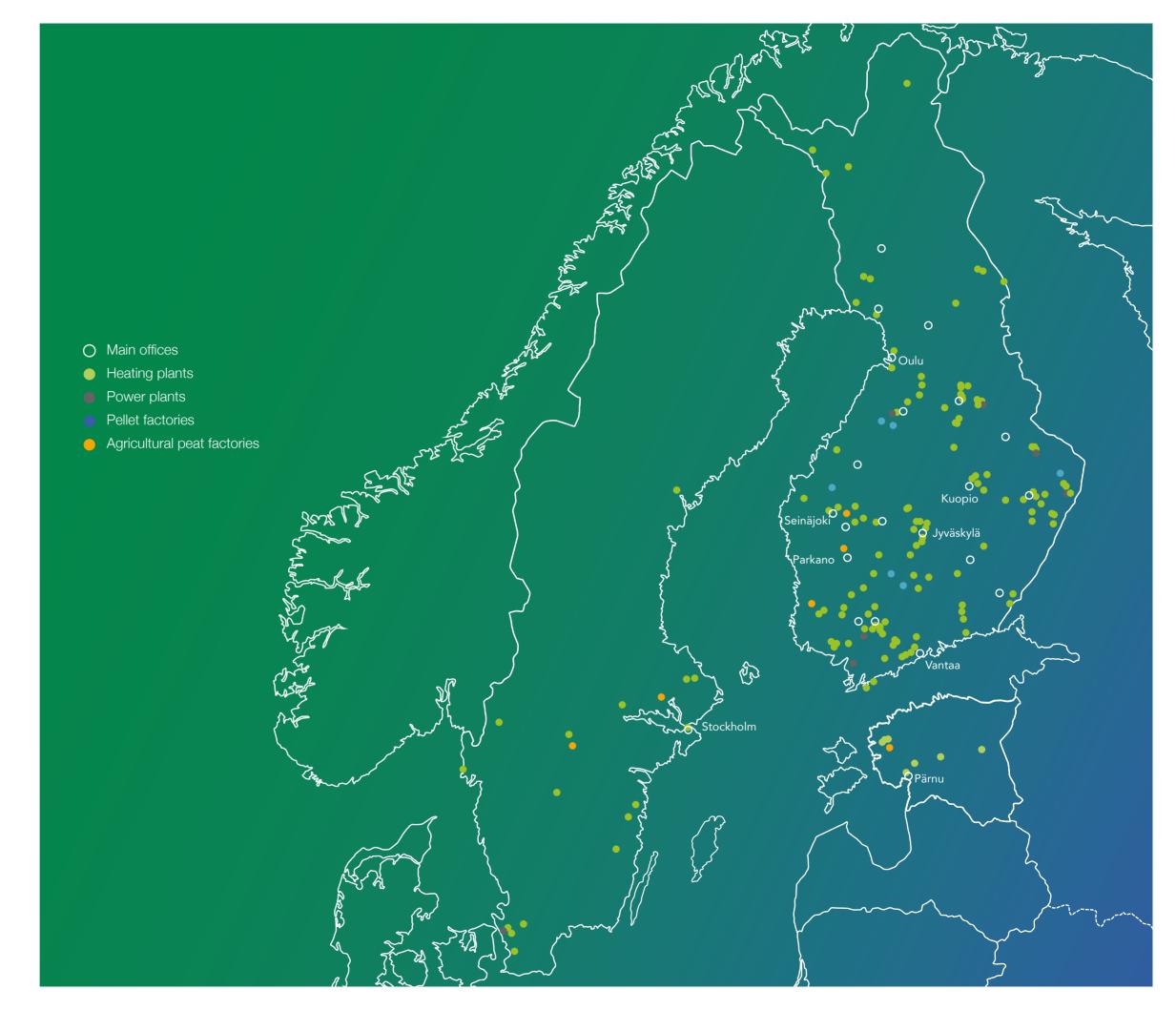






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### **READY FOR THE FUTURE**

Tomi Yli-Kyyny took up his post as the CEO of Vapo Oy in spring 2011 and his last day at the company was the final day of the financial year, 30 April 2017.

### What have been the biggest changes in the industry during the past six years?

The most significant change that has affected Vapo is the transformation of the electricity market, which has led to a situation where condensing power is barely used at all to produce electricity in Finland. For us, that has meant a decline in demand in the energy peat market corresponding to approximately five million cubic metres. As a percentage, the drop in demand has been 25–30 per cent over a period of just a few years. This represents a market change that is many times more impactful than something like a mild winter or a poor peat production season. The company has been forced to adapt its production and cost structure to the new level of demand—which it has done. Six years ago, Vapo was more of a pure supplier of fuel than a diverse energy company. The change in the market has turned Vapo from a fuel supplier to a provider of various energy solutions.

#### Why has Vapo not grown?

Vapo had actually grown a little too much in the countries around the Baltic Sea, without having sufficient critical mass in places like Denmark, Poland, Latvia and Russia. Single pellet factories or heating plants did not provide the economies of scale that would have made it worthwhile for us to maintain a presence in those countries just for the sake of our international image. Three years ago, we conducted a careful analysis of our strategy and concluded that we are an energy company that operates in Finland, Sweden and Estonia. We also began to purposefully investigate other uses for peat besides burning it as fuel and using it as a garden substrate and animal litter. This is a new side of Vapo that connects Kekkilä, which specialises in gardening products, with Vapo's core business in a new way. As a result of reviewing our strategy, we divested all of our sawmills, and that move alone has reduced our annual turnover by more than EUR 100 million. Our increased focus has led to lower turnover, on the one hand, but, on the other, it has meant that we are preparing for new growth in the

heating and electricity business while also pursuing new paths to growth through the Vapo Ventures business.

#### What are you most proud of?

I'm proud of the fact that we have worked with all of our personnel to achieve a significant change in Vapo's corporate responsibility. Our personnel are highly committed to having environmental responsibility, as part of broader corporate responsibility, elevated to a key role in Vapo's business strategy. The environmental investments we have made over the past few years represent the largest investment of my tenure as CEO and amount to nearly EUR 50 million. At Vapo, we all agree that responsibility is how we earn the right to keep operating in the future.

The company's financial position is much better than it was five years ago, it has a clear strategy confirmed by the Board of Directors and it has the ability to take the big leap the strategy requires. The company is ready for renewal.

#### What would you have done differently?

We should have done a better job of predicting the change in the operating environment. Then again, four years ago, hardly anyone predicted that electricity prices would be where they are today, so I suppose I shouldn't feel too guilty about that. I'm very pleased with the Vapo Ventures business but, at the same time, I'm a bit displeased with myself for not seeing these new uses for peat sooner. Peat is a good energy source, but it is also an excellent recyclable material for use in gardens and as animal litter.

The future will show what kind of role it can play in entirely new uses. Whether you look at utilising peat fibre or producing activated carbon products from peat, I believe we are very close to a major breakthrough. In a way, the development is similar to that of the wood processing industry, where all the talk is about the bioeconomy. According to the political definition, peat is not considered a renewable energy source. However, as a raw

material for the bioeconomy, the story of peat is only beginning. This means that Vapo will one day be known as a genuine global pioneer in the new bioeconomy.

### What is something people don't know about Vapo?

Despite years of hard work, we have failed to convince people of the fact that our operations do not endanger Finland's valuable mires that are in their natural state. There are plenty of ditched peatlands in Finland, enough to serve the current needs of the peat industry and the future needs of the bioeconomy. We have a very sustainable foundation for our raw material supply. The employment effects of peat are well-known, the environmental issues have been largely resolved and there will be more news coming out soon on new peat-related businesses. Vapo has set a goal of leading its industry in terms of the speed of its digital transformation. We have built the world's most modern operations centre in Tikkurila to remotely control solid fuel boiler plants, and we are introducing new digital services to our customers on a monthly basis. Our success on this front has been favourably reflected in higher customer satisfaction and the number of applicants for vacancies in our organisation.

### What kind of company will your successor inherit?

He will have the opportunity to lead a very interesting expert organisation in the energy sector. It is a company that believes in renewal and innovation in its traditional markets as well as entirely new markets. I wish all the best for the future for Vapo's personnel, contractors, customers and partners, and I want to thank them all for the journey we shared together.

Tomi Yli-Kyyny CEO Until 30 April 2017



### **VAPO'S YEAR**

### Producing active carbon from peat

Vapo is actively pursuing peat-based business opportunities beyond traditional fuel production. In October, the company announced a project aimed at making a quick entry into the growing international market for technical carbons. The aim is to decide on a plant investment of approximately EUR 50 million by the end of 2017.

### The industry's most advanced online store

During the year, Vapo developed its operations to make them even more digital and customer-focused. The company created a highly advanced online store for consumer customers requiring pellet and litter products. The online store represents a strong response to customer needs, particularly through improvements in the flexibility and convenience of making purchases.

### The leading supplier of renewable energy in southern finland

On 24 November 2016, Finland published an ambitious national climate and energy strategy aimed at becoming one of the world's leading countries on this front. Vapo has a role to play in achieving the goals laid out in the strategy. We are already the largest supplier of renewable energy—namely pellets, wood chips and forest industry by-products—to the energy companies in southern Finland.

### Cost efficiency through remote operation

Vapo offers power plant operating services to its customers from its operations centre in Vantaa's Tikkurila district. Leveraging the digital transformation in energy production can yield very significant savings in a short time, while increasing the plants' operating reliability and energy efficiency. No other operations centre in the world is used to remotely control as many solid fuel power plants and heating plants as this centre.

### Strong focus on customer service is producing good results

Vapo's promoter score among its customers rose to 36 from the previous year's level of 24. Vapo has set a goal of leading its industry in terms of the speed of its digital transformation. We want to achieve this goal by doing the right things—and doing new things—with our customers.

#### One accident is one too many

Vapo has set a goal of minimising workplace accidents. The number of accidents relative to working hours was reduced by half during the past financial year, while the number of occupational safety observations more than doubled.





### **OPERATING ENVIRONMENT**

Weather has a significant impact on Vapo Group's result. The ideal year would have a dry summer followed by a normal, cold winter. Unfortunately, neither of these happened in the past financial year. In addition to weather, the company must be able to adapt to national and international regulation.

### PRICES OF FOSSIL FUELS AND ELECTRICITY

According to preliminary data from Statistics Finland, the total energy consumption of Finland in 2016 was 1,335 petajoules (PJ), or 371 terawatt-hours (TWh), which is two per cent higher than in 2015. Electricity consumption totalled 85.1 TWh, up by approximately three per cent from the previous year. The increase in energy consumption was due to the weather being slightly cooler compared to the record-warm previous year. Compared to the previous years' price levels, the prices of oil, coal and natural gas remained exceptionally low. Combined with the higher-than-usual water reserves in the Nordic countries, they kept electricity prices low. As a result, condensing power plants barely produced any electricity at all, which was reflected in the demand for peat and energy chips.

#### INTERNATIONAL REGULATION

The most significant regulations and obligations that are in the decision stage at the EU level and affect Vapo Oy's operating environment are the LCP BREF document (Large Combustion Plant Best Available Technique Reference Document) related to large combustion plants (over 50 MW) and agreeing on the sustainability criteria concerning the energy use of wood in the next emissions trading period.

In spite of the efforts of Finland and Finnish companies that use biofuels, the LCP BREF document proposes substantially tougher limits on emissions arising from the combustion of biomass and peat. The use of domestic fuels is being promoted at the EU level, and it seems likely that countries that produce coal will have less strict emissions limits on their domestic brown coal, while Finland, Ireland and Sweden would not be granted a similar relaxation of emissions limits on domestic peat and wood. According to an estimate by Pöyry, this would result in hundreds of millions of euros in additional costs for Finland.

The sustainability criteria governing the energy use of wood, on the other hand, are not expected to be subject to significant changes. The energy use of wood in solid fuel plants and as raw material for transport fuels will continue under the existing terms in the next emissions trading period.

### THE PARIS CLIMATE AGREEMENT AND FINNISH ENERGY POLICY

The Paris Climate Agreement, which entered into force in late 2016, set a target of limiting the rise of global temperatures to below two degrees, preferably 1.5 degrees, above pre-industrial levels. The Climate Agreement sets restrictions on housing, transportation and agriculture, through which it also influences food. In Finland, for example, these sectors must reduce their emissions by 39 per cent compared to the 2005 levels. Transportation accounts for 23 per cent of the global greenhouse gas emissions.

The Government Programme of Finland's current government includes the goal of increasing the share of renewable and emission-free energy to more than 50 per cent by 2030. The target rate of self-sufficiency in energy is 55 per cent. The government wants to halve the use of imported oil and stop the energy use of coal by 2030.

Finland is making good progress towards its goal of increasing the share of renewable energy to half of all energy production by 2030. Last year, the share of renewable energy rose to nearly 40 per cent, which is the second-highest level in the EU. The second target set by the Government Programme, increasing the rate of self-sufficiency in energy to 55 per cent, is a challenging one, and peat has an important role to play in achieving it.

### THE IMPACT OF WEATHER ON THE FINANCIAL YEAR

The peat production volume, seven million cubic metres, was lower than planned due to the rainy weather in the late summer. However, the reserve stocks produced in previous summers ensure fuel deliveries to customers.

Temperatures in autumn 2016 were colder than the comparison year throughout the Vapo Group's operating area, but they were nevertheless substantially above the long-term averages. The first months of 2017 were also warmer than average. The warmer-than-average weather reduced the demand for energy peat by nearly 10 per cent.

### **MEGATRENDS**

Vapo is responding to the challenges and opportunities presented by global megatrends such as urbanisation, digital transformation and climate change.

#### **URBANISATION**

Forecasts suggest that, in 2030, more than 70 per cent of the global population will live in cities. Urbanisation means minimising the need to transport people and goods, which corresponds to minimising logistics expenses. Urbanisation will increase the importance of energy-efficient construction as well as energy production based on local renewable fuels. District heating is an environmentally sound and energy-efficient solution for producing heating for large communities.

#### **DIGITAL TRANSFORMATION**

Leveraging the digital transformation is vital in the consumer business and, in operations at the industrial scale, it represents a tremendous opportunity. Developments such as online commerce and the Internet of Things will enable great leaps in profitability. The operations of businesses and their employees will become more efficient and work, expertise and service provision will no longer be dependent on location.

#### **CLIMATE CHANGE**

Climate change influences the way all of us, including customers and their customers, operate. Mitigating climate change calls for increasing energy efficiency, adopting best practices and purposefully moving towards sustainable energy solutions.

#### RESPONSIBILITY

A responsible company can maintain a good balance between economic, social and environmental responsibility in its operations. Responsibility includes minimising environmental impacts as well as looking after employee well-being and increasing the local tax footprint.

### Vapo's response to the forces of change

Vapo aims to lead its industry in terms of the speed of its digital transformation. This means making maximum use of modern technology in consumer services, energy production, the operation and maintenance of boiler plants, logistics planning and monitoring the results of operations.

We make determined efforts to increase our use of renewable fuels and sustainable energy service solutions and to deliver these to our customers. The need for environmentally sound solutions is also reflected in our product development.

Recyclable substrates, treatment systems for natural waters and the new innovations we aim to leverage to introduce new raw materials for the fibre industry and technical carbons market are key aspects of our response to these megatrends.

District heating produced from local fuels is an excellent example of how local operations and local production can respond to the challenges presented by urbanisation.

### **INPUT**

#### **Finances**

- Balance sheet EUR 812,4 million
- Equity EUR 339,7 million
- Gross investments EUR 39,6 million

#### Personnel

- 773, of whom 515 in Finland
- 69 seasonal workers per year \*
- 70 training days per year \*

#### Natural resources

- 100,000 hectares of land assets
- 537,547 m³of certified wood fuel \*
- Water consumption 941,400 m<sup>3</sup> \*

#### Production plants

- Approx. 400 peat production areas
- 7 power plants
- 146 heating plants
- 27 district heating networks
- 6 pellet factories
- 8 agricultural peat factories
- 2 composting plants

#### Intangible assets

- Industry expertise
- Certified quality management and environmental system
- Patents, brands
- Treatment methods for natural waters and drainage waters

#### Partner network

- Contractors
- Logistics partners
- Land owners
- Wood suppliers
- Research institutes, universities, schools
- Retailers

### **BUSINESS**

Vapo is a renewal-oriented, local and responsible company that is close to the customer



- Energy industry expertise in solid fuels
- Peat expertise
- Expertise in growing
- Leveraging the digital transformation
- Customer-focused solutions and services



#### Forces of change

Digital transformation	Responsibility
Urbanisation	Climate change

### **OUTPUT**

#### Products and services

11.9 TWh of fuel supplied

1,321 GWh of heat, electricity and steam supplied

Substrates and other gardening products

Environmental peat

Peat fibre

**Energy solutions** 

Operating services for energy assets

Digital services

Water treatment solutions

Security of supply and logistics services

Innovation

#### Waste and emissions

#### Airborne emissions:

- Carbon dioxide
- Particle emissions
- Sulphur and nitrogen oxides
- Ash

#### Emissions into waterways:

- Phosphoru
- Nitrogen
- Solid matter
- Waste water
- Waste

### **IMPACT**

#### Economic impact

- Turnover EUR 392,1 million
- Salaries and fees EUR 37,2 million
- Purchases EUR 155,7 million
- Dividends EUR 4,0 million
- Direct taxes EUR 2,0 million
- Safeguarding energy assets

#### Social impacts

- Reliability of the supply of electricity and heating
- Direct and indirect employment effects in Finland, Sweden and Estonia
- An important employer in sparsely populated areas
- 46 accidents per one million working hours \*
- Promoting the construction of green areas and gardening
- Promoting food safety
- Developing global food production
- Animal welfare

#### Environmental impacts

- Urban green areas sequester carbon and wetlands purify drainage waters
- Converting cutaway peat production areas into carbon-sequestering areas
- Promoting biodiversity by reforestation and building wetlands
- Exchanging mires with significant natural resources or selling them for conservation purposes
- Waste recycling rate 72%
- Ash recycling rate 74% \*
- Reuse of used stacking plastic 100% \*

<sup>\*</sup> Figures for the calendar year 2016



### **VAPO IN BRIEF**

#### **VAPO ENERGY**

Vapo Energy consists of the Fuels business and the Heat and Power business. Vapo Energy brings together decades of fuel and energy expertise throughout the energy production value chain.

#### Fuels

Fuels are Vapo Oy's traditional strength. Vapo is a supplier of local fuels, such as energy peat, pellets and wood fuels, but also increasingly a provider of energy services that support these fuels. The customer base includes not only large industrial enterprises and Finland's largest power plants, but also smaller heating customers such as housing cooperatives and detached homes.

#### Heat and power

Vapo's Heat and Power business offers its customers tailored heating solutions, district heating and remote operation services. The customer base for heating solutions consists of industrial enterprises, municipalities, heating companies and large properties. Vapo delivers district heating to customers in the areas covered by the district heating networks operated by the company. Vapo sells the electricity it produces at its power plants to the Nordic Electricity Exchange.

