

FINANCIAL STATEMENTS AND REPORT ON OPERATIONS

1.1.2017-31.12.2017

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REPORT ON OPERATIONS FOR THE FINANCIAL YEAR 2017

The Helen Group is a commercial entity, which consists of the parent company Helen Ltd and its subsidiaries Helen Electricity Network Ltd, Oy Mankala Ab, Suomen Energia-Urakointi Oy and Helsingin Energiatunnelit Oy. The associated companies of Helen Ltd are Liikennevirta Oy, Voimapiha Oy and Suomen Merituuli Oy.

Helen Ltd offers its customers electricity, district heating and district cooling, along with a wide range of services for small-scale energy production and the customers' own energy use and improving its efficiency. Helen Ltd produces energy at its power stations and other production plants located in Helsinki, as well as through its power assets. Helen Ltd is owned by the City of Helsinki.

Helen Electricity Network Ltd (100%) concentrates on electricity network operations in compliance with the Electricity Market Act and provides transmission and distribution services to its customers in almost the entire City of Helsinki. The net sales of Helen Electricity Network Ltd account for approx. 14% of the Helen Group's net sales.

Oy Mankala Ab (100%) is a hydropower company that owns the Mankala, Ahvenkoski, Klåsarö and Ediskoski hydropower plants by the Kymijoki River. Oy Mankala Ab's holding in Teollisuuden Voima Oy is 8.1%, in Suomen Hyötytuuli Oy 12.5% and in Suomen Merituuli Oy 50%.

Helsingin Energiatunnelit Oy (90%) serves the energy, water supply and sewerage and telecommunication networks. The City of Helsinki's holding in Helsingin Energiatunnelit Oy is 10%.

Suomen Energia-Urakointi Oy (60%) is a service company specialised in electronic urban technology, providing design, installation, operation and data transmission services for networks and equipment related to electricity transmission, distribution and use. The other owners are Vantaa Energy Ltd and Lahti Energia Oy.

Financial year 2017

Although competition in the electricity retail market has continued to present a challenge, Helen has succeeded in increasing its customer numbers in both retail and corporate sales. This has required a significant increase in selling activities and in the number of customer contacts in different channels.

The growth targets for 2017 were met in the highly successful electricity sales, due to which the number of Helen's customers rose to a record level. The sales of district cooling services grew further. New energy services, such as renewable district heat, solar power plants and demand response services were also sold to business customers.

Helen's own operations were developed and their efficiency was enhanced. We adopted new operating models, for example, in ICT and invoicing services. In production and maintenance, we were able to reduce costs and improve Helen's competitiveness by developing out operations.

The security of electricity supply was excellent in Helsinki, and the availability of power plants continued to be high. The water supply situation was equal to a normal year, and the power plants of Oy Mankala Ab are undergoing the largest investment project for decades. The number of small-scale producers of solar power doubled during the year.

The interest of business and housing-company customers in cooling services has continued to grow. Helen meets the growing demand by increasing its production volumes. A new heating and cooling plant is currently under construction beneath the Esplanade Park. Thanks to the new heat pumps, waste energies from properties, homes and data centres can increasingly be recycled.

Group's profit trend

Helen Group's results were at the anticipated level, which was higher than in the previous year. The positive profit trend in the network business, the low market price of electricity and the increased fuel costs had a key impact on the performance.

The net sales for 2017 totalled EUR 805 million (EUR 782 million) and the operating profit stood at EUR 81 million (EUR 75 million). At 6,167 GWh, the electricity sales volume fell by 2% on the previous year. At 6,606 GWh, the district heat sales remained at the previous year's level, as did the district cooling energy sales at 141 GWh, and the electricity distribution in Helsinki at 4,404 GWh.

	Group		Parent company	
	2017	2016	2017	2016
Net sales, EUR mill.	805	782	681	664
Operating profit, EUR mill.	81	75	51	53
Operating profit, %	10	10	7	8
Profit before appropriations, EUR mill.	60	52	66	45
Investments, EUR mill.	95	90	49	53
Equity ratio, %	72	71	76	75
Return on investment, %	3	3	4	3
Employees as of 31 December	1,144	1,270	888	1,017
Balance sheet total, EUR. mill.	2,732	2,720	2,584	2,564

Equity ratio % = 100 * own funds / balance sheet total

Own funds = shareholders' equity + untaxed reserves + depreciation difference deducted by tax liability

Return on capital invested % =

100 * (profit before appropriations + financing costs + tax) / average capital invested

Capital invested = shareholders' equity + interest-bearing debt

Investments

Helen is making investments in increasing the use of renewable energy in district heat production, recycling of energy with heat pumps and improving the security of supply in energy networks in particular.

Helen Group's investments totalled EUR 95 million. The investments in the production structure stood at EUR 45 million in 2017. A total of 26 kilometres of new district heating and cooling networks were constructed, and their share of all investments was EUR 14 million. Investments in the electricity network totalled EUR 33 million and those in the tunnel network EUR 2 million. Emission allowance purchases amounted to EUR 1 million.

Financing

In accordance with its financial policy, Helen Ltd manages the financing of its subsidiaries in a centralised way. The Group's equity ratio was 72%, and the amount of interest-bearing debts EUR 632 million at the close of the financial year.

The interest-bearing debts of Helen Ltd consist of the subordinated loan (EUR 157 million) taken out from the owner, a so-called senior debt (EUR 252 million) taken out from the owner, and loans taken out from financial institutions (EUR 98 million).

The subordinated loan taken out from the City of Helsinki can be repayed early, either partially or fully, if the borrower so wishes. The capital of the subordinated loan can only be repaid to the extent that the unrestricted shareholders' equity and the total amount of the subordinated loans at the time of repayment exceed the loss that is to be confirmed for the company's latest financial year or is included in the balance sheet of more recent financial statements. The annual interest rate for the loan is six per cent (6%).

The loan of Oy Mankala Ab taken out from the State Nuclear Waste Management Fund amounted to EUR 84 million at the end of 2017.

Shares

The registered and fully paid share capital of Helen Ltd is EUR 600 million. The total number of shares is 1,000. The City of Helsinki owns all the shares.

KEY EVENTS DURING THE FINANCIAL PERIOD

The construction work at a pellet-fired heating plant in Salmisaari progressed when the installation of Finland's largest pellet-fired boiler began. This heating plant is one of the biggest investments in renewable energy in Finland, and it will be commissioned in early 2018. On completion, it will produce renewable district heat for the needs of about 25,000 one-bedroom flats. Wood pellets will replace coal use in Helen's district heat production.

Finland's largest heat pump plant, Helen's Katri Vala heating and cooling plant, was selected as part of the national peak load capacity system for the next three-year period. Thus, as part of the peak load capacity system, Helen will contribute to ensuring that Finland has a sufficient electricity supply by reducing the electricity consumption of the heating and cooling plant in exceptional situations, i.e. when peak load capacity is needed.

Helen is the first company in Finland to launch an electricity storage service intended for enterprises and concluded the first commercial agreements on implementing the service. When the customer does not need the entire capacity of its electricity storage facility, Helen can buy the extra usage time and bring it to the electricity market. The service can be acquired separately or as part of a solution suitable for the customer. The service can include, e.g., the production of solar electricity and demand response services related to the control of electricity consumption.

The first two-way charging point in Finland was opened in the Suvilahti district of Helsinki, in connection with Helen's solar power plant and electricity storage facility. The V2G (vehicle-to-grid) charging point enables not only charging of electric vehicles, but also using them as an electricity storage unit and taking part in the balancing of the electricity system.

Helen Electricity Network's new substation in Kalasatama was made ready for deployment. The substation will safeguard power distribution in the expanding district while piloting new fault management technology to automatically bypass faults in the electricity system of a major client site. The substation is equipped with its own solar power plant, and it utilises the waste heat of transformers in its heating.

The Ministry of Economic Affairs and Employment, the Energy Authority and Motiva have awarded Helen with recognition for its excellent energy-efficiency work. Helen's key achievement in energy efficiency during the period 2008–2016 was the Katri Vala heating and cooling plant that enables efficient utilisation of waste heat and recycled heat.

Finnish people regard Helen as the most sustainable brand among energy companies according to the largest survey in the Nordic countries concerning citizens' views on the responsibility of well-known brands. Helen was ranked highest in the industry in both of the scored categories, which are environmental responsibility and social responsibility.

In April 2017, Helen carried out an extensive customer survey among its residential customers. According to the survey, Helen's image among its own customers is excellent. For example, 92% of its customers regard Helen as more responsible than energy companies in general, and 94% consider Helen to be more reliable than energy companies in general. Helen was also ranked high for its customer orientation, proximity and favourable prices.

