FINGRID OYJ
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# FINGRID OYJ

# ANNUAL REVIEW AND FINANCIAL STATEMENTS

# 1 January 2016 – 31 December 2016

**Contents**

# 1 ANNUAL REVIEW

## 1.1 Report of the Board of Directors

Fingrid's consolidated financial statements have been drawn up in accordance with the Interna-tional Financial Reporting Standards (IFRS). Unless otherwise indicated, the figures in parentheses refer to the same period of the previous year.

### 1.1.1 Financial result

In preparing these consolidated financial statements, the Group has followed the same standards as in 2015.

The Group's turnover was EUR 586.1 (600.2) million. Grid service income increased to EUR 382.4 (333.0) million, as a result of the change in grid pricing enacted at the start of the year and due to the growth in electricity consumption. Electricity consumption totalled 85.1 (82.5) terawatt hours. Fingrid transmitted 68.6 (67.9) terawatt hours of electricity in its grid, which represents 77.5 (77.1) per cent of all electricity transmitted in Finland. Imbalance power sales amounted to EUR 153.9 (137.1) million. The growth in imbalance power sales resulted from an increase in the volume of imbalance power and higher imbalance power prices. Cross-border transmission income from the connection between Finland and Russia increased to EUR 24.0 (11.2) million. This was due to the new dynamic tariff structure that was introduced as well as to increased imports from Russia. Fingrid's congestion income from connections between Finland and Sweden declined to EUR 37.5 (86.8) million due to weakened hydrological conditions, which significantly decreased the number of congestion hours. Fingrid's congestion income from the links between Finland and Estonia amounted to EUR 2.4 (4.2) million. Congestion income will no longer be reported in Fingrid's turnover as of the beginning of 2016. Other operating income totalled EUR 12.7 (5.2) million. The growth in other operating income mainly resulted from the EUR 6.3 million in recognised congestion income, in compliance with the regulation concerning the costs from maintaining cross-border capacity and countertrade.

The Group's total costs amounted to EUR 442.2 (418.6) million. Imbalance power costs increased from the previous year's level to EUR 121.7 (98.2) million, due to the increase in the volume and price of imbalance power. Loss power costs amounted to EUR 57.6 (68.6) million. The declining loss power costs have been affected by the lower price of loss power procurement and the slightly lower volume of loss power. The average price of loss power procurement was EUR 43.87 (48.22) per megawatt hour. The cost of reserves to safeguard the grid's system security decreased to EUR 50.5 (54.7) million. The reason for the decreased cost was an interruption in the procurement of the automatic frequency control reserve until August, as well as the lower procurement cost of frequency controlled reserves for normal operation and disturbances due to high availability on the markets. Depreciation amounted to EUR 99.2 (94.1) million. Grid maintenance costs grew to EUR 24.1 (19.2) million. The maintenance costs were increased by the periodical felling of trees around substations and the trimming of trees at the edges of transmission line right-of-ways. Personnel costs increased as the payroll expanded, due to new operations and increased statutory duties and due to higher employer contributions in additional personnel expenses, and amounted to EUR 28.6 (25.8) million.

**Turnover and other operating income, € million**

| | Jan-Dec/16 | Jan-Dec/15 | Oct-Dec/16 | Oct-Dec/15 |
|---|---|---|---|---|
| Grid service revenue | 382.4 | 333.0 | 113.1 | 100.8 |
| Sales of imbalance power | 153.9 | 137.1 | 47.4 | 37.9 |
| Cross-border transmission income | 24.0 | 11.2 | 10.0 | 2.9 |
| Finland-Estonia congestion income* | | 4.2 | | 0.8 |
| Finland-Sweden congestion income* | | 86.8 | | 22.0 |
| Peak load capacity income** | 7.0 | 7.6 | 1.8 | 1.8 |
| ITC income | 13.2 | 15.3 | 3.8 | 4.5 |
| Other turnover | 5.6 | 5.1 | 2.0 | 1.8 |
| Other operating income | 12.7 | 5.2 | 2.0 | 3.0 |
| **Turnover and other income total** | **598.8** | **605.4** | **180.0** | **175.5** |

**Costs, € million**

| | Jan-Dec/16 | Jan-Dec/15 | Oct-Dec/16 | Oct-Dec/15 |
|---|---|---|---|---|
| Purchase of imbalance power | 121.7 | 98.2 | 37.5 | 29.6 |
| Cost of loss energy | 57.6 | 68.6 | 12.8 | 17.8 |
| Depreciation | 99.2 | 94.1 | 25.4 | 24.2 |
| Cost of reserves | 50.5 | 54.7 | 13.8 | 12.6 |
| Personnel costs | 28.6 | 25.8 | 8.4 | 6.8 |
| Maintenance management costs | 24.1 | 19.2 | 9.1 | 7.9 |
| Cost of peak load capacity** | 6.6 | 7.2 | 1.6 | 1.4 |
| ITC charges | 12.6 | 9.4 | 4.2 | 2.0 |
| Estlink grid rents | | | | |
| Other costs | 41.1 | 41.3 | 10.5 | 11.4 |
| Costs total | 442.2 | 418.6 | 123.4 | 113.7 |
| **Operating profit excluding the change in the fair value of commodity derivatives** | **156.6** | **186.8** | **56.6** | **61.9** |
| **Operating profit of Group, IFRS** | **192.0** | **162.6** | **67.4** | **57.4** |

* Due to a change in congestion income reporting, congestion income is not reported in the turnover as of the beginning of 2016.
** Peak load capacity income and costs are related to the securing of sufficient electricity supply during peak consumption hours in compliance with the Finnish Peak Load Capacity Act.

The Group's operating profit was EUR 192.0 (162.6) million. To recognise changes in the fair value of electricity derivatives and the currency derivatives related to capital expenditure and other operating expenses, EUR 35.4 (-24.3) million was recorded in operating profit.

Net financial costs in accordance with IFRS were EUR 18.7 (33.7) million, including a change of EUR -0.3 (-13.3) million in the fair value of financial derivatives.

The Group's profit before taxes was EUR 173.9 (129.3) million. The biggest differences from the last year are explained by changes in the market value of derivatives (EUR +72.7 million), the growth in grid service income (EUR +49.4 million), and a change in the reporting of congestion income (effect EUR -84.6 million). The profit for the year was EUR 138.7 (103.6) million. The equity to total assets ratio increased and was 36.4 (33.5) per cent at the end of the review period.

The parent company's turnover was EUR 581.4 (592.4) million, profit for the financial year EUR 103.9 (123.7) million and the distributable funds EUR 176.0 million.

By the company's own calculations, the return according to the regulatory model that governs grid operations amounts to a deficit of around EUR 40 million for 2016.

### 1.1.2 Capital expenditure

Fingrid's grid investment programme improves system security and promotes the electricity markets as well as the implementation of the national energy and climate strategy. The annual capital expenditure in the grid has remained extensive.

The company's total capital expenditure in 2016 amounted to EUR 146.7 (147.5) million. Of that amount, a total of EUR 135.8 (138.4) million was invested in the transmission grid and EUR 3.3 (0.7) million in reserve power. ICT investments totalled EUR 7.5 (8.4) million. A total of EUR 2.4 (1.8) million was used for R&D projects during the year under review.

At the end of 2016, Fingrid had thirteen 400 kilovolt substation sites and 67 kilometres of 400 kilovolt power line contracts as well as a significant number of 110 kilovolt substation and power line projects under construction.

Fingrid's all-time biggest investment, the 400 kilovolt 'Coastal Power Line' transmission connection from Pori to Oulu was completed at the end of 2016. With the completion of this power line on the western coast of Finland, there are now three 400 kilovolt transmission links connecting the northern and southern parts of the country. The project, which cost a total of EUR 260 million, was carried out according to plan over a span of ten years. The transmission link serves the wind farms that have been built in western coastal areas and which will be followed by more in the future. Several existing and planned nuclear power stations are also located close to this line. The new connection furthermore improves the cross-border transmission between Sweden and Finland. The investments carried out by Fingrid also help prepare for the new AC link to be built between the countries by 2025. Thanks to the Coastal Power Line, Finland's future as a single price region is now more secure. The voltage upgrade will also decrease transmission losses. This multi-year project was a major challenge for both Fingrid personnel and our suppliers. The employment impact of the project amounted to approximately 1,000 man-years. A large part of the congestion income collected by Fingrid was allocated to this major investment.

Overall, the Coastal Power Line consisted of three extensive projects:

• A 400 and 110 kilovolt transmission line connection from Seinäjoki to Vaasa, and a new transformer substation in Nivala were completed in 2011.

• A 400 kilovolt connection from Ulvila to Kristinestad was completed in the second stage of the power line project October 2014.

• In the final phase, a 400 kilovolt power line connection from Kokkola (Hirvisuo) to Muhos (Pyhänselkä) was completed in late 2016.

Overall, the Coastal Power Line includes 380 kilometres of new 400 kilovolt power line, nine new substations and several smaller substation extensions. This provides 600–800 megawatts of entirely new transmission capacity between northern and southern Finland.

The roughly EUR 130 million modernisation project on Finland's oldest transmission line, dubbed the 'Iron Lady' and running from Imatra to Turku, proceeded as planned during the year under review. The Hikiä–Forssa section of this major project was completed and commissioned in March. Modernisation of the Iron Lady continues between Lieto and Forssa. Work on the Yllikkälä–Koria section also started, between Lappeenranta and Kouvola. Furthermore, a decision was made to renew the transmission line between Hikiä and Orimattila and to build a new substation in Orimattila. The Iron Lady project is expected to be fully completed by 2020.

With the aim of securing the electricity supply for both residents of the Helsinki region and functions that are vital to society, Fingrid will reinforce the Espoo substation and the Länsisalmi substation in Vantaa. These substation upgrades and extensions, which cost nearly EUR 9 million for Espoo and roughly EUR 18.5 million for Vantaa Länsisalmi, started in 2016 and will be completed in 2017. The supply of electricity from the main grid to Helsinki and Vantaa takes place via the Länsisalmi and Tammisto transformer substations, serving around 800,000 people. Increasing electricity consumption and changes taking place in the production of electricity in Helsinki necessitate upgrades in supply capacity. The extension of the Espoo substation will improve the system security of the transmission facilities in western Uusimaa, the region west of the capital area. Local electricity production has decreased while consumption is constantly increasing.

Fingrid has, over the last two years, made major investments to develop the transmission grid in Lapland by building or upgrading a total of six substations. These measures were necessary due to increasing local consumption and due to new wind power capacity. During the year under review, the substation at Vajukoski and Petäjäskoski received new transformers and the existing systems were upgraded and extended. The Vajukoski transformer substation, north of Sodankylä, serves both hydropower production and mining industry and links up with the Norwegian transmission grid via Ivalo. The Petäjäskoski transformer substation, a major link between Lapland's 220 kilovolt and 400 kilovolt main transmission networks, also received an entirely new 220 kilovolt gas-insulated switchgear. Extensive upgrades were additionally carried out at the Taivalkoski and Ossauskoski substations. The total capital expenditure amounted roughly to EUR 43 million.

Several investment decisions were made during the year, many of which proceeded to the implementation stage.

The Inkoo substation that was built in the 1970s secures the electricity supply in western Uusimaa. An investment decision was made to modernise the ageing substation, and the project is due for completion in 2018. To secure the supply of electricity in the Hämeenlinna and Valkeakoski areas, Fingrid decided to modernise a 51-kilometre transmission line between the cities. Aged and worn out pylons and transmission lines will be dismantled and replaced with a new line. The project is due for completion in 2018.

Several of the investments are related to enabling or improving the operating conditions of industry. An upgrade on the Vuoksi substation and the roughly 24-kilometre Lempiälä–Vuoksi transmission line is planned between Lappeenranta and Imatra. The investment will be carried out sooner than originally planned, due to an extension to Kemira's industrial plant in Joutseno, and it is due for completion in 2018. The electricity supply for the new bioproduct mill in Äänekoski will be secured with the construction of a new 110 kilovolt transmission line between Äänekoski's Koivisto and Laukaa's Vihtavuori substations, due for completion in late 2017. Olkiluoto's 400 kilovolt switching station, which is outdated and has insufficient system security, will be modernised. The Olkiluoto substation is one of the most important grid nodes, with three nuclear power plants connected to it. The project is due for completion in 2019.

Fingrid's Huutokoski reserve power plant will undergo a EUR 15 million upgrade. The Huutokoski plant, located in Joroinen, is one of the ten reserve power plants owned by Fingrid which are tasked to support a sufficient supply of electricity in Finland during major disturbances in the power system. The upgrade project includes the modernisation of obsolete systems to secure reliable operation for the next 20 years as well as significant environmental investments. The systems to be modernised include fuel tanks and fuel systems, extinguishing systems, the plant's internal electrical and automation systems as well as the plant's own reserve power systems.

In 2006, Fingrid launched a project aimed at building a complete, modern IT system to support asset management operations. Thanks to system integrations, all the master data of the transmission grid assets is now in a single application. The overall project combined both modern ICT technology and in-house knowledge, and transformed operational procedures. Thanks to advanced technology, significant efficiency improvements were achieved in asset management. The ELVIS IT system project tasked to support asset management and use of the assets was completed in 2016.

Major improvements have been achieved in the reliability of cross-border transmission connections and Fingrid now has more expert resources on DC transmission connections. A 24/7 back-up system was taken into use in HVDC operations as of the beginning of 2016. During the year under review, disturbance clearing has been accelerated, individual disturbances have been prevented proactively and measures to secure the reliability and availability of the HVDC connections have been implemented much faster than in previous years. The total duration of interruptions in 2016 remained at around 10% of the 2014 and 2015 levels. The number of interruptions was halved from 2014 and 2015.

By international standards, Fingrid's maintenance management is world-class. The company was one of the best operators in the International Transmission Operations and Maintenance Study (ITOMS) for the 11th consecutive time. Lloyd's Register audited Fingrid's asset management operations and awarded Fingrid a certificate for compliance with the ISO 55001 standard.

In 2016, Fingrid's personnel had no accidents resulting in absence from work (2015: 1), in other words, the zero accidents target was achieved. Suppliers' personnel had 12 (13) accidents resulting in absence from work, three of which resulted in an absence of more than

30 days. The suppliers' and Fingrid's combined accident frequency rate decreased somewhat from the previous year.

The occupational safety development project continued, with a focus on implementing occupational safety models and tools and improving safety attitudes. On-line training was introduced in early 2016 and used by more than 1,700 people during the year. A safety observation campaign was carried out with suppliers and Fingrid's own personnel. Work was also continued to develop a mobile reporting system for occupational safety, quality and environmental issues, on-line training and Fingrid's safety management system.

### 1.1.3 Power system

In 2016, electricity consumption in Finland amounted to 85.1 (82.5) terawatt hours. A total of 68.6 (67.9) terawatt hours of electricity was transmitted in Fingrid's grid, representing 77.5 (77.1) per cent of the total transmission volume in Finland (consumption and inter-TSO).

Electricity import and production capacity was well sufficient to cover the peak consumption, which amounted to a maximum of 15,100 (13,500) megawatts. The peak consumption was at an all-time record high in Finland. During the consumption peaks early in the year, electricity production in Finland totalled approximately 10,800 (11,200) megawatts.

Electricity transmissions between Finland and Sweden consisted mostly of large imports to Finland. During 2016, 15.7 (17.8) terawatt hours of electricity was imported from Sweden to Finland, and 0.3 (0.2) terawatt hours were exported from Finland to Sweden.

The electricity transmission between Finland and Estonia was dominated by exports from Finland to Estonia, which amounted to 3.1 (5.0) terawatt hours.

The electricity imports from Russia increased by approximately 50 per cent. Nearly the full transmission capacity was available. Electricity imports from Russia totalled 5.9 (3.9) terawatt hours.

With a transmission reliability rate of 99.9998 per cent, the reliability of the transmission grid was at an excellent level during the year under review. The number of disturbances due to thunder exceeded the average, and the resulting multi-phase disturbances were detrimental to the process industry. Otherwise the number of disturbances remained at the normal level. Increased resources were allocated on determining the DC transmission links' susceptibility to disturbances. Thanks to this, no disturbances requiring extensive repairs occurred in the DC links during 2016, and also less significant disturbances were cleared more quickly than in previous years. The total duration of interruptions due to disturbances in DC links in 2016 remained at around 10% of the 2014 and 2015 levels, and the number of interruptions was halved from the 2014 and 2015 figures.

Transmission outages in connection with investment projects mostly affected Ostrobothnia and northern Ostrobothnia. The outages were challenging and required careful advance planning and good cooperation with our customers. The outages were handled successfully.

| Counter trade | Jan-Dec/16 | Jan-Dec/15 | Oct-Dec/16 | Oct-Dec/15 |
|---|---|---|---|---|
| Counter-trade between Finland and Sweden, €M | 2.5 | 0.8 | 0.3 | 0.2 |
| Counter-trade between Finland and Estonia, €M | 0.1 | 0.8 | 0.0 | 0.0 |
| Counter-trade between Finland's internal connections, €M | 1.2 | 2.2 | 0.3 | 0.6 |
| **Total counter-trade, €M** | **3.9** | **3.8** | **0.6** | **0.9** |

Reserves required to maintain the power balance of the electricity system were procured from Finland, the other Nordic countries, the Baltic countries and Russia. Countertrade costs totalled EUR 3.9 (3.8) million. Countertrade refers to special adjustments made in the management of electricity transmission which are used to eliminate short-term bottlenecks (an area where electricity transmission is congested) from the grid. Fingrid guarantees the cross-border transmission it has confirmed by carrying out countertrades, i.e. purchasing and selling electricity, up until the end of the 24-hour usage period. The need for countertrade can arise from, for example, a power outage or disruption in a power plant or in the grid.

An outage in a connection point in the grid caused by a disturbance in Fingrid's electricity network lasted an average of 2.1 minutes, which is clearly shorter than the ten-year average of 3.3 minutes. The estimated cost of the disturbances was EUR 3.5 (4.1) million.

| Power system operation | Jan-Dec/16 | Jan-Dec/15 | Oct-Dec/16 | Oct-Dec/15 |
|---|---|---|---|---|
| Electricity consumption in Finland TWh | 85.1 | 82.5 | 23.2 | 22.1 |
| TSO transmission in Finland, TWh | 3.5 | 5.5 | 0.4 | 1.4 |
| Transmission within Finland, TWh | 88.6 | 88.0 | 23.6 | 23.5 |
| Fingrid's transmission volume TWh | 68.6 | 67.9 | 17.4 | 17.7 |
| Fingrid's electricity transmission to customers, TWh | 64.9 | 62.3 | 16.8 | 16.3 |
| Fingrid's loss energy volume TWh | 1.3 | 1.4 | 0.3 | 0.3 |
| **Electricity transmission Finland - Sweden** | | | | |
| Exports to Sweden TWh | 0.3 | 0.2 | 0.2 | 0.1 |
| Imports from Sweden TWh | 15.7 | 17.8 | 2.8 | 4.7 |
| **Electricity transmission Finland - Estonia** | | | | |
| Exports to Estonia TWh | 3.1 | 5.0 | 0.2 | 1.2 |
| Imports from Estonia TWh | 0.7 | 0.0 | 0.5 | 0.0 |
| **Electricity transmission Finland - Russia** | | | | |
| Imports from Russia TWh | 5.9 | 3.9 | 1.9 | 1.0 |

### 1.1.4 Electricity market

The average market price of spot electricity on the electricity exchange (system price) was EUR 26.91 (20.98) per megawatt hour. The price level in the Nordic electricity markets trended downwards for an extended period during the first half of 2016, but rebounded during the summer. The drivers behind the price increase include weakened hydrological conditions as well as price hikes in fossil fuels and emission rights.

In 2016, prices on the Finnish wholesale market were higher than they were in other Nordic countries. The overall increase in Nordic prices made the price disparity between Finland and Sweden less pronounced and, as a result, congestion hours between Finland and Sweden decreased significantly during the latter half of the year. In addition to the increased Nordic price level, another reason for the decrease in congestion hours and decreased price disparity was the completion of the NordBalt transmission link between Sweden and Lithuania during the first half of 2016.

Fingrid accrued EUR 37.5 (86.8) million in congestion income from the cross-border power lines between Finland and Sweden. EUR 29.9 (24.3) million of this was accrued during the first half of 2016 and EUR 7.6 (62.5) million during the second half of the year. The links between Finland and Estonia generated EUR 2.4 (4.2) million in congestion income. All the congestion income accrued by Fingrid during 2016 was used for maintaining cross-border transmission capacity and for upgrade investments.

The imports from Russia increased to 5.9 (3.9) terawatt hours. Despite the increase, electricity imports from Russia to Finland have decreased significantly in recent years, and the hourly import volumes from Russia have varied considerably. In addition to Russia's capacity mechanism, the reduction in electricity trade is attributed to increased electricity prices in the country.

In spring, Fingrid published a discussion paper on the challenges of the electricity market and various alternative solutions to them entitled "Electricity market needs fixing – What can we do?", which sparked a lively debate. Fingrid's consultation request was responded to by a total of 36 industry operators, associations, research institutions and private citizens. During the second half of the year, Fingrid published a summary of the feedback, which contained suggestions for various routes to a market-based green electricity system.

The operating capacity of the electricity market and the sufficiency of electricity supply became national topics due to the bitter cold of January 2016. As the consumption of electricity broke records, the topics of meeting consumption needs and national self-sufficiency in terms of electricity were widely debated.

Roughly half of the cross-border transmission capacity between Finland and Sweden is provided by the Fenno-Skan links, i.e. high-voltage DC connections. Several measures were started by Fingrid early in 2016 to improve the reliability of cross-border transmission capacity. Thanks to the improvements, it was possible to keep interruptions very brief, and the availability of the connections has been clearly better compared to previous years.

Fingrid Datahub Oy, a company focused on the transfer of retail market information, was established on 16 February 2016. The task of the subsidiary, wholly owned by Fingrid, is to implement a centralised information exchange system for the electricity markets, i.e. a datahub, in which the exchange of information between retail sellers and distribution system operators is concentrated into a single service. This makes the exchange of information in the retail electricity market more straightforward and efficient. Data exchange among retail markets is needed in managing the various business processes of the electricity markets, such as balance settlement, an end user's change of address and a change of seller, for example. The system will facilitate the processing of measurement data, simplify and speed up client agreement events and improve the reliability of the service.

The implementation of European network codes required by the European Union proceeded in Finland, as Fingrid established a network code forum that is open to all market parties. The forum promotes public debate on all matters related to network codes and aims to gather the views of stakeholders as well as to complement the public hearing processes related to implementing the network codes. The network code forum convened three times during the year under review.

The Finnish, Norwegian and Swedish TSOs continued with the switchover to shared Nordic balance settlement. The jointly owned company eSett Oy, which Fingrid owns one third of, aims to start up operations in spring 2017.

In September, the Ministry of Economic Affairs and Employment set up a working group to look into the role of smart grids in the electricity market. The aim of the working group is to forge a common vision of future smart grids and to propose concrete measures for using smart grids as a means of increasing customers' opportunities to participate in the electricity market and contribute to maintaining a secure supply of electricity. The members of the working group broadly represent the stakeholders in the sector, including active participation by Fingrid.

| **Electricity market** | **Jan-Dec/16** | **Jan-Dec/15** | **Oct-Dec/16** | **Oct-Dec/15** |
|---|---|---|---|---|
| Nord Pool system price, average €/MWh | 26.91 | 20.98 | 34.42 | 21.92 |
| Area price Finland, average €/MWh | 32.45 | 29.66 | 37.48 | 30.59 |
| Congestion income between Finland and Sweden, € million* | 75.0 | 173.5 | 3.9 | 44.1 |
| Congestion hours between Finland and Sweden %** | 32.7 | 47.1 | 10.9 | 47.4 |
| Congestion income between Finland and Estonia, € million* | 4.7 | 8.4 | 0.1 | 1.6 |
| Congestion hours between Finland and Estonia % | 9.7 | 12.0 | 2.8 | 9.1 |

* The congestion income between Finland and Sweden and between Finland and Estonia is divided equally between the relevant TSOs. The income and costs of the transmission connections are presented in the tables under 'Financial result'. Congestion income is used for investments aimed at eliminating the cause of congestion.

** The calculation of a congestion hour between Finland and Sweden refers to an hour during which Finland's day-ahead area price differs from both Sweden's SE1 and its SE3 area prices.

### 1.1.5 Financing

The company's credit rating remained high, reflecting the company's strong overall financial situation and debt service capacity. The company's net financial costs during the period under review were EUR 18.7 (33.7) million, including the change in the fair value of derivatives of EUR -0.3 million (EUR -13.3 million).

Interest-bearing borrowings totalled EUR 1,107.7 (1,143.4) million, of which non-current borrowings accounted for EUR 842.9 (907.2) million and current borrowings for EUR 264.9 (236.2) million. In 2016, the company issued bonds totalling EUR 80 million (EUR 50 million with a four-year maturity and EUR 30 million with a six-year maturity) to refinance current borrowings.

The company's liquidity remained good.  Cash and financial assets recognised at fair value through profit or loss on 31 December 2016 totalled EUR 79.7 (116.6) million. The company additionally has an undrawn revolving credit facility of EUR 300 million to secure liquidity and EUR 50 million in uncommitted overdraft facilities. Fingrid used the first extension option of the revolving credit facility during the period under review. This extended the maturity of the revolving credit facility until 11 December 2021.

The counterparty risk arising from derivative contracts relating to financing was EUR 16 (11) million. Fingrid's foreign exchange and commodity price risks were generally fully hedged.

The international credit rating agencies S&P Global (S&P) and Fitch Ratings (Fitch) upgraded Fingrid's ratings as follows:

- On 28 October 2016, S&P raised the rating for Fingrid Oyj's unsecured senior debt and long-term company rating to 'AA-' and the short-term company rating to 'A-1+', with a stable outlook.
- On 21 November 2016, Fitch raised the rating for Fingrid Oyj's unsecured senior debt to 'AA-', the long-term company rating to 'A+', and affirmed 'F1' for the short-term company rating, with a stable outlook. The rating received by Fingrid was, at the time of issuing, the highest valid rating given by Fitch to any European regulated TSO.

### 1.1.6 Share capital

The company's share capital is EUR 55,922,485.55. Fingrid shares are divided into Series A shares and Series B shares. The number of Series A shares is 2,078 and the number of Series B shares is 1,247. The voting and dividend rights related to the shares are described in more detail in the notes to the financial statements and in the articles of association available on the company's website.

### 1.1.7 Personnel and remuneration systems

Fingrid Oyj employed 334 (315) persons, including temporary employees, at the end of the year. The number of permanent personnel was 291 (280).

Of the personnel employed by the company, 25.0 (24.4) per cent were women and 75.0 (75.6) per cent were men. The average age of the personnel was 44 (44).

