.5	~ 0	0.2	23.7	25.3	~ 0	0.3	25.6
Scope 2	0.1	~ 0	~ 0	0.1	0.2	~ 0	~ 0	0.2	0.1	~ 0	~ 0	0.1
Scope 3	1.9	2.9	~ 0	4.8	2.2	3.3	~ 0	5.5	2.3	3.4	~ 0	5.7
Total	**22.8**	**3.0**	**0.2**	**26.0**	**25.9**	**3.3**	**0.2**	**29.4**	**27.7**	**3.4**	**0.3**	**31.4**

EN17 Other relevant indirect greenhouse gas emissions

SF_6 is used as isolation gas in switchgears at a number of substations located in urban areas. SF_6 is a strong greenhouse gas, but the gas volume is low and the gas is well confined in the equipment. In 2012, about 24 kg of SF_6 was leaked into the atmosphere from Fortum's installations. This equals to 540 tonnes of CO_2 emissions.

EN18 Initiatives to reduce greenhouse gas emissions

New CO_2-free and low-carbon capacity

Fortum's most important measure in curbing climate change is to increase CO_2-free or low-carbon energy production and to improve energy efficiency.

In line with its strategy, Fortum is focusing on CO_2-free hydro and nuclear power and on energy-efficient combined heat and power (CHP) production. Emissions trading and the use of Kyoto mechanisms are also important climate actions at Fortum.

New CO_2-free and low-carbon production capacity commissioned during 2012 is described in Investments in 2012.

With its low-carbon production capacity, Fortum's Power Division has managed to reduce its electricity production's specific CO_2 emissions by 60% from the 2003–2007 comparison period for the Kyoto period 2008–2012.

Increasing the use of biomass

Increasing the use of bioenergy was studied at many power plants during 2012. At the Värtan power plant, testing of the use of olive stones in the fuel mix continued and their share of the fuel use was 4%. At the Czestochowa CHP plant in Poland, the share of biomass in fuel use increased from 22% to 32% during 2012.

In February 2012, Fortum made a decision on a pyrolysis plant to be built at the Joensuu CHP plant. The plant will produce 50,000 tonnes (corresponding to 200–220 GWh of fuel energy) of bio-oil annually, and it will be the first commercial-scale demonstration plant on pyrolysis technology. Primary raw materials will be sawdust and forest residues. Pyrolysis oil will replace the use of heavy fuel oil in heat-only boilers and power plants. The use of 200 GWh of pyrolysis oil instead of heavy fuel oil can reduce CO_2 emissions by about 60,000 tonnes. In 2012, Fortum submitted an environmental permit application for the use of pyrolysis oil at the Vermo heat plant in Espoo.

In December 2012, Fortum made a decision to invest in a new biomass fuelled combined heat and power (CHP) plant in Värtan, Stockholm. The production capacity of the CHP plant is about 280 megawatts (MW) heat and 130 MW electricity. The new plant will use primarily forest biomass, but can use a full range of other types of biomass as well. The share of bioenergy in fuel use at the Värtan plant will increase from today's 45% to as high as 70% upon completion of the plant in 2016. The use of fossil fuels will decrease accordingly.

Construction of the Järvenpää and Jelgava CHP plants continued as planned, and they will be commissioned in 2013. The Järvenpää plant received an environmental permit in 2012, and in compliance with it the aim is to use 100% biomass for the plant's fuel.

Read more: Responsible fuel purchasing >

Cutting emissions by improving energy efficiency

Fortum's activities in improving energy efficiency are described in EN5.

CCS as future abatement technology

Carbon capture and storage (CCS) will be an important abatement measure of CO_2 emissions and will have a pivotal role in energy system transformation in the future. In 2012, Fortum participated in CCS research programmes in Finland and the EU. Fortum was the main financer of Cleen's CCS research and is represented in ZEP, the Zero Emission Platform. However, the feasibility of CCS still faces major technical, economic, social and political challenges. The current cost level of CCS does not yet offer solid business cases for successful investments. Fortum is investing in so-called second-generation CCS concepts and technologies in its research and considers them more promising than the technologies researched so far.

EN19 Emissions of ozone-depleting substances

Fortum has about 150 tonnes of R22 (HCFC-22 refrigerant) in the heat pump facilities at Värtan and Hammarby in Stockholm. In 2012, emissions of R22 into the atmosphere were 2.7 tonnes, which is about 370 kg as R11 equivalent. R22 is also a strong greenhouse gas and the emission from these two plants is equivalent to 4,500 tons of CO_2.

EN20 NO_X, SO_2 and other significant air emissions

In 2012, Fortum's thermal energy production emitted 29,400 tonnes (2011: 36,000) of NO_X, 19,800 tonnes (2011: 24,900) of SO_2 and 16,000 tonnes (2011: 16,600) of particle emissions. SO_2, NO_X and particle emissions from Fortum's European production plants have decreased significantly in recent decades as a result of advancements in flue-gas cleaning technology and combustion process control.

About 72% of the flue-gas emissions (SO_2 and NO_X) and about 96% of the particle emissions originated from the Russian operations. The most significant source of particle emissions (9,070 tonnes in 2012) is the Argayash plant in Russia.

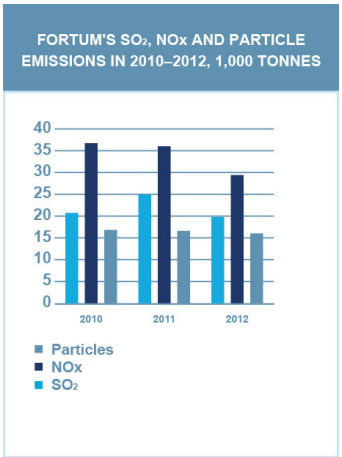
The single most important emissions reduction measure in 2012 was the change of the coal used at Argayash CHP and Chelyabinsk CHP-2. The use of the new coal was at the planned level. About 70% of the annual consumption of coal has been switched to a higher quality coal with an ash content of 16–19%, compared to the previous coal with an ash content of 41–45%. The sulphur content has also decreased from 0.9% to 0.6%. At these two plants, an overall reduction of 44% in particle emissions and 34% reduction in SO_2 emissions per used tonne of coal was achieved compared with the year 2010, when the coal change project was initiated.

However, due to the increased coal consumption, the total SO_2 emissions in Russia increased in 2012. Particle emissions remained at the same level in spite of higher coal consumption.

In 2012, the emissions of mercury into air were 130 kg.

Fortum's SO_2, NO_x and particle emissions by country, 1,000 tonnes

	SO_2	NO_X	Particles
Russia	13.1	22.2	15.3
Finland	3.1	3.7	0.2
Poland	3.3	1.7	0.5
Sweden	0.2	1.1	0.0
Great Britain	0.0	0.4	0.0
Other countries	0.2	0.6	0.0



EN21 Total water discharge by quality and destination

Energy production impacts on water systems are mainly caused by the thermal load of cooling water discharges and the impurities in waste water effluents. All waste water is conducted directly to municipal sewage treatment plants or cleaned on-site before being discharged into water systems.

In 2012, Fortum used a total of 3,580 million m^3 (2011: 3,750) of cooling water that was mostly discharged to water systems. The thermal load on the water systems was 17 TWh (2011: 21). The biggest single water withdrawal in 2012 was at the Loviisa nuclear power plant in Finland, where 1,327 million m^3 of cooling water was abstracted and discharged back to the sea. The thermal load into the sea was 15 TWh. Measurements indicate that the cooling water has increased the temperature of surface water by 1–2 ºC within a distance of 1–2 kilometres from the discharge point.

About 60 m^3 of oil and chemicals was relased into water along with waste waters and oil or chemical leaks. The majority of this (50 m^3) was bio-oil that leaked into the sea in unloading a tanker in Stockholm.

In Russia, the wet method is used to pump ash from coal-fired power plants into ash basins. Wastewaters from the basins are led into water systems and the deposited ash remains in the basin. During 2012, the plants implemented improvement measures for wastewater handling in order to decrease non-compliances regarding the exceedance of pollutant concentrations defined in the permits. There were fewer non-compliances than in previous years: a total of 12 cases (2011: 20) at five plants during the year. Water flows from the coal-fired plants through ash basins were separated and reduced. The use of better quality coal also improved the situation, because the amount of ash and consequently the volume of wastewater decreased.

Waste water emissions by recipient in 2010-2012, million m^3

	2012	2011	2010
Sea	8.9	3.9	3.9
Fresh water system	21.0	18.4	18.8
Municipal sewage	1.7	1.7	1.4
Other recipient	0.06	0.05	0.13

EN22 Total amount of waste by type and disposal method

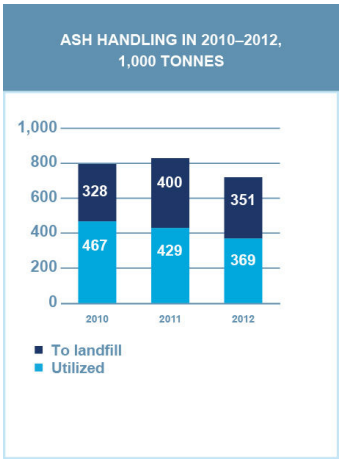
Ash and by-products

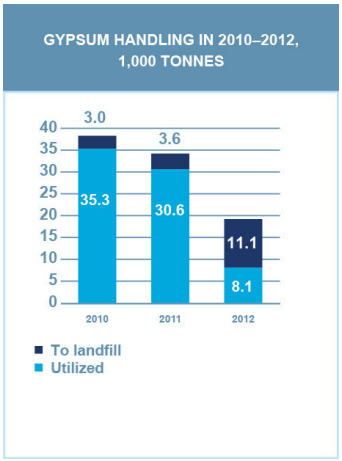
About 720,000 tonnes of ash and 19,000 tonnes of gypsum were generated in 2012. About 40% of the ash was generated at Russian plants, 26% in Sweden, 17% in Poland, 15% in Finland and the rest in the Baltic countries. In Europe, ash and by-products of desulphurisation are utilised and recycled as efficiently as possible. In Russia, ash is stored in basins because it does not have other usages, except for building embankments for ash basins, and the wet ash handling makes utilisation more difficult. In 2012, the ash recycling rate at Fortum was 51% and the gypsum recycling rate 42%.

Gypsum is utilised in the gypsum board industry. The gypsum volume was clearly lower than in the previous years because of the assignment of Naantali power plant to Turun Seudun Maakaasu ja Energiantuotanto Oy and low production volumes of coal condensing power. The utilisation of gypsum at the Meri-Pori power plant decreased from 2011.

Fly ash was used in the construction material industry, in road construction, as made-up ground and in backfilling mines. New product development for ash was carried out in 2012 in collaboration with different parties. In Sweden, a project to build a test road with slag from municipal waste incineration at Högdalen, in Stockholm, continued.