Employees

Helen Ltd had 888 (1,017) employees at the end of the year. The number of permanent employees was 852 (976), and the number of fixed-term employees 36 (41). The average number of employees was 962 (1,064). The considerable decrease in the number of employees was mainly due to the transfers of business operations implemented during the period under review, as well as a number of retirements. The average age of the employees was 46.7 (46.6) years, and the average length of employment was 16.6 (16.2) years. A total of EUR 49.3 million (EUR 53.0 million) was paid as wages and salaries in 2017.

Helen Electricity Network Ltd had 108 (105) employees at the end of the year. The number of permanent employees was 105 (101) and the number of fixed-term employees 3 (4). The average number of employees was 106 (104). The average age of the employees was 44.5 (44.0) years, and the average length of employment was 14.2 (13.8) years. Wages and salaries amounted to EUR 6.6 million (EUR 6.2 million) in 2017.

Suomen Energia-Urakointi Oy had 148 (148) employees at the end of the year. The number of permanent employees was 142 (145) and the number of fixed-term employees 6 (3). The average number of employees was 155 (155). The average age of the employees was 46.8 (46.9) years, and the average length of employment was 12.0 (12.4) years. A total of EUR 6.3 million (EUR 6.6 million) was paid as wages and salaries in 2017.

The rest of the subsidiaries, Oy Mankala Ab and Helsingin Energiatunnelit Oy had no employees at the end of 2017.

Research and development

The development of energy production focused on the planning of investments in renewable production forms and on the preparation of the decisions to be made to replace heat production in Hanasaari by year 2024. The options for the first stage are new investments in bio-based heat production, heat pumps and the storage of heat. We are also studying versatile heat pump solutions, electric boilers, geothermal heat, replacing coal with bio-based fuels, distributed microgeneration together with the customers, increasing energy efficiency in customers' operations, and the utilisation of purchased energies and waste heat, e.g. in data centres. Solutions related to the circular economy and the utilisation of waste heat are developed together with the customers to an increasing degree.

The project application prepared by Helen in cooperation with Helen Electricity Network Ltd and VTT with respect to the control of distributed resources, such as electricity storage facilities, solar power plants, charging of electric vehicles, and customers' electrical appliances, was accepted as part of the EU Horizon 2020 programme. The related four-year SysFlex project was launched in November 2017. Helen's goal in the project is to develop and demonstrate new market-driven flexibility technologies and products for the needs of the main grid and the distribution system.

Helen continued cooperation with the transmission system operator Fingrid Oyj in the aggregation pilot project for the balancing of energy markets. The objective of aggregation is to combine small-scale sites capable of balancing their electricity consumption or production, thus gaining financial benefits from taking part in the maintenance of the power balance in the electricity system. The pilot aims to gain practical experiences, e.g. from submitting aggregated bids, registering the sales and handling balance corrections, as well as information exchange between various parties in the balancing power market.

Helen is engaged in the EU project mySMARTLife to test new solutions for climate change mitigation in cities. The objective is that the solutions tested in Helsinki can be utilised in other cities in Finland and in other countries at a later date. Helen, e.g. gathered ideas from interested citizens for carrying out the expansion of the Korkeasaari solar power plant. It also produced a website visualising the Suvilahti energy system and an animation demonstrating the functioning of the solar power plant, electricity storage facility and an electric vehicle charging point. In addition, a housing company cooperation related to heat demand response in Merihaka progressed to its first stage and installations carried out in 20 dwellings. During the summer, we also successfully tested reactive power compensation at the Kivikko solar power plant.

Helen took part in Kasvupolku (Energy Growth Track), a joint growth programme for energy companies seeking new innovations, ideas and business models. Participation in the project is part of Helen's cooperation with growth companies aiming to identify new, promising partner enterprises, to increase common sales and to act as a facilitator of growth also through ownership arrangements.

Internal control and risk management

The aim of our risk management measures is to ensure the security of energy supply and safeguard and increase the value of the Helen Group in the long term. Within the company, risk management means a systematic and proactive way of identifying, analysing and managing uncertainties related to operations. Comprehensive risk management is a business-oriented, systematic and standardised procedure that steers decision-making and operations throughout the organisation.

It is the responsibility of Helen's management to ensure that the company has efficient risk management and internal control practices with regard to the extent and content of its economy and business operations. With regard to the extent and structure of its operations, the company has extensively assessed the most significant risks and uncertainty factors, as well as other factors affecting operational development.

Internal control and risk management have been organised by including risk-management thinking in all activities of the company. Operating principles and a risk management handbook have been drawn up for energy trading. The energy trading principles and associated risk management practices outlined in the risk management handbook have been approved by Helen's Board of Directors.

The comprehensive development programme for risk management includes, e.g., a risk maturity model and year clock. The maturity model assesses the present level of risk management and sets a target level for it. Improvement of risk management is based on measures that help to achieve the target level. The Management Group of Helen Ltd assesses the level of risk management annually.

The essential business risks are mainly associated with the high volatility and increasing unpredictability of the electricity market. Competition is becoming tougher also in the electricity retail market. Fluctuation of electricity exchange prices will cause business risks in wholesale and end customer sales and also in electricity procurement. The Helen Group is prepared for risks and uses derivatives to hedge procurement and sales. The most significant risks of fuel procurement are the volume risk and price risk. These risks are controlled, e.g. by means of procurement and derivative contracts. The key uncertainty in the long-term development of business operations is related to the targets set for carbon-neutral energy supply. Long-term investment planning is poses a challenge in a situation where the target and schedule are not clear.

Earnings-related pension insurances and a group life insurance were taken out at Keva. The rest of insurances are divided between four insurance companies. The insurance protection covers damages to property, damage due to business interruptions, damage to third-parties, personal injuries and vehicle damage. It has been ensured that the coverage and excess levels of the insurances correspond to the insurance companies' risk-bearing capacity. Some of the insurances were subject to competitive tendering in 2017.

Environment

Helen's long-term target is climate neutrality. In order to reduce emissions and increase the use of renewable energy, Helen makes progressive investments to utilise all the opportunities offered by new technologies. New energy production solutions are also developed together with customers. The energy production of Helen Ltd falls within the scope of the EU Emissions Trading Scheme (EU ETS).

The Industrial Emissions Directive (IE Directive) that entered into force at the beginning of 2016 made the emission limits of local emissions, such as particle matter, sulphur dioxides and nitrogen oxides more stringent, in many cases reducing the amounts to less than half of their previous levels. The particulate emissions of Helen Ltd have already been at a very low level and even below the new emission limits. The efficiency of the desulphurisation plants of the power plants was also increased. Reducing emissions of nitrogen oxides required significant investments in emissions reduction technologies.

The impacts of the local emissions from Helen's energy production on air quality in the Greater Helsinki area are monitored as part of the air quality monitoring carried out by the Helsinki Region Environmental Services Authority HSY. The results of the monitoring show that the impacts of energy production on the air quality of Helsinki are minimal.

At Helen Ltd, the production and distribution of electricity, heat and cooling has been certified in accordance with the ISO 14001 environmental management standard. Helen Electricity Network Ltd applies an integrated quality and environmental management system that complies with the ISO 9001, ISO 14001 ja OHSAS standards. The environmental impacts of all offices are managed with the Green Office environmental programme.

Annual General Meeting

The Annual General Meeting of Helen Ltd (1/2017) was held on 23 March 2017. In addition to the ordinary issues discussed at the meeting, the Annual General Meeting decided to add a new section, section 12, concerning corporate steering, to the Articles of Association of Helen Ltd.

KPMG Oy Ab was selected as the company's auditor. The auditor with the main responsibility was Kaija Pakkanen, Authorised Public Accountant.

The owner exercised its shareholder's power of decision (2/2017) in appointing the following persons as members of the shareholder's Appointments Committee on 12 June 2017: Mayor Jan Vapaavuori, City Manager Sami Sarvilinna, Ms. Tuuli Kousa, Mr. Paavo Arhinmäki and Mr. Tomi Sevander.

On 18 September 2017, the owner exercised its shareholder's power of decision (3/2017) in making the following changes to the members of the Board of Directors for the remaining term of office of the Board as of 1 October 2017:

Pekka Majuri to be replaced by Wille Rydman
Mari Holopanen to be replaced by Kaisa Hernberg
Annukka Mickelsson to be replaced by Daniel Sazonov
Jouko Sillanpää to be replaced by Sirpa Puhakka.

On 20 November 2017, the owner exercised its shareholder's power of decision (4/2017) by giving a binding instruction to the Board of Directors of Helen Ltd to the effect that in accordance with the proposal of the shareholder's Appointment Committee, Timo Rajala should be elected as a new member of the Board of Directors of Liikennevirta Oy.

Board of Directors

In accordance with the owner's decision of 18 September 2017, certain changes were made to the members of the Board of Directors of Helen Ltd for the remaining term of office of the Board.

