



WESTENERGY

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CEO'S REVIEW

Westenergy is an important part of circular economy. Energy in waste is converted into electricity and district heat in Westenergy's modern WtE plant, and bottom slag becomes raw material for new production processes. Target-orientation and continuous improvement direct the company operations.



Circular economy is more than just recycling - it is a new way of operating where waste becomes valuable raw material

CEO
Olli Alhoniemi

TOWARDS A CLEAN AND SUSTAINABLE WORLD



The waste-to-energy field has been in a constant change in Finland especially during the last few years. Including the energy recovery of waste in emissions trading and the taxation of waste-to-energy were often mentioned as future possibilities in the political discussions last year. As an alternative to these options, Westenergy together with interest groups and other companies operating within waste-to-energy field presented a counter-proposal, a Green Deal contract to the Ministry of the Environment. We regard Green Deal as a more efficient solution for controlling climate change and promoting circular economy than emissions trading or the taxation of energy recovery of waste. This is, because not only the climate objectives, but also the concrete action plans and schedules for achieving the objectives are outlined in the contract. The Ministry of the Environment has showed signs of approval for the Green Deal and the contract is currently being prepared. The contract will hopefully be signed in 2019. Green Deal would commit different parties to protecting the climate and promoting circular economy, and it would bring stability to the entire waste-to-energy field – stability that is long being longed for.

Westenergy has strengthened its role in circular economy as the bottom slag of the WtE plant can be utilised almost entirely: metals are recycled and used to produce new products, and the mineral fraction of the bottom slag is used in earthwork, road building and in the production of different

concrete elements. Cooperation with Lakeuden Etappi Oy and Suomen Erityisjäte Oy in developing the processing of bottom slag has paid off.

In 2018 we continued the work to carry out the flue gas scrubber investment. Companies were invited to tender for the supply contract in the end of the year, and the contract is to be signed in the beginning of next year. The aim is to install and take the scrubber into use in 2019.

The flue gas scrubber will complement the current semi-dry purification system of the plant, and it will significantly decrease the amount of acidic impurities (i.e. hydrochloric acid and Sulphur compounds) in the flue gases. At the same time, thermal energy in the flue gases can be recovered more efficiently, and the capacity of the plant to produce district heat will increase by approximately 20 percent. In this way, Westenergy's role as the producer of district heating for the Vaasa area will become more significant, and Westenergy will take the area one step closer to coal-free energy production. The flue gas scrubber project has proceeded in time in cooperation with Vaasan Sähkö, and I would like to thank Vaasan Sähkö for functional cooperation throughout the year.



**Read the full-length CEO's review online.
2018.WESTENERGY.FI**



PRODUCTION AND MAINTENANCE

Westenergy's Waste-to-Energy plant was in operation for 8369 hours in 2018 and the availability of the plant was remarkable - 95,5 %. Due to the skilled operating staff and maintenance team, even demanding situations were quickly and safely resolved.





Records in the amount waste and production of district heat



From a productional point of view, year 2018 was a very successful one. 191 000 tonnes of waste was processed in the plant, this being more than in any other year in the plant's history. The large amount of waste translated into a record also in district heat production: in 2018, 364 gigawatt-hours of district heat was produced in Westenergy's plant! This is over 40 percent of the consumption of district heating in the Vaasa area. In addition, 106 gigawatt-hours of electricity was produced in the plant in 2018 – the amount corresponds to the annual electricity consumption of some 7 000 households.

The plant availability in 2018 was very high, 95,5 %. With the help of the skilful staff, production deviations have been kept at minimum, and malfunction occurred only once in 2018: in April the plant shut down in an island mode due to disturbance in the turbine system. The auxiliary grid could, however, be quickly switched on, and the production deviation remained short, taking only about 30 hours.



Read the online annual report to discover more about the WtE plant's operation in 2018.
2018.WESTENERGY.FI

MAINTENANCE CREATES THE PREREQUISITES FOR THE WTE PLANT'S HIGH AVAILABILITY

Regarding maintenance, a central goal is that the annual service stop proceeds as planned and on schedule. In 2018, 16 days were reserved for the service stop but it took 36 hours less than planned. During the six years of operation, the staff has come to know the plant thoroughly, and this has helped in planning the service stops and outlining the preventive maintenance programmes.

During the service stop, for instance, the lime injection system of the plant was renewed and now the amount of lime can be adjusted more accurately than before. The lime supply system plays a key role in the plant process as lime is used to neutralise acidic impurities.

In 2018, the turbine's first overhaul of 50 000 hours was carried out. When the turbine was opened, it could be instantly noticed that the rotor of the turbine as well as the rotor and leading blades were in good condition which indicates that the steam quality is high. The super-heated steam led to the turbine is produced from the boiler water, and the turbine overhaul indicated that also the hydro-chemistry of the plant is in control.



Read the online annual report to learn more about the service stop of the WtE plant.
2018.WESTENERGY.FI

The high availability, 95,5 % is an indication of good cooperation between the operators and maintenance team.



FLUE GAS SCRUBBER IMPROVES HEAT RECOVERY AND PURIFICATION

With the help of the flue gas scrubber, thermal energy in the flue gases can be recovered more efficiently, and the scrubber will increase the plant's district heat capacity by approximately 20 %, which is approximately 10 megawatts. Currently the flue gases of the plant are led out of the stack at 140 degrees Celsius but after the scrubber has been installed, the temperature will drop to approximately 50 – 60 degrees Celsius.

The scrubber will be installed after the current purification system inside the plant building. Using the scrubber forms condensation water which will be purified and used primarily in the plant processes. The condensation water can also be used as feed water in the district heating system, and any additional purified condensation water is led to the sewage system.