#### Vapo Ventures

Vapo Ventures develops and commercialises Vapo's new businesses based on the company's strengths, raw material resources, competencies and networks. The first Vapo Ventures startup is Vapo Clean Waters Oy, which provides solutions for the treatment of natural waters. Vapo Fibers develops innovative and ecological peat fibre solutions for industry. The newest startup is Vapo Carbons, a technical carbon manufacturing business that is currently in the commercialisation phase.

#### Neova AB

Neova AB is a Swedish subsidiary of Vapo Ov. It provides district heating to its customers and customised heating solutions for industrial customers. The company also produces and markets peat products for its energy customers and users of agricultural peat products. The company's turnover is evenly divided between heating solutions and peat productions.

#### Kekkilä Group

Kekkilä Group develops, produces and markets high-end garden soils, plant fertilisers and mulches as well as home garden and yard construction products for amateur and professional growers and landscapers. The company operates under the Kekkilä brand in Finland and the export markets. In Sweden, Norway and Denmark, the products are marketed under the Hasselfors Garden brand.

#### AS Tootsi Turvas

AS Tootsi Turvas is Vapo Oy's Estonian subsidiary. Its primary business is the sale of agricultural peat products, energy peat products and wood fuels, as well as the production and sale of heating. Agricultural peat accounts for 47 per cent of the subsidiary's annual turnover, while wood fuels account for 30 per cent, energy peat 13 per cent and heating 10 per cent.

Vapo Group comprises Vapo Ov, Neova AB, AS Tootsi Turvas, Kekkilä Group and Hasselfors.

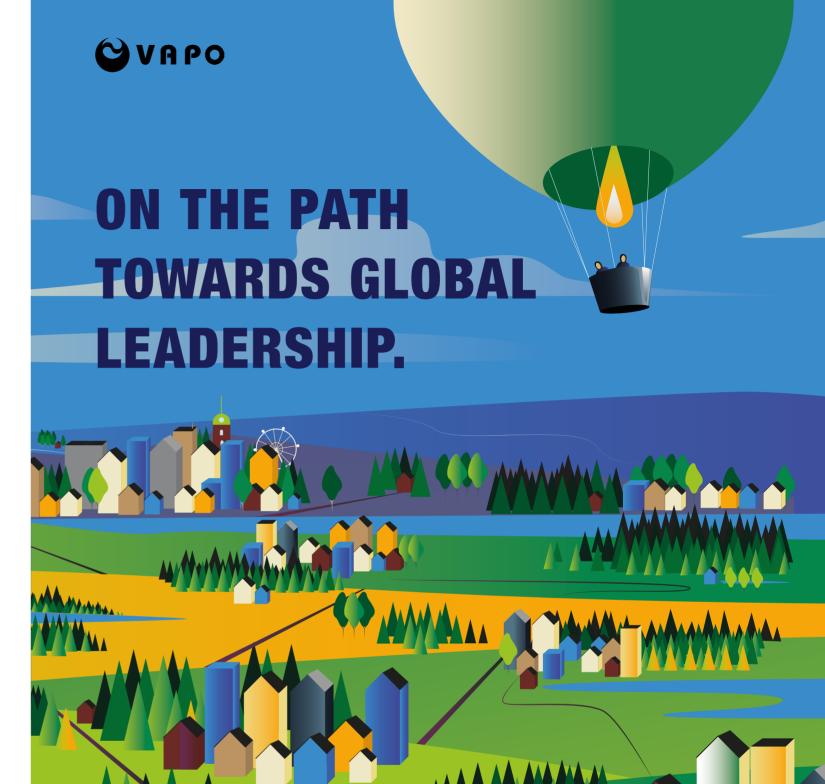






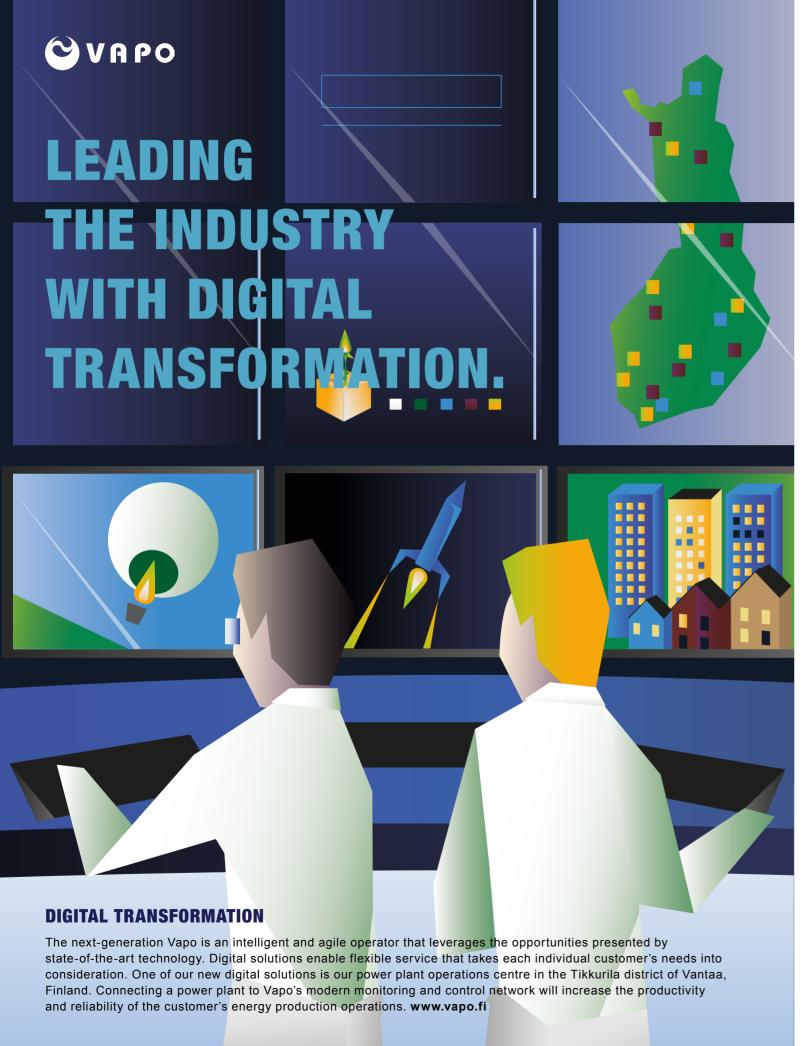


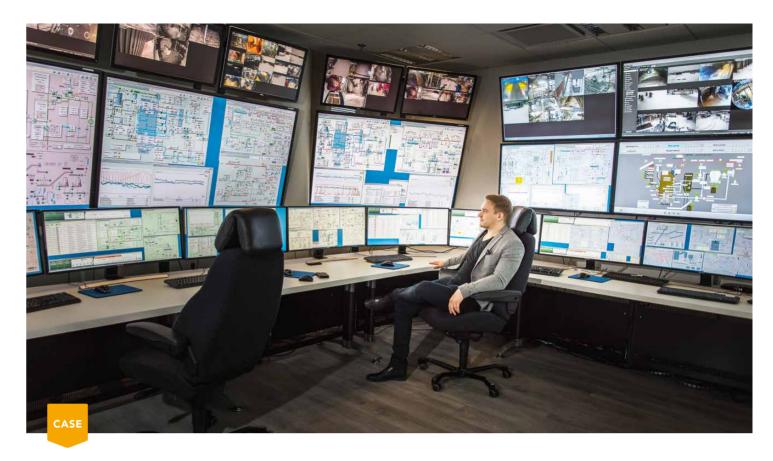




#### **VAPO GROUP**

We are a rapidly transforming bioeconomy and energy company. Renewal is not only our passion, it is also vital for our future. Combined with our highly competent people, our expertise in domestic raw materials and the energy sector create a strong foundation for the energy business and the development of our new bioeconomy businesses. We operate in Finland, Sweden and Estonia. www.vapo.com





#### MILLIONS OF EUROS IN SAVINGS FROM THE DIGITALISATION OF POWER PLANTS

Vapo aims to revolutionise the way power plants are operated in Finland. Most customers still operate their power plants locally. Vapo offers a comprehensive power plant remote control service to its customers.

There are a number of factors that have enabled the creation of this revolutionary operating service, one of which is the development of technology. If a power plant has a sufficiently advanced automation system, it can be operated remotely. Further factors that have enabled the development of the operations centre and its optimisation models include broad high-level expertise and Vapo's own power plants.

"Our experiences with remote operation have been excellent. The largest savings have been achieved through plant automation and related changes that increase the efficiency of operations, which have led to improvements in energy efficiency and the optimisation of plant oper-

ating methods," says Ville Koikkalainen, Head of the Operations Centre.

The walls of Vapo's Operations Centre in Vantaa's Tikkurila district are lined with dozens of computer screens. One of the machines chimes up, but Ville Koikkalainen is not alarmed. The plant operator sitting next to him quickly responds to the signal and Koikkalainen goes on to explain that the most significant benefits of automation are related to centralisation, predictability and lower costs.



Photo: Nivos Oy

### CONVENIENCE AND RELIABILITY THROUGH AUTOMATIC REFILLING

Nivos Energia, Jere Turunen

Mäntsälä-based Nivos Energia has introduced automatic pellet refilling at two of its heating plants. Scales at the foot of the silos provide real-time data on fuel levels and pellet deliveries can be optimised according to transport routes. In Mäntsälä, automatic refilling is expected to bring reliability and convenience to work routines.

"We have outsourced our fuel deliveries to Vapo. Vapo monitors fuel levels and

delivers more pellets without us having to put in separate orders. This gives Vapo the freedom to plan its pellet logistics in a way that optimises transport operations. Our role in fuel deliveries is simply to pay the bills," says Jere Turunen, District Heating Engineer at Nivos Energia.

Nivos Energia is the first external customer for Vapo's automatic refilling service, the concept for which was honed at Vapo's own Serena heating plant.



## LOGISTICS EXPERTISE AND LISTENING TO THE CUSTOMER

Turun Seudun Energiantuotanto, Tapani Bastman

– Over the decades, Vapo has developed strong logistics expertise related to peat, which also provides substantial benefits when it comes to wood fuels. While the old Vapo could even be considered to be at odds with selling, they have now really turned things around," says Tapani Bastman, CEO of Turun Seudun Energia.

- Today, Vapo is an active partner that is sensitive to customer needs, which made our negotiations and cooperation very smooth. We have signed a multi-year fuel delivery agreement and our aim is to build a long-term partnership.

Our power plant in Naantali represents our preparation for the future and potential changes in scenarios: the soon-to-be-completed CHP plant can run on almost anything, from wood fuels to natural gas, coal, peat and straw. The use of peat is restricted by the lack of good peatlands in the region.

- Price, delivery reliability and good communication are the key factors in our fuel supplier choices. Our storage capacity in Naantali is only one weekend's worth of fuel, so the reliability of deliveries is absolutely essential. We take delivery of 40 lorry loads of fuel per day. It is important for us that our partner has the ability to listen to the customer and understand the customer's needs. The Vapo of today does this very well.



### CONVENIENT AND AFFORDABLE DISTRICT HEATING BY OUTSOURCING

Mika Kilpeläinen, Sotkamo municipality

The municipality of Sotkamo outsourced the operation of its district heating network to Vapo in 2002. According to Municipal Manager Mika Kilpeläinen, the outsourcing move has been a success. It means the municipality has one less thing to worry about.

– For the residents of our municipality, it has proved to be an economical decision. The price of district heating has remained very stable, predictable and affordable. There have been no complaints from local residents. Everyone has been satisfied with Vapo," Kilpeläinen says. Vapo is familiar with the Sotkamo region, as the company runs its own power plant and district heating network in Vuokatti.

- Cooperation with Vapo has been

easy. We have no complaints. There were talks in Sotkamo a few years ago about selling the district heating network to Vapo, but that is not something we are currently looking at. We have discussions with Vapo a few times a year, and communication is always smooth," he explains.

The district heating network of Sotkamo municipality is just over 50 kilometres long and has nearly 500 connected customers.

– Our district heating network is getting up there in age. Vapo has carried out extensive repairs over the years. At the same time, when the municipality is building its own infrastructure, it also renovates the district heating network. We are moving forward in good harmony," Kilpeläinen adds.

### CASE

#### **NOT ONLY PEAT, BUT ALSO WOOD FUELS**

Jukka Vierimaa, Nokianvirran Energia

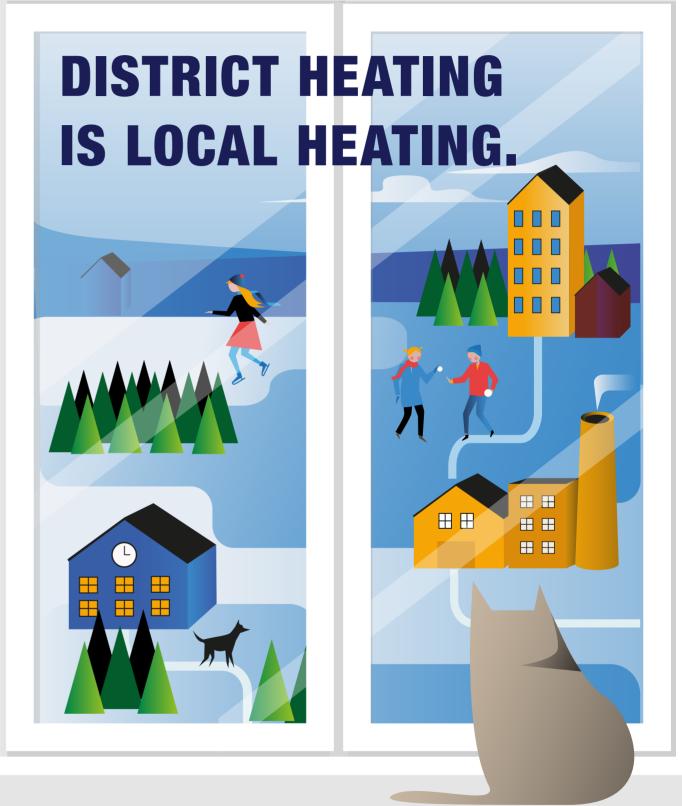
- Vapo's active approach and competitiveness in wood fuels was a bit of a surprise for me personally when we were choosing fuel suppliers for the Nokianvirta power plant. We ended up purchasing both peat and wood fuels from Vapo. Combined, Vapo's fuel deliveries account for slightly more than a third of the total fuel requirement at the plant," says Jukka Vierimaa, CEO of Nokianvirran Energia.

Nokianvirran Energia supplies district heating to Leppäkosken Lämpö's district heating network in Nokia as well as process steam for the production processes of Nokian Tyres and SCA Hygiene Products. A total of 360 GWh of fuel per year

= 3,700

lorry loads of fuel per year





#### **VAPO ENERGY**

Vapo's goal is to be the world's leading expert on the local energy value chain. We provide our customers with local and domestic fuels, electricity, heating and related added value services. With decades of experience in fuel production and a high level of expertise in energy production, we are a reliable partner and energy supplier for the energy industry, the business sector and homes. www.vapo.fi





#### **VAPO CARBONS**

Vapo is boldly seeking peat-based business opportunities beyond the traditional fuel, agricultural and environmental peat businesses. Vapo Carbons aims to refine peat into technical carbon products for the global market. Examples of technical carbon products include activated carbon and carbon black. Activated carbon can be used in the purification of air and water, for example, while carbon black is used as a pigment in industry. www.vapo.com



#### **VAPO CARBONS**

Vapo Ventures is actively pursuing peat-based business opportunities beyond traditional fuel production.

The aim is to find solutions based on the sustainable use of natural resources to increase the refining rate and produce new commodities.

In 2014-2016, Vapo Ventures developed the Vapo Carbons project, which was announced in autumn 2016. Vapo is planning to invest approximately EUR 50 million in a production plant for technical carbons. Technical carbons refer to products such as activated carbon, carbon black and raw carbon used for purposes other than energy production. Activated carbon is used in the purification of liquids and gases, while carbon black is used as a pigment and an additive in the rubber and plastic industries.

The international market for technical carbons holds great promise due to the growing need for air and water purification. The majority of the world's technical carbons are currently produced from oil and coal. Vapo has developed a new energy-efficient method for producing technical carbons from peat. The method makes it possible for us to

Vapo is planning to invest approximately

## **EUR 50**

#### **MILLION**

in a production plant for technical carbons.

produce competitive and high-quality products. Vapo also has the capacity to guarantee long-term availability and reliable deliveries.

The potential locations for the technical carbon production plant are Haapavesi, Ilomantsi and Seinäjoki. They

all have sufficient and logistically sensible raw material reserves. The project has also been very favourably received at each of the three potential locations. The employment effect of the plant's full production chain would correspond to approximately 200 man-years. The plant would produce tens of thousands of tonnes of technical carbons per year. The plant's environmental impacts are being carefully assessed in the permit application stage, which is currently underway, but the plant's operations are not expected to have significant environmental impacts. The inputs of the planned process do not include hazardous chemicals, nor do the climate emissions differ from those of a power plant of corresponding size that uses domestic fuels.

The investment decision on the construction of the first production plant is estimated to be made by the end of 2017. If the decision is made to invest in the plant and its construction begins in the first half of 2018, production operations at the plant can begin in 2019.



#### **VAPO FIBERS**

In 2015–2016, Vapo Ventures developed Vapo Fibers as a new business initiative aimed at delivering peat fibre-based materials to the market.

Peat fibre has been found to have special properties that bring added value and new properties to various fibre products, such as insulating materials, building boards, garden substrates and oil absorption products. Surveys indicate that the size of the potential market for peat fibre is in the billions of euros. Even a small market share or individual breakthrough can create significant sales.

Peat fibre is an environmentally sound raw material. Unlike the manufacture of many other fibre materials, the production of peat fibre does not require fields or forests, fertilisers or crop protection products. The preservation of biodiversity is ensured by the environmental permit processes. When production is discontinued, the areas are immediately allocated to subsequent uses; for example, by converting them into bird sanctuaries.

The special properties and producibility of peat fibre were investigated in 2016 in a project financed by Tekes, the Finnish Funding Agency for Innovation. The main goal was to find production methods that

yield fibre fractions that are sufficiently consistent and pure as well as suitable for customers' production processes. The methods were also geared towards making maximum use of the company's existing equipment. Recognising the promise held by the market potential of peat fibre in combination with Vapo's peat-related expertise and peat reserves, the Vapo Ventures steering group decided to propose to Vapo's Board of Directors that a new business unit, Vapo Fibers, be established effective as of 1 May 2016.

Vapo Fibers participated in KasvuOpen, a national business idea competition, where it made it through the Central Finland qualification round with an honourable mention citing "a good story, large potential, credible team and sufficient resources". While a place in the top ten turned out to be beyond reach, Vapo Fibers received a great deal of positive feedback and media attention during the competition.

In short-term strategy development efforts based on market surveys, it was decided that Vapo Fibers' resources will 99

Surveys indicate that the size of the potential market for peat fibre is in the billions of euros. Even a small market share or individual breakthrough can create significant sales.

be aimed at selected market areas where market entry is expected to be easiest and where the special properties of peat fibre are likely to play a significant role. Vapo Fibers is currently focused on productisation and customer acquisition. The goal is for the business to break even in the next financial year.



