

Vapo Group
Corporate Responsibility Report
2018 in brief

Sustainable
Everyday
Living

Vapo in Brief

Vapo Group is an international company. Through our businesses, we promote clean, local and water-conserving food production, supply local fuels and provide heat and steam production solutions. We also develop new products for cleaning contaminated environments and create wellbeing by providing jobs, recycling and creating comfortable living environments.

Our business is divided into three divisions: Energy, Grow&Care and New Businesses. The Supply Chain Management function used by all three business divisions manages peat production in various countries, logistics services and strategic procurement, among other things. The Group's strategic target is zero workplace accidents in all operations. Group services are produced by the Group Services function.

Grow&Care division is Europe's leading producer of home gardening and professional growing media. Our product selection also includes products targeted at home gardeners and landscapers. Our other sectors are recycling and composting as well as bedding peat.

The Energy division is a partner for our customers in a changing energy market. We provide renewable energy and energy peat as well as tailored energy solutions for the development of industrial and municipal infrastructure.

New Businesses division uses its in-house product development activities to create new products and innovations based on refining peat and other natural materials into air and water purification products, for instance. Examples of product development include the fibre business that was transferred to the Grow&Care division and the Carbons business that is based on the production of activated carbon.

Vapo Group companies include Vapo Oy, Kekkilä-BVB Oy, Kekkilä Oy, BVB Substrates B.V., G&C Materials Oy, Hasselfors Garden AB, Kekkilä Iberia S.L., Oü Kekkilä Eesti, Neova AB, AS Tootsi Turvas and Salon Energiantuotanto Oy. Our head office is located in Jyväskylä, Finland. We employ a total of approximately 1,000 people in Finland, Sweden, Estonia, the Netherlands, Spain, Germany and Australia.



Highlights in 2018

The implementation of Vapo's new strategy is well underway. The monthly volumes of the Group's growing media business have doubled as a result of the BVB transaction carried out in October. While energy peat will still be needed well into the future, Vapo will grow as a provider of renewable energy and tailored energy solutions.

Peat Ensured Heating for Cities

Extra deliveries of peat ensured that the heating needs of cities were met during the cold winter. Peat was needed at levels exceeding the contractual volumes to ensure that combined heat and power plants could operate at full capacity in the latter part of the winter season.

Vapo's First Activated Carbon Facility

Vapo is building an activated carbon production facility in Ilomantsi, creating some 50 new jobs in the process. Activated carbon can be used in the purification of air and water, industrial processes and food production, among other things.

Energy from Oat Hulls

Vapo built a heating plant in Utajärvi that burns oat hulls to generate heat and steam for a Kinnusen Mylly oat mill and an animal feed factory. The excess heat is channelled into the district heating network.

Heat and Steam as a Service

To meet the needs of its confectionery factory in Lappeenranta, Vapo's customer Fazer buys heat and steam as a service from Vapo's new natural gas plant.

Renewable Moss as a Component in Growing Media

Moss improves the structure and wetting properties of the growing media in Kekkilä's new AirBoost products. Sphagnum moss is collected responsibly, without the need for ditching, primarily from very barren ditched peatlands.

Vapo and Netherlands-Based BVB Established a Joint Venture

The growing media company established by the transaction is Europe's leading and most versatile company in the market for professional growers and home gardeners.

Excellent Peat Production During the Hot Summer Season

The production volumes of high-quality peat exceeded targets. Buffer stocks ensure the supply of fuel in the years to come.

The Reutilisation of Ash from Vapo's Heat and Power Plants Has Increased

The reutilisation of ash in Finland has increased from 46% to 93%. At the same time, the landfill disposal of ash has been reduced from 14% to 4%.

Vapo Sold 20 Wetlands

Vapo sold 20 wetlands to nature enthusiasts and hunters. The total area of the sold wetlands is 760 hectares. Sales will continue in 2019.

The Areas in Which Our Performance Fell Short of Our Targets in 2018

The Number of Workplace Accidents

The Group's strategic target is zero workplace accidents in all operations. A total of 21 workplace accidents occurred in 2018, with nine of them resulting in sickness-related absence.

CEO's Review

Responsibility is at the core of the success of our strategy.

Vapo Group's business strategy today is very different from what it was only a few years ago. This does not, however, mean that the strategy has been drastically and quickly changed just for the sake of changing it. On the contrary. The starting point for the strategy, which has now been in use for a year, was to understand and analyse global megatrends, assess the Group's own resources and define areas for development.

Our strategy is ultimately quite simple. The urbanisation and digital transformation of our world are changing customer behaviour, consumer demand and our operating environment at a tremendous rate. In addition, climate warming has led to a nearly exponential increase in expectations regarding the sustainability of businesses and their products and services as well as the transparency of business operations, making responsibility the most important driver in business. Business must be based on responsibility. Otherwise, the business will end. The IPCC report published in autumn 2018 regarding the warming of the climate and the measures required in response has dramatically altered our operating environment. At the same time, it has provided support for our strategy. For a year now, we have operated under a new

organisational structure while acquiring a large number of new talents and putting our strategy into action. Our strategy works.

Urbanisation is increasing the demand for clean local food in particular. The digital transformation creates opportunities for developing our own operations and more accurately predicting customer behaviour, markets and the future in general. Climate warming, for its part, has a direct impact on consumer behaviour as well as the actions of regulators and legislators.

Vapo Group made the choice to move the growing media business – which is key to the production of local food – from the fringes to the very core of the Group's strategy. With its focus on operating transparently, responsibly and actively in a growing market, the strategy has a very good chance of being successfully executed, perhaps even faster than originally planned. One indication of this is the transaction announced in October 2018 that saw Vapo Group's subsidiary Kekkilä Oy and the Netherlands-based BVB-Substrates B.V. join forces to become the leading player in its field in Europe. The other cornerstones of the new strategy are to develop the energy business to increasingly shift from fuel sales to the provision of services and tailored energy solutions as well as producing

entirely new products from peat and other natural materials.

Perhaps the best example of the Energy division's new direction is the solution built around an oat mill in Utajärvi, which is a town located near Oulu. The energy plant used by the Kinnusen Mylly oat mill and animal feed factory needed to be modernised.

Instead of simply modernising the heating plant, the solution was sought using a more comprehensive sustainability perspective. Vapo built a new heating plant for the oat mill and animal feed factory, which produces the heat and industrial steam required by the production facility as a service. Another innovation is that the plant



uses oat hulls, a by-product of the mill, as its fuel. As the energy content of the oat hulls exceeds the mill's own needs, Vapo acquired the municipal district heating network and now produces district heating by burning oat hulls. The heating plant, the supply of heat and steam to the mill and production plant, fuel supply and the district heating network are now controlled from the remote operations centre located 600 kilometres away in Vantaa's Tikkurila district. This is a practical example of Vapo's sustainability-driven energy business, which is aimed at maximising the opportunities presented by the digital transformation, duplicating the economies of scale arising from the ownership of dozens of plants and also duplicating human skills and competencies. And, of course, the purpose of all this is to satisfy customer expectations regarding high quality, delivery reliability and cost-efficiency.

A third example of the implementation of Vapo's responsible strategy is the production plant currently under construction in Ilomantsi. The facility, which is largely based on Vapo's own product development and innovations, will produce activated carbons from peat and other natural materials. These are all examples of the implementation of the new strategy during the past 12 months.