WESTENERGY IN NUMBERS IN 2018



Total efficiency
88,7 %



Employees
32



Operating hours
8369 h



Amount of waste
190 679 t



Electricity
106 GWh



District heat
364 GWh



Bottom slag
31 859 t



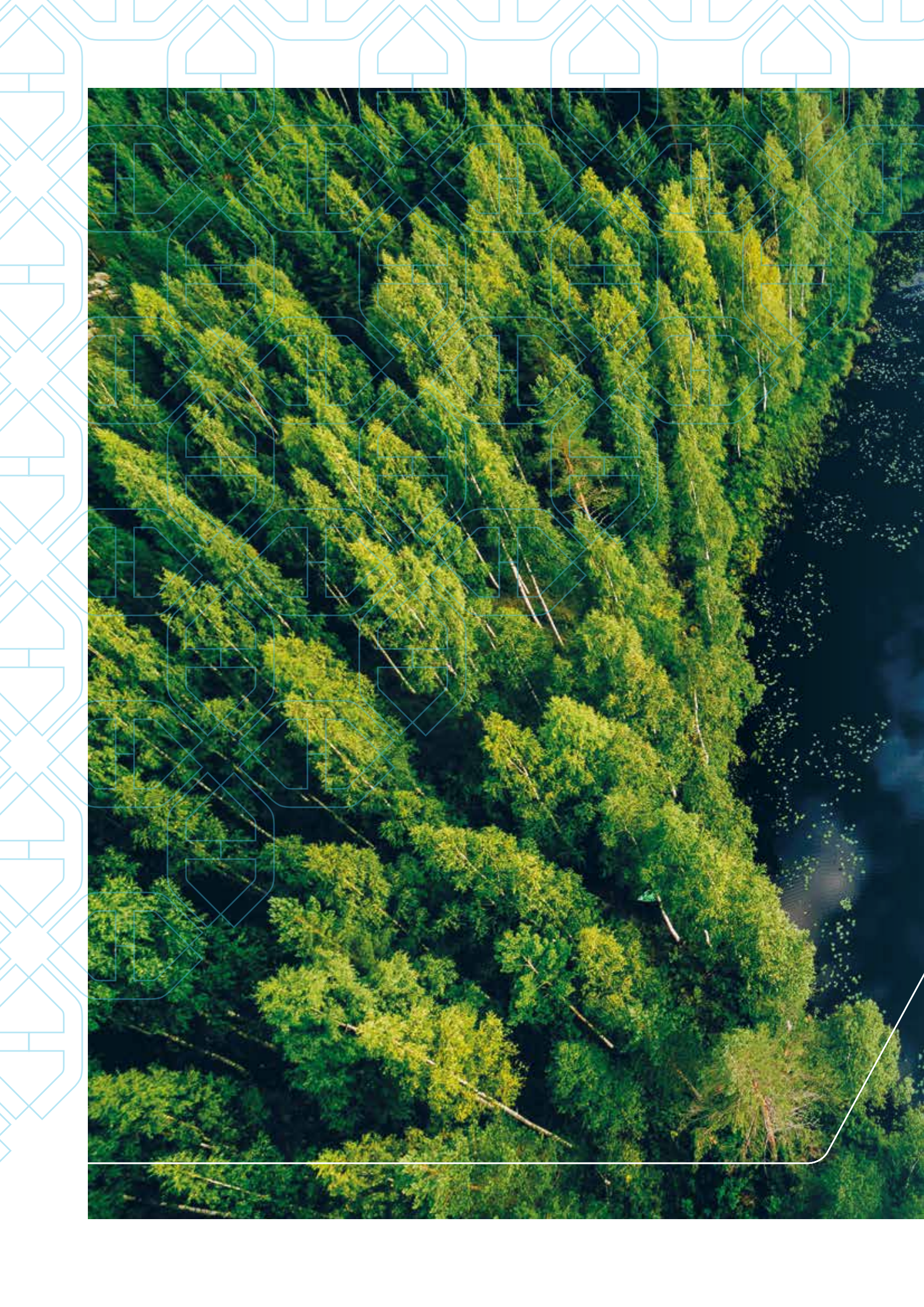
Metal
2 144 t



Flue gas treatment
residue (APC)
4 110 t
Boiler ash
1 605 t



Water to the
sewage system
11 167 m³
Rain and melt water
22 059 m³





OCCUPATIONAL HEALTH AND SAFETY

Occupational safety is preparation and cooperation. We aim at creating an open atmosphere which enables the entire staff to promote health and safety at work.



Occupational safety is foremost preparation and concrete actions



The most important objective regarding safety at Westenergy is to prevent occupational accidents, and the staff has worked determinedly to reach that goal. There is an objective for the number of the staff's near-miss reports and safety observations (120 annually), and altogether 161 such situations were reported in 2018. It is inevitable that different near-miss situations take place, and it is of key importance to create an open atmosphere that will make it easy for the staff to report dangerous situations at work. Only when they are reported, will we be able to address the issues and prevent accidents from happening. It is remarkable that no occupational accidents have taken place at Westenergy's WtE plant in three years.

Occupational safety is being promoted also with so-called safety minutes that are short discussions with the management and employees regarding current safety topics. Last year the topics of safety minutes were, for instance, using gas meters and lifting objects in the boiler hall. During the service stop last year, special safety inspections were also carried out to make sure that safety instructions are being followed.

Westenergy's staff is committed to promoting safety at work. The O accidents forum granted Westenergy the highest categorisation of On top of the world I for the second time in a row. The O accidents forum is a network of companies that aims at developing occupational health and safety and shares good practices between member organisations.



Westenergy is one of the first companies in Finland whose safety system is certified in accordance with the new ISO 45001:2018 standard.

EDUCATION AND WELL-BEING AT WORK ARE CONSIDERED IMPORTANT

Well-being at work and good work motivation inspire the staff to work actively to achieve the goals, and therefore, Westenergy considers education and improving the work atmosphere important. In 2018, a thorough study on the work atmosphere was conducted. The work atmosphere was considered positive and Westenergy was regarded as an equal place to work. There is still room for improvement, for instance, in the flow of information and, therefore, the intranet and document control system are being improved.

