

# Helen Ltd

Financial statements and report on operations  
for the financial year 1.1.2019 - 31.12.2019



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### Table of contents

Report on Operations	3-12
Consolidated income statement	13
Consolidated balance sheet	14-15
Consolidated cash flow statement	16
Parent company's income statement	17
Parent company's balance sheet	18-19
Parent company's cash flow statement	20
Notes to the financial statements	21-28
Unbundling of the electricity business	29

## Report on operations 2019

### Group

**The Helen Group** consists of the parent company Helen Ltd and its subsidiaries Helen Electricity Network Ltd, Oy Mankala Ab, and Helsingin Energiatunnelit Oy. The associated companies of Helen Ltd are Liikennevirta Oy, Voimapiha Oy and Suomen Merituuli Oy, the subsidiary Suomen Energiaurakointi Oy was sold on 30 April 2019, after which it is not reported in the Group figures.

**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 Edis-koski 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 telecommunication networks. The City of Helsinki's holding in Helsingin Energiatunnelit Oy is 10%.

### Strategy and values

According to its updated strategy, Helen Ltd will respond to the shift in the energy sector by making substantial investments in the solutions business and by building partnerships. We are seeking growth by developing new services and by investing in growth companies.

In the innovative Helen, the customer plays the most important role. Smarter and cleaner solutions are being developed in an open-minded way to answer the energy challenges of today and tomorrow.

Heat, cooling and electricity continue to be the basis for Helen's operations. At Helen, we have a solid experience of energy systems and energy production, and our future solutions will be based on this expertise. We are making substantial investments in regional renewable energy, smart buildings and electric-vehicle use.

#### **Helen's vision**

Helen is the most customer-focused energy company in the market. We make the possibilities of the new energy era available to everyone

#### **Strategic goals:**

##### **Bolder and more agile**

Our approach will be more customer-centric, and we will focus on developing the know-how and capabilities we value most. We will increase cooperation and work towards more streamlined decision-making.

**Higher profits**

Our stable and constantly improving product and service business in electricity, heating and cooling enables investments in the solutions business

**Our aim is to strengthen the solutions business**

Our objective is that the solution areas, such as regional, renewable energy, smart building solutions and electric-vehicle use will form an increasingly significant part of Helen's business operations.

**Towards a carbon-neutral future**

We aim for a carbon-neutral energy system. We will create a cleaner, smarter and more flexible energy system and will blaze the trail in sustainable energy systems.

**Partner network for growth**

We will increasingly cooperate with our customers, strengthen our partner network and invest in growth companies.

The common values of our entire personnel are helping the Helen's employees towards the goals set by the new strategy. Hundreds of Helen's employees were involved in the forming of the values. Our mission is to make the opportunities of the new energy era available to everyone, and this will be carried out in cooperation with others. To succeed, we will need each other's know-how, expertise, experience, views and passion.

**Helen's values are the following:**

Masters in cooperation

Person to person

World-class expertise

Make it happen

**Financial year 2019**

Helen's financial results remained excellent in the business year 2019. Our successful measures in the electricity market, along with the fuel price trend, improved our profitability.

Strategic measures have been targeted at regional renewable energy, smart buildings and electric-vehicle use. Helen's business operations have remained at a good level, and Helen has also continued its internal renewal and implemented its strategy in its daily work.

Helen has succeeded in increasing its customer numbers further. The number of households' customer contracts exceeded the limit of 500,000, and about one third of Finns are encompassed by Helen's energy services.

The first and last months of the year were warmer than normal, due to which the volume of district heat production was lower than estimated. Competition in the electricity retail market has remained highly competitive. In the electricity wholesale market, Helen's versatile production, particularly the volume of natural gas production, was increased in a flexible manner by making use of increases in the price level. The sales of our new services (solar power plants, electric-vehicle use, electricity storage facilities) have developed positively.

The availability of power lands was excellent and the optimization of energy production succeeded well. The production of hydropower plants continued to decline as a result of a poor water supply situation.

## Group's profit trend

The Group's reported net sales fell from the previous year. The development of net sales was impacted by the cost-based price changes of district heat, the electricity price reached in the electricity market and the sales volume of retail electricity. The drop in the comparable net sales was due to the sale of Suomen Energia-Urakointi Oy in the middle of the financial year.

Helen Group's results grew significantly on the previous year due to an increase in the parent company's operating profit. Helen Ltd was able to utilise the electricity market situation and fluctuations in the market by a number of successful measures taken in the electricity wholesale market. The fuel price trend and the profitable growth in the retail electricity business also improved the operating profit. The net sales and profitability of Helen Electricity Network Ltd showed a positive trend as well.

The net sales for 2019 totalled EUR 914 million (EUR 930 in 2018) and the operating profit stood at EUR.177 million (EUR 131 million). At 6,752 GWh, the electricity sales volume grew by 3% on the previous year. The district heat sales totalled 6,523 GWh, down by 3% on the year before. The district cooling sales stood at 171 GWh, a fall of 9%. Electricity distribution in Helsinki remained at the previous year's level, standing at 4,383 GWh.

## Group and parent company: Key figures 2019

	Group		Parent company	
	2019	2018	2019	2018
Net sales, EUR million	<b>914</b>	930	<b>792</b>	792
Operating profit, EUR million	<b>176</b>	131	<b>130</b>	88
Operating profit, %	<b>19</b>	14	<b>16</b>	11
Profit before appropriations, EUR million	<b>160</b>	112	<b>150</b>	106
Investments, EUR million	<b>69</b>	65	<b>43</b>	35
Equity ratio, %	<b>77</b>	73	<b>78</b>	77
Return on investments, %	<b>7</b>	5	<b>7</b>	5
Employees as of 31 December.	<b>957</b>	1,080	<b>863</b>	838
Balance sheet total, EUR million	<b>2,710</b>	2,758	<b>2,681</b>	2,616

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

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

**Return on capital invested %** = 100 \* (profit before appropriations + financing costs + tax) / average capital invested

Capital invested = balance sheet total + non-interest-bearing debt

## Investments

Helen is making investments to increase 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 69 million. The investments in the parent company's production structure amounted to EUR 43 million. Of this amount, the investments in the district heating and district cooling networks totalled EUR 16 million. Investments in the electricity network stood at EUR 22 million.

Helen invested EUR 2 million both in Oy Mankala Ab and the tunnel network. The rest of investments were targeted at new services and hydro power production.

## **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 77%, and the amount of interest-bearing debts EUR 415 million (EUR 569 million) at the close of the financial year.

The interest-bearing debts of Helen Ltd consist of the subordinated loan (EUR 157 million), bullet, with a fixed 6% interest, taken out from the owner, a so-called senior debt (EUR 211 million) taken out from the owner, and loans taken out from financial institutions (EUR 42 million).

Helen Electricity Network Ltd has an extra-Group loan of EUR 5 million. The loan of Oy Mankala Ab taken out from the State Nuclear Waste Management Fund that amounted to EUR 84 million was paid in full, after which Mankala has no interest-bearing debts.

## **Shares**

Helen Ltd has a commercial-paper programme of EUR 100 million, which has not been used yet.