Vapo Group's new strategy represents a major change, and putting it into practice throughout tens of organisational units and among all of the Group's personnel has been an extensive process. A large

tour was organised in May-June 2018 to communicate the changes. At the same time, various working groups continued to work on the values that support the implementation of the new strategy. Completed in the autumn, this process was followed by the second stage of implementation, during which all of the Group's employees received training and were engaged in the company's value process.

Vapo Group's values are:

- Focus on customer success
- Achieving together
- Courage to renew
- Trust through respect

The values emphasise collaboration, the need for change and keeping the customer at the centre of everything we do. They also underscore the view that trust is earned through our actions.

The company's strategy has proved to be effective. The values have also been embraced by the organisation and they support the implementation of the strategy. What, then, is our vision? We came up with a slightly different answer to this question than normal. We have three very different businesses, but they all share the same operating environment, strategy, values and responsibility requirements. With that in mind, we defined a Group-level Purpose Statement, which is an even higher-level statement than a vision. As we operate in eight countries and in at least as many



We strive systematically and continuously towards a future that is as responsible as possible.

languages, we decided to express our Purpose Statement in English.

Sustainable Everyday Living is now the guiding principle of all of our operations. We have a strong presence in the daily life of people and our customer companies. We strive systematically and continuously towards a future that is as responsible as possible.

We provide work and jobs not only to our own employees, but also to our subcontractors and partners. We want to be a company that takes good care of its personnel and subcontractors. A company, that looks after the safety and competence of its employees. We provide products

and services for safe food production, the construction of comfortable living environments and a wide range of energy needs. We strive to do all this while minimising our environmental impacts.

As part of the change in our strategy, we shifted from a structure built around country-specific companies to a single company model. This has caused – and will continue to cause – significant needs for changes in many areas, including the reorganisation of our reporting. This is our second Group-level corporate responsibility report in which we discuss our targets in the areas of social, economic and environmental responsibility. We have not yet reached our destination, but our target is clear. *Sustainable Everyday Living*.

Vesa Tempakka
Toimitusjohtaja



Responsible Operating Principles, Transparent and Active Communications – Targets and Results 2018–2021

ASPECT	TARGETS FOR 2018–2021	RESULTS IN 2018
Business ethics and anti-corruption	Organising training on anti-corruption activities	Included in Code of Conduct training. All of the Group’s personnel receive regular training on the Code of Conduct
	All Vapo Group employees regularly complete a training course on the Code of Conduct	Three out of four of the personnel have completed training on the Code of Conduct. The online training is mandatory for all personnel. New employees are required to complete the training within three months. Supervisors receive monthly reports on course completions
	All of Vapo’s strategically significant suppliers regularly complete a training course on the Code of Conduct	The Supplier Code of Conduct is currently being updated. An online training course for suppliers will be created based on the new guidelines. At a minimum, strategic suppliers should complete the course once every two years. The online course based on the previous Supplier Code of Conduct was not rolled out, but suppliers have been familiarised with ethical guidelines during contract negotiations and the Group also has separate application guidelines for this purpose
Business transparency	Reporting in compliance with the GRI CORE level	Vapo Group’s corporate responsibility reporting is based on the GRI framework. In reporting on the economic, environmental and social impacts of its operations, Vapo applies the GRI Standards Core scope and the Electric Utilities Sector Supplement. This corporate responsibility report covers the entire Vapo Group except for BVB, which was acquired at the turn of the year 2018-2019. The reporting is based on a materiality analysis that was used to determine the views of Vapo’s stakeholders and the company itself regarding the most material corporate responsibility topics related to the company’s operations

Corporate Responsibility Programme

“Sustainable growth and wellbeing from nature” is the first corporate responsibility programme that covers the entire Vapo Group, is based on a materiality analysis on responsibility carried out in autumn 2017.



We take care of nature

- Lifecycle impact of products and solutions
- Emissions into waterways from peat production
- Energy efficiency
- Airborne emissions
- Biodiversity



We develop continuously

- Delivery reliability and the security of supply by making use of digitality
- Customer satisfaction
- Innovations for sustainable development
- Development of competence



We guarantee quality and safety

- Quality and cost-efficiency of products and services
- Health and safety of personnel
- Health and safety of contractors
- Assessment of suppliers according to relevant criteria concerning environmental and social aspects



We create wellbeing

- Job satisfaction and wellbeing of personnel
- Equality and diversity
- Local employment effects
- Economic impact

Responsible operating principles, transparent and active communications

Our policies, commitments, reporting and stakeholder communications guide our operations.

Responsible Operating Principles

Vapo's new responsibility programme supports the company's new strategy, which was announced in spring 2018.

According to our strategy, we satisfy the basic needs of our customers:

- We promote healthy and local food production
- We are part of the solution to the world's freshwater problem
- We provide local heating production
- We offer new solutions for cleaning up polluted environments
- We create wellbeing

We Repeated Our Materiality Analysis

We conducted a new materiality analysis to assess our stakeholders' views regarding the themes of Vapo's corporate responsibility programme. The themes of the materiality analysis were selected based on Vapo's corporate responsibility programme. The perceived importance of ethical and legal compliance increased and the importance of environmental issues decreased compared to the previous materiality analysis, conducted in 2015 and limited in scope to Vapo's Finnish companies. The significant environmental investments made by Vapo Group in recent years and the Group's environmental management were widely praised by the interviewees, which was also reflected in environmental issues being assigned lower significance in their responses.

The significance of social responsibility increased. Products and services as well as customer satisfaction also grew in importance in the analysis.

The materiality analysis was based on an online survey and interviews. The Group Management Team also validated and assessed the material themes. The online survey was sent to 200 representatives of various stakeholders. Nearly 100 respondents completed the survey, representing employees, customers, Vapo Group's Board of Directors, partners and the authorities. The online survey was also complemented by interviews with the representatives of 13 different stakeholders.

In their responses, all of the stakeholders emphasised the importance of legal compliance and ethics in operations. The interviewees attributed the importance of legal and ethical compliance to the existence of contradicting views related to peat, although the stakeholders' default assumption and belief is that Vapo complies with all applicable legislation in its operations. The responses by customers and partners highlighted the importance of delivery reliability and the security of supply as well as the quality and reliability of products and services. Employees emphasised occupational health and

safety more than other stakeholders.

Customer satisfaction and the impact of peat production on waterways were also highlighted in the responses.

Defining the Themes, Vision and Targets

Vapo Group's work on the corporate responsibility programme is led by a steering group, working group and the project teams of five key projects along with their project managers. The key projects that are monitored on a monthly basis are as follows:

- Implementation and monitoring of the corporate responsibility programme
- The environment
- Safety
- Sustainable innovations
- Responsibility communications and stakeholder relations

Vapo has seen it necessary to update the current corporate responsibility programme because the operating environment is changing and the Group's strategy, which was revised in 2018, is now in the implementation phase. The corporate responsibility programme is currently being updated by the steering group and the aim is to have a proposal for the new programme completed within

summer 2019. The programme defines long-term targets and the goal is to engage in increasingly comprehensive reporting on responsibility from one year to the next and to actively communicate on responsibility with various stakeholders. A further aim is to more closely integrate Kekkilä-BVB's responsibility targets with the Group's responsibility targets as a whole.

The short-term targets of the current corporate responsibility programme are still current. Vapo has an absolute zero tolerance policy regarding corruption, all types of discrimination and violations of the law, and these areas will continue to be monitored going forward. Vapo's Code of Conduct was updated in early 2019. The updated Code of Conduct will be put into practice by various methods, including training aimed at ensuring commitment to the Code of Conduct throughout the Group's personnel. The Supply Chain Code of Conduct will also be updated in 2019.