Any remaining by-products that cannot be utilised are deposited in landfills or intermediate storage. In 2012, about 351,000 tonnes of ash and 11,000 tonnes of gypsum were deposited on landfill sites. All desulphurisation product from the Suomenoja power plant is deposited in a landfill, because the semi-dry desulphurisation method does not produce a by-product suitable for utilisation.





Nuclear waste

In 2012, Fortum used 21 tonnes of uranium fuel at the Loviisa nuclear power plant and produced a corresponding amount of high-level radioactive nuclear waste. In addition, about 130 m^3 of low- and intermediate-level radioactive waste was produced. After measuring the radioactivity, some of the low-level waste was reclassified as non-radioactive and was disposed of like other conventional waste.

Low- and intermediate-level nuclear waste is disposed of in the underground repository at the power plant site in Loviisa. During 2012, 284 drums (200 litres each) of low-level maintenance waste were disposed of in the repository. In 2012, an extension of the repository was taken into use, and at the end of the year, 41% of the current disposal capacity was in use.

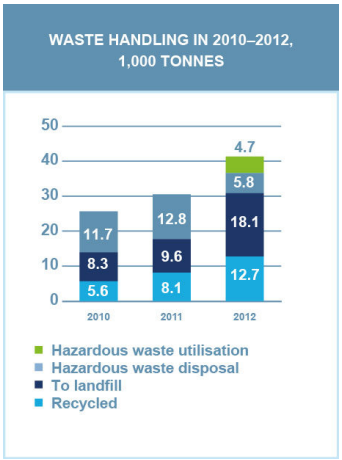
In 2012, 49 m^3 of liquid waste was produced. This liquid waste, like evaporation waste and the ion exchange resins, will be solidified before final disposal. The volume of the evaporation waste is further reduced with a caesium removal system before solidification.

Read more: Development of nuclear waste management >

Read more: Final disposal of nuclear waste >

Other waste

In 2012, Fortum's operations generated a total of 41,200 tonnes (2011: 30,500) of waste (excluding gypsum and ash deposited in landfills), 10,400 tonnes (2011: 12,800) of which was hazardous. In addition, 3,100 tonnes (2011: 1,300) of contaminated soil was removed in site remediation projects.



EN23 Total number and volume of significant spills

The reduction of spills was one of the targets in 2012, and the number of significant spills clearly decreased. In 2012, there were 11 spills of more than 100 litres (2011: 28) into the environment, most of them were oil. The total volume of the spills was about 58 m^3. The single biggest spill was of 50 m^3 of bio-oil into the sea when unloading a tanker in Stockholm.

None of the spills caused major environmental damage. The most extensive clean-up actions involved the replacement of the soil around the transformers and the recovery of oil discharged in water systems.

Environmental non-compliances by division in 2012

	Significant environmental and permit non-compliances	Fires	Leaks, over 100 litres
Power	0	0	3
Heat	0	6	4
ESD	0	1	3
Russia	12	2	1
Other	0	0	0
Fortum total	**12**	**9**	**11**

EN24 Transported, imported, exported, or treated hazardous waste

Not relevant for Fortum.

EN25 Water bodies and habitats affected by discharges of water

Fortum's discharges of water and runoff have only a minor impact on water bodies and related habitats. For a more detailed description, see EN12 and EN14.

Products and services

EN26 Mitigating environmental impacts of products and services

Fortum is building a low-carbon society by offering products and services that can help mitigate climate change also in other sectors of society.

In 2012, all electricity sold to private customers in Finland was CO_2-free and produced by hydropower and wind power. The origin of the hydropower and wind power was guaranteed with European Guarantees of Origin or with the EKOenergy label of the Finnish Association for Nature Conservation.

In 2012, all electricity in Sweden was sold with an environmental value. Customers can actively choose between a mix of wind and hydro, which is also labelled with Good Environmental Choice, or they can choose to have their energy entirely from either wind or hydropower. The Good Environmental Choice eco-label was founded and is overseen by the Swedish Society for Nature Conservation. The electricity sold as entirely wind or hydropower is based on European guarantees of origin. Customers not making an active choice receive nuclear power, which is CO_2-free in the production phase. Assigned deliveries (Fortum Enkel) have Good Environmental Choice eco-labelled wind and hydro power in their delivery.

In Finland and Sweden, Fortum's carbon-neutral heating product offers customers the opportunity to influence their CO_2 emissions. Companies are able to offset their CO_2 emissions resulting from their use of heat by purchasing international carbon offsets.

The extent of impact mitigation can be assessed by assuming that all electricity sold by Fortum (13 TWh in 2012) would have had the specific CO_2 emission of the Nordic electricity mix. The consequent CO_2 emissions would have been about 1.4 million tonnes. Fortum's sales of CO_2-free electricity resulted in no greenhouse gas emissions.

EN27 Percentage of products sold and their packaging materials that are reclaimed by category

Not relevant for Fortum.

Compliance

EN28 Significant fines and sanctions for non-compliance with environmental regulations

In Fortum's European operations, no significant environmental non-compliances or permit violations occurred in 2012 (2011: 0). In Russia, the total number of non-compliances (12) related to wastewater emissions decreased from the previous year (20).

The amount of fines paid for wastewater permit violations in Russia decreased and totalled EUR 1,000 (2011: 2,000). In 2012, reporting was made more specific with the detailed environmental dashboard developed in 2011. The dashboard contains data on emissions and waste, environmental aspects and environmental fees. The water treatment systems at the Chelyabinsk CHP1, CHP2 and CHP3 plants were improved by developing chemical treatment, closed loop water systems and by reducing and separating water flows from coal ash handling.

Environmental non-compliances by division in 2012

	Significant environmental and permit non-compliances	Fires	Leaks, over 100 litres
Power	0	0	3
Heat	0	6	4
ESD	0	1	3
Russia	12	2	1
Other	0	0	0
Fortum total	**12**	**9**	**11**

Transport

EN29 Environmental impacts of transportation

Fortum reports the greenhouse gas emissions of its company car fleet and the company benefit cars operated by its employees. In 2012, the CO_2 emissions from Fortum's cars were 2,300 tonnes. Fortum also reports the CO_2 emissions from the flights of its employees and offsets for the emissions annually. In 2012, the CO_2 emission from Fortum's air travel was 4,700 tonnes. Together, Fortum's cars and air travel accounted for 0.03% of the total greenhouse gas emissions.

The indirect emissions from the shipping of coal, oil and wood fuels have been roughly estimated. The CO_2 emission was of the order 125,000 tonnes in 2012, contributing to 0.5% of Fortum's total greenhouse gas emissions.

Transporting fuels and materials by road and rail results in emissions of SO_2, NO_x and particles. Fortum has no relevant information on the transport equipment of the fuel suppliers and therefore these emissions cannot be calculated.

In February 2012, coal dust was detected on the buildings on the islands close to the Meri-Pori coal-fired plant. Its origin could not be identified. Fortum and Pohjolan Voima Oy, which owns the adjacent Tahkoluoto power plant, took responsibility for clean-up of the area. The companies worked together with authorities on plans to develop operating ways and to prevent similar environmental impacts.

Overall

EN30 Total environmental protection expenditures and investments

EHS expenditures

Fortum's Environmental, Health and Safety (EHS) expenditures (EHS investments and operating costs) are costs resulting from measures that primarily aim to manage and reduce the environmental impacts of Fortum's operations or to improve operational safety.

Costs are defined as EHS costs regardless of whether the measures are mandatory on the basis of legislation or permit conditions or whether they are voluntary. Costs related to environmentally benign products and services are also included.

In 2012, Fortum's investments in environment and safety were a total of EUR 63 million (2011: 82). The investments were mainly related to health and safety, air pollution prevention and dam safety. Operating costs related to the environment, health and safety were EUR 62 million (2011: 89). The costs include, e.g., use and maintenance of environmental protection equipment and systems, emissions and environmental monitoring, decontamination of polluted soil, maintaining and developing biodiversity, development of EHS management systems, research and development work related to improving the management of environmental impacts, and the necessary environmental impact assessment reports and permit applications.

The figures are illustrative, because the calculation principles for EHS expenses and investments are not yet completely uniform throughout Fortum. In 2011, guidelines for the accounting and reporting of EHS costs were developed in order to clarify the EHS cost categories, the evaluation of EHS investments and the estimation of costs of own work.

EHS operating costs in 2012, EUR million

Environmental research	24.4
Health and safety	11.1
EHS management	7.9
Air pollution control	6.1
Waste management	4.0
Prevention and remediation of soil and water contamination	2.3
Waste water management	2.2
Other environmental protection	2.1
Environmental compensations and fines	1.8
Development of environmentally benign products and services	0.3
Total	**62.2**

Environmental liabilities

Environmental liabilities in relation to past operations relate to the dismantling of buildings and structures on contaminated land. The main part of the provisions is likely to be used within the next ten years. In 2012, the provisions for any future remedial costs concerning environmental damage amounted to a total of EUR 12 million.

Fortum has a shared dam liability insurance programme in place that covers Swedish dam failures up to SEK 9 billion.

Nuclear provisions have been described in the Fortum Financials 2012.

Employees and work conditions

LA1 Total workforce by employment type, employment contract and region, broken down by gender

In 2012, an average of 10,600 employees (2011: 11,010) worked at Fortum. The biggest number of employees was in Russia, 4,299 employees on average. Subcontractor employees worked at Fortum sites for a total of approximately 1,900,000 days during the year. The figure is based on contractors' hourly logs and on estimates based on job costs and average hourly rates. The figure has been calculated on the basis of an 8-hour work day.

The number of Fortum's permanent employees on 31 December 2012 was 9,899 (2011: 10,379), i.e. 95.4% (2011: 96.3%). The number of full-time employees was 9,644 and part-time 255. The percentage of fixed-term employees was 4.5% (2011: 3.7%).

Workforce by employment type, employment contract and region, broken down by gender

	Finland		Sweden		Russia		Poland		Other countries		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Employment contract												
Permanent	1,865	660	1,392	602	2,869	1,110	517	159	514	211	7,157	2,742
Fixed-term	70	53	29	30	169	99	7	2	9	4	284	188
Employment type (permanently employed)												
Full-time	1,790	604	1,371	542	2,861	1,105	517	159	507	188	7,046	2,598
Part-time	75	56	25	56	8	5	0	0	7	23	115	140

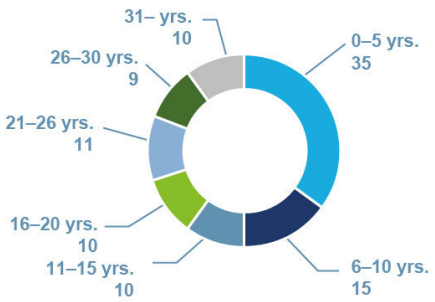
Personnel statistics from 2012, by country of operation

	Finland	Sweden	Russia	Poland	Other countries	Total
Personnel at year-end	2,647	2,050	4,252	687	735	10,371
of whom male	1,931	1,419	3,041	526	524	7,441
of whom female	716	631	1,211	161	211	2,930
Personnel, average	2,698	2,068	4,299	807	728	10,600
Personnel expenses, 1000 euros	221,048	192,751	83,375	17,747	40,634	555,555
Per person, 1000 euros	81.9	93.2	19.4	22.0	55.8	52.4

Personnel by division 31 Dec.