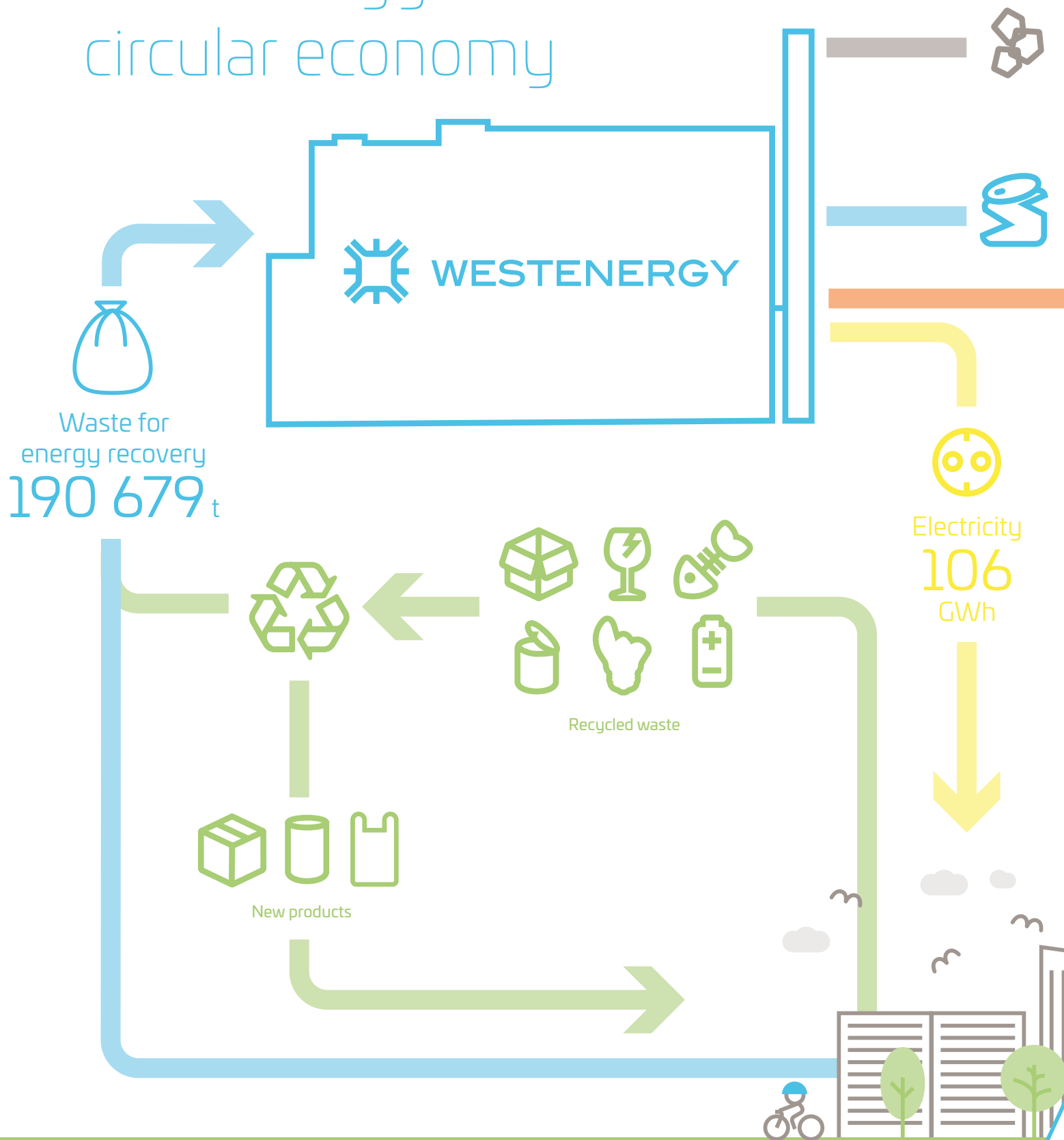


Read the online annual report to learn more about how Westenergy promotes occupational health and safety.
2018.WESTENERGY.FI

The education of the staff is being invested in, and a personal education plan is outlined for every employee on the basis of the development discussions. In outlining the plan, the needs of the company as well as those areas where the employee would like to develop and learn more are recognised.

To improve well-being at work, the staff is offered a possibility to participate in different health promoting campaigns every year. In 2018 the staff was offered a possibility to participate in a well-being course where personal programs for, for instance, adding exercise and improving eating habits were laid out. The absence due to sickness rate of the employees was relatively low (2,11 %) in 2018, and there were a lot of employees that didn't have any such absences in 2018.

Westenergy's role in circular economy



Total efficiency
88,7 %



Employees
32

Bottom slag
31 859 t

Metal
2 144 t

District heat
364 GWh

Separation & processing

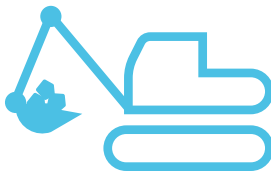
Mineral fraction



Metal products



Concrete elements



Earthwork



Operating hours
8369 h



Amount of waste
190 679 t





ENVIRONMENT

We aim at developing and improving the WtE plant's operation so that the environmental impacts of the plant will remain as minor as possible.



A pioneer in environmental issues



WASTE QUALITY INSPECTIONS GIVE IMPORTANT INFORMATION

The fuel used in Westenergy's Waste-to-Energy plant is source-separated municipal waste, and in this type of material, quality and energy content is relatively inconsistent. The quality of the fuel defines the efficiency of the entire process which makes waste quality inspections very important. The aim is to inspect 100 waste deliveries in a year and last year altogether 85 deliveries were inspected.

The decree on landfills came into effect in 2016. This decree meant that waste in which the carbon content is more than 10 % cannot be landfilled. Construction waste is especially troublesome in this sense as it consists of different materials – for instance, insulating plates, PVC plastic, insulation wool and fiberglass that cannot be recycled and unfortunately end up quite often to WtE plants. Construction waste is unsuitable for incineration as well as heat value in them is relatively low and it often includes fire-resistant materials. Construction waste can also weaken the suitability of the bottom slag for utilisation purposes. Exceptionally large metal beams were found in the waste last year. Metal can be recycled, and it is, therefore, unnecessary for this kind of material to end up to a Waste-to-Energy plant in the first place.