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 in the financial year

- Helen decided to initiate the planning of a new bioenergy heating plant to be built in Vuosaari. At the same time, it was possible to confirm the closing of the Hanasaari power plant after the necessary solutions to replace heat production were secured.
- Together with Vantaa Energy Ltd and Lahti Energia Oy, Helen decided to sell the shares of its subsidiary Suomen Energia-Urakointi Oy to KSS Energia Oy. The contracting company will continue to operate as a subsidiary of KSS Energia as of the beginning of May.
- A decision was made to build a heat pump in Vuosaari utilising the heat of sea water. Construction will start in 2020, and the new heat pump will be commissioned in 2022.
- Helen became a partner of the Helsinki Olympic Stadium with a common objective of improving energy efficiency. New environment- and energy-friendly solutions are introduced at the Olympic Stadium, which is undergoing modernisation.
- Helen launched a new virtual battery service to solar panel buyers. The virtual battery is a step towards a new kind of cleaner energy production, in which Helen's customers are also taking part.
- A unique city refinery is developed in Vuosaari in a joint project between Helen, Lassila & Tikanoja and VTT. Launched in 2019, the project pursues utilisation of materials and energy according to the circular economy. The Ministry of Economic Affairs and Employment granted energy aid of EUR 7.9 million to Helen for the investment.
- The first phase of the study on excess heat in Kilpilahti was completed. In Kilpilahti, the excess heat of Kilpilahti could meet about a quarter of the district heating demand of the entire Helsinki region.
- The City of Helsinki and Helen agreed on the delivery of a total of 59 new electric-vehicle charging points in the Helsinki city centre.
- Helen and Paulig launched a joint excess heat utilisation pilot at the Vuosaari coffee roastery. A new technical solution enables recovery of excess heat in quantities sufficient to cover the annual heat demand of 1,000 one-bedroom apartments. The recycling of excess heat generated by the production processes of the food industry to be utilised in the district heating network is unique in the Helsinki region.
- In August, Messukeskus Helsinki and Helen Ltd opened one of the largest solar power plants in Helsinki on the hall roofs of the Messukeskus Expo and Convention Centre. The solar power plant started operation at the end of August and the beginning of September 2019. The construction of an extension also started at the same time.
- In sales, a new type of trainee programme was launched in September. Helen is aiming for strong growth through new energy solutions, and the sales organisation is being strengthened with the trainee programme.
- Helen launched the new Helen Ventures investment with an aim to speed up the shift in the energy sector together with start-up partners. Helen Ventures is a strategic investor, which supports growth companies reforming the energy sector. Helen is investing about 50 million euros during the first five years.
- Helen sold the natural gas sales and distribution business to Suomen Kaasuenergia on 31 December 2019. The divested business has five corporate customers in Helsinki.

## Employees

Helen Ltd had 863 (838) employees at the end of the year. The number of permanent employees was 818 (816), and the number of fixed-term employees 45 (22). The average number of employees was 861 (870). The average age of the employees was 46.2 (47.0) years, and the average length of employment was 15.9 (16.9) years. A total of EUR 49.4 million (EUR 47.3 million) was paid as wages and salaries in 2019.

Helen Electricity Network Ltd had 94 (98) employees at the end of the year. The number of permanent employees was 91 (96) and the number of fixed-term employees 3 (2). The average number of employees was 96 (105). The average age of the employees was 45.4 (44.9) years, and the average length of employment was 14.1 (13.9) years. Wages and salaries amounted to EUR 6.3 million (EUR 6.6 million) in 2019.

The rest of the subsidiaries, Oy Mankala Ab and Helsingin Energiatunnelit Oy had no employees at the end of 2019.

## Research and development

A City Refinery is a concept launched by Helen, Lassila-Tiikanoja and VTT, referring to the circular economy. The companies are exploring opportunities to utilise society's underutilised material flows as raw materials in different end products according to the circular economy. At the same time, the waste heat of the process is conducted to the district heating network. A production plant to be established in Vuosaari is being planned. The Ministry of Economic Affairs and Employment granted energy aid of EUR 7.9 million to Helen for the investment in December.

Helen is assessing the applicability of Small Modular Reactors to Helen's energy system. Helen has been involved in the preparations of the SMR ecosystem project coordinated by VTT, and the project will be launched in the early part of the year. We have been discussing various technology concepts with unit suppliers. An update of the Nuclear Energy Act will be started soon, and Helen will be involved in the work together with Finnish Energy.

Helen is involved in several research projects coordinated by VTT, funded by the EU. Among such projects are, e.g., the Fletch (Flexible combined production of power, heat and transport fuels from renewable energy sources) project and the VA BISYS (Value-optimised use of biomass in a flexible energy infrastructure) project.

The development of products and services has continued in services related to energy efficiency, the solar business and in electric traffic.

Helen is investigating possibilities for utilising geothermal heat. Geological surveys were carried out jointly with Geological Survey of Finland (GTK) in Helsinki towards the end of the year, and follow-up measures will be decided on the basis of the research findings. Geothermal heat is considered a possible solution for partly replacing of the use of coal in the Salmisaari power plant.

## 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 the risk management handbook have been updated 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

### **Strategic risks**

The most important uncertainty factor in the long-term development of business operations is the operating environment, where steering mechanisms, goals and schedules are constantly changing as a result of political decision-making. In a situation like this, it is challenging to plan long-term investments related to climate-neutral energy production. Our plans are clear, however. Helen will phase out the use of coal by 2029 at the latest, and our energy production will be carbon-neutral in 2035.

### **Financial risks**

Significant business risks are mainly related to the strong fluctuation of the electricity market and its increasingly poor predictability. Competition in the electricity retail market is also becoming tighter. The fluctuations of electricity exchange prices result in business risks in wholesale and end-customer sales, as well as in electricity procurement. The Group is preparing itself for risks by hedging procurement and sales and by selling derivatives. In fuel procurement, the key risks are the volume and price risks. These risks are managed by using procurement and derivative contracts.

### **Operational risks**

Significant operational risks can result in failures in production plants or networks and interruptions in production. This will give rise to additional costs in energy procurement and possible disruptions to energy supply. The production plants manage operational risks, e.g., through proactive maintenance of equipment and networks, condition monitoring and personnel training. The level and capabilities of cybersecurity are constantly assessed and improved.

The employment pension insurances and group life insurances have been taken out at Keva. The rest of insurances Ars are divided between four different 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.

## **Responsibility**

Helen aims for carbon neutrality in 2035. We will phase out the use of coal, even before 2035, by 2029 at the latest. Mitigation of climate change will have a key impact on the planning of future energy solutions and investments. Investments will be carried out in stages to reduce emissions and to increase share of renewable energy sources with the opportunities offered by all new technologies. We also develop new energy solutions together with our customers. The energy production of Helen Ltd falls within the scope of the EU Emissions Trading Scheme (EU ETS).

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.

In addition to the climate and environment, Helen's operations impact people. Our goal is to openly provide information about our operations for our stakeholder groups and to find out their views and expectations.

During the year, the discussion themes of Helen's stakeholder groups included, among others, ceasing the energy use of coal, the sustainability of bioenergy and the impacts of bioenergy on the environment and society. We arranged opportunities for discussing the means of replacing coal, the future of the Vuosaari district and the shift taking place in the energy sector.

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 and OHSAS standards.

Helen Electricity Network has an occupational health and work safety system certified in accordance with the OHSAS 18001 standard. In other respects, the Quality and Environmental Management System complies with the Asset Standard ISO 55000, except for the fact that it has not been certified. The environmental impacts of all offices are managed with the Green Office environmental programme.

In 2019, Helen carried out an energy survey of its operations and properties, as required by the Energy Efficiency Act. With respect to the Helen Group, Helen Ltd, Helen Electricity Network Ltd, Oy Mancala Ab, and Helsingin Energiatunnelit Oy. were surveyed. Suomen Energiaurakointi Oy was also surveyed until 2019. An individual survey required of large enterprises was carried out at the Vuosaari B power plant. The Group-level and subsidiary-level energy-use profiles and the key energy efficiency improvement areas that have been implemented or planned or require further studies are included in the Energy Survey Reports.

## **Annual General Meeting**

The Annual General Meeting of Helen Ltd (1/2019) was held on 29 March 2019. KPMG Oy Ab was selected as the company's auditor. The auditor with the main responsibility was Kaija Pakkanen, Authorised Public Accountant. There was a change of auditor with the main responsibility; since May 2019, the auditor with the main responsibility has been Esa Kalliala, Authorised Public Accountant at KPMG Oy Ab.

## **Board of Directors**

In the Annual General Meeting held on 29 March 2019, Osmo Soininvaara, Wille Rydman, Kaisa Hernberg, Marko Karvinen, Hillevi Mannonen, Timo Piekkari, Sirpa Puhakka and Daniel Sazonov were elected to the Board of Directors, along with a new member, Pirja Heiskanen to replace Hanna-Marreplace Hanna-Maria Heikkinen. Osmo Soininvaara was re-elected as Chairman of the Board and Wille Rydman as Deputy Chairman.

In addition, the owner has exercised its power of decision on 17 June 2019 by appointing Sallamaari Muhonen to replace Kaisa Hernberg, who resigned from the company's Board of Directors, for the remainder of the term of office as of 1 July 2019.