	2012	2011	2010
Power	1,846	1,847	1,819
Heat	2,212	2,504	2,394
ESD	1,379	1,417	1,487
Russia	4,253	4,379	4,294
Other	681	633	591
Total	**10,371**	**10,780**	**10,585**

SERVICE YEARS, 31 DEC. 2012, PERMANENT EMPLOYEES, %



LA2 Total number and rate of new employee hires and employee turnover by age group, country and gender

During the year, 878 (2011: 1,230) new employees joined Fortum and 1,176 (2011: 1,427) employment relationships were terminated. Divestments reduced the number of personnel by a total of 259 (2011: 122). There were 36 (2011: 47) employees on international assignment. Departure turnover in 2012 was 12% (2011: 14%).

Read more: Fortum's employees >

Total number and rate of new employee hires and employee turnover by age group, country and gender

New employee hires	Finland		Sweden		Russia		Poland		Other countries	
	M	F	M	F	M	F	M	F	M	F
	no.	no.	no.	no.	no.	no.	no.	no.	no.	no.
below 25	1	2	9	0	85	21	1	1	5	3
25-29	26	12	26	11	73	30	3	1	11	4
30-34	36	14	23	11	41	18	5	1	8	2
35-39	25	9	17	9	33	17	4	1	6	2
40-44	18	8	16	10	24	6	7	1	3	1
45-49	6	12	8	0	21	14	14	2	2	1
50-54	5	2	8	2	24	8	12	0	1	0
55-59	3	0	2	1	14	3	4	0	0	0
60-	0	0	0	1	6	0	1	0	0	0
New recruits, %	4.8	2.3	5.5	2.3	8.1	2.9	7.5	1.0	5.0	1.8

Employees leaving	Finland		Sweden		Russia		Poland		Other countries	
	M	F	M	F	M	F	M	F	M	F
	no.	no.	no.	no.	no.	no.	no.	no.	no.	no.
below 25	0	1	1	1	35	12	1	0	0	1
25-29	9	4	8	3	62	31	3	1	1	3
30-34	12	6	11	4	42	34	4	3	2	2
35-39	17	8	6	6	38	27	11	6	1	1
40-44	17	11	11	6	34	31	23	2	4	0
45-49	20	3	13	4	31	38	35	9	5	0
50-54	19	1	7	4	46	36	32	9	2	0
55-59	24	1	7	6	40	48	39	12	3	0
60-	20	5	7	1	58	19	10	1	4	0
Departure turnover, %	5.6	1.6	3.7	1.8	9.7	6.9	23.4	6.4	3.0	1.0

LA3 Employee benefits for full-time employees

In principle, employee benefits are country-specific and comply with local legislation and the prevailing market situation. Benefits include, among other things, occupational health care, long service awards, and recreational and leisure activities. In 2012, 360 employees had company car benefits.

Fortum encourages its employees to exercise and to enjoy culture. In Finland, Sweden and Russia, Fortum employees can join different personnel clubs offering activities related to sports, nature and the arts.

In 2012, Fortum's support for employee recreational and leisure activities in Finland was EUR 415,000. The support included clubs, fitness and culture vouchers, and activities related to vacation homes. In Sweden, the support for clubs was EUR 111,100. In

Poland, support for employee fitness activities amounted to EUR 19,300. In Russia, support for employee social programmes was about EUR 309,000.

Labour/management relations

Collaboration between employees and Fortum management is based on local legislation and the Code of Conduct. In Finland, Fortum's employee representation system is site- and company-specific, and representatives are selected by personnel groups. Group collaboration meetings in Finland are held at least twice a year in conjunction with the Group's financial statements and interim reports.

In Sweden, the system is fundamentally identical. Collaboration between personnel representatives and Fortum management in Sweden takes place in the Council (Sverigerådet) that convenes twice a year. The collaboration forms are based on the agreement made between the company and personnel representatives.

In Estonia, the Working Council convened three times during 2012. In other countries of operation, collaboration is being implemented in councils between personnel representatives and employer representatives. Councils meet either regularly or on an as-needed basis.

In Poland, some 30 meetings were arranged with the local labour union. The meetings focused on salary- and benefits-related issues, occupational safety, improving collaboration, and harmonisation of employment contracts in Bytom and Zabrze. In 2012, there were no disputes related to employment terms.

As a rule, the Fortum European Council (FEC) convenes once a year. In 2012, the meeting was held in May and personnel representatives from Finland, Sweden, Poland and Estonia participated. Issues on the Council's agenda included the CEO's current review and themed workshops where the company's strategy, well-being, occupational health and safety, and Leading Performance and Growth initiative were addressed through group discussions and presentations.

Negotiations were held with personnel representatives regarding the adoption of the Raise a concern reporting channel as part of the Fortum Code of Conduct in Finland, Sweden and Norway and in line with each country's legislation and respective agreements. The negotiations addressed the channel's operating principles and particularly issues related to the collection and processing of information.

LA4 Coverage of collective bargaining agreements

Fortum respects its employees' freedom of association and collective bargaining, but does not monitor the degree of unionisation of its employees. Fortum applies local collective bargaining agreements in all countries where it operates, in compliance with the scope of each respective agreement.

LA5 Minimum notice period regarding operational changes

In situations of organisational restructuring, Fortum negotiates with personnel representatives in compliance with each country's local legislation and contractual procedures. The minimum notice period is based on local legislation, collective agreements or employment contracts, which are in harmony with local legislation and agreements. In situations involving personnel reductions, Fortum aims primarily to support the re-employment of its personnel.

Occupational health and safety

LA6 Representation in joint health and safety committees

Fortum's occupational health care is organised in all countries of operation in accordance with local laws and regulations. Workplace well-being and work safety are regularly addressed also in occupational safety committees, which operate in line with local legislative requirements and represent all personnel groups.

LA7 Rates of injury, occupational diseases, lost days, fatalities and absenteeism by area and by gender

Fortum's performance in occupational safety for its own personnel again slightly improved in 2012, although the lost workday injury frequency (LWIF) target was not reached. The LWIF for Fortum's own personnel decreased to 1.5 (2011: 1.6). The result was Fortum's all-time best. Fortum's target is to avoid fatalities and accidents with serious injuries. In 2012, there was one fatal accident for our contractor at the Nyagan power plant construction site in Russia. The total number of serious accidents to Fortum personnel and contractors was ten, i.e. a slight decrease (2011: 11). There were three serious accidents to own personnel.

Other occupational safety performance indicators regarding our own personnel improved or remained at the 2011 level. There were 29 work injuries resulting in an absence in 2012 (2011: 29). Four of the injuries happened to females, the rest to males. The decrease in serious injuries resulted in fewer personnel absences resulting from work injuries: 560 days (2011: 1,134). Fortum personnel's total recordable injury frequency (TRIF), which includes also minor injuries that do not lead to an absence, improved slightly and was 3.4 (2011: 3.5).

Safety management at Fortum equally encompasses contractors working at Fortum sites. The LWIF for contractors weakened somewhat from 3.2 to 3.8. One fatality and six serious injuries occurred with contractor employees. Contractor safety is a big challenge and will remain a focus area also in 2013. Several development projects have been launched to improve the situation, and contractor safety is more clearly included in the incentive systems.

In 2012, the proactive indicator targets (safety reports and initiatives, completion of the agreed actions and safety observation tours) were achieved in all areas, except safety reports, at the Group level. In 2013, the emphasis will remain on the importance of proactive reporting to improve safety in those organisations where the reporting level has not been achieved.

A good performance was achieved also in most of the process safety indicators. The number of fires clearly decreased, from 16 to 9, and there were zero non-compliances related to dam safety. However, there were three INES 1 incidents at the Loviisa nuclear power plant (2011: 0); these incidents did not harm people, the environment or the plant.

Fortum strives to ensure safe and healthy work conditions for personnel and supports the maintenance and development of working capacity. The monitoring of sickness-related absences is defined at the Group level, and the rate of absence due to sickness was 3.1% in 2012; the rate of absence due to sickness was 3.1% for males and 3.0% for females.

In 2012, there were three (2011: 8) cases of suspected occupational diseases in Finland. The suspected occupational diseases are related to noise and occurred with males. Additionally, one male was diagnosed with an occupational disease related to exposure to asbestos.

Key safety figures 2010-2012

	2012	2011	2010
Lost workday injury frequency, own personnel (1	1.5	1.6	2.4
Lost workday injuries, own personnel	29	29	45
Lost workday injury frequency, contractors (1	3.8	3.2	5.0
Lost workday injuries, contractors	57	45	43
Total recordable injury frequency, own personnel (1	3.4	3.5	4.6
Fatalities, own personnel	0	0	1
Fatalities, contractors	1	1	0
Number of safety observation tours	17,507	15,324	8,790
Number of improvement proposals and near-miss reports	6,362	10,087	4,440

1) per million working hours.

Sickness absence rate 2012, %

	Male	Female
Finland	2.8	3.2
Sweden	2.2	3.9
Russia	2.1	2.2
Poland	3.5	5.0
Other countries	2.9	3.0

LA8 Education and counselling to assist workforce members regarding serious diseases

All Fortum employees are covered within the sphere of Fortum's occupational health care as required by local legislation.

Fortum's occupational health care service emphasises the significance of preventive activities in promoting well-being in the company as well as employee counselling for work-related or serious illnesses. Fortum conducts regular examinations in accordance with local laws; employees who are exposed to e.g. noise, dust, radiation or perform shift work are within the sphere of the examinations. Occupational health care participates also in various discussions and assessments in the work community. The occupational health care professionals support management by providing information on preventive actions as well as alternatives when the ability to work decreases. They also offer methods and tools for these situations.

In 2012, an average of 2,660 (2011: 2,700) employees in Finland were within the sphere of Fortum's occupational health care. About 80% (2011: 80%) of them used Fortum's own occupational health care services and about 20% (2011: 20%) used contracted health clinics. The total costs of Fortum's own occupational health care in Finland were about EUR 1.3 million (2011: 1.2). The occupational health care costs per person in Finland, calculated from the share paid by Fortum, were EUR 580 (2011: 560). Preventive activities accounted for 43% (2011: 39%) of occupational health care visits. In Sweden, all employees are within the sphere of Fortum's occupational health care services. 681 employees used the service in 2012. Occupational health care costs in Sweden were 130 euros (2011: 92) per person.