FLUE GAS SCRUBBER TAKES PURIFICATION TO A NEW LEVEL

Regarding the environment, Westenergy's key goals are to purify the flue gases as efficiently as possible and to monitor the emissions continuously to make sure that the purification process of the plant works well. The diagrams on pages 22-23 illustrate the results of the continuous emission measurements in comparison to the emission limits outlined in the environmental permit.



Read the online annual report also for the emission measurements carried out twice a year.


[2018.WESTENERGY.FI](https://2018.westenergy.fi)

With the help of the flue gas scrubber, we will be able to respond to the new environment regulations. The current purification process of the plant is already very efficient as over 99 % of the impurities in the flue gases can be removed. The scrubber will, however, make purification even more efficient as especially acidic impurities such as hydrochloric acid and Sulphur compounds in the flue gases will decrease significantly.



Read the online annual report to learn how the plant's nearby environment is being monitored.

[2018.WESTENERGY.FI](https://2018.westenergy.fi)



Flue gases are purified in several stages and the plant's emissions are continuously monitored.

RESIDUE BECOMES RAW MATERIAL IN NEW PRODUCTION PROCESSES

Some 30 000 – 40 000 tonnes of bottom slag is produced in the plant annually. Bottom slag consists of ash and different metals that can be recycled. Large metal items are separated from the slag already at Westenergy's plant and recycled. The bottom slag is more thoroughly separated and prepared for utilisation purposes by Lakeuden Etappi Oy and Suomen Erityisjäte Oy in Ilmajoki. After a thorough separation process, precious metals and the mineral fraction become raw materials. Using the bottom slag of a WtE plant represents well the idea of circular economy as waste can be used

almost entirely, and the residues of a WtE plant become raw materials in new production processes.

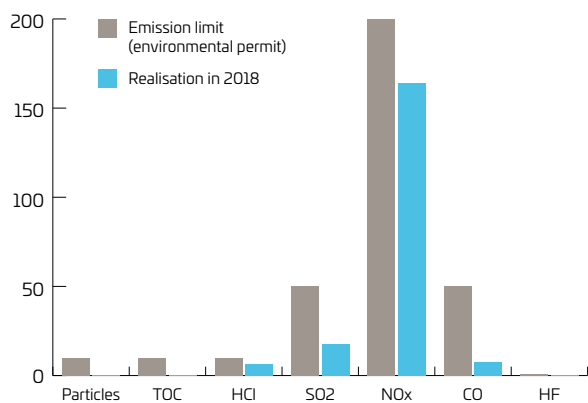
Using bottom slag is also reasonable from an environmental perspective as the mineral fraction replaces natural raw materials such as natural sand and gravel, and recycling metals is significantly less harmful to the environment than quarrying ore and processing metals.



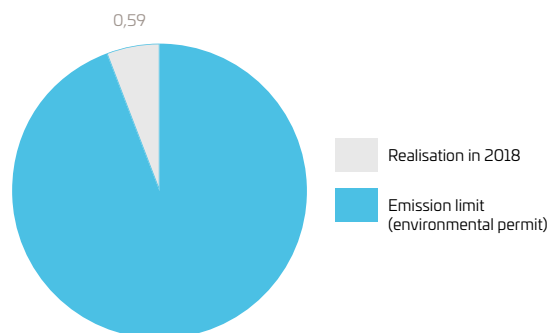
Read the online annual report to learn more about the bottom slag.
[2018.WESTENERGY.FI](https://2018.westenergy.fi)



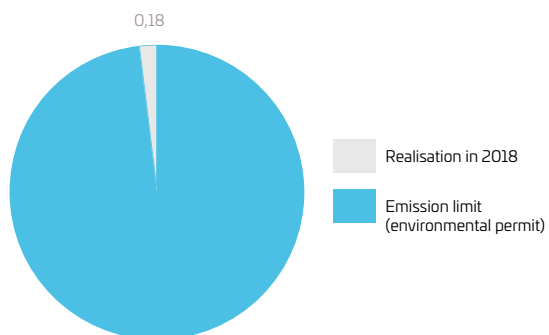
The levels of impurities in flue gases mg/Nm³