The Board of Directors convened 16 times. Four of the meetings were email meetings. The attendance percentage of the Board members in Board meeting was 94.4%.

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## **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 members of the Audit Committee are Hillevi Mannonen as Chairman, and Hanna-Maria Heikkinen and Sirpa Puhakka as members. On 29 March 2019, the Board appointed Pirja Heiskanen to replace Hanna-Maria Heikkinen.

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 seven times during the year 2019.

The members of the Personnel and Rewards Committee were Osmo Soininvaara as Chairman and Wille Rydman and Timo Piekkari as members. The committee meetings were regularly attended by the President and CEO, and the Human Resources Manager as the secretary of the committee. The Personnel and Rewards Committee convened five times in 2019.

## **President and CEO**

After Pekka Mannonen, who has acted as President and CEO of Helen Ltd, announced his intention to retire in spring 2020, the Board launched a headhunting project for a new CEO. In its meeting on 26 September 2019, the Board appointed Juha-Pekka Weckstöm, M.Sc. (Tech.) as the new President and CEO of Helen Ltd as of 1 April 2020.

Director Kauno Kaija, who has acted as a deputy for the President and CEO, retired on 31 December 2019.

During the financial period, a total of EUR 664,712 (EUR 550,195) 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 1,366,080,916.54, of which the profits from the previous financial years amount to EUR 36,969,150.56 and the profit from the financial year to EUR 77,939,372.53.

The Board of Directors proposes to the Annual General Meeting that the company should pay a dividend of EUR 68,000.00/share, totalling EUR 68,000,000.00, and that EUR 46,908,523.09 should be held as retained earnings. The Board of Directors proposes that the distribution of dividends should take place on 30 April 2020. 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**

Price fluctuations in the electricity wholesale market are expected to gain strength in the next few years along with the rise in variable production. Competitiveness in the price of district heat will remain at a good level; due to the investment in carbon neutrality, it will remain competitive and in demand also in the future.

The natural gas market was opened to competition from the beginning of 2020 when the natural gas distribution and energy sales in the wholesale market were unbundled. As a result of the opening up of the market, the competitiveness of natural gas is expected to rise.

During the current government term, one of the biggest targets with regard to the energy sector is the comprehensive reform of energy taxation. From Helen's point of view, the most important area with a need for reform is related to the change of the electricity tax class for heat pumps producing heat to the district heating network from the current tax class I to tax class II. The change is necessary for making district heating carbon neutral.

Helen is actively promoting the fact that the comprehensive reform of energy taxation will take account of the steering effect of emissions trading as well as the new solutions in heat production and the customer end, and that it would not put an unreasonable tax burden on current heat production and that way increase the costs to customers.

In accordance with the strategy confirmed in spring 2019, Helen's answer to the shift in the energy sector is to invest strongly in the solutions business, e.g. in regional renewable energy, smart building solutions and electric traffic, and to build partnerships that support Helen's strategy. Forces are joined with customers in order to build a carbon-neutral future.

Helen aims to be carbon-neutral by 2035. The use of coal will be phased out even earlier, in 2029 at the latest. The Hanasaari power plant will be closed by the end of 2024, and its heat production will be replaced with heat recovery using heat pumps, energy storage and the bioenergy heating plant to be built in Vuosaari. The related investment decision was made in January 2020. A bioenergy heating plant is needed to cover the heating demand of Helsinki also during cold winters. The heating plant is scheduled for commissioning in the heating season 2022-2023, i.e. about a year earlier than anticipated.

The designed size of the bioenergy heating plant is 260 MWh and the investment value of the project is about EUR 260 million. The investment is not estimated to impact the price of district heating. In the Salmisaari power plant, coal will be replaced in 2029 at the latest; our aim is to find a solution not based on firing.

The results for 2020 are estimated to be at the previous year's level. The company's outlook for the future is characterised by increasing uncertainty in the energy market resulting from the growing share of weather-dependent production in the Nordic energy market and the deregulation of the natural gas market. These factors will result in bigger price fluctuations in the energy commodity market. Helen has competence for operating in the market, and we will continue to develop our competences, while being aware of the fact that the company's results will vary more than before.

## PROFIT AND LOSS ACCOUNT

	Group	
	2019	2018
	€	€
<b>NET TURNOVER</b>	<b>913,799 667.74</b>	930,162,057.53
Variation in work in progress	<b>915,359.82</b>	-13,385.78
Work performed by the undertaking for its purpose and capitalized	<b>3,348,456.05</b>	3,319,686.13
Other operating income	<b>5,850,737.32</b>	5,328,099.75
Operating expenses		
Energy procurement	<b>-60,700,471.44</b>	-120,305,360.09
Purchase of electricity distribution	<b>-352,589.45</b>	-416,673.71
Materials, supplies and goods:		
Fuel	<b>-338,494,013.47</b>	-377,626,725.22
Variation in inventories	<b>-18,801 ,319.02</b> decr.	5,968,394.07 incr.
Purchase of materials and supplies	<b>-8,564,384.80</b>	-14,532,198.34
External services	<b>-48,938,792.81</b>	-51,294,582.70
Staff expenses	<b>-69,540,589.88</b>	-72,810,115.41
Depreciation and value adjustment	<b>-142,914,761.45</b>	-124,999,855.01
Other operating charges	<b>-59,392,626.39</b>	-52,195,727.26
<b>OPERATING PROFIT</b>	<b>176,214,672.21</b>	130,583,613.96
Financial income and expenses:		
Income from associated companies	<b>4,720,098.05</b>	4,156,886.47
Dividend income	<b>11,885.38</b>	17,341.66
Other interest and financial income	<b>768,544.38</b>	914,061.88
Interest and other financial expenses	<b>-21,654,602.25</b>	-23,633,457.46
<b>PROFIT BEFORE APPROPRIATIONS AND TAXES</b>	<b>160,060,597.78</b>	112,038,446.51
Income taxes	<b>-19,455,382.17</b>	-10,084,274.27
Deferred taxes	<b>-12,000,000.00</b>	-12,000,000.00
Minority interests	<b>-247,533.58</b>	-453,419.31
<b>PROFIT FOR THE FINANCIAL YEAR</b>	<b>128,357,682.03</b>	89,500,752.93

**BALANCE SHEET****ASSETS**

	<b>Group</b>	
	<b>31.12.2019</b>	<b>31.12.2018</b>
	€	€
<b>NON-CURRENT ASSETS</b>		
<b>Intangible assets</b>		
Intangible rights	22,865,703.79	42,272,891.16
Group goodwill	26,876,291.24	28,966,397.41
Other long-term expenses	265,103.00	525,201.15
	<u>50,007,098.03</u>	<u>71,764,489.72</u>
<b>Tangible assets</b>		
Land and waters	5,259,862.38	5,259,862.38
Buildings and constructions	344,767,398.65	358,864,366.14
Machinery and equipment	1,358,199,202.69	1,397,092,837.54
Advance payments and construction in progress	44,795,493.56	60,780,798.81
	<u>1,753,021,957.28</u>	<u>1,821,997,864.87</u>
<b>Investments</b>		
Investments in associated companies	68,083,060.06	65,876,788.25
Participating interests	246,185,448.06	247,932,787.17
	<u>314,268,508.12</u>	<u>313,809,575.42</u>
<b>CURRENT ASSETS</b>		
<b>Inventories</b>		
Fuel	71,579,977.91	90,312,739.13
Work in progress	0.00	1,749,662.56
Consumables	0.00	1,072,073.63
	<u>71,579,977.91</u>	<u>93,134,475.32</u>
<b>Long-term receivables</b>		
Loan receivables	55,280,424.00	55,280,424.00
Other receivables	0.00	17,325.72
	<u>55,280,424.00</u>	<u>55,297,749.72</u>
<b>Current receivables</b>		
Accounts receivable	35,327,323.86	42,183,957.88
Group account receivables	98,593,728.65	62,848,008.06
Other receivables	12,283,310.03	25,679,266.71
Prepayments and accrued income	110,846,400.37	119,702,342.96
	<u>257,050,762.91</u>	<u>250,413,575.61</u>
<b>Cash in hand and at banks</b>	<b>208,689,815.78</b>	<b>152,055,070.58</b>
<b>TOTAL</b>	<u><b>2,709,898,544.03</b></u>	<u><b>2,758,472,801.24</b></u>