# GROWTH FROM FIBRE. NATURALLY.



#### **VAPO FIBERS**

Our decades-long raw material expertise allows us to develop peat into future materials to serve the needs of the packaging and construction industries, for example. Peat fibres have unique special properties compared to many traditional materials. For this reason, products manufactured from natural peat fibre represent a competitive advantage, success factor and source of added value for consumers and producers of reprocessed products. www.vapo.com



## KEKKILÄ GROWS TOGETHER WITH ITS PARTNERS

Kekkilä Group is the Nordic market leader in garden soil, fertiliser and mulches

Kekkilä Group consists of Kekkilä Garden, Hasselfors Garden and Kekkilä Professional. Kekkilä Garden operates in Finland and the Baltic countries, while Hasselfors Garden products are marketed in Sweden, Norway and Denmark. The target markets for both brands are consumers and landscapers. In 2016, the turnover of the consumer business was EUR 40 million and that of the landscaping business was EUR 16 million.

Kekkilä Professional produces high-quality garden substrates for professional growers. The focus of operations is on developing growing solutions for global food production. The products are exported to more than 70 countries, the most significant of which are China, Mexico and Turkey. Kekkilä Professional's turnover in 2016 amounted to EUR 31 million.

Established in 1924, the starting point for Kekkilä's operations has always been the well-being of plants and people. Kekkilä Group aims to be the most trusted growing partner in the gardening industry and to share the joy of growing with amateur growers, retailers, land-scapers and professional growers alike.

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### For Kekkilä, 2016 was a year of renewal.

These goals can be achieved by working together, by being reliable and agile, and by focusing on what really matters.

For Kekkilä, 2016 was a year of renewal. This included a change of CEO as well as restructuring the organisation into three business units and clarifying responsibilities. Kekkilä Group also revised its brand strategy and began the deployment of a CRM system. Kekkilä Recycling was launched late in the year as a new business area that will recycle the byproducts of industry and society to produce substrates for parks and green areas that provide recreational value to citizens.

In 2017, Kekkilä Group will complete the basic projects that enable its growth and start measures by which Kekkilä Group will achieve profitable growth as well as strengthen its brand and solidify its position as the market leader. The area in which the highest growth is sought is the professional growing business. Safe and high-quality Nordic agricultural peat is seeing growing demand as global food production and the related safety requirements increase.

In the Nordic countries, recreational gardening and landscaping are a growing trend. The pressure to build green areas is increasing as urbanisation moves forward. Consumers are taking up gardening as a hobby in search of personal time, shared moments and self-sufficiency. The clear global trends that support Kekkilä Group's growth include the digital transformation, changes in the supply chain, sustainable development, population growth, increased environmental awareness and a willingness to invest in one's well-being through personal activity. In this environment, a gardening company that has firm roots in its market area and is pursuing new growth can find opportunities to thrive in cooperation with partners and consumers.

### **TOOTSI PRODUCES PEAT FOR EXPORT**

There are plenty of mires in Estonia for producing agricultural peat. Exporting agricultural peat is AS Tootsi Turvas' most significant business.

AS Tootsi Turvas is Vapo's Estonian subsidiary focused on local energy. Its business consists of the production of agricultural and energy peat, the production and distribution of heating and delivering energy chips to customers in Estonia as well as export markets. The company's annual turnover is approximately EUR 15 million and it has slightly over 30 employees. Matti Puuronen has served as the company's Managing Director since 2008.

Agricultural peat sales represent slightly less than half of Tootsi Turvas' turnover, while wood fuel sales account for 30 per cent, energy peat sales slightly over 10 per cent and heating sales 10 per cent.

Tootsi Turvas owns eight heating plants and three district heating networks in Estonia. The company's heat distribution in the past financial year totalled approximately 30 GWh.

The company's peat production areas are mainly located on land owned by the Estonian state. Tootsi Turvas has access to these land areas in exchange for resource fees based on long-term agreements. Peat production and the production of energy chips are based on subcontracting agreements.

The demand for energy peat has been on the decline in recent years. Due to this trend and strong inventory levels, the company did not produce any energy peat in summer 2016. Conversely, the demand for energy chips has seen strong growth in recent years. Tootsi Turvas supplies wood fuels to the Estonian as well as the Finnish and Swedish markets.

Tootsi Turvas is able to export its products through all of Estonia's ports. The most significant port of exportation is Pärnu. During the past financial year,



ships loaded with agricultural peat left Pärnu on a weekly basis to destinations including Finland, Sweden as well as ports in Central Europe and the Far East.

### **BIOENERGY FOR ALL OF SWEDEN**

Neova AB produces peat in Sweden only at ditched peatlands that, if left unused, would be major sources of carbon dioxide emissions.

Vapo Oy's wholly owned Swedish subsidiary Neova Ab is one of the leading bioenergy companies in Scandinavia.



Its turnover, totalling approximately EUR 43 million, is fairly evenly divided between peat production and heat production. Neova produces peat for use as energy and garden substrates. The peat produced by Neova is also processed into activated carbon in the Netherlands. Neova owns 50 per cent of Scandbio AB, the largest pellet producer in Sweden. Scandbio's turnover is approximately SEK 125 billion, or EUR 130 million. Neova's personnel comprises slightly over 80 full-time employees and some 200 seasonal workers. Neova's Managing Director is Torbjörn Claesson.

Neova's operating area covers all of Sweden, from Skåne to Torne River Valley. Peatlands constitute approximately one quarter of Sweden's total land area. It is estimated that approximately one per mille of these mires are currently used for peat production, and peat production accounts for about one per cent of the annual growth of peatlands. Neova is committed to only operating in ditched peatlands. Its total production area in 2016 was slightly more than 4,000 hectares and its production volume was about one million cubic metres.

Neova owns 13 district heating networks and nearly 40 heating plants across Sweden, all using local biofuels. Neova's district heating customers include municipalities, industrial facilities, housing companies and individual consumers. It also provides comprehensive heating solutions to industrial companies to manage their entire energy supply. Neova's total production of heat and electricity during the financial year amounted to 448 GWh.



### RESPONSIBILITY IS THE FOUNDATION FOR VAPO'S OPERATIONS

At Vapo Oy, the CEO is responsible for corporate responsibility and its implementation. The responsibility report is reviewed before publication in its entirety by the Board's Audit Committee and the Board of Directors.

The CEO has delegated the main components of responsibility reporting as follows. The Chief Financial Officer is responsible for reporting on economic responsibility and the development of reporting areas. The Environmental Director is responsible for areas related to environmental responsibility, and the Human Resources Director is responsible for areas related to social responsibility. The Director of Communications and Public Affairs is responsible for the planning, composition and production of the report.

The Board of Directors discusses the company's financial situation at each Board meeting based on the CEO's review and in more detail in conjunction with the interim reports published every four months.

According to materiality analyses conducted among stakeholders (2010, 2013, 2015), environmental responsibility is perceived as Vapo Oy's most significant area of corporate responsibility reporting. For this reason, the realisation of environmental responsibility is also the area scrutinised the most by the Board of Directors.

The Environmental Director compiles a summary for the Board of Directors to report on all obligations currently subject to legal proceedings as well as decisions by the authorities. The environmental responsibility report was presented to the Board of Directors on a quarterly basis in 2016. In addition to Board meetings, the reports are also discussed in Audit Committee meetings.

Significant changes or renewal measures that belong to the reporting

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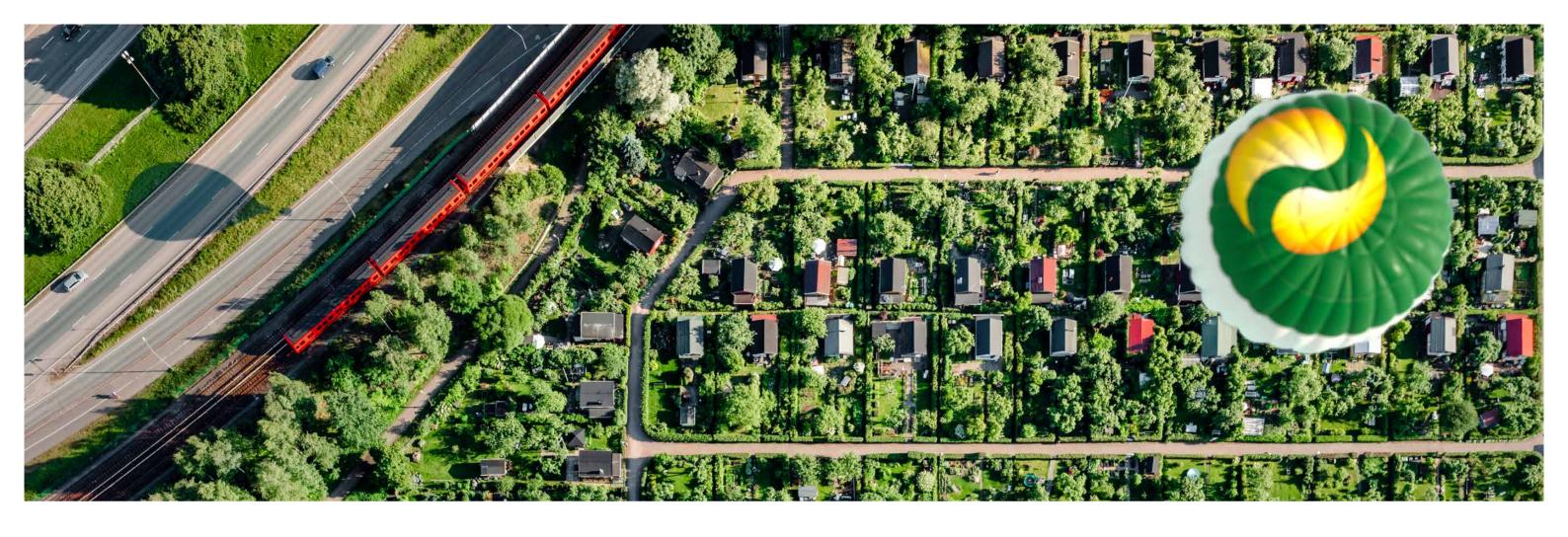
According to materiality analyses conducted among stakeholders, environmental responsibility is perceived as Vapo Oy's most significant area of corporate responsibility reporting.

area of social responsibility and have an impact on the position of the company's personnel are always discussed in Board meetings. Examples of such changes or measures include acquisitions and divestments that affect the position of personnel, the scaling down of production and other matters that are subject to negotiations pursuant to the Finnish Act on Co-operation within Undertakings.

The company's responsibility policy and operations are presented on the company website. The corporate responsibility report is also published in Finnish and English on the website.

#### **Responsibility commitments**

In 2012, Vapo made a commitment to build water treatment systems using the best available water treatment technology



(BAT) at all of its peat production areas by the end of 2014. This commitment was fulfilled 100%.

In addition to being monitored by authorities, the water treatment systems at all Vapo peat production areas are inspected at least once every two weeks during the production season. Employees and contractors are provided with training continuously to ensure that all those participating in peat production have the required knowledge and skills related to the company's standards of environmental responsibility.

On its website, Vapo publishes information on the contact persons for each production area, as well as reports on emissions and the monitoring of waterways produced for the authorities by independent consulting agencies.

Vapo has increased the use of continuously operating meters in load monitoring and publishes the results online.

Vapo produces peat only in production areas where the natural state has been altered, generally meaning ditched peatlands. Vapo does not apply for environmental permits for category 4 and 5 mires in line with the strategy for the

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Vapo produces peat only in production areas where the natural state has been altered, generally meaning ditched peatlands. Half of the production areas are subject to year-round emissions monitoring.

sustainable and responsible use of mires and peatlands.

Vapo will continue to actively exchange mires with significant nature value owned by the company to ditched peatlands, or to sell such mires for use for conservation purposes.

#### Vapo is committed to ensuring that...

- The solid matter and humus load of new peat production areas will be lower than that of the same area before peat production. If the load exceeds the initial level, waters originating from other land use methods will be purified in the same area.
- All of Vapo's peat production areas are

subject to emissions monitoring during the peat production season, and half of the production areas are subject to year-round emissions monitoring. The goal is to maintain the implementation of the voluntary emissions monitoring programme at the current scale for three years to obtain sufficient continuous data on the quality of the water that flows out of production areas.

 Areas owned by Vapo and released from peat production will be in active after-use within two years of the end of production operations. The land use methods after peat production include reforestation, agriculture and establishing diverse wetlands.

#### **VALUES AND CODE OF CONDUCT**

The company's strategy is based on responsible business and decades of experience and expertise in producing local energy.

The company's strategy is based on responsible operations and its competence in the production of local energy which is accumulated over many decades. The values and the Code of Conduct specify in detail what the company expects from its employees and subcontractors and what it is committed to in delivering products and services to its customers.

### Vapo's values are responsibility, results orientation and renewal

Responsibility justifies the existence of Vapo's business. All of the company's operations must always be transparent and publicly acceptable. Everyone at Vapo must take responsibility for their work.

Results orientation is not only related to financial targets—it also gives the company the tenacity to follow through, even on things that are difficult, when doing so is in the long-term interest of the company's business and customers.

Renewal is essential. Vapo needs to lis-

ten carefully to recognise even weak signals of how customers want the company to develop. The world is changing, and only renewal and adapting to change can guarantee the company's future.

The Code of Conduct is available on the Vapo website at https://www.vapo.com/en/responsibility/the-way-we-operate/code-of-conduct. Vapo's strict and comprehensive Code of Conduct is applicable as an appendix to contracts even with the company's most demanding customers. Responsible operations cover not only Vapo's own employees, but also the entire production chain from subcontractors to customer deliveries.

The Code of Conduct is a fixed component of our processes, personnel training and the orientation of new employees. Online training gives employees the opportunity to learn about the company's operating principles in an interesting manner. The training makes it clear that compliance with the Code of Conduct is

not a recommendation. It is an unconditional and binding operating model. In addition to personnel, Vapo also provides training to its subcontractors on the requirements stipulated by the Code of Conduct in entrepreneur training and by means of an online training programme designed specifically for them.

To support the practical implementation of the Code of Conduct in day-to-day work, the company's internal network also includes a whistleblowing channel that allows anyone at Vapo to anonymously report conduct that is not compliant with the Code of Conduct. In 2016, a total of three anonymous reports were received via the whistleblowing channel, and corrective action was taken in response.

The realisation of the Code of Conduct is monitored as part of the internal and external audits of the company's quality system. The assurance of ethicality in operations is also emphasised in internal audits.



#### WE ARE DEPENDABLE IN OUR OPERATIONS AND RELIABLE IN OUR DELIVERIES

Vapo is primarily a local operator that produces vital fuels and energy solutions for its customers.

Vapo's delivery reliability ensures that communities do not run out of energy. Many plants that use solid fuels do not have extensive storage facilities, which means that the supply of fuel must be uninterrupted regardless of road and weather conditions. For the customer, the dependability of operations often means a multi-year delivery agreement, which makes operations more predictable. The supply of district heating, industrial heat and process steam simply has to work. An unexpected interruption in energy delivery can lead to significant financial costs for the customer, which is why Vapo has invested in delivery reliability throughout its local energy value chain.

Vapo wants to be the most reliable, competent and responsible provider of local fuel and energy solutions. Over several decades, our operations throughout the local energy value chain have allowed us to accumulate a great deal of experience and expertise. This expertise is now creating a competitive advantage in areas ranging from fuel deliveries to our own energy production.

Vapo wants to be the provider with the highest level of delivery reliability now and decades ahead. Vapo has the best capacity to sign multi-year fuel agreements. In energy solutions, delivery reliability refers to the high usability of energy produced from domestic fuels through every moment of the customer relationship.

Managing delivery reliability on a day-to-day basis requires Vapo to have the capacity to react to unexpected peaks in demand regardless of road conditions and public holidays. This is made possible by Vapo's extensive contract equipment, comprehensive network of terminals and warehouses as well as the capacity to provide alternative fuels. Vapo's fuel delivery services are on call around the clock.

Multi-year fuel agreements are possible because Vapo has a nationwide network in Finland for peat production, fuel wood purchasing and transport. Vapo also has several pellet factories and pellet warehouses. Stockpiles corresponding to the total demand of two heating seasons ensures that the company has the capacity to respond to consecutive weak peat production seasons.

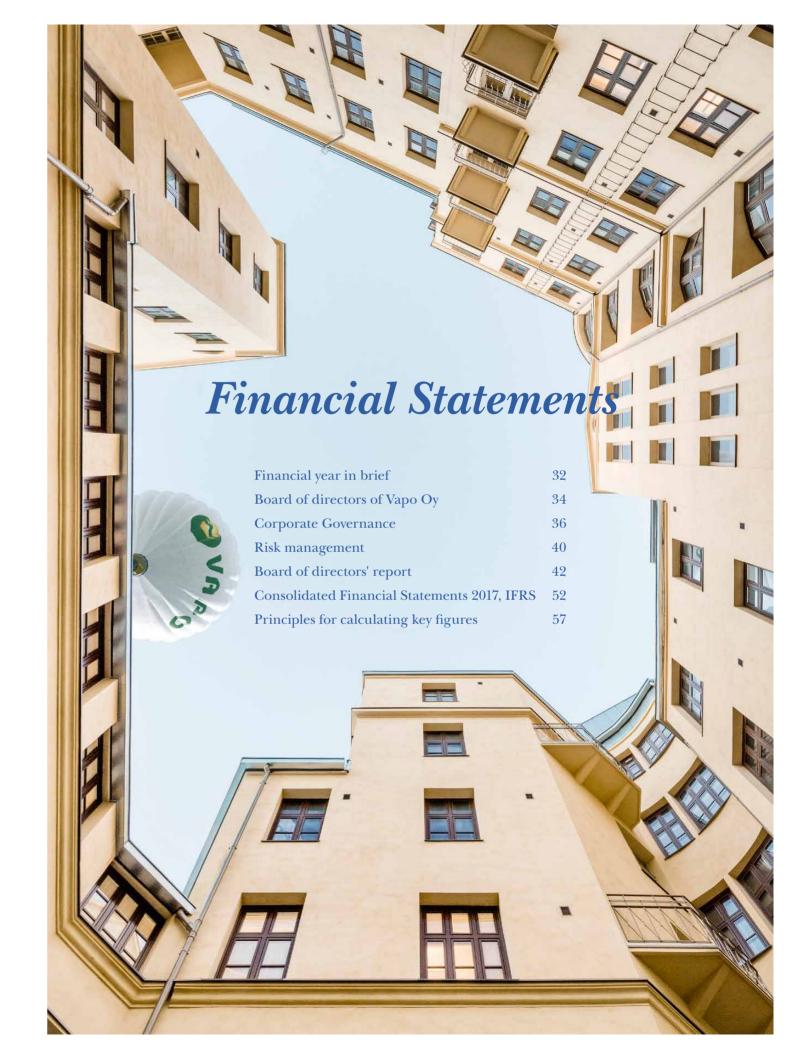
With extensive peat production resources and reserve peatlands that combine the company's permit-related expertise and peatland preparation competencies, Vapo has the ability to guarantee its delivery reliability for decades to come. In pellet fuels, Vapo has a nationwide organisation in Finland that includes a network of pellet factories. Fuel functions in Estonia and

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An unexpected interruption in energy delivery can lead to significant financial costs for the customer, which is why Vapo has invested in delivery reliability throughout its local energy value chain.