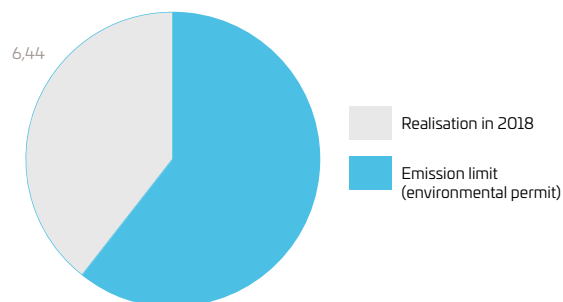
Particles mg/Nm³



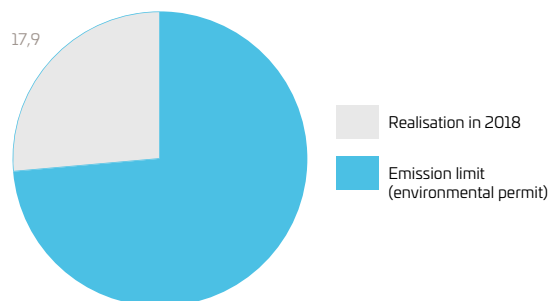
TOC (total organic carbon) mg/Nm³



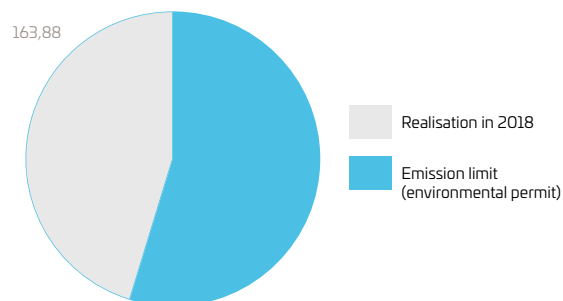
HCl (hydrochloric acid) mg/Nm³



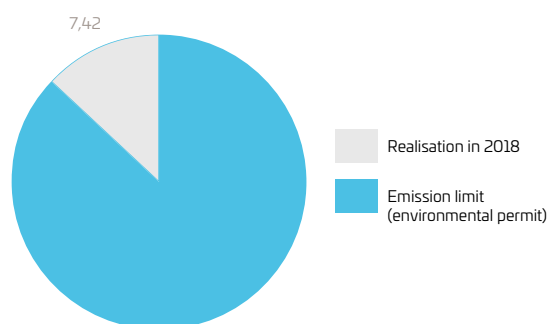
SO₂ (sulphur dioxide) mg/Nm³



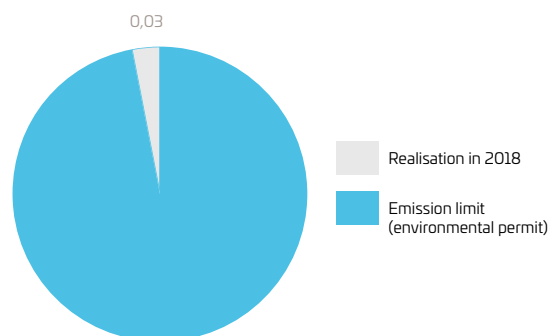
NO_x (nitrogen oxides) mg/Nm³



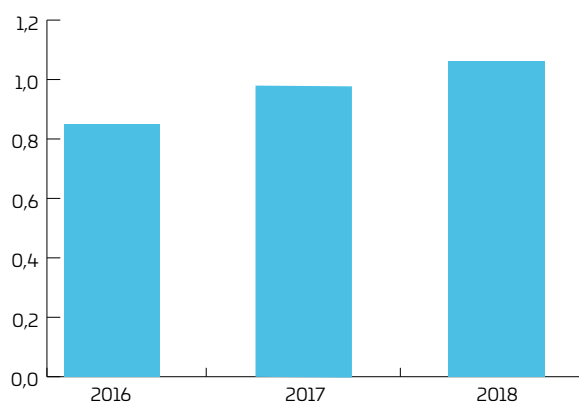
CO (carbon monoxide) mg/Nm³



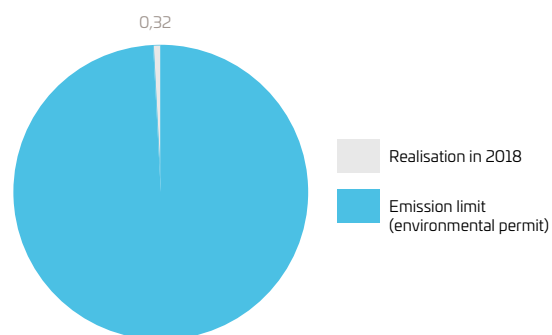
HF (hydrogen fluoride) mg/Nm³



NH₃ (ammonia) mg/Nm³



Hg (mercury) µg/Nm³



NB:

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

1 µg = 1 microgram = one millionth of a gram or 0,000001 grams



COMMUNITY

We aim at promoting awareness of the waste-to-energy industry with open communications. We inform people actively about current topics and thousands of people visit the WtE plant every year.





We explain how the WtE plant works and what kind of role energy recovery of waste has in circular economy.

Westenergy engages thousands every year



Westenergy emphasises effective flow of information, and already when the Waste-to-Energy plant was being planned, people living in the company's operating area were informed about the company and the plant's operation. Westenergy has remained an interesting place to visit, and in 2018 approximately 3 000 people visited the plant. The visitor groups consist of different organisations, clubs and work groups, and a large part of the visitors are school children and students to whom visiting the plant often forms a part in an environment or energy theme period.

One of the highlights of the year is the Open House event that is organised every year at the plant usually in the end of the year. Last year, there were, for instance, guided tours in the WtE plant and a display of metal items that were found in the bottom slag. The display makes people think about also their own recycling habits. Last year some 300 people took part in the Open House event and every year, the event has received positive feedback.

In 2018 Westenergy participated also in the Open House events of the owner companies, the municipal waste management companies and in different local energy events and fairs. Westenergy contacts people also in social media, via company Instagram and Facebook accounts.

WESTENERGY SUPPORTS STUDENT CO-OPERATION AND RESEARCH PROJECTS IN CIRCULAR ECONOMY

Providing work and study opportunities is an important part of Westenergy's community activity. Every year Westenergy recruits summer workers to the operator and maintenance teams and for the office. Since 2017 Westenergy has also hired 16-18-year-old students to take care of the outdoor areas of the plant in the summer. Some students have also written their thesis or diploma work for Westenergy after their summer job.

Westenergy provides support to research projects that are based on the circular economy concept. Last year in the SHARE project, the ecosystems of circular economy in the context of waste-to-energy field were studied in three theses.



Read the online annual report for more about the theses and research projects in 2018.
2018.WESTENERGY.FI

As a part of circular economy theme, Westenergy in cooperation with Vaasanseudun Kehitys Oy and the University of Vaasa organised ReThink seminar that aimed at making companies and decision-makers consider the competitive edges circular economy could offer. The role of municipalities in creating a viable operating environment for circular economy was also discussed in the seminar.



Read about different organisations where Westenergy is a member in the online annual report.
2018.WESTENERGY.FI

Annual activity report

1.1. - 31.12.2018

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 Botnariorsk Ab, Lakeuden Etappi 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 an incineration plant for non-recyclable municipal waste on a property that it owns in Koivulah-ti, Mustasaari, and sells waste treatment services to its shareholders on the absorption principle. The steam produced in the incineration 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 2018 was an operational success for Westenergy. This is reflected, for example, in the new record of the amount of waste and very high availability of the plant. The company's turnover in 2018 amounted to EUR 15,908,304. The company's most important sources of revenue are waste incineration services to the shareholders and the steam energy to Vaasan Sähkö Oy, for which Westenergy Oy Ab is paid on the basis of the supplied district heat and electricity. The price of electricity was a pleasant surprise in 2018. The high availability translated also in the reliability of district heat supply. In addition, the company received significant revenue from the sales of metals separated from the bottom slag. Turnover fell from the previous year, which is explained primarily with the low price level of waste incineration services.