EU16 Policies and requirements regarding health and safety of employees and employees of contractors and subcontractors

Everyday work is guided by Fortum and local level EHS (Environmental, Health and Safety) guidelines. There are some 20 Group-level safety instructions, such as instructions for contractor management, incident investigation, fire and electrical safety, asbestos management, change management, work permit system requirements, risk assessment practices, deviation reporting and EHS training. Additionally, there are common minimum requirements also for EHS meetings, personal protective equipment and high-risk

jobs. Local organisations address their relevant safety issues, such as nuclear power plant safety and dam safety, in more detail. The instructions apply to Fortum's own and contractor employees.

Read more: Safety >

EU18 Percentage of contractor and subcontractor employees that have undergone relevant health and safety training

The safety of subcontractor and contractor employees is as important as the safety of Fortum's own employees. Contractor safety targets are set based on a continuous improvement principle, safety incidents and accidents are reported, accidents are investigated, and safety performance indicators are monitored on a monthly basis. Fortum is committed to contractor safety in all aspects of contractor management – from contractor selection and job performance to the post-performance contractor evaluation. Requirements are set forth in the corporate-level safety instructions and the purchasing organisation's instructions. The instructions were further specified in 2012, and the new requirements will take effect in 2013.

One of the key elements in the instructions is the requirement to provide proper induction training and on-site orientation to all workers, including contractors, before starting the work. Efficient induction training ensures a good understanding of site-specific risks, procedures and safety requirements. Induction training is valid for a limited period, typically, not more than three years. Induction training includes at least site-specific safety requirements, rules, instructions, work permit procedures, the main risks of the site and how to prepare for them, required personnel protective equipment, near-miss and incident reporting, emergency response, inspections, housekeeping, fire protection, first-aid systems, evacuation plans, and the individuals responsible for these tasks. Verification that the safety procedures and requirements given in the induction training are understood is ensured by using interpreters, when needed, and by testing. All of these requirements cover all types of contractors and subcontractors. Implementation of the training is the responsibility of the local organisations.

In 2012, investments in contractor safety training continued. The ESD Division and the Heat Division's Finnish functions implemented the online training programmes developed in 2011. In Finland, for example, more than 1,000 contractor employees completed the training. Additionally, Fortum's "Stop and Think" safety training was organised for contractors in the ESD Division and the Power Division.

Training and education

LA11 Programmes for skills management and lifelong learning

Fortum offers its employees many internal training programmes to support the various development needs. As part of the Leading Performance and Growth initiative, Fortum has arranged the Leadership Impact programme aimed at all managers. The key goal of the leadership development programme is to deepen the understanding and skills required from individuals in management positions to lead performance and growth. The programme consists of 360° feedback assessments, a two-day training event and personal coaching sessions. Increasing self awareness, practicing the receiving and giving of feedback, and development of coaching skills have been central to the programme. Since autumn 2011, 800 managers from all of Fortum's countries of operation have participated in the programmes offered in Finnish, Swedish, Russian and English.

Fortum Forerunner is a trainee programme intended for recent university graduates. During the 18-month-long training programme, trainees have the opportunity to work at various assignments in different business environments and to learn about Fortum's operations and the energy industry. The previous programme started in January 2011 and ended in August 2012. The trainees were from Finland, Sweden, Russia, Poland, and Latvia. The next programme will begin in 2014.

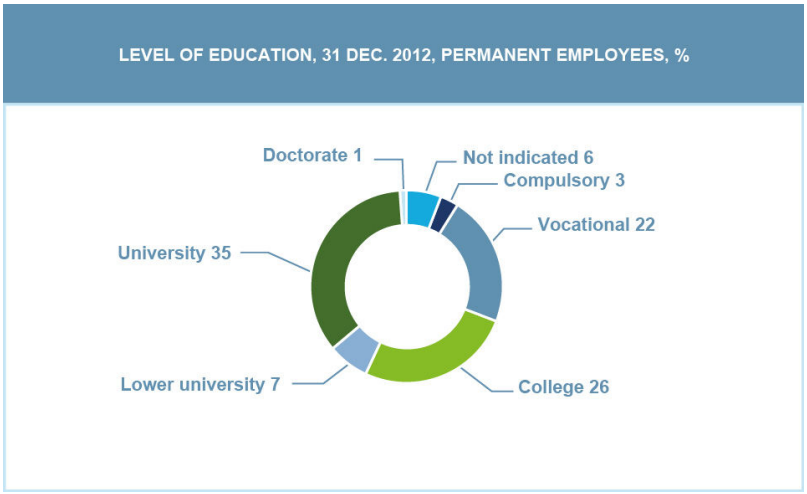
Fortum supervisors are offered day-long Master courses to enhance their preparedness to meet the challenges of supervisory work. At the same time, Fortum is harmonising and developing the way of operating in HR processes. The courses include exercises and small group discussions. In 2012, a total of 281 supervisors participated in the courses, and there were a total of 29 Master training days.

Fortum Passport is an online onboarding programme for new employees. In 2012, 324 employees used the e-tool to learn about Fortum's operations. The onboarding package covers several different topics, including information about the Code of Conduct, sustainability principles and safety. The programme also includes a Joiner's Survey feedback section that is used to monitor and develop the success of the recruiting and onboarding process.

In 2012, training costs were about EUR 7.9 million from which the Leadership Impact programme was one fourth.

Read more: Increasing employee engagement and development >

Read more: Group-level criteria for talent management >



LA12 Employees receiving regular performance and career development reviews by gender

Fortum's permanent employees in all operating countries are within the scope of the performance and development discussion processes, which are implemented on a personal and/or team level. The annual performance and development reviews support the employee/supervisor dialogue about goals, achievements and opportunities for professional development. The discussions aim to commit and motivate employees, engage them in the implementation of the strategy, business goals and operating plans, and improve operational planning, the workplace atmosphere and the flow of information, as well as promote performance and growth at the individual and corporate level.

Personal and/or team-specific targets aligned with Fortum's strategy are set at the beginning of the year. At the same time, the needed competence is verified and last year's performance is assessed. The achievement of targets forms the basis for incentives to be paid. Permanent employees, excluding employees of recently acquired companies, are within the sphere of Fortum's incentive plan. The aim is to gradually implement a Fortum-wide performance and development model also at new Fortum sites.

The performance and development process applies to all permanent employees, however, the electronic tool used in the process in 2012 covered about 64% of the personnel, and it was not in use with certain personnel groups in Poland and Russia. Of the personnel covered by the electronic tool, the performance and development process was conducted for 96%. Completion rate among female employees was 95.8% and among male employees 96.3%. Thus performance and development process was equally completed among female and male employees. The company-wide completion rate cannot yet be provided.

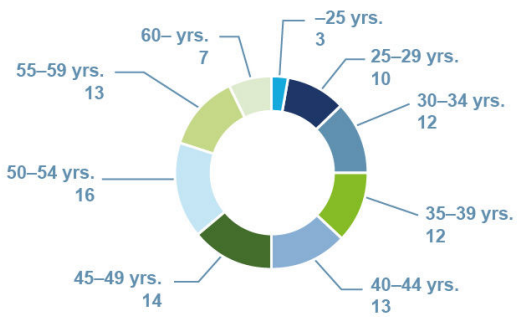
Equal opportunities

LA13 Composition of governance bodies and breakdown of employees

Fortum promotes equal treatment and opportunities in recruiting, remuneration, development and career advancement, regardless of the employee's race, religion, political views, gender, age, nationality, language, sexual orientation, marital status or possible disabilities. Any form of harassment is forbidden and addressed immediately. In Finland and Sweden, Fortum has separate guidelines for workplace harassment and discrimination. In 2012, there was one case of discrimination reported.

The average age of Fortum's permanent employees in 2012 was 44 years (2011: 41), and the share of employees over 50 years was 36% (2011: 30%). In 2012, women accounted for 28% (2011: 29%) of Fortum's total personnel. Women accounted for 35% (2011: 34%) of the Group- and division-level management teams. In 2012, the Board of Directors comprised seven members, three, including the chairman, were women.

PERSONNEL AGE DISTRIBUTION, 31 DEC. 2012, PERMANENT EMPLOYEES, %



LA14 Ratio of basic salary of men to women by employee category, by significant operation countries

In line with its HR policy, Fortum offers a fair, transparent and competitive incentive system to its employees at all levels. Salaries and wages are based on local legislation and labour market agreements and are compliant with established practices in each country. Salary levels are based on personal work performance, on defined competence requirements, and the market situation in each country.

In Finland, the pay equality for men and women in white- and upper white-collar positions has been monitored since 2005. Comparisons in the 'workers' personnel group have not been possible due to the small group sizes. In 2012, the differences in median base salary between male and female white-collar employees was 7.5 percentage points, on average, and the dispersion was -23 – +0.7 percentage points. Age and seniority partially explain the differences. The difference in upper-white-collar employees was
-3.4 percentage points, on average, with a dispersion of -9.6 – +7.4 percentage points. In 2012, the differences in median base salary between men and women in Sweden was -1.6 percentage points, on average, and the dispersion was -10.3 – +7.0 percentage points. Similar studies have not been made in other countries.

Read more: Personnel expenses, notes of Financials 2012 >

Human rights

HR1 Investment agreements that include human rights clauses

A sustainability assessment is carried out for all of Fortum's investment projects and takes into consideration the environmental, occupational health and safety, and social impacts of the project. Projects requiring approval by the Fortum Management Team are additionally subject to an assessment and approval by Group-level sustainability experts. The sustainability assessment also includes a human rights evaluation, especially regarding new operating areas.

HR2 Suppliers and contractors that have undergone human rights screening

The majority of Fortum's purchases are from the Nordic countries. Fortum's purchases from risk countries are 5%, excluding the Russia Division's suppliers. In 2012, Fortum conducted pre-selection on 264 suppliers. Pre-selection includes a supplier questionnaire and verification of credit. A supplier questionnaire is used to gather general and sustainability information about suppliers. In 2013, the target is to implement corporate instructions regarding supplier pre-selection also in the Russia Division.

Fortum's Supplier Code of Conduct is implemented in all of Fortum's operating countries and it is included in all purchasing agreements exceeding 50,000 euros. With the Supplier Code of Conduct, Fortum aims to ensure that e.g. the supplier provides safe working conditions for its employees, complies with rules and regulations, and reduces environmental impacts caused by its operations.

In 2012, Fortum started audits of suppliers of services and goods; the audits assess how the supplier meets the requirements of Fortum's Supplier Code of Conduct. A target was set to audit three main risk country suppliers per division, excluding the Russia Division. Fortum audited a total of ten suppliers, half of which operate in risk countries. This represents 13% of the risk country suppliers, excluding the Russia Division's suppliers. The audited suppliers included Fortum's 1st and 2nd tier suppliers. The emphasis in the audits was on biofuel suppliers.