Sweden enable imports when necessary.

In Vapo's energy solutions, delivery reliability is maximised through effective fuel planning, expertise, a high level of operational competence and proactive maintenance. Vapo monitors the operation of plants around the clock, ensures a sufficient level of reserve capacity and duplicates critical functions where necessary. In Vapo's energy solutions, the availability of fuels is ensured throughout the customer relationship.



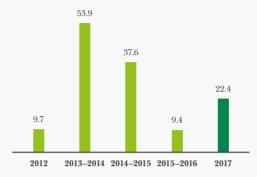
### FINANCIAL YEAR IN BRIEF

#### Key figures

EUR million	2012	4/2014*	4/2015	4/2016	4/2017
Turnover	652.9	847.4	486.9	459.8	392.1
Operating margin (EBITDA)	52.1	110.8	74.7	43.1	56.9
% of turnover	8.0	13.1	15.3	9.4	14.5
Operating profit (EBITA)	9.1	50.0	36.9	8.6	20.0
% of turnover	1.4	5.9	7.6	1.9	5.1
Operating profit (EBITA) before impairments	9.7	53.9	37.6	9.4	22.4
% of turnover	1.5	6.4	7.7	2.1	5.7
Free cash flow before impairments	64.4	61.9	-25.1	60.7	73.2
Return on invested capital %	1.3	3.8	5.4	1.2	3.0
Return on invested capital before impairments %	1.4	4.4	5.5	1.4	3.4
Equity ratio %	37.7	40.2	37.8	37.6	43.0
Gross investments	48.0	65.0	88.4	38.5	39.6
Average number of personnel	1,154	1,091	961	914	773
Depreciations	-42.0	-54.2	-39.3	-35.0	-35.6
Depreciations / net sales %	6.4	6.4	8.1	7.6	9.1

<sup>\*</sup> The financial year 1.1.2013-30.4.2014 was 16 months long.

#### Operating profit (EBIT) before impairment, EUR million



Operating profit shows the profitability of business operations and largely determines the return on invested capital, among other things. In Vapo's operations, operating profit is particularly influenced by the weather dependence of the fuel and heating business and the success of peat production. The winter in financial year 2017 was again warmer than average, which reduced the demand for fuels and heating. The rainy summer also restricted peat production and increased the financial year's costs recognised through profit and loss. Nevertheless, the Group's operating profit showed a substantial year-on-year improvement and amounted to EUR 22.4 million.

The financial year 1.1.2013-30.4.2014 was 16 months long.

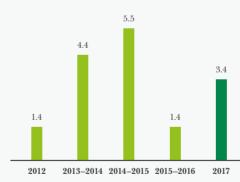
### Free cash flow (pre-tax), EUR million



Free cash flow before taxes and financial items takes into account the operating margin as well as factors such as changes in capital tied up in businesses, the impacts of sales of assets, and investments made. Vapo condensed its Group structure in the 2017 financial year by divesting the Kekkilä Group's subsidiaries in Norway and Russia. Financial leasing arrangements in the Heat and Power business and lower fuel reserves also improved the Group's cash flow, which was a positive EUR 73.2 million for the financial year.

The financial year 1.1.2013-30.4.2014 was 16 months long

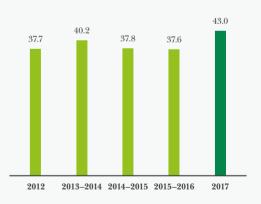
### Return on invested capital (ROIC) before impairment %



Return on invested capital (ROIC) is the main indicator of profitability in Vapo's capital-intensive industries as it takes invested capital into account in addition to operating profit. ROIC reflects the company's ability to create shareholder value, meaning that it should be higher than the weighted average cost of capital (WACC). At the end of the financial year, Vapo's return on invested capital before impairment was 3.4%.

The financial year 1.1.2013-30.4.2014 was 16 months long.

Equity ratio %



The equity ratio measures the company's solvency and indicates the extent to which the company's assets are financed by equity. Changes in organisational structure, the divestment of loss-making operations and a focus on cash flow are reflected in the equity ratio improving in recent years. At the end of the 2017 financial year, the equity ratio stood at 43.0%.

The financial year 1.1.2013–30.4.2014 was 16 months long

### **VAPO'S BOARD OF DIRECTORS**

#### **Chairman of the Board**

#### Jan Lång

b. 2 February 1957, M.Sc. (Econ.)

#### Relevant concurrent positions of trust:

Chairman of the Board: Molok Oy 2016- and Antilooppi ky, 2015-; Member of the Board: Stiftelsen för Åbo Akademi, 2013-

#### Relevant work experience:

Huhtamäki Oy, several positions 1982-2003; Uponor Oyj, CEO 2003-2008; Ahlström Oyj, CEO 2009-2014

Chairman of Vapo's Board of Directors 2015-

Chairman of the Personnel Committee 2015-

#### Vice Chairman of the Board

#### Hannu Linna

b. 4 December 1955, M.Sc. (Eng.) CEO, Vaasan Sähkö Oy, 20 August 2001-

#### Relevant concurrent positions of trust:

Chairman of the Board: Oy RAVERA Ab; Member of the Board: EPV Energia Oy, Voimapiha Oy and Power-Deriva Oy; Deputy Board Member: Pohjolan Voima Oy; Deputy Chairman of the Board: Energiateollisuus ry.

#### Relevant work experience:

Korpelan Voima joint municipal authority, Managing Director 11/1994-7/2001; Mellano Oy, Managing Director 9/1992-10/1994; Pyhännän Rakennustuote Oy (PRT-Forest Oy), IT Manager 1984-1991, Project Manager 1991-1992; Imatran Voima Oy, Staff Engineer 1980-1984 Member of the Board at Vapo 2009-2012 and 2014-Member of the Personnel Committee 2009-2010 and 2011-2012 Chairman of the Audit Committee 2010-2011 and 2014-

Member of the Board of Vapo Timber Oy 2012-2014



#### **Members**

#### Martti Haapamäki

b. 17 February 1950, M.Sc. (Eng.), Engineering Counsellor (Finnish honorary title) CEO, Seinäjoen Energia Oy

#### Relevant concurrent positions of trust:

Chairman of the Board: Voimajunkkarit Oy; Member of the Board: Vaskiluodon Voima Oy; Deputy Board Member: EPV Energia Oy

#### Relevant work experience:

Vaasan Sähkö Oy, Business Unit Director 1991-2003; Teollisuuden Voimansiirto Oy, Senior Specialist 1989-1991; Länsi-Suomen Voima Oy, Operation Manager 1982-1989; Nokia Engineering Oy, Project Manager 1987-1991; Helsinki Energy Board, Design Engineer 1985-1987

Member of the Board at Vapo 2015-Member of the Audit Committee 2015-2016 Member of the Personnel Committee 2016-

#### **Tuomas Hyyryläinen**

b. 1 December 1977, M.Sc. (Econ.) Senior Vice President, Emerging businesses, Neste Oyj, 14 September 2016-

#### Relevant concurrent positions of trust: Member of the Board: Nynas Ab Relevant work experience:

Neste Corporation, SVP, Strategy and New Ventures 6/2014-9/2016, SVP Strategy 6/2012-6/2014; F-Secure Corporation, Vice President, Strategy and M&A, 6/2010-6/2012; Nokia Corporation, several different positions, 2004-2010 Member of the Board at Vapo 2016-

Member of the Personnel Committee 2016-

#### Pirita Mikkanen

b. 15 February1966, D.Sc. (Tech.) Partner, TM System Finland Oy

#### Relevant concurrent positions of trust:

Member of the Executive Board: Finnfund Oy; Member of the Board: Pihita Oy, Enersize Oy and GloCell Ltd Oy; Chairman of the Board: Lifa Air Oy

#### Relevant work experience:

GreenStream Network Oy, Executive Vice President 2010-2014, Climate Opportunity Fund and Fine Post 2012; Carbon Fund, Fund Manager 2011-2013; KemiCell Oy, CEO 2009-2013; GloCell Oy, CEO 2009-2010; PricewaterhouseCoopers Oy, Senior Manager 2008-2009; Labtium Oy (Geological Survey of Finland), Business Area Director 2006-2008; Gaia Consulting Oy, Business Director 2005-2006; Dekati Oy, Business Director 2000-2005

Member of the Board at Vapo 2014Member of the Audit Committee 2014-

#### Minna Pajumaa

b. 19 April 1963, M.Sc. (Econ.), CEFA Senior Financial Specialist, Prime Minister's Office

#### Relevant concurrent positions of trust:

Member of the Board: Veikkaus Oy, Gasonia Oy and Terrafame Group Oy

#### Relevant work experience:

HSH Nordbank AG, Client Executive 2004-2008, Project Manager 2002-2004; SEB, Vice President 1998-2002; Suomen Vientiluotto Oy, Regional Representative Singapore, Assistant Regional Representative Hong Kong and other positions 1990-1998

Member of the Board at Vapo 2013-Member of the Audit Committee 2013-2014

Chairman of the Personnel Committee 2014-2015, member 2015-

#### **Minna Smedsten**

b. 30 August 1976, M.Sc. (Econ.) Group CFO, Taaleri Plc. 1 August 2013-

#### Relevant concurrent positions of trust:

Member of the Board: Havsfrun Investment AB and Taaleri Equity Funds Ltd

#### Relevant work experience:

GreenStream Network Plc, CFO 2009-2013; Kaupthing Bank Finland, Finance Manager 2005-2008; Norvestia Plc, IR & Finance Manager 2000-2004; Tuokko Deloitte & Touche, Auditor 1999-2000 Member of the Board at Vapo 2016-Member of the Audit Committee 2016-

#### Markus Tykkyläinen

b. 28 October 1973, M.Sc. (Energy Technology), eMBA (strategic management), M.Sc. in Economics and Business Administration (Finance)

Managing Director, Suur-Savon Sähkö Oy, 1 September 2016-

#### Relevant concurrent positions of trust:

Member of the Board: Kymppivoima Tuotanto Oy, Kymppivoima Hankinta Oy and Järvi-Suomen Voima Oy; Chairman of the Board: Elvera Oy

#### Relevant work experience:

Rovaniemen Energia Oy/Napapiirin Energia and Vesi Oy, Managing Director 2011-2016; Ranuan Bioenergia Oy, Managing Director 2015-2016; Vakka-Suomen Voima Oy, Development Director 2010- 2011; Kainuun Sähkö Oy/Graninge Kainuu Oy/Kainuun Energia Oy/E.ON Kainuu Oy, Design Engineer, Quality Manager, Environmental Director, Risk Manager, Development Manager 1998-2010 Member of the Board at Vapo 2016-Member of the Audit Committee 2016-

The Members of the Board of Directors do not own shares of Vapo Oy.

### **CORPORATE GOVERNANCE AT VAPO**

Vapo Oy is a Finnish non-listed joint-stock company whose decision-making and management comply with the Limited Liability Companies Act and the company's Articles of Association as well as the Shareholders' Agreement between the company's owners, namely the Finnish State and Suomen Energiavarat Ov. In addition, Vapo Ov complies with the recommendation on the handling of Corporate Governance matters in publicly owned and affiliated companies issued by the Ownership Steering Department in the Prime Minister's Office and, where applicable, the Securities Market Association's Finnish Corporate Governance Code, which took effect on 1 January 2016.

Vapo Group's administrative bodies are Vapo Oy's general meeting of shareholders, the Supervisory Board, the Board of Directors, its CEO and the boards and managing directors of its subsidiaries. Vapo Oy's Board of Directors, its chairman and vice chairman are elected by the general meeting of shareholders in compliance with what is agreed in the Shareholders' Agreement between the owners. Vapo Oy's Board of Directors appoints the CEO and the members of the boards of directors of its subsidiaries and other Group companies.

Vapo Oy's Board of Directors appoints the Audit Committee and the Remuneration Committee from among its number.

The operations of the Group's parent company Vapo Oy are composed of the business areas of the local energy value chain—Fuels, Heat and Power—as well as the regional operations in Finland, which are in the same responsibility matrix for regional operations as the aforementioned. Vapo Ov's product development unit Vapo Ventures develops new business opportunities for Vapo. In addition to the above, the Group includes, as an independent business, Vapo Oy's subsidiary Kekkilä Oy, which operates in the sectors of garden substrates, fertilisers and environmental solutions. Vapo Oy's most important subsidiaries are Neova Ab in Sweden and AS Tootsi Turvas in Estonia. In line with Vapo Oy's operations, the business of both of these subsidiaries covers the entire value chain of local energy. Kekkilä Oy in Finland and Hasselfors Garden AB in Sweden are the largest companies in the Kekkilä Group. In addition, the Vapo Group includes the subsidiaries and associates of the aforementioned companies.

#### **General meeting of shareholders**

The highest decision-making body in the Vapo Group is Vapo Oy's General Meeting. In accordance with the Articles of Association, the general meeting is convened by registered letter to the shareholders sent to the address in the share register no later than eight days before the meeting. The Annual General Meeting is held annually in either Jyväskylä or Helsinki on a date determined by the Board of Directors, no later than six months after the end of the financial year.

The Annual General Meeting was held in Helsinki on 22 September 2016. The Annual General Meeting adopted the financial statements of the parent company and the consolidated financial statements for the financial period 1 May 2015–30 April 2016 and discharged the Board of Directors and the CEO from liability. The Annual General Meeting also approved the Board of Directors' proposal on the distribution of dividends, according to which dividends in the amount of EUR 4 million, or EUR 133.33 per share, were paid for the financial period 1 May 2015-30 April 2016. In addition, the Annual General Meeting decided on the members of the Board of Directors and elected an auditor for the company.

The composition of the Board of Directors was strengthened by the addition of new members at two Extraordinary General Meetings. Tuomas Hyyryläinen was appointed to the Board of Directors at an Extraordinary General Meeting held on 13 October 2016 and Minna Smedsten at an Extraordinary General Meeting held on 7 December 2016.

#### **Supervisory Board**

Vapo Oy has a Supervisory Board consisting of a minimum of eight and a maximum of ten members elected by the Annual General Meeting for a term of one year, and three employee representatives elected by the personnel for a term of two years.

The Supervisory Board operates according to the Limited Liability Companies Act and the rules of the Articles of Association, and is tasked with the following:

- 1. Supervising the administration of the company carried out by the Board of Directors and the CEO.
- Issuing a statement to the Annual General Meeting on the financial statements and the Auditor's Report.

- 3. Providing instructions to the Board of Directors on matters that have far-reaching consequences and involve important principles.
- Issuing statements to the general meeting of shareholders on matters in which the Limited Liability Companies Act requires a statement by the Supervisory

The Supervisory Board convened four times during the financial period 1 May 2015-30 April 2016. The average attendance rate was 77.5%.

The Annual General Meeting held on 22 September 2016 elected the following members to continue on the Supervisory Board:

- · Johanna Ojala-Niemelä, Member of
- Heikki Miilumäki, D.Sc. (Tech.) (h.c.)
- Markku Eestilä, Member of Parliament
- Hanna Halmeenpää, Member of Parliament
- Reijo Hongisto, Member of Parliament
- · Hannu Hoskonen, Member of Parliament
- · Eero Kubin, Customer Manager, Professor
- · Esko Kurvinen, engineer
- Tommi Lunttila, agricultural and forestry entrepreneur
- · Tiina Snicker, Financial Manager

Johanna Ojala-Niemelä was elected to continue as the Chairman of the Supervisory Board and Heikki Miilumäki as the Vice Chairman.

#### **Board of Directors**

Vapo Ov's Board of Directors comprises a minimum of four and a maximum of eight members elected, as agreed in the Shareholders' Agreement, by the general meeting of shareholders for a term of one year. The chairman and vice chairman are elected by the general meeting of shareholders as agreed in the Shareholders' Agreement. The election of the Board members complies with the guidelines concerning the realisation of diversity issued by the Ownership Steering Department in the Prime Minister's Office.

Vapo Oy's Board of Directors is responsible for managing and supervising Vapo in accordance with the Limited Liability Companies Act, the company's Articles of Association and Corporate Governance principles, the Board's charter and the shareholders'

instructions. Vapo's Corporate Governance principles and the charters of the Board and its committees are available on the company's website at: https://www.vapo.com/en/ vapo-group-2/corporate-governance.

The key parts of the Board's charter read as follows:

- the preparation of matters to be presented to the general meeting of shareholders and the Supervisory Board;
- defining and ratifying the long-term goals and strategies of the Group and its business areas;
- approving the operational, investment and financial plans for the business areas for the current financial period and monitoring the reporting related to the plans;
- organising the Group's accounting, including the policies applied in the preparation of the financial statements;
- creating the necessary organisational structure and appointing the CEO, the Group's Business Area Directors and the Directors in charge of the Group's support functions, as well as deciding on their remuneration;
- approving operational policies and monitoring their implementation;
- · organising internal auditing;
- · acquisitions and related practices;
- · deciding on major investments by the Group companies, other long-term expenses, assignments of property and financing arrangements according to set budgets given in euros;
- · deciding on significant expansions and reductions of operations.

The Annual General Meeting held on 22 September 2016 elected Jan Lång, Martti Haapamäki, Hannu Linna, Pirita Mikkanen and Minna Pajumaa to continue as Board members and Markus Tykkyläinen to join the Board as a new member. Jan Lång was elected to continue as the Chairman of the Board of Directors, with Hannu Linna as the Vice Chairman, All members of the Board of Directors are independent of the company.

The Extraordinary General Meeting held on 13 October 2016 decided that the number of members of the Board of Directors shall be seven, with Tuomas Hyyryläinen elected as a new Board member effective as of 1 November 2016.

The Extraordinary General Meeting held on 7 December 2016 decided that the number of members of the Board of Directors shall be eight, with Minna Smedsten elected as a new Board member effective as of 7 December 2016.

The Board of Directors convened 13 times during the financial period 1 May 2015-30 April 2016. The average attendance rate in the meetings was 97.8%.

The Board of Directors monitors and assesses its working methods with annual internal reports.

#### **Committees**

The Board of Directors appoints two permanent Committees from among its number: the Audit Committee and the Remuneration Committee.

#### **Audit Committee**

The task of the Board of Directors' Audit Committee is to prepare, direct and evaluate financial reporting as well as auditing, internal auditing, risk management, legal risks and internal monitoring systems.

The Audit Committee comprised Hannu Linna (Chairman), Pirita Mikkanen, Minna Smedsten and Markus Tykkyläinen. The Audit Committee convened five times during the financial year and the attendance rate was 94.1%.

#### **Personnel Committee**

The Board of Directors' Remuneration Committee was renamed the Personnel Committee during the financial period 1 May 2016-30 April 2017. The task of the Personnel Committee is to make proposals on the management's salaries and remuneration system to the Board of Directors and to prepare any significant organisational and appointment issues.