The delivery amount of waste was slightly lower than previous years because the stored waste was burned off over

the past year. Consumption of chemicals remained moderate and the tendering procedure for chemicals that was completed in the end of the previous year began to have visible results only during the past year. A record amount of bottom slag was treated in the past year, over 50,000 tonnes. The sales of metals separated from slag amounted to a significant revenue. The costs of treating slag were increased by the so-called final disposal costs, which however are considerably lower than the opportunity cost of disposal in a landfill. The new Government Decree on the Recovery of Certain Wastes in Earth Construction made the final disposal of mineral fraction possible. 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 maintenance costs were slightly above the estimate, primarily for the comprehensive maintenance during the shutdown. During the shutdown, the waste hopper was replaced, for example. During the year, also the first large revision maintenance of the turbine was made in collaboration with Vaasan Sähkö Oy. The revision maintenance restricted the production of electricity for more than a month.

Investments in the financial period were related to the renewal of the operating system's data collection server and emissions reporting system, improved efficiency of the lime silo's unloading system and optimisation of the lime feeding, change of the reduction valve and new announcement system. Investments in 2018 totalled EUR 252,485.

The company's cash position continues to be good. Westenergy Oy Ab has done a complete revision of its methods of financing in 2017. The new funding programme of MEUR 66 was concluded with Handelsbanken. The funding programme includes a loan of MEUR 60 that was drawn down in 2017. In addition, a tranche of MEUR 6 was agreed upon

YEAR	2018	2017	2016	2015
Turnover, MEUR	15,9	18,9	16,8	18,3
Amount of burned waste, tonnes	190 679	188 208	163 118	168 355
Utilisation rate, %	95,5	94,9	82,1	85,1

and drawn down in 2018. The company has hedged near-ly 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 provides strong support to development projects and dissertations on circular economy. The company has requested students to conduct final projects concerning these topics, for instance. Together with the University of Vaasa, the company has participated in the SHARE project - Industry sharing platform for boosting transition towards circular economy, organised by VTT Technical Research Centre of Finland. SHARE research consortium consists of VTT Technical Research Centre of Finland, University of Vaasa, Westenergy, HSY, Abloy, Roima and Sharetribe. Last year, three final projects were conducted on the topic. The first study analysed the economic importance of utilisation of slag while the second one studied how the amendments to the procurement and waste acts have affected Westenergy's operations. The third final project created an analytical description of the closed material flows between the urban food production and waste-based energy production. 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 has continued to survey an investment in a flue gas scrubber. The investment helps Westenergy Oy Ab comply with the stricter environmental standards. The European Union will make a decision on the Waste Incineration BREF, which is highly likely to lead to stricter emission regulations. In addition, the investment helps increase the capacity of district heat production by approximately 20 %. This further increases the role of Westenergy in the district

heat production for Vaasa region. The tendering of the procurement was carried out in the end of 2018 and the actual supply agreement was concluded in February 2019. The goal is to install and introduce the scrubber already in 2019.

Westenergy Oy Ab was issued a new environmental license in 2017 but it has appealed against the decision. The company can continue to operate in accordance with the new license despite the appeal. The new environmental license has updated the plant capacity to reflect the reality and given a permission to invest in a flue gas scrubber.

Westenergy Oy Ab is committed to follow the quality, environmental, and occupational health and safety policies that 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 safety and occupational healthcare. 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 2018. Westenergy is one of the first businesses in Finland to have its operational system certified in accordance with the new occupational health and safety standard (ISO 45001:2018).

The company employed 30 people in the beginning of the financial period and 32 people in the end of the financial period. The average number of employees during the year was

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

36. The salaries and remuneration paid in 2018 totalled EUR 2,224,828. The following table includes some key figures related to the personnel.

In the past operating period, the Board of Directors consisted of Heikki Halla-aho (Chairman), Paavo Eloniemi (Vice-Chairman), Håkan Anttila, Paavo Hankonen, Jouko Huumarkangas, Ari Perälä, Harri Virtanen and Gunbritt Tallbäck (regular members). Håkan Anttila, a long-standing member of the board, passed away on 7 March 2018 and Ragnvald Blomfeldt was appointed to replace him as a regular member of the Board. The Board met seven 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.

Early in 2016, Westenergy Oy Ab was sued for damages in the district court. The case was completed in the end of 2018. The district court issued an interim order dismissing the case in its entirety and ordering the suitor to pay for Westenergy's legal expenses. The suitor has not appealed against the interim order or requested an extension of the appeal period. Westenergy Oy Ab is negotiating with Loimi-Hämeen Jätehuolto Oy about ownership arrangements that would make Loimi-Hämeen Jätehuolto Oy an important shareholder of the company. Westenergy is also negotiating with the current shareholders about the changes in shareholdings. The negotiations are to be concluded by the end of 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.

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

The company's registered share capital was EUR 12,000,000 in the end of the financial period. The company has 12,000,000 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 results.

In compliance with Section 3 of the articles of association, the company does not distribute dividends. The Board of Directors proposes that the net profit for the period of EUR 20,017.83 be transferred to the profit and loss account as the company's equity.

