

























Zero-emissions and circular economy as starting points for development

We have taken the

Vaasa region one step

closer to carbon-neutral

energy production.

Westenergy is a link between two very rapidly changing sectors as the WtE plant is an important part of municipal waste management and, at the same time, a significant local significantly as the scrubber brings an extra 10-megawatt

energy producer, producing some half of the district heat needed in the Vaasa region and electricity for the annual need of some 10 000 households. Our position in this intersection makes the operating environment interesting but also challenging. Development in the waste

and energy sectors has been very fast especially over the last decade, and it seems that the pace is only quickening in the future. A strong drive towards zero-emissions directs the development of both industries.

We at Westenergy aim also at developing the operation of the company and plant continuously so that it would cause as little stress on the environment and climate as possible. In this sense, last year was particularly significant as the new flue gas scrubber was taken into use in the plant. Flue gas purification was on a high level already before the scrubber but

now flue gases can be purified even more efficiently. At the same time, the energy efficiency of the plant has improved

> output to the district heat production without any additional fuel. The investment was successful, and I would like to thank Vaasan Sähkö for excellent co-operation in the project. We have again taken the Vaasa region one step closer to carbon-neutral energy production.

Circular economy is here to stay and strongly directs development today. Circular economy is not just recycling but a modern economic model that challenges us to look at production processes and possibilities to utilise different materials in a completely new way. The result of circular economy is a world where no waste is created but by-products and residues become raw materials for new production processes. Moreover, it is important to keep the value of different materials in circulation.

Our goal is to optimise the operation of the plant but also to alone. Co-operation with universities and different industrial promote the development of true circular economy in our operators is, therefore, a very central dimension in all our cirwide operation area. Our co-operation with Lakeuden Etap- cular economy projects. We aim to identify these operators pi and Suomen Erityisjäte in the utilisation of the ash of the and technical pioneers and build consortiums to waste-toplant is a textbook example of working circular economy. energy sector that could together carry out projects in circular

Metal separated from the ash is recycled and the ash is utilised in construction infrastructure and as raw material for different concrete products such as paving stones and concrete elements. Metal re-

Our goal is to optimise the plant operation and promote the development of true circular economy.

cycling reduces climate stress in many ways, and using ash preserves natural materials such as sand and gravel. With the help of circular economy, natural resources can be used in a more sustainable way.

Zero-emissions and promoting circular economy are the starting points in developing the company, and our vision is that by 2030 the logistics related to our operation is very much biogas-driven, that different materials related to our production process are utilised even more efficiently than today and that our energy production is carbon-neutral. In outlining the strategy, these goals were considered the most central, and the goals have been refined into concrete circular economy projects in good co-operation with the University of Vaasa and Vaasa Energy Business Innovation Centre, VE-BIC. In a newly launched project that has received a subsidy of 100 000 euros from the Finnish Ministry of Employment and Economy, we aim at discovering the best way to capture, store and utilise the CO2 of the plant.

It goes without saying that it is impossible for Westenergy to solve complex climate and circular economy challenges

economy and solve development challenges. In our opinion, challenges related to climate and circular economu can be more effectively solved with voluntary co-operation projects than

with simple tax increases or emissions trading. True development cannot be achieved with sanctions but with incentives and motivation. As an alternative to the taxation of energy recovery and emissions trading, we have outlined a suggestion about Green Deal for the Ministry of Environment together with interest groups and several other operators. Green Deal is a contract that is based on voluntary and local promotion of circular economy.

The role of energy recovery has caused wide discussion throughout its existence. In our opinion, energy recovery has an important role for the functionality of the entire society as waste-to-energy plants such as the one owned by Westenergy refine that part of waste that cannot otherwise be utilised into electricity, heat and recovered materials. Energy recovery is an important part of circular economy and continuous improvement directs the development of it.

Westenergy's year 2019 was eventful in many ways. Westenergy got a new owner company, Loimi-Hämeen Jätehuolto, and the other owners reinforced their shares in the company in the process. Due to a new owner company,

Despite the challenging service stop, we produced more energy than before.

Westenergy's operation area covers now about 20 percent of the municipalities in Finland. A widening owner basis is a sign of trust towards Westenergy's operation and together with the wide and skilled owner group we can develop operation further. I want, therefore, to thank all our owner companies for successful co-operation in 2019.

I also want to thank our staff for good work in 2019. We were able to achieve many of the goals laid out for the year. The installation of the flue gas scrubber brought remarkable challenges especially to the service stop but we were still able to produce more energy than ever before during the plant's eight-year history. We have a motivated and skilled staff with whom I'm proud to continue developing the operation of the plant and company for new challenges over the new decade.

OLLI ALHONIEMI

CEO



annual report:

















Carbon-neutral energy production

Carbon capture can help us build an industrial carbon sink.

Biogas-driven **logistics**



fossil fuels. Interestingly, when the role of biogas is strengthened, it can be

We create the prerequisites that in the future, the logistics related to Westenergy's operation uses domestic emission-free energy.

Efficient material utilisation



Westenergy lives in the intersection of material flows and has already sucfurther is, therefore, a natural strategic choice for us. Westenergy's resources can be used to create a network of companies where ideas, products and materials circulate. In the project managed by VEBIC and financed by Busiour value promise to the owners also in the future.

Developing the ecosystems of circular economy is a natural strategic choice for us.





More energy, cleaner flue gases



trict heat, 379 gigawatt-hours, was produced in Westenergy's WtE plant. "The new record is strongly linked to the flue gas scrubber that was taken into use at the end of the year, and the project largely defined the year in production as the alteration work necessary for the flue gas scrubber started already at the beginning of the year", explains Westenergy's Production Manager **Kai Alavillamo** who had the main responsibility in the project. The scrubber has proved out to be a successful investment as soon as it was taken into use, the levels of impurities in the flue gases dropped significantly and the district heat output of the plant increased by some 10 megawatts.

"Flue gas purification was very efficient already before the scrubber was taken into use but the scrubber adds the finishing touch to the purification. The scrubber reduces especially the levels of acidic impurities to the level that is necessary regarding the upcoming emission requirements. Moreover, as the same amount of fuel creates now more energy than before, the energy efficiency of the plant has improved significantly.", Alavillamo sums up.