The Personnel Committee comprised Jan Lång (Chairman), Martti Haapamäki, Tuomas Hyyryläinen and Minna Pajumaa. The Personnel Committee convened seven times during the financial year and the attendance rate was 100%.

#### **Chief Executive Officer**

The tasks and responsibilities of the CEO

- 1. The day-to-day management of the company and the Group in accordance with the Articles of Association, the Limited Liability Companies Act and instructions issued by the Board of Directors.
- Reports to the Board of Directors and the Supervisory Board.
- 3. Is responsible for drawing up and presenting the Group's strategy and business plans to the Board of Directors for approval.
- Regularly informs the Board of Directors of the company's operations and financial position.
- Presents matters to be decided on by the Board of Directors, unless this is delegated to the Business Area Director concerned.
- Acts as the presenter of the Committees of the Board of Directors.

The division of tasks between the CEO and the Board of Directors is described in more detail in the Board's charter (https:// www.vapo.com/en/vapo-group-2/corporate-governance).

#### Vapo's management

Vapo Group's management is appointed by Vapo Ov's Board of Directors. It is tasked with supporting the CEO in his work. The management's work takes place within two management teams: the Group's management team and the management team of Vapo Oy's energy business. The management teams are responsible for:

- 1. Deciding on investments and acquisitions within the limits of authority approved by the Board of Directors.
- Ensuring that the decisions made by the governing bodies are implemented in an appropriate manner in the organisation.
- Assisting Vapo Oy's CEO in preparing for Vapo Oy's Board meetings and investigating all matters which the CEO has ordered them to investigate.
- 4. Actively promoting cooperation between the Business Areas and agreeing on joint principles and development measures in Group management.

The management teams convene on a regular basis. The Group's management team convenes at least three times a year and the energy business's management team at least once a month.

#### **During the financial period, the Group's** management team was composed of:

#### Tomi Yli-Kyyny

Chief Executive Officer, Vapo Ov With Vapo from 2011 to 2017

#### Torbjörn Claesson

Managing Director, Neova AB with Neova since 2007

#### Markus Hassinen

Business Area Director, Vapo Heat and Power with Vapo since 2011

#### Pasi Koivisto

Business Area Director, Vapo Fuels with Vapo since 2008

#### Suvi Kupiainen

Chief Financial Officer, Vapo Oy with Vapo since 2011

#### Ahti Martikainen

Director, Communications and Public Affairs, Vapo Oy with Vapo since 2011

#### Kari Poikolainen

Senior Vice President, Corporate Planning, Vapo Oy with Vapo since 1990

#### Matti Puuronen

Regional Director, Baltic Operations with Vapo since 1996

#### Juha Mäkinen

CEO, Kekkilä Oy With Kekkilä since 2016

#### Mia Suominen

Business Area Director, Vapo Oy, Vapo Ventures with Vapo since 2006

#### Jyrki Vainionpää

Chief Operating Officer, Deputy CEO, Vapo Oy with Vapo since 2011

#### Juhani Ylä-Sahra

Director, Vapo Oy with Vapo since 1989

#### **Subsidiaries**

The subsidiaries are managed by their own boards and management teams in accordance with their own Corporate Governance principles, which include regulations on issues subject to the approval of Vapo Oy's Board of Directors.

The boards and CEOs of Vapo Group's subsidiaries are tasked with:

- making decisions concerning the business operations of the respective companies and supervising the companies as required by law in the best interests of each company and Vapo Group in such a way as to ensure long-term increase in the value of the company as part of Vapo Group.
- ensuring that the company has enough information at its disposal to carry out its tasks;
- ensuring that the company operates in accordance with approved business principles
  and set targets; ensuring that the company
  complies with the Articles of Association
  and any possible instructions given in
  company-specific Corporate Governance
  principles and by Group management;
- ensuring that the company complies with local laws and regulations applicable to its business;
- monitoring legislation and informing Group management, Vapo Oy's CEO and /or the responsible business area or function director of relevant changes to it;
- ensuring that all tasks assigned by Vapo Oy's Board of Directors and CEO are implemented;
- ensuring that the company operates in

accordance with its ethical principles and carries out corporate responsibility reporting where applicable.

Companies with minority shareholders external to the Group comply, for the most part, with the procedures described above, nevertheless taking into account the rights of the minority shareholders, and the rules detailed in the Articles of Association and any possible shareholders' agreement.

#### **Remuneration of management**

In accordance with the remuneration principles described in Vapo Oy's Corporate Governance guidance, remuneration for the financial period 1 May 2016–30 April 2017 took place as follows:

### Fees paid to the members of the Supervisory Board

The Chairman received EUR 800, the Deputy Chairman EUR 600 and the other members EUR 500 per meeting.

### Fees paid to the members of the Board of Directors

The Chairman of the Board of Directors was paid EUR 2,750, the Deputy Chairman EUR 1,900 and the other members EUR 1,550 per month. A meeting fee of EUR 500 was paid for Board and committee meetings.

#### Terms of the CEO's contract

The CEO's monthly salary including fringe benefits was EUR 27,704.

The contract includes an incentive bonus, which may not exceed 40% of the annual salary, bound to annual targets set by the Board of Directors. Based on the result for the financial year 1 May 2016–30 April 2017, bonuses will possibly be paid to the CEO in accordance with the achievement of the targets specified in the remuneration programme, with the amount to be subsequently approved by the Board of Directors.

The CEO may furthermore receive an incentive bonus for reaching long-term targets. The incentive bonus is based on three-year earnings periods. The Board of Directors will decide on the earnings criteria and targets for each earnings period. The long-term incentive scheme for 2014-2016 ended during the financial period 1 May 2016-30 April 2017. The criteria applied in the scheme were Vapo's customer satisfaction (NPS), the average return on invested capital before write-downs during the earnings period and the cumulative operating margin of the heat and power business. As the criteria were not met for all of the targets during the earnings period, no bonuses were awarded under the incentive scheme.

In addition to a statutory pension, the

CEO is entitled to a defined contribution collective supplementary pension insurance to which Vapo contributes an amount equivalent to 10 per cent of the CEO's total annual salary (12 x monthly salary), excluding bonuses, every year. The CEO's contract terminates when the CEO turns 63.

The CEO's period of notice is six months if he is dismissed by the Board of Directors, in addition to which he is entitled to compensation corresponding to 12 months' salary. If the CEO resigns, the period of notice is six months.

The total salary paid to CEO Tomi Yli-Kyyny in the financial period 1 May 2016–30 April 2017 was EUR 407,597. During the financial year, incentive bonuses amounting to EUR 21,991 were paid based on previous long-term incentive schemes.

#### Remuneration of other management

In addition to a monthly salary, other members of the Group's management are entitled to a bonus, which can be 20–30% of the annual salary, for reaching annual targets set by the CEO. In addition, other members of the management separately named by the Board of Directors may also receive an incentive bonus for meeting long-term targets on grounds equal to those applicable to the CEO. During the financial year 1 May 2016–30 April 2017, incentive bonuses amounting to EUR 72,470 were paid to management based on previous long-term incentive schemes.

Vapo Oy's directors who are members of the Group management, including the CEO, are covered by the pension scheme provided by the Employees' Pensions Act. They are entitled to a defined contribution collective supplementary pension insurance to which Vapo contributes an amount equivalent to 10 per cent of their total annual salary (12 x monthly salary), excluding bonuses, every year. The company has an agreement with a pension insurance company on said supplementary pension rights.

The remuneration paid to the external members of the boards of directors of the subsidiaries is determined by Vapo Oy's Board of Directors. Members of the board of directors of the subsidiaries employed by Vapo are not usually paid separately for their membership. Members of the boards of directors of associates or subsidiaries who are employed by Vapo can be paid a fee when it is justifiable to ensure equality between them and the other members. The principles for the fees are agreed upon by Vapo Oy's Board of Directors, and the Board of Directors issues a recommendation concerning the remuneration for review by the general meeting of shareholders of the company in question.

During the financial year, Vapo Group's

management team (excluding the CEO of Vapo Oy) was paid salaries totalling EUR 1,568,326 and bonuses amounting to EUR 14,670 for the previous financial year. Based on the result for the financial year 1 May 2016–30 April 2017, bonuses will possibly be paid to individual management team members according to their personal score card results at amounts to be subsequently approved by the Board of Directors.

#### Options

The company does not make use of option bonus schemes.

### Remuneration of personnel (other than senior management)

Based on the result for the financial year 1 May 2016–30 April 2017, bonuses will possibly be paid to the personnel according to their personal score card results at amounts to be subsequently approved by the Board of Directors. Incentive bonuses and other personal bonuses in the amount of EUR 403,260 for previous financial periods were paid to the personnel during the past financial year.

#### **Internal monitoring**

The Board of Directors' Audit Committee is tasked with monitoring the effectiveness of Vapo's internal monitoring, internal auditing and the company's risk management systems. Vapo has defined operating principles for internal monitoring and the key controls of processes. The CEO and CFO are responsible for the practical organisation of internal monitoring.

Internal monitoring applies to the entire organisation and its management. Effective internal monitoring supports the achievement of strategic objectives and improves the steering of business operations. The aim of internal monitoring is to give the Board of Directors and acting management adequate assurance of the realisation of the following objectives:

- the efficiency and appropriateness of operations;
- the achievement of targets and profitability;
- the reliability and completeness of financial reporting and other reporting;
- the safeguarding of assets;
- compliance with operating principles, plans, guidelines, laws and regulations to prevent errors and misconduct, for example.

Internal monitoring forms an essential part of the Group's operations on all levels of the organisation, and is conducted on all organisational levels and in all operations. The methods of internal monitoring include internal guidelines, reporting, various ICT

systems and operational practices. These help to ensure that the management's instructions are followed and that any risks to the achievement of the Group's objectives are responded to in the appropriate manner. Regular monitoring activities include management audits and audits concerning the measurement of operations, the performance of measurements suitable for each sector, physical monitoring, monitoring compliance with agreed approval limits and operational principles and any deviations therefrom, a system of approvals and authorisations, as well as various assurance and integration arrangements.

Operations are managed and monitored on a monthly basis, primarily by business area and, from an operational perspective, by company. Reviewing the financial period under way and rolling monthly forecasts is an essential component of the control and monitoring process.

At Group level, the monitoring activities are managed by the Chief Financial Officer (CFO). At the level of companies, they are managed by the CEOs, and at the level of business areas by the management of the business areas. The implementation of monitoring is the responsibility of business controllers appointed for the business areas and companies in question operating under the CFO who, together with the CEOs and operational management, see to business transactions being entered in the systems in a timely manner and reported appropriately and efficiently, complying with the separately issued Group guidelines on the content of internal monitoring and reporting.

#### Internal auditing

Internal auditing supports Vapo Oy's Board of Directors, its CEO and the subsidiaries' senior management in carrying out their supervisory tasks. Internal audit services are purchased from an external service provider in the manner approved by the Board of Directors. The Group's Senior Vice President for Corporate Planning controls and supervises the implementation of these services and is responsible for communicating with the Board of Directors, its Audit Committee and the senior management in matters related to the internal audit.

#### Internal auditing:

- Assesses the adequacy and efficiency of the control and supervision measures required to manage the organisation from the perspective of business goals and identified material business risks.
- Supports the organisation in its efforts to maintain effective supervision measures.
- Carries out audits that assess the reliability and integrity of business-critical

- financial and operational information, the effectiveness and efficiency of operations, safeguarding of assets and compliance with legislation, regulations, agreements and the organisation's internal instructions.
- Prevents risks of misconduct.

#### Reporting:

The Senior Vice President for Corporate Planning and the external auditor performing the internal audit report, as necessary and appropriate, either jointly or independently, to the Group's Board of Directors, the Audit Committee and the senior management, in addition to the preparing analyses, assessments and development recommendations on the operations of the Group and the Group companies.

#### **Risk management**

Risk management is an integral part of the management of business operations at Vapo Group. Comprehensive risk management supports the achievement of Vapo's strategic and business goals and ensures the continuity of business operations under changing circumstances.

Successful and long-range business requires the proactive identification of business-related risks, managed risk-taking, the active monitoring of risk development and correct measures undertaken at the right time.

The risk management that implements the aforementioned objectives forms a part of the job description of every Vapo employee. Risks are managed at different levels of the organisation depending on where they can be influenced. The implementation and effectiveness of risk management is the responsibility of the directors responsible for business areas in Vapo Group and Vapo Oy in accordance with the Group's risk management policy.

The main risks threatening the Group's different businesses and the ways to prepare for these risks are reported in the annual reports published by the Group companies.

#### Auditing

The Group's auditing is organised so that the parent company's Authorised Public Auditors appointed by the general meeting of shareholders carries out its auditing through its own global organisation throughout Vapo Group.

The appointed firm of auditors is KPMG Oy Ab, Authorised Public Auditors, with Ari Eskelinen (APA) as the principal auditor. The auditor's term is a financial year.

The fees paid to the auditors during the financial year for the actual audit amounted to EUR 213,000.

### RISK MANAGEMENT

Risk management is an integral part of the management of business operations at Vapo Group. Comprehensive risk management supports the achievement of Vapo's strategic and business goals and ensures the continuity of business operations under changing circumstances. In order for business operations to be successful and based on a long-term approach, risks must be identified, risk taking must be managed, and the development of risks must be actively monitored.

Risk management emphasises anticipating risks and the necessary measures as well as the importance of systematic and timely action. Identifying, monitoring and reporting risks is part of the job description of everyone at Vapo. This can be achieved by incorporating risk management in day-to-day operations and ensuring that risk management responsibilities are appropriately allocated.

The goals of risk management at Vapo Group:

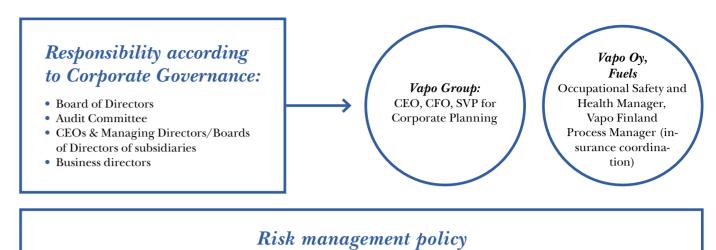
- Supporting strategic and operative planning and decision-making
- Supporting and ensuring the achievement of strategic and business goals
- Ensuring the continuity of our business operations
- Proactively identifying the most significant risks facing Vapo Group and its businesses, the related threats and opportunities, as well as determining the necessary risk management measures
- Increasing the general level of safety and thereby reducing damage and hazard risks
- Improving cooperation with internal and external stakeholders and increasing their trust in our operations

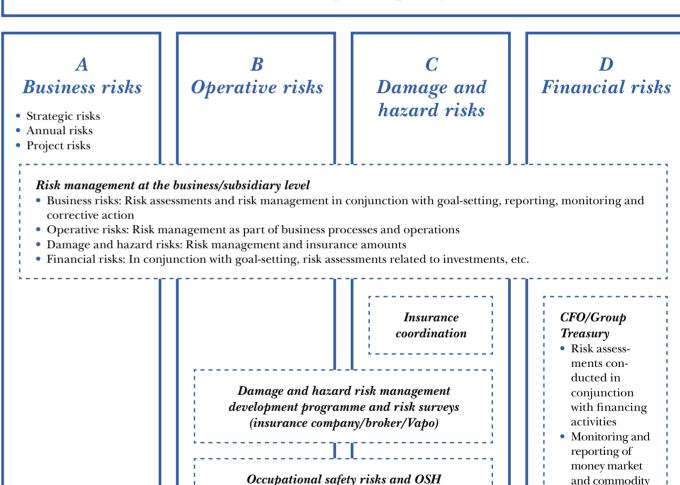
At Vapo Group, risks are managed at different levels of the organisation depending on where they can be influenced. The implementation and effectiveness of risk management is the responsibility of the directors responsible for business areas in Vapo Group and Vapo Oy, and on an independent basis, the managing directors of Vapo Group's subsidiaries. In addition, the directors of Group functions are responsible for risk management in their respective areas. They organise risk management activities in their business area and report at agreed intervals to their management teams and boards of directors on the most significant risks related to their area of responsibility. Vapo Group's Senior Vice President for Corporate Planning is responsible for the Group's risk reporting to the Board of Directors of Vapo Group and maintaining Group-level risk management principles that guide the implementation of risk management.

Vapo Group's liability insurance coverage (property insurance, loss-of-profits insurance, general liability insurance, product liability insurance and management liability insurance), is managed by a centralised Group-wide insurance agreement, the coordination of which is the responsibility of Vapo Oy's Group services. The development programmes for damage and hazard risk management and the risk surveys included in these programmes are conducted at the business and company-specific level, led by the Business Area Director or the CEO/Managing Director of the company in question. Personal insurance policies in Finland are maintained by Vapo Oy's Group services. Foreign subsidiaries handle personal insurance policies independently.

The main risks threatening the Group's various operations and methods for preparing for these risks are reported in the annual reports and interim reports published by the Group companies.

#### Overview of risk management at Vapo Group in 2016





#### Compliance function

(Vapo Finland)

risks

### **BOARD OF DIRECTORS' REPORT**

### Jyrki Vainionpää, Deputy CEO: Vapo's result more than doubled from the previous year

The Group's comparable turnover for the financial year 1 May 2016–30 April 2017 was largely unchanged from the previous year, amounting to EUR 392.1 million (EUR 398.8 million). The actual turnover of the comparison year, EUR 459.8 million, included EUR 63.5 million in turnover from the sawmill business divested in early 2016.

Vapo Group's comparable operating profit excluding one-off items and divested businesses was EUR 23.2 million (comparable operating profit EUR 19.4 million). This represented a substantial improvement compared to the previous year's result, which was weighed down by one-off expenses of nearly EUR 10 million related to the divestment of the sawmill business and the renewal of Vapo Oy's operating model. Peat production in Finland has fallen substantially short of the targeted volume for the past two summers due to the weather conditions, leading to higher expenses in both financial years. The Group's profit for the financial year was EUR 8.1 million (EUR -4.4 million).

Kekkilä Group, a wholly owned subsidiary of Vapo, divested its unprofitable operations in Russia and Norway during the financial year. Losses of approximately EUR 2 million were recognised on the sale of the two businesses. The result of Kekkilä's continuing operations was weaker than in the previous year due to the exceptionally cool spring, which delayed the start of the season.

The Group's most significant increase in profitability was achieved by Vapo Oy's Heat and Power business, where efficiency improvement measures enabled by the digital transformation, such as the remote control of power and heating plants, have reduced operating and maintenance costs. The business recorded turnover of EUR 8.9 million (EUR 5.3 million) for the financial year.

The Group had strong cash flow in the financial year, which will allow the company to repay the EUR 100 million bond issued in 2011 and maturing in June 2017 without the need for refinancing.