During 2016, personnel received a total of 11,647 (11,794) hours of training, with an average of 35.7 (37.4) hours per person. Employee absences due to illness accounted for 1 (2) per cent of the total working hours. In addition to a compensation system that is based on the requirements of each position, Fingrid applies incentive bonus schemes.

### 1.1.8 Board of Directors and corporate management

Fingrid Oyj's Annual General Meeting was held in Helsinki on the 6th of April 2016. Juhani Järvi was elected Chairman of Fingrid's Board of Directors and Juha Majanen was elected Vice Chairman. Other members elected to the Board were Esko Torsti, Sanna Syri and Anu Hämäläinen.

The Board members until 6th April 2016 were Helena Walldén, Juha Majanen, Juhani Järvi, Sanna Syri and Esko Torsti.

PricewaterhouseCoopers Oy was elected as the auditor of the company, with Jouko Malinen, APA serving as the responsible auditor.

The Board of Directors has two committees: the Audit Committee and the Remuneration Committee. As of 6th April 2016, the Audit Committee consists of Esko Torsti (Chairman), Juhani Järvi and Juha Majanen. The members of the Audit Committee until 6th April 2016 were Juha Majanen (Chairman), Juhani Järvi and Helena Walldén.

As of 6th April 2016, the Remuneration Committee consists of Juhani Järvi (Chairman), Sanna Syri and Anu Hämäläinen. The members of the Remuneration Committee until 6th April 2016 were Helena Walldén (Chairman), Sanna Syri and Esko Torsti.

Jukka Ruusunen serves as President & CEO of the company. Fingrid has an executive management group which supports the CEO in the company's management and decision-making.

A corporate governance statement, required by the Finnish Corporate Governance Code, has been provided separately. The statement and other information required by the Code are also available on the company's website at www.fingrid.fi.

### 1.1.9 Internal control and risk management

Fingrid's internal control is a permanent component of the company's operations and deals with all those operating methods and procedures whose objective it is to ensure
- effective and profitable operations that are in line with the company's strategy,
- the reliability and integrity of the company's financial and management information,
- that the company's assets are protected,
- that applicable legislation, guidelines, regulations, agreements and the company's own governance and operating guidelines are complied with, and
- that the company's risk management meets a high standard.

Risk management is planned as a whole with the objective of comprehensively identifying, assessing, monitoring and safeguarding the company's operations, the environment, personnel and assets from various threats and risks. Due to the nature of the company's basic mission, risks are also assessed from the perspective of society in general.

Continuity management is a part of risk management. Its objective is to improve the organisation's capacity to prepare and to react in the best possible way should risks occur, and to ensure the continuity of operations in such situations.

Further information on internal control, risk management and the foremost risks and factors of uncertainty is available on the company's website at www.fingrid.fi and in the Board of Directors' annual review.

Board of Directors

The company’s Board is responsible for organising internal control and risk management, and it approves the principles of internal control and risk management on an annual basis. The Board specifies the company’s strategic risks and related management procedures as part of the company’s strategy and action plan, and monitors their implementation. The Board decides on the operating model for the company’s internal audit. The Board regularly receives internal audit and financial audit reports as well as a status update at least once a year on the strategic risks and continuity threats relating to the company’s operations and their management and occurrence.

Line management and other organisation

Assisted by the executive management group, the CEO is responsible for executing and steering the company’s governance, decision-making procedures, control and risk management, and for the assessment of strategic risks and continuity threats at the company level, and their related risk management.

The heads of functions are responsible for the practical implementation of the governance, decision-making procedures, controls and risk management for their areas of responsibility, as well as for the reporting of deviations and the sufficiency of more detailed guidelines. Directors appointed in charge of the threats to continuity management are responsible for drawing up and maintaining continuity management plans and guidelines, and for arranging sufficient training and practice.

The CFO is responsible for arranging procedures, controls and monitoring at the company level as required by the harmonised operating methods of internal control and risk management. The company’s general counsel is responsible at the company level for assuring the legality and regulation compliance of essential contracts and internal guidelines, taking into account the company’s interests, as well as for the procedures these require. Each Fingrid employee is obligated to identify and report any risks or control deficiencies she or he observes and to carry out the agreed risk management procedures.

Internal auditor and auditor

The Board decides on the operating model for the company’s internal audit. The internal audit acts on the basis of plans processed by the Audit Committee and approved by the Board. Audit results are reported to the object of inspection, the CEO, the Audit Committee and the Board. Upon decision of the Board, an internal audit outsourced to an authorised public accounting company acts within the company. From an administrative perspective, the internal audit is subordinate to the company’s CEO. The internal audit provides a systematic approach to the assessment and development of the efficacy of the company’s risk management, monitoring, management and administrative processes and ensures their sufficiency and functionality as an independent party. The internal audit has the authority to carry out reviews and to access all information that is essential to the audit. The company’s internal audit carries out risk-based auditing on the company’s various processes.

An authorised public accounting company selected by the general meeting acts as auditor for the company. The company's financial auditor inspects the accounting, financial statements and financial administration for each financial period and provides the general meeting with reports required by accounting legislation or otherwise stipulated in legislation. The financial auditor reports on his or her work, observations and recommendations for the Board and may also carry out other authorisation-related tasks commissioned by the Board or management.

### 1.1.10 Foremost risks and uncertainty factors for society and Fingrid

One of the company's biggest business risks and the biggest risk where society is concerned is a major disturbance related to the functioning of the power system. A major disturbance or other electrical system disruption can cause significant financial and physical damage to Fingrid and society in general.

Other major risks for Fingrid and society are a loss of confidence in the electricity market, environmental risks and electricity and occupational health and safety risks.

The risks to Fingrid's operations are risks related to the unfavourable trend in official regulation, capital investments which have become unnecessary, financing risks, personnel risks, risks related to ICT and data transfer, asset risks and reputation risks.

Risks to society arising from Fingrid's operations are unsuccessful timing of capital investments and long-term restrictions in transmission capacity.

The most significant of the above-mentioned risks to Fingrid are explored in greater detail in the company's annual report. Fingrid's financing risks are described in more detail in sections 5.2 and 5.3 of the consolidated financial statements (IFRS). No substantial risks were realised in 2016.

### 1.1.11 Corporate responsibility

Fingrid's compliance with corporate responsibility is steered by the set strategy targets. Corporate responsibility is a key element in the implementation of Fingrid's strategy and in its business expertise. The key targets have been set by identifying matters that are of material importance to Fingrid. The need for updates to the materiality analysis is assessed annually as part of the strategy process, based on an operating environment and stakeholder analysis and on the strategy update. Fulfilment of the targets serves as the basis for executive management's and personnel's remuneration.

Corporate responsibility is managed as an integrated part of Fingrid's management system. Fingrid's Board of Directors approves the company's Code of Conduct and monitors the company's compliance in operating responsibly. The Board is responsible for the CSR management systems and their integration into business operations. The CEO and the heads of functions are each responsible for corporate responsibility issues within their area of responsibility. Social issues and environmental impacts are taken into account in all decision-making and when assessing operations alongside profitability issues.

Managers and the entire work community ensure that behaviour is in line with the Code of Conduct. A whistleblower system managed by an independent third party for reporting cases of misconduct etc. is available to the personnel. Fingrid Oyj committed in 2016 to the United Nations Global Compact initiative. Fingrid's Code of Conduct complies with the Global Compact initiative's principles on human rights, labour, environment and anti-corruption.

Fingrid also requires all contractors to comply with the Code of Conduct and monitors their compliance based on risk assessments.

Fingrid's work sites are regularly audited to verify compliance with contractor obligations, occupational safety and environmental management. The audits carried out during 2016 proved that the work site operations are generally at a high level and that use of the electronic reporting system is extensive.

A human rights impact assessment was carried out in compliance with the due diligence process recommended in the UN's Guiding Principles on Business and Human Rights. As regards tax footprint reporting, Fingrid only operates in Finland and has not resorted to any special arrangements to minimise taxes. The company's tax footprint is presented in the annual report's 'Corporate finances, financing and risk management' section. Dividends are mainly paid to the State of Finland and to Finnish pension insurance and insurance companies.

To ensure transparency and comparability, Fingrid reports on its corporate responsibility in accordance with the international Global Reporting Initiative (GRI) framework. The GRI G4 reporting framework is applied using the Core 'in accordance' option.

### 1.1.12 Environmental matters

Fingrid has a long-term approach to its environmental impacts and land use issues, and the principles for minimising environmental impacts are accounted for in our land use and environmental policy. The key aspects include an environmental impact assessment (EIA) and preparedness for environmental risks. During 2016, Fingrid signed the energy efficiency agreement of Finnish industries 2017–2025 and committed to the target of cutting energy use by six per cent by 2025.

Environmental management was developed during the year by establishing a management system in compliance with the ISO 14 001 standard for the reserve power plants and by introducing an online training course on environmental issues for all personnel working at Fingrid sites. Environmental training was provided during the kick-off meetings for investment projects, and training was also provided on the use of chemicals, the management of safety data sheets and oil spill response for the providers of maintenance services at substations and reserve power plants. Environmental aspects were monitored as part of work site monitoring. Compliance with environmental requirements, occupational safety and contractor obligations was verified in 15 audits.

Several development projects were carried out to improve fire safety at substations and reserve power plants. Oil spill response plans were created and emergency response plans were updated at all reserve power plants. One significant environmental deviation occurred during the year, as around 180 litres of oil was leaked from a worksite at the Isokangas substation.

In 2016, Fingrid issued around 260 statements on land-use plans and EIAs. In addition, the company directed the construction taking place near grid installations by issuing statements containing safety guidelines and land use restrictions. Some 420 such statements were issued.

EIAs were carried out for six transmission line projects in 2016. Two events were arranged to inform the public about the environmental impacts of the power lines required to connect the

Hanhikivi 1 nuclear power plant to the grid; the EIA process for the project was completed in October 2016. A Natura assessment update was carried out for this project in compliance with the Nature Conservation Act. An EIA was completed for five transmission line projects (Hämeenlahti–Hännilä, Kontiolahti–Pamilo, Kontiolahti–Uimaharju, Siikajoki–Raahe and the line rearrangements for the Olkiluoto substation). Three projects involved archaeological inventories.

In order to be able to build, operate and maintain a transmission line, Fingrid redeems a right of use to the transmission line area. Redemption permits were obtained for the re-routing of transmission lines from Multisilta and Kangasala to Lavianvuori and for the transmission lines Vanaja–Tikinmaa, Vihtavuori–Koivisto and Koria–Yllikkälä. A redemption permit application was filed for the transmission line project Hikiä–Orimattila. The redemption compensation procedure was completed in seven transmission line projects. Eight hearings in accordance with the Finnish Act on the Redemption of Immoveable Property and Special Rights were held with landowners.

Fingrid's reserve power plants are subject to an environmental permit and covered by the EU's emissions trading scheme. The accuracy of the measuring and reporting systems for fuel consumption is verified by an accredited emissions trading verifier. A total of 10,326 (6,697) units ($tCO_2$) of emission allowances were returned, all of which consisted of acquired emission rights units. Fingrid has not been granted free-of-charge emission rights for the emissions trade period 2013–2020. No emissions rights were purchased in 2016. Emissions trading had minor financial significance for Fingrid.

## 1.1.13 Legal proceedings and proceedings by authorities

A lawsuit was initiated against Fingrid in December 2016, demanding non-specified damages due to an alleged breach of contract. The alleged injury is continuous and the claim amounted to EUR 135,000 by the time the lawsuit was initiated. Fingrid has contested the claims presented in the lawsuit. The case is currently before the court. In Fingrid's view, the legal proceedings are not likely to have a substantial impact on the company's financial result or financial position. Thus no provisions were recognised in the financial statements in relation to these proceedings.

## 1.1.14 Events after the review period and estimate of future outlook

Fingrid Group's profit for the 2017 financial period, excluding changes in the fair value of derivatives and before taxes, is expected to improve somewhat. Grid service pricing for 2017 is set in such a way as to achieve a regulatory-allowed financial result.

Results forecasts for 2017 are complicated especially by the uncertainty related to grid income, ITC income and cross-border transmission income, and to reserve and loss power costs. These are particularly dependent on temperature variations and precipitation and changes in the hydrological situation in the Nordic countries, which affect electricity consumption and electricity prices in Finland and its nearby areas, and thereby also the volume of electricity transmission in the grid. The company's debt service capacity is expected to remain stable.

## 1.1.15 Board of Directors’ proposal for the distribution of profit

The guiding principle for Fingrid’s dividend policy is to distribute substantially all of the parent company profit as dividend. When making the decision, however, the economic conditions, the company’s near term investment and development needs as well as any prevailing financial targets of the company are always taken into account.

Fingrid Oyj's parent company's profit for the financial year was EUR 103,866,300.72 and distributable funds in the financial statements total EUR 175,954,253.06. Since the close of the financial year, there have been no material changes in the company’s financial position and, in the Board of Directors’ view, the proposed dividend distribution does not threaten the company’s solvency.

The company’s Board of Directors will propose to the Annual General Meeting of Shareholders that

- a dividend of EUR 37,536.09 per share be paid for Series A shares and EUR 16,038.49 per share be paid for Series B shares, for a total of EUR 97,999,992.05.

- EUR 77,954,261.01 be retained in unrestricted equity.

## 1.1.16 Annual General Meeting 2017

Fingrid Oyj’s Annual General Meeting is preliminarily scheduled for 24 May 2017 in Helsinki.

Helsinki, 17 February, 2017
Fingrid Oyj
Board of Directors

## 1.2 Consolidated key figures

| CONSOLIDATED KEY FIGURES | | 2016 IFRS | 2015 IFRS | 2014 IFRS | 2013 IFRS | 2012 IFRS |
|---|---|---|---|---|---|---|
| **Extent of operations** | | | | | | |
| Turnover | MEUR | 586.1 | 600.2 | 567.2 | 543.1 | 522.1 |
| Capital expenditure, gross | MEUR | 146.7 | 147.5 | 129.5 | 225.3 | 139.0 |
| - % of turnover | % | 25.0 | 24.6 | 22.8 | 41.5 | 26.6 |
| Research and development expenses | MEUR | 2.4 | 1.8 | 1.7 | 1.8 | 1.5 |
| - % of turnover | % | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 |
| Personnel, average | | 336 | 319 | 305 | 277 | 269 |
| Personnel at the end of period | | 334 | 315 | 313 | 287 | 275 |
| Salaries and remunerations total | MEUR | 22.7 | 21.3 | 20.5 | 19.0 | 18.2 |
| **Profitability** | | | | | | |
| Operating profit | MEUR | 192.0 | 162.6 | 142.8 | 115.3 | 94.6 |
| - % of turnover | % | 32.8 | 27.1 | 25.2 | 21.2 | 18.1 |
| Profit before taxes | MEUR | 173.9 | 129.3 | 132.9 | 87.3 | 88.3 |
| - % of turnover | % | 29.7 | 21.5 | 23.4 | 16.1 | 16.9 |
| Return on investments (ROI) | % | 10.4 | 8.7 | 7.6 | 6.3 | 5.6 |
| Return on equity (ROE) | % | 18.8 | 15.0 | 16.3 | 15.0 | 12.4 |
| **Financing and financial position** | | | | | | |
| Equity ratio | % | 36.4 | 33.5 | 31.0 | 29.5 | 27.3 |
| Interest-bearing net borrowings | MEUR | 1,028.0 | 1,026.9 | 1,046.1 | 1,076.7 | 1,030.3 |
| Net gearing | | 1.3 | 1.4 | 1.6 | 1.7 | 1.8 |
| **Share-specific key figures** | | | | | | |
| Profit/share | € | 41,706.1 | 31,150.8 | 32,027.9 | 27,277.9 | 20,159.2 |
| Dividend/A shares | € | 37536.09* | 33,686.24 | 21,655.44 | 29,788.26 | 5,115.89 |
| Dividend/B shares | € | 16038.49* | 16,038.49 | 16,038.49 | 16,038.50 | 2,018.26 |
| Dividend payout ratio A shares | % | 90.0 | 108.1 | 67.6 | 109.2 | 25.4 |
| Dividend payout ratio series B shares | % | 38.5 | 51.5 | 50.1 | 58.8 | 10.0 |
| Equity/share | € | 230,301 | 213,822 | 200,568 | 193,293 | 171,365 |
| Number of shares at 31 Dec | | | | | | |
| – Series A shares | shares | 2,078 | 2,078 | 2,078 | 2,078 | 2,078 |
| – Series B shares | shares | 1,247 | 1,247 | 1,247 | 1,247 | 1,247 |
| Total | shares | 3,325 | 3,325 | 3,325 | 3,325 | 3,325 |

* The Board of Directors proposal to the Annual General Meeting

## CALCULATION OF KEY FIGURES

Return on investment, % = $\frac{\text{Profit before taxes + interest and other finance costs}}{\text{Balance sheet total - non-interest-bearing liabilities (average for the year)}}$ x 100

Return on equity, % = $\frac{\text{Profit for the financial year}}{\text{Equity (average for the year)}}$ x 100

Equity ratio, % = $\frac{\text{Equity}}{\text{Balance sheet total - advances received}}$ x 100

Earnings per share, € = $\frac{\text{Profit for the financial year}}{\text{Average number of shares}}$

Dividends per share, € = $\frac{\text{Dividends for the financial year}}{\text{Average number of shares}}$

Dividend payout ratio, % = $\frac{\text{Dividend per share}}{\text{Earnings per share}}$ x 100

Equity per share, € = $\frac{\text{Equity}}{\text{Number of shares at closing date}}$

Interest-bearing net borrowings, € = Interest-bearing borrowings - cash and cash equivalents and financial assets

Net gearing = $\frac{\text{Interest-bearing borrowings - cash and cash equivalents and financial assets}}{\text{Equity}}$

# 2 CONSOLIDATED FINANCIAL STATEMENTS (IFRS)

## INTRODUCTION

**How to read Fingrid's financial statements and get the most out of it?**

- **Notes are compiled under specific themes to provide the best representation of Fingrid**
- **Chapters 3-6 consist of notes to the consolidated financial statements.**
- **Accounting principles are linked with the note most relevant for each specific principle.**
- **Accounting principles are shown at the end of each note, in a separate box and recognizable by the use of symbol** .
- **Interesting facts about Fingrid's operating environment are highlighted in infoboxes throughout the notes to the financial statements. The infoboxes can be recognized by the use of symbol** .

**Fingrid's business model and the regulation of transmission system operations**

Fingrid constitutes a natural monopoly as referred to in the Finnish Electricity Market Act (588/2013), with duties defined in legislation. The company's operations, reasonableness in pricing and financial result are regulated and overseen by the Energy Market Authority. Transmission network operations constitute most of the company's turnover, result and balance sheet.

The allowed financial result from transmission network operations is calculated by multiplying the total adjusted capital invested in the transmission network operations (transmission network assets valued at the regulatory present value) with the reasonable rate of return defined by the Energy Market Authority.

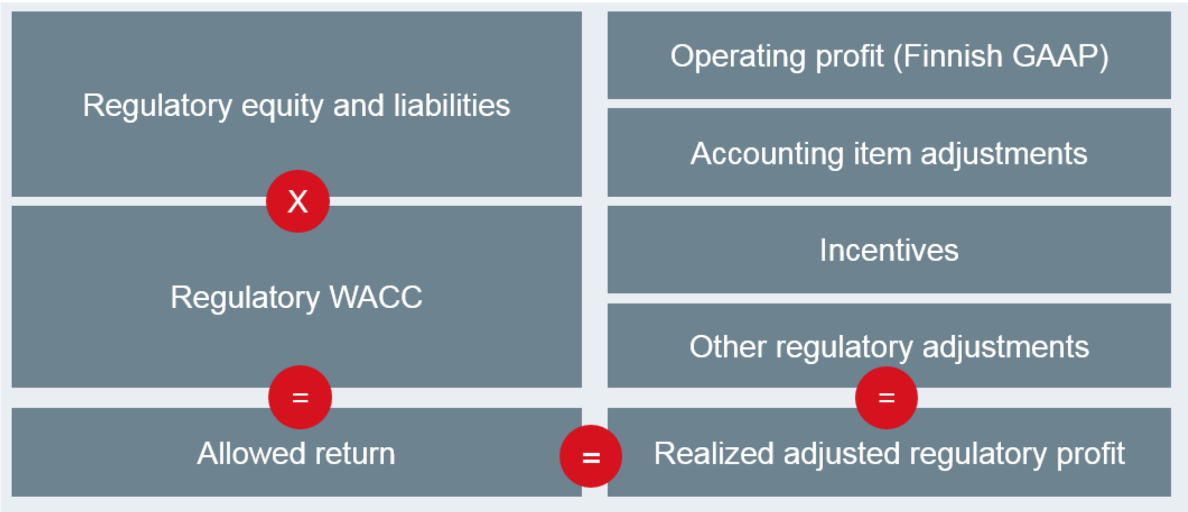
The reasonable financial result allowed by the regulation forms the basis of Fingrid's financial planning and pricing. One can calculate the required amount of turnover by adding operating expenses in the result. Fingrid's turnover mainly consists of the electricity transmission volume multiplied by the unit prices. The company determines in advance for the next year the unit prices for the transmission of electricity to recover required turnover. The company's total costs consist of the operating expenses and financial costs and taxes, which are excluded from regulatory calculations.

The so-called adjusted profit, realised in compliance with the regulation, is calculated by adjusting the parent company's operating profit according to the Energy Market Authority's regulation methods and by adding the impact of the incentives.

The regulation incentives are as follows: *Investment incentive* – intended to promote reasonable and cost-effective investments as well as a justified overhaul of components. The incentive impact is created by the fact that the methods allow the TSO straight-line depreciations based on the replacement value of the transmission network assets. *Quality incentive* – intended to encourage the TSO to improve the quality of electricity transmission. In practical terms this means minimising the calculated negative impact caused by non-transmitted energy. *Efficiency improvement incentive* – intended to encourage the TSO to operate

cost-effectively. The efficiency improvement incentive is based on Fingrid's controllable operating costs.
*Innovation incentive* – intended to encourage the TSO to develop and use innovative technical and operational solutions in its network operations. In practice, this means adequate R&D resources.

Any realised regulatory profit over a regulatory period that exceeds the allowed return is a surplus that must be returned to the customers in the form of lower future prices. If the realised regulatory profit over a regulatory period is below the allowed return, the result is a deficit which the company may recover from the customers in the form of higher future prices. No regulatory surplus or deficit income is recorded in the financial statements. The main aim of Fingrid's business operations is to achieve the allowed financial result each year.




The Energy Market Authority determines Fingrid's allowed financial result over four-year regulatory periods (2016–2019 and 2020–2023). The table below presents Fingrid's own rough approximations for 2016, as well as the cumulative figures for the current regulatory period.

| **WACC** | **Adjusted equity** | **Allowed financial result** | **Deficit(-)/Surplus(+) 2016** | **Cumulative Deficit (-)/Surplus(+) 2016-2019** |
|---|---|---|---|---|
| 6.55% | Approx. EUR 2,950 million | Approx. EUR 190 million | Approx. EUR -40 million | Approx. EUR -40 million |

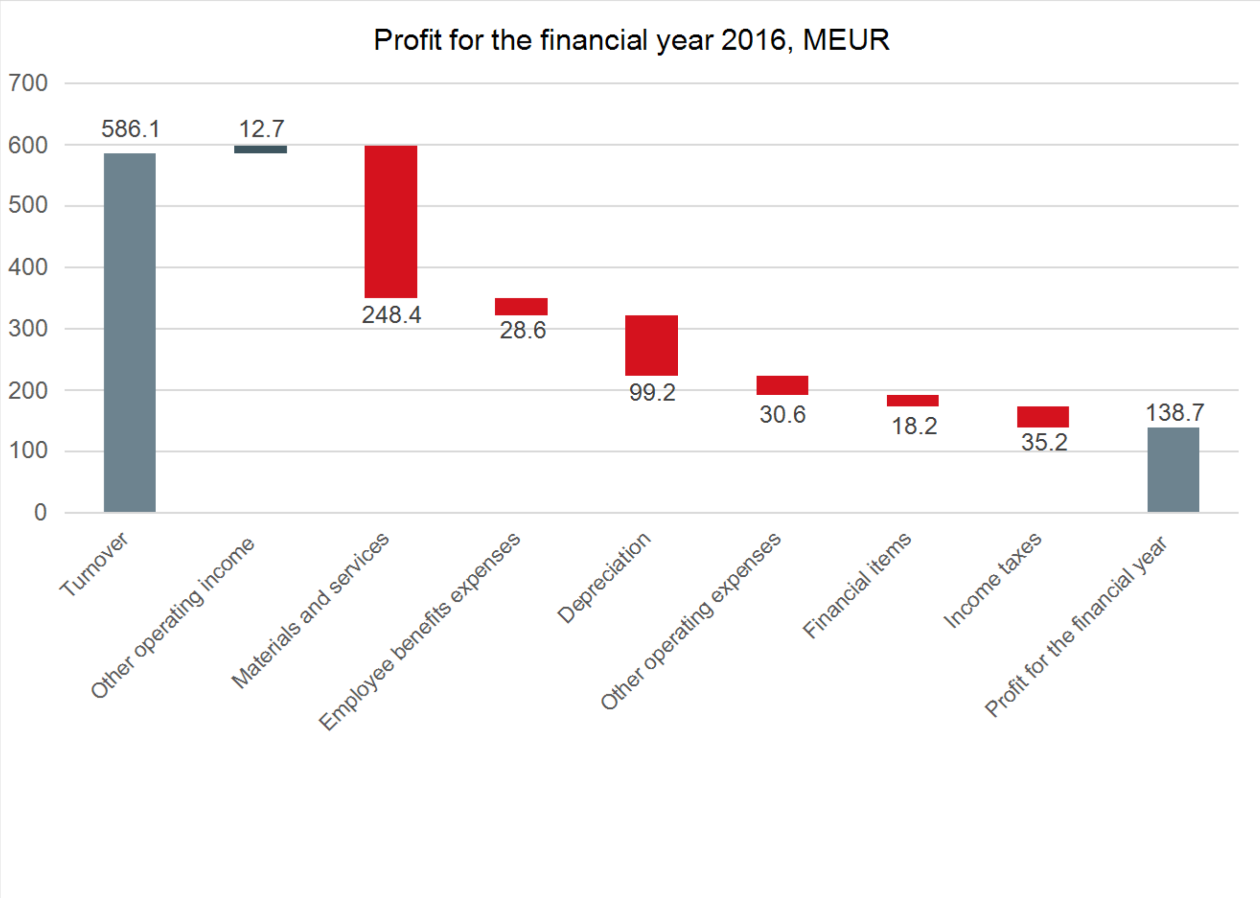
The company also engages in other regulated business operations, but the impact of these on the company's financial income and balance sheet is negligible.