Management of Corporate Responsibility

Corporate responsibility at Vapo Group and the responsibility strategy are led at the Group Management Team level by the Chief Supply Chain Officer, with the

Director, Group Environment and Sustainability being in charge of implementation. Business-level management is in charge of the practical measures related to responsibility in each business area. The Vapo Group Chief Financial Officer is responsible for reporting on economic responsibility, the Vapo Group Environmental Director is responsible for areas related to environmental responsibility and the Vapo Group Chief HR Officer is responsible for areas related to social responsibility.

The corporate responsibility report is reviewed and approved by Vapo's Board of Directors and the Audit Committee. The Director, Group Environment and Sustainability is in charge of the planning, composition and production of the corporate responsibility report. The Group's corporate responsibility policy was approved in spring 2019. The corporate responsibility policy covers the Group's environmental, occupational health, occupational safety and quality policy. Training on the corporate responsibility policy will be arranged during 2019.

The UN Sustainable Development Goals and Vapo Group

Vapo Group is committed to supporting the UN Sustainable Development Goals (SDGs). The SDGs most relevant to Vapo are:

- Zero hunger
- Clean water and sanitation
- Affordable and clean energy
- Decent work and economic growth
- Sustainable industry, innovation and infrastructure
- Climate action
- Life on land



Management Approach

	We take care of nature	We develop continuously	We guarantee quality and safety	We create wellbeing
Management approach target	To develop and manage Vapo Group's business operations responsibly, taking stakeholder expectations into consideration			
Policies and commitments	Vapo's operating principles, Code of Conduct, internal control, financial policies and operating principles			
	Corporate responsibility policy, Procurement policy, Environmental strategy 2020	Innovation and IPR policy, Procurement and sourcing policy	Corporate responsibility policy, Risk management policy, Data security policy, Procurement and sourcing policy	HR policy, Financial policies and operating principles
Targets	We take care of nature - targets for 2018-2021	We develop continuously - targets for 2018-2021	We guarantee quality and safety - targets for 2018-2021	We guarantee quality and safety - targets for 2018-2021
Responsibilities and resources	At Vapo Group, the CEO is in charge of corporate responsibility and its implementation. The Group Chief Supply Chain Officer is responsible for developing the corporate responsibility strategy. Business-level management is in charge of the practical measures related to responsibility in each business area			
	The Director, Group Environment and Sustainability is in charge of the coordination of the Group's environmental strategy and environmental affairs. Each of Vapo's businesses has a person responsible for environmental affairs who is in charge of environmental management and stakeholder cooperation with regard to environmental issues	Responsibility for customer satisfaction is assigned to business units across national boundaries. Vapo Ventures develops and commercialises Vapo's new businesses. Ventures is also responsible for the Group's innovation and IPR management. These activities are guided by the Group's Innovation and IPR policy (Vapo's Board of Directors 8/2016). The Ventures unit is led by a Business Area Director	The Director, Group Operational Excellence & Sustainability is in charge of the development of Vapo Group's quality management system, the coordination of quality-related issues as well as the development and coordination of safety. The Group's Chief Procurement Officer is responsible for Vapo Group's procurement and purchase policy	The Group's Chief HR Officer is responsible for human resource management and its development at Vapo Group. Each of Vapo's businesses has its own HR Officer, and there are local HR units responsible for country-specific legal obligations
Feedback mechanisms	Environmental feedback and irregularities are handled by the business area in question and reported to the Board of Directors	Customer satisfaction survey	Customer complaints and customer satisfaction surveys (NPS, Net Promoter Score) are processed by the business area in question. Workplace accidents are processed by all management teams and reported to the Board of Directors. Safety observations are processed by the safety network. Internal and external audits and quality observations are processed by the quality network	Personnel survey
Assessment of management approach	External and internal audits. Management reviews			

Stakeholder Engagement Is Vital

Our strategy is based on satisfying the basic needs of people and communities. It is vital for us to engage in cooperation with our stakeholders. Stakeholder engagement starts at the local level and extends all the way to international activities across national boundaries.

Dialogue, feedback and good cooperation are the key methods for promoting mutual understanding between stakeholders and Vapo Group. The Group aims to build

networks with important parties as well as collect and share information that is relevant to the Group's business and customers. Feedback from stakeholders is one of the inputs considered in the development of products and services, and it also influences how the company operates. Vapo also monitors and evaluates public discussion.

Stakeholders are defined as those parties that are affected by Vapo Group's operations and who have an impact on Vapo

Group. Vapo's most important stakeholders are customers, owners, peatland lessors and landowners, researchers, personnel and production and transport contractors along with their personnel.

The Vapo Group Code of Conduct was updated in spring 2019. It covers the entire Group and is used as an appendix in customer agreements. The requirements concerning the responsibility of operations apply not only to Vapo Group's own person-

nel, but also the entire supply chain, from subcontractors to customer deliveries.

The significance of international cooperation is constantly growing in response to the internationalisation of the markets, research and regulation. Vapo Group companies in various countries are active members of the International Peatland Society (IPS), for example. International advocacy work related to the energy and growing media businesses is focused on EU bodies in Brussels.

Key stakeholders	Contact channels	Stakeholder expectations	Examples of responding to expectations during the 2018 reporting period
Personnel	Skype meetings, daily communication, Yammer, Intra, workspaces, website, personnel satisfaction survey, development discussions, seminars, internal training, online training	Participation in shared affairs, the flow of information, deciding on shared issues, planning the future, occupational health and safety, sharing knowledge and expertise	Personnel magazine, Intra, monthly meetings, Vapo Group Studio, Skype meetings, safety observation tools such as Nappi and Obs, MMP training programme, online training
Customers	Meetings, phone calls, e-mail, customer magazine, events, customer satisfaction survey, website, digital service channels, customer seminar	High-quality, competitive and responsibly produced products and services. Key factors from the customers' perspective include delivery reliability and the security of supply as well as the quality and reliability of products and services	Annual customer satisfaction survey, customers addressed in the Annual Report and the Corporate Responsibility Report, mobile portal for district heating customers, online store for consumer customers
Owners	General Meeting, Board of Directors' meetings, Supervisory Board meetings, the annual owner seminar, regular meetings between the CEO, CFO and representatives of the owners, website, Annual Report, Corporate Responsibility Report	Stable dividend pay-out capacity, increase in shareholder value, ensuring responsibility in operations. Key aspects include the importance of legal and ethical compliance	The annual owners' seminar, reporting on responsibility commitments in the Board of Directors' meetings, the corporate responsibility programme
Public authorities	Annual meetings, supervision inspections, cooperation groups on the management of waterways, one-to-one meetings	Compliance with environmental permits and legislation, open and truthful communication	Annual reporting of the information stipulated by environmental permit decisions. Cooperation with the authorities; for example, in the form of various notifications, inspections and annual meetings. Active participation in cooperation groups on the management of waterways, among other things
Peatland lessors and landowners	Customer and stakeholder magazine "Polte", Annual Report, customer newsletters when necessary, personal correspondence, website	Obtaining information on the company's strategy and operating policies, ensuring responsibility in operations and future yield expectations	Providing information via the website and distributing the customer magazine Polte