During the financial year, Vapo Oy made progress in line with the strategy confirmed by the Board of Directors in both the energy business and in new business areas. In the energy business, the objective is to evolve from a fuel supplier into a provider of energy solutions and services with higher added value, thereby improving customer satisfaction. The company's NPS (Net Promoter Score), which is used to measure customer satisfaction annually, has risen from 1 in 2013 to 38 in the most recent financial year. In spring 2017, the company launched an extensive programme geared towards developing new services and operating models in response to customers' business challenges. The participants in this Lean Service Creation programme include dozens of key employees of Vapo Oy as well as several customers.

The company's second significant focus area is the development of new businesses alongside the energy business and the gardening business. In cooperation with Kekkilä Group, Vapo Fibers is developing business based on refining peat fibres, with progress being made during the past financial year in selecting the market and product segments with the highest potential. Vapo Carbons, which was first announced in October 2016, aims to launch the production of peat-based technical carbons in Finland using a new method developed by the company.

During the financial year, the Finnish Government published an ambitious national energy and climate strategy aimed at international leadership. Vapo supports the implementation of this strategy; for example, the company will play a significant role in Finland achieving 55 per cent self-sufficiency in energy by 2030 and increasing the share of renewable energy to more than 50 per cent. Among other things, the successful implementation of the strategy depends on heating and power production with very high energy efficiency and superior operating efficiency, along with district heating, remaining at the current level. This appears very challenging due to the low electricity prices and I believe that a twofold response is needed: firstly, industry operators must leverage all of the potential benefits of the modernisation and digitisation of production. Vapo is highly committed to this and, in addition to enhancing the efficiency of

its power plants through measures such as remote control, the company can also offer its expertise and economies of scale to other operators. Secondly, in addition to actions taken within the industry, achieving this target requires a predictable and long-term energy policy and, above all, that the competitiveness of the domestic fuels used in CHP production is not reduced.

#### **Operating environment**

According to preliminary data from Statistics Finland, the total energy consumption of Finland in 2016 was 1,335 petajoules (PJ), or 371 terawatt-hours (TWh), which is two per cent higher than in 2015. Electricity consumption totalled 85.1 TWh, up by approximately three per cent from the previous year. The increase in energy consumption was due to the weather being slightly cooler compared to the record-warm previous year. Compared to the previous years' price levels, the prices of oil, coal and natural gas remained exceptionally low. Combined with the higher-than-usual water reserves in the Nordic countries, they kept electricity prices low. As a result, condensing power plants barely produced any electricity at all, which was reflected in the demand for peat and energy chips.

The Government Programme of Finland's current government includes the goal of increasing the share of renewable and emission-free energy to more than 50 per cent by 2030. The second target set by the Government Programme is to increase the rate of self-sufficiency in energy to 55 per cent, and peat has an important role to play in achieving this. The government wants to halve the use of imported oil and stop the energy use of coal by 2030.

The peat production volume, seven million cubic metres, was lower than planned due to the rainy weather in the late summer. However, the reserve stocks produced in previous summers ensure fuel deliveries to customers.

Temperatures in autumn 2016 were colder than the comparison year throughout the Vapo Group's operating area, but they were nevertheless substantially above the long-term averages. The first months of 2017 were also warmer than average. The warmer-than-aver-

#### Consolidated key figures

MEUR	1-4/2017	1-4/2016	5/2016-4/2017	5/2015-4/2016	5/2014-4/2015
Turnover	173.7	182.6	392.1	459.8	486.9
Turnover, continuing operations			392.1	398.8	
Operating profit (EBIT)	20.5	18.1	20.0	8.6	36.9
Operating profit (EBIT), continuing operations			20.0	12.0	
% of turnover	11.8	9.9	5.1	1.9	7.6
Operating profit (EBIT) before impairments	22.7	12.8	22.4	9.4	37.6
% of turnover	13.1	7.0	5.7	2.1	7.7
Profit/loss for the reporting period	14.6	10.0	8.1	-4.4	19.8
Operating margin (EBITDA)	32.6	20.7	56.9	43.1	74.7
+/- Change in working capital	24.1	31.5	14.7	39.6	-32.7
- Net investments	0.4	-10.1	1.6	-21.9	-67.1
Free cash flow before taxes	57.1	42.1	73.2	60.7	-25.1
Gross investments	13.4	11.9	39.6	38.5	88.4
Return on invested capital % *			3.0	1.2	5.3
Return on invested capital % *, continuing operations			3.0	1.7	
Return on invested capital % before impairments *			3.4	1.4	5.5
Return on equity % *			2.6	-1.5	6.6
Balance sheet total			812.4	795.0	838.2
Shareholders' equity			339.7	288.2	304.4
Interest-bearing net debt			269.6	366.6	393.1
Equity ratio %**			43.0	37.6	37.8
Interest-bearing net debt/operating margin			4.7	8.5	5.3
Gearing %			79.4	127.2	128.7
Average number of employees			773	914	961

<sup>\*</sup> Previous 12 months

#### Key figures for parent company Vapo Oy

MEUR	5/2016-4/2017	5/2015-4/2016	4/2014-5/2015
Turnover	241.9	252.0	244.8
Operating profit (EBIT)	11.8	8.4	46.2
% of turnover	4.9%	3.3%	18.9%
Operating profit (EBIT) before impairments	13.6	8.6	46.8
% of turnover	5.6%	3.4%	19.0%
Profit/loss for the period	5.7	-7.3	26.3
Operating margin (EBITDA)	33.4	28.4	70.1
Return on invested capital % *	2.0%	1.2%	8.0%
Return on invested capital % before impairments *	2.3%	1.2%	8.0%
Return on equity % *	2.1%	-2.9%	10.0%
Balance sheet total	777.0	770.8	802.8
Shareholders' equity	302.9	251.3	263.1
Equity ratio %	39.4%	33.2%	34.0%

<sup>\*\*</sup> In calculating the equity ratio, the capital loan on the balance sheet was calculated as shareholders' equity
For continuing operations, the figures for the comparison period are reported exclusive of the divested Vapo Timber Oy

age weather reduced the demand for energy peat by nearly 10 per cent.

#### **Vapo Group**

The Group's profit for the financial year 1 May 2016-30 April 2017 showed a substantial year-on-year improvement and amounted to EUR 8.1 million (EUR -4.4 million). Turnover decreased to EUR 392.1 million (comparable turnover EUR 398.8 million). The Group's operating profit improved by 133 per cent and totalled EUR 20.0 million (EUR 8.6 million). Comparable operating profit excluding one-off items and divested operations also showed a substantial improvement and totalled EUR 23.2 million (EUR 19.4 million). The measures implemented by the Group to reduce its balance sheet were reflected in strong operating cash flow (free cash flow before taxes), which amounted to EUR 73.2 million (EUR 60.7 million) for the financial year. This has also enabled the reduction of the Group's debt, which is reflected in improved key indicators related to financing. The Group's equity ratio stood at 43 per cent (37.6%) at the end of the financial year, while the ratio of net debt to operating margin was 4.7 (8.5).

#### **Developments by business segment**

The company's segment reporting corresponds to the Group's separate companies. However, the Vapo Oy segment also reports the results of smaller subsidiaries that serve the energy business, as their operations are managed by Vapo Oy. These subsidiaries include Salon Energiantuotanto Oy, Piipsan Turve Oy, Suo Oy and Hanhisuon Turve Oy.

#### Vapo Oy

Vapo Oy provides local fuels, heating solutions and environmental peat products to businesses, municipalities and consumers. Fuels account for approximately 70 per cent of the company's external turnover, heating solutions approximately 25 per cent, and environmental peat approximately five per cent. The company's newest commercial businesses are Vapo Fibers and Vapo Carbons. Vapo Fibers focuses on utilising peat fibre for new purposes. Vapo Carbons aims to make a quick entry into the growing international market for peat-based technical carbons.

The segment's turnover in the final third of the financial year (January–April 2017) was EUR 114.9 million (January–April 2016: EUR 117.3 million). The operating profit for

the reporting period was EUR 11.9 million (EUR 6.6 million). The operating profit includes one-off expenses amounting to EUR 6.0 million (EUR -7.9 million), of which EUR 3.5 million was eliminated at the Group level as an item related to the sale of the company's stake in Harvestia. The cold spring was not enough to compensate for the reduced heating needs caused by the mild winter, which was reflected in a year-on-year decline in the demand for energy peat and heating, while the delivery volumes of wood fuels and pellets increased. The sales prices of power and heating plants developed favourably compared to the corresponding period last year.

The segment's turnover for the full financial year was EUR 247.4 million (EUR 257.0 million). Operating profit amounted to EUR 13.2 million (EUR 7.4 million). The operating profit includes one-off items of EUR 4.0 million (EUR -7.7 million). The total volume of energy peat deliveries for the full financial year decreased year-on-year due to the temperature, the increased supply of wood fuels and low electricity prices. Significant cost savings were achieved in the operation and maintenance of power and heating plants as a result of efficiency improvement

#### Turnover by segment

MEUR	1-4/2017	1-4/2016	Change %	5/2016- 4/2017	5/2015- 4/2016	Change %
Vapo Oy	114.9	117.3	-2.1	247.4	257.0	-3.7
Vapo Timber Oy	0.0	5.5	-100.0	0.0	63.5	-100.0
Kekkilä Group	33.5	34.9	-4.2	89.5	87.9	1.8
Neova AB	19.6	21.5	-8.9	43.3	47.8	-9.4
AS Tootsi Turvas	7.5	5.9	26.6	16.0	13.0	23.2
Others	0.1	0.0	=	0.3	0.0	1,964.2
Inter-segment turnover	-1.9	-2.6	28.9	-4.4	-9.4	53.5
Total	173.7	182.6	-4.9	392.1	459.8	-14.7

#### Operating profit/loss by segment

MEUR	1–4/2017	1-4/2016	Change %	5/2016- 4/2017	5/2015- 4/2016	Change %
Vapo Oy	11.9	6.6	79.3	13.2	7.4	78.0
Vapo Timber Oy	0.0	-0.6	100.0	0.0	-2.2	100.0
Kekkilä Group	-0.6	0.6	-199.2	-1.1	-1.3	13.9
Neova AB	1.9	2.6	-26.3	0.9	1.7	-48.7
AS Tootsi Turvas	1.0	0.3	216.2	1.3	1.1	20.2
Others	-0.2	0.3	-166.6	-0.8	0.2	-420.7
Associates	1.1	2.2	-50.5	0.6	1.4	-57.4
Eliminations	5.4	6.0	-10.2	5.8	0.3	1,746.9
Total	20.5	18.1	13.2	20.0	8.6	131.2

measures. Investments amounted to EUR 30.9 million (EUR 31.3 million). Energy peat deliveries during the financial year totalled 9.2 TWh (9.7 TWh) while heating deliveries amounted to 1.2 TWh (1.2 TWh).

Peat production in the summer 2016 production season was substantially below the targeted volume and below the heating season's order backlog. Stockpiles accumulated in previous years secured fuel deliveries to customers

The profitability of forest fuels declined year-on-year due to oversupply. The sales volume was on a par with the comparison period, but sales prices declined, particularly due to the high supply of by-products from the wood processing industry.

The turnover and profitability of the pellet business improved year-on-year, although the profitability of the business remained at a weak level. The domestic delivery volume increased due to higher demand from power plants. Profitability was improved by efficiency improvement measures implemented in production and raw material procurement.

The company's investments in the development of the digital customer experience took concrete form in the launch of a new district heating portal and an online pellet store, both of which were well received. A growing proportion of the consumer pellet trade is taking place online.

#### **Neova AB**

Neova AB is a Swedish subsidiary of Vapo Oy. It provides district heating to its customers through its own district heating networks and offers customised heating solutions for industrial customers. The company also produces and markets peat products for its energy customers and users of agricultural peat products. Its annual turnover is evenly divided between heating solutions and peat productions.

Turnover in the final third of the financial year (January–April 2017) amounted to EUR 19.6 million (EUR 21.5 million). The operating profit for the period was EUR 1.9 million (EUR 2.6 million). The latter part of the period being colder than the autumn and early winter helped increase demand for fuels and heating. Turnover was also boosted by the increased sales of agricultural peat. Decreased demand for energy peat led to the closure of peat production areas in certain regions in Sweden. This caused a write-down of EUR 1 million recognised in the result for the final third of the year.

Turnover for the full financial year was EUR 43.3 million (EUR 47.8 million) and the operating profit was EUR 0.9 million (EUR 1.7 million). Investments during the financial year amounted to EUR 3.2 million

(EUR 3.8 million). The operating profit includes one-off expenses and write-downs totalling EUR 0.6 million (EUR 0.0 million).

Energy peat deliveries during the financial year totalled 0.6 TWh (0.7 TWh) while heating deliveries amounted to 0.4 TWh (0.4 TWh). Deliveries of agricultural peat totalled 0.6 million cubic metres (0.6).

Brostorpsmossen, a subsidiary of Neova AB, was merged with the parent company in September 2016.

#### **AS Tootsi Turvas**

AS Tootsi Turvas is Vapo Oy's Estonian subsidiary. Its primary business is the sale of agricultural peat products, energy peat products and wood fuels, as well as the production and sale of heating. Agricultural peat accounts for 45 per cent of the subsidiary's annual turnover, while wood fuels account for 30 per cent, energy peat 15 per cent and heating 10 per cent.

Turnover in the final third of the financial year (January–April 2017) amounted to EUR 7.5 million (EUR 5.9 million). The operating profit for the period was EUR 1.0 million (EUR 0.3 million).

Turnover for the full financial year was EUR 16.0 million (EUR 13.0 million) and the operating profit was EUR 1.3 million (EUR 1.1 million). Investments during the financial year amounted to EUR 3.3 million (EUR 1.1 million). The turnover and profit for the financial year were boosted by successful sales, cost savings in logistics and the acquisition of the district heating company Uuemõisa Teenused AS in summer 2016. The company was merged with the parent company in September 2016.

Energy peat deliveries for the financial year totalled 0.2 TWh (0.2 TWh). Deliveries of agricultural peat totalled 0.7 million cubic metres (0.6).

#### Kekkilä Group

Kekkilä Group develops, produces and markets high-end garden substrates, plant fertilisers and mulches as well as home garden and yard construction products for amateur and professional growers and landscapers.

Turnover in the final third of the financial year (January–April 2017) amounted to EUR 33.5 million (EUR 34.9 million). The operating result for the period was EUR -0.6 million (EUR 0.6 million). The result for the final third of the year includes one-off expenses of EUR 3.0 million (EUR -1.1 million) related to the divestment of the Norwegian business.

The Group's turnover for the final third of the year declined year-on-year in the consumer and landscaping businesses. The first three months of the final third of the year were strong compared to the previous year, but the delayed spring meant that the start of the peak season was pushed to the next financial year. Kekkilä's professional grower and recycling businesses grew year-on-year. Higher sales also helped improve the operating result of the business.

Turnover for the full financial year was EUR 89.5 million (EUR 87.9 million) and the operating result was EUR-1.1 million (EUR-1.3 million). Investments during the financial year amounted to EUR 2.2 million (EUR 3.6 million).

Cumulative turnover growth was achieved particularly in the professional grower and landscaping businesses. The consumer business suffered from excess capacity in the production of soil products and a consolidation of purchasing power within the customer base.

The full-year result includes one-off expenses of EUR 3.2 million (EUR -1.6 million).

On 31 December 2016, Kekkilä Oy divested its stake in Kekkilä Group's Russian subsidiary by selling its shares to the acting local management.

On 31 March 2017, Kekkilä Oy divested its stake in Kekkilä Group's Norwegian subsidiary by selling its shares to the Norway-based company Nordic Garden AS.

#### Other activities

The Others segment includes Vapo Clean Waters Oy and the Danish subsidiary Vapo A/S. It also includes Forest BtL, the operations of which were discontinued in 2014.

Vapo Clean Waters Oy began its operations on 1 May 2016. The company specialises in design, construction and maintenance services and products related to water protection and biodiversity. During the financial year, the company participated in the Storm Filter project led by VTT Technical Research Centre of Finland, aimed at developing clean technology for the management of drainage waters. The company also coordinated the PäästöSäästö project in cooperation with the Natural Resources Institute Finland and other partners. The project is focused on testing new types of domestic organic soil-conditioning substances to improve crop yields and reduce the nutrient load of agriculture. The company partnered with the Finnish Defence Forces in a project coordinated by the Centre for Economic Development, Transport and the Environment focused on the restoration of areas with contaminated soil.

The Others segment had an impact of EUR 0.1 million (EUR 0.0 million) on the turnover for the final third of the year and its impact on the operating result was EUR

-0.2 million (EUR 0.3 million). Turnover for the full financial year was EUR 0.3 million (EUR 0.0 million) and the operating result was EUR -0.8 million (EUR 0.2 million).

#### Cash flow, investments and financing

The Group's free cash flow before taxes in the financial year 1 May 2016–30 April 2017 amounted to EUR 73.2 million (EUR 60.7 million). The difference compared to the previous year was mainly attributable to an increase in the operating margin of the Group's businesses. Working capital continued to decrease, particularly due to lower fuel stockpiles, which increased cash flow by EUR 14.7 million (EUR 39.6 million).

Gross investments in the financial year were EUR 39.6 million (EUR 38.5 million), or 110 per cent of the amount of depreciation (110%). The most significant investments in the financial year were allocated to capacity expansion, energy efficiency investments and reducing the use of fossil fuels in the Heat and Power business as well as the preparation and acquisition of new peat production areas. Net investments amounted to EUR 1.6 million (EUR -21.9 million).

Interest-bearing net debt at the end of the financial year was EUR 269.6 million (EUR 366.6 million). Interest-bearing net debt includes a EUR 5 million capital loan in one of Vapo's subsidiaries. The ratio of interest-bearing net debt to operating margin (net debt/EBITDA) on 30 April 2017 was 4.7 (8.5). Short-term interest-bearing debt was EUR 127.4 million (EUR 35.0 million). Of Vapo's long-term interest-bearing debt, 36.5 per cent is covered by a covenant related to the company's equity ratio. The terms of the covenant were met at the end of the review period. The equity ratio at the end of the financial year was 43.0 per cent (37.6%) and the gearing ratio was 79.4 per cent (127.2%) The consolidated balance sheet total was EUR 812.4 million (EUR 795.0 million). The Group's net financing items were EUR -9.8 million (EUR -9.7 million). Net financing items were 2.5 per cent (2.1%) of turnover.

In accordance with its hedging policy, the Group hedges the majority of its predicted net foreign currency exposure for the next 12 months. The hedging instruments used are primarily forward exchange agreements and currency swaps. The most important hedged currency is the Swedish krona. At the end of April, the Group's currency hedging ratio for the next 12 months was 94 per cent.

The company issued a EUR 50 million hybrid bond during the financial year. The arrangement strengthened the Group's financial position and provides flexibility for the funding of future strategic investments. The Group's strong cash flow enables the

repayment of the EUR 100 million bond maturing in June without the need for refinancing.