FINGRID OYJ
www.fingrid.fi 17.2.2017

## 2.1 Income statement

| CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME | Notes | 1 Jan - 31 Dec, 2016 € 1,000 | 1 Jan - 31 Dec, 2015 € 1,000 |
|---|---|---|---|
| **TURNOVER** | 1 | **586,120** | **600,224** |
| Other operating income | 2 | 12,689 | 5,199 |
| Materials and services | 5 | -248,359 | -240,643 |
| Employee benefits expenses | 9 | -28,598 | -25,804 |
| Depreciation | 11,12 | -99,222 | -94,119 |
| Other operating expenses | 6,13 | -30,586 | -82,288 |
| **OPERATING PROFIT** | | **192,045** | **162,570** |
| Finance income | 17 | 694 | 706 |
| Finance costs | 17 | -19,385 | -34,401 |
| Finance income and costs | | -18,691 | -33,695 |
| Share of profit of associated companies | | 511 | 447 |
| **PROFIT BEFORE TAXES** | | **173,865** | **129,321** |
| Income taxes | | -35,192 | -25,745 |
| **PROFIT FOR THE FINANCIAL YEAR** | | **138,673** | **103,576** |
| **OTHER COMPREHENSIVE INCOME** | | | |
| Items that may subsequently be transferred to profit or loss | | | |
| Cash flow hedges | | 7,232 | 7,232 |
| Translation reserve | | 318 | -309 |
| Available-for-sale investments | | 17 | 22 |
| Taxes related to other items in total comprehensive income | | -1,450 | -1,451 |
| **TOTAL COMPREHENSIVE INCOME FOR THE FINANCIAL PERIOD** | | **144,790** | **109,070** |
| **Profit attributable to:** | | | |
| Equity holders of parent company | | 138,673 | 103,576 |
| **Total comprehensive income attributable to:** | | | |
| Equity holders of parent company | | 144,790 | 109,070 |
| **Earnings per share for profit attributable to the equity holders of the parent company:** | | | |
| Undiluted and diluted earnings per share, € | | 41,706 | 31,151 |
| Weighted average number of shares, quantity | | 3,325 | 3,325 |

Notes are an integral part of the financial statements.


Profit for the financial year 2016, MEUR
700
600
500
400
300
200
100
0
586.1
12.7
248.4
28.6
99.2
30.6
18.2
35.2
138.7
Turnover
Other operating income
Materials and services
Employee benefits expenses
Depreciation
Other operating expenses
Financial items
Income taxes
Profit for the financial year

## 2.2 Consolidated balance sheet

| ASSETS | Notes | 31 Dec 2016 € 1,000 | 31 Dec 2015 € 1,000 |
|---|---|---|---|
| **NON-CURRENT ASSETS** | | | |
| Intangible assets: | 12 | | |
| Goodwill | | 87,920 | 87,920 |
| Other intangible assets | | 96,580 | 95,428 |
| | | 184,500 | 183,348 |
| Property, plant and equipment: | 11 | | |
| Land and water areas | | 15,701 | 15,349 |
| Buildings and structures | | 193,716 | 167,280 |
| Machinery and equipment | | 578,281 | 567,627 |
| Transmission lines | | 825,038 | 789,614 |
| Other property, plant and equipment | | 7,602 | 7,548 |
| Prepayments and purchases in progress | | 69,825 | 129,566 |
| | | 1,690,162 | 1,676,984 |
| Investments in associated companies | 24 | 14,158 | 12,388 |
| Available-for-sale investments and receivables | | 101 | 284 |
| Derivative instruments | 23 | 29,657 | 32,148 |
| Deferred tax assets | 10 | 6,155 | 16,479 |
| **TOTAL NON-CURRENT ASSETS** | | **1,924,733** | **1,921,632** |
| **CURRENT ASSETS** | | | |
| Inventories | 8 | 12,269 | 12,665 |
| Derivative instruments | 23 | 2,861 | 3,353 |
| Trade receivables and other receivables | 3 | 82,191 | 70,213 |
| Financial assets recognised in the income statement at fair value | 20 | 57,790 | 93,451 |
| Cash in hand and cash equivalents | 19 | 21,939 | 23,099 |
| **TOTAL CURRENT ASSETS** | | **177,050** | **202,782** |
| **TOTAL ASSETS** | | **2,101,782** | **2,124,414** |

Notes are an integral part of the financial statements.

| EQUITY AND LIABILITIES | Notes | 31 Dec 2016<br>€ 1,000 | 31 Dec 2015<br>€ 1,000 |
|---|---|---|---|
| **EQUITY ATTRIBUTABLE TO EQUITY HOLDERS OF THE PARENT COMPANY** | | | |
| Share capital | 21 | 55,922 | 55,922 |
| Share premium account | 21 | 55,922 | 55,922 |
| Revaluation reserve | 21 | 59 | -5,740 |
| Translation reserve | 21 | -413 | -731 |
| Retained earnings | 21 | 654,258 | 605,585 |
| **TOTAL EQUITY** | | **765,749** | **710,960** |
| **NON-CURRENT LIABILITIES** | | | |
| Deferred tax liabilities | 10 | 125,778 | 125,240 |
| Borrowings | 14 | 842,866 | 907,232 |
| Provisions | 25 | 1,481 | 1,668 |
| Derivative instruments | 23 | 18,567 | 46,952 |
| | | **988,692** | **1,081,092** |
| **CURRENT LIABILITIES** | | | |
| Borrowings | 14 | 264,865 | 236,217 |
| Derivative instruments | 23 | 7,859 | 30,331 |
| Trade payables and other liabilities | 7 | 74,617 | 65,815 |
| | | **347,341** | **332,363** |
| **TOTAL LIABILITIES** | | **1,336,033** | **1,413,455** |
| **TOTAL EQUITY AND LIABILITIES** | | **2,101,782** | **2,124,414** |

Notes are an integral part of the financial statements.

## 2.3 Consolidated statement of changes in equity

Attributable to equity holders of the parent company, € 1,000

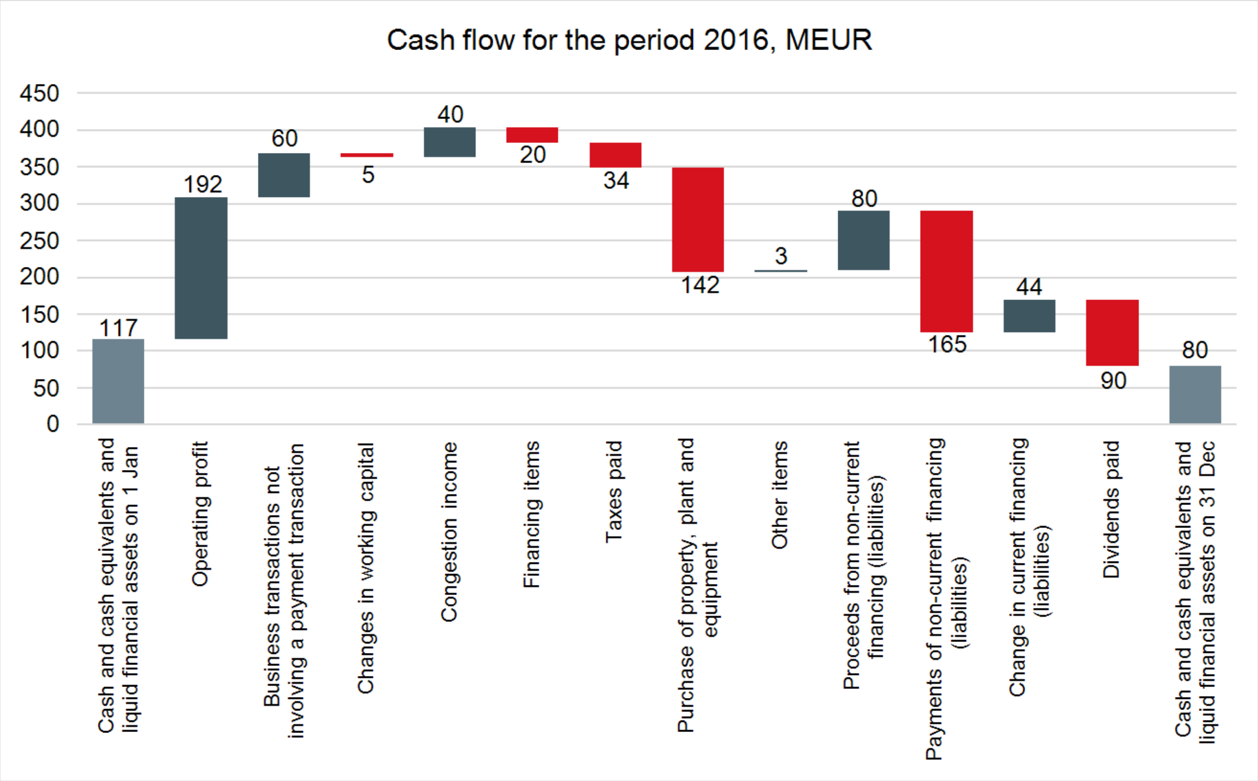
| | Share capital | Share premium account | Revaluation reserves | Translation reserve | Retained earnings | Total equity |
|---|---|---|---|---|---|---|
| **Balance on 1 Jan 2015** | **55,922** | **55,922** | **-11,543** | **-422** | **567,009** | **666,889** |
| **Comprehensive income** | | | | | | |
| Profit or loss | | | | | 103,576 | 103,576 |
| **Other comprehensive income** | | | | | | |
| Cash flow hedges | | | 5,785 | | | 5,785 |
| Translation reserve | | | | -309 | | -309 |
| Available-for-sale investments | | | 18 | | | 18 |
| **Total other comprehensive income adjusted by tax effects** | | | **5,803** | **-309** | | **5,494** |
| **Total comprehensive income** | | | **5,803** | **-309** | **103,576** | **109,070** |
| **Transactions with owners** | | | | | | |
| Dividend relating to 2014 | | | | | -65,000 | -65,000 |
| **Balance on 31 December 2015** | **55,922** | **55,922** | **-5,740** | **-731** | **605,585** | **710,960** |
| | | | | | | |
| **Balance on 1 Jan 2016** | **55,922** | **55,922** | **-5,740** | **-731** | **605,585** | **710,960** |
| **Comprehensive income** | | | | | | |
| Profit or loss | | | | | 138,673 | 138,673 |
| **Other comprehensive income** | | | | | | |
| Cash flow hedges | | | 5,785 | | | 5,785 |
| Translation reserve | | | | 318 | | 318 |
| Available-for-sale investments | | | 13 | | | 13 |
| **Total other comprehensive income adjusted by tax effects** | | | **5,799** | **318** | | **6,117** |
| **Total comprehensive income** | | | **5,799** | **318** | **138,673** | **144,790** |
| **Transactions with owners** | | | | | | |
| Dividend relating to 2015 | | | | | -90,000 | -90,000 |
| **Balance on 31 Dec 2016** | **55,922** | **55,922** | **59** | **-413** | **654,258** | **765,749** |

Notes are an integral part of the financial statements.

## 2.4 Consolidated cash flow statement

| CONSOLIDATED CASH FLOW STATEMENT | Notes | 1 Jan - 31 Dec, 2016<br>€ 1,000 | 1 Jan - 31 Dec, 2015<br>€ 1,000 |
|---|---|---|---|
| **Cash flow from operating activities:** | | | |
| Profit for the financial year | 21 | 138,673 | 103,576 |
| Adjustments: | | | |
| Business transactions not involving a payment | | | |
| Depreciation | | 99,222 | 94,119 |
| Capital gains/losses (-/+) on tangible and intangible | | -3,792 | -1,970 |
| Share of profit of associated companies | | -511 | -447 |
| Gains/losses from the assets and liabilities recognised in the income statement at fair value | | -35,378 | 24,276 |
| Interest and other finance costs | | 19,385 | 34,401 |
| Interest income | | -689 | -701 |
| Dividend income | | -5 | -5 |
| Taxes | | 35,192 | 25,745 |
| Impact from changes in the fair value of the investment | | 203 | -233 |
| Changes in working capital: | | | |
| Change in trade receivables and other receivables | | -13,121 | -11,532 |
| Change in inventories | | 396 | 178 |
| Change in trade payables and other liabilities | | 7,371 | -8,332 |
| Congestion income | | 39,863 | |
| Change in provisions | 25 | -187 | -18 |
| Interests paid | | -20,496 | -23,734 |
| Interests received | | 440 | 821 |
| Taxes paid | | -33,887 | -20,470 |
| Net cash flow from operating activities | | 232,679 | 215,674 |
| **Cash flow from investing activities:** | | | |
| Purchase of property, plant and equipment | 11 | -138,084 | -150,449 |
| Purchase of intangible assets | 12 | -4,108 | -3,421 |
| Proceeds from sale of other assets | | 152 | 500 |
| Proceeds from sale of property, plant and equipment | | 5,885 | 5,066 |
| Loans granted | | -1,500 | -900 |
| Dividends received | | 565 | 556 |
| Contributions received | | | 15,000 |
| Capitalised interest paid | 17 | -2,016 | -1,690 |
| Net cash flow from investing activities | | -139,106 | -135,339 |
| **Cash flow from financing activities:** | | | |
| Proceeds from non-current financing (liabilities) | | 80,000 | 107,424 |
| Payments of non-current financing (liabilities) | | -164,824 | -104,220 |
| Change in current financing (liabilities) | | 44,430 | -80,961 |
| Dividends paid | 21 | -90,000 | -65,000 |
| Net cash flow from financing activities | | -130,394 | -142,757 |
| **Change in cash as per the cash flow statement** | | **-36,822** | **-62,421** |
| **Opening cash as per the cash flow statement** | | **116,550** | **178,972** |
| **Closing cash as per the cash flow statement** | 19,20 | **79,729** | **116,550** |

Notes are an integral part of the financial statements.



# 3 BENCHMARK FOR TSO OPERATIONS

- **This chapter contains first general information about the Group and the general accounting principles applied to the consolidated financial statements.**
- **The chapter focuses on describing how Fingrid's turnover and result are formed and how they relate to the regulatory revenue level. The impact of the regulation is reflected in Fingrid's day-to-day operations and revenue collection.**
- **The chapter also describes Fingrid's operating receivables and liabilities, as well as the risk management they entail.**
- **People are Fingrid's most important resource, which is why information related to personnel has been included here, in the first note.**
- **Fingrid is a substantial tax payer, and Fingrid does not use tax planning. The note on taxes is at the end of this chapter, in chapter 3.9.**

## 3.1 General information about the Group and general accounting principles

Fingrid Oyj is a Finnish public limited liability company responsible for electricity transmission in the high-voltage transmission system in Finland. Fingrid's nationwide grid is an integral part of the power system in Finland. The transmission grid is the high-voltage trunk network which covers all of Finland. Major power plants, industrial plants and electricity distribution networks are connected to the grid.

Finland's main grid is part of the Nordic power system, which is connected to the system in Central Europe via high-voltage direct current transmission links. Finland also has DC links with Russia and Estonia.

The transmission system encompasses more than 14,000 kilometres of 400, 220 and 110 kilovolt transmission lines, plus more than 100 substations.

Fingrid is in charge of planning and monitoring the operation of the main grid and for maintaining and developing the system. An additional task is to participate in work carried out by ENTSO-E, the European Network of Transmission System Operators for Electricity, and in preparing European market and operational codes as well as network planning.

Fingrid offers grid, cross-border transmission and balance services to its contract customers: electricity producers, network operators and the industry. Fingrid serves the electricity market by maintaining adequate electricity transmission capacity, by de-bottlenecking cross-border transmission links and by providing market data.

The consolidated financial statements include the parent company Fingrid Oyj and its wholly owned subsidiaries Finextra Oy and Datahub Oy. The consolidated associated companies are Nord Pool Spot AS (ownership 18.8%) and eSett Oy (ownership 33.3%). The Group has no joint ventures.

Fingrid issues bonds under the Euro Medium Term Note (EMTN) programme. Fingrid Oyj's issuances under the EMTN programme are listed on the London Stock Exchange. Fingrid shares are not listed.

**Critical accounting estimates and judgements**
When the consolidated financial statements are drawn up in accordance with the IFRS, the company management needs to make estimates and assumptions which have an impact on the amounts of assets, liabilities, income and expenses recorded and conditional items presented. These estimates and assumptions are based on historical experience and other justified assumptions which are believed to be reasonable under the conditions which constitute the foundation for the estimates of the items recognised in the financial statements. The actual amounts may differ from these estimates. In the financial statements, estimates have been used for example, when specifying the economic lives of tangible and intangible asset items, and in conjunction with deferred taxes and provisions. Critical estimates and judgements by management are described by topic in the notes, and the judgement or estimates related to which are in accordance with the following table.

| | |
|---|---|
| **Estimate of the purchase and sale of imbalance power** | Chapter 3.3 |
| **Inter-Transmission System Operator Compensation (ITC)** | Chapter 3.3 |
| **Deferred tax assets and liabilities** | Chapter 3.9 |
| **Determination of the fair value measurement of grid assets** | Chapter 4.1 |
| **Determination of the depreciation periods of property, plant and equipment, and intangible assets** | Chapter 4.2 |

**Accounting principles**

In preparing these consolidated financial statements, the Group has followed the same standards as in 2015. New standards, interpretations and changes took effect during the year, but these have not had a material effect on the consolidated financial statements, with the exception of the following change. The financial statement structure was revised in 2016 with the aim of making it more reader friendly and more focussed on information relevant to Fingrid. The revised version is in line with the changes in IAS 1 *Presentation of Financial Statements*, which entered into force on 1 January 2016 and which clarify that when drawing up their financial statements, companies may exercise their judgement in presenting, emphasising and consolidating their financial reports. Fingrid furthermore adopted, ahead of their 1 January 2017 entry into force, the amendments to IAS 7 *Statement of Cash Flows*, according to which companies must now present disclosures on changes in liabilities arising from financing activities. This includes changes from financing cash flows (e.g. drawdowns and payments of debt), as well as changes in non-cash items, such as procurements, disposals, interest accruals and unrealised foreign currency exchange differences. The new note is presented in chapter 5.3.
IASB has published the following new and amended standards and interpretations, which the company has not yet applied. The company will begin applying the standard and interpretation from the date of its entry into force. The estimated impact of the standards is described in the notes listed in the table.

| | |
|---|---|
| IFRS 9 Financial instruments, effective 1 January 2018 | Chapter 5.6 |
| IFRS 15 Revenue from Contracts with Customers, effective 1 January 2018 | Chapter 3.3 |
| IFRS 16 Leases, effective 1 January 2018 | Chapter 4.3 |

**Segment reporting**

The entire business of the Fingrid Group is deemed to comprise grid operations in Finland with system responsibility, only constituting a single segment. There are no essential differences in the risks and profitability of individual products and services. For that reason, segment reporting in accordance with the IFRS 8 standard is not presented. The operating segment is reported in a manner consistent with the internal reporting to the chief operating decision-maker. The chief operating decision-maker is the company's Board of Directors. Fingrid operates only in Finland, which is also why geographical data is not presented.

**Foreign currency transactions**

The consolidated financial statements are presented in euros, which is the functional currency of the parent company. Transactions and financial items denominated in foreign currencies are recognised at the foreign exchange mid-rate quoted by the European Central Bank (ECB) at the transaction date. Receivables and liabilities denominated in foreign currencies are valued in the financial statements at the mid-rate quoted by the ECB at the closing date. Foreign exchange gains and losses from business are included in the corresponding items above operating profit. Foreign exchange gains and losses from financial instruments are recognised at net amounts in finance income and costs.

**Earnings per share**

The Group has calculated undiluted earnings per share in accordance with standard IAS 33. Undiluted earnings per share are calculated using the weighted average number of shares outstanding during the financial year. Since Fingrid has no share option schemes or benefits bound to shareholders' equity or other equity financial instruments, there is no dilutive effect.

## 3.2 The company's general risk management processes and policies

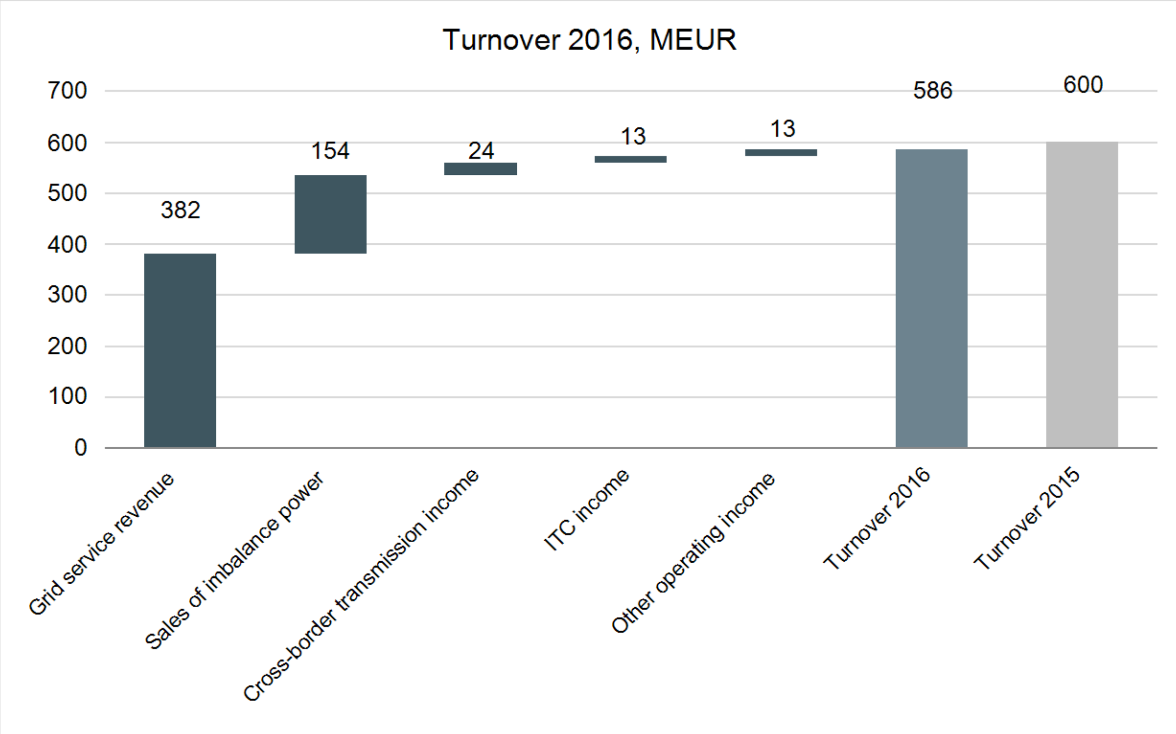
The objective of Fingrid's risk management is to make preparations for cost-effective measures providing protection against damage and loss relating to risks and to ensure the commitment of the entire personnel to considering the risks pertaining to the company, its various organisational units and each employee. In order to fulfil these objectives, risk management is continuous and systematic. The significance of individual risks or risk entities is assessed against the present level of protection, taking into account the probability of a harmful event, its financial impact and impact on corporate image or on the attainment of the business goals.

Risk management is planned as a whole with the objective of comprehensively identifying, assessing, monitoring and safeguarding the company's operations, the environment, personnel and assets from various threats and risks. Due to the nature of the company's basic mission, risks are also assessed from a societal perspective.

The Board approves the key principles of internal control and risk management and any amendments to them. The Board of Directors approves the primary actions for risk management as part of the corporate strategy, indicators, action plan, and budget. The Board of Directors (Audit Committee) receives a situation report on the major risks relating to the operations of the company and on the management of such risks.

## 3.3 Formation of turnover and financial result

Turnover consists of the following:




| 1. TURNOVER, €1,000 | 2016 | 2015 |
|---|---|---|
| Grid service revenue | 382,395 | 333,005 |
| Sales of imbalance power | 153,881 | 137,127 |
| Cross-border transmission income | 24,015 | 11,174 |
| ITC income | 13,199 | 15,298 |
| Peak load capacity | 7,023 | 7,585 |
| Congestion income* | | 90,941 |
| Other operating income | 5,607 | 5,093 |
| **Total** | **586,120** | **600,224** |

*** The booking of congestion income was changed in 2016. This is presented in chapter 4.1.**

Grid service income mainly consists of the unit price for electricity transmission multiplied by the volume. The Energy Market Authority approves the pricing structure for grid services, on the basis of which Fingrid sets the unit prices for electricity transmission during the winter period and for consumption during other times. The winter period begins on 1 December and ends on the last day of February. Fingrid additionally charges fees for output from and input into the grid, and power generation capacity fees. Fingrid strives to set the unit prices for electricity transmission each autumn for the next year, for one year at a time.

Within the framework of grid services, a customer obtains the right to transmit electricity to and from the main grid through its connection point. Grid service is agreed by means of a grid service contract signed between a customer connected to the main grid and Fingrid.

Each electricity market party must ensure its electricity balance by making an agreement with either Fingrid or some other party. Fingrid buys and sells imbalance power in order to stabilise the hourly power balance of an electricity market party (balance responsible party). Imbalance power trade and pricing are based on a balance service agreement with equal and public terms and conditions.

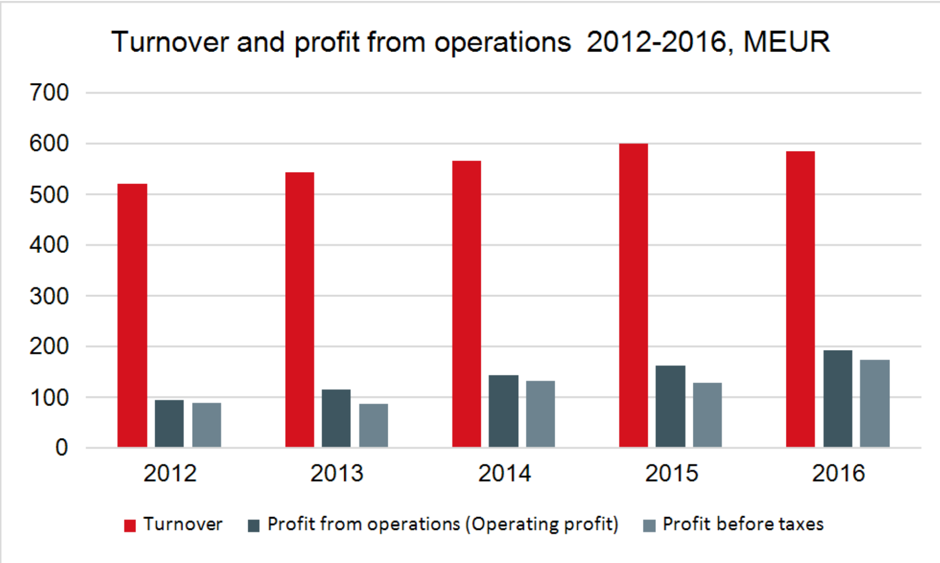
Fingrid is responsible for the continuous power balance in Finland at all times by buying and selling regulating power in Finland. The balance responsible parties can participate in the Nordic balancing power market by submitting bids on their available capacity. The terms and conditions of participation in the regulating power market and the pricing of balancing power are based on the balance service agreement.