Key stakeholders	Contact channels	Stakeholder expectations	Examples of responding to expectations during the 2018 reporting period
Scientists, researchers, research institutes	Publications, meetings, joint projects, website	Mutually beneficial cooperation, establishing new research projects and taking advantage of them in business and within the scientific community	Vapo Fibers: Oulu University of Applied Sciences (OAMK)/PaiBiRa project: bio-based raw materials to serve the changing needs of the construction industry and the Business Finland Innovative Bioproducts growth programme. Vapo Ventures: Laboratory and research collaboration with the University of Jyväskylä
Schools and students	Organising student visits, Me & MyCity cooperation, Energy in Finland school project, partner classes, website	Obtaining information on peat production and the company's other operations	Student visits to production areas and other operating locations, visits to schools by Vapo's representatives
Non-governmental organisations	Open house events at peat production sites, website	Distributing up-to-date information on the company's environmental responsibility strategy and engaging in open dialogue with NGOs. The key aspect is legal and ethical compliance	Open house events at peat production sites as well as heat and power plants
HR partners and external stakeholders	Agreed-upon forums and meetings, website	Understanding Vapo's business and knowing Vapo's targets, cooperation models	Regular meetings with HR partners, such as the occupational health service provider
Suppliers, service providers, contractors	Industry events and seminars, training and feedback events for entrepreneurs, cooperative development projects with suppliers	Developing a competitive and profitable operating environment in supply chains, creating business and investment opportunities for entrepreneurs, cooperation relationships that are mutually beneficial, flexible and responsive	Entrepreneur training and production feedback events in the autumn and spring, regional contractor events in Finland, customer service training on enhanced pellet services
Political decision-makers	Regular face-to-face meetings with Members of Parliament, their assistants and parliamentary groups and maintaining contact with the background influencers and officers of political parties, meetings with municipal decision-makers and having them visit production sites, annual seminar, stakeholder magazine, website	Access to up-to-date information on Vapo's business strategy and the progress of environmental responsibility projects	Stakeholder seminar in April 2018, met with Members of Parliament, representatives of youth organisations, assistants and party officers. Visits with municipal decision-makers were also organised
Citizens, media, labour market organisations	Cooperation days and meetings, joint projects, website	Exchanging information, establishing rules and trust, legal and regulatory compliance, open and truthful communication	Open house events, open stakeholder communication, reports and audits, website

We Take Care of Nature - Targets and Results 2018-2021



SECTION	TARGETS FOR 2018–2021	RESULTS IN 2018
Lifecycle impact of products and solutions	We will optimise material efficiency and reduce raw material losses	In 2018, we focused particularly on increasing the reutilisation of ash
	We will manage the origin chain in accordance with the PEFC certificate	The proportion of certified raw material was 87.39% in 2018
	<p>We will increase recycling and reduce the amount of landfill waste:</p> <ul style="list-style-type: none"> • The proportion of ash from power and heating plants that ends up in landfills will decrease to 13% by 2020 • The recovery rate of stack plastic from peat production will reach 100% by 2021 • We will utilise ash generated in energy production as fertiliser and in soil construction 	The landfill disposal rate of ash fell to a level as low as 4% in 2018, which can be considered a tremendous achievement. The majority of the ash was reutilised in soil construction or as forest fertiliser. The ash from all of Vapo's power plants was reutilised in 2018. The recycling rate of stack plastic from peat production was only 9%. Partners were sought in 2018 to develop the reutilisation of stack plastic. Finding partners has proved to be challenging thus far, and more focus will be placed on identifying alternative materials in the future
Emissions into waterways from peat production	We will monitor the load on waterways from our operations, exceeding the requirements stipulated by the authorities	Drone technology was introduced in the environmental inspections of peat production areas in 2018. In addition to environmental inspections, drones can be used in taking stock, for example. In addition to the monitoring of emissions and waterways by consultants, Vapo takes additional samples during periods of high flow and heavy rain as well as in problem situations.
	We will reduce the load on waterways from our operations	In 2018, emissions into waterways from Vapo's peat production operations in Finland were significantly reduced from the previous year with respect to solid matter, total phosphorus and total nitrogen. We also continued to enhance water treatment and pilot new treatment methods at our peat production sites
Energy efficiency	We will improve energy efficiency	<p>The development of energy efficiency is one of Vapo's key goals, taking into account both the Group's environmental impacts and offering energy efficiency as a service to our customers. With respect to energy production, Vapo has continued to implement an energy efficiency development programme for the 150 power and heating plants owned by the Group. In addition, Vapo helps develop its customers' energy efficiency by providing various energy solutions. A number of development initiatives were implemented last year at the power plants operated from Vapo's remote operations centre with the aim of improving their coefficient of efficiency. Vapo's plant operating service gives Vapo's customers access to extensive experience in operating plants at a high level of energy efficiency and cost efficiency. The energy efficiency of Vapo's heat and power plants has also been increased by the deployment of heat-capturing flue gas scrubbers, district heating batteries and heat pumps. Investments have also been made in optimising the district heating network and minimising heat loss</p> <p>Vapo has joined the Action Plan for Energy Production under Motiva's Energy Efficiency Agreement for the period 2017–2025. We have set a quantitative target for improving the efficiency of our energy consumption and we will take action to achieve the target. In 2018, we implemented several measures at our power plants in Finland to accomplish the target. The actions we have taken have been reported to Motiva</p>

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Emissions	We will replace fossil fuels, oil and coal, with local fuels and energy solutions	<p>The development of energy efficiency is one of Vapo’s key goals, taking into account both the Group’s environmental impacts and offering energy efficiency as a service to our customers. With respect to energy production, Vapo has continued to implement an energy efficiency development programme for the 150 power and heating plants owned by the Group. In addition, Vapo helps develop its customers’ energy efficiency by providing various energy solutions. A number of development initiatives were implemented last year at the power plants operated from Vapo’s remote operations centre with the aim of improving their coefficient of efficiency. Vapo’s plant operating service gives Vapo’s customers access to extensive experience in operating plants at a high level of energy efficiency and cost efficiency. The energy efficiency of Vapo’s heat and power plants has also been increased by the deployment of heat-capturing flue gas scrubbers, district heating batteries and heat pumps. Investments have also been made in optimising the district heating network and minimising heat loss</p> <p>Vapo has joined the Action Plan for Energy Production under Motiva’s Energy Efficiency Agreement for the period 2017–2025. We have set a quantitative target for improving the efficiency of our energy consumption and we will take action to achieve the target. In 2018, we implemented several measures at our power plants in Finland to accomplish the target. The actions we have taken have been reported to Motiva</p>
	We will reduce transport emissions	In 2018, Vapo Group continued to implement development projects focused on shifting to EU5 or newer vehicles and increasing the capacity of the transport vehicles. The Group also launched several new projects aimed at reducing the environmental impacts of transport operations, such as “From wheels to water” and “From wheels to rail”
Biodiversity	We will protect biodiversity through the active use of cutaway peatlands	<p>Mires released from peat production are subsequently used to grow carbon-sequestering forests, build wetlands that increase biodiversity as well as develop other types of areas that are suitable for versatile recreational use. A total of 339 hectares of cutaway peatlands were assigned for use in forestry and 195 hectares for building wetlands. In addition, a total of 406 hectares of peatlands were sold for protection purposes during the year</p> <p>A Master’s Thesis written in cooperation with Vapo in 2018 sought to take stock of the current status of approximately 5,300 hectares of peatlands released from peat production by Vapo in 2013–2018 for the purpose of reforestation. The aim was to examine seedlings and evaluate factors that influence the success of their emergence. The findings were that the natural renewal of ash-fertilised cut-away peatlands usually achieves the desired density of seedlings and that successful drainage is the most important factor in the successful emergence of seedlings</p>
	We will participate in at least one voluntary watercourse restoration project annually	Vapo participated in an initiative aimed at increasing the value of the Iijoki watercourse. The aim of the Iijoki watercourse vision and action plan is to increase the value of the Iijoki watercourse through the restoration of migrating fish and the improvement of water quality as well as to build trust and increase interaction between the parties operating in the Iijoki area. The implementation of the Iijoki watercourse vision and action plan during the period 2019–2023 was ensured by the signing of the Iijoki Agreement in Oulu in early 2019. The parties to the agreement are PVO-Vesivoima Oy, Metsähallitus, the peat producers Vapo Oy and Turveruukki Oy, the North Ostrobothnia Centre for Economic Development, Transport and the Environment and the Iijoki watercourse area municipalities of Ii, Oulu, Pudasjärvi and Taivalkoski