**BALANCE SHEET****EQUITY**

	<b>Group</b>	
	<b>31.12.2019</b>	<b>31.12.2018</b>
	€	€
<b>CAPITAL AND RESERVES</b>		
Share capital	<b>600,000,000.00</b>	600,000,000.00
Invested unrestricted equity fund	<b>1,251,172,393.45</b>	1,251,172,393.45
Retained earnings	<b>107,607,339.30</b>	69,106,586.36
Profit for the financial year	<b>128,357,682.03</b>	89,500,752.93
	<b><u>2,087,137,414.78</u></b>	<u>2,009,779,732.74</u>
<b>MINORITY INTERESTS</b>	<b>4,685,001.50</b>	6,898,856.34
<b>LIABILITIES</b>		
<b>Long-term debts</b>		
Subordinated loan	<b>157,000,000.00</b>	157,000,000.00
Loans from the parent community	<b>190,550,000.00</b>	211,150,000.00
Financing loans	<b>46,117,647.09</b>	47,294,117.67
Other interest-bearing liabilities	<b>227,807.30</b>	83,681,197.62
Deferred tax liabilities	<b>44,008,000.00</b>	32,008,000.00
	<b><u>437,903,454.39</u></b>	<u>531,133,315.29</u>
<b>Current liabilities</b>		
Financing loans	<b>1,176,470.58</b>	49,176,470.58
Loans from the parent community	<b>20,600,000.00</b>	20,600,000.00
Accounts payable	<b>66,769,194.87</b>	58,171,664.21
Other current liabilities	<b>59,350,712.50</b>	54,760,516.25
Deferred income and accrued liabilities	<b>32,276,295.41</b>	27,952,245.83
	<b><u>180,172,673.36</u></b>	<u>210,660,896.87</u>
<b>TOTAL</b>	<b><u><u>2,709,898,544.03</u></u></b>	<u><u>2,758,472,801.24</u></u>

**CASH FLOW STATEMENT**

	<b>Group</b>	
	<b>2019</b>	<b>2018</b>
	€	€
<b>Cash flow from operating activities</b>		
Operating profit	176,214,672.21	130,583,613.96
Corrections:		
Depreciations according to plan	142,903,005.72	124,999,855.01
Use of emission allowances	19,252,549.27	11,147,843.03
Financial income and expenses	-20,867,110.91	-22,702,053.92
Taxes	-31,455,382.17	-21,932,953.87
Share of profits of associated companies	4,720,098.05	4,156,886.47
Cash flow before change in working capital	<u>290,767,832.17</u>	<u>226,253,190.68</u>
Working capital:		
Current receivables without interests	21,699,438.68	-47,265,998.95
Group account receivables	-35,745,720.59	1,586,374.30
Current receivables	18,732,761.09	-5,904,744.14
Current liabilities without interest	34,518,911.36	30,464,895.58
<b>Cash flow from operating activities (A)</b>	<u>329,973,222.71</u>	<u>205,133,717.47</u>
<b>Cash flow from investing activities:</b>		
Investments in tangible and intangible assets	-72,241,463.48	-61,583,219.22
Capital gain of tangible and intangible assets	3,591,779.47	
Other investments	-458,932.60	-2,314,906.74
<b>Cash flow from investing activities (B)</b>	<u>-69,108,616.61</u>	<u>-63,898,125.96</u>
<b>Cash flow from financing activities:</b>		
Current debts	-48,000,000.00	37,000,000.00
Long-term debts	-105,229,860.90	-99,809,753.30
Shareholders' equity	-51,000,000.00	-31,200,000.00
<b>Cash flow from financing activities (C)</b>	<u>-204,229,860.90</u>	<u>-94,009,753.30</u>
<b>Change in cash and cash equivalents (A+B+C) increase (+) / decrease (-)</b>	<b>56,634,745.20</b>	<b>47,225,838.21</b>
Cash and cash equivalents at the beginning of the year	152,055,070.58	104,829,232.37
Cash and cash equivalents at end of the year	<u>208,689,815.78</u>	<u>152,055,070.58</u>
	<b>56,634,745.20</b>	<b>47,225,838.21</b>

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



## PROFIT AND LOSS ACCOUNT

	<b>Parent company</b>	
	<b>2019</b>	<b>2018</b>
	€	€
<b>NET TURNOVER</b>	<b>791,602,790.62</b>	792,049,902.30
Work performed by the undertaking for its purpose and capitalized	<b>2,736,606.27</b>	2,250,214.51
Other operating income	<b>10,865,683.18</b>	8,547,423.52
Operating expenses		
Energy procurement	<b>-57,276,465.54</b>	-116,786,198.71
Purchase of electricity distribution	<b>-7,831,761.85</b>	-8,125,058.34
Materials, supplies and goods:		
Fuel	<b>-338,494,013.47</b>	-377,626,725.22
Variation in inventories	<b>-18,732,761.22</b> <small>decr.</small>	6,382,062.68 <small>incr.</small>
Purchase of materials and supplies	<b>-10,257,574.71</b>	-9,054,598.37
External services	<b>-22,468,399.51</b>	-17,867,451.69
Staff expenses	<b>-59,586,999.58</b>	-57,025,037.27
Depreciation and value adjustment	<b>-104,183,807.20</b>	-86,331,809.72
Other operating charges	<b>-56,032,282.97</b>	-48,081,423.55
<b>OPERATING PROFIT</b>	<b>130,341,014.02</b>	88,331,300.14
Financial income and expenses:		
Dividend income	<b>30,731,885.38</b>	29,377,341.66
Other interest and financial income	<b>9,837,690.18</b>	10,679,289.51
Interest and other financial expenses	<b>-21,248,814.03</b>	-22,697,450.98
<b>PROFIT BEFORE APPROPRIATIONS AND TAXES</b>	<b>149,661,775.55</b>	105,690,480.33
Change in cumulative accelerated depreciation	<b>-60,000,000.00</b>	-60,000,000.00
Income taxes	<b>-11,722,403.02</b>	-3,304,505.19
<b>PROFIT FOR THE FINANCIAL YEAR</b>	<b>77,939,372.53</b>	42,385,975.14

**BALANCE SHEET****ASSETS****Parent company**

	<b>31.12.2019</b>	<b>31.12.2018</b>
	€	€
<b>NON-CURRENT ASSETS</b>		
<b>Intangible assets</b>		
Intangible rights	<u>21,871,265.09</u>	<u>41,123,814.36</u>
	<b>21,871,265.09</b>	<b>41,123,814.36</b>
<b>Tangible assets</b>		
Buildings and constructions	<b>212,693,126.96</b>	222,693,868.23
Machinery and equipment	<b>953,172,879.96</b>	984,834,590.46
Advance payments and construction in progress	<u>35,720,835.81</u>	<u>52,773,058.49</u>
	<b>1,201,586,842.73</b>	<b>1,260,301,517.18</b>
<b>Investments</b>		
Holdings in group undertakings	<b>501,684,754.96</b>	421,092,154.96
Receivables from group undertakings	<b>280,745,000.00</b>	259,315,000.00
Receivables from associated companies		
Holdings in associated companies	<b>66,339,649.41</b>	63,333,475.66
Other shares and holdings	<u>120,049,823.65</u>	<u>121,912,037.90</u>
	<b>968,819,228.02</b>	<b>865,652,668.52</b>
<b>CURRENT ASSETS</b>		
<b>Inventories</b>		
Fuels	<u>71,579,977.91</u>	<u>90,312,739.13</u>
	<b>71,579,977.91</b>	<b>90,312,739.13</b>
<b>Long-term receivables</b>		
Other receivables	<u>0.00</u>	<u>17,325.72</u>
	<b>0.00</b>	<b>17,325.72</b>
<b>Current receivables</b>		
Trade debtors	<b>25,821,940.36</b>	29,933,278.91
Loan receivables from group undertakings	<b>6,570,000.00</b>	6,570,000.00
Group account receivables	<b>81,093,623.00</b>	44,841,852.83
Other receivables	<b>8,563,763.70</b>	21,603,171.83
Prepayments and accrued income	<u>105,521,841.55</u>	<u>114,442,684.04</u>
	<b>227,571,168.61</b>	<b>217,390,987.61</b>
<b>Cash in hand and at banks</b>	<b>189,231,328.43</b>	141,633,709.16
<b>TOTAL</b>	<u><b>2,680,659,810.79</b></u>	<u><b>2,616,432,761.68</b></u>