### Natural seasonal fluctuation in activities

The Group's business is cyclical to a significant extent due to seasonal variation in the demand for heating. In the first third of the financial year, from May to August, the focus is on fuel production and acquisition, while the second third of the financial year brings with it the start of the heating season, and the volume of fuel deliveries increases. The final third of the financial year is the strongest period for the company's sales of heating, electricity and fuels. The temperatures during the heating season in the financial year were warmer than average aside from the exceptionally cool April, which had a negative impact on the sales of heating and fuels.

Kekkilä's gardening business is also sensitive to seasonal fluctuations, with demand peaking in the spring. During the past financial year, the spring season did not get up to full speed by the end of April, which moved sales to the following financial year and reduced the duration of the season.

#### **Notable risks and uncertainty factors**

#### Regulation

The uncertainty associated with securing environmental permits, caused by increasingly strict regulations that are open to interpretation, is a significant risk from the perspective of all of Vapo's peat-related businesses and, with respect to energy peat, also from the perspective of Finland's self-sufficiency in energy. This risk, which has already materialised to an extent, prevents and slows down the commissioning of new peat production areas to adequately meet future customer needs in all circumstances. For the continuity of peat production, it is important that the issuing of environmental permits for new peat production areas is consistent throughout the country and based on unambiguous environmental criteria.

Vapo has increased its investments in environmental protection at its production sites and enhanced the treatment of leachates originating from its peat production areas to ensure that there are no obstacles to the granting of permits attributable to Vapo itself. In accordance with the mire and peatland strategy approved by the Finnish government, Vapo applies for environmental permits and opens new production areas only in peatlands where the natural state has been altered, meaning forest-ditched peatlands.

Vapo's Wood Fuels business also involves regulatory risks. The regulatory treatment of

the sustainability criteria of wood-based solid fuels will determine the extent to which they will represent a threat to the use of wood-based fuels and the national economy of Finland.

In the energy industry, operations are typically developed in accordance with long-term objectives, and investments in the industry often have a decades-long life span. Continuously changing regulations constitute a regulatory risk that complicates the industry's operations, for example through a dramatic decline in the market prices of electricity caused by subsidies. This has led to a situation in which investments in plants using fuels have decreased from their previous level. The fuel market has contracted, which is reflected in the reduced use of energy peat and the petering out of growth in the use of wood chips.

One positive regulatory change in 2016 was the reduction in peat tax to EUR 1.90 per MWh and the corresponding increase of fuel wood subsidies. However, the impact of these changes on the demand for fuels did not yet materialise in the past financial year. Going forward, the change in taxation is likely to have the effect of increasing demand, although there is a concurrent move away from combustion-based energy production in the customer base due to regulatory reasons as well as other factors.

The Finnish Government published its energy and climate strategy to 2030. In line with the Government Programme, the strategy states that Finland's goal is to increase its self-sufficiency in energy to the current level of approximately one third to 55% by 2030, with the share of renewable energy rising to 50% during the same time frame. The strategy is aimed at phasing out coal and maintaining peat's position to ensure the security of supply. The relevant legislative proposal will be drafted during the term of the current government and it may still introduce changes to the previously announced targets.

Regulatory changes pertaining to the energy sector constitute the most significant risk in Vapo Oy's business. The profitability of heat and power production will be further reduced by the LCP BREF document, which will significantly tighten the emission limits on large combustion plants (over 50 MW) and agreeing on the EU sustainability criteria concerning the energy use of wood. This will be reflected in the continued elimination of back-pressure production capacity, which will reduce fuel demand. The sustainability criteria concerning the energy use of wood will be agreed upon in the European Commission's energy package, but the process is still unfinished.

The LULUCF land use directive, which affects sectors outside emissions trading, can also affect the operating environment in the energy sector if the carbon sink calculations for forests become more disadvantageous.

The discussion of the EU's clean energy package will continue in 2017 in the European Parliament and the Council of Europe. The package comprises eight legislative proposals. Amongst others, they include the renewable energy directive, REDII, according to which the EU's binding target for renewables is 27 per cent by 2030. The final content is likely to be confirmed in 2018 at the earliest. The European Commission has also proposed increasing the use of renewable energy in heating and cooling by one percentage point per year.

#### Market risks

Vapo's energy business is subject to significant market risks related to end product demand as well as the prices and availability of wood-based fuels and their raw materials.

Concern about the climate has led to a transformative shift in the energy industry, which will inevitably see a reduction in the share of energy solutions based on traditional fossil fuels. According to Statistics Finland, the use of peat as an energy source in Finland amounted to 27 TWh in 2010 (seven per cent of the total consumption), while the corresponding figure in 2015 was 16 TWh (four per cent). The rate of decline has been the fastest in electricity production. To mitigate the demand risk of peat, Vapo invests in developing deeper relationships with existing fuel customers by offering the most reliable fuel and energy solutions through plant operation services, plant efficiency improvement projects and other added value services.

The demand for wood fuels has increased as energy companies have sought alternatives to fossil fuels. The higher demand has led to increased pellet production in Europe. Imports from outside of Europe have also increased. The competition in the pellet market has intensified due to oversupply, which is reflected in a decrease in market prices in the company's primary markets in Finland and Sweden. As the market grows, the availability of appropriately priced raw material in relation to the price of the end product plays a key role in ensuring competitiveness. The efficiency improved programmes launched at Vapo are expected to substantially improve the profitability of the wood fuels business in the coming financial year.

The Heat and Power business is influenced by the development of the heating, industrial steam and electricity markets as well as fuel markets and the markets for competing energy solutions. Electricity

prices in Finland and Europe remained at a low level, which reduced electricity sales revenue. In the fuel market, the low price of oil has had a positive effect in the form of lower costs, but it has also had a negative effect on the sales of fuels produced by Vapo, as customers have postponed their decisions on replacing oil with solutions based on domestic fuels. Competing energy solutions based on new technology constitute a growing threat to energy produced from domestic fuels, although the costs of heating alternatives that compete with district heating remained largely unchanged during the past financial year, and district heating remained competitive. New forms of heating, combinations of different forms of heating, and energy conservation are key considerations in the development of the district heating business.

#### Weather risks

Weather is a risk that has extensive effects on Vapo's business. In the winter, temperature influences the fuel needs of external and internal customers and the utilisation rates of the Group's own heat and power plants. In the spring, the weather conditions also determine the timing of the peak season in the gardening trade. As the peak season takes place around the end of the Group's financial year, its timing affects the profit performance for the full year. During the summer, the effects of weather concern the production volumes and quality of wood fuels and environmental products.

In summer 2016, peat production was in line with the plans in Sweden but fell short of the targets in Finland and Estonia. Falling short of the target increased the costs recognised through profit and loss allocated to the financial year as the quantity of stored peat was lower than expected. Due to the Group companies' own commercial stockpiling, however, the lower level peat production will not have a material impact on the company's supply in the coming heating and production season.

In the upcoming production season, fuels will be scaled according to anticipated demand in the coming years as well as customer-specific storage requirements that are known to the company. This means that production targets will be lowered at certain production areas compared to previous production seasons. This may make it more difficult to find peat contractors in the future, at least at the regional level, due to contractors exiting the market, which would also have long-term effects in the form of lost industry expertise.

#### Damage risks

Damage risks include occupational safety

risk, property risk, interruption risk and environmental risk. Vapo aims to prevent damage risks through proactive risk management measures and by reacting quickly to any observed hazards. Risks that cannot be managed by the company's own actions are insured where possible. The goal is to continuously promote a positive culture of occupational safety and asset protection throughout the organisation. Extensive investments in changing the organisation's safety culture are already being reflected in a reduced number of accidents and lower accident frequency as well as an increase in safety observations and related improvement measures throughout Vapo Group.

#### Financing and commodity risks

The company manages its financing risk and maintains liquidity by balancing the proportional share of short-term and long-term loans and the repayment schedules of long-term loans. In addition, the risk related to the availability and price of financing is managed by diversifying fundraising between different banks and financial instruments.

The company's main financial risks are currency risk, interest rate risk and liquidity risk. The Group treasury, guided by the financial policy ratified by the Board of Directors, is responsible for identifying and managing financial risks. The Group's risk management tools include currency derivatives and options, currency swaps, foreign currency loans, interest rate swaps and commodity derivatives.

With regard to commodity risks, Vapo purchases hedging services related to the purchase and sale of electricity. Electricity trading represents a very minor share of Vapo's business.

#### **Research and development**

The Group's research and development investments during the financial year 1 May 2016–30 April 2017 amounted to EUR 1.1 million (EUR 1.1 million), which is equal to 0.3 per cent of turnover (0.2%). Research and development activities were focused on supporting the company's strategic renewal in Vapo Oy and Vapo Clean Waters Oy.

Vapo Ventures develops and commercialises new businesses based on Vapo's competencies and networks. The first new businesses developed by Vapo Ventures are Vapo Clean Waters Oy, which provides treatment solutions for natural waters, and Vapo Fibers, which produces natural fibre solutions. The company announced its latest new initiative, the Vapo Carbons project, in October 2016. Vapo Carbons aims to enter the growing international market for technical carbons.

Vapo Oy's other research and develop-

ment activities consisted of the development of environmental responsibility and new businesses and technologies as well as the production methods of energy peat and environmental peat. As part of following through on its environmental commitments, the company developed entirely new kinds of water treatment methods to achieve even higher performance in water purification and minimise the negative environmental impacts of peat production. The new methods were related to areas such as utilising natural microbiological purification processes. The company also investigated the suitability of solar power systems to pumping drainage waters in peat production. To improve peat quality management, the company developed various measurement methods for quickly measuring fuel moisture.

The creation of new business based on sphagnum moss biomass was promoted by developing the sphagnum moss production method and treatment process. To support the commercialisation of raw materials derived from sphagnum moss biomass, research projects were launched on raw material attributes, the eco-friendliness of production and the regeneration of harvested areas.

The company partnered with Peatmax Oy to jointly develop a new harvester for sod peat, with test runs initiated in late summer. The new harvester offers improved opportunities for utilising production areas that are small in size.

Vapo Clean Waters Oy participated in the Storm Filter project aimed at developing clean technology for the management of drainage waters. Materials and structures that absorb and purify water can be used to reduce surface runoff as well as filter and retain contaminants in materials that purify water mechanically.

The PäästöSäästö project aims at mitigating the environmental impacts of agriculture and improving the growth of plants by testing new types of domestic organic soil-conditioning substances to improve crop yields and reduce the nutrient load of agriculture. In addition, a natural and domestic water purification system based on peat filtration was developed for risk management related to waters at shooting ranges.

Vapo Clean Waters Oy also continued its development activities for Vapo Oy. Development efforts related to water treatment in peat production were focused on various advanced filtration and sedimentation methods. Research related to acidic sulfide soil was continued under the Sulfa II project led by the Finnish Environment Institute.

#### **Environmental responsibility**

Environmental responsibility is an impor-

tant element of Vapo's day-to-day business operations. The company has implemented an environmental programme that was unique even by international standards. One goal of the project, known as Tiger's Leap, was to build water treatment systems using the best available water treatment technology (BAT) at all of Vapo's peat production areas. Summer 2016 was the second production season in which all of Vapo's peat production areas had water treatment systems using the best available technology. Vapo is committed to ensuring that areas released from peat production will be in active after-use within two years of the end of production operations. The programme's other goals included improving the effectiveness of voluntary environmental inspections and engaging in even more active communications on the overall impacts of using peat.

Vapo increased its emissions monitoring activities further in spite of the total peat production area declining by eight per cent from the previous year. In 2016, more than 18,000 samples (17,800 samples) were taken as part of emissions monitoring, with approximately 145,000 analyses (150,000 analyses) carried out. A further 2,900 samples (2,600 samples) were taken in the context of monitoring waterways, with 35,000 analyses (35,200 analyses) carried out.

The company continued to carry out self-initiated environmental impact inspections at peat production areas. Contractors inspected water treatment structures in twoweek intervals during the production season. In addition, 25 environmental inspectors recruited for the summer season inspected water treatment methods and other aspects related to environmental permit conditions at all production areas. In 2016, Centres for Economic Development, Transport and the Environment made 128 inspection visits to Vapo's peat production areas.

Vapo continued to sell peat bogs of high natural value for protection purposes.

In accordance with its permit policy, Vapo only applies for new production permits for ditched peatlands. In 2016, 690 hectares in newly approved production sites were obtained through environmental permit applications for peat production. The EIA process was completed for areas totalling 402 hectares. Two new environmental permit decisions were received concerning heating plants.

Vapo is committed to ensuring is that all new production areas opened after 2016 will have a lower solid and humus load on downstream watercourses than before peat production. To follow through on these commitments, Vapo launched the Clean Water and Monitoring 100 projects involving the monitoring of the impacts of new production areas on watercourses at approximately 80 sites before the potential start of peat production.

The Group's environmental investments amounted to EUR 2.3 million (EUR 4.0 million) and were primarily related to improving and building water treatment structures at peat production sites and investments required by environmental legislation in the Heat and Power business area. The company also invested in energy efficiency and reducing the use of fossil fuels. Excluding Vapo's own personnel's input, environmental protection costs for the period amounted to EUR 18.8 million (EUR 20.8 million). The costs primarily consisted of the maintenance of water treatment structures in peat production and environmental load monitoring.

Active production areas in Finland amounted to 32,000 hectares (34,900 ha) in summer 2016. A total of 311 hectares (265 ha) of new peatlands became ready for production by the end of the financial year. Peatlands released from production during the financial year amounted to 1,156 hectares (545 ha).

A total of 4,194 hectares (4,996 ha) were transferred to other land use methods, of which 1,371 hectares (826 ha) were sold. A total of 1,235 hectares (2,024 ha) were assigned for forestation, 0 hectares (0 ha) for farming, and 223 hectares (150 ha) for building wetland habitats for birds. A total of 1,364 hectares (1,996 ha) were returned to landowners. Vapo has an aftercare reserve for the costs resulting from the rehabilitation of decommissioned production areas, which covers the costs of water protection measures, water rehabilitation, landscaping and other restoration measures after decommissioning.

In 2016, Vapo continued its own power and heating plants' multi-year development programme aimed at reducing oil consumption and improving energy efficiency. The use of domestic fuels increased further at Vapo's power and heating plants. The share of domestic fuels was 95.3 per cent (93.7%) at the Group level and 94.3 per cent (92.3%) in Finland. The coefficient of efficiency improved for power plants and pellet heating plants and remained on a par with the previous year for other heating plants.

The most significant energy efficiency investments in 2016 were the flue gas scrubber investment at the Sotkamo power plant and the Forssa power plant's 4,000 cubic metre district heating battery that can be charged and discharged at an output of 15 MW. The plants' carbon dioxide emissions remained on a par with 2015. Particle emissions decreased by seven per cent, NOx emissions by three per cent and SO2 emissions by four

per cent. The reduction in particle and SO2 emissions was particularly attributable to the deployment of a flue gas scrubber at the Sotkamo power plant. The reduction in nitrogen oxides was mainly due to combustion optimisation and boiler adjustments.

#### Vapo Oy's share capital and shareholders

Vapo Oy has one class of shares. The total number of shares is 30,000. Each share carries one vote at the General Meeting, and all shares carry the same dividends. If a Vapo share is transferred to an external party other than one that is in a Group relationship with the shareholder pursuant to Chapter 8, Section 12 of the Finnish Limited Liability Companies Act, the company's shareholder shall have the right to redeem the share in question. If more than one shareholder wishes to exercise this redemption right, the shares are divided between the parties wishing to redeem them in proportion to their existing shareholdings. At the end of the financial year, on 30 April 2017, Vapo Oy's share capital amounted to EUR 50,456,377.94.

Vapo Oy is a joint venture of the Finnish State and Suomen Energiavarat Oy. The Finnish State holds 50.1% of the shares (15,030 shares) and Suomen Energiavarat Oy 49.9% (14,970 shares).

#### **General Meetings**

Vapo Ov's Annual General Meeting was held in Helsinki on 22 September 2016. The AGM adopted the financial statements and consolidated financial statements for the financial year 1 May 2015-30 April 2016 and discharged the members of the Supervisory Board and the Board of Directors, as well as the CEO, from liability. The AGM resolved to distribute a dividend for the financial period ended 30 April 2016 amounting to EUR 133.33 per share, or EUR 4.0 million in total. The dividend payment date was 23 September 2016.

The AGM confirmed the number of members of the Supervisory Board as eight. Johanna Ojala-Niemelä was elected Chairman, with Heikki Miilumäki as Vice Chairman. Markku Eestilä, Hanna Halmeenpää, Reijo Hongisto, Hannu Hoskonen, Eero Kubin, Esko Kurvinen, Tommi Lunttila and Tiina Snicker were re-elected as members.

The AGM confirmed the number of members of the Board of Directors as six. Jan Lång will continue as Chairman, with Hannu Linna elected Vice Chairman. Pirita Mikkanen, Minna Pajumaa and Martti Haapamäki were re-elected to the Board of Directors, and Markus Tykkyläinen was elected as a new member.

The audit firm KPMG Ov Ab was elected

Vapo Oy's Extraordinary General Meeting was held in Helsinki on 13 October 2016. The AGM confirmed the number of members of the Board of Directors as seven. Tuomas Hyyryläinen was elected to the Board of Directors as a new member. Vapo Oy's Extraordinary General Meeting held on 7 December 2016 confirmed the number of members of the Board of Directors as eight and elected Minna Smedsten to the Board of Directors as a new member.

Vapo Oy's Board of Directors elected

Jan Lång (Chairman), Martti Haapamäki, Tuomas Hyvryläinen and Minna Pajumaa to the Personnel Committee (formerly the Compensation Committee) from among its members. Hannu Linna (Chairman), Pirita Mikkanen, Minna Smedsten and Markus Tykkyläinen were elected to the Audit Committee.

A more detailed description of the company's governance system during the financial year is available in a separate statement published on the company website.

The Group employed an average of 773 (914) persons in the financial year.

As planned, Vapo Oy's codetermination committee met twice during the financial year to discuss current topics. Kekkilä Oy held codetermination negotiations to support the company's profitable growth and clarify the Group's business structure. The negotiations covered Kekkilä Oy's personnel in Finland, excluding blue collar workers. The Group announced its new organisational structure and Group Management Team on 20 October 2016. The decisions made following the negotiations did not have personnel impacts.

The Board of Directors of Vapo Oy appointed Jyrki Vainionpää as the company's deputy CEO on 17 October 2016.

Vapo Oy's CEO Tomi Yli-Kyyny announced his resignation in late December and left the company on 30 April 2017. The Board of Directors appointed Vesa Tempakka as the new CEO. He took up his post on 29 May 2017. Kekkilä Oy appointed its Chief Op-

#### Vapo Group's personnel on average

	5/2016-4/2017	5/2015-4/2016	5/2014-4/2015
Finland	515	654	707
Other countries	258	260	254
Total	773	914	961

#### Vapo Group employees by segment, average

	5/2016-4/2017	5/2015-4/2016	5/2014-4/2015
Vapo Oy	383	451	466
Vapo Timber Oy	0	81	107
Kekkilä Group	261	256	248
Neova AB	86	92	87
AS Tootsi Turvas	33	33	35
Others	10	1	18
Total	773	914	961

erating Officer Juha Mäkinen as the Kekkilä Group's new CEO on 1 March 2017.