Vapo Oy's Environmental Targets 2014-2018

Topic	Target	Results in 2018
Sustainable use of natural resources	<ul style="list-style-type: none"> We will monitor the load on waterways from our operations We will reduce the load on waterways from our operations We will protect biodiversity through the active use of cutaway peatlands We will manage the origin chain in accordance with PEFC and FSC certification We will use certified wood raw material in pellet production Sustainable use of natural resources 	<ul style="list-style-type: none"> In the emissions monitoring of peat production in Finland, 13,290 samples were collected and 106,341 analyses were performed Emissions into waterways from peat production in Finland decreased from the previous year. Solid matter load (t/a) decreased by 28%, phosphorus load (t/a) by 36% and nitrogen load (t/a) by 39% In Finland, some 271 hectares of land was reforested, and wetlands were built in an area totalling 152 hectares The wood business and the pellet business are PEFC certified The raw material used in pellet production was 87% certified. The wood raw materials used by the Fuels business were 47% certified Participating in wetlands restoration research in Sweden in cooperation with the local municipality and county council. The project has received funding from the Swedish Environmental Protection Agency (LONA grant) The material recovery of stack plastic used in the Group's operations in Finland fell short of the targets. Only 9% of stack plastic was reutilised At the Kekkilä production facility in Haukineva, all round baling pallets have been replaced by recycled pallets and the use of bioplastics has been increased. At the composting plants in Nurmijärvi, wastewater has been reduced, while at the composting plant in Teuva, the efficiency of water treatment processes has been improved
Reduction of greenhouse gas emissions	<ul style="list-style-type: none"> We will transform cutaway peat production areas into carbon sinks such as forests and fields We will replace fossil fuels, oil and coal, with local fuels and energy solutions We will improve energy efficiency The average coefficient of efficiency of power plants will exceed 87% We will reduce energy consumption We will reduce transport emissions 	<ul style="list-style-type: none"> Some 271 hectares of land was reforested in Finland The use of fuel oil decreased from the previous year at Vapo Oy's power plants in Finland Neova did not achieve its oil consumption targets due to problems at the Valåsen plant. The rate of oil consumption was 2% (MWh/MWh of energy supplied) New biofuel boilers were installed at several locations in Sweden. They increase the efficiency of energy production and replace natural gas by bioenergy The target (86%) was not achieved for Neova's plants. The energy efficiency rate was 83% The coefficient of efficiency of the Group's power plants in Finland was 87% The electricity consumption of Vapo's Finnish operations increased by 15% compared to the previous year The CO2 emissions arising from fuel transport increased by 20% year-on-year due to an increase in transport volume. However, relative emissions decreased slightly compared to the previous years and amounted to approximately 43 grams of CO2 per 1,000 kilometres. In Sweden, the aim is to modernise the vehicle fleet used in peat production. The current replacement rate of 73% is close to the target of 75%
Improving material efficiency	<ul style="list-style-type: none"> We will optimise material efficiency and reduce raw material losses 	<ul style="list-style-type: none"> At pellet factories, the raw material loss rate increased to 3.8% from the previous year's level of 3.5%. The use of recycled materials was increased in the Kekkilä Park business by increasing the proportion of compost and forest industry by-products without any adverse effects on product quality
Waste	<ul style="list-style-type: none"> We will reduce the amount of landfill waste 	<ul style="list-style-type: none"> The amount of landfill waste from Vapo's Finnish operations decreased by 75% from the previous year

We Take Care of Nature

Lifecycle Impact of Products and Solutions

From the circular economy perspective, the key environmental aspect is the recycling of ash from power plants, stack plastic from peat production sites and the plastic used in packaging. Some 90% of the waste generated in 2018 was recycled.

For ash from power plants, the aim is to minimise the landfill disposal of ash. The reutilisation of ash increased significantly. The majority (93%) of the ash generated in 2018 was reutilised in soil construction or as forest fertiliser. The landfill disposal of ash was reduced to 4% from 14% in the previous year.

For stack plastic, the aim is to reduce the amount of plastic that ends up in landfills. The material reutilisation of stack plastic fell short of targets, with only 9% of stack plastic reutilised as material. The stack plastic handling instructions for peat production sites will be updated to enhance plastic recycling.

Strategic lifecycle assessments (SLCA) were conducted in 2018 for the main products of each business area. Lifecycle analysis is a qualitative assessment that provides a strategic review of the social and ecological sustainability impacts of a product over its entire lifecycle.

A survey was conducted in autumn 2018 regarding the current status and future of the circular economy at Vapo. Following the completion of the survey, the development of circular economy solutions began under Vapo's innovation function.

Emissions into Waterways from Peat Production

The number of samples and analyses under Vapo Oy's emissions monitoring programme in 2018 decreased significantly compared to the previous year. In 2018, emissions into waterways from Vapo's peat production operations in Finland were significantly reduced from the previous year with respect to solid matter, total phosphorus and total nitrogen. The lower emissions were partly due to the weather conditions during the summer and autumn, which were dry and featured low rainfall.

In addition to the monitoring of emissions and waterways by consultants, Vapo takes additional samples during periods of high flow and heavy rain as well as in problem situations. A total of 77 such samples were taken in 2017.

Vapo has measured the load on peat production areas using continuously operating measuring equipment for three years. The continuous measurement will be discontinued in 2019.

In 2012, Vapo made a commitment to ensuring that, from the year 2016 onwards, the solid matter and humus load of new peat production areas would be lower than that of the same bog before peat production. The decision was made to discontinue the commitment because no viable techniques were found.

Drone technology was introduced in the environmental inspections of peat production areas. The aim of the project was to accumulate experiences and determine how drones could be used in the environmental inspections of peat production sites.

Management and Organisation of Environmental Issues

The management of environmental issues is guided by Vapo's own local environmental programmes and environmental policy. In late 2018, Vapo Group began drafting a Group-wide environmental strategy.

In 2018, the environmental authorities made 137 inspection visits to Vapo Group's peat production areas. The inspectors recorded a total of nine observations involving minor violations. The observed irregularities were rectified.

A total of 253 environmental observations were made in Vapo Group in 2018.

In 2018, drainage waters from peat production had to be rerouted to diversion culverts and dams on 67 occasions to prevent damage to water protection structures, for an average of seven days per incident. The number of diversion incidents increased by 31% from the previous year and their duration increased by 25%.