Transmission services on the cross-border connections to the other Nordic countries enable participation in the Nordic Elspot and Elbas exchange trade. Fingrid makes transmission services on the cross-border connections with Russia available to all electricity market parties. The transmission service is intended for fixed electricity imports. When making an agreement on transmission services from Russia, the customer reserves a transmission right (in MW) for a period of time to be agreed upon separately. The smallest unit that can be reserved is 50 MW. The contractual terms are equal and public.

ITC compensation is, for Fingrid, income and/or costs which the transmission system operator receives for the use of its grid by other European transmission system operators and/or pays to other transmission system operators when using their grid to serve its own customers.

The peak load capacity secures the supply security of electricity in situations of the Finnish power system where the planned electricity procurement is not sufficient to cover the anticipated electricity consumption. The peak load capacity can consist of both power plants and facilities capable of adjusting their electricity consumption.

| **2. OTHER OPERATING INCOME, €1,000** | **2016** | **2015** |
|---|---|---|
| Rental income | 922 | 1,196 |
| Capital gains on fixed assets | 3,792 | 2,265 |
| Contributions received | 282 | 199 |
| Congestion income | 6,325 | |
| Other income | 1,368 | 1,539 |
| **Total** | **12,689** | **5,199** |




**Accounting principles**

**Revenue recognition**
Sales recognition takes place on the basis of the delivery of the service. Electricity transmission is recognised once the transmission has taken place. Balance power services are recognised on the basis of the delivery of the service. Connection fees are recognised when connection to the grid has happened. Indirect taxes and discounts, etc., are deducted from the sales income when calculating turnover.

**Adoption of the IFRS 15 Revenue from Contracts with Customers standard, effective 1 Jan 2018**
IFRS 15 will replace IAS 18, which outlines the accounting requirements for the sale of goods and services, and IAS 11 applied to long-term projects.
The fundamental principle of the new standard is that sales revenue should be recognised when control over the goods or the service is transferred to the customer; in other words, control of the asset is the criterion to be examined instead of the previous criteria of risks and rewards.
A new five-step process should be applied when recognising sales revenue:
• Identify the contract(s) with a customer
• Identify the individual performance obligations
• Determine the transaction price according to the contract
• Allocate the transaction price to individual performance obligations, and
• Recognise revenue when each performance obligation is met.
The most significant differences compared with the present practice are as follows:
• The time of recognising sales revenue can change: some of the revenue currently recognised at the end of a contract may in future be recognised over the contract term and vice versa. The timing of recognition of grid connection fees will change along with the new standard.
• Like all new standards, IFRS 15 includes new requirements for the notes to the financial statements.
These changes in the accounting procedures may affect the company’s business practices regarding systems, processes and controls, compensation and bonus arrangements, tax planning and investor relations.

If a customer does not receive an individual item of goods or a service against the connection fee, this must be recognised as revenue in the same way as the other revenue according to the contract, generally over the contract term. This will change Fingrid's principles for recognising revenue regarding, for instance, connection fees.

Fingrid charges also other similar fees that in practical terms are linked with this issue, such as fixed fees and volume-based fees. Fingrid is currently specifying the performance obligations it must meet for each contract. Revenue recognition will be examined separately for each performance obligation. When determining the extent to which a performance obligation is met, a single method should be applied for all performance obligations to be met over time. The company is currently conducting an analysis of the impacts of the standard, and the impacts on connection fee recognition have been identified. The goal is to start applying the standard using the simplified transitional approach for the 2018 financial statements.

The standard can be applied either fully retroactively or non-retroactively by providing additional information.

**Judgements and estimates**

**Estimate of the purchase and sale of imbalance power**
The income and expenses of imbalance power are ascertained through a nationwide imbalance settlement procedure, which is based on the Ministry of Employment and Economy's 9 December 2008 decree on the disclosure obligation related to the settlement of electricity delivery. The final imbalance settlement is completed no later than two months from the delivery month, which is why the income and expenses of imbalance power in the financial statements are partly based on preliminary imbalance settlement. The preliminary settlement has been made separately for consumption, production and foreign balances. For the two first balances, the volume of unsettled imbalance power has been estimated using reference group calculations. For foreign balances, the calculations have been verified with the foreign counterparties.

**Inter-Transmission System Operator Compensation (ITC)**
Compensation for the transit transmissions of electricity has been agreed upon through an ITC (Inter-Transmission System Operator Compensation) agreement. The centralised calculations are carried out by ENTSO-E (the European Network of Transmission System Operators of Electricity). ITC compensation is determined on the basis of the compensation paid for use of the grid and transmission losses. The ITC calculations take into account the electricity transmissions between the various ITC agreement countries. ITC compensation can represent both an income and a cost for a transmission system operator. Fingrid's share of the ITC compensation is determined on the basis of the cross-border electricity transmissions and imputed grid losses. ITC compensation is invoiced retroactively after all parties to the ITC agreement have approved the invoiced sums. Control is carried out monthly. This is why the uninvoiced ITC compensations for 2016 have been estimated in the financial statements. The estimate has been made using actual energy border transmissions in Finland and unit compensations, which have been estimated by analysing the actual figures from previous months and data on grid transmissions during these months.

## 3.4 Revenue-related receivables and credit risk management

| 3. TRADE RECEIVABLES AND OTHER RECEIVABLES, €1,000 | 2016 | 2015 |
|---|---|---|
| Trade receivables | 72,914 | 55,709 |
| Trade receivables from associated companies | 125 | 39 |
| Prepayments and accrued income from associated companies | 18 | 9 |
| Prepayments and accrued income | 7,835 | 13,241 |
| Other receivables | 1,298 | 1,216 |
| **Total** | **82,191** | **70,213** |

| Essential items included in prepayments and accrued income | 2016 | 2015 |
|---|---|---|
| Accruals of sales | 1,153 | 4,046 |
| Accruals of purchases/prepayments | 2,364 | 4,016 |
| Interest receivables | 4,118 | 5,001 |
| Rents/prepayments | 200 | 178 |
| **Total** | **7,835** | **13,241** |

**Credit risk management – customers**
According to The Electricity Market Act, the company is obliged to accept distribution network operators joining the grid as well as electricity producers and consumers as its customers. Accordingly, the company cannot choose its customers based on a credit risk analysis or collect different fees from them. In general, bank guarantees are not required from the company's customers to secure sales payments, but in the event of an overdue payment, this is possible. The unit in charge of the customer relationships is responsible for verifying their creditworthiness, with assistance from the Treasury unit. The Treasury has defined an operating process for monitoring customers' payment defaults in the terms and conditions of the Main Grid Contract. Any guarantees required by Fingrid will be either bank guarantees or an upfront payment in order to cover the

electricity taxes payable by customers connected to the grid and subject to the tax, as ruled in the Main Grid Contract's Service Terms and Conditions. The company has no bad debts, and the related credit risk is deemed to be minor. The company has no impairments related to receivables.

**Netting of trade receivables and trade payables**

The trade receivables and trade payables are netted in the balance sheet as presented in the table below. The netted items are associated with purchases and sales of imbalance power. The company has a legally enforceable right of set-off to these items in any circumstance and will use this right.

**4. NETTING OF TRADE RECEIVABLES AND TRADE PAYABLES € 1,000**

| | **2016** | | | **2015** | | |
|---|---|---|---|---|---|---|
| | Gross amount of trade receivables/trade payables | Amount of netted items | Net amount of trade receivables and trade payables presented in the balance sheet | Gross amount of trade receivables/trade payables | Amount of netted items | Net amount of trade receivables and trade payables presented in the balance sheet |
| Trade receivables | 88,176 | -15,136 | 73,040 | 66,118 | -10,371 | 55,747 |
| Trade payables | 40,113 | -15,136 | 24,976 | 25,025 | -10,371 | 14,654 |
| **Total** | **48,063** | **0** | **48,063** | **41,093** | **0** | **41,093** |

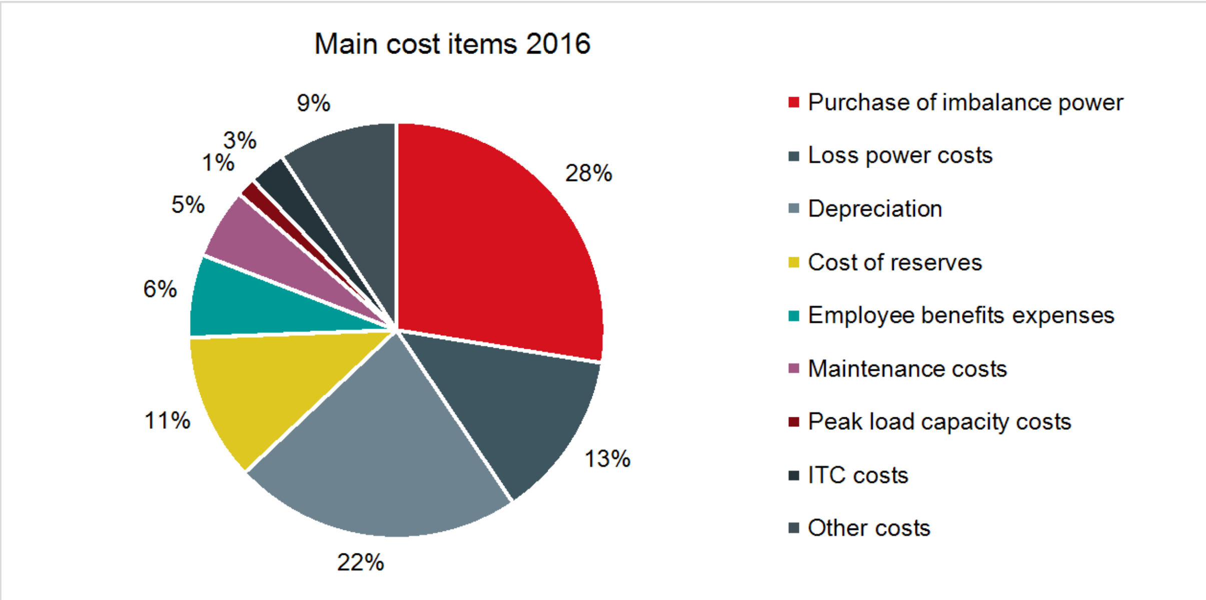
**Accounting principles**

**Trade and other receivables**
Loans and other receivables are recognised initially at fair value; subsequently they are measured at amortised cost using the effective interest rate method. The amount of doubtful receivables is estimated based on the risks of individual items. An impairment loss is recorded on receivables when there is valid evidence that the Group will not receive all of its receivables at the original terms (e.g. due to the debtor's serious financial problems, likelihood that the debtor will go bankrupt or be subject to other financial rearrangements, and payments overdue by more than 90 days). Impairment losses are recognised directly, under other operating expenses, to reduce the carrying amount of the receivables. Fingrid did not have any impairment losses during the periods presented here.

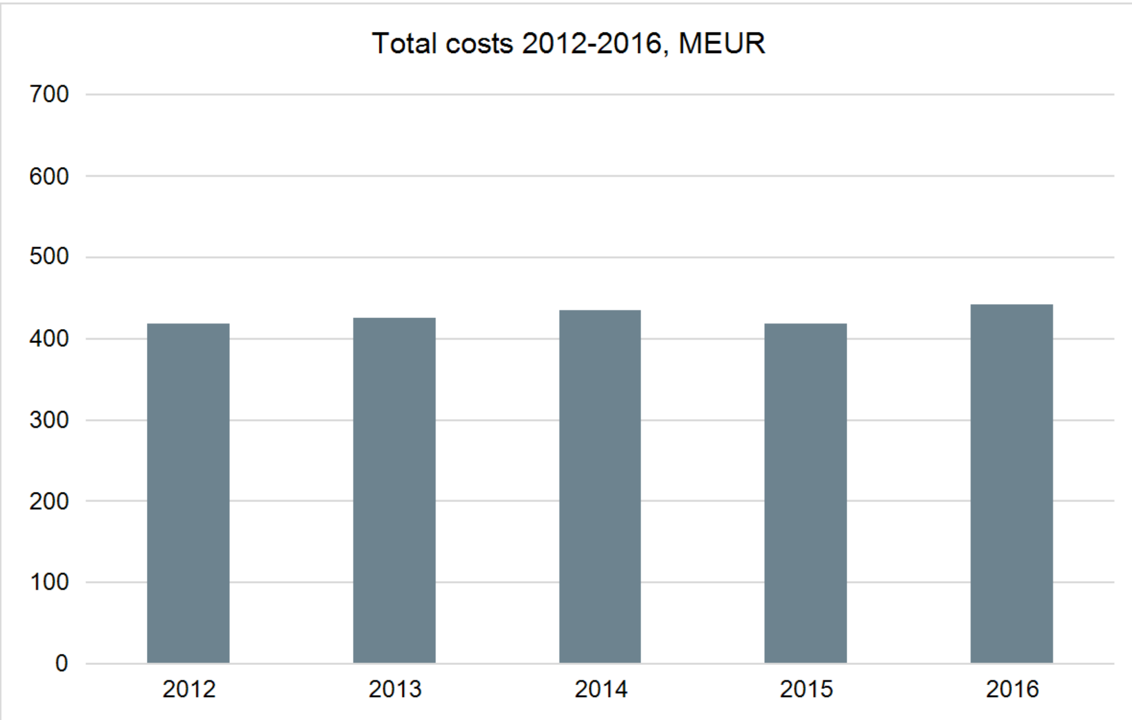
In addition to trade receivables and other receivables, the company has a small amount of loan receivables from associated companies. These are long-term and described in Chapter 6.1. The receivables from associated companies are recognised according to these same accounting principles.

## 3.5 Operating expenses, liabilities and credit risk management for purchases

Fingrid's operating expenses consist of and have developed as follows:




Cost increases due in particular to new tasks and unexpected external changes affecting operations has been a special characteristic of grid operations in recent years. The new tasks involve, among other things, developing the Nordic imbalance markets, changes required by the new Electricity Market Act and the European network codes and the R&D expenses for these tasks. Some of the new tasks and responsibilities are assigned to Fingrid by law, which means the company must increasingly develop and back up its operations. The cost factors also include society's increasing dependency on the power system, as well as needs related to data security. The Group's R&D costs in 2016 amounted to EUR 2.4 (1.8) million. Fingrid nevertheless continues to be one of the most cost-effective TSOs in the world in international benchmark studies.



| 5. MATERIALS AND SERVICES, €1,000 | 2016 | 2015 |
|---|---|---|
| Loss power costs | 57,555 | 68,566 |
| Purchase of imbalance power | 121,697 | 98,032 |
| Cost of reserves | 44,907 | 50,271 |
| Other material costs | 4,189 | 5,906 |
| Change in inventories, increase (-) or decrease (+) | 396 | 178 |
| Peak load capacity costs | 6,604 | 7,211 |
| ITC costs | 12,645 | 9,423 |
| Other external services | 365 | 1,058 |
| **Total** | **248,359** | **240,643** |

| 6. OTHER OPERATING EXPENSES, €1,000 | 2016 | 2015 |
|---|---|---|
| Contracts, assignments etc. undertaken externally | 53,427 | 45,757 |
| Gains/losses from measuring electricity derivatives at fair value | -35,310 | 24,127 |
| Other rental expenses | 2,816 | 2,727 |
| Other expenses | 9,653 | 9,677 |
| **Total** | **30,586** | **82,288** |

| Auditors' fees | 2016 | 2015 |
|---|---|---|
| PricewaterhouseCoopers Oy | | |
| Auditing fee | 65 | 45 |
| Tax advisory fees | 21 | 16 |
| Assignments referred to in the Auditing Act, Chapter 1, Section 1, Subsection 2 | 3 | |
| Other fees | 60 | 58 |
| **Total** | **149** | **119** |

Auditors' fees are included in other operating expenses

The company’s operating model is largely based on outsourcing, including areas such as grid investments, maintenance management and ICT purchases. The company will apply competitive tendering as described in the procurement policy. All purchasing activities are based on impartiality, equality and transparency. Procurement decisions will be made according to previously published financial and qualitative criteria that are verifiable also after the fact. Fingrid aims to ensure that all suppliers and their subcontractors operate in a sustainable manner. A commitment to Fingrid’s Supplier Code of Conduct is required from all suppliers.

| 7. TRADE PAYABLES AND OTHER LIABILITIES, €1,000 | 2016 | 2015 |
|---|---|---|
| Trade payables | 24,825 | 14,652 |
| Trade payables to associated companies | 152 | 2 |
| Interest payable | 13,751 | 15,529 |
| Value added tax | 11,860 | 7,787 |
| Collaterals received | 923 | 15 |
| Electricity tax | 3,093 | 3,045 |
| Accruals | 19,259 | 24,147 |
| Other debt | 755 | 639 |
| **Total** | **74,617** | **65,815** |

| Essential items included in accruals | 2016 | 2015 |
|---|---|---|
| Personnel expenses | 5,693 | 4,310 |
| Accruals of sales and purchases | 7,849 | 5,923 |

| | | |
|---|---|---|
| Tax liabilities | 5,305 | 13,412 |
| Other accruals | 413 | 501 |
| **Total** | **19,259** | **24,147** |

**Credit risk in purchasing**
The heads of functions are in charge of credit risks related to suppliers. The procurement policy and guidelines, and separate instructions set out the financial criteria required for Fingrid's suppliers and how they should be monitored.

**General procurement principles**
The Group follows three alternative procurement methods when purchasing goods or services. When the value of the purchase is less than 30,000 euros and the benefits of a competitive tender are smaller than the costs of the purchase, the purchase can be realised without a competitive tender or it can be realised through an oral request. A written order or purchasing agreement is always drawn up. When the estimated value of the procurement exceeds 30,000 euros but is below the threshold values applied to public procurements, the procurement is subject to competitive bidding by requesting written bids from the supplier candidates. When the public procurement threshold values that apply to Fingrid (in 2016: EUR 418,000 for goods and services and EUR 5,225,000 for construction projects) are exceeded, the company follows the public procurement legislation applied to special sectors.

## 3.6 Inventories

Fingrid prepares for outages by maintaining reserve power plants. The inventories contain fuel for reserve power plants, spare parts for submarine cables, back-up equipment and parts for substations, and repair equipment for transmission lines. The aim of stockpiling is to achieve sufficient preparedness in case of faults and events possibly occurring during times of crisis at the substations and on the transmission lines owned by Fingrid.

| 8. INVENTORIES, €1,000 | 2016 | 2015 |
|---|---|---|
| Materials and consumables at 1 Jan | | |
| Material stocks | 6,144 | 5,678 |
| Fuel stocks | 5,995 | 6,969 |
| Work in progress | 131 | 18 |
| **Total** | **12,269** | **12,665** |

The cost of inventories recognised as an expense was EUR 2.1 (1.5) million.

**Accounting principles**

**Inventories**
Inventories are measured at the lower of acquisition cost or net realisable value. The acquisition cost is determined using the FIFO principle. The net realisable value is the estimated market price in normal business reduced by the estimated future costs of completing and estimated costs required by sale. Inventories consist of material and fuel inventories.

## 3.7 Management of electricity price and volume risk and commodity risks

The electricity price and volume risks are not significant to the company's turnover and financial result over time. If the volume of transmitted electricity deviates from the forecasted volume, the result may be a deviation in the company's turnover and financial result. This can lead to a surplus or deficit compared with the allowed reasonable return for the year in question, which the company will aim to offset during the subsequent financial year.

The company is exposed to electricity price and volume risk through transmission losses. Loss power purchases and the price hedging thereof are based on the Corporate Finance and Financing Principles approved by the Board of Directors. Moreover, the company has a loss power purchasing policy, approved by the Executive Management Group, for hedging and for physical electricity purchases, as well as operative instructions, instructions for price hedging and control room instructions. The purpose of price hedging is to reduce the impact of market price volatility and enable sufficient predictability in order to keep the annual pressures on grid service fees of loss energy at a moderate level. Price hedging is implemented over a four year horizon such that by the end of September in the year preceding the delivery, the price risk for the next year is fully hedged. For the price hedging of loss power purchases, the company mainly uses NASDAQ OMX Commodities quoted products. The allowed hedging products are specified in the loss power purchasing policy. The company can also use OTC products comparable with NASDAQ OMX Commodities products. The nominal values, fair values and exposures are disclosed in Note 23.

Commodity risks other than those related to loss energy purchases arise if the company enters into purchasing agreements in which the price of the underlying commodity influences the final price of the investment commodity (commodity price risk). As a rule, commodity price risks and exchange rate risks are fully hedged. A risk that amounts to less than EUR 5 million when realised can be unhedged for reasons of cost-effectiveness.

## 3.8 Personnel - the cornerstone of our operations

Fingrid Oyj employed 334 (315) persons, including temporary employees, at the end of the year. The number of permanent personnel was 291 (280). Of the personnel employed by the company, 25.0 (24.4) per cent were women and 75.0 (75.6) per cent were men. The average age of the personnel was 44 (44).

| **9. EMPLOYEE BENEFITS EXPENSES, €1,000** | **2016** | **2015** |
|---|---|---|
| Salaries and bonuses | 22,735 | 21,320 |
| Pension expenses - contribution-based schemes | 4,433 | 3,518 |
| Other additional personnel expenses | 1,430 | 967 |
| **Total** | **28,598** | **25,804** |
| | | |
| **Salaries and bonuses of top management** | **1,553** | **1,472** |

In 2016, the Group applied a remuneration system for senior management; the general principles of the system were accepted by the Board of Directors of Fingrid Oyj on 18 December 2015. The total remuneration of the members of the executive management group consists of a fixed total salary, a one-year bonus scheme, and a three-year long-term incentive scheme. The maximum amount of the one-year bonus scheme payable to the CEO was 25 per cent of the annual salary and to the other members of the executive management group 20 per cent of the annual salary. The maximum amount of the annual long-term incentive scheme payable to the CEO was 35 per cent and to the other members of the executive management group 25 per cent.

The Group currently has contribution-based pension schemes only. The pension security of the Group's personnel is arranged by an external pension insurance company. Pension premiums paid for contribution-based schemes are recognised as an expense in the income statement in the year to which they relate. In contribution-based schemes, the Group has no legal or factual obligation to pay additional premiums if the party receiving the premiums is unable to pay the pension benefits.

| **NUMBER OF SALARIED EMPLOYEES IN THE COMPANY DURING THE FINANCIAL YEAR:** | **2016** | **2015** |
|---|---|---|
| Personnel, average | 336 | 319 |
| Personnel, 31 Dec | 334 | 315 |

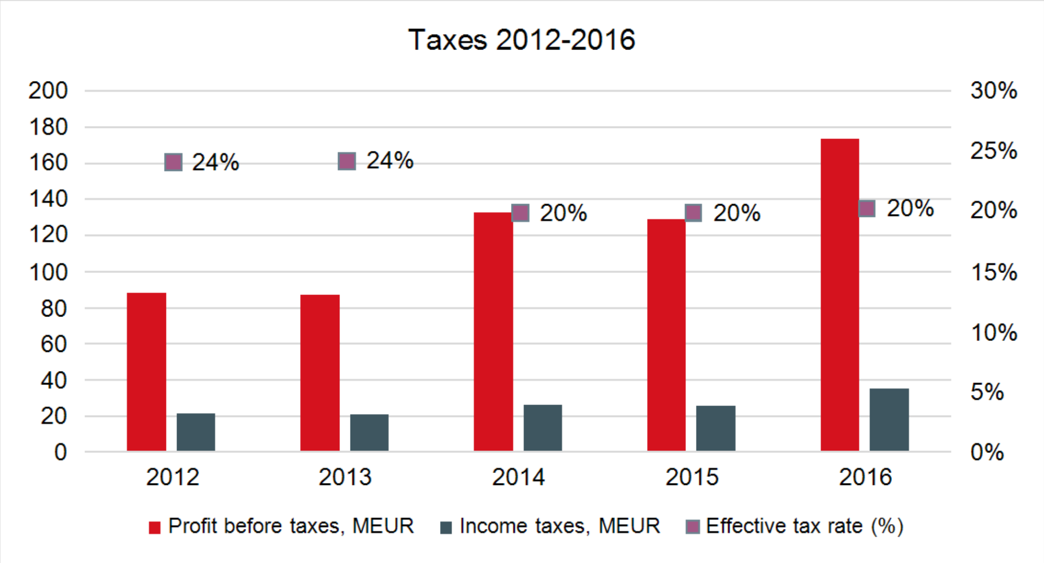
**Accounting principles**

**Employee benefits**

**Pension obligations**
The company has only defined contribution-based pension schemes. A defined contribution-based pension arrangement refers to a pension scheme according to which fixed contributions are paid into a separate entity, and the Group bears no legal or actual obligation to make additional contributions if the fund does not contain sufficient funds to pay out benefits based on work performed during current and previous financial periods to all employees. Under defined contribution-based pension schemes, the Group pays mandatory, contractual or voluntary contributions into publicly or privately managed pension insurance policies. The Group has no other contribution obligations in addition to those payments. The payments are entered as personnel costs when they fall due. Advance payments are entered in the balance sheet as assets insofar as they are recoverable as refunds or deductions from future payments.

## 3.9 Taxes

The company will pay its income taxes in accordance with the underlying tax rate, with no tax planning. Income taxes consist of direct taxes and the change in deferred tax: EUR -25.8 (-30.8) million and EUR -9.4 (5.0) million respectively. Fingrid's effective tax rate is essentially comparable to Finland's corporate tax rate (20% in 2016 and 2015). The only difference between the Finnish corporate tax rate and Fingrid's effective tax rate is due to a minor amount of non-deductible items, amounting in 2016 to EUR 0.4 (-0.1) million. The table below illustrates the development of Fingrid's effective tax rate. The impact of a change in the tax rate has been eliminated over the year in the 2013 figures.