Read more: Sustainable supply chain management >

HR3 Human rights-related training for employees

Fortum's own personnel are responsible for supplier audits. Auditors receive 1.5 days of internal training, during which they review the requirements of the Supplier Code of Conduct, the sub-areas to be audited, and the tools to be used to verify conformance with the requirements. After the training, supplier audits are started together with an experienced auditor. Fortum's goal is to train auditors from different divisions and operating countries. In 2012, a total of seven auditors from Finland and Sweden were trained.

Fortum's online course for the updated Code of Conduct also includes training in human rights-related issues.

HR4 Incidents of discrimination and actions taken

In 2012, there was one case of discrimination reported, which related to remuneration. The case went through court proceedings and the ruling was in the employer's favour.

HR5 Supporting the right to freedom of association and collective bargaining in risk areas

Fortum respects employees' right to freedom of association and collective bargaining as well as the inviolability and integrity of labour union representatives. In Fortum's operating countries, freedom of association and collective bargaining are guaranteed by law, with the exception of India, which has not ratified the International Labour Organization's (ILO) Convention on the right to

freedom of association and collective bargaining. Fortum's functions in India have in place the same practices as in other countries of operation, and Fortum doesn't limit or prohibit the right to freedom of association.

The majority of Fortum's purchases are from the Nordic countries. Fortum's purchases from risk countries are 5%, excluding the Russia Division's suppliers. In risk country classification, Fortum utilises the assessments of ILO Decent Work Agenda, Human Development Index of the United Nations and the Corruption Perceptions Index by Transparency International. Violations related to the environment and social issues are more probable in these countries than in no-risk countries.

In 2012, Fortum started audits of suppliers of services and goods; the audits assess how effectively the supplier meets the requirements of Fortum's Supplier Code of Conduct. This also includes an assessment of how the right to freedom of association is realised by the supplier. Fortum audited a total of ten suppliers in 2012, half of which operate in risk countries. This represents 13% of the risk country suppliers. The figures exclude the Russia Division's suppliers.

HR6 Measures taken to eliminate child labour in risk areas and in operations of significant suppliers

All forms of child labour and forced labour are strictly prohibited and in violation of Fortum's Code of Conduct. Of Fortum's operating countries, India has not ratified the International Labour Organisation's (ILO)Convention on the minimum age and the worst forms of child labour. Fortum's functions in India require job applicants to be of adult age.

The majority of Fortum's purchases are from the Nordic countries. Fortum's purchases from risk countries are 5%, excluding the Russia Division's suppliers. In risk country classification, Fortum utilises the assessments of ILO Decent Work Agenda, Human Development Index of the United Nations and the Corruption Perceptions Index by Transparency International. Violations related to the environment and social issues are more probable in these countries than in no-risk countries.

In 2012, Fortum started audits of suppliers of services and goods; the audits assess how effectively the supplier meets the requirements of Fortum's Supplier Code of Conduct. This also includes an assessment of the supplier's guidelines on preventing the use of child labour and a review of personnel files. Fortum audited a total of ten suppliers in 2012, half of which operate in risk countries. This represents 13% of the risk country suppliers. The figures exclude the Russia Division's suppliers.

HR7 Measures taken to eliminate forced labour in risk areas and in operations of significant suppliers

All forms of forced labour are strictly prohibited and in violation of Fortum's Code of Conduct. There has been no risk related to the use of forced labour identified in Fortum's own operations.

The majority of Fortum's purchases are from the Nordic countries. Fortum's purchases from risk countries are 5%, excluding the Russia Division's suppliers. In risk country classification, Fortum utilises the assessments of ILO Decent Work Agenda, Human Development Index of the United Nations and the Corruption Perceptions Index by Transparency International. Violations related to the environment and social issues are more probable in these countries than in no-risk countries.

In 2012, Fortum started audits of suppliers of services and goods; the audits assess how effectively the supplier meets the requirements of Fortum's Supplier Code of Conduct. This also includes an assessment of the supplier's guidelines on preventing the use of forced labour. Fortum audited a total of ten suppliers in 2012, half of which operate in risk countries. This represents 13% of the risk country suppliers. The figures exclude the Russia Division's suppliers.

Society

Community

SO1 Managing impacts of operations on communities

Open, honest and proactive communication and listening to our stakeholders are of key importance when striving for our strategic aims. Special attention must be paid to the local communities and people around our production plants.

Fortum conducts environmental impact assessments (EIA) in accordance with legislative requirements. Stakeholder consultation is part of the EIA process. The environmental impact assessment programmes and reports are publicly available. In addition, relevant stakeholders are heard in all licensing procedures.

EU19 Stakeholder participation in the decision-making process related to energy planning and infrastructure development

Fortum engages in an active dialogue about key issues in the energy sector and is involved in different associations and organisations at the EU level and in countries where it operates. Stakeholder participation in the decision-making process related to energy planning and infrastructure development is discussed in the section regarding stakeholders.

EU21 Management approach to disaster/emergency planning and response; contingency planning measures, disaster/emergency management plan and training programmes, and recovery/restoration plans

Fortum's Operational Risk Management Instructions require our businesses to have solid business continuity plans in place. Corporate Security is responsible for crisis management development and Corporate Communications is responsible for crisis communication and for development of the related emergency preparedness. Fortum's crisis communication instructions have been prepared for the Group, country, division and unit level. In addition to the general guidelines, Fortum uses separate crisis communication guidelines for e.g. power and heat outages and for crisis situations that involve the Loviisa nuclear power plant. Crisis management is the responsibility of the respective division and line organisation. Crises that affect Group operations are managed at the Group level. Testing and updating plans is the responsibility of the respective units.

In 2012, Fortum developed its crisis communication preparedness by e.g. training employees who work in the customer interface, drafting comprehensive procedure manuals and improving technical capacities in customer service. A total of 183 Fortum employees took part in crisis communications training, and the majority of them (161) were employees who work in customer service for the Distribution business and in other customer interface positions.

Corruption

SO2 Business units analysed for corruption risks

Compliance risks related to corruption are managed as part of Fortum's risk management and control procedures in all Fortum's operating countries. The assessment of compliance risks is periodic and documented; the Fortum Management Team oversees the process. A systematic compliance risk assessment is included in business plans, and follow-up is part of the business performance review. Line management reports regularly on compliance activities to the Fortum Management Team.

Legal and compliance risks, Financials 2012 >

SO3 Anti-corruption training

Fortum's anti-corruption principles have been included in the Fortum Code of Conduct since 2007, and all Fortum employees have participated in the Code of Conduct training. The Fortum Code of Conduct was updated in 2012. In the same conjunction, the Fortum Management Team approved the revised anti-bribery and conflict of interest instructions. During the year, the Group's Legal department organised a total of 14 separate anti-corruption training events for division management teams and other specific groups, such as for those individuals responsible for purchasing and public affairs. Additionally, four separate training events were arranged for the facilitators involved in implementing the Code of Conduct.

Training for the updated Code of Conduct started in spring 2012 with an online training programme. The material was published in 10 different languages. At the end of 2012, 86% of Fortum's personnel had completed the online training. In Russia, the training was started in August; by the end of the year, 68% of Russian personnel had completed the training. In Russia, the training is hindered by the small number of personal computers. In the end of February 2013, 99% of all personnel had completed the training.

Read more: Revisal of Fortum's Code of Conduct >

SO4 Actions taken in response to incidents of corruption

Fortum has always had a strong focus on the prevention of any type of corruption. In connection with the revised Fortum Code of Conduct, Fortum has reviewed its procedures to ensure the prevention, oversight, reporting and enforcement based on the requirements prescribed in international legislation. In connection with the update, Fortum also launched a channel on its website that enables all stakeholders to report misconduct.

For compliance with appropriate business ethics regulations, Fortum ensures and arranges:

- Continuous training and communication
- Procedures and reporting
- Appropriate controls
- Line management has always the primary responsibility for ensuring compliance
- Compliance risks assessment is periodic and documented with the Fortum Management Team having oversight of the process; a systematic risk assessment is included in business plans, and follow-up is part of the company's business performance review.

In January 2013, Fortum's Management team approved the Business Ethics Compliance reporting model that is consistent with the updated Fortum Code of Conduct. Based on the model, line management regularly reports on compliance activities and the detected deviations to the Group management.

The Fortum Code of Conduct and compliance topics and instructions are communicated through internal and external communication channels. The communication highlights the commitment of top management, and it follows the principles of transparency in sustainability reporting.

However, if incidents of corruption occur, Fortum has internal procedures for dealing with the incident professionally, in accordance with applicable laws and with respect to the rights and personal integrity of the persons and parties involved. Each incident will be first properly investigated, including a hearing of the relevant persons and parties, and then the appropriate sanctions and corrective actions, if deemed necessary, will be considered.

Furthermore, after each incident an assessment is made regarding the need to raise awareness of the Fortum Code of Conduct. This can be done through e.g. e-learning or face-to-face training, in the relevant business organisation to ensure that employees are fully aware of what is considered appropriate conduct at Fortum and what their responsibility is in case of non-compliance.

There were no cases of corruption observed at Fortum in 2012. However, Fortum did observe suspected corruption with one of its service providers. The service provider has denied the suspicions, which were in no way related to Fortum. Fortum has initiated actions in accordance with its own internal processes and is duly monitoring developments in the matter.

Public policy

SO5 Public policy positions and participation in public policy development and lobbying

As an energy sector expert, Fortum actively expresses its views on energy policy issues and offers expert advice to decision makers and non-governmental organisations in energy-related issues. Fortum engages in an active dialogue about key issues in the energy sector and publishes position papers on significant topics.

In 2012, a particular focus in public affairs was on developing the European electricity model and steering mechanisms supporting emissions-free energy production. Fortum published position papers on e.g. EU post-2020 target setting and decarbonisation, development of EU emissions trading, the EU's renewable energy communication, and the sustainability of fuels. In 2012, we also published a review on Russia's energy policy. During the year, Fortum representatives had several meetings with different decision makers and officials at the EU level and in its operating countries.

Fortum's lobbying in Finland focused on items in the government programme. In Sweden, we engaged in active collaboration with state authorities in research focusing on the possibilities of opening access to third parties in the district heat network. In Poland, Fortum contributed to advancing the energy legislation renewal. In the Baltic countries, lobbying focused on legislation regulating renewable electricity production and district heat sales. Fortum and the Foreign Investors Council in Latvia (FICIL) collaborated in the discussion about Latvia's energy strategy under development. In Russia, Fortum arranged numerous meetings with decision makers in which the discussions focused on energy efficiency and the Russian electricity and heat market legislation. In summer 2012, Fortum hosted authorities from Tyumen as they visited Stockholm to get familiar with urban planning and waste handling systems.

At the EU level, our representatives discussed issues related to EU's internal energy markets with the European Commission and officials from different countries' EU delegations. In March 2012, Fortum updated the company's information in the Transparency Register maintained jointly by the European Parliament and European Commission. The register offers information about organisations that aim to influence EU decision making.