**BALANCE SHEET****EQUITY**

	Parent company	Parent company
	31.12.2019	31.12.2018
	€	€
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	36,969,150.56	45,583,175.42
Profit for the financial year	77,939,372.53	42,385,975.14
	<u>1,966,080,916.54</u>	<u>1,939,141,544.01</u>
<b>APPROPRIATIONS</b>		
Cumulative accelerated depreciation	160,000,000.00	100,000,000.00
<b>LIABILITIES</b>		
<b>Long-term debts</b>		
Subordinated loan	157,000,000.00	157,000,000.00
Loans from the parent community	190,550,000.00	211,150,000.00
Financing loans	42,000,000.00	42,000,000.00
Other interest-bearing liabilities	223,611.16	97,217.59
	<u>389,773,611.16</u>	<u>410,247,217.59</u>
<b>Current liabilities</b>		
Financing loans		20,000,000.00
Loans from the parent community	20,600,000.00	20,600,000.00
Accounts payable	67,319,886.12	56,707,344.77
Other current liabilities	51,448,766.55	51,117,905.24
Accruals and deferred income	25,436,630.42	18,618,750.07
	<u>164,805,283.09</u>	<u>167,044,000.08</u>
<b>TOTAL</b>	<u><u>2,680,659,810.79</u></u>	<u><u>2,616,432,761.68</u></u>

**CASH FLOW STATEMENT**

	<b>Parent company</b>	
	<b>2019</b>	<b>2018</b>
	€	€
<b>Cash flow from operating activities</b>		
Operating profit	<b>130,341,014.02</b>	88,331,300.14
Corrections:		
Depreciations according to plan	<b>104,183,807.20</b>	86,331,809.72
Use of emission allowances	<b>19,252,549.27</b>	11,147,843.03
Financial income and expenses	<b>19,320,761.53</b>	17,359,180.19
Taxes	<b>-11,722,403.02</b>	-3,304,505.19
Cash flow before change in working capital	<b>261,375,729.00</b>	199,865,627.89
Working capital:		
Current receivables without interests	<b>26,088,914.89</b>	-37,855,684.15
Group account receivables	<b>-36,251,770.17</b>	3,454,995.87
Current receivables	<b>18,732,761.22</b>	-6,382,062.68
Current liabilities without interests	<b>17,761,283.01</b>	18,062,185.34
<b>Cash flow from operating activities (A)</b>	<b>287,706,917.95</b>	177,145,062.27
<b>Cash flow from investing activities:</b>		
Investments in tangible and intangible assets	<b>-46,022,637.75</b>	-32,318,943.63
Capital gain of tangible and intangible assets	<b>553,505.00</b>	0.00
Other investments	<b>-103,166,559.50</b>	-18,473,020.17
<b>Cash flow from investing activities (B)</b>	<b>-148,635,692.25</b>	-50,791,963.80
<b>Cash flow from financing activities:</b>		
Current debts	<b>-20,000,000.00</b>	14,000,000.00
Long-term debts	<b>-20,473,606.43</b>	-70,633,282.72
Shareholders' equity	<b>-51,000,000.00</b>	-31,200,000.00
<b>Cash flow from financing activities (C)</b>	<b>-91,473,606.43</b>	-87,833,282.72
<b>Change in cash and cash equivalents (A+B+C) increase (+) / decrease (-)</b>	<b>47,597,619.27</b>	38,519,815.75
Cash and cash equivalents at the beginning of the year	<b>141,633,709.16</b>	103,113,893.41
Cash and cash equivalents at end of the year	<b>189,231,328.43</b>	141,633,709.16
	<b>47,597,619.27</b>	38,519,815.75

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 Helen Ltd and its subsidiaries Helen Electricity Network Ltd, Oy Mankala Ab, Helsingin Energiatunneli Oy and Suomen Energia-urakointi Oy. Liikennevirta 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](http://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. The undepreciated share of the Group assets of associated companies is €1,937,014.28. Deferred tax liabilities have been entered in the balance sheet. The impact of the change in the recognition principles has not been adjusted in the net turnover and energy procurement of electricity wholesale for the reference year, no effect on profit or loss.

#### 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

Intangible assets	Depreciation period, years
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 constructions	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		Parent company	
	2019	2018	2019	2018
	€1,000	€1,000	€1,000	€1,000
<b>1. Turnover</b>				
Electricity sales	312,166	327,793	312,166	327,793
Sales of electricity distribution S	121,042	117,712		
	446,717	435,413	446,717	435,413
Sales of district cooling	21,259	18,425	21,259	18,425
Other income	12,616	30,819	11,461	10,419
Total	913,800	930,162	791,603	792,050
<b>2. Variation in work in progress</b>	915	-13		
<b>3. Work performed by the undertaking for its purpose and capitalized</b>	3,348	3,320	2,737	2,250
<b>4. Other operating income</b>				
Service sales	3,129	2,116	8,403	6,479
Income from payment reminders	1,006	840	1,006	840
Other	1,716	2,372	1,457	1,229
Total	5,851	5,328	10,866	8,547

	Group		Parent company	
	2019	2018	2019	2018
	€1,000	€1,000	€1,000	€1,000
<b>5. Fuels and energy procurement</b>				
Purchase of electricity	59,374	119,399	55,950	115,879
Purchase of heat	1,326	907	1,326	907
Purchase of electricity distribution	353	417	7,832	8,125
Purchase of fuels	321,536	364,510	321,536	364,510
Change in fuel stores	18,733	6,382	18,733	-6,382
Emission allowances	16,958	13,116	16,958	13,116
Total	418,280	491,967	422,335	496,156
<b>6. External services</b>				
Grid fees	19,967	21,461		
Construction and land construction projects	6,763	13,472	3,857	3,535
Environmental services	160	307	160	307
Other external services	22,049	16,055	18,453	14,025
Total	48,939	51,295	22,470	17,867
<b>7. Staff</b>				
Average number of personnel				
Number of monthly salaried employees	957	1,120	861	870
Number of personnel	957	1,120	861	870
	2019	2018	2019	2018
	€1,000	€1,000	€1,000	€1,000
Staff costs				
Wages and salaries	58,120	60,419	49,390	47,334
Pension expenses	9,670	10,423	8,599	8,054
Other social charges	1,751	1,968	1,598	1,637
Total staff costs	69,541	72,810	59,587	57,025
Value of fringe benefits for tax purposes	269	279	217	221
Total	69,810	73,089	59,804	57,247
Remuneration of the Board and key management	1,077	926	665	550
<b>8. Depreciation and value adjustment</b>				
Depreciation according to plan	124,236	122,671	87,621	86,332
Scrapping and reduction in value	15,894	227	15,800	
Expenses of fixed assets sold	993	12	762	
Depreciation of consolidated goodwill	7,421	7,719		
Group reserve recognised as revenue	5,629	5,629		
Total	142,915	125,000	104,184	86,332
<b>9. Other operating charges</b>				
Land leases	7,506	7,633	6,163	6,131
Other leases	6,092	6,579	10,177	9,930
Information technology and expert services	16,458	14,002	15,296	12,806
Vehicle and equipment expenses	2,177	3,429	2,536	2,302
Representation and marketing	7,653	4,961	7,648	4,903
Insurance policies	1,099	1,151	966	980
Audit fees	20	59	16	23
Other costs	18,387	14,381	13,229	11,007
Total	59,393	52,196	56,032	48,081
<b>10. Financial income and expenses</b>				
Share of profits of associated companies	4,720	4,157		
Dividend income				
From Group undertakings			25,200	25,200
From associated companies			5,520	4,160
From others	12	17	12	17
Interest income on long-term investments				
From Group undertakings			9,549	10,239
Other interest and financial income				
From Group undertakings				
From others	769	914	288	440
Total financial income	5,501	5,088	40,569	40,057
Interest expenses				
Interest expenses on a subordinated loan	9,420	9,420	9,420	9,420
Interest expenses on a senior debt	11,073	12,103	11,073	12,103
Other interest and financial expenses				
To Group undertakings				
To others	1,162	2,111	756	1,175
Total financial expenses	21,655	23,633	21,248	22,697