Read more about flue gas scrubber in our online annual report 2019.WESTENERGY.FI

Year 2019 was a successful one as a record amount of dis- Because of the flue gas scrubber, the plant's process control involves more adjusting and observing the chemicals and pH levels, and here, there is still room for development. In addition to the flue gas scrubber, a power increase of the boiler was carried out last year, and the steam production was increased by about 10 percent. Because of the power increase, the district heat output of the plant increased by 4 megawatts. "Last year a lot of big changes were carried out in the plant in a relatively short time so next year we focus on operating the plant as efficiently and smoothly as possible.", Alavillamo continues.

AIMING AT HIGH AVAILABILITY

Westenergy's main goal regarding the plant's maintenance is clear: to create the prerequisites for high availability.

"The maintenance of the plant is largely determined by the preventive maintenance plan, and in addition, those maintenance needs and tasks that require a plant shut-down are listed during the year. The to-do list for maintenance gets, therefore, longer when the service stop is nearing. Last year the service stop of the plant was more comprehensive than previous years as in addition to the usual service and maintenance tasks, the new flue gas scrubber was installed in the plant.", explains Westenergy's Maintenance Manager Rauno Tuokkola.

The same amount of fuel creates now more energy than before.

Cost-efficient operation is also a central goal for maintenance. "The plant has reached that age that different revisions have that are in direct contact with material flows. We aim to predict the maintenance needs of the plant and plan the procedures in advance so that costs remain stable. Moreover, one

of the goals in maintenance is to carry out most of the work with the help of our own staff.", Tuokkola explains. In 2020 become necessary especially to those pieces of equipment on significant investments are going to be carried out but the aim is to focus on making the plant run smoothly, efficiently

WESTENERGY IN NUMBERS IN 2019



Total efficiency 90,6%



Employees 35



Operating hours 8 187 h



Waste to energy 189 638 t



Electricity 113 C/Wh



District heat 379 GWh



30 834 t



3 610 t

Flue gas treatment residue (APC) 4 269 t Boiler ash 1494 t



Waste water 17 373 m³

Rain and melt water 24 227 m³





Preparation is the key in safety



Goals were achieved in occupational health and safety in actively.", praises Tuokkola. Last year, a new programme for 2019: the sickness absence percent of the staff was clearly under three, over 160 safety observations were reported safety observations with attached photos can be reported on which is more than the target number and accidents were the spot with a smart phone. avoided for the fourth year in a row. "More important than reaching a certain target number is what the target numbers Safety observations often lead into concrete improvements actually comprise: to be able to reach the goals, the staff needs to consider occupational health and safety important the responsibility of occupational health and safety belongs and participate actively in developing health and safety by to Maintenance Manager. "Last year the safety of the emmaking concrete observations about their work environment." explains Head of Occupational Health and Safety

Rauno Tuokkola.

Preparation is the key in safety. At Westenergy, new safety observations are discussed every day in the morning meeting where also the corrective and preventive actions and their deadlines are outlined. "There is good safety culture at West- Healthy and motivated staff is central for good work atmosenergy. Everyone is committed to the O accidents mind-

the safety observations was taken into use, and now the

and alterations, so it is no coincidence that at Westenergy, ployees was improved by, for instance, installing shut-off valves into the bottom slag outlet system and by widening the work floors in the plant. Risk assessment was updated, and psychological risks were mapped out with an e-survey. The key idea is to recognise dangers and risks already before any accidents happen.", Tuokkola explains.

phere and achieving the goals, and the staff's training and imset and also the subcontractors report safety observations proving the work atmosphere are, therefore, being invested in at Westenergy. Based on the development discussion, a personal training plan is outlined for every employee. In the plan the needs of the company and those areas where the employee would like to develop and learn more, are recognised. To maintain good team spirit, different events are organised for the staff. Last year the staff members competed in eco-shooting and different humorous dexterity tests at Reinon Tupa in Kurikka. There is also a gym at Westenergy's plant which the staff members can use freely.

Last year Westenergy was nominated by the employees for the Vaasa's Employer of the Year 2019 and was selected as one of the finalists.

Staff training and good work atmosphere are being invested in.

Safety observations lead often into improvements and different modifications.

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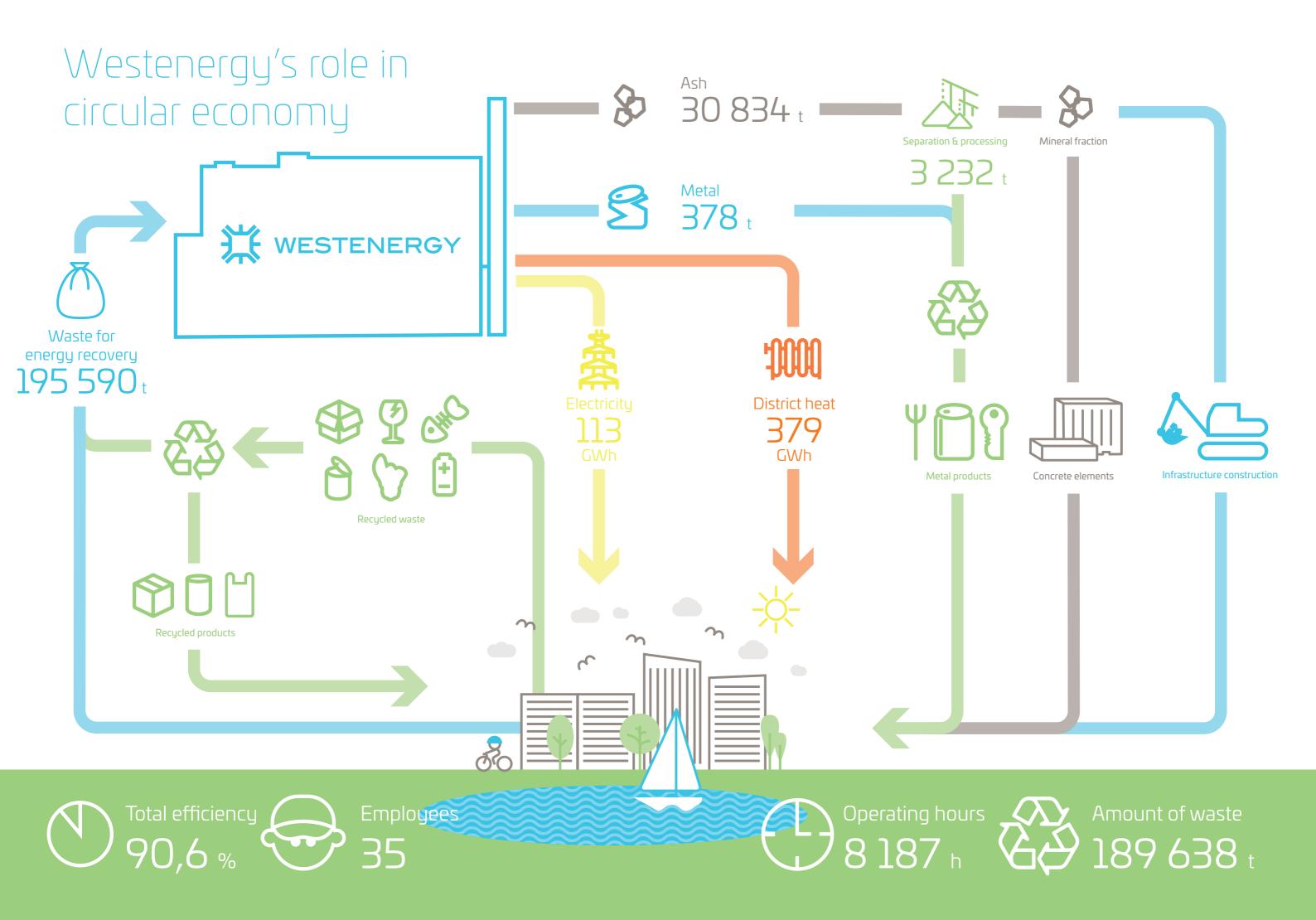