Fortum is involved in 78 sector associations and organisations at the EU level and in its countries of operation. The most important are Eurelectric, Energiateollisuus ry, Svensk Energi, International Energy Agency (IEA), FORATOM and EuroHeat & Power.

SO6 Contributions to political parties and related institutions

Fortum does not award donations for any kind of political activities, religious organisations, authorities, municipalities or local administrations.

Anti-competitive behaviour

SO7 Legal actions for anti-competitive behaviour, anti-trust, and monopoly

In 2012, there were two final court decisions in Russia holding the heat business of Fortum Russia liable for abuse of dominant position. The related fines imposed are presented under indicator SO8. Further, there were eight additional court proceedings pending, in which the heat business of Fortum Russia was accused of abuse of dominant position or related infringement.

Compliance

SO8 Fines and sanctions for non-compliance with laws and regulations

In 2012, there were two cases in Poland leading to fines. These cases were related to misleading communications with Energy Regulatory Office and failure to meet the minimum quota of electricity sold through the power exchange. The fines received amounted to about EUR 4,060.

In Russia, the fines received amounted to about EUR 31,300. These court decisions are described in indicator SO7.

Product responsibility

Access

EU28 Power outage frequency
EU29 average power outage duration

Fortum uses international indicators (SAIDI and CAIDI) to measure electricity distribution reliability. In 2012, the system average interruption duration indicator (SAIDI) per customer was 103 minutes (2011: 565). The customer average interruption duration indicator (CAIDI) was 61 minutes (2011: 240). In 2011, these indicators (SAIDI and CAIDI) were affected by the year end 2011 winter stroms. The set target for system average interruption duration indicator (SAIDI) per customer for 2013 is to be below 110 minutes.

Product and service labelling

PR3 Product information required by procedures

Fortum follows EU-based national legislation on the origin of electricity. This requires the electricity producer to report the origin of the produced electricity, the CO_2 emissions and the amount of radioactive waste.

In 2011, Fortum Markets Oy sold electricity to residential and business customers. Electricity was acquired from Nord Pool. All residential customers received 100% hydro or wind power. Business customers received electricity mainly produced with nuclear and hydro power. In addition to this, Fortum Markets has long-term existing agreements with major customers for so-called mixed electricity. For this reason, fossil fuels and carbon dioxide emissions have also been reported in the overall breakdown.

Sources used to produce all the electricity sold by Fortum Markets:

- 55.7% renewable energy (52.1 % was sold as environmental electricity)
- 39.6% nuclear power
- 4.7% fossil fuels

Emissions generated in the production of electricity sold by Fortum Markets Oy:

- Accumulation of spent nuclear fuel: 1.119 mg/kWh
- Carbon dioxide (CO_2): 32 g CO_2/kWh

Due to the Nordic reporting practice, figures for 2012 will be available in summer 2013.

PR5 Customer satisfaction

Fortum monitors customer satisfaction through regular EPSI customer satisfaction surveys in Finland, Sweden and Norway. In 2012, Fortum reached its all-time best score in the annual EPSI rating in Sweden and Norway. In Finland, customer satisfaction was slightly down compared to 2011. Customer satisfaction in Finland was affected by the year end 2011 winter storms that caused widespread power outages. During 2012, the customer satisfaction level has almost been restored to the 2011 level.

The longer term customer satisfaction trend towards Fortum has developed favourably in Finland, Sweden and Norway. The trend has been upward and faster than the average in the sector.

In all three countries, Fortum received the best score in product quality. In Finland, Fortum received the weakest score in customer loyalty, in Sweden in price value, and in Norway in image.

Customer satisfaction* in 2010-2012

	Finland	Sweden	Norway
2010	68	59	64
2011	70	60	63
2012	68	64	69

* In Finland and Norway research method was EPSI, in Sweden Svenskt Kvalitetsindex

Fortum annually measures customer satisfaction and the company's reputation and factors affecting it also with the extensive One Fortum survey targeting different stakeholder groups: customers, the general public, governmental bodies, capital markets, non-governmental organisations and Fortum's personnel. In 2012, the survey was conducted in Finland, Sweden, Norway, Poland, the Baltic countries and Russia.

According to the survey, Fortum's reputation is still the strongest within the capital markets and weakest amongst the general public. Compared to the 2011 results, Fortum's reputation has developed favourably amongst all stakeholder groups, except customers. The development has been most favourable amongst non-governmental organisations and opinion leaders.

The survey indicates that customer satisfaction has improved significantly amongst the ESD Division's business customers. For other customers, satisfaction has remained at the previous year's level. Fortum's reputation amongst customers in Finland is slightly weaker than before, which also has an impact on the overall rating received from the customer target group.

Marketing communications

PR7 Non-compliance with marketing communications

Fortum Markets AB in Sweden received five decisions from the direct marketing committee, DM-nämnden, related to a breach of good marketing practices. DM-nämnden is not an authority, but the direct marketing industry's own self-regulating committee. The decisions received were due to errors made when collecting the contact information of potential customers. In these cases Fortum was not able to show that it had received permission to contact the potential customer or that the potential customer had not been contacted. The breaches did not result in any fines.

Compliance

PR9 Fines for non-compliance concerning the provision and use of products and services

No such fines in 2012.

Assurance statement

Independent assurance report on Fortum's Corporate Sustainability report

To the Management of Fortum Corporation

We have performed an assurance engagement on the Fortum Corporate Sustainability report for the reporting period of January 1, 2012 to December 31, 2012. The information subject to the assurance engagement is the Finnish version of the report published in the website http://annualreporting2012.fortum.com/.

Management's responsibility

Management is responsible for the preparation of the Corporate Sustainability report in conformity with the Sustainability Reporting Guidelines (G3.1) of the Global Reporting Initiative and principles of inclusivity, materiality and responsiveness as set out in the AA1000 AccountAbility Principles (2008) (AA1000APS). This responsibility includes: designing, implementing and maintaining internal control relevant to the preparation and fair presentation of the Corporate sustainability report that are free from material misstatement, selecting and applying appropriate criteria and making estimates that are reasonable in the circumstances. The scope of the 2012 Fortum Corporate Sustainability report and the information included therein depends on the Fortum's Corporate Sustainability priority areas as well as the reporting principles.

Auditor's responsibility

Our responsibility is to draw an assurance conclusion on the Fortum Corporate Sustainability report based on our work performed. We have conducted the assurance engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 to provide public limited assurance on non-financial performance data within the Fortum´s Sustainability Report. In addition, we have used the criteria in AA1000 Assurance Standard (2008) to evaluate the adherence of AA1000APS (2008) principles to provide public Type 1 moderate level assurance. This requires that we plan and perform the engagement to obtain required level of assurance about whether the Fortum's Corporate Sustainability report is free of material misstatement.

We did not perform any assurance procedures on the prospective information, such as targets, expectations and ambitions, disclosed in the Corporate Sustainability report. Consequently, we draw no conclusion on the prospective information.

A limited (moderate) assurance engagement with respect to a Corporate Sustainability report involves performing procedures to obtain evidence about the information disclosed in the Corporate Sustainability report. The procedures performed depend on the practitioner's judgment, but their nature is different from, and their extent is less than, a reasonable assurance engagement. It does not include detailed testing of source data or the operating effectiveness of processes and internal controls and consequently they do not enable us to obtain the assurance necessary to become aware of all significant matters that might be identified in a reasonable assurance engagement.

Our procedures on this engagement included:

- Assessing the suitability of the reporting policies and criteria used by management and the consistent application of such policies, the inclusiveness of the stakeholders as well as the responses on the stakeholder dialogue and the overall presentation of these in the Corporate Sustainability report;
- Conducting interviews with senior management responsible for Corporate Sustainability at Fortum to gain an understanding of Fortum's targets for sustainability as part of the business strategy and operations;

- Reviewing internal and external documentation to verify to what extent these documents and data support the information included in the Corporate Sustainability report and evaluating whether the information presented in the Corporate Sustainability report is in line with our overall knowledge of Corporate Sustainability at Fortum;
- Conducting interviews with employees responsible for the collection and reporting of sustainability information and reviewing of the processes and systems for data gathering, including the aggregation of the data for the Corporate Sustainability report;
- Performing analytical review procedures and testing data on a sample basis to assess the reasonability of the presented sustainability information;
- Performing site visits to selected sites to review compliance to reporting policies, to assess the reliability of the sustainability data reporting process as well as to test the data collected for sustainability reporting purposes on a sample basis;
- Evaluating the application of the AA1000APS (2008) principles;
- Assessing the Company's stated application level according to GRI's guidelines.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Observations & Recommendations

Based on our limited (moderate) assurance engagement, we provide the following recommendations in relation to the AA1000APS (2008) and GRI G3.1 principles. The recommendations are to improve Fortum´s management and reporting of sustainability in the future and they do not affect to our conclusion:

- Inclusivity – Fortum has a comprehensive stakeholder inclusiveness process in place and throughout this process Fortum has identified the relevant key stakeholder groups for its operations. In 2012, Fortum has improved the presentation of the stakeholder inclusiveness and co-operation. We encourage Fortum to further develop ways for stakeholders to be involved in decisions that will improve sustainability performance and to continue the active dialogue with the key stakeholders.
- Materiality – Fortum has developed a system to determine important and material issues for Fortum´s stakeholders. We recommend that Fortum further develops the process of prioritizing and selecting the content of the report in relation to materiality.
- Responsiveness – The report includes a significant amount of information how Fortum has responded to stakeholder expectations. We recommend Fortum to enhance the presentation and the structure of the report to systematically communicate the responses to all material issues.
- Other recommendations – During 2012 Fortum has further developed the central coordination process and related internal controls for the Sustainability reporting process. However, the control activities implemented differ on a site level. We encourage Fortum to continue the development of harmonized control activities relating to the source data collection for the Sustainability Report.

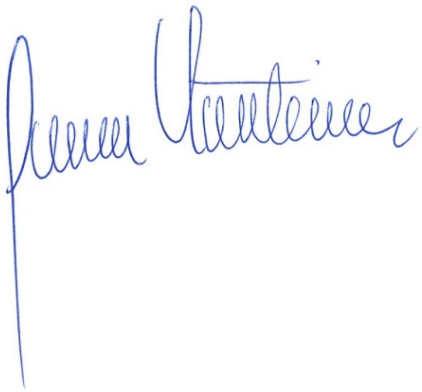
Our independence and competences in providing assurance to Fortum

We complied with Deloitte's independence policies which preclude us from taking financial, commercial, governance and ownership positions which might affect, or be perceived to affect, our independence and impartiality and from any involvement in the preparation of the report. We have confirmed to Fortum that we have maintained our independence and objectivity throughout the year and in particular that there were no events or prohibited services provided which could impair our independence and objectivity.
This engagement was conducted by a multidisciplinary team including assurance and sustainability expertise with professional qualifications. Our team is experienced in providing sustainability reporting assurance.