Biodiversity

Vapo has classified the peatlands and mires it owns in Finland in accordance with the Finnish government's classification system, in which category 0 is the most altered state and category 5 is the most natural state. Some 98% of the peatlands owned by Vapo are in categories 0-3. Vapo established a policy in 2012 to not apply for environmental permits for peat production for category 4 and 5 peatlands, which are mires in the most natural state.

A total of 4,220 hectares of land were sold for conservation purposes during the period 2012-2018.

Energy Efficiency

The minimisation of noise and dust impacts is taken into consideration in all of Vapo's operations. The operations, production methods and equipment are continuously developed to reduce dust levels.

Noise or dust was monitored at nine Vapo Group operating locations in 2018. In 2018, a total of 22 reports from local residents concerning negative impacts from dust or noise were recorded in the observation system.

The fossil-based carbon dioxide emissions of Vapo's heat and power plants in Finland increased by 7% and particle emissions increased by 19%. NOx emissions decreased by 7% and SO2 emissions by 9% compared to the previous year.

Airborne Emissions

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We Guarantee Quality and Safety - Targets and Results 2018-2021



SECTION	TARGETS FOR 2018–2021	RESULTS IN 2018
Delivery reliability and the security of supply by making use of digitality	Better delivery punctuality	The existing development project aimed at further improving delivery punctuality will continue in 2019
	Increasing order automation	Following the introduction of newly developed services, the share of electronic ordering channels has increased in fuel sales, retail sales (Vapo shop) and Grow&Care products
Delivery reliability and the security of supply by making use of digitality, Grow&Care	Digital delivery tracking based on chip technology, also linked to automatic customer communication and the extranet	In 2018, we launched an Extranet project for distributors in the professional growing business. The project started from understanding the distributors' needs and creating a suitable channel on top of the existing technical infrastructure. The first pilots were carried out late in the year, and the project will continue in 2019 as part of the development of Kekkilä-BVB's digital customer experience. The digital tracking of deliveries and enhanced use of chip technology are also being worked on
	Continuously developing the e-commerce offering to match B2B and B2C customer needs with respect to the product range, functionality and deliveries	The MVP version of the online store for consumers was completed in 2018. We have gained a lot of valuable information through the service, which will be used in the development of the e-commerce business to benefit all Kekkilä-BVB customers
Customer satisfaction	In 2021, the Net Promoter Scores per customer segment will be substantially higher than at present	In the customer satisfaction survey at the end of 2018, the NPS scores were 57 for Kekkilä Garden (previous year: 42), 19 for Hasselfors Garden (previous year: 21) and 49 for Kekkilä Professional in Finland
	We will be the most trusted partner in our industries (B2B and B2C)	In our customer surveys, we asked direct questions to assess how reliable we are perceived to be as a partner. We received a lot of valuable and mostly positive feedback. The improved NPS figures indicate that customers are satisfied, particularly in the case of Kekkilä Garden
Customer satisfaction, Grow&Care	In 2020, the turnover-weighted Net Promoter Score will be 47	In the customer satisfaction survey at the end of 2018, the NPS scores were 57 for Kekkilä Garden (previous year: 42), 19 for Hasselfors Garden (previous year: 21) and 49 for Kekkilä Professional in Finland. The global response rate as too low to obtain reliable results
Innovations for sustainable development	Vapo's R&D expenses compared to the Finnish average (2.8% of GDP in 2016)	R&D expenses were 1.4% of turnover
	Number of new ideas per year	66

Development of competence	In the personnel survey, the score reflecting the employees' perception of learning new things will remain at an excellent level (at 8.7 at a minimum)	The results of the personnel survey indicate a high level of interest in developing one's competence: 9.27 (on a scale of 4-10)
	Strategic competence areas will guide personnel development programmes and recruitment	The Group has engaged in active communication regarding the new strategy, values and targets. Change Skills training has been introduced for supervisors, to be followed by the supervisors implementing similar training at the team level throughout the Group's personnel. The recruitment of complementary skills and potential has been successful
	Increasing training hours per person	The Group is not yet able to report hours of training in a harmonised manner
	In the personnel survey, the score reflecting the perceived quality of managerial work will rise to an excellent level (at 8.7 at a minimum)	In the personnel survey conducted in autumn 2018, the score awarded to the quality of managerial work was 8.43 (on a scale of 4-10)
	Vapo Group will be perceived as an attractive employer that is popular among new talent. Target rankings for Universum Most Attractive Employer surveys: Top 50 in Finland and Top 100 in Sweden	The target set for 2018 regarding the Universum Most Attractive Employer Survey was to improve the ranking in the previous category of Engineering/Natural Science Students from 68 in 2017 to enter the Top 50 in Finland. The category has since been divided into two groups. In 2018, we achieved an excellent result in our target group in the Natural Science Students by being ranked in 36th place. Our ranking in the Engineering category was 98. We have not yet participated in the survey in Sweden
	Personal career development and target setting discussions included in the performance assessment system are held with every employee	The career development and target setting discussions included in the performance assessment system are held individually or at the team level; employees in production operations typically have team targets rather than individual targets. The discussions are held with every employee throughout the Group

We Develop Continuously

Delivery Reliability and the Security of Supply by Making Use of Digitality

Vapo leads the energy industry in terms of the speed of its digital transformation. In addition to heat and power plant operating services and digital solutions related to the fuel supply chain, new innovations improve customer service and offer an even higher level of delivery reliability for the customer.

The use of fossil fuels and peat increased by 2% and the CO₂ emissions arising from energy production increased by 3% in 2018. Challenges related to the procurement of solid wood fuels during the cold period early in the year significantly increased the consumption of peat. As a result, the consumption of peat for the full year increased by 24% compared to the previous year. The consumption of wood fuels increased by 4% and they remained Finland's most significant source of energy with a share of 27%.

The Group's fuel sales volume increased from the previous year. Nevertheless, the demand for peat has decreased during the past few years while the demand for wood fuels has grown. The weather in 2018 was warmer than the long-term average, which was reflected in the demand for district heating and the delivery volumes of fuels used to produce district heating.

The successful production season of summer 2018 in Finland increased peat inventories and buffer stocks. A total of 16 million cubic metres of peat was produced in Finland in summer 2018. Buffer stocks produced in accordance with Vapo's customer promise are sufficient to ensure peat deliveries in subsequent heating seasons in spite of potentially poor peat production summers.

Customer Satisfaction

Customer satisfaction has been measured at Vapo since 1998. The aim is to ensure customer satisfaction and increase customer value.

Vapo's customer satisfaction survey in 2018 revealed that the NPS (Net Promoter Score) among the customers of the Energy division is at an all-time high at 30, which represents a slight improvement on the score of 28 achieved in 2017.

B2C customers indicated that the price-quality ratio is challenging. Satisfied customers place the highest value on delivery reliability, which is also a major factor in customer loyalty. Based on the results obtained in 2018, the aim is particularly to increase customer satisfaction among district heating customers in each country. Customers will be offered more opportunities to influence their energy consumption by developing the service offering and pricing structure. The development of real-time customer satisfaction measurement for the consumer customers of pellet products will start in 2019.

In a customer satisfaction survey conducted at the end of the 2018 season, the Grow&Care division's units achieved the following NPS scores: Kekkilä Garden 57 (2017: 42), Hasselfors Garden 19 (21) and the Kekkilä Professional unit in Finland 49. Consumer preference for Kekkilä Garden decreased by three percentage points to 27%. In Sweden, Hasselfors Garden's preference score remained on par with the previous year at 12%. In 2019, focus will be placed on keeping customer data as current as possible, which also enables a broader reach for NPS surveys.