Sickness absence percent 2.2 %



observations 193

Read more about how Westenergy improves occupational safety in our online annual report: 2019.WESTENERGY.FI





Monitoring emissions and waste quality are of key importance

Complying with the regulations outlined in the environmental permit is the starting point of the company operations. "There are a lot of regulations concerning, for instance, the fuel, emissions, residues and the near-by environment, and my work focuses mainly on these matters." explains Westenergy's Environmental Manager Tanja Västi.

As the fuel of the plant is source-separated household waste of which contents vary considerably when compared to any other fuel used in energy production, it is essential to inspect the fuel quality. "Our goal is to inspect 100 waste loads in a year. This represents a very small part of all the waste deliveries, but the inspections give us important information on how well the waste is sorted. The inspections have pointed out that the amount of metal and hazardous waste has been roughly the same throughout the time the plant has been in operation but the amount of construction and demolition waste has increased after 2016 when landfilling organic material was banned in Finland. Construction and demolition waste is not suitable for recycling and it, therefore, often ends up to waste-to-energy plants. It is not, however, suitable for energy recovery either as insulation wool, concrete elements and bricks cannot simply be incinerated and PVC Västi explains.

The flue gas scrubber removes acidic impurities (i.e. chlorides and sulphur compounds) efficiently from the flue gases but they still cause corrosion in the boiler pipes in the long run and it its expensive and time-consuming to replace the pipe walls. In addition, there is a risk that a wrong type of fuel will hinder the utilisation possibilities of the ash. Waste quality inspections are, therefore, important also in the future.

Waste quality inspections give important information on how well the waste is sorted.

"We were aware that the emission regulations would become stricter in the near future, and this was one of the reasons why the flue gas scrubber was installed in the plant.", Västi explains. The scrubber was taken into use just in time as the BREF document (Reference Document on Best Available Techniques) was published at the end of the year. The document outlines the best practices and emission limits for waste-to-energy plants in EU countries. The emission limits plastic and plaster turn into acidic impurities in the process.", for acidic impurities will become stricter as anticipated but the document contains also new regulations regarding, for

instance, new emission components and the functionality of the measuring devices. "We comply with environmental regulations that concern waste-to-energy sector and aim at optimising the plant's operation so that its effects on the environment remain as minor as possible. In 2020 we are going to map out the best way for Westenergy to capture carbon dioxide.", Västi continues.

Our aim is to optimise the plant operation so that its effects on the environment remain as minor as possible.



ASH BECOMES RAW MATERIAL FOR INFRASTRUC-TURE CONSTRUCTION AND CONCRETE INDUSTRY

Some 30 000 – 35 000 tonnes of bottom slag that consists of ash and metal is produced in Westenergy's WtE plant every year. Nearly all the ash can be utilised in the production of concrete products and in construction infrastructure, and the separated metal is recycled.



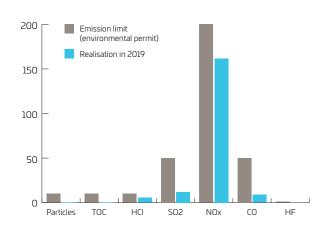
Read more about how ash can be utilised in our online annual report 2019.WESTENERGY.F

You can find more information about the flue gas scrubber and condensate in our online annual report 2019.WESTENERGY.FI

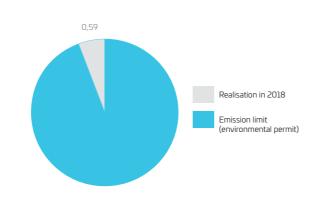


Here you can find information about the results of Westenergy's emission measurements in 2019.

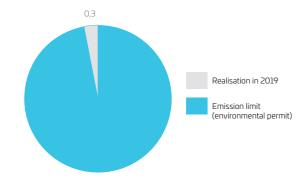
The levels of impurities in flue gases mg/Nm3



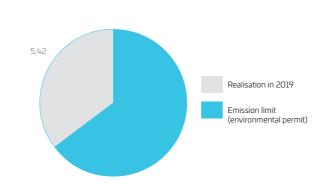
Particles mg/Nm3



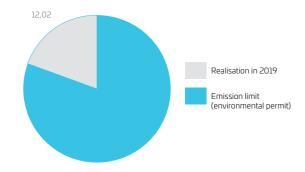
TOC (total organic carbon) mg/Nm3



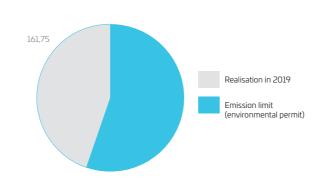
HCI (hydrochloric acid) mg/Nm3



SO2 (sulphur dioxide) mg/Nm3



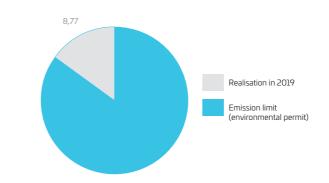
NOx (nitrogen oxides) mg/Nm3



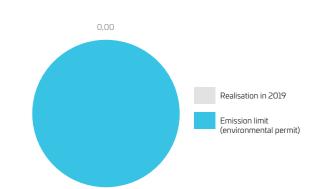
NB:

1 mg = 1 milligram = one thousandth of a gram or 0,001 grams

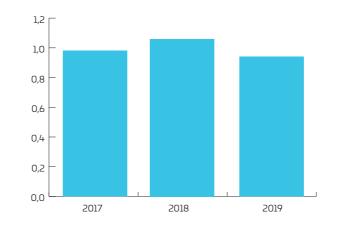
CO (carbon monoxide) mg/Nm3



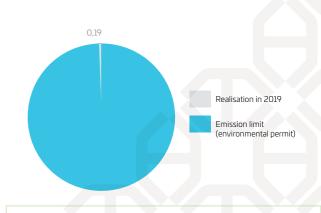
HF (hydrogen fluoride) mg/Nm3



NH3 (ammonia) mg/Nm3



Hg (mercury) µg/Nm3



 $1\,\mu g=1\, microgram$ = one millionth of a gram or 0,000001 grams

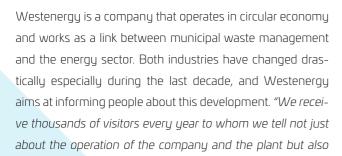
Fi m 20

Find more information about emission measurement results and use of chemicals online: 2019.WESTENERGY.FI





Communicating actively about circular economy and energy recovery



more widely about circular economy, energy production and

the role of energy recovery in the society. A large part of the people visiting Westenergy are school children and students, and a visit to Weste-

A visit to Westenergy has become a central part in energy and environment education in many schools in the operating area.

nergy has become a central part in energy and environment education in many schools in the operating area. A visit to us is an effective way to learn to understand where electricity and district heat come from and what happens to the waste.", explains Westenergy's Communications Officer Sanna Hautamaa who hosts most of the visitor groups. Last year some 2 500 people visited Westenergy.

Plant visits form a central part of the company's communications, but interest groups are contacted in many other ways as well. "We inform actively about current issues and meet people at different events. Our Communications Officer Sanna shares interesting material in our social media channels and we have got more followers all the time. Last year we participated in, for instance, Circular Economy -theme week at Vaasa University of Applied Sciences, Circular Economy seminar during

EnergyWeek and Energy Day which is a meeting place for local companies and students at the University of Vaasa. Last year we also started

updating the company image so, for instance, our website has been changed entirely. Active communications has been a central part of Westenergy's operations since the company was founded", explains **Riina Kivikangas** who works as Quality & Communications Manager at Westenergy.



Co-operation with students is an important part of our community activity. "We offer summer jobs in production, maintenance and administration, and students have worked also as visit coordinators and have presented the company to visitor groups. The visit coordinators have been of great help especially during the busy months and at the same time, students have gained experience in giving presentations and have got to know a lot about circular economy and energy.", Kivikangas continues. Westenergy offers summer jobs also

for 16-18-year-old students and last year, three 16-year-old students were hired for the summer to take care of the vast green areas of the plant.

Every year students have written their diploma work or theses in different topics for Westenergy. Last year, the challenges and possibilities of the plant's power increase were analysed in one of the theses.



Find out more about the diploma work and theses written for Westenergy online:
WESTENERGY.FI/COLLABORATION-WITH-STUDENTS

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Annual activity report

Westenergy Oy Ab was registered in the Finnish Trade Register on 1 January 2008. The company's trade registration number is 2165379 – 9 and its registered office is in Mustasaari. The company is owned by Oy Botniarosk Ab, Lakeuden Etappi Oy, Loimi-Hämeen Jätehuolto Oy, Millespakka Oy, Ab Stormossen Oy and Vestia Oy. The past financial period was the eleventh in the company's history. Westenergy's main line of business is operating a Waste-to-Energy plant. The company operates on the absorption principle and does not distribute dividends.

The company has built a plant specialising in the energy production from and conversion of non-recyclable municipal waste on a property that it owns in Koivulahti, Mustasaari and sells services to its shareholders on the absorption principle. The energy produced at the plant is converted into electricity and district heat with the machinery of the company's partner, Vaasan Sähkö Oy. The plant was finished and went into operation in August 2012.

The year 2019 was challenging for Westenergy. During the year under review, the company carried out major investments and alteration works. Despite the disruption, the plant processed nearly the same amount of waste as the previous year. The utilisation rate of the plan is good, even if it slightly falls short from that of 2018. High utilisation rate and successful investments and disruption management guaranteed a better financial result than was initially anticipated. The year-on-year net turnover shows a slight increase. This was largely driven by the increase in the district heat supply following a growth in waste supply and investments; the val-

ue of waste supply and district heath supply exceeded our expectations. The price of electricity was disappointing during the year under review, and although the year-on-year amount of supply again increased, their value still showed a slight decrease compared to 2018. While falling a fraction short of the previous years' figures, the sales of metals none-theless exceeded the estimates. Key figures are presented in the table below.

The amount of bottom slag processed in 2019 was slightly smaller than in the previous year. The work we have done together with our partners Lakeuden Etappi Oy and Suomen Erityisjäte Oy in developing the processing of slag further has taken steps forward. The treatment of bottom slag and the processing methods are undergoing constant development and the achieved efficiency has brought added cost savings. The maintenance costs were slightly above the estimate, primarily for the comprehensive maintenance during the shutdown. This year, Westenergy operated a three-week annual maintenance and investment shutdown, during which extensive maintenance, repair and replacement works as well as new investments were carried out.

The chemical costs remained well within the estimate. In total, the variable costs were significantly lower than in the previous year and well within the estimate.

The total amount of investments made in 2019 came to EUR 6,274,563. The biggest investment in the year was the flue gas scrubber. The investment was made in response to stricter environmental standards to be applied in the treat-

KEY FIGURES	2019	2018	2017	2016	2015
Turnover, MEUR	16,1	15,9	18,9	16,8	18,3
Amount of utilised waste, tonnes	189 638	190 679	188 208	163 118	168 355
Utilisation rate, %	93,5	95,5	94,9	82,1	85,1

ment of flue gasses, and the investment also supports the improved energy efficiency of our plant. Thanks to the major investment, we will be able to comply with the provisions of the EU's 2019 BREF document. We will also be able to recover heat energy from the flue gases, increasing Westenergy's district heat output by a further 20%. This further increases the role of Westenergy in the district heat production for Vaasa region. Other main investments during the year under review included the upgrade of the primary air system capacity, the penstock valves of the slag extinguisher, replacement of baghouse filter transporter and auxiliary devices, replacement of pressure reduction and relief valves and glucol heat exchanger.