11. Non-current assets	Group		Parent company	
	2019	2018	2019	2018
	€1,000	€1,000	€1,000	€1,000
<b>Intangible assets</b>				
Acquisition cost 1.1.	53,513	61,448	50,454	58,905
Increases 1.1.-31.12.	528	5,182	336	4,666
Decreases 1.1.-31.12.	16,964	13,116	16,958	13,116
Acquisition cost 31.12.	37,077	53,513	33,832	50,454
Accumulated depreciation 1.1.	10,715	7,497	9,330	6,633
Depreciation 1.1.-31.12.	3,230,821	3,218,267	2,631	2,697
Book value 31.12.	23,131	42,798	21,871	41,124
<b>Group goodwill</b>				
Acquisition cost 1.1.	149,904	149,904		
Increases 1.1.-31.12.				
Decreases 1.1.-31.12.	298			
Acquisition cost 31.12.	149,605	149,904		
Accumulated depreciation 1.1.	30,876	23,157		
Depreciation 1.1.-31.12.	7,421	7,719		
Book value 31.12.	111,309	119,028		
Carried over from Group reserve	84,433	90,061		
Group goodwill in the balance sheet 31.12.	26,876	28,966		
<b>Group reserve</b>				
Value 1.1.	90,061	95,690		
Increases 1.1.-31.12.				
Decreases 1.1.-31.12.	5,629	5,629		
Value 31.12.	84,433	90,061		
Book value 31.12.	84,433	90,061		
Carried over to Group goodwill	84,433	90,061		
Group goodwill in the balance sheet 31.12.	-	-		
<b>Land and waters</b>				
Acquisition cost 1.1.	5,260	5,206		
Increases 1.1.-31.12.		54		
Decreases 1.1.-31.12.				
Acquisition cost 31.12.	5,260	5,260		
Book value 31.12.	5,260	5,260		
<b>Buildings and constructions</b>				
Acquisition cost 1.1.	432,375	425,438	274,715	271,271
Increases 1.1.-31.12.	5,934	6,938	3,557	3,444
Decreases 1.1.-31.12.	224			
Acquisition cost 31.12.	438,085	432,375	278,272	274,715
Accumulated depreciation 1.1.	73,511	53,944	52,021	38,634
Depreciation 1.1.-31.12.	19,806,780	19,567,425	13,557	13,387
Book value 31.12.	344,767	358,864	212,693	222,694
<b>Machinery and equipment</b>				
Acquisition cost 1.1.	1,786,896	1,724,828	1,259,457	1,224,339
Increases 1.1.-31.12.	79,241	63,339	56,334	35,118
Decreases 1.1.-31.12.	16,798	1,270	16,562	
Acquisition cost 31.12.	1,849,338	1,786,896	1,299,228	1,259,457
Accumulated depreciation 1.1.	389,803	290,582	274,622	204,375
Depreciation 1.1.-31.12.	101,336,168	99,221,136	71,433	70,247
Book value 31.12.	1,358,199	1,397,093	953,173	984,835
<b>Advance payments and fixed assets in progress</b>				
Acquisition cost 1.1.	60,754	72,373	52,773	61,713
Increases 1.1.-31.12.	66,794	59,575	42,320	32,553
Decreases 1.1.-31.12.	82,752	71,194	59,372	41,493
Acquisition cost 31.12.	44,795	60,754	35,721	52,773
Book value 31.12.	44,795	60,754	35,721	52,773

Investments 31.12.2019	Group			Parent company			
	Domicile	Number	Share %	Book value	Number	Share %	Book value
				€			€
<b>Shares and holdings</b>							
<b>Shares and holdings in Group companies</b>							
Oy Mankala Ab	Iitti	42,500,262	100.0%	381,600,000			
Helen Sähköverkko Oy	Helsinki	42,000	100.0%	84,000,000			
Helsingin Energiatunnelit Oy	Helsinki	360,081	90.0%	36,084,755			
<b>Associated companies</b>							
Voimapiha Oy	Helsinki	400,000	33.3%	65,688,443	400,000	33.3%	60,000,000
Liikennevirta Oy	Helsinki	26,532	35.5%	1,394,342	26,532	35.5%	6,339,649
Suomen Merituuli Oy	Helsinki	1,000	50.0%	1,000,275			
<b>Other shares/participating interests</b>							
Teollisuuden Voima Oyj	Helsinki	110,674,771	8.1%	117,499,060			
EPV Energia Oy	Vaasa	503,006	6.2%	55,750,209	503,006	6.2%	55,750,209
Pohjolan Voima Oyj	Helsinki	201,316	0.6%	13,821,107	201,316	0.6%	13,821,107
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
Suomen Hyötytuuli Oy	Pori	276	12.5%	8,636,564			
Suomen Messut osuuskunta	Helsinki	1		17	1		17
Helsingin Konsernihankinta Oy	Helsinki	3		1	1		1
<b>Other investments</b>							
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							29,390,000
Loan Helen Electricity Network Ltd, bullet							28,000,000
Loan Helen Electricity Network Ltd, bullet							20,000,000
Loan Helen Electricity Network Ltd, bullet							21,000,000
Loan Helen Electricity Network Ltd, bullet							5,000,000
Loan Helsingin Energiatunnelit Oy, instalment is fixed rate of 5% of total loan							37,925,000
		<b>Group</b>		<b>Group</b>	<b>Parent company</b>		<b>Parent company</b>
		<b>2019</b>		<b>2018</b>	<b>2019</b>		<b>2018</b>
<b>12. Receivables</b>		<b>€1,000</b>		<b>€1,000</b>	<b>€1,000</b>		<b>€1,000</b>
Short-term receivables from group undertakings							
Intra-group loan, interest-bearing					6,570		6,570
Trade receivables					714		416
Accrued income and prepaid expenses					7,237		8,051
					<b>14,521</b>		<b>15,036</b>
Accrued income and prepaid expenses							
Accrued sales		108,786		117,227	97,258		105,564
Accrued direct taxes				627			483
Other accrued income		2,060		1,849	8,264		8,396
		<b>110,846</b>		<b>119,702</b>	<b>105,521</b>		<b>114,443</b>
<b>13. Equity</b>							
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.		1,251,172		1,251,172	1,251,172		1,251,172
Retained earnings 1.1.		158,607		100,307	87,969		76,783
Minority interests in retained earnings							
Distribution of dividends		51,000		31,200	51,000		31,200
Adjustment of retained earnings							
Retained earnings 31.12.		107,607		69,107	36,969		45,583
Profit for the financial period 31.12.		128,358		89,501	77,939		42,386
Unrestricted shareholders' equity, total		<b>1,487,137</b>		<b>1,409,780</b>	<b>1,366,081</b>		<b>1,339,142</b>
Total equity		<b>2,087,137</b>		<b>2,009,780</b>	<b>1,966,081</b>		<b>1 939 142</b>



	Group 2019 €1,000	Group 2018 €1,000	Parent com- pany 2019 €1,000	Parent com- pany 2018 €1,000
<b>14. Liabilities falling due after five years</b>				
Subordinated loan from the City	157,000	157,000	157,000	157,000
Other loans from the City	108,150	128,750	108,150	128,750
Loans from financial institutions	11,733	15,333	11,733	14,667
Nuclear waste management loan				
Total	<u>276,883</u>	<u>301,083</u>	<u>276,883</u>	<u>300,417</u>

The capital loan that Helen Ltd has taken out from the City of Helsinki may be returned prematurely either in full or in part if the borrower so wishes. The loan capital may be returned only to the extent that the amount of Helen Oy's unrestricted shareholders' equity and all capital loans at the time of payment exceeds the losses confirmed for the company's last completed financial period or balance sheet included in a more recent financial statement. The annual interest for the loan is six per cent (6%).