The Board of Directors consisted of the following persons as of 1 October 2017:

Osmo Soininvaara
Hanna-Maria Heikkinen
Kaisa Hernberg
Marko Karvinen
Hillevi Mannonen
Timo Piekkari
Sirpa Puhakka
Wille Rydman
Daniel Sazonov

The owner exercised its shareholder's power of decision in appointing Osmo Soininvaara as Chairman and Wille Rydman as Deputy Chairman of the Board of Directors of Helen Ltd. as of 1 October 2017.

In 2017, the Board of Directors convened 13 times. Two of the meetings were email meetings. The attendance percentage of the Board members in Board meetings was 95.7%.

The Board committees

The Board committees are the Audit Committee and the Personnel and Rewards Committee. The committees help the Board in carrying out its duties. The board appointed the Audit Committee and the Personnel and Rewards committee from among its members. Both committees have at least three members. The members of the Audit Committee are Hillevi Mannonen as Chairman, and Hanna-Maria Heikkinen and Mari Holopainen as members.

After the owner had exercised its shareholder's power of decision on 18 September 2017 in changing some of the Board members as of 1 October 2017, the Board appointed from among its members Sirpa Puhakka as member of the Audit Committee to replace Mari Holopainen who had resigned from the Board of Directors. The committee meetings were regularly attended by the chief Financial Officer and the vice President, General Counsel, as the secretary of the committee, as well as by the auditor and any other experts that the committee had invited at any given time. The Audit Committee convened eight times during the year 2017.

The members of the Personnel and Rewards Committee were Pekka Majuri as Chairman and Osmo Soininvaara and Annukka Mickelsson as members. After the Annual General Meeting held on 23 March 2017, the Board elected from among its members Timo Piekkari as a new member of the Personnel and Rewards Committee.

After the owner had exercised its shareholder's power of decision on 18 September 2017 in changing some of the Board members as of 1 October 2017, the Board appointed Osmo Soininvaara, Chairman of the Board, as Chairman of the committee, and Wille Rydman, Deputy Chairman of the Board, as committee member in accordance with the agenda of the committee. Timo Piekkari also continued as a committee member.

The committee meetings were regularly attended by the CEO, and the Human Resources Manager as the secretary of the committee. The Personnel and Rewards Committee convened four times in 2017. The term of office of the committees in one year, and it will end at the termination of the Annual General Meeting to be held in 2018.

President and CEO

Pekka Manninen, M.Sc. (Tech.) has acted as President and CEO of Helen Ltd.

During the financial period, a total of EUR 483,909 (EUR 507,589) was paid as salaries, fees and bonuses to the members of the company's Board of Directors and to the President and CEO and his deputy.

The Board of Directors' proposal for the distribution of dividends

The distributable equity of the parent company Helen Ltd stands at EUR 1,327,955,568.87, of which the profits from the previous financial years amount to EUR 34,357,493.85 and the profit from the financial year to EUR 42,425,681.57. The Board of Directors proposes to the Annual General Meeting that the company should pay a dividend of EUR 31,200.00/share, totaling EUR 31,200,000.00, and that EUR 45,583,175.42 should be held as retained earnings. The Board of Directors proposes that the distribution of dividends should take place on 30 April 2018. The liquidity of the company is good, and the Board of Directors takes the view that the profit distribution will not jeopardise the company's liquidity.

Outlook

According to forecasts, the electricity market will be very difficult for electricity producers in the next few years. The wholesale price of electricity will remain low in the Nordic countries in the next few years and investing in electricity generation will not be economically viable.

The share of imported electricity in Finland has risen in the past few years. Especially in wintertime, the domestic production capacity is not sufficient to meet the demand. Wind power that fluctuates according to the weather has seen very strong growth, while a significant amount of regulatable production has been withdrawn from the market at the same time. There has been an increasing need in the power system for production capacity that has reliable availability, e.g. for combined heat and power generation. Therefore, a value should be created for this kind of production in order to safeguard market performance also in the future.

The reform of the EU Emissions Trading Scheme (ETS) for the period 2021–2030 was approved in December. The new legislation will enter into force in early 2018. In Helen's view, it is excellent that emissions trading is strengthened. Emissions trading should be the primary means of control for energy production, and any overlapping and contradictory support systems should be minimised.

The directive proposals of the EU clean energy package will be completed in phases during 2018. The key issues of the directive, the criteria for bioenergy sustainability, will have a substantial impact on Helen's possibilities of utilising bioenergy in replacing fossil fuels.

The Ministry of Economic Affairs and Employment is currently preparing a legislative proposal on banning the use of coal in energy production by 2030, with a potential option of bringing the ban forward to 2025. According to the proposal, implementation of the legislation would compel the operators to carry out solutions that are too rapid and possibly inappropriate and would therefore have a very adverse effect.

The future tax solutions in Finland will also have a significant impact, on the ability to safeguard combined heat and power generation, which is needed especially in the winter conditions.

The results for 2018 are estimated to be slightly lower than in 2017.

PROFIT AND LOSS ACCOUNT 1.1.17-31.12.17
GROUP

	2017 €	2016 €
NET TURNOVER	805,011,300.36	782,118,992.18
Variation in work in progress	754,966.44	-319,457.58
Work performed by the undertaking for its purpose and capitalized	4,125,346.04	4,316,771.86
Other operating income	6,536,382.48	6,062,051.79
Operating expenses		
Energy procurement	-104,867,236.79	-107,603,311.09
Purchase of electricity distribution	-443,764.65	-443,717.34
Materials, supplies and goods:		
Fuel	-305,984,138.17	-281,733,752.30
Variation in inventories	1,925,639.13 ^{incr}	10,612,075.23 ^{incr}
Purchase of materials and supplies	-16,599,436.19	-15,755,016.94
External services	-48,537,569.35	-56,986,129.00
Staff expenses	-75,560,765.82	-81,309,452.11
Depreciation and value adjustments	-124,215,000.12	-124,582,510.08
Other operating charges	-61,511,918.20	-59,037,117.16
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OPERATING PROFIT	80,633,805.16	75,339,427.46
Financial income and expense		
Income from associated companies	3,319,682.38	2,293,409.64
Dividend income	280,263.38	56,245.38
Other interest and financial income	897,381.93	2,652,267.71
Interest and other financial expenses	-25,134,677.58	-28,721,944.46
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PROFIT BEFORE APPROPRIATIONS AND TAXES	59,978,455.27	51,619,405.73
Income taxes	-11,805,496.60	-10,460,607.25
Minority interests	-316,083.24	-420,170.07
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PROFIT FOR THE FINANCIAL YEAR	47,856,875.43	40,738,628.41

BALANCE SHEET**GROUP**31.12.2017
€31.12.2016
€**ASSETS****NON-CURRENT ASSETS****Intangible assets**

Intangible rights	53,192,697.12	63,445,970.95
Goodwill	31,056,503.59	33,146,609.76
Other long-term expenses	758,423.02	997,896.10
	<u>85,007,623.73</u>	<u>97,590,476.81</u>

Tangible assets

Land and waters	5,205,981.02	5,205,981.02
Buildings and constructions	371,494,255.80	379,130,262.73
Machinery and equipment	1,434,245,673.06	1,447,881,757.03
Advance payments and construction in progress	72,373,499.74	87,481,050.48
	<u>1,883,319,409.62</u>	<u>1,919,699,051.26</u>

Investments

Holdings in group undertakings	-	-
Receivables from Group expenses	-	-
Investments in associated companies	66,423,841.71	61,306,743.73
Participating interests	245,070,827.07	243,841,202.07
	<u>311,494,668.78</u>	<u>305,147,945.80</u>

CURRENT ASSETS**Inventories**

Fuel	83,930,676.45	81,924,247.38
Work in progress	1,813,312.49	973,348.49
Consumables	1,485,742.24	1,566,532.17
	<u>87,229,731.18</u>	<u>84,464,128.04</u>

Long term receivables

Loan receivables	47,142,572.00	39,004,720.00
Other receivables	17,325.72	48,807.32
	<u>47,159,897.72</u>	<u>39,053,527.32</u>

Current receivables

Accounts receivable	41,430,952.92	32,349,428.23
Receivables from Group companies	-	-
Group account receivables	64,434,382.36	100,865,229.60
Other receivables	11,542,008.55	9,203,312.29
Prepayments and accrued income	95,615,779.53	91,779,039.18
	<u>213,023,123.36</u>	<u>234,197,009.30</u>

Cash in hand and at banks

	104,829,232.37	39,580,905.82
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TOTAL ASSETS

	<u>2,732,063,686.76</u>	<u>2,719,733,044.35</u>
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BALANCE SHEET**GROUP**