The company's cash position continues to be good. The company obtained new capital through directed share issues. Alongside the existing owners Oy Botniarosk Ab, Lakeuden Etappi Oy, Millespakka Oy, Ab Stormossen Oy and Vestia Oy, a new owner Loimi-Hämeen jätehuolto Oy acquired a significant holding in the company. A portion of the new capital was posted under reserve for invested unrestricted equity. The company has hedged nearly 100 per cent of its non-current liabilities with financial instruments against adverse developments in the financial markets in order to reduce the fluctuations in its financial results as well as its financial risks.

Westenergy has sharpened its strategy during the year under review. The strategy is aligned with the climate and circular economy targets of the EU and Finland. Westenergy collaborated with its owner companies and other stakeholders in innovating and seeking new solutions for the future. Westenergy has acted as a pioneering force in defining the Green Deal package for the industry. Westenergy provides strong support to development projects and scientific research into circular economy and climate questions, working in close re-

lationship with the University of Vaasa and VEBIC. Based on our strategy work, we have launched several development projects related to CO2 capture, more efficient utilisation of biofuels, conversion of non-recyclable waste fractions into energy and other materials, investigating potential additional capacity as well as the circular economy road map and building a waste-to-energy ecosystem. The company has also participated actively in the development of local circular economy together with the municipality of Mustasaari, Vaasanseudun Kehitys Oy and Ab Stormossen Oy.

Westenergy Oy Ab is committed to following the quality, environmental and occupational health and safety policies which the company has defined. Through certified systems, Westenergy Oy Ab aims to improve the overall quality and cost-effectiveness of its operations. An occupational health and safety system is used to manage known risks, maintain the health and working ability of employees and improve the occupational health and safety. Westenergy Oy Ab aims at managing environmental risks with actions and programmes defined in the environmental system. Westenergy Oy Ab reports new developments concerning the quality, environment and occupational health and safety to interest groups primarily in the form of an annual report. Westenergy's management system, which complies with the standards of quality (ISO 9001:2015), environment (ISO 14001:2015) and new occupational health and safety (ISO 45001:2018), has been evaluated by an independent external evaluator in 2019.

The company employed 30 people at the beginning of the financial period and 32 people at the end of the financial period. The average number of employees during the year was 35. The salaries and remuneration paid in 2019 totalled EUR 2,266,380. The following table includes some key figures related to the personnel.

KEY FIGURES RELATED TO THE PERSONNEL	2019	2018	2017	2016	2015
Number of employees, 1 Jan	30	30	34	31	32
Number of employees, 31 Dec	33	32	32	34	30
Average number of employees	35	36	37	35	34
Salaries and remunerations, MEUR	2,27	2,22	2,25	2,16	2,04
Absences due to illness, % of total working time (*	2,20	2,11	2,98	3,54	3,18
Number of accidents at work	0	0	0	0	4
*) Including sick leaves, absences due to illness of a child and absences due to accidents during work and leisure time					

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of Heikki Halla-aho (Chairman), Paavo Eloniemi (Vice-Chairman), Rangvald Blomfeldt, Paavo Hankonen, Jouko Huumarkangas, Ari Perälä, Harri Virtanen and Gunbritt Tallbäck (ordinary members). The Board met ten times in total during the past financial period. Olli Alhoniemi has acted as the Managing Director of Westenergy. The company's regular auditor was the CPA firm Ernst & Young Oy with Kjell Berts, CPA, acting as the principal auditor.

Westenergy Oy Ab and Loimi-Hämeen Jätehuolto Oy concluded negotiations about ownership arrangements and Loimi-Hämeen Jätehuolto Oy became an important shareholder of the company. Negotiations with the existing owners on the changes of their respective holdings were also successfully completed. All existing owners, Oy Botniarosk Ab, Lakeuden Etappi Oy, Millespakka Oy, Ab Stormossen Oy and Vestia Oy, acquired new shares in the company.

The annual general meeting held on 7 June 2019 decided to issue 3,903,873 new shares at EUR 2/share. The issue was directed at Loimi-Hämeen Jätehuolto Oy, Oy Botniarosk Ab, Lakeuden Etappi Oy, Millespakka Oy and Vestia Oy. The directed share issue was based on weighty financial reasons new shares were entered into the share register. as provided in Chapter 9 section 4(1) of the Limited Liability Companies Act, with the aim of strengthening the compa-

ny's financial standing and securing sufficient supply of raw In the past operating period, the Board of Directors consisted materials. The subscription period was from 6 November to 18 November, and the shares were subscribed and paid up by 18 November 2019. EUR 1/share of the subscription price was posted under share capital, and the remaining funds (EUR 3,903,873) under reserve for invested unrestricted equity. The new shares and share capital were registered on 11 December 2019.

> The objective of the ownership arrangements is to strengthen the ownership base of Westenergy Oy Ab, which would guarantee a sufficient waste supply until a distant future and enable Westenergy to provide cost-effective services to its shareholders. Until now, the current shareholders of Westenergy have acquired non-recyclable waste for energy production also outside their own operating areas through contractual arrangements.

> With the ownership arrangements, the shareholders' agreements and the supply agreements, which determine the relationship and operations between the shareholders and the company, were updated accordingly. The share of ownership still directly correlates with the supply quotas of each shareholder. The articles of association were also updated and the

> An extraordinary general meeting convened on 18 Decem-

The following table shows the number of shares and share of ownership by owner.

NUMBER OF SHARES HELD AND SHARE OF OWNERSHIP AFTER CHANGES			
Company	Shares	Ownership, %	
Oy Botniarosk Ab	1 050 000	6,60 %	
Millespakka Oy	600 000	3,77 %	
Vestia Oy	3 100 000	19,49 %	
Lakeuden Etappi Oy	4 200 000	26,41 %	
Ab Stormossen Oy	3 953 873	24,86 %	
Loimi-Hämeen Jätehuolto Oy	3 000 000	18,86 %	
New subscribed capital	15 903 873	100,00 %	

ber 2019. The Company Board was discharged as of 31 December 2019 and a new board was appointed with its term commencing on 1 January 2020. Six new members were appointed to the Company Board. The new Members of the Board are Paavo Eloniemi (Chairman), Ragnvald Blomfeldt (Vice-Chairman), Paavo Hankonen, Jouko Huumarkangas, Teuvo Suominen and Harri Virtanen (ordinary members). The new Board was registered on 29 January 2020.