#### 15. Current liabilities

##### Current liabilities to group undertakings

Accounts payable			3,380	4,655
Other liabilities			972	5,185
Accruals			55	760
			<u>4,408</u>	<u>10,601</u>

##### Current liabilities to associated companies

Accounts payable	1,664	1,924	1,664	1,924
	<u>1,664</u>	<u>1,924</u>	<u>1,664</u>	<u>1,924</u>

##### Accruals

Periodisation of holiday pay and holiday allowance	11,488	13,217	10,215	10,249
Interests	3,079	4,250	3,070	3,332
Accrued direct taxes	8,324	2,764	8,011	
Other accruals	9,385	7,721	4,141	5,038
	<u>32,276</u>	<u>27,952</u>	<u>25,437</u>	<u>18,619</u>

#### 16. Commitments and contingent liabilities

##### Security deposits

Bank liabilities	33	33	33	33
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##### Rental liabilities

Due in 2020	4,173	4,150	3,358	3,336
Due at a later date	2,385	3,086		

##### Leasing liabilities

Due in 2020	138	1,398	98	523
Due at a later date	1,164	1,214	1,103	673

##### Directly enforceable guarantees

Construction and warranty guarantees		11,065	30,000	
		1,510		

A separate bank account is in use for electricity trading and the related security, the balance of which on 31 December 2019 was EUR 30,000. Oy Mankala Ab is committed to providing two separate shareholder loans to Teollisuuden Voima Oyj for a total amount of EUR 36.6 million, of which EUR 20.3 million is outstanding.

#### 17. Related party transactions

##### Transactions between Helen Ltd and Group companies:

<b>Oy Mankala Ab</b>	Sales	410	382
	Purchases	25,566	35,121

As the owner of a power plant company operating under the Mankala principle, Helen Ltd bears the costs of the company's operations and, in return, receives electricity at cost price.

##### Helen Electricity Network Ltd

Sales	7,822	8,761
Purchases	8,547	8,337
Dividend income	25,200	25,200
Interest income	7,561	8,141

##### Helsingin Energiatunnelit Oy

Sales	1,173	1,117
Purchases	5,997	5,903
Interest income	1,989	2,174

##### Suomen Energia-Urakointi Oy

Sales	122	184
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##### Voimapiha Oy

Dividend income	5,520	4,160
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## Electricity derivatives

## Group

2019	Amount, GWh			Fair value, EUR 1,000		
	under 1 yr	over 1 yr	Total	under 1 yr	over 1 yr	Total
Purchased	2,531	1,212	3,743	1,405	1,515	2,920
Sold	3,839	1,467	5,306	3,890	-184	3,706
Total	-1,308	-255	-1,563	5,295	1,330	6,626

## Parent company

2019	Amount, GWh			Fair value, EUR 1,000		
	under 1 yr	over 1 yr	Total	under 1 yr	over 1 yr	Total
Purchased	2,531	1,212	3,743	1,405	1,515	2,920
Sold	3,839	1,467	5,306	3,890	-184	3,706
Total	-1,308	-255	-1,563	5,295	1,330	6,626

The fair value of electricity derivatives describes the amount in euros recognised in the profit and loss account concerning the derivatives in the future, at the market price on the date of closure of the accounts.

	EUR 1,000
Fair value as cash flow	
Accumulated cash flow, debt	7,414
Future cash flow	-788
Fair value	6,626

	EUR 1,000
Fair value as cash flow	
Accumulated cash flow, debt	7,414
Future cash flow	-788
Fair value	6,626

2018	Amount, GWh			Fair value, EUR 1,000		
	under 1 yr	over 1 yr	Total	under 1 yr	over 1 yr	Total
Purchased	2,759	1,423	4,182	26,145	6,633	32,778
Sold	4,596	2,178	6,774	-46,720	-8,519	-55,239
Total	-1,837	-755	-2,592	-20,575	-1,886	-22,461

2018	Amount, GWh			Fair value, EUR 1,000		
	under 1 yr	over 1 yr	Total	under 1 yr	over 1 yr	Total
Purchased	2,617	1,193	3,810	24,127	4,865	28,992
Sold	4,596	2,178	6,774	-46,720	-8,519	-55,239
Total	-1,979	-985	-2,964	-22,593	-3,655	-26,248

	EUR 1,000
Fair value as cash flow	
Accumulated cash flow, receivable	-12,760
Future cash flow	-9,701
Fair value	-22,461

	EUR 1,000
Fair value as cash flow	
Accumulated cash flow, receivable	-16,547
Future cash flow	-9,701
Fair value	-26,248

The purpose of the electricity derivatives trade 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 trading is carried out through the Nordic electricity exchange Nord Pool AS. In accounting, physical hourly-based sales and purchases are netted and presented as income. With respect to electricity derivatives, the hedging of sales is recorded in turnover and the hedging of purchases in energy procurement.

## Currency derivatives

## Group

2019	Nominal value, EUR 1,000			Fair value, EUR 1,000		
	under 1 yr	over 1 yr	Total	under 1 yr	over 1 yr	Total
Purchased	11,389	2,830	14,220	175	21	196
Sold	11,649	241	11,890	104	1	105
Total	-260	2,590	2,330	279	22	301

## Parent company

2019	Nominal value, EUR 1,000			Fair value, EUR 1,000		
	under 1 yr	over 1 yr	Total	under 1 yr	over 1 yr	Total
Purchased	11,389	2,830	14,220	175	21	196
Sold	11,649	241	11,890	104	1	105
Total	-260	2,590	2,330	279	22	301

2018	Nominal value, EUR 1,000			Fair value, EUR 1,000		
	under 1 yr	over 1 yr	Total	under 1 yr	over 1 yr	Total
Purchased	22,512		22,512	696		696
Sold	18,439		18,439	-270		-270
Total	4,073		4,073	426		426

2018	Nominal value, EUR 1,000			Fair value, EUR 1,000		
	under 1 yr	over 1 yr	Total	under 1 yr	over 1 yr	Total
Purchased	22,512		22,512	696		696
Sold	18,439		18,439	-270		-270
Total	4,073		4,073	426		426

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

## Coal derivatives

## Group

2019	Amount, 1,000 t			Fair value, EUR 1,000		
	under 1 yr	over 1 yr	Total	under 1 yr	over 1 yr	Total
Purchased	222	48	270	-2,835	-263	-3,098
Sold	171		171	1,172		1,172
Total	51		99	-1,662	-263	-1,925

## Parent company

2019	Amount, 1,000 t			Fair value, EUR 1,000		
	under 1 yr	over 1 yr	Total	under 1 yr	over 1 yr	Total
Purchased	222	48	270	-2,835	-263	-3,098
Sold	171		171	1,172		1,172
Total	51		99	-1,662	-263	-1,925

2018	Amount, 1,000 t			Fair value, EUR 1,000		
	under 1 yr	over 1 yr	Total	under 1 yr	over 1 yr	Total
Purchased	288		288	550		550
Sold	186		186	1,476		1,476
Total	102		102	2,026		2,026

2018	Amount, 1,000 t			Fair value, EUR 1,000		
	under 1 yr	over 1 yr	Total	under 1 yr	over 1 yr	Total
Purchased	288		288	550		550
Sold	186		186	1,476		1,476
Total	102		102	2,026		2,026

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 five years as from the balance sheet date.

## Emission derivatives

## Group

2019	Amount, 1,000 t		Total	Fair value, EUR 1,000		
	under 1 yr	over 1 yr		under 1 yr	over 1 yr	Total
Purchased	84	205	289	-74	-139	-213
Sold						
<b>Total</b>	<b>84</b>	<b>205</b>	<b>289</b>	<b>-74</b>	<b>-139</b>	<b>-213</b>

## 2018

Purchased						
Sold						
<b>Total</b>						

## Parent company

2019	Amount, 1,000 t		Total	Fair value, EUR 1,000		
	under 1 yr	over 1 yr		under 1 yr	over 1 yr	Total
Purchased	84	205	289	-74	-139	-213
Sold						
<b>Total</b>	<b>84</b>	<b>205</b>	<b>289</b>	<b>-74</b>	<b>-139</b>	<b>-213</b>

## 2018

Purchased						
Sold						
<b>Total</b>						

The purpose of using emission derivatives is based on the trading need according to actual and predicted emission levels and the emission allowances granted in the initial allocation. Emission derivatives are futures contracts ending with physical delivery, and their maximum duration is five years as from the balance sheet date.