## 10. DEFERRED TAX ASSETS AND LIABILITIES, € 1,000

**Changes in deferred taxes in 2016:**

| Deferred tax assets | 31 Dec 2015 | Recorded in income statement at profit or loss | Recorded in other comprehensive income | 31 Dec 2016 |
|---|---|---|---|---|
| Provisions | 334 | -37 | | 296 |
| Current financial receivables | 3 | 9 | | 12 |
| Trade payables and other liabilities | 6,336 | -4,478 | | 1,858 |
| Derivative instruments | 9,800 | -4,365 | -1,446 | 3,989 |
| Other items | 6 | | -6 | |
| **Total** | **16,479** | **-8,872** | **-1,452** | **6,155** |
| | | | | |
| **Deferred tax liabilities** | | | | |
| Accumulated depreciations difference | -89,779 | | | -89,779 |
| Property, plant and equipment, tangible and intangible assets | -24,896 | -2,224 | | -27,120 |
| Available-for-sale investments | -33 | | 13 | -20 |
| Other receivables | -1,005 | 166 | | -840 |
| Current financial receivables | | | | |
| Financial assets recognised in the income statement at fair value | -39 | -41 | | -79 |
| Borrowings | -3,259 | 927 | | -2,332 |
| Derivative instruments | -6,230 | 622 | | -5,608 |
| **Total** | **-125,240** | **-551** | **13** | **-125,778** |

**Changes in deferred taxes in 2015:**

| Deferred tax assets | 31 Dec 2014 | Recorded in income statement at profit or loss | Recorded in other comprehensive income | 31 Dec 2015 |
|---|---|---|---|---|
| Provisions | 337 | -4 | | 334 |
| Current financial receivables | | 3 | | 3 |
| Trade payables and other liabilities | 365 | 5,971 | | 6,336 |

| | | | | |
|---|---|---|---|---|
| Borrowings | 957 | -957 | | |
| Derivative instruments | 8,995 | 2,252 | -1,446 | 9,800 |
| Other items | 21 | -19 | 4 | 6 |
| **Total** | **10,674** | **7,246** | **-1,442** | **16,479** |
| | | | | |
| **Deferred tax liabilities** | | | | |
| Accumulated depreciations difference | -89,779 | | | -89,779 |
| Property, plant and equipment, tangible and intangible assets | -22,726 | -2,170 | | -24,896 |
| Available-for-sale investments | -25 | | -8 | -33 |
| Other receivables | -1,229 | 224 | | -1,005 |
| Financial assets recognised in the income statement at fair value | -85 | 47 | | -39 |
| Borrowings | | -3,259 | | -3,259 |
| Derivative instruments | -9,204 | 2,974 | | -6,230 |
| **Total** | **-123,048** | **-2,184** | **-8** | **-125,240** |

**Accounting principles**

**Income taxes**
Taxes presented in the consolidated income statement include the Group companies’ accrual taxes for the profit of the financial year, tax adjustments from previous financial years and changes in deferred taxes. Deferred taxes are recorded in accordance with Finland’s statutory corporate tax rate of 20%. Taxes are recognised in the income statement unless they are linked with other comprehensive income, in which case the tax is also recognised in other comprehensive income. Such items in the Group consist solely of available-for-sale investments, since hedge accounting for electricity derivatives was discontinued in 2014.

Deferred tax assets and liabilities are recognised on all temporary differences between the tax values of asset and liability items and their carrying amounts using the liability method. Deferred tax is recognised using tax rates valid up until the closing date. The deferred tax liabilities arising from the original recognition of goodwill will not be recognised, however. Deferred tax liabilities will also not be recognised if they are caused by the original recognition of the asset or liability and the item is not related to a merger and the transaction will not affect the accounting totals or the taxable revenue during its implementation. The deferred tax assets are shown as non-current receivables and deferred tax liabilities correspondingly as non-current liabilities.

The largest temporary differences result from the depreciation of property, plant and equipment and from financial instruments. No deferred tax is recognised on the undistributed profits of the foreign associated company, because receiving the dividend does not cause a tax impact by virtue of a Nordic tax agreement. The deferred tax asset from temporary differences is recognised up to an amount which can likely be utilised against future taxable income.

FINGRID OYJ
www.fingrid.fi 17.2.2017

# 4 LONG-TERM INVESTOR

- **This chapter focusses on Fingrid's assets, and above the most important ones: Grid assets and the indicators related to them.**
- **The chapter also takes a look at the company's goodwill and provides a description of other property, plant and equipment, and intangible assets.**
- **Leases are also included in this chapter as, for example, right-of-use agreements make up a considerable share of the company's operations and are as important as the company's other assets. Their share will be especially highlighted when all lease agreements are included in the company's balance sheet following the introduction of the new IFRS 16 standard.**

## 4.1 Grid assets

Fingrid's grid investment programme promotes the national climate and energy strategy, improves system security, increases transmission capacity and promotes the electricity markets. The annual capital expenditure in the grid has remained extensive.

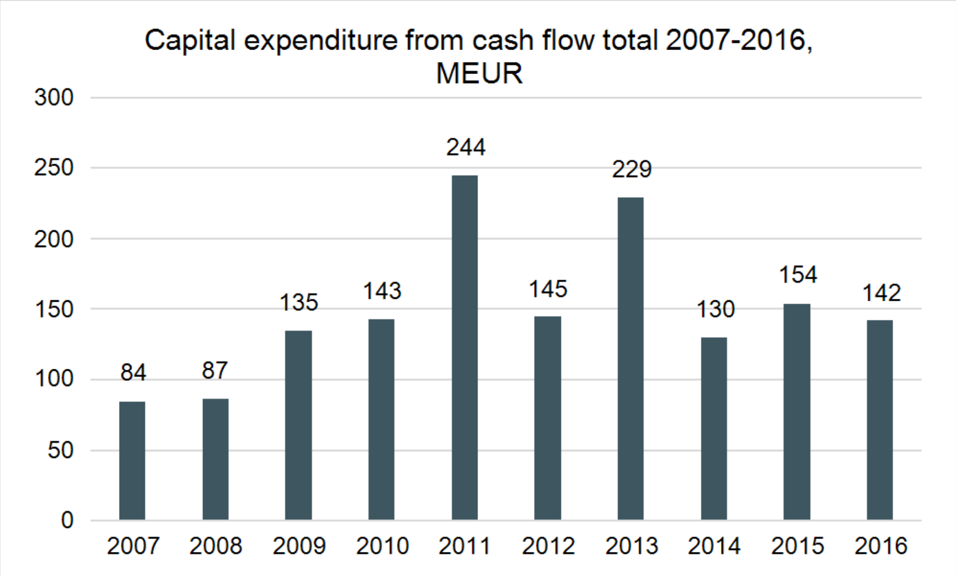
14 300 km of power lines
300 km of submarine cable

over
49 000 towers

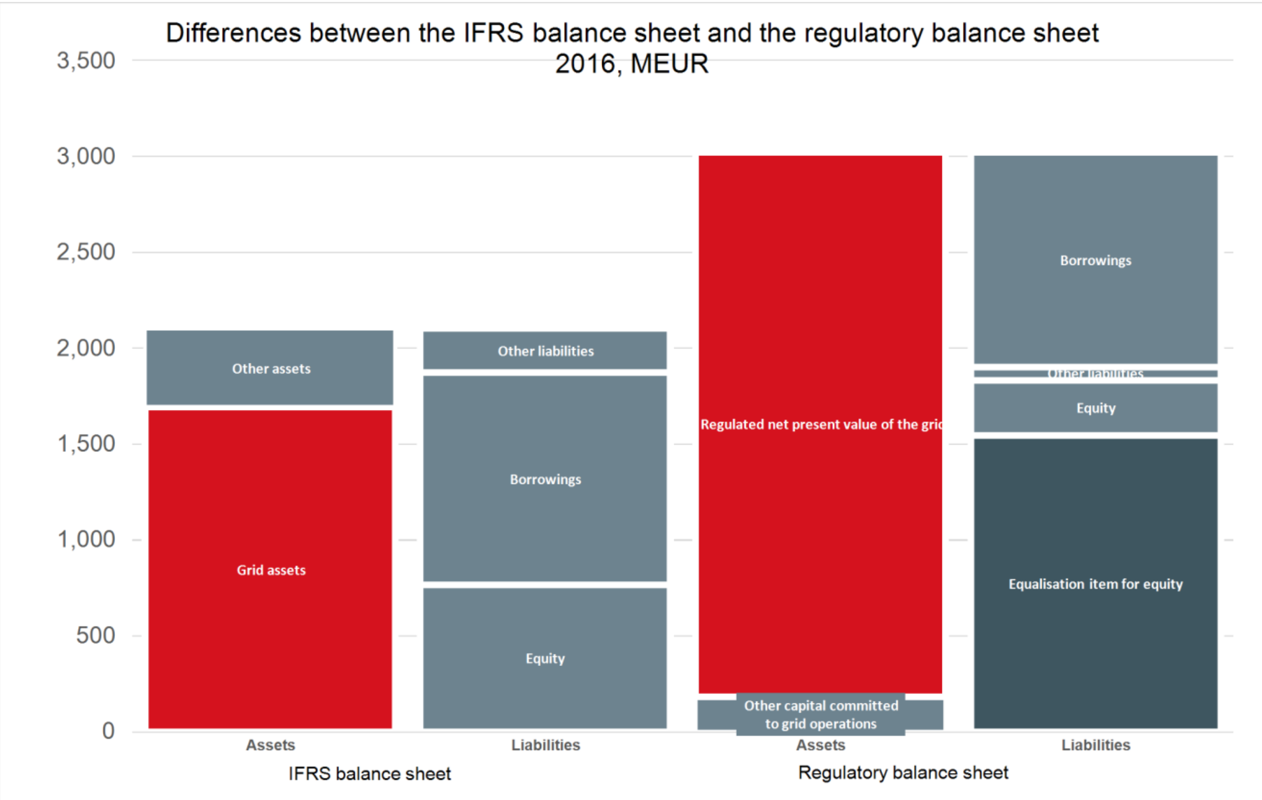
118 substations

10 reserve power plants
> 935 MW reserve

The company's total capital expenditure in 2016 amounted to EUR 146.7 (147.5) million. This included a total of EUR 135.8 (138.4) million invested in the transmission grid and EUR 3.3 (0.7) million for reserve power. ICT investments amounted to EUR 7.5 (8.4) million. A total of EUR 2.4 (1.8) million was used for R&D projects during the year under review. At the end of 2016, Fingrid had thirteen 400 kilovolt substation sites and 67 kilometres of 400 kilovolt power line contracts as well as a significant number of 110 kilovolt substation and power line projects under construction.

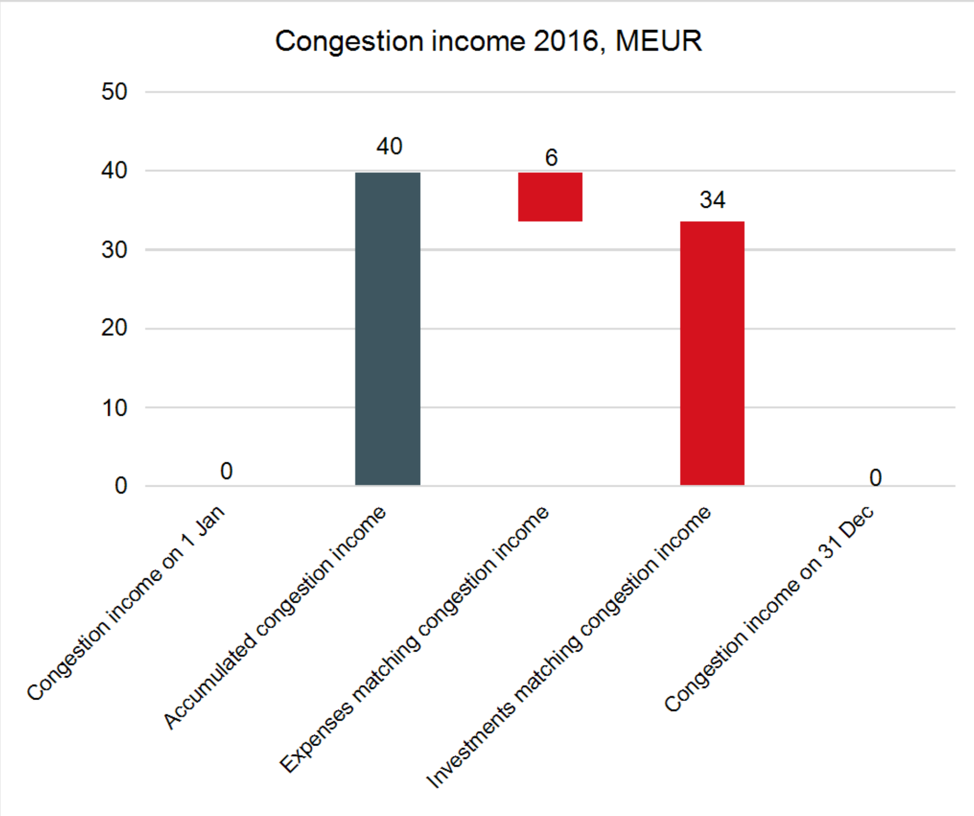



Grid assets are recognised at fair value for the purposes of the company's regulatory balance sheet, as described above. The fair value of the transmission network assets (adjusted replacement cost) is calculated by adding up the adjusted replacement costs for each grid component; these are calculated by multiplying the unit price specified by the Energy Authority with the number of grid components. The adjusted present value in use for a grid component is calculated based on the adjusted replacement cost, using the useful life of the grid component and its mean lifetime data.



**Congestion income**

Congestion income is generated because of an insufficient transmission capacity between the bidding zones of an electricity exchange. In such cases, the bidding zones become separate price areas, and the transmission link joining them generates congestion income in the electricity exchange as follows: congestion income [€/h] = transmission volume in the day-ahead markets [MW] * area price difference [€/MWh]. The basis for this is that a seller operating in a lower priced area receives less for their power than what a buyer pays for it in a higher priced area. The additional income caused by this price difference, i.e. congestion income, remains in the electricity exchange, which then pays the income to the TSOs as per the contractual terms. The congestion income received by a grid owner must be used for the purposes stated in EC Regulation 714/2009, Article 16, Paragraph 6: guaranteeing the actual availability of the allocated capacity, and maintaining or increasing interconnection capacities through network investments. As a consequence of the change in the regulation governing Fingrid's grid pricing, the company will include the congestion income received after 1 January 2016 as accruals in the item other liabilities in the balance sheet.




The congestion income from 2016 was used for improving and maintaining the cross-border transmission connections, and in part also for the Hirvisuo–Pyhänselkä transmission network investment, which supports the cross-border transmission from northern Sweden.

**Accounting principles**

**Congestion income**

As a consequence of the change in the regulation governing Fingrid's grid pricing, the company will include the congestion income received after 1 January 2016 as accruals in the item other liabilities in the balance sheet. Of the accruals, congestion income will be recognised in the income statement as other operating income when their corresponding costs, as defined in the regulation, accrue as annual expenses in the income statement. Alternatively, they are entered in the balance sheet against investments, as defined by regulation, to lower the acquisition cost of property, plant and equipment, which lowers the depreciation of the property, plant and equipment in question. The congestion income received before 1 January 2016 was recognised in turnover.

**Public contributions**

Public contributions received from the EU or other parties related to property, plant and equipment are deducted from the acquisition cost of the item, and the contributions consequently reduce the depreciation made on the item. Other contributions are distributed as income over those periods when costs linked with the contributions arise. Other contributions received are presented in other operating income.

## 4.2 Tangible and intangible assets

| 11. PROPERTY, PLANT AND EQUIPMENT, € 1,000 | 2016 | 2015 |
|---|---|---|
| **Land and water areas** | | |
| Cost at 1 Jan | 15,349 | 14,974 |
| Increases 1 Jan - 31 Dec | 393 | 442 |
| Decreases 1 Jan - 31 Dec | -41 | -67 |
| **Cost at 31 Dec** | **15,701** | **15,349** |
| **Carrying amount 31 Dec** | **15,701** | **15,349** |
| **Buildings and structures** | | |
| Cost at 1 Jan | 220,357 | 202,370 |
| Increases 1 Jan - 31 Dec | 34,634 | 18,214 |
| Decreases 1 Jan - 31 Dec | -168 | -227 |
| **Cost at 31 Dec** | **254,823** | **220,357** |
| Accumulated depreciation 1 Jan | -53,077 | -45,829 |
| Decreases, depreciation 1 Jan - 31 Dec | 73 | 59 |
| Depreciation 1 Jan - 31 Dec | -8,103 | -7,307 |
| **Carrying amount 31 Dec** | **193,716** | **167,280** |
| **Machinery and equipment** | | |
| Cost at 1 Jan | 1,053,479 | 1,015,283 |
| Increases 1 Jan - 31 Dec | 61,839 | 38,826 |
| Decreases 1 Jan - 31 Dec | -100 | -630 |
| **Cost at 31 Dec** | **1,115,218** | **1,053,479** |
| Accumulated depreciation 1 Jan | -485,852 | -438,393 |
| Decreases, depreciation 1 Jan - 31 Dec | 8 | 306 |
| Depreciation 1 Jan - 31 Dec | -51,094 | -47,765 |
| **Carrying amount 31 Dec** | **578,281** | **567,627** |
| **Transmission lines** | | |
| Cost at 1 Jan | 1,238,261 | 1,213,542 |
| Increases 1 Jan - 31 Dec | 74,414 | 30,003 |
| Decreases 1 Jan - 31 Dec | -5,565 | -5,283 |
| **Cost at 31 Dec** | **1,307,111** | **1,238,261** |
| Accumulated depreciation 1 Jan | -448,647 | -415,422 |
| Decreases, depreciation 1 Jan - 31 Dec | 3,944 | 3,223 |
| Depreciation 1 Jan - 31 Dec | -37,370 | -36,448 |
| **Carrying amount 31 Dec** | **825,038** | **789,614** |
| **Other property, plant and equipment** | | |
| Cost at 1 Jan | 22,756 | 22,232 |
| Increases 1 Jan - 31 Dec | 966 | 524 |
| **Cost at 31 Dec** | **23,721** | **22,756** |
| Accumulated depreciation 1 Jan | -15,208 | -14,326 |
| Depreciation 1 Jan - 31 Dec | -911 | -882 |
| **Carrying amount 31 Dec** | **7,602** | **7,548** |
| **Prepayments and purchases in progress** | | |
| Cost at 1 Jan | 120,816 | 78,687 |
| Increases 1 Jan - 31 Dec | 116,534 | 134,335 |
| Transfers to other tangible and intangible assets 1 Jan - 31 Dec | -177,946 | -92,206 |
| **Cost at 31 Dec** | **59,404** | **120,816** |

| | | |
|---|---|---|
| **Carrying amount 31 Dec** | **59,404** | **120,816** |
| **Capitalised interest** | | |
| Cost at 1 Jan | 9,426 | 7,735 |
| Increases 1 Jan - 31 Dec | 2,016 | 1,690 |
| **Cost at 31 Dec** | **11,442** | **9,426** |
| Accumulated depreciation 1 Jan | -676 | -399 |
| Depreciation on capitalised interest 1 Jan - 31 Dec | -345 | -276 |
| **Carrying amount 31 Dec** | **10,421** | **8,750** |
| **Carrying amount 31 Dec** | **69,825** | **129,566** |
| **Property, plant and equipment** | **1,690,162** | **1,676,984** |

| **12. INTANGIBLE ASSETS, €1,000** | **2016** | **2015** |
|---|---|---|
| **Land use rights** | | |
| Cost at 1 Jan | 92,749 | 91,920 |
| Increases 1 Jan - 31 Dec | 2,022 | 2,758 |
| Decreases 1 Jan - 31 Dec | -263 | -1,929 |
| **Cost at 31 Dec** | **94,507** | **92,749** |
| **Carrying amount 31 Dec** | **94,507** | **92,749** |
| **Other intangible assets** | | |
| Cost at 1 Jan | 30,853 | 29,829 |
| Increases 1 Jan - 31 Dec | 848 | 1,118 |
| Decreases 1 Jan - 31 Dec | -57 | -95 |
| **Cost at 31 Dec** | **31,644** | **30,853** |
| Accumulated depreciation 1 Jan | -28,173 | -26,732 |
| Depreciation 1 Jan - 31 Dec | -1,398 | -1,441 |
| **Carrying amount 31 Dec** | **2,073** | **2,680** |
| **Carrying amount 31 Dec** | **96,580** | **95,428** |

Land use rights are not depreciated but tested annually for impairment in connection with the testing of goodwill. No need for impairment has been noted as a result of the testing.

The entire business of the Fingrid Group is grid operations in Finland with system responsibility, which the full goodwill of the Group in the balance sheet is fully allocated to. The goodwill included in the balance sheet amounts to EUR 87,920 and has not changed during the periods under review. Since, per the regulation, the fair value of the net assets included in the company's grid assets is approximately EUR 2,800.0 million compared to the carrying amount of EUR 1,874.7 million in net assets, which includes land use rights and goodwill, the book value of the asset items has not decreased.

**Accounting principles**

**Property, plant and equipment**
Grid assets form most of the property, plant and equipment. Grid assets include, among other things, 400 kV, 220 kV, 110 kV transmission lines, direct current lines, transmission line right-of-ways, substations and the areas they encompass (buildings, structures, machinery and equipment, substation access roads), gas turbine power plants, fuel tanks, generators and turbines.

Property, plant and equipment are valued in the balance sheet at the original acquisition cost less accumulated depreciation and potential impairment. If an asset is made up of several parts with useful lives of different lengths, the parts are treated as separate items and are depreciated over their separate useful lives.

When a part of property, plant and equipment that is treated as a separate item is replaced, the costs relating to the new part are capitalised. Other subsequent costs are capitalised only if it is likely that the future economic benefit relating to the asset benefits the Group and the acquisition cost of the asset can be determined reliably. Repair and maintenance costs are recognised in the income statement when they are incurred.

Borrowing costs, such as interest costs and arrangement fees, directly linked with the acquisition, construction or manufacture of a qualifying asset form part of the acquisition cost of the asset item in question. A qualifying commodity is one that necessarily requires a considerably long time to be made ready for its intended purpose. Other borrowing costs are recognised as an expense. Borrowing costs included in the acquisition cost are calculated on the basis of the average borrowing cost of the Group.

Property, plant and equipment is depreciated over the useful life of the item using the straight-line method. Depreciation on property, plant and equipment taken into use during the financial year is calculated on an item-by-item basis from the month of introduction. Land and water areas are not depreciated. The expected economic lives are verified at each closing date, and if they differ significantly from the earlier estimates, the depreciation periods are amended accordingly.

The depreciation periods of property, plant and equipment are as follows:

| | |
|---|---|
| Buildings and structure | |
| Substation buildings and separate buildings | 40 years |
| Substation structures | 30 years |
| Buildings and structures at gas turbine power plants | 20-40 years |
| Separate structures | 15 years |
| Transmission lines | |
| Transmission lines 400 kV | 40 years |
| Direct current lines | 40 years |
| Transmission lines 110-220 kV | 30 years |
| Creosote-impregnated towers and related disposal costs | 30 years |
| Aluminium towers of transmission lines (400 kV) | 10 years |
| Optical ground wires | 10-20 years |
| Machinery and equipment | |
| Substation machinery | 10-30 years |
| Gas turbine power plants | 20 years |
| Other machinery and equipment | 3-5 years |

Gains or losses from the sale or disposition of property, plant and equipment are recognised in the income statement under either other operating income or expenses. Property, plant and equipment are derecognised in the balance sheet when their economic useful life has expired, the asset has been sold, scrapped or otherwise disposed of to an outsider.

**Goodwill and other intangible assets**

Goodwill created as a result of the acquisition of enterprises and businesses is composed of the difference between the acquisition cost and the net identifiable assets of the acquired business valued at fair value. Goodwill is allocated to cash-generating units and is tested annually for impairment. With associated companies, goodwill is included in the value of the investment in the associated company.

Other intangible assets consist of computer software and land use and emission rights. Computer software is valued at its original acquisition cost and depreciated on a straight line basis during its estimated useful life. Land use rights, which have an indefinite useful life, are not depreciated but are tested annually for impairment.

More on emission rights in chapter 6.2.

Subsequent expenses relating to intangible assets are only capitalised if their economic benefits to the company increase beyond the former performance level. In other cases, expenses are recognised in the income statement when they are incurred.

## 4.3 Lease agreements

The lease agreements of the Group mainly relate to office premises. The durations of the lease agreements range from less than one year to fifteen years, and the contracts can usually be extended after the original date of expiration. The index, renewal and other terms of the different agreements vary.

In addition to real estate, the Group has additionally leased assets such as several land areas under substations and transmission lines and some 110 kilovolt transmission lines and circuit breaker bays.

Under its system responsibility, Fingrid is also obligated to maintain a rapid response disturbance reserve to prepare for disruptions to the power system. In order to ensure the availability of this disturbance reserve, Fingrid has, in addition to its reserve power plant capacity, acquired power plant capacity suited to this purpose as well as disconnectable loads for industry by long-term agreement. These are shown below under the Right-of-use agreements.

| 13. OTHER LEASE AGREEMENTS, € 1,000 | 2016 | 2015 |
|---|---|---|
| **Rental obligations from lease agreements:** | | |
| In one year | 3,536 | 2,643 |

| | | |
|---|---|---|
| In more than one year and less than five years | 13,676 | 10,698 |
| In more than five years | 14,977 | 12,601 |
| **Total** | **32,189** | **25,942** |

| | | |
|---|---|---|
| **Payment obligations from right-of-use agreements:** | | |
| In one year | 7,601 | 8,017 |
| In more than one year and less than five years | 36,477 | 44,258 |
| In more than five years | 36,201 | 36,790 |
| **Total** | **80,278** | **89,065** |

**Accounting principles**

**Lease agreements**
Lease obligations where the risks and rewards incident to ownership remain with the lessor are treated as other lease agreements. Lease obligations paid on the basis of other lease agreements are treated within other operating expenses and are recognised in the income statement as equally large items during the lease period. Other lease agreements primarily concern office facilities, land areas and network leases. In accordance with the principles of standard IAS 17 Leases, those leases which transfer substantially all the risks and rewards incident to ownership to the company are classified as finance leases. The company has not leased tangible or intangible assets using finance leases.

**Adoption of the IFRS 16 Leases standard, effective 1 Jan 2019**
The company has started an assessment of the impacts of the adoption of the IFRS 16 standard. From the point of view of a lessee, the standard eliminates the current classification of leases as either operating leases or finance leases, and instead requires the recognition of practically all lease agreements as assets (right-of-use of the leased property) and the obligation of lease payments as a financial liability. Exceptions are possible for leases concerning short-term asset items of insignificant value.

Consequently, the standard will affect both Fingrid's corporate balance sheet and income statement. The rental expenses now included in other operating expenses will be replaced by interest and depreciation to be recognised under operating profit. The liability will be amortized using the effective interest rate method, where the relative amount of interest expenditure decreases along with the loan capital. The expenditure is thus recognised in the income statement over the lease term according to a front-end-loaded schedule.

The cash flow from operating activities will increase, as the capital repayment in rental payments will be classified as cash flow from financing activities. The interest component will continue to be disclosed in the cash flow from operating activities.