	31.12.2017	31.12.2016
	€	€
EQUITY		
CAPITAL AND RESERVES		
Share capital	600,000,000.00	600,000,000.00
Invested unrestricted equity fund	1,251,172,393.45	1,251,172,393.45
Retained earnings	52,499,710.93	32,177,879.52
Profit for the financial year	47,856,875.43	40,738,628.41
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	1,951,478,979.81	1,924,088,901.38
MINORITY INTERESTS	6,445,437.03	6,137,721.49
LIABILITIES		
Long-term debts		
Subordinated loan	157,000,000.00	158,600,000.00
Loans from the parent community	231,750,000.00	252,350,000.00
Financing loans	126,470,588.25	138,647,058.84
Other interest-bearing liabilities	83,714,480.34	83,737,058.22
Deferred tax liabilities	20,008,000.00	16,008,000.00
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	618,943,068.59	649,342,117.06
Current liabilities		
Financing loans	6,176,470.58	7,176,470.58
Loans from the parent community	20,600,000.00	20,600,000.00
Accounts payable	51,123,311.52	56,228,620.97
Other current liabilities	42,007,254.14	27,073,142.93
Deferred income and accrued liabilities	29,289,165.09	29,086,069.95
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	155,196,201.33	140,164,304.43
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TOTAL EQUITY AND LIABILITIES	2,732,063,686.76	2,719,733,044.35

CASH FLOW STATEMENT**GROUP**

	2017	2016
	€	€
Cash flow from operating activities		
Operating profit	80,633,805.16	75,339,427.46
Corrections		
Depreciations according to plan	124,215,000.12	124,582,510.08
Other income and expenses without payments	-316,083.24	4,420,170.07
Financial income and expenses	-23,975,032.27	-26,013,431.37
Taxes	-11,805,496.60	-6,460,607.25
Share of profits of associated companies	3,319,682.38	2,293,409.64
Cash flow before change in working capital	172,071,875.55	165,321,138.49
Working capital		
Current receivables without interests	-23,363,331.70	-25,904,236.02
Group account receivables	36,430,847.24	29,943,517.85 ¹⁾
Current receivables	-2,765,603.14	-10,234,637.73
Current liabilities without interests	14,031,896.89	15,681,255.19
Cash flow from operating activities (A)	196,405,684.84	174,807,037.78
Cash flow from investing activities		
Investments in material and immaterial goods	-76,628,466.99	-92,666,662.34
Capital gain of material and immaterial goods	-	250,561.95
Investments in other investments	-6,346,722.98	-2,265,873.94
Cash flow from investing activities (B)	-82,975,189.97	-94,681,974.33
Cash flow from financing activities		
Current debts	5,000,000.00	-53,823,529.42
Long-term debts	-32,799,048.47	29,612,060.91
Own capital	-20,383,119.85	-33,579,829.93
Cash flow from financing activities (C)	-48,182,168.32	-57,791,298.44
Change in cash flow (A + B + C) increase (+) or decrease (-)	65,248,326.55	22,333,765.01
Cash and cash equivalents at the beginning of the year	39,580,905.82	17,247,140.81
Cash and cash equivalents at the end of the year	104,829,232.37	39,580,905.82
	65,248,326.55	22,333,765.01

1) Change in cash and cash equivalents in the consolidated account is presented under cash flow from operating activities.

PROFIT AND LOSS ACCOUNT 1.1.17-31.12.17 PARENT COMPANY

	2017 €	2016 €
NET TURNOVER	680,896,183.30	664,091,804.63
Work performed by the undertaking for its purpose and capitalized	2,924,578.16	3,222,709.44
Other operating income	9,646,741.13	9,005,666.04
Operating expenses		
Energy procurement	-100,913,245.31	-103,256,147.56
Purchase of electricity distribution	-7,329,347.69	-5,994,192.61
Materials, supplies and goods:		
Fuel	-305,984,138.17	-281,733,752.30
Variation in inventories	2,006,429.06 <i>incr</i>	11,143,932.75 <i>incr</i>
Purchase of materials and supplies	-8,521,092.14	-9,160,922.36
External services	-18,709,123.76	-30,140,743.59
Staff expenses	-60,063,928.93	-65,468,233.68
Depreciation and value adjustments	-85,172,227.89	-84,079,342.28
Other operating charges	-57,794,161.47	-54,568,078.16
	-----	-----
OPERATING PROFIT	50,986,666.29	53,062,700.32
Financial income and expenses		
Dividend income	27,560,263.38	5,876,245.38
Other interest and financial income	11,601,887.30	10,408,261.70
Interest and other financial expenses	-23,998,564.97	-24,686,661.47
	-----	-----
PROFIT BEFORE APPROPRIATIONS AND TAXES	66,150,252.00	44,660,545.93
Change in cumulative accelerated depreciation	-20,000,000.00	-20,000,000.00
Income taxes	-3,724,570.43	-3,894,307.11
	-----	-----
PROFIT FOR THE FINANCIAL YEAR	42,425,681.57	20,766,238.82

BALANCE SHEET**PARENT COMPANY**

	31.12.2017	31.12.2016
	€	€
ASSETS		
NON-CURRENT ASSETS		
Intangible assets		
Intangible rights	52,271,657.39	63,121,944.82
	-----	-----
	52,271,657.39	63,121,944.82
Tangible assets		
Buildings and constructions	232,637,237.39	242,764,134.47
Machinery and equipment	1,019,964,156.71	1,061,407,317.67
Advance payments and construction in progress	61,712,989.17	45,511,077.55
	-----	-----
	1,314,314,383.27	1,349,682,529.69
Investments		
Holdings in group undertakings	401,092,154.96	393,092,154.96
Receivables from Group expenses	260,885,000.00	248,855,000.00
Receivables from associated companies	1,470,000.00	0.00
Holdings in associated companies	62,407,415.59	60,000,000.00
Participating interests	121,325,077.80	120,991,702.80
	-----	-----
	847,179,648.35	822,938,857.76
CURRENT ASSETS		
Inventories		
Fuel	83,930,676.45	81,924,247.38
	-----	-----
	83,930,676.45	81,924,247.38
Long term receivables		
Other receivables	17,325.72	48,807.32
	-----	-----
	17,325.72	48,807.32
Current receivables		
Trade debtors	30,393,454.96	25,352,060.96
Loans receivable by group member companies	6,570,000.00	6,570,000.00
Group account receivables	48,296,848.70	86,482,726.13
Other receivables	7,415,433.80	4,375,095.31
Prepayments and accrued income	90,314,561.87	90,060,049.07
	-----	-----
	182,990,299.33	206,269,931.47
Cash in hand and at banks	103,113,893.41	33,555,509.86
	-----	-----
TOTAL ASSETS	2,583,817,883.92	2,564,111,828.30

BALANCE SHEET**PARENT COMPANY**

	31.12.2017 €	31.12.2016 €
EQUITY		
CAPITAL AND RESERVES		
Share capital	600,000,000.00	600,000,000.00
Invested unrestricted equity fund	1,251,172,393.45	1,251,172,393.45
Retained earnings	34,357,493.85	33,974,375.03
Profit for the financial year	42,425,681.57	20,766,238.82
	<u>1,927,955,568.87</u>	<u>1,905,913,007.30</u>
APPROPRIATIONS		
Cumulative accelerated depreciation	40,000,000.00	20,000,000.00
LIABILITIES		
Long-term debts		
Subordinated loan	157,000,000.00	157,000,000.00
Loans from the parent community	231,750,000.00	252,350,000.00
Financing loans	92,000,000.00	98,000,000.00
Other interest-bearing liabilities	130,500.31	157,274.33
	<u>480,880,500.31</u>	<u>507,507,274.33</u>
Current liabilities		
Loans from credit institutions	6,000,000.00	6,000,000.00
Loans from the parent community	20,600,000.00	20,600,000.00
Accounts payable	50,429,228.04	56,416,084.96
Other current liabilities	19,318,306.31	24,077,229.49
Accruals and deferred income	23,598,232.22	23,598,232.22
	<u>130,691,546.67</u>	<u>130,691,546.67</u>
TOTAL EQUITY AND LIABILITIES	<u>2,583,817,883.92</u>	<u>2,564,111,828.30</u>

CASH FLOW STATEMENT**PARENT COMPANY**

	2017	2016
	€	€
Cash flow from operating activities		
Operating profit	50,986,666.29	53,062,700.32
Corrections:		
Depreciations according to plan	85,132,513.63	83,852,207.97
Other income and expenses without payments	39,714.26	227,134.31
Financial income and expenses	15,163,585.71	-8,402,154.39
Taxes	-3,724,570.43	-3,894,307.11
Cash flow before change in working capital	147,597,909.46	124,845,581.10
Working capital		
Current receivables without interests	-8,304,763.69	-16,466,412.66
Group account receivables	38,185,877.43	27,113,152.10
Current receivables	-2,006,429.07	-11,143,932.75 ¹⁾
Current liabilities without interests	4,290,268.07	15,665,339.19
	-----	-----
Cash flow from operating activities (A)	179,762,862.20	140,013,726.98
Cash flow from investing activities		
Investments in material and immaterial goods	-38,993,508.30	-51,399,793.35
Capital gain of material and immaterial goods	39,714.26	250,561.95
Investments in other investments	-24,240,790.59	-65,031,547.46
	-----	-----
Cash flow from investing activities (B)	-63,194,584.63	-116,180,778.86
Cash flow from financing activities		
Long-term debts	-26,626,774.02	35,500,632.43
Own capital	-20,383,120.00	-38,008,417.22
	-----	-----
Cash flow from financing activities (C)	-47,009,894.02	-2,507,784.79
Change in cash flow (A + B + C) increase (+) or decrease (-)	69,558,383.55	21,325,163.33
Cash and cash equivalents at the beginning of the year	33,555,509.86	12,230,346.53
Cash and cash equivalents at the end of the year	103,113,893.41	33,555,509.86
	-----	-----
	69,558,383.55	21,325,163.33

1) Change in cash and cash equivalents in the consolidated account is presented under cash flow from operating activities.