Conclusion

On the basis of the procedures we have performed, nothing has come to our attention that causes us to believe the Fortum Corporate Sustainability report for the year from January 1, 2012 to December 31, 2012, is not prepared, in all material respects, in accordance with the Sustainability Reporting Guidelines (G3.1) of the Global Reporting Initiative and to the AA1000APS (2008) AccountAbility Principles.

Espoo 26.3.2013



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Feedback

We welcome all feedback on the report at sustainability@fortum.com

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Cases

Our commitment to sustainability is visible in all our operations. Check out some examples of our activities in 2012.

Examples of Fortum's activities in 2012

Solar energy technology advancing quickly

In Fortum's view, solar energy is one of the most important energy production forms in the future solar economy.

Solar energy has a lot of potential – the earth receives about 800 million terawatt-hours of solar energy annually, over 5,000 times more than the global primary energy consumption.

Solar energy technology, particularly photovoltaic technology (PV), has advanced quickly in recent years. The cost of solar PV modules has dropped significantly, and it is estimated that also non-subsidised solar energy will become competitive with other energy sources already during this decade. Solar energy production capacity has also increased quickly – in 2012 about 30 gigawatts of solar electricity was installed in the world, and at the end of the year the total capacity was about 100 gigawatts.

A solar business development team established its operations at Fortum at the beginning of 2012. During the year, the team analysed the development prospects for solar energy markets and technologies, and assessed potential business models. Large-scale solar electricity production in locations with plenty of sunshine is the best match with Fortum's strengths. In 2012, Fortum also commercially launched a solar kit containing a solar PV system that connects to the grid.

In 2012 Fortum commercially launched a solar kit in Finland and Sweden.

Bio-oil replacing fuel oil

Fortum's goal is to increase the use of biofuels in its combined heat and power (CHP) production.

The company's expertise makes it possible to use a diverse selection of fuels, and bio-based, local fuels are becoming increasingly important. The new pyrolysis plant to be built in connection with the Joensuu CHP plant in Finland will showcase the use of biofuels. In addition to electricity and heat, the plant will also produce bio-oil. Based on fast pyrolysis technology, the CHP plant is the first of its kind in the world on an industrial scale. Upon completion, the Joensuu plant will produce 50,000 tons of bio-oil annually, enough to meet the heating needs of more than 10,000 single-family homes.

Energy produced with bio-oil reduces carbon dioxide emissions by over 70% compared to fossil fuels. The initial intention is to replace the fuel oil used at Fortum's own heat plants with the bio-oil made from forest residues and other wood-based biomass. In the future, bio-oil could also be used as traffic fuel or as raw material for various biochemicals.

Upon completion, the Joensuu plant will produce 50,000 tons of bio-oil annually.

Fortum's revised Code of Conduct familiar to all employees

Fortum's Code of Conduct defines the general principles of how we treat others, how we engage in business and how we safeguard our corporate assets.

The Code of Conduct is based on Fortum's shared values – accountability, creativity, respect and honesty. The first version of the Code of Conduct was published in 2007, and it was revised in the spring of 2012 due to changes in the operating environment and legislation, among other things.

The communications and training related to the revision were rolled out in all countries of operation in the same manner: the majority of Fortum employees took part in an online course and team discussions about ethical ways of operating. Team training was also held in Russia and Poland for employees who do not use a computer. By the end of February 2013, 99% of the personnel had completed the training related to the Code of Conduct. The training will continue in 2013.

In Russia, implementation of the Code of Conduct and getting employees familiar with it is the responsibility of the Compliance organisation, which was established in 2010 to strengthen the culture of ethical practices. The Compliance organisation has adopted the best practices of international companies in matters related to, e.g., the protection of assets and combating inappropriate payments. The organisation's work is particularly important because Russia ranked 143 in the global corruption index, whereas Finland ranked 2.

Fortum Code of Conduct

2007

- First version of the Code of Conduct is adopted.

2011

- Updating the Code of Conduct begins. The working group includes:
  - Experts from different countries and different company functions
  - Employee representatives from the Fortum European Council.

2012

- Updated Code of Conduct is adopted; employees receive a printed copy of the Code of Conduct in their native language.
- Launch of Code of Conduct online course targeting all personnel and team training events.

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- Training events continue. The goal is to achieve 100% coverage in the first quarter.
- Online course becomes part of the onboarding programme for new employees.

Work design and well-being at work

Fortum implemented a number of work well-being projects in 2012 as part of the company's ForCARE well-being programme.

The goal of all the projects is to develop the work community and to improve working capacity. In some of the projects, employees have worn heart-rate monitors to track their stress level, recovery, and level of physical activity. Over 100 employees participated in these projects during the year. Thanks to the measuring, feedback and follow-up, the average weight index of the participants decreased, the length and quality of their sleep improved, their 24-hour recovery time lengthened, and their physical activity became more regular.

Fortum also participated in the Redesigning 925 (nine to five) project implemented as part of the World Design Capital Helsinki 2012. The work design-focused project examined the daily life of an information employee and looked for better ways of doing and organising work. The goal was to also redesign the working week to meet today's needs and expectations and to increase the enjoyment, creativity and efficiency of work.

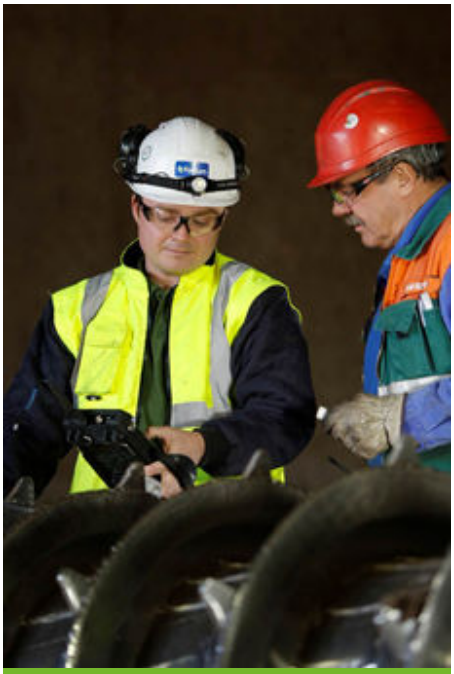
The goal of the Redesigning 925 project was to increase the enjoyment, creativity and efficiency of work.

Better safety at CHP plants

In 2012, Fortum improved the safety of the plants it had acquired in 2011 in Poland.

As a result of several concrete changes implemented at the Zabrze and Bytom CHP plants, the plants quickly met Fortum's safety requirements. Personnel safety training continued at the plants, and work safety was enhanced by renewing the employees' protective equipment and by improving and cleaning the work environment. Investments in plant safety, in turn, improved the safety of coal handling and plant start-ups. Additionally, the reporting and the investigation of incidents was improved.

The work has significantly improved the safety at the plants. There were no fires or leaks at the plants in 2012. In 2012, as in 2011, there was one lost workday accident. The number of lost workday accidents in 2009 and 2010 was 4 and 5, respectively. The ISO 14001 and OHSAS 18001 certification of the plants has also advanced as planned, and certification audits will be conducted during the first half of 2013.



Work safety was enhanced by e.g. renewing the employees' protective equipment.

Charging solutions for electric vehicles

The electrification of motoring is one step towards smarter energy consumption.

Fortum's goal is to develop the charging infrastructure for electric vehicles and to make it as easy as possible to transition to the motoring that minimises the load on the environment. One of our commercial launches is the Charge & Drive concept that offers turn-key electric car charging solutions and services for electric vehicles for companies and municipalities. Additionally, consumer customers are offered home recharging stations for electric vehicles.

In 2012, Fortum signed a collaboration agreement with Nissan to install 50 new quick charging stations along major highways in the Nordic countries. The aim is to enable travelling by electric vehicle between the capitals of the Nordic countries. With the new quick charging stations, the time required to charge the electric vehicles drops from 6−8 hours to about 15−20 minutes.

Fortum has launched the Charge & Drive concept.

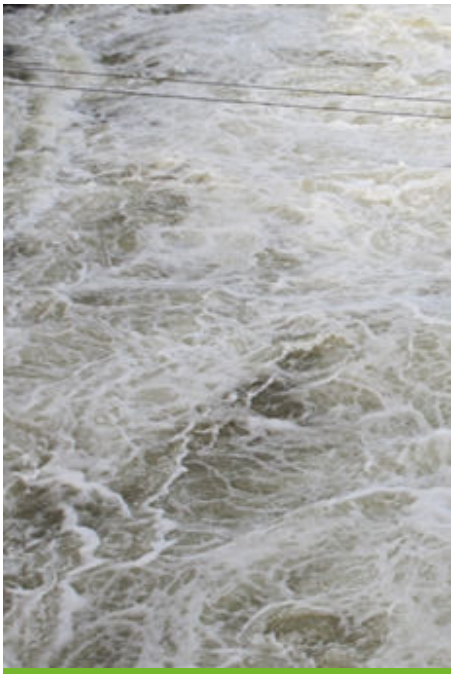
A year of exceptionally high precipitation in Finland

Exceptionally widespread flooding of the Oulujoki water system took place in summer 2012 in Finland.

The amount of rainfall in the first ten days of August was almost 50% more than what is normal for the entire month. This much precipitation occurs less frequently than once every 250 years. Fortum was able to mitigate the situation somewhat by regulating the waters in the system, but the level of Oulujärvi lake still rose by more than 10 cm over the top limit of regulation. The high water level caused flood damage to residential properties along the shoreline. Most of the damage was to various shoreline structures. Authorities noted that the water-level regulation was in line with the permit in the flood situation, and regulating the water couldn't have prevented the flooding.

Even though Fortum wasn't obligated to compensate for damages caused by the flooding, the company's experts inspected all of the 300+ damage sites reported by the residents. At some sites, Fortum made agreements with the residents on joint projects to repair the shoreline flood damages. The company also sent a personal letter to everyone who had reported damage; the letter provided background information about the flooding situation and about the possibility to apply for compensation from the State.

Fortum and the authorities are working together to determine how the regulating practices and permits for the water system's regulated lakes could be changed to minimise any damages from similar flooding in the future. Fortum has already taken the initiative to make changes to the planning of runs and is striving to improve flood control in all possible ways.



Fortum's experts inspected all of the 300+ damage sites reported by the residents.

Decontamination materials for radioactive liquids to Fukushima

Fortum has over 20 years of experience in treating waste that contains radioactive impurities.

Fortum is currently supplying ion exchange materials it has developed to the damaged Daiichi power plant in Fukushima, Japan, to purify the radioactive waters. The materials are being delivered to American EnergySolutions LLC, which is the technology supplier for the project led by Toshiba Corporation.