Innovations for Sustainable Development

The Vapo Ventures unit under the New Businesses division is in charge of the Group's innovation and IPR activities that ensure the operating conditions for the future. The aim is to identify new businesses to replace the declining use of energy peat, in particular, in the long run.

The Ventures unit led the development of the Group's first shared innovation model, which will accelerate the creation of future business ideas and the process of refining these ideas into revenue-generating business activities. To make innovation easier, a digital innovation tool was introduced. The megatrends relevant to Vapo Group were used to define strategic focus areas for idea campaigns: clean and local food, sustainable energy, healthy life and healthy living environments.

The Ventures Lab product development laboratory focused mainly on supporting Vapo Carbons, a new business aimed at entering the activated carbons market, for which the investment decision was made in December 2018.

During the year, the Ventures unit began a systematic effort to build competitive advantage based on the multipurpose use of peat biomass. The Vapo Refinery 2030 vision aims at developing high added value products from peatland biomass and creating new business for the Group. Turning the vision into reality started with the launch of humics and moss projects as well as the planning of the Vapo Refinery R&D programme.

The humics project is focused on refining humic substances derived from dark peat

and the moss project brought together the results of the extensive development efforts taken within the Vapo organisation and confirmed the business profitability and growth potential of growing media products with moss as an added ingredient.

Development of Competence

Competence development is driven by business growth targets, the shared values that support renewal and the Group's learning-oriented and target-driven organisational culture.

To overcome the challenges involved in managing an expert organisation and developing supervisory work, the Group has started to train supervisors to engage their teams in initiating and implementing change.

In 2018, the Grow&Care division implemented the Growing Together development programme, which covered all of the division's personnel and was focused on developing the division's operations openly through workshops and discussions. Workshops were held in various G&C operating locations in Finland, Sweden and Estonia.

A significant investment in learning was made by implementing an online course related to new data protection regulations that is mandatory for all employees. At the end of the year, only a tenth remained of the 100% target.

Journey to Excellence, a two-year development programme focused on information management, was launched in 2018.

The Group's language policy was defined in the autumn and the Group's shared language is now English.

We Guarantee Quality and Safety - Targets and Results 2018-2021



SECTION	TARGETS FOR 2018-2021	RESULTS IN 2018
Quality and cost-efficiency of products and services	New products launched in the market will promote sustainable development	The activated carbon products of the Carbons business are used to clean the air and water. The fibre products of the Fibers business can replace plastic. The humic acid products of the Humics business replace harmful chemicals
	Reducing complaints pertaining to the quality of products and services	Complaints related to Vapo Oy's pellet business have been reduced by 50% over the past five years. Kekkilä Group's complaint costs have been reduced by more than half compared to 2015 and 2016, and there have been no major complaint incidents after 2016. The development of feedback management continued at the Group level in 2018
	We are a competitive alternative in relation to other comparable operators	The Group's new shared innovation model puts the customer at the centre of innovation activities and ideas are evaluated with a particular emphasis on sustainable development and the markets. The competitive edge of Kekkilä Group's products for professional growers will be maintained by analysing the products available in the market and building insight into the customers' various needs, starting from different cultivation techniques and plants. The businesses also have a strong foundation in sustainable development, which will become an increasingly significant selection criterion for customers in the coming years. For example, new fertiliser packaging for consumers is made entirely from recycled plastic. In landscaping, we are involved right from the start of construction projects. For example, our expertise enables us to make use of the on-site raw materials as efficiently as possible. This ensures more robust outcomes and the observance of the principles of sustainable development while also creating cost savings for our customers
Occupational health and safety of personnel	100% safety by 2021	At the Group level, the number of accidents leading to lost time increased to 9 (2017: 3). However, none of the accidents were serious and the resulting absences were not long
	Safety observations per employee: 10 in 2021	Following the deployment of a mobile application, the number of safety observations increased substantially in 2018. The average number of observations made in 2018 was 5.4
Health and safety of contractors	Contractors are 100% committed to the safety commitment and operate accordingly	Positive development in safety-related attitudes is clearly evident in the subcontracting chain, but the development of safety culture requires an uncompromising long-term effort. In 2018, there were no serious workplace accidents among subcontractors who were in a direct contractual relationship with Vapo
	Contractor health and safety training is organised annually as part of other training organised for contractors	
Assessment of suppliers according to relevant criteria concerning environmental and social aspects	The number of audits of strategic contractual suppliers will be increased to 40 from the current level of 35	Vapo Group audited a total of 50 suppliers by means of on-site audits or supplier self-assessments. Of this total, 20 were on-site audits and 30 were self-assessment forms sent to suppliers
	The Code of Conduct is incorporated into all contracting agreements (100%)	The Code of Conduct is incorporated into all new contracting agreements. In Vapo Oy, the Code of Conduct covered approximately 90% of all agreements at the end of 2018

We Guarantee Quality and Safety

Quality and Cost-Efficiency of Products and Services

Vapo Group produces cost-efficient products and services, taking into account the needs and expectations of customers, owners and society. Our customer-driven approach and ISO 9001 and ISO 14001 compliant management system ensure that our products and operations meet stakeholder needs.

Quality control is an integral aspect of management and the day-to-day operating culture of our company. It is guided by a Quality Policy approved by Vapo's Board of Directors. Amongst other things, we monitor the achievement of our quality targets by using customer feedback and quality indicators, including the Net Promoter Score (NPS) as a measure of customer satisfaction and loyalty. A key role in our quality management is also played by internal and external audits focused on evaluating the effectiveness of our certified management system.

Vapo Group revised its structure in 2018 to accelerate the growth opportunities presented by its new business strategy. Vapo aims to be the European market leader in the professional and consumer growing media businesses. The renewal of the business structure also involves the centralisation of Group services. Vapo Group will continue to implement measures related to the renewal of its business structure in 2019.

Health and Safety of Personnel

Safety is one of our highest priorities. Our starting point is that every Vapo Group employee and partner should go home healthy at the end of the day. We continuously develop occupational safety and health in order to ensure a safe and healthy work environment under all circumstances. We train our own personnel and subcontractors to apply a safe, caring and proactive approach as well as look after their own safety and the safety of their colleagues.

Vapo Group reports all workplace accidents that require a visit to occupational health services (MTR) and, separately, all workplace accidents that cause an absence of at least one day (LTA1). Accidents during commutes (between the home and workplace) are also included in the calculations. The accident frequency figures are calculated per one million working hours.

In 2018, Vapo Group's accident frequency (MTR), measured in terms of workplace accidents requiring a visit to occupational health services, was 16 (15). In 2018, Vapo Group's accident frequency, measured in terms of workplace accidents causing an absence of at least one day (LTA1), was 6.9 (2.3). There were no serious workplace accidents.

The logging and appropriate processing of safety observations is proven to reduce damage incidents and prevent accidents. In 2018, Vapo Group recorded a total of 4,116 (3,375) safety observations. Vapo Oy had the highest number of observations with 2,700 (2,090), followed by Kekkilä Group with 1,350 (1,210). The main target for 2019 is to reduce the total number of workplace accidents, particularly with respect to accidents leading to lost time.