NOTES TO THE FINANCIAL STATEMENTS

Accounting principles

Scope of consolidated financial statements

The consolidated financial statements include the parent company Helent Ltd and its subsidiaries Helen Sähköverkko Oy, Oy Mankala Ab, Helsingin Energiatunnelit Oy and Suomen Energia-Urakointi Oy. Voimapiha Oy and Suomen Merituuli Oy are consolidated as associated companies. The consolidated financial statements are prepared according to the Finnish Accounting Standards.

The Group is included in the Helsinki City Group as a sub-group. A copy of the financial statements of the City of Helsinki is available online at www.hel.fi

Accounting policies for the consolidated financial statements

Intra-group ownership of shares has been eliminated with the acquisition cost method. Intra-group transactions, the internal margin included in non-current assets, as well as intra-group balances have been eliminated. In the consolidated balance sheet, the difference of the acquisition cost and equity of subsidiaries has been allocated as Group goodwill, which is depreciated in five or 20 years. The share of equity exceeding the acquisition cost of subsidiaries has been allocated as Group reserve, which is recognised as revenue in 20 years. Group reserve in the balance sheet has been reported on a net basis and presented as Group goodwill. Minority interests have been separated from the capital and reserves and from the profit for the financial year and presented as a separate item. Associated companies have been consolidated in the consolidated financial statements with the equity method.

Valuation of current assets

Current assets are presented according to the FIFO principle as acquisition cost or as replacement cost if lower.

Valuation of fixed assets

Fixed assets are recognised in the balance sheet at purchase cost less depreciation according to plan and possible impairment. Depreciation according to plan is calculated as straight-line depreciation on the acquisition cost of fixed assets.

DEPRECIATION PLAN

	Depreciation period, years
Intangible assets	
IT software	3-5
Other intangible rights	over their useful economic life
Goodwill	5-20
Emission allowances	according to use
Other long-term expenses	3-10
Tangible assets	
Land and waters	no depreciation period
Buildings and structures	10-40
Networks	10-40
Machinery and equipment	3-30
IT equipment	3-10
Advance payments and construction in progress	no depreciation period
Investments of fixed assets	
Shares and holdings	no depreciation period
Group reserve recognised as revenue	20

Processing of connection fees

Connection fees that are transferrable but non-refundable have been entered as income in the profit and loss account.

	GROUP 2017 1,000 €	2016 1,000 €	PARENT COMPANY 2017 1,000 €	2016 1,000 €
1. Turnover				
Electricity sales	263,749	273,978	263,749	273,978
Sales of electricity distribution	107,919	101,069	-	-
Sales of district heat	386,281	361,304	386,281	361,304
Sales of district cooling	-	-	16,184	15,169
Other income	47,062	45,768	14,682	13,641
Total	805,011	782,119	680,896	664,092
2. Variation in work in progress	755	-319	-	-
3. Work performed by the undertaking for its own	4,125	4,317	2,925	3,223
4. Other operating income				
Capital gains	40	251	40	251
Other	6,497	5,811	9,607	8,755
Total	6,536	6,062	9,647	9,006
5. Fuels and energy procurement				
Purchase of electricity	103,874	106,925	99,936	102,578
Purchase of heat	994	678	994	678
Purchase of electricity distribution	444	444	7,313	5,994
Purchase of fuels	305,984	281,734	305,984	281,734
Change in fuel stores	2,006	11,144	2,006	11,144
Total	409,289	378,637	412,220	379,840
6. External services				
Grid fees	21,028	19,521	-	-
Construction and land construction projects	13,394	11,244	3,145	3,889
Environmental services	2,506	3,990	2,506	3,990
Other external services	11,610	22,232	13,058	22,262
Total	48,538	56,986	18,709	30,141
7. Staff				
Average number of personnel				
Number of monthly salaried employees	1,223	1,315	962	1,064
Number of hourly waged employees	-	-	-	-
Personnel	1,223	1,315	962	1,064
Staff costs				
Wages and salaries	62,291	65,870	49,339	52,995
Pension expenses	10,643	11,569	8,380	9,205
Other social charges	2,627	3,871	2,345	3,268
Total staff costs	75,561	81,309	60,064	65,468
Value of fringe benefits for tax purposes	299	219	299	219
Total	75,790	81,528	60,293	65,687
Remuneration of the Board and key management	925	882	552	546

	GROUP		PARENT COMPANY	
	2017	2016	2017	2016
	1,000 €	1,000 €	1,000 €	1,000 €
8. Other operating charges				
Land leases	7,485	7,958	6,075	6,048
Other leases	12,651	13,439	9,723	9,754
Information technology and expert services	12,248	10,922	11,191	10,729
Vehicle and equipment expenses	3,730	5,780	2,411	4,249
Representation and marketing	4,106	4,027	3,678	3,891
Insurance policies	1,400	1,673	1,087	1,464
Emission allowances	11,749	10,897	11,749	10,897
Audit fees	59	50	31	20
Other costs	8,084	4,290	11,850	7,516
Total	61,512	59,037	57,794	54,568
9. Financial income and expenses				
Share of profits of associated companies	3,320	2,293	-	-
Dividend income				
From Group undertakings	-	-	25,200	5,040
From associated companies			2,080	780
From others	280	56	280	56
Interest income on long-term investments				
From Group undertakings	-	-	11,062	9,887
Other interest and financial income				
From Group undertakings	-	-	-	-
From others	897	2,652	540	522
Total financial income	4,479	5,002	39,162	16,285
Interest expenses				
Interest expenses on a subordinated loan	9,420	9,420	9,420	9,420
Interest expenses on a senior debt	13,133	14,163	13,133	14,163
Other interest and financial expenses				
To Group undertakings	-	-	-	3
To others	2,582	5,139	1,446	1,101
Total financial expenses	25,135	28,722	23,999	24,687

	GROUP 2017 1,000 €		PARENT COMPANY 2017 1,000 €	2016 1,000 €
10. Non-current assets				
Intangible assets				
Acquisition cost 1.1.	69,367		67,643	65,559
Increases 1.1.-31.12.	2,497		1,679	12,753
Decreases 1.1.-31.12.	10,416		10,416	10,670
Acquisition cost 31.12.	61,448		58,905	67,643
Depreciation 1.1.	4,923		4,521	2,230
Depreciation 1.1.-31.12.	2,574		2,113	2,291
Book value 31.12.	53,951		52,272	63,122
Group goodwill				
Acquisition cost 1.1.	149,904			
Increases 1.1.-31.12.				
Decreases 1.1.-31.12.				
Acquisition cost 31.12.	149,904			
Depreciation 1.1.	15,438			
Depreciation 1.1.-31.12.	7,719			
Book value 31.12.	126,747			
Carried over from Group reserve	95,690			
Group goodwill in the balance sheet 31.12.	31,057			
Group reserve				
Value 1.1.	101,319			
Increases 1.1.-31.12.				
Decreases 1.1.-31.12.	5,629			
Value 31.12	95,690			
Book value 31.12.	95,690			
Carried over to Group goodwill	95,690			
Group reserve in the balance sheet 31.12.	-			
Land and waters				
Acquisition cost 1.1.	5,206			
Increases 1.1.-31.12.				
Decreases 1.1.-31.12.				
Acquisition cost 31.12.	5,206			
Book value 31.12.	5,206			
Buildings and structures				
Acquisition cost 1.1.	413,848		268,211	264,090
Increases 1.1.-31.12.	12,768		3,061	4,126
Decreases 1.1.-31.12.	1,178		-	5
Acquisition cost 31.12.	425,538		271,271	268,211
Depreciation 1.1.	34,717		25,447	12,597
Depreciation 1.1.-31.12.	19,226		13,187	12,850
Book value 31.12.	371,494		232,637	242,764
Machinery and equipment				
Acquisition cost 1.1.	1,639,277		1,195,950	1,142,359
Increases 1.1.-31.12.	86,114		28,685	53,813
Decreases 1.1.-31.12.	564		296	222
Acquisition cost 31.12.	1,724,828		1,224,339	1,195,950
Depreciation 1.1.	191,395		134,542	65,831
Depreciation 1.1.-31.12.	99,187		69,832	68,712
Book value 31.12.	1,434,246		1,019,964	1,061,407
Advance payments and fixed assets in progress				
Acquisition cost 1.1.	87,481		45,511	54,384
Increases 1.1.-31.12.	83,524		50,419	91,262
Decreases 1.1.-31.12.	98,632		34,217	100,134
Acquisition cost 31.12.	72,373		61,713	45,511
Book value 31.12.	72,373		61,713	45,511