There have been no significant events after the end of the financial period.

The company's registered share capital was EUR 15,903,873 in the end of the financial period. The company has 15,903,873 shares. The redemption clause set in the articles of association is applied on the shares, according to which other shareholders have the primary right to redeem shares and the company itself has the secondary right if the shares are to be transferred to a third party.

Because of the absorption principle, it is not appropriate to compare the key figures to profit-making companies when analysing Westenergy's operations, financial position and

In compliance with Section 3 of the articles of association, the company does not distribute dividends. The Board of Directors proposes that the net loss for the period of EUR -4,173.61 be transferred to the profit and loss account as the company's equity.

Vaasa 2 April 2020 Westenergy Oy Ab, Company Board



Profit and loss statement

Currency EUR	1.1.2019 - 31.12.2019	1.1.2018 - 31.12.2018
NETTURNOVER	16 062 679,32	15 908 304,24
Raw materials and services		
Raw materials and consumables		
Purchases during the financial year	-3 575 319,93	-4 900 498,19
Variation in inventories	-42 008,94	-218 577,90
External services	-1 949 238,12	-1 309 786,53
Raw materials and services total	-5 566 566,99	-6 428 862,62
Staff expenses		
Wages and salaries	-2 266 380,41	-2 224 827,68
Social security expenses		
Pension expenses	-382 792,89	-402 370,14
Other social security expenses	-49 599,50	-43 885,37
Staff expenses total	-2 698 772,80	-2 671 083,19
Depreciation and reduction in value		
Depreciation according to plan	-6 549 305,27	-6 492 276,64
Depreciation and reduction in value total	-6 549 305,27	-6 492 276,64
Other operating charges	-1729 022,44	-1744 464,47
OPERATING PROFIT (LOSS)	-480 988,18	-1 428 382,68
Financial income and expenses		
Other interest and financial income	83,50	5,69
Interest and other financial expenses	-950 362,06	-1 078 698,31
Financial income and expenses total	-950 278,56	-1 078 692,62
PROFIT (LOSS) BEFORE APPROPRIATIONS AND TAXES	-1 431 266,74	-2 507 075,30
Appropriations		
(-)increase or decrease (+) in depreciation difference	1 427 093,13	2 527 093,13
Extraordinary items total	1 427 093,13	2 527 093,13
APPROPRIATIONS TOTAL	-4 173,61	20 017,83

Balance sheet

	31.12.2019	31.12.2018
ASSETS		
NON-CURRENT ASSETS		
Intangible assets		
Intangible rights	179 662,77	97 249,95
Other capitalised long-term expenses	3 412 027,08	5 118 040,69
Intangible assets total	3 591 689,85	5 215 290,64
Tangible assets		
Land and waters		
Assets owned	711 581,18	711 581,1
Buildings		
Assets owned	24 324 820,36	25 405 000,9
Machinery and equipment	40 625 785,61	38 286 808,8
Other tangible assets	103 122,24	13 060,0
Tangible assets total	65 765 309,39	64 416 450,9
NON-CURRENT ASSETS TOTAL	69 356 999,24	69 631 741,5
CURRENT ASSETS		
Inventories		
Raw materials and consumables	1549703,98	1 591 712,9
Inventories total	1549703,98	1 591 712,9
Accounts receivables		
Short-term		
Trade debtors	1 388 723,16	895 656,3
Deferred tax assets	362 866,80	342 535,0
Other debtors	324 425,45	51 167,8
Prepayments and accrued income	38 566,85	49 416,4
Short-term total	2 114 582,26	1 338 775,6
Cash in hand and at banks	3 360 448,58	5 085 720,1
CURRENT ASSETS TOTAL	7 024 734,82	8 016 208,7
ASSETS TOTAL	76 381 734,06	77 647 950,28

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Balance sheet

Currency EUR	31.12.2019	31.12.2018
LIABILITIES		
CAPITAL AND RESERVES		
Subscribed capital	15 903 873,00	12 000 000,00
Other reserves		
Reserve for invested non-restricted equity	3 903 873,00	0,00
Fair value reserve	-1 451 467,20	-1 370 140,00
Other reserves total	2 452 405,80	-1 370 140,00
Retained earnings (loss)	-24 359,22	-44 377,05
Profit (loss) for the financial year	-4 173,61	20 017,83
CAPITAL AND RESERVES TOTAL	18 327 745,97	10 605 500,78
TAX RESERVES		
Depreciation reserve	1795 628,85	3 222 721,98
TAX RESERVES TOTAL	1795 628,85	3 222 721,98
CREDITORS		
Long-term		
Loans from credit institutions	45 000 000,00	52 000 000,00
Long-term total	45 000 000,00	52 000 000,00
Short-term Short-term		
Loans from credit institutions	7 000 000,00	7 000 000,00
Advances received	250 515,60	115 620,00
Trade creditors	1589 008,97	1700720,27
Other creditors	69 625,07	69 252,59
Accruals and deferred income	2 349 209,60	2 934 134,66
Short-term total	11 258 359,24	11 819 727,52
CREDITORS TOTAL	56 258 359,24	63 819 727,52
LIABILITIES TOTAL	76 381 734,06	77 647 950,28