Vaasa 11 April 2019

Westenergy Oy Ab, Company Board

The company board



Gunbritt Tallbäck

Board member since 2014



Heikki Halla-aho

Chairman of the Board
Board member since 2014



Harri Virtanen

Board member since 2014



Jouko Huumarkangas

Board member since 2014



Paavo Eloniemi

Vice-Chairman of the Board
Board member since 2014



Paavo Hankonen

Board member since 2014



Ragnvald Blomfeldt

Board member since 2018



Olli Alhoniemi

Secretary of the Board
Managing Director



Ari Perälä

Board member since 2014

Profit and loss statement

Currency EUR	1.1.2018 - 31.12.2018	1.1.2017 - 31.12.2017
NET TURNOVER	15 908 304,24	18 864 299,62
Raw materials and services		
Raw materials and consumables		
Purchases during the financial year	-4 900 498,19	-3 585 679,87
Variation in inventories	-218 577,90	-137 423,45
External services	-1 309 786,53	-1 552 726,28
Raw materials and services total	-6 428 862,62	-5 275 829,60
Staff expenses		
Wages and salaries	-2 224 827,68	-2 254 458,16
Social security expenses		
Pension expenses	-402 370,14	-417 612,63
Other social security expenses	-43 885,37	-61 770,83
Staff expenses total	-2 671 083,19	-2 733 841,62
Depreciation and reduction in value		
Depreciation according to plan	-6 492 276,64	-6 549 791,77
Depreciation and reduction in value total	-6 492 276,64	-6 549 791,77
Other operating charges	-1 744 464,47	-1 528 471,54
OPERATING PROFIT (LOSS)	-1 428 382,68	2 776 365,09
Financial income and expenses		
Other interest and financial income	5,69	1,21
Interest and other financial expenses	-1 078 698,31	-1 664 969,47
Financial income and expenses total	-1 078 692,62	-1 664 968,26
PROFIT (LOSS) BEFORE EXTRAORDINARY ITEMS	-2 507 075,30	1 111 396,83
Extraordinary items		
Extraordinary expenses	2 527 093,13	-1 114 109,16
PROFIT (LOSS) FOR THE FINANCIAL YEAR	20 017,83	-2 712,33

Balance sheet

Currency EUR	31.12.2018	31.12.2017
ASSETS	81 581 734,51	81 581 734,51
NON-CURRENT ASSETS		
Intangible assets		
Intangible rights	97 249,95	88 130,50
Other capitalised long-term expenses	5 118 040,69	6 824 054,30
Intangible assets total	5 215 290,64	6 912 184,80
Tangible assets		
Land and waters	711 581,18	711 581,18
Buildings	25 405 000,92	26 582 094,05
Machinery and equipment	38 286 808,82	41 652 613,00
Other tangible assets	13 060,00	13 060,00
Tangible assets total	64 416 450,92	68 959 348,23
NON-CURRENT ASSETS TOTAL	69 631 741,56	75 871 533,03
CURRENT ASSETS		
Inventories		
Raw materials and consumables	1 591 712,92	1 810 290,82
Inventories total	1 591 712,92	1 810 290,82
Short-term		
Trade debtors	895 656,38	803 368,82
Deferred tax assets	342 535,00	374 830,80
Other debtors	51 167,82	790,86
Prepayments and accrued income	49 416,44	0,00
Short-term total	1 338 775,64	1 178 990,48
Cash in hand and at banks	5 085 720,16	2 720 920,18
CURRENT ASSETS TOTAL	8 016 208,72	5 710 201,48
ASSETS TOTAL	77 647 950,28	81 581 734,51

Balance sheet

Currency EUR	31.12.2018	31.12.2017
LIABILITIES		
CAPITAL AND RESERVES		
Subscribed capital	12 000 000,00	12 000 000,00
Other reserves		
Fair value reserve	-1 370 140,00	-1 499 323,20
Other reserves total	-1 370 140,00	-1 499 323,20
Retained earnings (loss)	-44 377,05	-41 664,72
Profit (loss) for the financial year	20 017,83	-2 712,33
CAPITAL AND RESERVES TOTAL	10 605 500,78	10 456 299,75
TAX RESERVES		
Depreciation reserve	3 222 721,98	5 749 815,11
TAX RESERVES TOTAL	3 222 721,98	5 749 815,11
CREDITORS		
Long-term		
Loans from credit institutions	52 000 000,00	53 000 000,00
Long-term total	52 000 000,00	53 000 000,00
Short-term		
Loans from credit institutions	7 000 000,00	7 000 000,00
Advances received	115 620,00	1 053 510,00
Trade creditors	1 700 720,27	819 954,16
Other creditors	69 252,59	367 615,13
Accruals and deferred income	2 934 134,66	3 134 540,36
Short-term total	11 819 727,52	12 375 619,65
CREDITORS TOTAL	63 819 727,52	65 375 619,65
LIABILITIES TOTAL	77 647 950,28	81 581 734,51

Financial statement

Currency EUR	31.12.2018	31.12.2017
CASH FLOW FROM OPERATING ACTIVITIES		
Profit (loss) before extraordinary items	-2 507 075,30	1 111 396,83
Corrections:		
Depreciation and amortization	6 492 276,64	6 549 791,77
Financial income and expenses	1 078 692,62	1 664 968,26
Cash flow before change in working capital	5 063 893,96	9 326 156,86
Change in working capital:		
Increase(-)/decr.(+) in short-term interest-free receivables	-159 785,16	94 141,11
Increase(-)/decrease (+) in inventories	218 577,90	137 423,45
Increase(+)/decr.(-) in short-term interest-free liabilities	-555 892,13	-1 517 753,05
Cash flow from operations before financial items and taxes	4 566 794,57	8 039 968,37
Interest paid and pmts for other financ. exp. from operat.	-1 078 698,31	-1 664 969,47
Financial income received from operations	5,69	1,21
Cash flow before extraordinary items	3 488 101,95	6 375 000,11
CASH FLOW FROM OPERATING ACTIVITIES (A)	3 488 101,95	6 375 000,11
CASH FLOW FROM INVESTMENTS:		
Investments in tangible and intangible assets	-252 485,17	-289 393,21
CASH FLOW FROM INVESTMENTS (B)	-252 485,17	-289 393,21
CASH FLOW FROM FINANCING:		
Fair value reserve, change	129 183,20	95 303,20
Repayment of long-term loans	-1 000 000,00	-10 319 781,06
CASH FLOW FROM FINANCING (C)	-870 816,80	-10 224 477,86
CHANGE IN CASH AND CASH EQUIVALENTS(A+B+C) INCR.(+)/DECR.(-)	2 364 799,98	-4 138 870,96
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD	2 720 920,18	6 859 791,14
CASH AND CASH EQUIVALENTS AT END OF PERIOD	5 085 720,16	2 720 920,18

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:

	31.12.2018	31.12.2017
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	2 512 208,46	2 093 507,05
Amortisation in the financial period	418 701,41	418 701,41
Accumulated amortisation	2 930 909,87	2 512 208,46
Undepreciated	1 256 104,27	1 674 805,68