## Emissions trading

Helen Ltd has been granted emission allowances for a total of 7 million tonnes of CO<sub>2</sub> for 2013–2020. The estimated actual emissions in 2019 total 3.2 million tonnes of CO<sub>2</sub>. In 2019, there were no deliveries based on emission allowance trading. In intangible assets in the balance sheet, emission allowances and corresponding allowances totalled 1.3 million tonnes of CO<sub>2</sub> on 31 December 2019 after deduction of use in 2019. 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

## EUR 1,000

	Group		Parent company	
	2019	2018	2019	2018
Interest rate swap				
Nominal value corresponding to the principal of the amortized loan at the balance sheet date	22,000	22,000	22,000	22,000
Fair value (according to the bank)	-736	-163	-736	-163
Loan amortization begins 30 November 2021.				

Interest rate swap 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. Items denominated in 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

Helen's subsidiary Oy Mankala Ab is taking part in the construction of the 1,600-MW Olkiluoto 3 nuclear power plant unit through its shareholding (about 8.14%) in Teollisuuden Voima Oyj (TVO). Olkiluoto 3 EPR (OL3 EPR) is a nuclear power plant unit under construction. It has been ordered as a fixed-price turnkey contract from a consortium (plant supplier) formed by Areva GmbH, Areva NP SAS and Siemens AG. The supplier consortium companies are jointly liable for the contractual obligations in accordance with the plant supply contract.

In December 2019, TVO received from the plant supplier an updated schedule on the commissioning of the OL3 EPR plant unit. According to the information received, fuel will be loaded into the reactor in June 2020, the first connection of the plant unit to the national grid will take place in November 2020 and regular electricity production from the plant unit will start in November 2021. In accordance with the commissioning programme, the plant unit will produce 1-3 terawatt-hours of electricity with varying power levels during a time that begins with grid connection and ends with the start of regular electricity production.

The civil engineering works of the plant unit have mainly been completed. Electricity, automation and mechanical installations are still partly incomplete. The Radiation and Nuclear Safety Authority in Finland (STUK) granted the operator licences for the operating personnel in late 2018. The hot functional tests carried out in spring 2018 detected vibrations in the pressuriser surge line, which is part of the reactor cooling circuit. In May 2019, STUK approved the solution to absorb vibration, and the absorbers have been installed in place. STUK will inspect the acceptability of the absorber structures before nuclear fuel is loaded into the reactor.

The Finnish Government granted an operating licence for the plant unit in March 2019. At the end of the reporting period, the number of personnel working at the site was about 1,700. The occupational safety of the worksite remained at a good level.

The plant supplier paid the second instalment of the compensation according to the comprehensive settlement agreement agreed in 2018, EUR 122 million, to TVO in December 2019. All realised expenses that meet the activation criteria of the OL3 EPR project have been recorded in the TVO Group's balance sheet under acquisition cost of property, plant and equipment. Oy Mankala Ab owns about 8.14% of the Olkiluoto 3 nuclear power plant unit and is committed to financing the construction in proportion to its shareholding. At the end of December 2019, Oy Mankala Ab's shareholder loan to TVO amounted to EUR 55 million. The amount of the remaining commitment of Oy Mankala Ab to the OL3 unit is about EUR 20 million.

Risks related to TVO's Olkiluoto 3 EPR plant unit:

### Schedule and planned completion

TVO's major risks are related to the schedule of the OL3 EPR project, to sufficient financial capacity of the consortium company Areva to meet its obligations until the end of the guarantee period, and to profit-yielding capacity. According to the contract, commercial electricity production of the plant unit was originally due to start at the end of April 2009. The completion of the project has, however, been delayed. According to the schedule last updated by the plant supplier in December 2019, regular electricity production of the plant unit will commence in March 2021.

The risk related to the planned completion refers to a situation where commercial use cannot be launched as planned, which leads to additional costs. During 2019, TVO executed several risk management measures related to the OL3 EPR project to improve TVO's readiness to commission the plant unit as well as operate three nuclear power plant units. TVO monitors closely the compliance of the conditions set in the settlement agreement and the stages of commissioning the OL3 EPR plant unit to ensure that they are implemented according to the plant supplier's schedule and in compliance with the financial and technical resources.

### Profit-yielding capacity of OL3

If the OL3 EPR plant unit fails to reach the projected output level, load factor or operating cost structure or the output level is restricted by the main grid, there is a risk that the production cost will rise in comparison to the objective. This risk has been analysed by TVO with the help of various scenarios influencing the profit-yielding capacity of OL3 EPR. As risk management measures, TVO as a licensee ensures, among other things, that the OL3 EPR plant unit has undergone extensive functional testing before nuclear test operations are launched. TVO will ensure that the experiences from the Taishan sister plants are utilised during nuclear commissioning of the OL3 EPR plant unit.

## Helen Ltd

**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 1.1.2019 - 31.12.2019**

	2019	2018
	€	€
<b>TURNOVER</b>	<b>304,774,184</b>	328,336,245
Work performed by the undertaking for its own purpose and capitalised	<b>207,506</b>	596,370
Other operating income	<b>298,259,114</b>	279,410,181
<b>Expenses</b>		
Purchase of energy	<b>-65,469,197</b>	-122,971,078
Materials, supplies and goods:		
Power plant fuel purchases	<b>-336,032,098</b>	-362,760,559
Change in fuel stores	<b>-18,732,761</b> <small>decr.</small>	6,382,063 <small>incr.</small>
Material and goods purchases	<b>-9,658,113</b>	-3,694,547
External services	<b>-18,459,623</b>	-18,382,480
Staff costs	<b>-24,649,403</b>	-22,564,499
Planned depreciation	<b>-29,762,024</b>	-22,013,997
Other operating charges	<b>-25,460,637</b>	-23,658,455
<b>OPERATING PROFIT</b>	<b>75,016,946</b>	38,679,243
Financial income and expenses:		
Financial income	<b>5,531,885</b>	4,379,302
Financial expenses	<b>-7,883,310</b>	-8,640,555
<b>PROFIT BEFORE APPROPRIATIONS</b>	<b>72,665,522</b>	34,417,990
Change in cumulative accelerated depreciation	<b>-14,367,623</b>	-24,477,077
Income taxes	<b>-11,659,580</b>	-1,988,182
<b>PROFIT FOR THE PERIOD</b>	<b>46,638,319</b>	7,952,730

**OTHER ELECTRICITY BUSINESS OPERATIONS BALANCE SHEET 31.12.**

€1,000	2019	2018
	€	€
<b>ASSETS</b>		
<b>Non-current assets</b>		
Intangible assets	<b>13,300,501</b>	30,367,350
Tangible assets	<b>228,247,145</b>	255,959,411
Investments	<b>561,347,981</b>	479,210,194
Advance payments on procurement and fixed assets in progress	<b>1,976,651</b>	1,386,829
<b>Current assets</b>		
Inventories	<b>31,188,014</b>	39,746,345
Receivables	<b>178,826,696</b>	177,496,286
<b>Total</b>	<b>1,014,886,987</b>	984,166,415
<b>EQUITY AND LIABILITIES</b>		
<b>Equity</b>		
Share capital	<b>222,600,000</b>	222,600,000
SVOP fund	<b>464,184,958</b>	464,184,958
Retained profits	<b>10,809,600</b>	17,908,932
Profit for the period	<b>46,638,319</b>	7,952,730
<b>Accumulated appropriations</b>		
Depreciation difference	<b>38,313,662</b>	23,946,038
<b>Liabilities</b>		
Long-term		
Share of loans	<b>152,165,650</b>	167,228,250
Current liabilities	<b>80,174,799</b>	80,345,507
<b>Total</b>	<b>1,014,886,987</b>	984,166,415