Investments 31.12.2017	Domicile	GROUP		PARENT COMPANY			Book value €
		Number	Share %	Book value €	Number	Share %	
Shares and holdings							
Shares and holdings							
Oy Mankala Ab	litti	-	-	-	42,500,262	100.0	277,600,000
Helen Sähköverkko Oy	Helsinki	-	-	-	42,000	100.0	84,000,000
Helsingin Energiatunnelit Oy	Helsinki	-	-	-	360,081	90.0	36,084,755
Suomen Energia-Urakointi Oy	Helsinki	-	-	-	3,625	60.4	3,407,400

Associated companies

Voimapiha Oy	Helsinki	400,000	33.3	62,648,426	400,000	33.33	60,000,000
Liikennevirta Oy	Helsinki	9,748	47.6	1,312,971	9,748	33.33	2,407,416
Suomen Merituuli Oy	Helsinki	1,000	50.0	992,408	-	-	-

Other shares

Teollisuuden Voima Oyj	Helsinki	99,630,381	8.1	117,973,353	-	-	-
EPV Energia Oy	Vaasa	496,838	6.3	55,133,409	496,838	6.3	55,133,409
Pohjolan Voima Oy	Helsinki	201,316	0.6	15,683,321	201,316	0.6	15,683,321
Kemijoki Oy	Rovaniemi	39,095	1.6	50,176,665	39,095	1.6	50,176,665
Helsinki Halli Oy	Helsinki	12	-	201,826	12	-	201,826
CLIC Innovation Oy	Helsinki	100	2.2	100,000	100	2.2	100,000
Powest Oy	Helsinki	4,436	-	29,840	4,436	-	29,840
Suomen Hyötytuuli Oy	Pori	276	12.5	5,772,396	-	-	-
Suomen Messut osuuskunta	Helsinki	1	-	17	1	-	17
Helsingin							
Konsernihankinta Oy	Helsinki	3	-	1	1	-	1

Other investments

Capital loan, Helen Electricity Network Ltd, 1.10.2006–30.9.2026, interest is the reference rate of interest confirmed by the electricity market authority + 2 percentage points	146,000,000
Loan Helen Electricity Network Ltd, instalment is fixed rate of 5% of total loan	32,260,000
Loan Helen Electricity Network Ltd, bullet	20,000,000
Loan Helen Electricity Network Ltd, bullet	21,000,000
Loan Helsingin Energiatunnelit Oy, instalment is fixed rate of 5% of total loan	41,625,000
Loan Liikennevirta Oy, convertible bond loan, bullet	1,470,000

	GROUP		PARENT COMPANY	
	2017 1,000 €	2016 1,000 €	2017 1,000 €	2016 1,000 €
11. Receivables				
Long-term receivables				
Long-term loan receivables from others	47,143	39,005		
Other receivables	17	49	17	49
Total	47,160	39,054	17	49
Short-term receivables from Group undertakings				
Intra-group loan, interest-bearing	-		6,570	6,570
Trade receivables	-		376	376
Accrued income and prepaid expenses	-		9,232	9,232
Total			9,608	16,178
Accrued income and prepaid expenses				
Accrued sales	81,815	79,672	77,245	77,714
Accrued direct taxes	4,813	2,356	2,453	2,356
Other accrued income	8,988	9,751	10,617	9,990
Total	95,616	91,779	90,315	90,060

	GROUP	PARENT COMPANY		
	2017 1,000 €	2016 1,000 €	2017 1,000 €	2016 1,000 €
12. Equity				
Share capital 31.12.	600,000	600,000	600,000	600,000
Restricted shareholders' equity, total	600,000	600,000	600,000	600,000
Invested unrestricted equity fund 31.12.2017	1,251,172	1,251,172	1,251,172	1,251,172
Retained earnings 1.1.2017	72,917	66,171	54,741	66,171
Minority interests in retained earnings 31.5.2017 (increase)	-	7	-	-
Distribution of dividends 31.3.2017	20,383	34,000	20,383	34,000
Retained earnings correction	84	-	-	-
Retained earnings 31.12.2017	52,450	32,178	34,357	33,974
Profit for the financial period 31.12.2017	47,857	40,739	42,426	20,766
Unrestricted shareholders' equity, total	1,351,479	1,324,089	1,327,956	1,305,913
Total equity	1,951,479	1,924,089	1,927,956	1,905,913
13. Liabilities falling due after five years				
Subordinated loan from the City	157,000	157,000	157,000	157,000
Other loans from the City	149,350	169,950	149,350	169,950
Loans from financial institutions	21,067	23,475	19,067	20,533
Nuclear waste management loan	83,580	83,580	-	-
Total	410,996	434,004	325,417	347,483

The subordinated loan of Helen Ltd from the City of Helsinki can be repaid early either in part or full if the borrower so wishes. The capital of the subordinated loan may be repaid only where the amount of unrestricted equity and all subordinated loans of Helen Ltd exceed the amount of loss in accordance with the balance sheet included in the company's financial statements confirmed for the last or the current accounting period at the time of payment. The annual interest of the loan is six per cent (6%).

The Helen Group owns shares in the Finnish nuclear power company Teollisuuden Voima Oyj (TVO), which is legally obliged to cover in full the decommissioning of its nuclear power plants and the final disposal of spent nuclear fuel through the Nuclear Waste Management Fund. In order to cover its share of TVO's fund target in the forthcoming year and in case of unforeseen events, the Group has provided a directly enforceable guarantee for the sum of EUR 12 million. TVO has exercised its right to borrow the funds back from the Nuclear Waste Management Fund. The Helen Group's share of the reloan is EUR 84 million, which is included in the long-term debt falling due after five years.

	GROUP 2017	2016	PARENT COMPANY 2017	2016
	1 000 €	1 000 €	1 000 €	1 000 €
14. Current liabilities				
Current liabilities to Group undertakings				
Accounts payable			3,309	3,873
Other liabilities			8,906	4,781
Accruals			519	132
Total			12,735	8,786
Current liabilities to associated companies				
Accounts payable	1,163	1,201	1,163	1,201
Total	1,163	1,201	1,163	1,201
Accruals				
Periodisation of holiday pay and holiday allowance	14,429	14,381	11,372	12,630
Interests	6,124	6,130	3,598	3,831
Accrued direct taxes	508	72		
Other accruals	5,767	8,503	4,348	7,137
Total	24,827	29,086	19,318	23,598
15. Commitments and contingent liabilities				
Security deposits				
Bank liabilities	33	3,101	33	3,101
Rental liabilities				
Due in 2017	3,953	4,407	3,199	3,642
Due at a later date	9,201	12,920	3,929	7,129
Leasing liabilities				
Due in 2017	1,478	1,776	705	847
Due at a later date	1,791	2,405	999	1,190
Directly enforceable guarantees	15,258	11,762	-	-
Construction and warranty guarantees	1,444	1,487	-	-

Oy Mankala Ab is committed to providing a shareholder loan to Teollisuuden Voima Oyj for a total maximum amount of EUR 24.4 million, of which EUR 24.4 million is outstanding.