Large volumes of radioactive liquids were generated during the efforts to stabilise the reactors after the March 2011 nuclear power plant accident in Fukushima. Cleaning the Fukushima waters is, in fact, the world's largest decontamination operation of radioactive liquids. The Fortum-developed and -registered NURES® products, CsTreat® and SrTreat®, performed very well in the decontamination tests conducted in Fukushima, and they were chosen at the beginning of 2012 as the key technologies to treat the contaminated waters. The aim is to decontaminate 500 cubic meters of water every 24 hours in the upcoming years to bring the radioactive concentrations below the set limits. Deliveries of the materials started in July. It is the all-time biggest delivery of NURES® products.

Cleaning the Fukushima waters is the world's largest decontamination operation of radioactive liquids.

Collaboration with universities and colleges

Fortum annually engages in collaboration with several universities and colleges in the countries where it has operations.

The goal of the collaboration is to develop Fortum's business and to promote Fortum's research and development work and its recruiting and training opportunities. In 2012, there were several central collaboration projects. A solar economy professorship focusing on the research and teaching of market mechanisms related to a solar economy will be established at Lappeenranta University of Technology in Finland. Fortum is supporting the start-up of operations with a 75% share for a five-year period. Also in Finland, Fortum is funding Aalto University's Multidisciplinary Institute of Digitalisation and Energy (MIDE) research programme, which is in its final stretch.

In Sweden, Fortum is working with the Royal Institute of Technology to develop solutions for sustainable urban living; and in Poland, Fortum is involved with Wroclaw University of Technology in a research project that is exploring the best technical solutions for producing district cooling. In December, Fortum's subsidiary OAO Fortum in Russia signed a collaboration agreement with Ural Federal University for further training of Fortum employees and research collaboration in the energy sector.

A solar economy professorship will be established at Lappeenranta University of Technology in Finland.

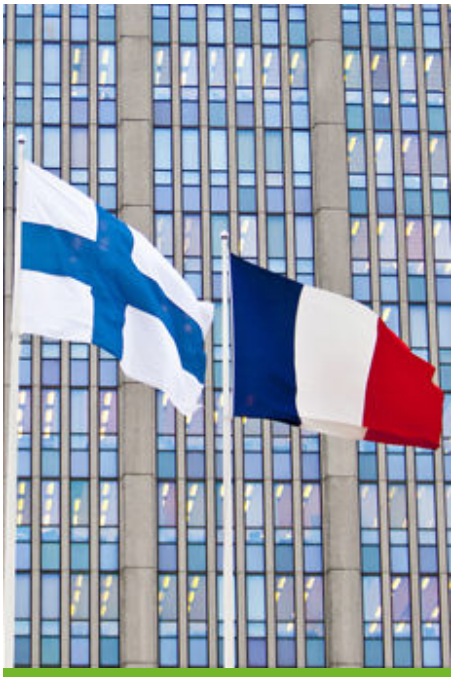
Close collaboration with stakeholders in France

During 2012, Fortum continued its preparations for the tender process for hydropower concessions in France.

The renewal of the French hydropower concessions represents a rare opportunity for a substantial hydropower stake in the centre of Europe's energy markets. France is home to Europe's second largest hydropower capacity, about one fifth of which is planned to be opened up to competition in the upcoming years.

Fortum's ambition in France is to contribute to building a low-carbon society by utilising its expertise in efficient and environmentally benign hydropower production. During the past two years, under the leadership of Philippe Stohr, Country Manager for Fortum France SNC, Fortum has engaged in an active dialogue with local authorities, politicians and organisations about hydropower development. The goal of the discussions is to co-create new ideas for sustainable hydropower production while leveraging Fortum's expertise and taking into consideration the needs of stakeholders.

As an outcome of the discussions held, Fortum compiled a comprehensive report summarising the observations made in the 110 interviews. Fortum was also invited to the French National Assembly to share its views on hydropower and the tendering process.



France is home to Europe's second largest hydropower capacity.

Smart grids

New technology related to smart grids gives customers better opportunities to track and boost the efficiency of their own electricity use, decrease their carbon footprint, and even produce their own energy.

A smart grid is a part of the future's efficient energy system. Furthermore, smart technology reduces the number and duration of power outages in the grid. Thanks to the new smart meters, it is easier to pinpoint malfunctions. Additionally, a smart meter enables two-way metering of electricity, i.e. the customer can sell and feed the surplus electricity to the grid.

New technology and consumers' increased interest in small-scale electricity production accelerated Fortum's commercial launch of a solar photovoltaic technology product for consumers in Finland and Sweden in 2012. Fortum Aurinkopaketti (Solar Kit) is a system that connects to the grid and differs from off-grid systems, which have batteries as backup. Fortum also commits to purchasing the customer's potential surplus electricity. And when a consumer's own electricity production isn't enough to meet the household's needs, they can buy the extra electricity they need from the electricity company.

Thanks to the smart meters, it is easier to pinpoint malfunctions in the grid.

Inspiring design year

Fortum was one of the main corporate partners of Helsinki World Design Capital 2012.

The biggest of the design year's projects was the partnership in the Kulttuurisauna project. Built on the Helsinki waterfront in Hakaniemi, the advanced energy solution of the Kulttuurisauna promises sauna goers a virtually non-existent carbon footprint. The solution simulates power plant technology on a small scale.

Suvanto lounges for work and relaxation were created at the Helsinki-Vantaa airport in collaboration with other design partners. Travellers can use the lounges to take a breather and to recharge electronic devices. Air travellers have an increasing need to recharge electronic devices; in addition to the Suvanto lounges, recharging walls were also installed at several departure gates.

As in the previous year, Fortum was the only energy company to participate in the Habitare fair in Helsinki. The stand welcomed thousands of visitors who checked out the energy solutions for the home of the future.

The design year also resulted in the launch of a rapid charging station for electric vehicles in Espoo in collaboration with HOK-Elanto. Additionally, Espoo residents had an opportunity to design new looks for electric cabinets. Fortum's head office in Keilaniemi, Espoo, was open to the public twice during the design year: in February, Espoo residents had a rare opportunity to check out masterpieces in Fortum Art Foundation's art collection; in August, the public admired the Espoo seascape from the rooftop terrace of the head office. Art owned by Fortum Art Foundation was also on display during the year at the Amos Anderson Art Museum. An urban garden and bee farm were established at the head office courtyard for the summer season. The harvest was enjoyed by Fortum's business visitors.

Suvanto lounges for work and relaxation were created at the Helsinki-Vantaa airport.

Future homes control their own energy consumption

Real-time measuring of electricity consumption was adopted in Sweden in 2009. The same obligation will take effect in Finland by the beginning of 2014.

Among other things, smart meters enable the development of new kinds of smart services that facilitate everyday life for consumers. These kinds of products include Fortum Fiksu, sold in Finland, and Fortum Energy Display, offered in Finland, Sweden and Norway, and Fortum Hemkontroll, offered in Sweden.

Fortum Energy Display is an in-home display terminal for real-time monitoring of the home's total consumption of electricity. Increased awareness of household electricity consumption enables consumers to use their electric devices more efficiently and that results in lower electricity bills. The device can also be programmed with daily consumption targets and limits. Fortum Hemkontroll was introduced in Sweden at the beginning of 2013. Like the Energy Display, it can be used to monitor household electricity consumption – but it can also be used to control electric devices and heating at home with a computer or smart phone.

In 2012, Fortum commercially launched Fortum Fiksu, a product that automatically controls electrically heated water boilers. The product might also be called new-era night-time electricity. This device makes it possible to lower home heating costs because the control system retrieves a weather forecast from the Internet and an electricity price from the electricity exchange for each hour of the day and night. With the information, the most economical hours of the day/night are automatically selected to heat the water in the boiler. Once the equipment is installed, electricity consumption can be monitored with a computer or smart phone.

Remote reading helps everyday life for consumers.

Refurbishment of Russian district heating network

District heating's share of the heating markets in Russia is over 50%.

The heating season in Russia starts when the average outdoor temperature remains below +8 degrees for five days. The local authority makes the actual decision on the start of the heating season. In Fortum's operating area, the heating season lasts about 8.5 months – typically starting in late September or early October and ending in the middle of May.

Fortum and its subsidiary Urals Heat Network are refurbishing trunk networks annually. Over the past three years, the old insulation was replaced with polyurethane, which has increased the service life of the pipes and decreased heat loss. Additionally, moisture meters have been installed in the heating network in order to locate possible damages in the network. This way, repairs can be made promptly and disruptions in heat delivery can be kept as short as possible.

The life of the pipes has increased and heat loss decreased.

Innovation Award 2012

Innovation Award 2012 recognises employees' best ideas.

Fortum's fifth consecutive Innovation Award contest was organised in 2012. The contest has generated nearly 500 ideas over the years. The aim of the award is to develop Fortum's operations and to create new products and services. The contest has also led to several patentable ideas.

The employee ideas collected in the Innovation Award 2012 contest primarily came from two areas: Efficiency improvement, which was related to the efficiency programme started at Fortum in 2012, and the solar economy. Additionally, in a separate contest, the unit with the most improved initiative process was awarded.

The Fortum Management Team chose the winners, and the awards were given at Summit 2013, the annual strategy meeting for Fortum's top management. The grand prize for 2012 went to Esko Tusa, the developer of the NURES products for decontaminating radioactive liquids. The Suomenoja plant and its personnel in Finland were awarded for most improved initiative process. The plant personnel were particularly active in submitting initiatives in 2012.

The aim of the award is to develop Fortum's operations and to create new products and services.

Dialogue about EU energy markets

The dialogue about the future of the EU energy markets, and particularly the electricity market model, escalated in 2012.

Fortum is concerned that the competitiveness of market-based production will be undermined by subsidy-based energy production gaining ground. Fortum's goal is for a market-driven transition to carbon dioxide-free energy production, which would be best encouraged by efficiently functioning emissions trading. As a result of the weak economic situation and the overlapping steering mechanisms watering down each other, the EU's emissions trading has not been able to steer production and investments along the intended low-carbon course.

Fortum has actively participated in the European dialogue about the necessity for well-functioning electricity markets and has done its own investigative studies and modelling on the functioning of the markets; the results have been distributed also to external stakeholder groups. Fortum has engaged in close collaboration with the European Commission in particular. Fortum has also been active in the Union of the Electricity Industry – Eurelectric, which represents the common interests of the whole European electricity industry, and has participated in discussions with national authorities and other stakeholders.

Polish school kids learn about energy and the environment

Fortum has two educational projects in Poland to teach local school kids about energy and to encourage them to take responsibility for the world around them.

In Wrocław, 120 children participated in the Pro-environmental Creative Competition that Fortum and the Wrocław Teacher Training Centre organised for the sixth time. The main purpose of the competition was to educate children about energy and the environment. The slogan of the competition -- "What is energy to you?" -- provided a platform for children's artwork, comic strips and multimedia presentations.

In Czestochowa, teachers were trained to use the Energy Game, developed by Fortum, as an alternative learning method. As a result, students of 50 secondary and high schools solved problems related to issues like energy conservation and energy generation.

Both projects are continuing in 2013.

Secondary and high-school students solved problems related to energy conservation and energy generation.