Safety in the Subcontracting Chain

As a responsible client, Vapo uses safety evaluations to ensure that the subcontracting chain satisfies the same safety requirements as the Group's own operations.

Vapo Group has focused heavily on improving safety in the subcontracting chain. In 2018, some 80% of all contractors in Finland participated in training that included content related to occupational safety and health. Similar training is also arranged in Sweden and Estonia. Each year, we provide training to our contractors on the employer's key obligations pertaining to safety. The training includes the sharing of best practices between subcontractors and Vapo's personnel and awards have also been presented to entrepreneurs in recognition of excellent safety performance.

Positive development in safety-related attitudes is clearly evident in the subcontracting chain. The number of logged safety observations increased in the subcontracting chain in 2018. Some 15% (10%) of all observations were made by contractors or other stakeholders.

In 2018, there were no serious workplace accidents among subcontractors who were in a direct contractual relationship with Vapo. Two serious accidents occurred in operations indirectly related to Vapo's operations.

Assessment of Suppliers According to Relevant Criteria Concerning Environmental and Social Aspects

Vapo requires its suppliers of goods and services to have certified responsible operations, transparency and certainty that the goods and services are produced and implemented in an ethically sustainable manner. The supplier requirements concerning environmental and social perspectives have been incorporated into Vapo's Code of Conduct.

Vapo's suppliers must be committed to compliance with Vapo's Code of Conduct and the requirements specified therein. An unconditional requirement in the selection of new suppliers is that they must satisfy the standards set out in the Code of Conduct. The Code of Conduct is incorporated into all new contracting agreements.

Vapo assesses its suppliers of goods and services on a regular basis in accordance with an annual assessment plan. Vapo Group has identified about 100 strategic suppliers. Of these, some 50 were assessed in 2018 in accordance with the assessment plan, using on-site audits and supplier self-assessments. Corrective measures were identified based on the assessments. No serious deficiencies or actual violations were observed, and no partnerships were terminated based on the assessments.

Vapo's network of suppliers currently includes approximately 1,000 contract suppliers and another 10,000 invoicing suppliers.

We Create Wellbeing - Targets and Results 2018-2021



SECTION	TARGETS FOR 2018–2021	RESULTS IN 2018
Job satisfaction and wellbeing of personnel	Excellent results in the personnel survey (minimum score 8.7)	The Group-level score achieved in the 2018 personnel survey was 8.30. The team-level score was excellent (8.72), while the most significant challenges were identified in Group-level and division-level responses. Following the Group's adoption of a new organisational structure effective from 1 May 2018, the Group began to monitor the implementation of the new operating model and strategy by means of a monthly survey
	The employees' perception of being treated as a valuable resource will be at least at a good level in the personnel survey (minimum score 8.5)	The employees' perception of being treated as a valuable resource was still at a very modest level (7.58) in the most recent survey
Equality and diversity	Men and women receive the same basic pay for equally demanding jobs	According to the research results we have obtained, there are no significant differences in basic pay between men and women for equally demanding jobs
	We will increase the number of women among our personnel	If a recruitment situation makes it possible to choose between equally qualified candidates and the gender distribution is male-dominated, the female candidate will be selected
Local employment effects	Contracting and transport agreements are always signed with domestic and local entrepreneurs when possible	Contracting and transport agreements have been primarily signed with local contractors in the various countries the Group operates in. The agreements are mostly signed with small enterprises that operate locally and employ local workers
Economic impact	Equity ratio above 40%	The equity ratio target was achieved by a clear margin in 2018
	Vapo Group's long-term success is assessed in terms of its operational profitability and the following performance indicators: return on invested capital, ratio of net debt to operating margin and equity ratio	All of the Group's strategic financial performance indicators developed favourably in 2018

We Create Wellbeing

Satisfaction and Wellbeing of Personnel

The job satisfaction and wellbeing of the personnel is measured twice a year by a Group-wide survey. The results are reviewed at multiple levels, from the Group Management Team to the team level.

The new strategy and organisational renewal further increased the significance of the personnel survey. The survey was implemented as an anonymous online questionnaire in January and August. In connection with the renewal of the Group's strategy, an additional monthly Pulse survey was introduced.

The effects of the renewal were reflected in the results as a slight decline in the overall score, from 8.40 to 8.30 (on a scale of 0-10). One target set by the Group with regard to the personnel survey is for the employees to feel that they are treated as a valuable resource. This score decreased somewhat between the two surveys conducted last year, from 7.71 in January to 7.58 in August. The current level is well short of the target of 8.50.

Kekkilä-BVB, a joint venture between Kekkilä and the Netherlands-based growing media company BVB, will start operating under the Grow&Care division. Integration projects related to various business functions will be implemented in 2019. The number of personnel in Vapo Group increased by approximately 280 and amounted to about 1,000 employees in January 2019.

Non-Discrimination

There is zero tolerance for discrimination and improper conduct. The two personnel surveys conducted in 2018 were the first to include Group-level questions on phenomena related to improper conduct and discrimination. Based on the results, the decision was made to update and harmonise the existing non-discrimination policies throughout the Group and its various operating countries, taking the local legislative requirements of each country into account.

A separate targeted survey on discrimination and improper conduct was carried out late in the year in the units that had the highest frequency of related observations. The research results in question are one significant source of information used in drafting the updated Group-level equality and non-discrimination policy. The aim of the survey was to understand what the phenomenon is about and what are the perceptions among personnel regarding intervention in, and prevention of, discrimination and improper conduct. An open and transparent approach to operations, appropriate intervention and prevention are key to strengthening a non-discriminatory operating culture.

The Code of Conduct will be updated at the beginning of the year and turned into a new e-learning course, which will again be mandatory for all of the Group's employees.

Clearer operating models, corrective action and monitoring practices prove that the Group is serious about all of its obligations related to non-discrimination.

Local Employment Effects

Vapo's local impacts as an employer, taxpayer and buyer of products and services are significant, particularly in the Group's main operating countries of Finland, Sweden and Estonia. Vapo's total investments in Finland amounted to EUR 30.1 million in 2018. The corresponding figure for the previous year was EUR 23.4 million. The largest investment was the start of the activated carbon production facility in Ilomantsi.

Vapo Group's business is very local. The company aims to continue to use the services of local businesses and subcontractors where possible. The company has no current plans to reduce the size of its network of operating locations.

Economic Impact

Profitable business is the foundation for economic responsibility. During the past few years, Vapo has made significant investments in improving profitability and developing new businesses to ensure the company's continued existence and the livelihood of its employees and partners far into the future.

The financial year from 1 May 2018 to 30 April 2019 was fairly good in financial terms. The Group's turnover grew by nearly 10% and profitability improved substantially. The Group's operating profit was EUR 33.3 million (EUR 26.3 million), up by more than 26% year-on-year. Profitability improved across all of the Group's businesses.

The Group's investments were significantly higher than in the previous year due to the BVB acquisition and an increase in working capital, with cash flow for the financial year being EUR -23.5 million (EUR 73 million). Nevertheless, profitable growth meant that the Group was able to maintain its strong equity ratio, which stood at 51% (51%) at the end of the year.

Investments also began in the Vapo Carbons business announced in December 2018, with the development of an activated carbon production facility in Ilomantsi starting in the spring.

Vapo Group companies pay all of their statutory taxes, based on their own business operations, to the country in which they operate. None of the Group companies have unpaid taxes or significant pending appeal processes. Group administration is responsible for the implementation of Vapo's tax strategy and compliance with country-specific tax regulations.

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