Electricity derivatives

Group							Parent company						
2017	Amount, GWh			Fair value, EUR 1,000			2017	Amount, GWh			Fair value, EUR 1,000		
	under 1 yr	over 1 yr	Total	under 1 yr	over 1 yr	Total		under 1 yr	over 1 yr	Total	under 1 yr	over 1 yr	Total
Purchased	5,074	1,731	6,805	-6,799	2,504	-4,295	Purchased	4,921	1,510	6,430	-6,599	2,135	-4,464
Sold	5,487	1,654	7,141	-7,625	-2,082	-9,707	Sold	5,487	1,654	7,141	-7,625	-2,082	-9,707
Total	-413	77	-336	-14,424	422	-14,002	Total	-567	-144	-711	-14,223	53	-14,171
2016							2016						
Purchased	3,700	2,694	6,394	-12,385	-9,922	-22,308	Purchased	3,275	2,641	5,916	-11,770	-9,855	-21,625
Sold	4,229	1,920	6,149	-13,303	-4,734	-18,037	Sold	4,229	1,920	6,149	-13,303	-4,734	-18,037
Total	-529	774	245	-25,688	-14,656	-40,344	Total	-954	721	-233	-25,073	-14,589	-39,662

The purpose of electricity derivative trades is to hedge future purchases and sales of electricity taking place at the market price. All trading takes place in a controlled way within accepted risk limits and operating guidelines. Derivatives trading implements the risk management policy approved by Helen's Board of Directors and the guidelines on the operating principles and risk management in energy trading. The majority of derivative contracts are Nordic electricity futures products of Nasdaq Commodities, which are traded on in the Nordic commodity derivatives exchange Nasdaq OMX Oslo ASA. The maximum duration of the derivatives is five years as from the balance sheet date.

All derivatives have hedging properties and therefore their fair values, i.e. the value changes concerning future accounting periods, have not been recognised in the result of the last completed accounting period. In later accounting periods, the realised result of the derivatives is recognised for the same period as the hedged items.

Physical electricity sale and purchase contracts are drawn up through Nord Pool AS. Hourly-based sales and purchases are netted at the Group level and presented either as income or expenses according to the status of either net seller or net purchaser at any given time. The entry practice is identical with that of electricity derivatives.

Currency derivatives

Group							Parent company						
2017	Amount, GWh			Fair value, EUR 1,000			2017	Amount, GWh			Fair value, EUR 1,000		
	under 1 yr	over 1 yr	Total	under 1 yr	over 1 yr	Total		under 1 yr	over 1 yr	Total	under 1 yr	over 1 yr	Total
Purchased	10,778	2,112	12,889	-183	-28	-210	Purchased	10,778	2,112	12,889	-183	-28	-210
Sold	4,897		4,897	99		99	Sold	4,897		4,897	99		99
Total	5,880	2,112	7,992	-84	-28	-112	Total	5,880	2,112	7,992	-84	-28	-112
2016							2016						
Purchased	6,357		6,357	466		466	Purchased	6,357		6,357	466		466
Sold							Sold						
Total	6,357		6,357	466		466	Total	6,357		6,357	466		466

Currency derivatives are used for hedging coal purchases in USD. The maximum duration of the derivatives is one year as from the balance sheet date.

Coal derivatives

Group							Parent company						
2017	Amount, GWh			Fair value, EUR 1,000			2017	Amount, GWh			Fair value, EUR 1,000		
	under 1 yr	over 1 yr	Total	under 1 yr	over 1 yr	Total		under 1 yr	over 1 yr	Total	under 1 yr	over 1 yr	Total
Purchased	171	30	201	1,783	38	1,821	Purchased	171	30	201	1,783	38	1,821
Sold	55		55	-93		-93	Sold	55		55	-93		-93
Total	116	30	146	1,690	38	1,727	Total	116	30	146	1,690	38	1,727
2016							2016						
Purchased	147		147	3,085		3,085	Purchased	147		147	3,085		3,085
Sold							Sold						
Total	147		147	3,085		3,085	Total	147		147	3,085		3,085

Coal derivatives are used for hedging physical purchases of coal taking place in the future. The derivatives are implemented as cash payments, and their maximum duration is one year as from the balance sheet date.

Emission derivatives

Group						Parent company							
2017	Amount, GWh		Total	Fair value, EUR 1,000		Total	2017	Amount, GWh		Total	Fair value, EUR 1,000		Total
	under 1 yr	over 1 yr		under 1 yr	over 1 yr			under 1 yr	over 1 yr				
Purchased						Purchased							
Sold						Sold							
Total						Total							
2016						2016							
Purchased	245		245	277		277	Purchased	245		245	277		277
Sold							Sold						
Total	245		245	277		277	Total	245		245	277		277

The purpose of use of emission derivatives is based on the trading need for hedging the difference between actual and predicted emissions and the emission allowances granted in the initial allocation. Emission derivatives are futures contracts ending with physical delivery, and their maximum duration is one year as from the balance sheet date. There wasn't any emission derivatives in financial year 2017.

Emissions trading

Helen Ltd has been granted emission allowances for a total of 6.9 million tonnes of CO₂ for 2013-2020. The estimated actual emissions in 2017 is 3.3 million tonnes of CO₂. In the 2017 trading, the emission allowances and corresponding allowances bought physically totalled 0.2 million tonnes of CO₂. In intangible assets in the balance sheet, emission allowances and corresponding allowances totalled 6.6 million tonnes of CO₂ on 31 December 2017.

In accounting, emission allowances are dealt with using the so-called net method in accordance with statement 1767/2005 of the Finnish Accounting Standards Board.

Interest rate derivatives

	GROUP		PARENT COMPANY	
	2017	2016	2017	2016
	1,000 €	1,000 €	1,000 €	1,000 €
Interest rate swap 1				
Nominal value corresponding to the principal of the bullet loan	5,000	5,000	-	-
Fair value (according to the bank)	-43	-94	-	-
Interest rate swap 1 has been drawn up for hedging the interest risk of an individual loan. Variable interest rates have been converted to fixed rates with the interest rate swap. The capital, due date and interest payment date of the loan and the interest rate swap correspond with one another. The contract expires on 31 October 2018 and the contract has no escape clause. Interest is paid monthly.				
Interest rate swap 2				
Nominal value corresponding to the principal of the bullet loan	30,000	30,000	30,000	30,000
Fair value (according to the bank)	-199	-579	-199	-579
Interest rate swap 2 has been drawn up for hedging the interest risk of an individual loan. Variable interest rates have been converted to fixed rates with the interest rate swap. The capital, due date and interest payment date of the loan and the interest rate swap correspond with one another. The contract expires on 28 June 2018 and the contract has no escape clause. Interest is paid quarterly.				
Interest rate swap 3				
Nominal value corresponding to the principal of the bullet loan	22,000	-	22,000	-
Fair value (according to the bank)	130	-	130	-
Interest rate swap 3 has been drawn up for hedging the interest risk of an individual loan. Variable interest rates have been converted to fixed rates with the interest rate swap. The repayment programme, due dates and interest payment dates of the principal amount of the loan and the interest rate swap correspond with one another. The contract expires on 30 November 2028 and the contract has no escape clause. Interest is paid every six months.				

Only swaps, caps, collars or other instruments that unambiguously limit the maximum level of interest rate are used in interest rate hedging.

The fair values of derivatives are based on the market prices at the balance sheet date. Changes in the value of derivative contracts drawn up for hedging purposes are recorded in profit or loss for the same period as the underlying instruments they are hedging. If there are derivative contracts that have been drawn up for purposes other than hedging, their unrealised loss shall be recognised in profit or loss for the accounting period.

16. Foreign currencies

Items denominated in a foreign currency have been valued at the exchange rate applying at the balance sheet date.

17. Court proceedings and disputes

In 2012, TVO submitted a claim and defence in arbitration proceedings in accordance with the rules of the International Chamber of Commerce (ICC) concerning the delay in the completion of OL3 EPR and the ensuing costs. The monetary value of the company's costs and losses updated by TVO in July 2015 is about EUR 2.6 billion until December 2018, which, according to the schedule submitted by the OL3 EPR plant supplier in September 2014 was the time of starting regular electricity generation at OL3 EPR.

The arbitration proceedings were initiated in December 2008 by the plant supplier. The plant supplier's monetary claim, last updated in April 2017, is now approximately EUR 3.59 billion in total. The sum is based on the plant supplier's updated analysis of events that occurred until September 2014, with certain claims quantified until the end of December 2014. The sum includes interest on overdue payments (calculated to the end of June 2017) and a total of some EUR 1.58 billion of payments delayed by TVO under the plant supply contract, as well as approximately EUR 132 million in loss of profit claimed by the plant supplier.

The arbitration tribunal made a final and binding partial award in November 2016. The partial award addressed the matters in the initial stages of the dispute, such as the time schedule, licensing and licensability, as well as the system design. This comprises many of the facts that TVO relies upon in its principal claims against the plant supplier, as well as certain key issues that the plant supplier relies upon in its claims against TVO. The partial award finally resolved the majority of these matters in favour of TVO and, on the other hand, rejected the majority of the plant supplier's contentions in this regard. The partial award did not take a position on the monetary claims presented by the parties.