Financial statement

Currency EUR	31.12.2019	31.12.2018
CASH FLOW FROM OPERATING ACTIVITIES		
Profit (loss) before appropriations and taxes	-1 431 266,74	-2 507 075,30
Corrections:		
Depreciation and amortization	6 549 305,27	6 492 276,64
Financial income and expences	950 278,56	1 078 692,62
Cash flow before change in working capital	6 068 317,09	5 063 893,96
Change in working capital:		
Increase(-)/decr.(+) in short-term interest-free receivables	-775 806,62	-159 785,16
Increase(-)/decrease (+) in inventories	42 008,94	218 577,90
Increase(+)/decr.(-) in short-term interest-free liabilities	-561 368,28	-555 892,13
Cash flow from operations before financial items and taxes	4 773 151,13	4 566 794,57
Interest paid and pmts for other financ. exp. from operat.	-950 362,06	-1 078 698,31
Financial income received from operations	83,50	5,69
Cash flow before extraordinary items	3 822 872,57	3 488 101,95
CASH FLOW FROM OPERATING ACTIVITIES (A)	3 822 872,57	3 488 101,95
CASH FLOW FROM INVESTMENTS:		
Investments in tangible and intangible assets	-6 274 562,95	-252 485,17
CASH FLOW FROM INVESTMENTS (B)	-6 274 562,95	-252 485,17
CASH FLOW FROM FINANCING:		
Increase in paid-in equity capital	7 807 746,00	0,00
Fair value reserve, change	-81 327,20	129 183,20
Repayment of long-term loans	-7 000 000,00	-1 000 000,00
CASH FLOW FROM FINANCING (C)	726 418,80	-870 816,80
CHANGE IN CASH AND CASH EQUIVALENTS(A+B+C) INCR.(+)/	-1 725 271,58	2 364 799,98
DECR.(-)		
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD	5 085 720,16	2 720 920,18
CASH AND CASH EQUIVALENTS AT END OF PERIOD	3 360 448,58	5 085 720,16

Notes

ACCOUNTING POLICIES

Policies followed in the financial statements

The financial statements have been drawn up in accordance with the Finnish Government Decree on the information presented in the financial statements of a small undertaking and micro-undertaking (PMA, Chapters 2 and 3).

Derivatives

The company has entered into an interest derivative contract to manage the volatility of interest rates. Interest derivatives are hedged. The hedge instruments' impact on profit is recognised together with the hedged item. Unrealised changes in value are recognised in the fair value reserve of equity. The fair value is calculated taking into account the deferred tax receivables.

VALUATION AND MATCHING PRINCIPLES AND METHODOLOGY

Intangible assets recorded in the fixed assets of the company are valued at the historical cost of acquisition.

The fixed assets are valued at the variable and fixed costs of acquisition, the latter related to the fixed asset project.

The acquisition costs of reproducible assets are written off in accordance with the established plan. The depreciation plan is determined on the basis of economic life.

In all other respects, the financial statements have been drawn up in accordance with the valuation and matching principles and methodology given in the decree on the financial statements of small undertakings.

CLASS OF ASSETS	Assumed life, years	Depreciation method
Intangible rights	5	Straight-line depreciation
Other intangible assets	10	Straight-line depreciation
Building	40	Straight-line depreciation
Machinery and equipment, production machines and tools	5-20	Straight-line depreciation

ACTIVATED INTEREST EXPENSES

The undepreciated portion of activated interest expenses in the intangible assets is as follows:

	31.12.2019	31.12.2018
Activated in the financial period	0,00	0,00
Activated interest expenses, total	4 187 014,14	4 187 014,14
Accumulated amortisation and depreciation, 1 Jan	2 930 909,87	2 512 208,46
Amortisation in the financial period	418 701,41	418 701,41
Accumulated amortisation	3 349 611,28	2 930 909,87
Undepreciated	837 402,86	1 256 104,27

INTANGIBLE ASSETS	2019	2018
Intangible rights		
Historical cost, 1 Jan	108 055,50	88 130,50
Increase	104 930,50	19 925,00
Historical cost, 31 Dec	212 986,00	108 055,50
Accumulated amortisation and depreciation, 1 Jan	10 805,55	0,00
Amortisation in the financial period	22 517,68	10 805,55
Accumulated amortisation	33 323,23	10 805,55
Carrying amount	179 662,77	97 249,95
Other intangible assets		
Historical cost, 1 Jan	17 060 135,93	17 060 135,93
Historical cost, 31 Dec	17 060 135,93	17 060 135,93
Accumulated amortisation and depreciation, 1 Jan	11 942 095,24	10 236 081,63
Amortisation in the financial period	1706 013,61	1706 013,61
Accumulated amortisation	13 648 108,85	11 942 095,24
Carrying amount	3 412 027,08	5 118 040,69

TANGIBLE ASSETS	2019	2018
Land		
Historical cost, 1 Jan	711 581,18	711 581,18
Increase	0,00	0,00
Historical cost, 31 Dec	711 581,18	711 581,18
Buildings		
Historical cost, 1 Jan	32 845 367,33	32 845 367,33
Increase	96 912,57	0,00
Reductions		
Historical cost, 31 Dec	32 942 279,90	32 845 367,33
Accumulated amortisation and depreciation, 1 Jan	7 440 366,41	6 263 273,28
Amortisation in the financial period	1177 093,13	1 177 093,13
Accumulated amortisation	8 617 459,54	7 440 366,4]
Carrying amount	24 324 820,36	25 405 000,92
Machinery and equipment		
Historical cost, 1 Jan	60 406 420,99	60 173 860,52
Increase	5 982 657,64	232 560,47
Decrease		
Historical cost, 31 Dec	66 389 078,63	60 406 420,99
Accumulated amortisation and depreciation, 1 Jan	22 119 612,17	18 521 247,52
Amortisation in the financial period	3 643 680,85	3 598 364,65
Accumulated amortisation	25 763 293,02	22 119 612,17
Carrying amount	40 625 785,61	38 286 808,82

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TANGIBLE ASSETS	2019	2018
Other tangible assets		
Historical cost, 1 Jan	13 060,00	13 060,00
Increase	90 062,24	0,00
Reductions		
Historical cost, 31 Dec	103 122,24	13 060,00
Accumulated amortisation and depreciation, 1 Jan	0,00	0,00
Amortisation in the financial period	0,00	0,00
Accumulated amortisation	0,00	0,00
Carrying amount	103 122,24	13 060,00

EQUITY

EQUITY	31.12.2019	31.12.2018
Committed		
Share capital, 1 Jan	12 000 000,00	12 000 000,00
Change in the financial period	3 903 873,00	
Share capital, 31 Dec	15 903 873,00	12 000 000,00
Fair value reserve	-1 451 467,20	-1 370 140,00
Committed capital, total, 31 Dec	14 452 405,80	10 629 860,00
Free		
Reserve for invested non-restricted equity, 1 Jan	0,00	0,00
Change in the financial period	3 903 873,00	0,00
Reserve for invested non-restricted equity, 31 Dec	3 903 873,00	0,00
Retained earnings	-24 359,22	-44 377,05
Distribution of dividends	0,00	0,00
Profit/loss (+/-) for the financial period	-4 173,61	20 017,83
Free capital, total	3 875 340,17	-24 359,22
Equity, total	18 327 745,97	10 605 500,78

No dividends to be paid 31 December 2019.