#### **Changes in the organisation**

Vapo Clean Waters Oy began operating as a wholly owned subsidiary of Vapo Oy on 1 May 2016.

Brostorpsmossen AB, a subsidiary of Neova AB, was merged with the parent company in September 2016.

In September 2016, AS Tootsi Turvas merged with AS Uuemõisa Teenus, a heating production and distribution company it acquired in June 2016 from Ridala municipality.

Kekkilä Oy sold its loss-making Russian subsidiary Kekkilä RUS LLC to the subsidiary's Managing Director in an MBO transaction. The transaction was completed on December 30, 2016.

Vapo Oy agreed to sell its 45 per cent stake in the wood sourcing company Harvestia Oy to Powerflute Oyj. The agreement was signed on 31 October 2016 and the transaction entered into effect on 2 January 2017.

Kekkilā Oy sold its wholly owned subsidiary Hasselfors Garden AS and its 60 per cent stake in Andoy Torv AS in Norway to Nordic Garden AS. The transaction was completed on 31 March 2017.

### Board of Directors' proposal for the distribution of profits

The Board of Directors proposes to the General Meeting to be convened on 6 September 2017 that Vapo Oy's profit for the financial year, EUR 5,658,831.15, be added to retained earnings, after which the distributable funds available to the General Meeting amount to EUR 172,385,033.79.

In line with its dividend policy, Vapo Oy distributes as dividends 50 per cent of the annual profit shown in the company's financial statements. There have been no substantial changes in the company's financial position after the end of the financial year. The Board of Directors also proposes to the General Meeting that EUR 4.0 million, which is EUR 133.33 per share, be paid as dividends for the financial year 1 May 2016–30 April 2017.

#### **Events after the review period**

In October 2016, Vapo Oy announced it aims to increase the efficiency of its land use and release capital tied up in land assets. During the financial year, the company assessed alternative implementation models for selling land assets while ensuring the continuity of peat production to serve the company's future needs. Investor negotiations related to the sale of land assets continued after the end of the financial year and the aim is to carry

#### Board of Directors 1 May 2016-30 Apr 2017

Chairman	Jan Lång
Vice Chairman	Hannu Linna
Members	Martti Haapamäki
	Tuomas Hyyryläinen
	Pirita Mikkanen
	Minna Pajumaa
	Minna Smedsten
	Markus Tykkyläinen

### Members of the Supervisory Board 1 May 2016-30 Apr 2017

Chairman	Johanna Ojala-Niemelä, Member of Parliament
Vice Chairman	Heikki Miilumäki, D.Sc. (Tech.) (h.c.)
Members	Markku Eestilä, Member of Parliament
	Hanna Halmeenpää, Member of Parliament
	Reijo Hongisto, Member of Parliament
	Hannu Hoskonen, Member of Parliament
	Eero Kubin, Customer Manager, Professor
	Esko Kurvinen, Engineer
	Tommi Lunttila, agricultural and forestry entrepreneur
	Tiina Snicker, Financial Manager

#### Group's Management Team 30 Apr 2017

Tomi Yli-Kyyny, Chief Executive Officer, Vapo Oy
Torbjörn Claesson, Managing Director, Neova AB
Markus Hassinen, Business Area Director, Heat and Power, Vapo Oy
Pasi Koivisto, Business Area Director, Polttoaineet, Vapo Oy
Suvi Kupiainen, Chief Financial Officer, Vapo Oy
Ahti Martikainen, Director, Communications and Public Affairs, Vapo Oy
Kari Poikolainen, Senior Vice President, Corporate Planning, Vapo Oy
Matti Puuronen, Regional Director, Viro
Juha Mäkinen, CEO, Kekkilä Oy
Mia Suominen, Business Area Director, Vapo Ventures, Vapo Oy
Jyrki Vainionpää, Chief Operating Officer, Deputy CEO, Vapo Oy
Juhani Ylä-Sahra, Director, Vapo Oy

out the transaction by autumn 2017.

Vesa Tempakka took up his post as Vapo Oy's new Chief Executive Officer on 29 May 2017.

#### Future outlook

Vapo Group is one of the world's largest

producers of energy peat and environmental peat. The company holds an important role in ensuring Finland's self-sufficiency in energy and the security of supply. Political decisions have a substantial impact on the profitability of Vapo's business operations and its capacity to make investments.

Vapo will continue to implement measures in line with its strategy to increase the competence of its personnel and achieve market-leading customer service in the local energy value chain. This includes the development of new services and comprehensive solutions for our energy customers. At the same time, the company will continue to increase the efficiency of its business processes in order to improve profitability. Vapo wants to lead its industry with respect to the speed of its digital transformation. Combined with a diverse selection of products and services, highly competent personnel and a comprehensive

service network, this will increase the company's competitiveness. The fuel market is not expected to see significant growth due to the low volume of electricity production from solid fuels.

In the new financial year, Kekkilä Group will invest in developing its product selection and increasing its sales in the consumer, professional grower and landscaping businesses. Kekkilä will continue to develop production capacity for the manufacturing of peat fibres in partnership with the Vapo Fibers business.

The restructuring measures implemented by Vapo Group in recent years to eliminate

unprofitable units will enable the company to engage in more profitable business operations in the upcoming financial year.

Vapo will continue the commercialisation of new business operations in the Vapo Carbons and Vapo Fibers businesses as well as researching of further new business initiatives in the Vapo Ventures business area. The plans for Vapo Carbon's first pilot plant for producing technical carbons are moving ahead, and the location of the plant will be decided during the upcoming financial year. The new businesses will not yet generate significant turnover during the upcoming financial year.

### Vantaa, 20 June 2017 Board of Directors of Vapo Oy

Jan Lång Chair

Hannu Linna Vice Chair

Martti Haapamäki

Tuomas Hyyryläinen

Pirita Mikkanen

**Minna Paiumaa** 

Minna Smedsten

Markus Tykkyläinen

Vesa Tempakka CEO

# **CONSOLIDATED FINANCIAL STATEMENTS 2017, IFRS**

#### Consolidated statement of comprehensive income

EUR 1,000	Note	5/2016-4/2017	5/2015-4/2016
TURNOVER	2	392,103	398,814
Change in stock levels of finished and unfinished products		-20,284	-14,228
Production for own use		395	844
Other operating income	5	11,020	8,591
Share of results of companies consolidated using the equity method		1,106	1,381
Materials and services	6	-155,684	-167,137
Expenses arising from staff benefits	7	-48,123	-50,641
Depreciation	8	-35,616	-33,790
Impairment	8	-2,424	-789
Impairment of goodwill	8	0	0
Other operating expenses	9	-122,516	-131,013
OPERATING PROFIT		19,977	12,030
Financial income	10	5,995	6,379
Financial expenses	10	-15,819	-15,771
PROFIT/LOSS BEFORE TAXES		10,152	2,638
Income taxes	11	-2,038	-3,516
Profit/loss from discontinued operations			-3,567
PROFIT/LOSS FOR THE PERIOD		8,115	-4,444
OTHER COMPREHENSIVE INCOME ITEMS (items that may be reclassified s	subsequently to profi	t or loss):	
Translation differences from foreign units		-775	52
Other comprehensive income items for the period after taxes		7,340	-4,392
PROFIT/LOSS FOR THE PERIOD			
Distribution of profit for the period:			
To parent company shareholders		8,133	-4,392
To non-controlling shareholders		-18	-52
		8,115	-4,444
Distribution of comprehensive income for the period:			
To parent company shareholders		7,353	-4,275
To non-controlling shareholders		-12	-117
		7,340	-4,392
Earnings per share calculated from profits due to parent company shareholders			
Earnings/share, EUR		271	-146
Average number of shares		30,000	30,000

#### Consolidated balance sheet

EUR 1,000	Note	30.4.2017	30.4.201
ASSETS			
Long-term assets			
Intangible assets	12	12,940	10,70
Goodwill	12	5,436	5,79
Land and water areas	13	43,169	45,40
Buildings and structures	13	38,683	46,18
Machinery and equipment	13	121,956	129,46
Other tangible assets	13	221,583	217,30
Prepayments and unfinished acquisitions	13	43,849	48,59
Shares in entities consolidated using the equity method	14	20,654	26,15
Other long-term financial assets	15	756	8,02
Long-term sales and other receivables	16	3,272	4,68
Deferred tax asset	18	204	13
Long-term assets total		512,502	542,44
Current assets			
Inventories	19	123,469	147,93
Sales and other receivables	20	80,138	92,83
Income tax receivables	20	806	2,35
Cash and cash equivalents	21	95,495	9,4
Current assets total	21	299,908	252,53
ASSETS TOTAL		812,410	794,98
SHAREHOLDERS' EQUITY AND LIABILITIES			
Shareholders' equity			
Share capital		50,456	50,45
Fair value fund and other funds		30,236	30,12
Translation differences		-3,020	-2,24
Retained earnings		211,661	208,80
Hybrid bond		50,000	
Parent company shareholders' share of shareholders' equity		339,334	287,14
Non-controlling shareholders		384	1,03
Shareholders' equity total	22	339,718	288,18
Long-term liabilities			
Deferred tax liability	18	15,925	16,76
Long-term interest-bearing liabilities	23	241,122	349,44
Long-term non-interest-bearing liabilities	24	7,077	7,39
Long-term provisions	25	7,749	8,09
Pension liabilities	-	4,629	3,48
Long-term liabilities total		276,501	385,1
Current liabilities			
Current interest-bearing liabilities	23	127,399	35,0
-			•
Current non-interest-bearing liabilities	27	68,687	86,3
Current provisions		105	30
Current liabilities total		196,191	121,63
SHAREHOLDERS' EQUITY AND LIABILITIES		812,410	794,98

### Consolidated cash flow statement

EUR 1,000	30.4.2017	30.4.2016
Cash flow from operating activities		
Profit/loss for the period	8,115	-4,444
Adjustments to the result for the period		
Depreciation and impairment	38,040	35,810
Share of results of entities consolidated using the equity method	-1,106	-1,381
Financial income and expenses	5,243	14,082
Income taxes	2,038	3,387
Other adjustments	320	6,608
Adjustments to the profit/loss for the period total	44,535	58,506
Change in working capital		
Increase/decrease in inventories	20,582	11,801
Increase/decrease in sales receivables and other receivables	5,428	-1,388
Increase/decrease in accounts payable and other debts	-14,974	13,701
Change in provisions	78	227
Change in working capital total	11,113	24,341
Interest paid	-8,891	-9,705
Interest received	389	492
Other financial items	2,801	-4,252
Taxes paid	-1,467	-2,467
Cash flow from operating activities	56,596	62,471
		22,
Cash flow from investing activities		
Investments in tangible and intangible assets	-37,920	-38,739
Proceeds from disposal of tangible and intangible assets	34,797	18,457
Acquisition of subsidiaries, net of cash	-1,237	0
Disposal of subsidiaries, net of cash	3,502	3,468
Associates' shares bought	0	0
Associates' shares sold	3,592	0
Other investments	0	-80
Proceeds from disposal of other investments	7,669	3
Loans granted	0	-200
Repayments of loans receivable	5,099	2,604
Dividends received	2,623	48
Cash flow from investing activities	18,125	-14,437
Cash flow from financing activities		
Proceeds from hybrid bond	50,000	
Increase (+)/decrease (-) in short-term loans	-6,246	-3,032
Proceeds from long-term loans	815	70,131
Repayment of long-term loans	-27,077	-96,974
Repayment of finance lease liabilities	-2,065	-933
Dividends paid	-4,000	-12,055
Cash flow from financing activities	11,427	-42,863
Change in cash and cash equivalents	86,148	5,171
Cash and cash equivalents opening balance	9,415	4,147
	86,148	5,171
Change in cash and cash equivalents	00,140	
Change in cash and cash equivalents  Effect of changes in exchange rates	-66	97

### Consolidated statement of changes in shareholders' equity

EUR 1,000	Share capital	Other funds	Translation differences	Retained earnings	Hybrid bond	Total	Non-controlling shareholders	Total
SHAREHOLDERS' EQUITY 1.5.2016	50,456	30,123	-2,242	208,804		287,144	1,039	288,183
Changes in shareholders' equity								
Dividend distribution	0	0	0	-4,000		-4,000	0	-4,000
Transfers between items		111		-111		0		0
Total comprehensive income		0	-778	8,130		7,353	-12	7,340
Other changes								0
Other changes				-1,162	50,000	48,838		48,838
Changes in holdings in subsidiaries				0		0	-643	-643
SHAREHOLDERS' EQUITY 30.4.2017	50,456	30,234	-3,020	211,661	50,000	339,334	384	339,718

EUR 1,000	Share capital	Other funds	Translation differences	Retained earnings	Hybrid bond	Total	Non-controlling shareholders	Total
SHAREHOLDERS' EQUITY 1.5.2015	50,456	30,099	-2,359	225,928		304,151	1,211	305,362
Changes in shareholders' equity								
Dividend distribution	0	0	0	-12,000		-12,000	-55	-12,055
Total comprehensive income			117	-4,392		-4,275	-117	-4,392
Other changes								
Imputed taxes								
Other changes		27		-732		-732		-732
SHAREHOLDERS' EQUITY 30.4.2016	50,456	30,126	-2,242	208,804	0	287,144	1,039	288,183

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### Group key figures 2012-2017

EUR million	2012	04/2014	04/2015	04/2016	04/2017
Turnover	652.9	847.4	486.9	459.8	392.1
Growth %	-7.4	29.8	0.0	-5.6	-5.0
Operating margin (EBITDA)	52.1	110.8	74.7	43.1	56.9
% of turnover	8.0	13.1	15.3	9.4	14.5
Depreciation	-42.0	-54.2	-39.3	-35.0	-35.6
Impairment	-0.6	-3.8	-0.7	-0.8	-2.4
Operating profit (EBIT)	9.1	50.0	36.9	8.6	20.0
% of turnover	1.4	5.9	7.6	1.9	5.1
Operating profit before impairment	9.7	53.9	37.6	9.4	22.4
% of turnover	1.5	6.4	7.7	2.1	5.7
Net financial items	-6.4	-17.2	-13.5	-9.7	-9.8
Profit/loss before taxes	2.7	32.9	23.3	-1.1	10.2
Taxes	3.5	-10.2	-3.6	-3.4	-2.0
Profit/loss for the period	6.1	22.7	19.8	-4.4	8.1
Return on invested capital %	1.3	3.8	5.4	1.2	3.0
Return on invested capital before impairment %	1.4	4.4	5.5	1.4	3.4
Restricted capital on average	680.6	671.4	687.0	695.8	656.9
Turnover of restricted capital (turnover/restricted capital on average)	1.0	0.9	0.7	0.7	0.6
1 ( ) 7	125.6	130.4	164.3	163.4	138.1
Average working capital % of turnover	19.2	15.4	33.7	35.5	35.2
Average working capital % of turnover	667.7	659.4	713.2		633.9
Restricted capital at the end of the year				669.8	
Working capital at the end of the year	116.9	144.2	176.9	140.2	125.6
Gross investments	48.0	65.0	88.4	38.5	39.6
% of turnover	7.4	7.7	18.1	8.4	10.1
Gross investments/depreciation	1.1	1.2	2.3	1.1	1.1
Operating margin	52.1	110.8	74.7	43.1	56.9
+/- Change in working capital	39.1	-27.4	-32.7	39.6	14.7
- Net investments	-26.9	-21.6	-67.1	-21.9	1.6
Free cash flow before taxes	64.4	61.9	-25.1	60.7	73.2
Balance sheet total	801.2	786.9	838.2	795.0	812.4
Shareholders' equity	294.7	305.2	304.4	288.2	339.7
Shareholders' equity (average)	296.8	300.5	297.4	296.1	313.0
Interest-bearing debt	368.2	340.2	408.1	384.5	368.
Interest-bearing net debt	355.9	329.0	393.1	366.6	269.6
Equity ratio %	37.7	40.2	37.8	37.6	43.0
Gearing %	120.7	110.3	128.7	127.2	79.4
Interest-bearing net debt/operating margin	6.8	4.4	5.3	8.5	4.7
Liquidity	2.5	2.5	3.2	2.9	4.4
Return on equity %	2.1	1.3	6.6	-1.5	2.0
Dividend distribution	10.0	12.0	12.0	4.0	0.0
Dividend % of profit *	187.5	52.9	64.8	1.4	0.0
Personnel on average	1,154	1,091	961	914	773
Key figures per share					
Number of shares	30,000	30,000	30,000	30,000	30,000
Earnings/share, EUR *	178	683	617	-146	271
Shareholders' equity/share, EUR	9,483	9,763	10,106	9,571	11,31
Dividend/share, EUR	333	400	400	133	(11,011

<sup>\* =</sup> profit attributable to owners of the parent company Note! The financial year 1.1.2013–30.4.2014 was 16 months long.

### Principles for calculating key figures

EBITDA	=	Operating profit + Depreciations and impairment + / - Shares of associates' results	
Working capital	=	Inventories + Non-interest-bearing receivables of businesses - Non-interest-bearing debt	
Restricted capital	=	Fixed assets of businesses + Working capital	
Turnover of restricted capital	=	Turnover rolling 12 months  Restricted capital (on average)	
Return on invested capital % (ROIC)	=	Operating profit rolling 12 months  Restricted capital (on average)	X 100
Return on equity %	=	Profit before taxes rolling 12 months - income tax  (Shareholders' equity + minority interest) on average	X 100
Liquidity	=	Short-term on-interest bearing receivables  Short-term non-interest-bearing liabilities	
Equity ratio %	=	Shareholders' equity + minority interest + capital loan  Balance sheet total – advances received	X 100
Equity ratio %  Interest-bearing net debt	=		X 100
		Balance sheet total – advances received	X 100
Interest-bearing net debt	=	Balance sheet total – advances received  Interest-bearing debt - Interest-bearing loans receivable - Cash and cash equivalents  Interest-bearing net debt	
Interest-bearing net debt  Gearing %	=	Balance sheet total – advances received  Interest-bearing debt - Interest-bearing loans receivable - Cash and cash equivalents  Interest-bearing net debt  Shareholders' equity + minority interest	
Interest-bearing net debt  Gearing %  Free cash flow before taxes	=	Balance sheet total – advances received  Interest-bearing debt - Interest-bearing loans receivable - Cash and cash equivalents  Interest-bearing net debt  Shareholders' equity + minority interest  EBITDA + / - Change in working capital – net investments	
Interest-bearing net debt  Gearing %  Free cash flow before taxes  Earnings / share	= =	Balance sheet total – advances received  Interest-bearing debt - Interest-bearing loans receivable - Cash and cash equivalents  Interest-bearing net debt  Shareholders' equity + minority interest  EBITDA + / - Change in working capital – net investments  Profit attributable to owners of the parent company / Number of shares	



#### Vapo Oy

Yrjönkatu 42, Jyväskylä P.O.Box 22 FI-40101 JYVÄSKYLÄ FINLAND

+358 20 790 4000 www.vapo.com

Twitter: @VapoEnergia LinkedIn: Vapo Oy