INTANGIBLE ASSETS	2018	2017
Intangible rights		
Historical cost, 1 Jan	88 130,50	0,00
Increase	19 925,00	88 130,50
Historical cost, 31 Dec	108 055,50	88 130,50
Accumulated amortisation and depreciation, 1 Jan	0,00	0,00
Amortisation in the financial period	10 805,55	0,00
Accumulated amortisation	10 805,55	0,00
Carrying amount	97 249,95	88 130,50
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	10 236 081,63	8 530 068,02
Amortisation in the financial period	1 706 013,61	1 706 013,61
Accumulated amortisation	11 942 095,24	10 236 081,63
Carrying amount	5 118 040,69	6 824 054,30

TANGIBLE ASSETS	2018	2017
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	0,00	0,00
Reductions		
Historical cost, 31 Dec	32 845 367,33	32 845 367,33
Accumulated amortisation and depreciation, 1 Jan	6 263 273,28	5 086 180,15
Amortisation in the financial period	1 177 093,13	1 177 093,13
Accumulated amortisation	7 440 366,41	6 263 273,28
Carrying amount	25 405 000,92	26 582 094,05
Machinery and equipment		
Historical cost, 1 Jan	60 173 860,52	59 972 597,81
Increase	232 560,47	201 262,71
Decrease		
Historical cost, 31 Dec	60 406 420,99	60 173 860,52
Accumulated amortisation and depreciation, 1 Jan	18 521 247,52	14 854 562,49
Amortisation in the financial period	3 598 364,65	3 666 685,03
Accumulated amortisation	22 119 612,17	18 521 247,52
Carrying amount	38 286 808,82	41 652 613,00

EQUITY	31.12.2018	31.12.2017
Committed		
Share capital, 1 Jan	12 000 000,00	12 000 000,00
Share capital, 31 Dec	12 000 000,00	12 000 000,00
Fair value reserve	-1 370 140,00	-1 499 323,20
Committed capital, total, 31 Dec	10 629 860,00	10 500 676,80
Free		
Retained earnings	-44 377,05	-41 664,72
Distribution of dividends	0,00	0,00
Profit/loss (+/-) for the financial period	20 017,83	-2 712,33
Free capital, total	-24 359,22	-44 337,05
Equity, total	10 605 500,78	10 456 299,75

There are no distributable funds on 31 December 2018

SPECIFICATION OF LIABILITIES	2017	2016
Non-current		
Amounts owed to financial institutions	52 000 000,00	53 000 000,00
Current		
Amounts owed to financial institutions	7 000 000,00	7 000 000,00
Accounts payable	1 700 720,27	819 954,16
Accrued liabilities	2 934 134,66	3 134 540,36
Other liabilities	69 252,59	367 615,13
Deferred income	115 620,00	1 053 510,00
Total	63 819 727,52	65 375 619,65

PERSONNEL AND MEMBERS OF BODIES

In the financial period, the company employed an average of 36 people.

PERSONNEL COSTS	2018	2017
Salary costs in the financial period	2 153 827,68	2 180 158,16
Remuneration of board members	71 000,00	74 300,00
Pension costs	402 370,14	417 612,63
Social security contributions	43 885,37	61 770,83
Personnel costs, total	2 671 083,19	2 733 841,62

FINANCIAL INCOME AND EXPENSES	2018	2017
Interest income	5,69	1,21
Interest expenses	-1 078 698,31	-1 664 969,47
Financial income and expenses, total	-1 078 692,62	-1 664 968,26

RECEIVABLES	2018	2017
Current receivables		
Trade receivables	895 656,38	803 368,82
Other receivables	51 167,82	790,86
Accrued income	49 416,44	0,00
Current receivables, total	996 240,64	804 159,68

DETAILS ON THE DERIVATIVE CONTRACTS THAT HEDGE AGAINST INTEREST RATE RISK

The notional amount of the interest rate swap contract is EUR 27,000,000 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 28.2 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:

2018	2017
- 1 712 675,00	- 1 874 154,00

CONTINGENT LIABILITIES AND OTHER COMMITMENTS

	2018	2017
Debt guaranteed by a mortgage on the real estate or company		
Financial loans	59 000 000,00	60 000 000,00
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	2018	2017
Leasing	4 001,52	5 335,36
of which maturing in 2018	1 333,84	1 333,84
Liability to refund VAT for real estate investments	3 084 932,66	3 853 032,31

LIABILITIES DUE IN MORE THAN FIVE YEARS

	2018	2017
Financial institution loans	2 300 000,00	10 000 000,00

ACCOUNTING BOOKS USED IN THE FINANCIAL PERIOD

General journal, digital
 General ledger, digital
 Balance book, manual
 Separate payroll accounting

VOUCHER TYPES USED IN THE FINANCIAL PERIOD

Handelsbanken bank account
 Purchase invoices
 Electronic purchase invoices
 Cash and memo vouchers
 VAT entries
 Vouchers of passing on of charges

voucher type 20
 voucher type 71
 voucher type 73
 voucher type 90
 voucher type 91
 voucher type 92

SIGNATURES

Vaasa 11 April 2019



Heikki Halla-aho

Chairman of the Board



Olli Alhoniemi

Managing Director



Ragnvald Blomfeldt

Board Member



Ari Perälä

Board Member



Gunbritt Tallbäck

Board Member



Paavo Eloniemi

Vice-Chairman of the Board



Paavo Hankonen

Board Member



Harri Virtanen

Board Member



Jouko Huumarkangas

Board Member

AUDITOR'S NOTE

Auditor's Report has been issued today.

Vaasa 11 April 2019



Kjell Berts, KHT

Auditor's report

To the Annual General Meeting of Westenergy Oy Ab

REPORT ON THE AUDIT OF FINANCIAL STATEMENTS

Opinion

We have audited the financial statements of Westenergy Oy Ab (business identity code 2165379-9) for the year ended 31 December, 2017. 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

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 Financial Statements

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 guarantee 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 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 information included in 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 information included in the report of the Board of Directors and, in doing so, consider whether the information included in the report of the Board of Directors 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 regulations.

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

Vaasa 11.4.2018

Ernst & Young Oy
Authorized Public Accountant Firm



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