LIABILITIES

SPECIFICATION OF LIABILITIES	2019	2018
Non-current		
Amounts owed to financial institutions	45 000 000,00	52 000 000,00
Current		
Amounts owed to financial institutions	7 000 000,00	7 000 000,00
Accounts payable	1589 008,97	1700 720,27
Accrued liabilities	2 349 209,60	2 934 134,66
Other liabilities	69 625,07	69 252,59
Deferred income	250 515,60	115 620,00
Total	56 258 359,24	63 819 727,52

PERSONNEL AND MEMBERS OF BODIES

In the financial period, the company employed an average of 35 people.

PERSONNEL COSTS	2019	2018
Salary costs in the financial period	2 183 680,41	2 153 827,68
Remuneration of board members	82700,00	71 000,00
Pension costs	382 792,89	402 370,14
Social security contributions	49 599,50	43 885,37
Personnel costs, total	2 698 772,80	2 671 083,19

FINANCIAL INCOME AND EXPENSES	2019	2018
Interest income	83,50	5,69
Interest expenses	-950 362,06	-1 078 698,31
Financial income and expenses, total	-950 278,56	-1 078 692,62

RECEIVABLES	2019	2018
Current receivables		
Trade receivables	1 388 723,16	895 656,38
Other receivables	324 425,45	51 167,82
Accrued income	38 566,85	49 416,44
Current receivables, total	1751715,46	996 240,64

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CONTINGENT LIABILITIES AND OTHER COMMITMENTS

	2019	2018
Debt guaranteed by a mortgage on the real estate or		
company		
Financial loans	52 000 000,00	59 000 000,00
Business mortgage	110 000 000,00	110 000 000,00
Real estate mortgage	110 000 000,00	110 000 000,00
The terms of loan contain special conditions		
Bank account limit	200 000,00	200 000,00
of which used	0,00	0,00
Other collateral		
Bank guarantee	600 000,00	600 000,00
Other liabilities	2019	2018
Leasing	2 667,68	4 001,52
of which maturing in 2020	1333,84	1 333,84
Liability to refund VAT for real estate investments	3 410 407,51	3 084 932,66

DETAILS ON THE DERIVATIVE CONTRACTS THAT HEDGE AGAINST INTEREST RATE RISK

The notional amount of the interest rate swap contract is EUR 24,000,000 from 8 December 2017 to 8 December 2027 with the interest rate being 3-month Euribor. The company receives 3-month Euribor and pays a fixed interest.

This interest rate swap contract hedges Westenergy's loan of MEUR 26.4 with the final maturity date in four years. The review of loan terms is in 2020.

The cash flows of the interest rate swap contract are recognised in profit or loss for the same periods as the interest flows of the hedged loan until 8 December 2027.

The fair value of the contract at the date of closure of the accounts:

2019	2018
-1814334,00	- 1 712 675,00

LIABILITIES DUE IN MORE THAN FIVE YEARS

	2019	2018
Financial institution loans	8 600 000,00	9 300 000,00

ACCOUNTING BOOKS USED IN THE	VOUCHER TYPES USED IN THE FINANCIAL PERIOD	
FINANCIAL PERIOD	Handelsbanken bank account	voucher type 20
General journal, digital	Purchase invoices	voucher type 71
General ledger, digital	Electronic purchase invoices	voucher type 73
Balance book, manual	Cash and memo vouchers	voucher type 90
Separate payroll accounting	VAT entries	voucher type 91
	Vouchers of passing on of charges	voucher type 92

THE ANNUAL ACCOUNTS HAVE BEEN SIGNED BY:

Paavo Eloniemi Chairman of the Board



Jouko Huumarkangas Board member

Alf Ragnvald Blomfeldt Board member

Teuvo SuominenBoard member

Paavo Hankonen Board member

Harri Virtanen Board member

AUDITOR'S NOTE

Auditor's report has been issued in Vaasa 9 April 2020. Kjell Berts, APA.

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Auditor's report

To the Annual General Meeting of Westenergy Oy Ab

REPORT ON THE AUDIT OF THE FINANCIAL STATE-**MENTS**

Opinion

We have audited the financial statements of Westenergy Ou Ab (business identity code 2165379-9) for the year ended 31 December 2019. The financial statements comprise the balance sheet, income statement, cash flow statement and notes.

In our opinion, the financial statements give a true and fair view of the company's financial performance and financial position in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements.

Basis for Opinion

We conducted our audit in accordance with good auditing practice in Finland. Our responsibilities under good auditing practice are further described in the Auditor's Responsibilities for the Audit of Financial Statements section of our report. We are independent of the company in accordance with the ethical requirements that are applicable in Finland and are relevant to our audit, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of the Board of Directors and the Managing Director for the Financial Statements

The Board of Directors and the Managing Director are responsible for the preparation of financial statements that give a true and fair view in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements. The Board of Directors and the Managing Director are also responsible

for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors and the Managing Director are responsible for assessing the company's ability to continue as going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting. The financial statements are prepared using the going concern basis of accounting unless there is an intention to liquidate the company or cease operations, or there is no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial

Our objectives are to obtain reasonable assurance on whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a quarantee that an audit conducted in accordance with good auditing practice will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with good auditing practice, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

 Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of the Board of Directors' and the Managing Director's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our to report in this regard. conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events so that the financial statements give a true and fair view.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

OTHER REPORTING REQUIREMENTS

Other information

The Board of Directors and the Managing Director are responsible for the other information. The other information comprises the report of the Board of Directors.

Our opinion on the financial statements does not cover the other information.

In connection with our audit of the financial statements, our

responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. Our responsibility also includes considering whether the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

In our opinion, the information in the report of the Board of Directors is consistent with the information in the financial statements and the report of the Board of Directors has been prepared in accordance with the applicable laws and regu-

If, based on the work we have performed, we conclude that there is a material misstatement of the report of the Board of Directors, we are required to report that fact. We have nothing

Vaasa 9.4.2020

Ernst & Young Oy

Authorized Public Accountant Firm

Authorized Public Accountant