# 5 STRONG FINANCIAL POSITION

- **This chapter focusses on describing how Fingrid's financing is formed and how the related risks are managed, and at the same time, how short-term financial assets that secure liquidity are formed.**
- **The chapter describes the company's principles of capital management, ownership structure and dividend distribution policy.**
- **The end of the chapter contains a summary of all the financial assets and financing liabilities, as well as derivatives, that the company uses solely for risk management purposes. The risks relate to various market risks: the electricity price risk and the interest rate and exchange rate risk. The management of electricity price risk is described in chapter 3.7.**

## 5.1 Capital management

Equity and liabilities as shown in the balance sheet are managed by the company as capital. The principal aim of Fingrid's capital management is to ensure that the company is capable of uninterrupted operations and can rapidly recover from any exceptional circumstances. Additional key goals include maintaining an optimal capital structure such that the company's credit rating remains solid, cost of capital remains reasonable, and the company can pay dividends to its shareholders.

The company has not set specific financial ratio targets for capital management, but instead monitors and controls the overall capital structure based on credit ratings and their underlying parameters.

The company's credit rating remained high in 2016. This reflects the company's strong overall financial situation and debt service capacity. Fingrid has credit rating service agreements with S&P Global (S&P) and Fitch Ratings (Fitch).

- On 28 October 2016, S&P raised the rating for Fingrid Oyj's unsecured senior debt and long-term company rating to 'AA-' and the short-term company rating to 'A-1+', with a stable outlook.
- On 21 November 2016, Fitch raised the rating for Fingrid Oyj's unsecured senior debt to 'AA-', the long-term company rating to 'A+', and affirmed 'F1' for the short-term company rating, with a stable outlook. The rating received by Fingrid was, at the time of issuing, the highest valid rating given by Fitch to any European regulated TSO.

The company aims to maintain a credit rating of at least 'A-'. The credit rating target and criteria guide financing activities.

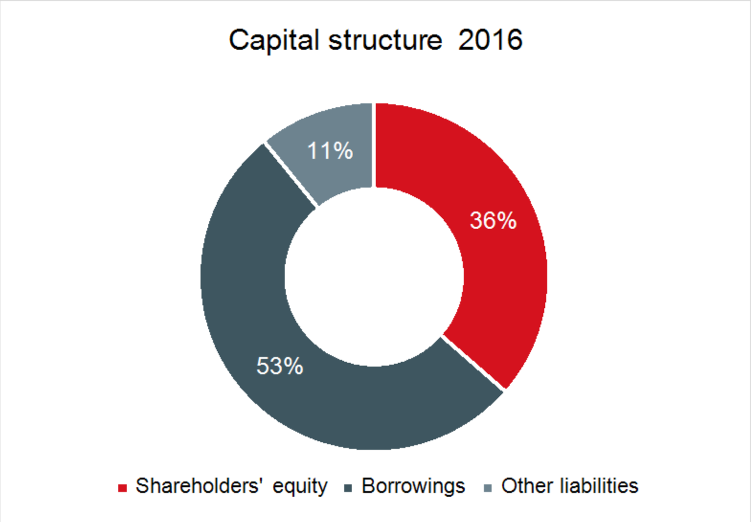
## 5.2 The aims and organisation of financing activities and the principles for financial risk management

The company has a holistic approach to the management of financing activities, encompassing external financing, as well as managing liquidity, counterparty and financial risks, and supporting business operations in matters related to financing in general.

Core aims for financing activities:
- Protecting shareholder value by securing the financing required for the company's business operations, by hedging against the main financial risks and by minimising financial costs within the risk limits;
- Maintaining adequate liquidity even in unexpected situations;
- Long-term financing from diverse sources, taking into account the company's investment plan and cash flow from operating activities as well as credit rating and its criteria;
- Overall optimisation of the interest rate risk, including the interest rate risk of business operations via the Energy Authority's regulatory model (risk-free interest in the so called WACC model) and the company's interest rate risk of net debt;
- Forward-looking financial planning to ensure that the overall impact from the cash flow from operating activities, future investments, maturing loans and future dividends is taken into account when raising funds and optimising the loan portfolio structure.

The Treasury maintains active and consistent dialogue with the credit rating agencies and monitors the key ratios used by the agencies, as well as other generally accepted financial ratios.

Fingrid's financial capital consists of equity and debt financing. The share of equity from the balance sheet total was 36,4% and that of liabilities 63,6% in 2016. Equity according to the regulatory balance sheet amounted to 60,7% and the corresponding liabilities to 39,3% of regulatory balance sheet total in 2016.




Fingrid Oyj's overall financial management is exposed to market, liquidity, counterparty and credit, among other, risks, when managing the company's financial position. The objective of financial risk management is to foster shareholder value by securing the financing required for the company's business operations, by hedging against the main financial risks and by minimising financing costs within the risk limits.

**Corporate finance and financing principles**
The Board of Directors of Fingrid Oyj approves the Corporate Finance and Financing Principles which define how Fingrid Oyj manages financing as a whole. The external financing of Fingrid Group is carried out by Fingrid Oyj.

**Risk management execution and reporting**
Fingrid's Chief Financial Officer is responsible for the practical measures related to securing financing and managing financial risks, in line with the company's Corporate Finance and Financing Principles and Treasury Policy. The CFO oversees the day-to-day organisation, reporting and adequate controls of financing activities, and reports regularly to the CEO and the Board (Audit Committee).

**Risk management processes**
The Treasury unit is in charge of risk monitoring, systems and the models and methods used to calculate and assess risks. The Treasury unit is furthermore responsible for identifying, measuring and reporting the financial risks that the company may be exposed to. The internal audit additionally ensures compliance with the Corporate Finance and Financing Principles and the company's internal guidelines.

**Fair value hierarchy**
In the presentation of fair value, assets and liabilities measured at fair value are categorised into a three-level hierarchy. The appropriate hierarchy is based on the input data of the instrument. The level is determined on the basis of the lowest level of input for the instrument that is significant to the overall fair value measurement.
Level 1: inputs are publicly quoted in active markets.
Level 2: inputs are not publicly quoted and are based on observable market parameters either directly or indirectly.
Level 3: inputs are not publicly quoted and are unobservable market parameters.

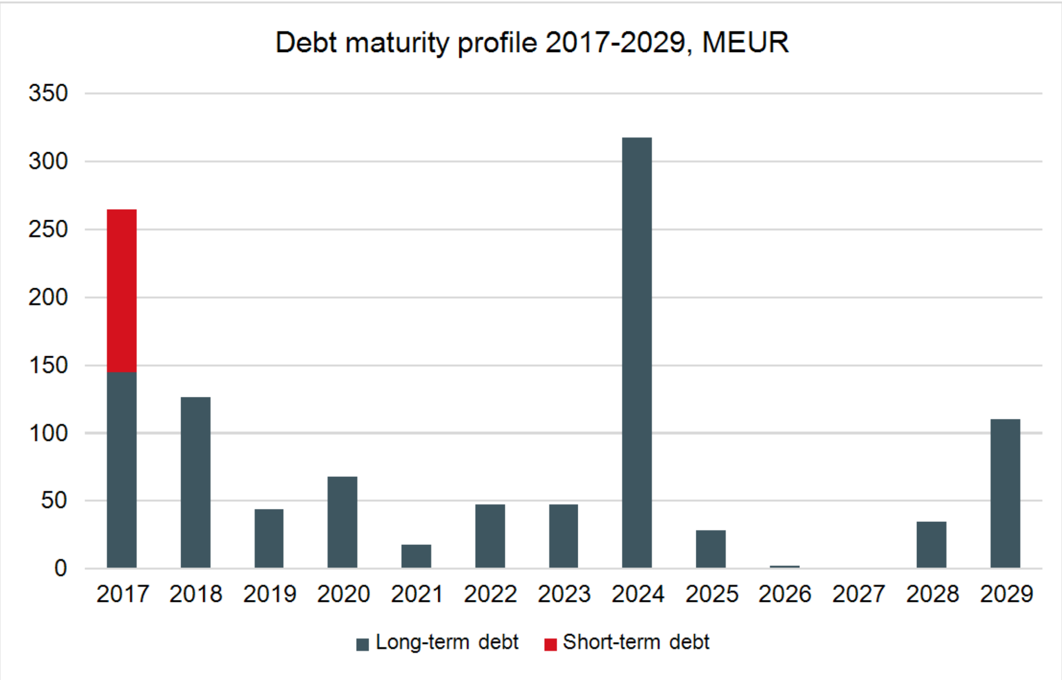
## 5.3 Financial liabilities, financial costs and managing the financial risks of liabilities

The company takes advantage of the opportunities offered by its credit ratings at any given time on the international and domestic debt capital and money markets. Market-based and diversified financing is sought from several sources aiming at a balanced maturity profile. Fingrid's existing loan agreements, debt or commercial paper programmes are unsecured and do not include any financial covenants based on financial ratios. In 2016, the company issued bonds totalling EUR 80 million (EUR 50 million with a four-year maturity and EUR 30 million with a six-year maturity) to refinance current borrowings.

Borrowings are as follows:

| **14. BORROWINGS, €1,000** | **2016** | | | **2015** | | | **Hierarchy level** |
|---|---|---|---|---|---|---|---|
| | Fair value | Balance sheet value | % | Fair value | Balance sheet value | % | |
| **Non-current** | | | | | | | |
| Bonds | 791,948 | 691,662 | | 829,075 | 734,366 | | Level 2 |
| Loans from financial institutions | 163,895 | 151,203 | | 186,408 | 172,866 | | Level 2 |
| | **955,843** | **842,866** | 76% | **1,015,483** | **907,232** | 79% | |
| **Current** | | | | | | | |
| Bonds | 125,885 | 123,074 | | 144,284 | 140,504 | | Level 2 |
| Loans from financial institutions | 23,246 | 21,662 | | 22,195 | 20,710 | | Level 2 |
| Other loans/Commercial papers (international and domestic) | 120,059 | 120,128 | | 75,022 | 75,003 | | Level 2 |
| | 269,190 | 264,865 | 24% | 241,501 | 236,217 | 21% | |
| **Total** | **1,225,033** | **1,107,730** | 100% | **1,256,984** | **1,143,448** | 100% | |

The fair values of borrowings are based on the present values of cash flows. Loans raised in various currencies are measured at the present value on the basis of the yield curve of each currency. The discount rate includes the company-specific and loan-specific risk premium. Borrowings denominated in foreign currencies are translated into euros at the mid-rate quoted by the ECB at the closing date.

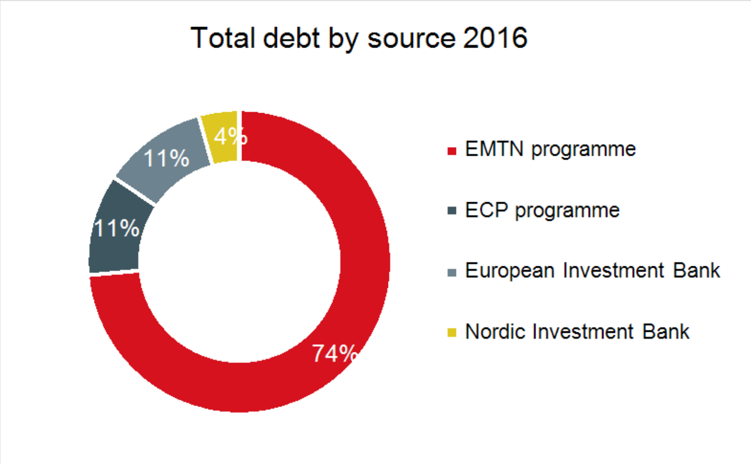


| 15. BONDS INCLUDED IN BORROWINGS, €1,000 | | | | 2016 | 2015 |
|---|---|---|---|---|---|
| Currency | Nominal value | Maturity | Interest | | |
| EUR | 20,000 | 11/04/2017 | floating rate | 20,000 | 20,000 |
| EUR | 25,000 | 11/04/2017 | floating rate | 25,000 | 25,000 |
| EUR | 30,000 | 15/06/2017 | 3.07% | 30,000 | 30,000 |
| EUR | 50,000 | 20/09/2020 | floating rate | 50,000 | |
| EUR | 30,000 | 19/09/2022 | floating rate | 30,000 | |
| EUR | 30,000 | 11/09/2023 | 2.71% | 30,000 | 30,000 |
| EUR | 300,000 | 03/04/2024 | 3.50% | 298,961 | 298,837 |
| EUR | 25,000 | 27/03/2028 | 2.71% | 25,000 | 25,000 |
| EUR | 10,000 | 12/09/2028 | 3.27% | 10,000 | 10,000 |
| EUR | 80,000 | 24/04/2029 | 2.95% | 80,000 | 80,000 |
| EUR | 30,000 | 30/05/2029 | 2.89% | 30,000 | 30,000 |
| | | | | 628,961 | 548,837 |
| JPY | 500,000 | 22/06/2017 | 1.28% | 4,052 | 3,815 |
| | | | | 4,052 | 3,815 |
| NOK | 200,000 | 17/10/2016 | 5.15% | | 20,827 |
| NOK | 200,000 | 11/04/2017 | 5.16% | 22,011 | 20,827 |
| NOK | 200,000 | 10/11/2017 | 5.12% | 22,011 | 20,827 |
| NOK | 200,000 | 12/11/2019 | 5.37% | 22,011 | 20,827 |
| NOK | 100,000 | 16/09/2025 | 4.31% | 11,006 | 10,413 |
| | | | | 77,039 | 93,721 |
| SEK | 100,000 | 15/01/2016 | 3.30% | | 10,882 |
| SEK | 500,000 | 18/10/2016 | interest rate structure | | 54,385 |
| SEK | 500,000 | 18/10/2016 | 3.50% | | 54,410 |
| SEK | 1,000,000 | 19/11/2018 | interest rate structure | 104,685 | 108,820 |
| | | | | 104,685 | 228,497 |
| Bonds, long-term total | | | | 691,663 | 734,366 |
| Bonds, short-term total | | | | 123,074 | 140,504 |
| **Total** | | | | **814,737** | **874,870** |

The company operates in the debt capital, commercial paper and loan markets:

- For long-term financing, the company has a Medium Term Note Programme ("EMTN Programme"), totalling EUR 1.5 billion.
- Fingrid has a Euro Commercial Paper Programme ("ECP Programme") totalling EUR 600 million.
- Fingrid has a domestic commercial paper programme totalling EUR 150 million.
- Furthermore, Fingrid has bilateral long-term loan agreements with both the European Investment Bank (EIB) and the Nordic Investment Bank (NIB).

The graph below illustrates Fingrid's various sources of debt financing. Fingrid sources debt financing mainly from the international debt capital markets.




The company defines net debt as the difference between cash in hand, and the financial assets recognized in the income statement at fair value and borrowings as shown in the balance sheet. The development of net debt is actively monitored.

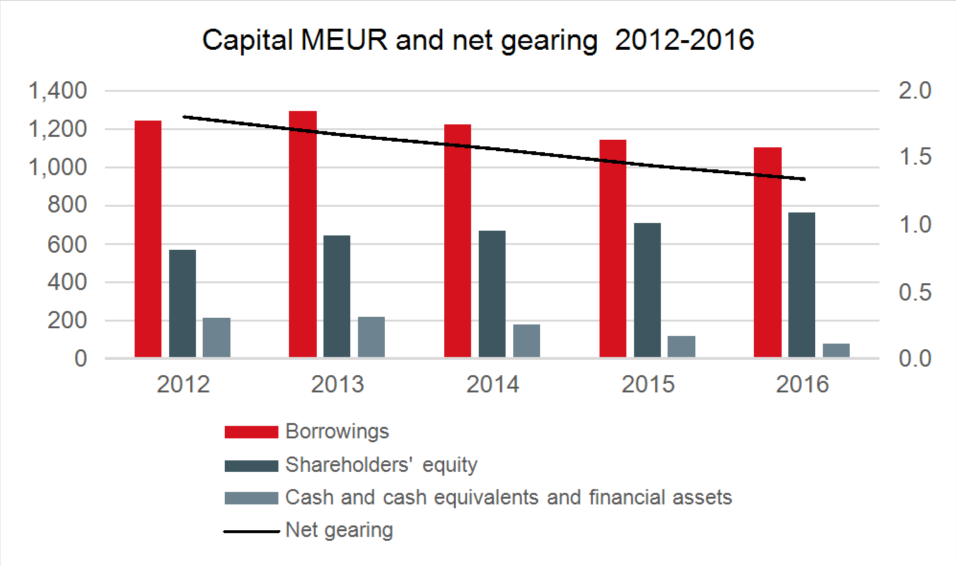
## 16. RECONCILIATION OF DEBT, €1,000

| | Borrowings due within 1 year | Borrowings due after 1 year | Total |
|---|---|---|---|
| **Debt on 1 Jan 2015** | **263,033** | **962,324** | **1,225,358** |
| Cash flow from financing activities | -185,181 | 107,424 | -77,757 |
| Exchange rate adjustments | -3,573 | 2,350 | -1,223 |
| Accrual of effective interest rates | 1,051 | 12,873 | 13,925 |
| Other changes not involving a payment transaction | 161,937 | -164,867 | -2,930 |
| **Debt on 31 Dec 2015** | **237,268** | **920,105** | **1,157,373** |
| Cash flow from financing activities | -119,917 | 80,000 | -39,917 |
| Exchange rate adjustments | -1,192 | 5,243 | 4,051 |
| Accrual of effective interest rates | 355 | 1,472 | 1,827 |
| Other changes not involving a payment transaction | 149,757 | -149,608 | 149 |
| **Debt on 31 Dec 2016** | **266,271** | **857,211** | **1,123,482** |

Financial assets recognised in the income statement at fair value are liquid investments traded on active markets.

| **Reconciliation of net debt, € 1,000** | **2016** | **2015** |
|---|---|---|
| Cash in hand and cash equivalents | 21,939 | 23,099 |
| Financial assets recognised in the income statement at fair value | 57,790 | 93,451 |
| Borrowings - repayable within one year | 264,865 | 236,217 |
| Borrowings - repayable after one year | 842,866 | 907,232 |
| **Net debt** | **1,028,002** | **1,259,999** |

Net debt is the difference between the company's debt and its cash in hand and cash equivalents




Interest income and costs on loans and other receivables are as follows:

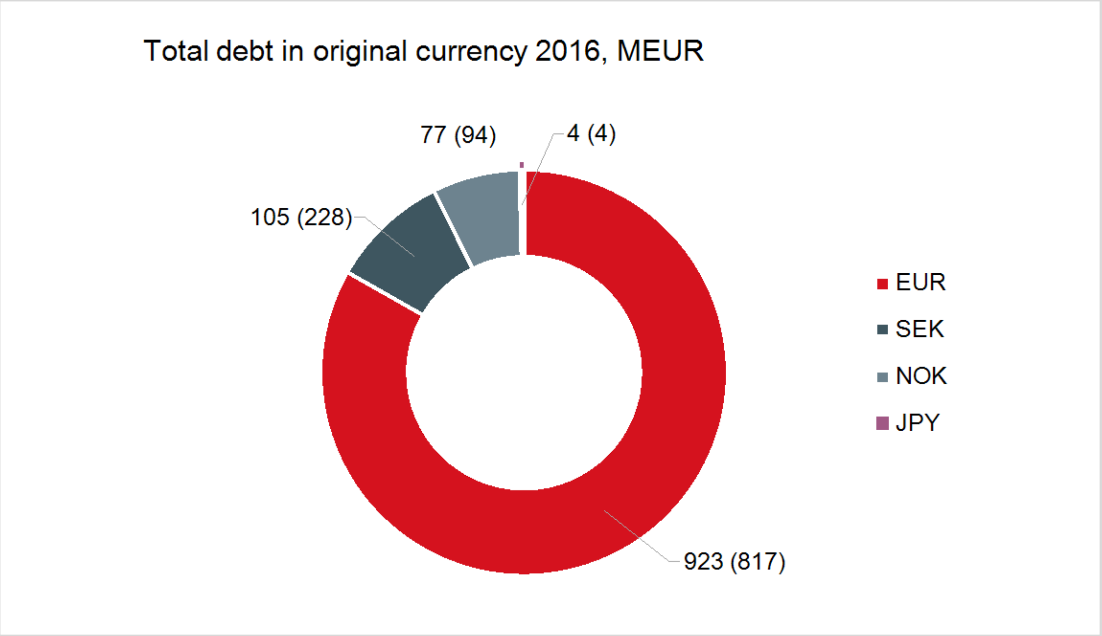
| 17. INTEREST INCOME AND EXPENSES FROM LOANS AND OTHER RECEIVABLES, €1,000 | 2016 | 2015 |
|---|---|---|
| Interest income on held-for-trading financial assets | 500 | 449 |
| Interest income on cash, cash equivalents and bank deposits | 189 | 174 |
| Net foreign exchange gains and losses | 0 | 77 |
| Dividend income | 5 | 5 |
| | 694 | 706 |
| Interest expenses on borrowings | -27,017 | -29,650 |
| Net interest expenses on interest rate and foreign exchange derivatives | 7,261 | 8,250 |
| Gains from measuring derivative contracts at fair value | 6,016 | 3,749 |
| Losses from measuring derivative contracts at fair value | -6,358 | -17,025 |
| Net foreign exchange gains and losses | -67 | 0 |
| Other finance costs | -1,236 | -1,416 |
| | -21,401 | -36,092 |
| Capitalised finance costs, borrowing costs; at a capitalisation rate of 2 % (note 11) | 2,016 | 1,690 |
| **Total** | **-18,691** | **-33,695** |

**Managing the market risks of debt**

Fingrid's debts are based on both fixed and floating interest rates and issued in several currencies. They thus expose Fingrid's cash flow to interest rate and exchange rate risks. Fingrid uses derivative contracts to hedge against interest rate risks on cash flow and exchange rate risks on borrowings. Fingrid generally retains issued bonds until the maturity date and thus does not value its bonds in the balance sheet at fair value or hedge against the fair value interest rate risk. The permitted hedging instruments are defined in the Treasury policy and are chosen in order to achieve the most effective hedging possible for the risks in question.

The functional currency of the company is euro. Generally, currency risks and the foreign exchange interest rate risk are fully hedged. A risk that amounts to less than EUR 5 million when realised can be unhedged for reasons of cost-effectiveness.

**Transaction risk**

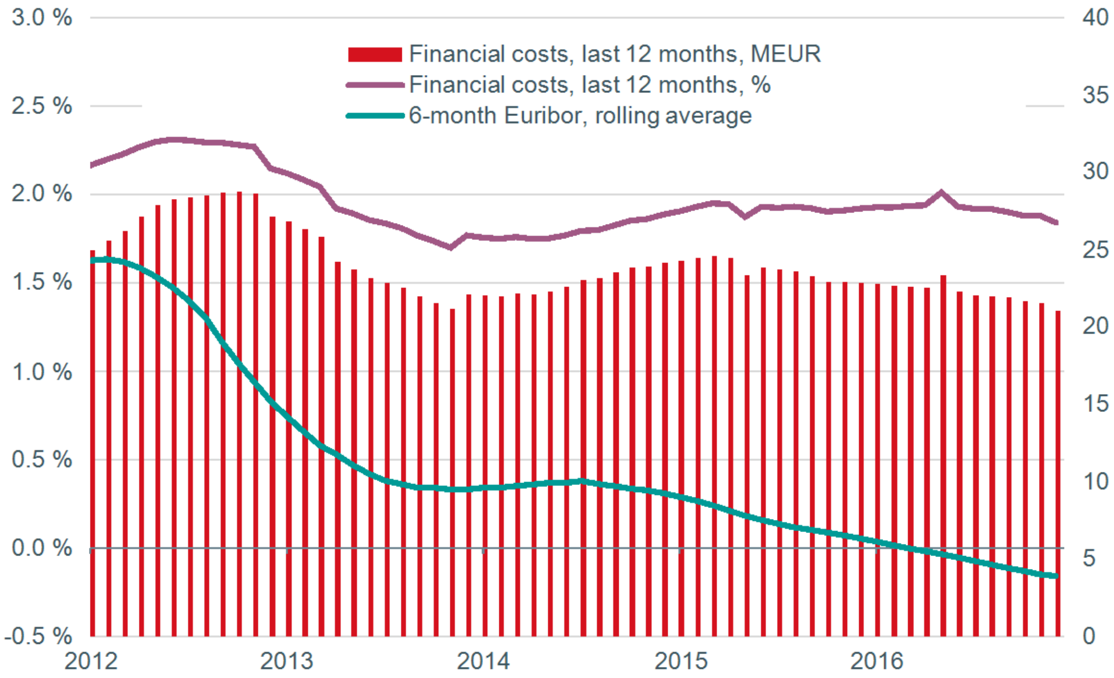



The company issues bonds in the international and domestic money and debt capital markets. The company's loan portfolio is spread across euro and non-euro currencies, and the total debt portfolio and the related interest rate flows are hedged against the currency risk. The currency risk for each bond is fully hedged in conjunction with its issuance. The company uses interest rate and cross currency swaps to hedge the exchange rate and interest risk of bonds.

Business-related currency risks are small and they are mainly hedged. During the financial year, the company used foreign exchange forwards to hedge business transaction risks. A summary of the derivatives is presented in Note 23.

The sensitivity analysis of changes in the foreign exchange rate is measured as a 10 per cent change between the euro and the currency in question. The most important foreign currency for the Group is the Swedish krona (SEK). If the rate of SEK on 31 December 2016 had been 10% lower/higher than the euro, with all other variables remaining unchanged, the profit after taxes would have been EUR 1,000 higher/EUR 1,000 lower (2015: EUR 32,000/EUR 36,000). The main impact on the net profit is caused by the change in the fair value of derivatives. Starting in 2016, the impact of the SEK-denominated forward curve is also taken into account in the sensitivity analysis. In 2016, loans amounting to SEK 1,100 million and their corresponding derivatives matured, which accounts for the reduced impact of the exchange rate changes.

Financial costs 2012-2016




**Interest rate risk**

The company is only exposed to the interest rate risk in euros from its business operations, assets and borrowings. The company's borrowings are, both in terms of principal and interest payments, fully hedged against exchange rate risks, and cash and cash equivalents and financial assets recognised in the income statement at fair value are denominated in euros.

Interest rate risk management will include optimisation of the future interest rate risk of business operations (risk-free interest in the WACC model described in the next infobox) together with the company's net debt interest rate risk through a regulatory model specified by the Energy Authority.

The interest rate risk from business operations can in part or in its entirety be hedged in terms of the adjusted capital committed to grid operations. The Board of Directors always makes a separate decision on the hedging of operational interest rate risks. The interest rate risk included in business operations was not hedged in 2016. The interest rate risk inherent in Fingrid's business operations is caused by changes in the risk-free interest in the WACC model. If the risk-free interest rate rises/falls by one percentage unit, the post-tax WACC rises/falls by 0.9%.