The arbitration tribunal also made a final and binding partial award in July 2017. The partial award addressed the preparation, submittal, review and approval of the design and licensing documents on the project. This comprised the key matters that the plant supplier relies upon in its principal claims against TVO, as well as certain issues that TVO relies upon in its claims against the plant supplier. The partial award finally resolved the majority of the matters in favour of TVO and, on the other hand, rejected the majority of the plant supplier's claims in this regard. Although the partial award did not take a position on the monetary claims presented by the parties, it has conclusively rejected the analytical method used by the plant supplier to support its principal monetary claims against TVO.

The parties were also given a final and binding partial award in November 2017. The partial award dealt with the execution of the construction works and project management of the project. This comprised the key matters that TVO relies upon in its principal claims against the plant supplier, as well as certain matters that the plant supplier relies upon in its claims against TVO. The partial award finally resolved many of the issues concerning the execution of the construction works in favour of TVO and notably deferred many of the issues raised by TVO related to the plant supplier's project management for determination in a subsequent award.

The arbitration proceeding is still ongoing and it now proceeds towards the final award, in which the arbitration tribunal will decide on the liabilities of the parties to pay compensation.

TVO considers its claims to be well-founded and has found the plant supplier's claims to be without merit. The three significant partial awards granted by the arbitration tribunal confirm this position and the TVO's view that TVO's claims are stronger than those of the plant supplier.

In September 2016, TVO filed an application for an urgent interim proceeding concerning Areva before the Nanterre Commercial Court in France in order to obtain information about the restructuring of the French nuclear industry and its potential impacts on meeting the obligations and responsibilities required by the OL3 plant supply contract. Based on discussions between the parties TVO withdrew from this action in May 2017. The continuation of discussions is expected to favour completion of the OL3 EPR project and the start-up of the plant.

In January 2017, the European Commission made a decision on French state aid to Areva, and in May 2017 the Commission accepted the merger. In September 2017, TVO filed an appeal to the General Court of the European Union of the Commission's decision on state aid. TVO requires that the restructuring of the French nuclear industry will not compromise the completion of the OL3 EPR project in accordance with the plant supply contract within the schedule notified by the plant supplier.

The supplier consortium companies (AREVA GmbH, AREVA NP SAS and Siemens AG) are jointly liable for the contract obligations in accordance with the plant supply contract.

TVO has not recorded any receivables or provisions on the basis of claims presented in the arbitration proceedings.

UNBUNDLING OF ELECTRICITY BUSINESS OPERATIONS

By virtue of the Electricity Market Act, a company operating in the electricity market shall unbundle electricity network operations from other electricity trade operations by the company. Further details about unbundling are set out in the decree of the Ministry of Trade and Industry (79/2005).

Electricity network operations are unbundled into a separate limited company. Other electricity business operations consist of electricity production and sale business operations.

Non-current and current assets have been allocated according to the matching principle. The allocation of share capital, funds and non-current liabilities is based on the risk bearing of business operations. Current liabilities are allocated according to the matching principle.

Allocation of income and expenses has taken place according to the matching principle with the aid of internal accounts. Income taxes are recognised in relation to income formation. Income, expenses, receivables and debts of unbundled business operations also include the company's internal items.

OTHER ELECTRICITY BUSINESS OPERATIONS PROFIT AND LOSS ACCOUNT 1.1.2017 - 31.12.2017

	2017 €	2016 €
TURNOVER	268,528,997	274,139,436
Work performed by the undertaking for its own purpose and capitalised	252,273	268,229
Other operating income	239,597,343	221,014,101
Expenses		
Purchase of energy	-107,292,862	-108,215,893
Materials, equipment and goods:		
Power plant fuel purchases	-304,219,760	-280,090,960
Change in fuel stores	2,006,429	11,143,933
Material and goods purchases	-3,124,702	-3,547,244
External services	-21,980,797	-28,764,457
Staff costs	-15,843,854	-17,673,650
Planned depreciations	-21,806,078	-21,826,713
Other operating charges	-20,393,564	-19,257,491
OPERATING PROFIT	15,723,425	27,189,291
Financial income and expenses:		
Financial income	2,657,993	1,096,427
Financial expenses	-8,865,424	-9,216,761
PROFIT BEFORE APPROPRIATIONS	9,515,994	19,068,957
Change in cumulative accelerated depreciation	-4,226,298	-7,531,163
Income taxes	-1,057,939	-1,822,008
PROFIT FOR THE PERIOD	4,231,757	9,715,786

OTHER ELECTRICITY BUSINESS OPERATIONS BALANCE SHEET 31.12.

	2017 €	2016 €
ASSETS		
Non-current assets		
Intangible assets	44,044,798	54,595,955
Tangible assets	269,740,024	293,483,262
Investments	458,623,234	449,524,338
Advance payments on procurement and fixed assets in progress	19,306,041	14,416,380
Current assets		
Inventories	35,864,670	35,499,770
Receivables	152,825,831	146,936,653
TOTAL	980,404,599	994,456,358
EQUITY AND LIABILITIES		
Equity		
Share capital	222,600,000	222,600,000
SVOP fund	464,184,958	464,184,958
Retained profits	25,935,178	31,605,842
Profit for the period	4,231,757	9,715,786
Accumulated appropriations		
Depreciation difference	11,757,460	7,531,163
Liabilities		
Long-term		
Share of loans	188,226,850	198,095,450
Current liabilities	63,468,396	60,723,160
TOTAL	980,404,599	994,456,358

UNBUNDLING OF NATURAL GAS BUSINESS OPERATIONS

The unbundling principles of the natural gas business operations are set out in Chapter 5 of the Natural Gas Market Act (508/2000) and in the decree of the Ministry of Trade and Industry (222/2005).

Non-current and current assets have been allocated according to the matching principle. The allocation of share capital, funds and non-current liabilities is based on the risk bearing of business operations. Current liabilities are allocated according to the matching principle.

Allocation of income and expenses has taken place according to the matching principle.

Depreciation periods according to plan are presented in the notes concerning depreciation.

Income taxes are recognised in relation to income formation. Income, expenses, receivables and debts of unbundled business operations also include the company's internal items.

NATURAL GAS NETWORK OPERATIONS

Profit and loss account 1.1.2017-31.12.2017

	2017 €	2016 €
TURNOVER	171,429	164,166
Expenses		
External services	-13,809	-26,338
Staff costs	-15,977	-4,455
Depreciation	-62,052	-62,052
Other operating charge	-33,791	-42,227
	-----	-----
OPERATING PROFIT	45,800	29,095
Financial income and expenses:		
Financial income	-	-
Financial expenses	-6,595	-7,461
	-----	-----
PROFIT BEFORE APPROPRIATIONS	39,205	21,634
Income taxes	-7,841	-4,327
	-----	-----
PROFIT FOR THE PERIOD	31,364	17,308

BALANCE SHEET FOR NATURAL GAS BUSINESS OPERATIONS 31.12.

	2017 €	2016 €
ASSETS		
Buildings and structures		
Network	867,643	929,691
	-----	-----
CURRENT ASSETS		
Short-term receivables	115,871	42,854
	-----	-----
TOTAL	983,514	972,545
EQUITY AND LIABILITIES		
Equity		
Share capital	245,407	245,407
SVOP fund	511,746	511,746
Retained earnings	10,625	3,942
Profit/loss for the accounting period	31,364	17,308
Liabilities		
Long-term liabilities	-	-
Capital loan and senior debt	184,373	194,143
Short-term liabilities	0	0
	-----	-----
TOTAL	983,514	972,545

Key figures of natural gas network operations	2017	2016
Net investment, EUR		
Tangible asset	-	-
Return on capital invested, %	4,7	3,0

NATURAL GAS ENERGY SALES OPERATIONS

Profit and loss account 1.1.2017-31.12.2017

	2017	2016
	€	€
TURNOVER	1,911,529	1,421,082
Expenses		
Materials, equipment and goods:		
Natural gas purchases	-1,699,042	-1,152,919
Staff costs	-15,977	-4,455
Other operating charges	-33,791	-42,664
	-----	-----
TURNOVER	162,719	211,044
Financial income and expenses:		
Financial income	-	-
Financial expenses	-6,595	-7,461
PROFIT BEFORE APPROPRIATIONS	156,124	213,583
Income taxes	-31,225	-42,717
	-----	-----
PROFIT FOR THE PERIOD	124,899	170,867

NATURAL GAS SALES OPERATIONS, BALANCE SHEET 31.12.

ASSETS	2017	2016
	€	€
Non-current assets	-	-
Current assets		
Short-term receivables	223,574	288,729
	-----	-----
TOTAL	223,574	288,729

EQUITY AND LIABILITIES

Equity		
Retained earnings	98,674	26,482
Profit/loss for the accounting period	124,899	170,867
Liabilities		
Short-term liabilities	-	91,381
	-----	-----
TOTAL	223,574	288,729