The objective of managing the interest rate risk on the loan portfolio is to minimise interest costs in the long term. The basic principle is to keep the interest rate exposure of the company's loan portfolio linked to a floating rate of interest, targeting at most an average interest refixing period of 12 months.The loan portfolio's interest rate risk arises from market interest rate volatility, which decreases or increases the annual interest expenses on the company's floating-rate loans. When the interest rates increase (decrease) on the market, the interest expenses of the floating-rate loans also increase (decrease). The company hedges this so-called cash flow risk with derivatives. The exposure of the loan portfolio to interest rate risk is measured by using a Cash Flow at Risk (CFaR) type of model, more specifically the Autoregressive Integrated Moving Average (ARIMA) model. The key parameters of the model are the 3-month and 6-month Euribor rates, the historical development of which serve as a basis for a forward-looking simulation of the probable future interest expenses for Fingrid's loan portfolio. The exposure on which the sensitivity analysis is calculated includes all of the Group's interest-bearing borrowings, the loan portfolio's derivatives and interest-rate options purchased to hedge against unexpected changes in interest rates. According to the model, there is a 95% (99%) probability that Fingrid's interest expenditure will amount to no more than EUR 20 (20) million during the next 12 months.

**Determination of the reasonable rate of return in regulation and operational interest rate risk**

The reasonable rate of return on adjusted capital committed to grid operations is determined by using the weighted average cost of capital model (WACC). The WACC model illustrates the average cost of the capital used by the company, where the weights are the relative values of equity and debt. The weighted average of the costs of equity and interest-bearing debt are used to calculate the total cost of capital, i.e. the reasonable rate of return per the regulation. The reasonable return is calculated by multiplying the adjusted capital invested in network operations by the WACC.

$$WACC_{post\text{-}tax} = C_E \times \frac{E}{E+D} + C_D \times (1 - ctr) \times \frac{D}{E+D}$$

$WACC_{post\text{-}tax}$ = reasonable rate of return after corporate tax
$C_E$ = reasonable cost of equity
$C_D$ = reasonable cost of interest-bearing debt
E = adjusted equity invested in network operations
D = adjusted interest-bearing debt invested in network operations
ctr = current rate of corporate tax

$\mathbf{C_D = R_r + DP}$
$R_r$ = risk-free interest rate
DP = risk premium of debt

$\mathbf{C_E = R_r + \beta_{levered} \times (R_m - R_r) + LP}$
$R_r$ = risk-free interest rate
$\beta_{levered}$ = levered beta
$R_m$ = average market return
$R_m - R_r$ = market risk premium
LP = liquidity premium

The above-mentioned reasonable rate of return after taxes is then adjusted with the current rate of corporate tax. This calculation gives the reasonable pre-tax rate of return.

$$WACC_{pre\text{-}tax} = \frac{WACC_{post\text{-}tax}}{(1 - ctr)}$$

WACC pre-tax = reasonable rate of return before corporate tax

A fixed capital structure is applied to the TSO, whereby the weight of debt capital is 50% and the weight of equity capital is 50%. The pre-tax reasonable rate of return is calculated as follows:

$$WACC_{pre\text{-}tax} = \frac{C_E \times 0,5}{(1 - ctr)} + C_D \times 0,5$$

$$R_{k,pre\text{-}tax} = WACC_{pre\text{-}tax} \times (E+D)$$

$R_{k,\ pre\text{-}tax}$ = pre-tax reasonable return, EUR
$WACC_{pre\text{-}tax}$ = reasonable rate of return, %
E = adjusted equity invested in network operations, EUR
D = adjusted interest-bearing debt invested in network operations, EUR
E + D = adjusted capital invested in network operations, EUR

| Reasonable cost of equity | Variable | Value used |
|---|---|---|
| $C_E = R_r + \beta_{debt\text{-}free} x (1 + (1 – t) x D/E) x (R_m – R_f) + LP$<br>$C_E$ = Finland's 10y govt. bond + 0.4 x (1 + (1 – 20%) x 50/50) x 5% + 0.6%<br>**$C_E$ = Finland's 10y government bond + 4.2%** | Risk-free interest rate ($R_f$) | Higher:<br>a) 10-year daily average of Finland's 10y government bond<br>b) Daily average of previous year April–September of Finland's 10y government bond rate |
| **Reasonable cost of liabilities** | Asset beta ($\beta_{debt\text{-}free}$) | 0.4 |
| $C_D = R_r + DP$<br>**$C_D$ = Finland's 10y government bond + 1.4%** | Market risk premium ($R_m – R_f$) | 5.0% |
| **WACC (pre-tax)** | Liquidity premium (LP) | 0.6% |
| $WACC_{post\text{-}tax} = C_E x 50 / 100 + C_D x (1 – t) x 50 / 100$<br>**$WACC_{post\text{-}tax}$ = Finland's 10y government bond x 0.9 + 2.66%**<br>$WACC_{pre\text{-}tax}$ = Finland's 10y government bond x 1.125 + 3.33% | Capital structure (D/E) | 50/50 |
| | Risk premium of debt (DP) | 1.4%* |
| | Corporate income tax rate (t) | 20% |

**Liquidity risk and refinancing risk**
Fingrid is exposed to liquidity and refinancing risks arising from the redemption of loans, payments and fluctuations in cash flow from operating activities.The liquidity of the company must be arranged so that 110% of the refinancing needs for the next 12 months can be covered by liquid assets (cash and cash equivalents, and financial assets recognised in the income statement at fair value) and available long-term committed credit lines.

The company has a revolving credit facility agreement of EUR 300 million signed on 11 December 2015. The maturity of the facility is five years. In addition to this, the company has two one-year extension options, one of which has been used. This extended the maturity of the revolving credit facility until 11 December 2021. The facility is committed and has not been drawn. The company additionally has uncommitted overdraft facilities totaling EUR 50 million.

The refinancing risk is managed by building an even maturity profile such that the share of long-term loans in a single year constitutes less than 30 per cent of the total debt and the average maturity of the company's loan portfolio is at least three years. To secure refinancing, the company makes wide use of diverse sources of financing. The high credit rating and good bank and investor relations enable ready access to the debt capital market and thus minimises the company's debt refinancing risks and financing costs.

The counterparty risks of financing activities are caused by counterparties related to investing (e.g. money market funds), derivatives counterparties and bank counterparties. The company minimises any counterparty risks. As a rule, credit rating categories are the decisive factor in specifying the counterparty limit.

Contractual repayments and interest costs on borrowings are presented in the next table. The interest rates on floating-rate loans are defined using the zero coupon curve. The repayments and interest amounts are undiscounted values. Finance costs arising from interest rate swaps are often paid in net amounts depending on the nature of the swap. In the following table, they are presented in gross amounts.

**18. DEBT REPAYMENTS, INTEREST PAYMENTS AND PAYMENTS AND RECEIVABLES UNDER DERIVATIVE CONTRACTS IN CASH, €1,000**

| 31 Dec 2016 | | 2017 | 2018 | 2019 | 2020 | 2021 | 2022- | Total |
|---|---|---|---|---|---|---|---|---|
| Bonds | - repayments | 123,074 | 104,685 | 22,011 | 50,000 | | 514,967 | **814,737** |
| | - interests | 20,874 | 17,555 | 17,361 | 16,398 | 16,247 | 68,012 | **156,447** |
| Loans from financial institutions | - repayments | 21,662 | 21,662 | 21,662 | 17,662 | 17,662 | 72,554 | **172,866** |
| | - interests | 3,264 | 2,859 | 2,572 | 2,305 | 1,999 | 4,383 | **17,382** |
| Commercial papers | - repayments | 120,000 | | | | | | **120,000** |
| Currency swaps | - payments | 53,453 | 107,833 | 23,967 | 87 | 118 | 13,342 | **198,800** |
| Interest rate swaps | - payments | 2,287 | 2,204 | 845 | 269 | 370 | 2,204 | **8,180** |
| Forward contracts | - payments | 2,214 | | | | | | **2,214** |
| **Total** | | **346,829** | **256,798** | **88,419** | **86,721** | **36,397** | **675,463** | **1,490,626** |
| Currency swaps | - receivables | 49,434 | 110,878 | 22,394 | 449 | 449 | 12,209 | **195,812** |
| Interest rate swaps | - receivables | 4,933 | 4,015 | 3,859 | 3,662 | 3,371 | 8,381 | **28,221** |
| Forward contracts | - receivables | 2,271 | | | | | | **2,271** |
| **Total** | | **56,638** | **114,893** | **26,253** | **4,111** | **3,820** | **20,590** | **226,304** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Total** | | **290,191** | **141,905** | **62,165** | **82,610** | **32,577** | **654,873** | **1,264,322** |

| 31 Dec 2015 | | 2016 | 2017 | 2018 | 2019 | 2020 | 2021- | Total |
|---|---|---|---|---|---|---|---|---|
| Bonds | - repayments | 140,504 | 120,468 | 108,820 | 20,827 | | 484,251 | **874,870** |
| | - interests | 24,850 | 21,043 | 18,711 | 17,111 | 15,993 | 83,757 | **181,465** |
| Loans from financial institutions | - repayments | 20,710 | 21,662 | 21,662 | 21,662 | 17,662 | 90,216 | **193,576** |
| | - interests | 3,707 | 3,270 | 3,066 | 2,841 | 2,544 | 7,051 | **22,479** |
| Commercial papers | - repayments | 75,000 | | | | | | **75,000** |
| Currency swaps | - payments | 146,373 | 53,753 | 108,408 | 24,160 | 170 | 13,889 | **346,753** |
| Interest rate swaps | - payments | 3,632 | 2,102 | 1,991 | 1,029 | 534 | 3,715 | **13,003** |
| Forward contracts | - payments | 2,266 | 1,914 | | | | | **4,181** |
| **Total** | | **417,043** | **224,213** | **262,658** | **87,631** | **36,904** | **682,879** | **1,711,327** |
| Currency swaps | - receivables | 148,587 | 49,939 | 111,766 | 22,394 | 449 | 12,658 | **345,792** |
| Interest rate swaps | - receivables | 4,656 | 4,733 | 3,751 | 3,339 | 2,813 | 8,863 | **28,156** |
| Forward contracts | - receivables | 2,222 | 1,871 | | | | | **4,093** |
| **Total** | | **155,465** | **56,544** | **115,517** | **25,733** | **3,262** | **21,520** | **378,041** |
| **Total** | | **261,578** | **167,669** | **147,141** | **61,897** | **33,642** | **661,358** | **1,333,285** |

**Accounting principles**

**Borrowings**
Borrowings are initially recognised at fair value net of the transaction costs incurred. Transaction costs consist of bond prices above or below par value, arrangement fees, commissions and administrative fees that are directly related to loan. Borrowings are subsequently measured at amortised cost; any difference between the loan amount and the amount to be repaid is recognised in the income statement over the loan period using the effective interest rate method. Borrowings are derecognised when they mature and are repaid.

Commitment fees to be paid on credit facilities are entered as transaction costs related to the loan insofar as partial or full utilisation of the facility is likely. In such cases, the fee is capitalized in the balance sheet until the facility is utilised. If there is no proof that loans included in a facility are likely to be drawn in part or in full, the fee will be recognised as an upfront payment for liquidity services and amortized over the maturity of the facility in question.

## 5.4 Cash and cash equivalents and other financial assets

| 19. CASH AND CASH EQUIVALENTS, €1,000 | 2016 | 2015 |
|---|---|---|
| Bank deposits | 10,000 | 10,000 |
| Cash assets and bank account balances | 11,939 | 13,099 |
| **Total** | **21,939** | **23,099** |

| 20. FINANCIAL ASSETS RECOGNISED IN THE INCOME STATEMENT AT FAIR VALUE, €1,000 | 2016 | 2015 | Hierarchy level |
|---|---|---|---|
| Commercial papers | 12,998 | 53,984 | Level 2 |
| Short-term money market funds | 44,792 | 39,468 | Level 1 |
| **Total** | **57,790** | **93,451** | |

**Accounting principles**

**Cash and cash equivalents**
Cash and cash equivalents in the balance sheet include cash in hand and bank deposits with an initial maturity of no more than three months. Cash and cash equivalents in the cash flow statement also include financial assets recognised in the income statement at fair value. Cash and cash equivalents are derecognised when they mature, are sold or otherwise disposed of.

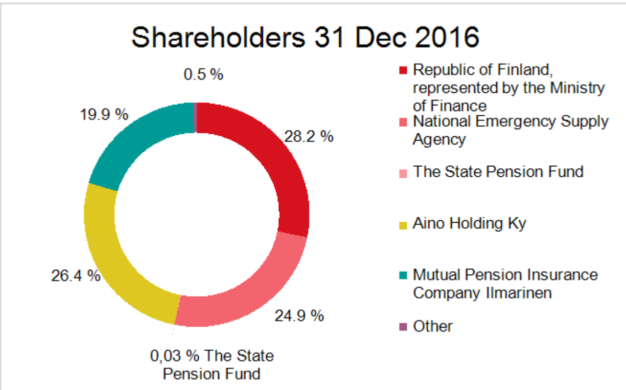
**Held-for-trading financial assets**
This category consists of the financial assets held specifically for trading purposes. The financial assets classified in this category include short-term money market securities (certificates of deposit, commercial papers and municipality bills) and current investments in short-term fixed income funds. Financial assets recognised at fair value in the income statement are entered in the balance sheet at fair value at the settlement date. Subsequently, the financial assets are measured on each reporting day at fair value, and the change in their fair value is recognised in the income statement under finance income and costs. Derivatives are also included in this group, but are presented in the balance sheet on their own lines. Accounting principles for derivatives are disclosed in Chapter 5.6.

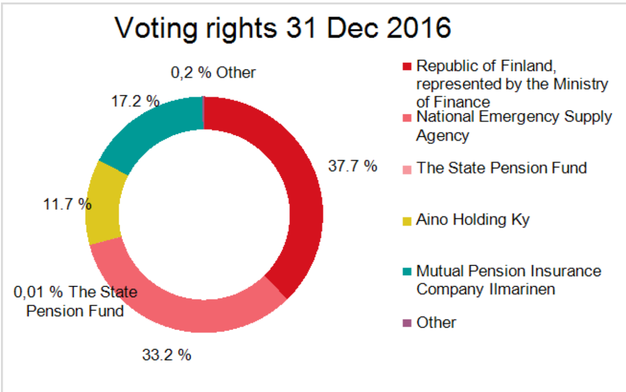
**Available-for-sale investments**
Fingrid has insignificant amounts of financing assets classified as available-for-sale investments, mainly shares in telephone companies and publicly listed shares. Available-for-sale investments are recognised at fair value, which is the market value at the closing date and thus belongs to level 1 in the fair value hierarchy. Changes in fair value are recognised through other comprehensive income in shareholders' equity, minus taxes, until the investment is sold or otherwise disposed of, or the value of the investment is impaired, at which time the changes in fair value are reclassified in the income statement.

Financial assets are derecognised when they mature, are sold or otherwise disposed of such that their risks and revenues have been transferred.

## 5.5 Equity and dividend distribution

The shareholders' equity is composed of two share classes. The shareholder breakdown and voting rights are illustrated in the following graphs.




| SHAREHOLDERS BY CATEGORY 31 DEC | Number of shares | Of all shares % | Of votes % |
|---|---|---|---|
| Public organisations | 1,768 | 53.17 | 70.87 |
| Financial and insurance institutions | 1,557 | 46.83 | 29.12 |
| **Total** | **3,325** | **100.00** | **100.00** |

| Shareholders, 31 Dec 2016 | Number of shares | Of all shares % | Of votes % |
|---|---|---|---|
| Republic of Finland, represented by the Ministry of Finance | 939 | 28.24 | 37.66 |
| Aino Holding Ky | 878 | 26.41 | 11.74 |
| National Emergency Supply Agency | 828 | 24.90 | 33.20 |

| | | | |
|---|---|---|---|
| Mutual Pension Insurance Company Ilmarinen | 661 | 19.88 | 17.15 |
| Imatran Seudun Sähkö Oy | 10 | 0.30 | 0.13 |
| Fennia Life | 6 | 0.18 | 0.08 |
| Elo Mutual Pension Insurance | 1 | 0.03 | 0.01 |
| OP Insurance Ltd | 1 | 0.03 | 0.01 |
| The State Pension Fund | 1 | 0.03 | 0.01 |
| **Total** | **3,325** | **100.00** | **100.00** |

The company's share capital is EUR 55,922,485.55. Fingrid shares are divided into Serias A shares and Series B shares. The number of Series A shares is 2,078 and the number of Series B shares is 1,247.

The maximum number of shares is 13,300, as in 2015. The shares have no par value.

Series A shares confer three votes each at the Annual General Meeting and Series B shares one vote each. When electing members of the Board of Directors, Series A shares confer 10 votes each at the Annual General Meeting and Series B shares one vote each.

Series B shares have the right before Series A shares to obtain the annual minimum dividend specified below from the funds available for profit distribution. If the annual minimum dividend cannot be distributed in some year, the shares confer a right to receive the undistributed amount from the funds available for profit distribution in the subsequent years; however, such that Series B shares have the right over Series A shares to receive the annual minimum dividend and the undistributed amount. Series B shares have no right to receive any other dividend.

**Fingrid Oyj's Annual General Meeting decides on the annual dividend.**
Eighty-two (82) per cent of the dividends to be distributed for each financial year is distributed for all Series A shares and eighteen (18) per cent for all Series B shares, however such that EUR twenty (20) million of the dividends to be distributed for each financial year is first distributed for all Series B shares. If the above-mentioned EUR twenty (20) million minimum amount for the financial period is not distributed (all or in part) for Series B shares in a financial period, Series B shares confer the right to receive the undistributed minimum amount in question (or the accumulated undistributed minimum amount accrued during such financial periods) in the next profit distribution, in any disbursements paid out, or in any other distribution of assets prior to any other dividends, disbursements or asset distribution until the undistributed minimum amount has been distributed in full for Series B shares. There are no non-controlling interests.

Equity is composed of the share capital, share premium account, revaluation reserve (incl. hedging and fair value reserves), translation reserve, and retained earnings. The hedging reserve includes changes in the fair value of hedging instruments for loss power. The translation reserve includes translation differences in the net capital investments of associated companies in accordance with the equity method of accounting. The profit for the financial year is posted in retained earnings.

**Share premium account**
The share premium account includes the difference between the counter value of the shares and the value obtained. The share premium account consists of restricted equity as referred to in the Finnish Limited Liability Companies Act. The share capital can be increased by transferring funds from the share premium account. The share premium account can be decreased in order to cover losses or, under certain conditions, it can be returned to the owners.

**Revaluation reserve**
The revaluation reserves include changes in the fair value of derivative instruments used for hedging cash flow (hedging reserve) and changes in the fair value (fair value reserve) of available-for-sale investments (publicly quoted and unquoted securities).The company discontinued hedge accounting in 2014 and changes in the fair value of derivatives are no longer transferred to the hedging reserve. Changes in the value of the hedging reserve are caused solely by the dissolution of the previously recorded fair value and its recognition in the income statement, EUR 11.6 million annually in 2015 and 2016, taking into account the deferred tax rate (20%). The changes in the fair value reserve are due to a change in the fair value of available-for-sale shares minus taxes (20%). In 2016, the company gave up a timeshare for EUR 152,000.

Changes to equity funds during the financial year are presented in the statement of changes in equity.

## 21. SHAREHOLDERS BY CATEGORY

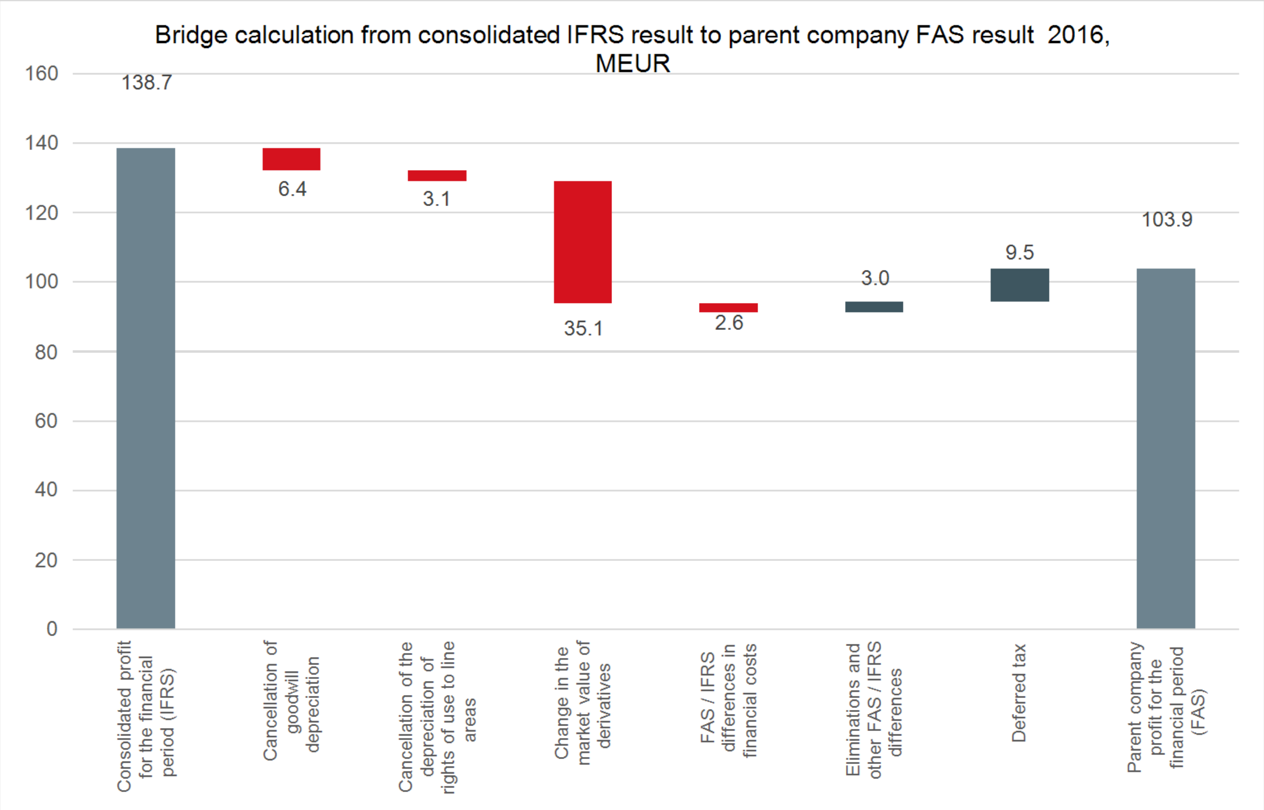
| **The share capital is broken down as follows** | Number of shares | Of all shares % | Of votes % |
|---|---|---|---|
| Series A shares | 2,078 | 62.50 | 83.33 |
| Series B shares | 1,247 | 37.50 | 16.67 |
| **Total** | **3,325** | **100.00** | **100.00** |

The purpose of Fingrid's dividend policy is to ensure that the shareholders receive a reasonable return on their investment while also maintaining the company's financial position such that it enables long-term implementation of the strategy and supports operational flexibility.

Fingrid Oyj's distributable funds in the financial statements total EUR 175,954,253.06. In 2016, EUR 90.0 million was paid in dividends (EUR 65.0). Since the closing date, the Board of Directors has proposed that a dividend of EUR 37,536.09 for Series A shares and EUR 16,038.49 for Series B shares be distributed per share (2015: EUR 33,686.24 for Series A shares; EUR 16,038.49 for Series B shares), totalling EUR 98.0 (90.0) million.

The distributable funds are calculated on the basis of the parent company's equity. Dividends are paid based on the distributable funds of the parent company.

Fingrid updated its dividend policy in 2014. The guiding principle for Fingrid's dividend policy is to distribute substantially all of the parent company profit as dividend. When making the decision, however, the economic conditions, the company's near term investment and development needs as well as any prevailing financial targets of the company are always taken into account. The graph below indicates the differences between the consolidated IFRS income statement and the parent company's FAS income statement.




**Accounting principles**

**Dividend distribution**
The Board of Directors' proposal concerning dividend distribution is not recorded in the financial statements. The liability and equity is recognised only after a decision is made by the Annual General Meeting of Shareholders.

## 5.6 Summary of financial assets, financial liabilities and derivatives

The carrying amounts of Fingrid's financial assets and liabilities by measurement category are as follows:

**22. CARRYING AMOUNTS OF FINANCIAL ASSETS AND LIABILITIES BY MEASUREMENT CATEGORY, €1,000**

| | Assets/ liabilities recognised in income statement at fair value | Available-for-sale financial assets | Financial assets/liabilities measured at amortised cost | Total | Note |
|---|---|---|---|---|---|
| **Balance sheet item 31 Dec 2016** | | | | | |
| **Non-current financial assets** | | | | | |
| Available-for-sale investments | | 101 | | 101 | |
| Interest rate and currency derivatives | 29,403 | | | 29,403 | 23 |
| Electricity derivatives | 254 | | | 254 | 23 |
| Loan receivables | | | 4,000 | 4,000 | |
| **Current financial assets** | | | | | |
| Interest rate and currency derivatives | 1,475 | | | 1,475 | 23 |
| Electricity derivatives | 1,385 | | | 1,385 | 23 |
| Trade receivables and other receivables | | | 79,887 | 79,887 | 3 |
| Financial assets recognised in the income statement at fair value | 57,790 | | | 57,790 | 20 |
| Cash in hand and cash equivalents | | | 21,939 | 21,939 | 19 |
| **Financial assets total:** | **90,308** | **101** | **105,826** | **196,235** | |
| **Non-current financial liabilities:** | | | | | |
| Borrowings | | | 842,866 | 842,866 | 14 |
| Interest rate and currency derivatives | 13,196 | | | 13,196 | 23 |
| Electricity derivatives | 5,371 | | | 5,371 | 23 |
| **Current financial liabilities:** | | | | | |
| Borrowings | | | 264,865 | 264,865 | 14 |
| Interest rate and currency derivatives | 5,072 | | | 5,072 | 23 |
| Electricity derivatives | 2,786 | | | 2,786 | 23 |
| Trade payables and other liabilities | | | 39,666 | 39,666 | 7 |
| **Financial liabilities total** | **26,426** | | **1,147,397** | **1,173,823** | |

| | Assets/ liabilities recognised in income statement at fair value | Available-for-sale financial assets | Financial assets/liabilities measured at amortised cost | Total | Note |
|---|---|---|---|---|---|
| Balance sheet item 31 Dec 2015 | | | | | |
| **Non-current financial assets** | | | | | |
| Available-for-sale investments | | 284 | | 284 | |
| Interest rate and currency derivatives | 32,148 | | | 32,148 | 23 |
| Electricity derivatives | | | | | 23 |
| Loan receivables | | | 2,500 | 2,500 | |
| **Current financial assets** | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Interest rate and currency derivatives | 3,353 | | | 3,353 | 23 |
| Electricity derivatives | | | | | 23 |
| Trade receivables and other receivables | | | 63,701 | 63,701 | 3 |
| Financial assets recognised in the income statement at fair value | 93,451 | | | 93,451 | 20 |
| Cash in hand and cash equivalents | | | 23,099 | 23,099 | 19 |
| **Financial assets total:** | **128,953** | **284** | **89,300** | **218,537** | |
| **Non-current financial liabilities:** | | | | | |
| Borrowings | | | 907,232 | 907,232 | 14 |
| Interest rate and currency derivatives | 21,820 | | | 21,820 | 23 |
| Electricity derivatives | 25,132 | | | 25,132 | 23 |
| **Current financial liabilities:** | | | | | |
| Borrowings | | | 236,217 | 236,217 | 14 |
| Interest rate and currency derivatives | 6,403 | | | 6,403 | 23 |
| Electricity derivatives | 23,928 | | | 23,928 | 23 |
| Trade payables and other liabilities | | | 30,214 | 30,214 | 7 |
| **Financial liabilities total** | **77,283** | | **1,173,663** | **1,250,946** | |

Fingrid uses derivatives for hedging purposes only, even though the company does not apply hedge accounting. Bilateral derivative transactions require a valid International Swap Dealers Association's (ISDA) Master Agreement with the counterparty. The derivatives falling under the scope of an ISDA agreement can be netted in conditional circumstances such as default or bankruptcy. The company had derivatives that can be netted as per ISDA at a total fair value of EUR 9,8 million in 2016 (12,3). Fingrid uses collaterals to cover the market value of the loss power price hedge derivatives. The management of electricity price risk is described in chapter 3.7. The hedging of interest rate and foreign exchange risks is described in chapter 5.3.

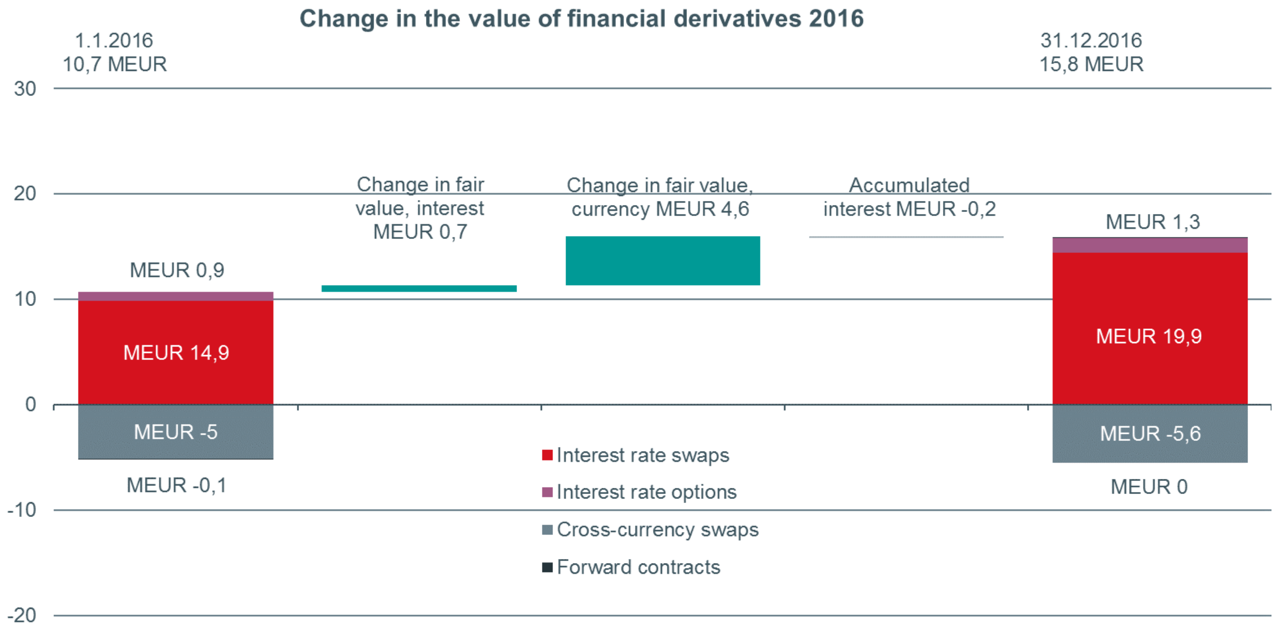
The company's derivative transactions consist of interest rate and cross currency swaps hedging the loan portfolio, and purchased cap options to hedge the loan portfolio from a sudden change in short-term interest rates. Forward contracts are used to fix the exchange rate for non-euro-denominated contracts related to business operations.The company uses electricity futures to hedge the price risk of future loss power purchases.

The table below includes all of the Group's derivatives.

### 23. DERIVATIVE INSTRUMENTS, € 1,000

| | 2016 | | | | 2015 | | | | Hierarchy level |
|---|---|---|---|---|---|---|---|---|---|
| **Interest rate and currency derivatives** | Fair value pos. 31.12.16 | Fair value neg. 31.12.16 | Net fair value 31.12.16 | Nominal value 31.12.16 | Fair value pos. 31.12.15 | Fair value neg. 31.12.15 | Net fair value 31.12.15 | Nominal value 31.12.15 | |
| Cross-currency swaps | 6,930 | -12,487 | -5,558 | 196,396 | 15,286 | -20,297 | -5,011 | 341,205 | Level 2 |
| Forward contracts | 46 | | 46 | 2,271 | | -88 | -88 | 4,505 | Level 2 |
| Interest rate swaps | 26,667 | -6,725 | 19,943 | 360,000 | 24,348 | -9,442 | 14,905 | 430,000 | Level 2 |
| Bought interest rate options | 1,350 | | 1,350 | 518,820 | 862 | | 862 | 358,820 | Level 2 |
| **Total** | **34,993** | **-19,212** | **15,781** | **1,077,487** | **40,496** | **-29,827** | **10,668** | **1,134,531** | |
| **Electricity derivatives** | Fair value pos. 31.12.16 | Fair value neg. 31.12.16 | Net fair value 31.12.16 | Volume TWh 31.12.16 | Fair value pos. 31.12.15 | Fair value neg. 31.12.15 | Net fair value 31.12.15 | Volume TWh 31.12.15 | |
| Electricity forward contracts. NASDAQ OMX Commodities, not designated as hedge accounting | 1,640 | -8,157 | -6,518 | 4.07 | | -49,060 | -49,060 | 4.22 | Level 1 |
| **Total** | **1,640** | **-8,157** | **-6,518** | **4.07** | | **-49,060** | **-49,060** | **4.22** | |

The net fair value of derivatives indicates the realised profit/loss if they had been closed on the last trading day of 2016. The net fair value cannot be used for deriving the net derivative liabilities or receivables in the balance sheet, as accrued interest is taken into account here.
The graph below indicates the change of value of all of the company's currency and interest rate derivatives on 2016.



**Accounting principles**

**Derivative instruments**
Derivatives are initially recognised at fair value according to the date the derivative contract is entered into, and are subsequently re-measured at fair value. Changes in the fair value of derivatives are recognised in profit and loss. The company uses derivative contracts only for hedging purposes according to the Corporate Finance and Financing principles and the loss energy hedging policy.

**Electricity derivatives**
The company enters into electricity derivative contracts in order to hedge the price risk of electricity purchases in accordance with the loss energy forecast. Fingrid discontinued hedge accounting for electricity derivatives at the beginning of 2014. As a result, the entire change in the fair value of electricity derivatives was recorded and will continue to be recorded in the income statement. The hedge fund in the balance sheet was dismantled in the income statement during 2015 and 2016 in fixed instalments such that it decreases the result by EUR 11.6 million.

**Interest and currency derivatives**
The company enters into derivative contracts in order to hedge financial risks (interest rate and foreign exchange exposure) in compliance with the Corporate Finance and Financing Principles approved by the Board of Directors. Fingrid does not apply hedge accounting to these derivatives. A derivative asset or liability is recognised at its original fair value. Derivatives are measured at fair value at the closing date, and the change in fair value is recognised in the income statement under finance income and costs.

The fair values of derivatives at the closing date are based on different calculation methods. Foreign exchange forwards have been meas-ured at the forward prices. Interest rate and currency swaps have been measured at the present value on the basis of the yield curve of each currency. Interest rate options have been valued using generally accepted option pricing models in the market.

**Adoption of the IFRS 9 standard, effective 1 January 2018**
IFRS 9 Financial instruments replaces IAS 39 and brings changes to how financial assets are recognised and measured, the application of impairment and hedge accounting principles.
- Bonds that are financial assets are measured at amortised cost, but only when the business model target is to hold on to these investments and collect all the cash flows based on the contract, and when the instrument's contract-based cash flows consist exclusively of capital and interest payments. All other bonds, equity investments and structured investment products that are financial assets are recognised at fair value.
- Changes in the fair value of all financial assets are recognised in the income statement. The exception is changes in the fair value of equity investments, which are not held for trading: they can be recognised either in the income statement or in equity funds (in which case they are not transferred later to the income statement). In addition, some bonds that belong under financial assets may be recognised at fair value through other comprehensive income, depending on the company's business model.
- The impairment of financial assets must be determined using the expected loss impairment model.
- The new hedge accounting rules bring hedge accounting closer to general risk management practices.

Company management has begun an analysis of the impacts of the IFRS 9 standard. The company's current opinion is that the standard will not have a significant impact on the financial statement figures, since the company's financial assets have largely been recognised in line with the IFRS 9 standard. The company does not have a significant credit risk, nor are any essential credit losses expected to be entered in future. In addition, management's current opinion is that the company will not begin applying hedge accounting when the IFRS 9 standard enters into effect. The new standard also contains broader notes requirements than before, and changes will be made to the method of presentation.

# 6 OTHER INFORMATION

- **This chapter contains the rest of the notes.**
- **First comes a joint presentation of the Group companies and insider data.**
- **After that, other notes follow in the same sequence they appear in the income statement and balance sheet.**

## 6.1 Group companies and related parties

The Group has two Fingridi's wholly-owned subsidiaries, Finextra Oy and Fingrid Datahub Oy.

Finextra Oy is a subsidiary wholly-owned by Fingrid Oyj established to handle the statutory public service obligations not included in actual grid operations or transmission system responsibility. These tasks include peak load capacity services and guarantee-of-origin services for electricity. Through Finextra, the cost of public service tasks is separated from the cost of grid maintenance, which makes it possible to ensure the unequivocal transparency of the different operations. The Energy Authority oversees Finextra's operations and reasonable returns from its services. The aim of Finextra is to carry out the assigned duties cost effectively, making use of joint resources. The allowable annual return on peak load capacity services is EUR 75,000. The allowed return on guarantee-of-origin services for the regulatory period ending on 31 December 2016 was approximately EUR 100,000. The realised return during the regulatory period consisted of a surplus of roughly EUR 200,000.

Fingrid Datahub Oy is a subsidiary wholly-owned by Fingrid Oyj established in 2016 to handle the operations linked to the Datahub. Key duties of the subsidiary is to offer and develop centralised electricity market information exchange services and other related services to the market parties and to govern the register information required by the electricity markets. The Datahub is a centralised information exchange system for retail markets that stores data from all of Finland's 3.5 million places of electricity consumption. The information stored in the Datahub will be utilised by around 100 electricity sales companies and more than 80 distribution network operators to provide services to the consumers of electricity. Fingrid started the Datahub project during the spring of 2015.

The consolidated associated companies are Nord Pool AS (ownership 18.8%) and eSett Oy (ownership 33.3%). The Group has no joint ventures.

The investments in associated companies included in the balance sheet are composed of the following:

| **24. INVESTMENTS IN ASSOCIATED COMPANIES, € 1,000** | **2016** | **2015** |
|---|---|---|
| Interests in associated companies | 10,158 | 9,888 |
| Loan receivables from associated companies | 4,000 | 2,500 |
| **Total** | **14,158** | **12,388** |

Receivable from an associated company consists of a loan receivable from eSett Oy. The main terms and conditions are as follows:

**Associated company loan:**
The loan capital is EUR 2.5 (2.5) million and the annual interest rate is 1.5 per cent, on top of the 12-month Euribor. The loan repayment is ten equal instalments every six months beginning one year from when eSett begins its operations. The amount of the loan capital is one third of the total loan that eSett's owners have granted the company proportionate to their holdings. The terms of the loan are the same as the loan terms for eSett's other owners.

**Capital loan:**
The loan capital is EUR 1.5 (0) million. The fixed annual interest rate is 3.0 per cent. The loan repayment is ten equal instalments every six months beginning one year from when eSett begins its operations. The loan repayment is three equal instalments once a year beginning one year from when eSett begins its operations. The repayment is subordinated to all of the company's other liabilities and to the Limited Liability Companies Act's terms to be applied to capital loans.

**Financial summary of associated companies, €1,000**

| | Non-current | | Current assets | | | | | |
|---|---|---|---|---|---|---|---|---|
| **2016** | Assets | Liabilities | Assets | Liabilities | Turnover | Profit/loss | Dividends received during the financial period | Ownership (%) |
| Nord Pool AS | 2,465 | | 121,162 | 94,420 | 26,965 | 7,103 | 560 | 18.8 |
| eSett Oy | 7,507 | 12,000 | 5,748 | 657 | | -2,392 | | 33.3 |

| 2015 | Non-current Assets | Liabilities | Current assets Assets | Liabilities | Turnover | Profit/loss | Dividends received during the financial period | Ownership (%) |
|---|---|---|---|---|---|---|---|---|
| Nord Pool AS | 3,489 | | 66,698 | 40,194 | 25,851 | 6,422 | 551 | 18.8 |
| eSett Oy | 5,364 | 7,500 | 5,474 | 328 | | -2,141 | | 33.3 |

The Group's associated companies indicated in the tables are treated in the consolidated financial statements using the equity method of accounting.

The Nordic Balance Settlement (NBS) will be introduced in Finland on 1 May 2017. When the NBS begins its operations, management of the balance settlement will transfer from Fingrid's Balance Service Unit to eSett Oy.

The company has an equity investment in Norwegian kroner in an associated company, which results in exposure to translation risk. The translation risk is not significant and the company does not hedge against this risk.

| **Equity investments in associated companies, € 1,000** | **2016** | **2015** |
|---|---|---|
| Cost at 1 Jan | 9,888 | 10,515 |
| Decreases | | -214 |
| Share of profit | 511 | 447 |
| Translation reserve | 318 | -309 |
| Dividends | -560 | -551 |
| **Carrying amount 31 Dec** | **10,158** | **9,888** |
| Carrying amount of associated companies includes goodwill 31 Dec. | 3,245 | 3,245 |

There are no material temporary differences related to associated companies on which deferred tax assets or liabilities have been recognised.

The subsidiaries, associated companies and parent company (Fingrid Oyj) described above are related parties of the Group. In addition, the shareholder entities mentioned in chapter 5.5 and the top management and its related parties are also considered related parties.

The top management is composed of the Board of Directors, the President & CEO, and the executive management group. Other related party transactions include transactions concluded with entities in which the State of Finland has a holding in excess of 50 per cent.

The company has not lent money to the top management, and the company has no transactions with the top management.

Business with related parties is conducted at market prices.

| **Transactions with associated companies, € 1,000** | **2016** | **2015** |
|---|---|---|
| Sales | 473 | 809 |
| Expense adjustments | 48 | 30 |
| Purchases | 39,625 | 39,659 |
| Receivables | 343 | 2,973 |
| Liabilities | 152 | 2 |
| Loan receivables | 4,000 | 2,500 |

| **Transactions with owners, € 1,000** | **2016** | **2015** |
|---|---|---|
| **Owners:** | | |
| Purchases | 5,095 | 6,303 |
| Liabilities | 1 | 0 |

**Other related parties:**

| | | |
|---|---|---|
| Sales | 31,613 | 28,759 |
| Purchases | 51,044 | 69,538 |
| Receivables | 2,457 | 845 |
| Liabilities | 2,526 | 2,279 |

**Accounting principles**

**Subsidiaries**

The subsidiaries encompass all companies over which the Group has control (including structured entities). The Group is considered to have control over a company if the Group's holding results in exposure to variable returns or if the Group is entitled to variable returns and it can influence these returns by exercising its control over the company. The subsidiaries are consolidated into the consolidated financial statements starting from the day on which the Group gained control over the company. Consolidation is discontinued once the control ceases to exist.

Consolidation of operations is carried out using acquisition cost method.

Transactions, receivables and liabilities between Group companies and any unrealised profits from internal transactions are eliminated. Unrealised losses are also eliminated unless the transaction indicates an impairment of the disposed asset. If necessary, the financial statements of the subsidiaries have been adjusted to correspond to the accounting principles applied by the Group.

**Associated companies**

The associated companies include all companies over which **the** Group has significant influence but no control or joint control. This is generally based on a shareholding amounting to 20–50% of the votes. Investments in associated companies are initially recognised at the acquisition cost and subsequently handled using the equity method. According to the equity method, investments are initially recorded at the acquisition cost and this is subsequently adjusted by recognising the Group's share of the profit or loss after the time of acquisition in the income statement and the Group's share of any changes in the investment object's other comprehensive income in other comprehensive income. Any dividends received or to be received from the associated companies and joint ventures are deducted from the investment's carrying amount.

If the Group's share of the losses of an investment recognised according to the equity method equals or exceeds the Group's holding in the company in question, including any other non-current receivables without collaterals, the Group will not recognise any additional losses unless it has obligations or it has made payments on behalf of the company.

A share corresponding to the Group's ownership interest is eliminated from the unrealised profits between the Group and its associated companies and joint ventures. Any unrealised losses are also eliminated unless the transaction indicates an impairment of the disposed asset. If necessary, the accounting principles applied by the investments to be recognised according to the equity method have been adjusted to correspond to the principles applied by the Group.

## 6.2 Other notes

**EMISSION RIGHTS**

Fingrid's reserve power plants are subject to an environmental permit and covered by the EU's emissions trading scheme. A total of 6,634 (11,141) units ($tCO_2$) of emission allowances were returned, all of which consisted of acquired emission rights units. Fingrid has not been granted free-of-charge emission rights for the emissions trade period 2013–2020. No emissions rights were purchased in 2016.Emissions trading had minor financial significance for Fingrid. The use of emission rights had no impact on the financial result in 2016. $CO_2$ emissions included in emissions trading totalled 10,326 tonnes in 2016 (6,697). As of 31 December 2016, the balance sheet included EUR 0.4 million (0.5) in emission rights.

**Accounting principles**

**Emission rights**

Emission rights acquired free of charge are recognised in intangible assets at their nominal value, and purchased emission rights at their acquisition cost. A liability is recognised for emission rights to be returned. If the Group has sufficient emission rights to cover the return obligations, the liability is recognised at the carrying amount corresponding to the emission rights in question. If there are not sufficient emission rights to cover the return obligations, the liability is recognised at the market value of the emission rights in question. No depreciation is recognised on emission rights. They are derecognised in the balance sheet at the time of transfer when the actual emissions have been ascertained. The expense resulting from the liability is recognised in the income statement under the expense item 'Materials and services'. Capital gains from emissions rights are recognised under other operating income.

**25. PROVISIONS, € 1,000**

| | 2016 | 2015 |
|---|---|---|

| | | |
|---|---|---|
| Provisions for creosote-impregnated towers 1 Jan | 1,668 | 1,735 |
| Provisions used | -187 | -67 |
| **Provisions 31 Dec** | **1,481** | **1,668** |

**Accounting principles**

**Provisions**
A provision is recorded when the Group has a legal or factual obligation based on an earlier event and it is likely that fulfilling the obligation will require a payment, and the amount of the obligation can be estimated reliably.
The provisions are valued at the present value of the costs required to cover the obligation. The discounting factor used in calculating the present value is chosen so that it reflects the market view of the time value of money at the assessment date and the risks pertaining to the obligation.

### 26. COMMITMENTS AND CONTINGENT LIABILITIES, €1,000

| | 2016 | 2015 |
|---|---|---|
| **Pledges** | | |
| Pledge covering property lease agreements | 9 | 9 |
| Pledge covering customs credit account | 280 | 280 |
| Pledge covering electricity exchange purchases | | 863 |
| | **289** | **1,151** |
| **Other financial commitments** | | |
| Counterguarantee in favour of an associated company | | |
| Rent security deposit, guarantee | 38 | 38 |
| Credit facility commitment fee and commitment fee: | | |
| Commitment fee for the next year | 395 | 326 |
| Commitment fee for subsequent years | 1,154 | 1,154 |
| | **1,587** | **1,518** |
| **Unrecognised investment commitments** | **84,572** | **124,314** |

The investment commitments consist of agreements signed by the company to carry out grid construction projects.

**LEGAL PROCEEDINGS AND PROCEEDIGNS BY AUTHORITIES**
A lawsuit was initiated against Fingrid in December 2016, demanding non-specified damages due to an alleged breach of contract. The alleged injury is continuous and the claim amounted to EUR 135,000 by the time the lawsuit was initiated. Fingrid has contested the claims presented in the lawsuit. The case is currently before the court. In Fingrid’s view, the legal proceedings are not likely to have a substantial impact on the company’s financial result or financial position. Thus no provisions were recognised in the financial statements in relation to these proceedings.

There are no other ongoing legal proceedings or proceedings by authorities that would have a material impact on Fingrid's business.

**EVENTS AFTER THE CLOSING DATE**
The Group management is not aware of such significant events after the closing date that would affect the financial statements.

**GROUP’S CONTACT INFORMATION AND APPROVAL OF THE FINANCIAL STATEMENTS**
Fingrid Oyj is a Finnish public limited liability company incorporated under the Finnish Companies Act. Fingrid’s consolidated financial statements have been drawn up in accordance with the International Financial Reporting Standards (IFRS) as adopted by the EU. Fingrid’s registered office is in Helsinki at the address P.O. Box 530 (Läkkisepäntie 21, 00620, Helsinki), 00101 Helsinki.

A copy of the consolidated financial statements is available on the website fingrid.fi or at Fingrid Oyj's head office.

The amounts in the financial statements are expressed in thousands of euros and are based on the original acquisition costs, unless otherwise stated in the accounting principles or notes.

Fingrid Oyj’s Board of Directors has accepted the publication of these financial statements in its meeting on 17 February 2017. In accordance with the Finnish Companies Act, the shareholders have the opportunity to adopt or reject the financial statements in the shareholders’ meeting held after their publication. The shareholders’ meeting can also amend the financial statements.

# 7 Parent company financial statements (FAS)

## 7.1 Parent company income statement

| | Notes | Jan-Dec/2016 € | Jan-Dec/2015 € |
|---|---|---|---|
| **TURNOVER** | 2 | **581,409,910.01** | **592,403,122.38** |
| Other operating income | 3 | 12,693,378.54 | 5,358,153.35 |
| Materials and services | 4 | -241,754,851.27 | -233,431,910.68 |
| Personnel costs | 5 | -28,597,902.39 | -25,804,349.63 |
| Depreciation and amortisation expense | 6 | -108,266,566.81 | -103,322,929.47 |
| Other operating expenses | 7,8 | -65,773,725.99 | -57,903,667.10 |
| **OPERATING PROFIT** | | **149,710,242.09** | **177,298,418.85** |
| Finance income and costs | 9 | -20,121,491.84 | -22,835,249.11 |
| **PROFIT BEFORE EXTRAORDINARY ITEMS** | | **129,588,750.25** | **154,463,169.74** |
| **PROFIT BEFORE APPROPRIATIONS AND TAXES** | | **129,588,750.25** | **154,463,169.74** |
| Income taxes | 10 | -25,722,449.53 | -30,721,273.94 |
| **PROFIT FOR THE FINANCIAL YEAR** | | **103,866,300.72** | **123,741,895.80** |

Notes are an integral part of the financial statements.

## 7.2 Parent company balance sheet

| ASSETS | Notes | 31 Dec 2016 € | 31 Dec 2015 € |
|---|---|---|---|
| **Intangible assets:** | | | |
| Goodwill | 11 | 4,288,792.08 | 10,721,980.26 |
| Other intangible assets | 12 | 79,770,462.84 | 82,342,061.28 |
| | | **84,059,254.92** | **93,064,041.54** |
| **Tangible assets** | 13 | | |
| Land and water areas | | 15,700,654.61 | 15,348,845.85 |
| Buildings and structures | | 193,639,539.82 | 167,200,800.50 |
| Machinery and equipment | | 576,316,710.23 | 565,543,070.37 |
| Transmission lines | | 808,874,948.90 | 772,984,715.15 |
| Other property, plant and equipment | | 117,516.35 | 117,516.35 |
| Prepayments and purchases in progress | | 59,404,402.54 | 120,815,913.42 |
| | | **1,654,053,772.45** | **1,642,010,861.64** |
| **Investments:** | 14 | | |
| Interests in Group companies | | 507,063.77 | 504,563.77 |
| Interests in associated companies | | 8,587,578.95 | 8,587,578.95 |
| Other shares and interests | | 1,965,313.45 | 1,885,466.31 |
| | | **11,059,956.17** | **10,977,609.03** |
| **TOTAL NON-CURRENT ASSETS** | | **1,749,172,983.54** | **1,746,052,512.21** |
| **CURRENT ASSETS** | | | |
| **Inventories** | 15 | **12,269,117.70** | **12,664,970.40** |
| **Receivables** | | | |
| **Non-current** | | | |
| Loan receivables from Group companies | 16 | 2,807,700.00 | |
| Loan receivables from associated companies | 16 | 4,000,000.00 | 2,500,000.00 |
| Other receivables | 16 | | |
| | | **6,807,700.00** | **2,500,000.00** |
| **Current** | | | |
| Trade receivables | | 70,674,359.79 | 53,462,739.39 |
| Receivables from Group companies | 17 | 826,575.41 | 209,433.70 |
| Receivables from associated companies | 18 | 143,749.03 | 47,937.43 |
| Other receivables | | 1,298,105.32 | 1,216,188.46 |
| Prepayments and accrued income | 19,20 | 9,198,988.07 | 14,491,440.95 |
| | | **82,141,777.62** | **69,427,739.93** |
| **Financial securities** | 21 | **57,393,757.42** | **93,258,506.42** |
| **Cash in hand and bank receivables** | 21 | **21,939,069.16** | **23,099,085.95** |
| **TOTAL CURRENT ASSETS** | | **180,551,421.90** | **200,950,302.70** |
| **TOTAL ASSETS** | | **1,929,724,405.44** | **1,947,002,814.91** |

Notes are an integral part of the financial statement

| SHAREHOLDERS' EQUITY AND LIABILITIES | Notes | 31 Dec 2016 € | 31 Dec 2015 € |
|---|---|---|---|
| **EQUITY** | 22 | | |
| Share capital | | 55,922,485.55 | 55,922,485.55 |
| Share premium account | | 55,922,485.55 | 55,922,485.55 |
| Profit from previous financial years | | 72,087,952.34 | 38,346,060.29 |
| Profit for the financial year | | 103,866,300.72 | 123,741,895.80 |
| **TOTAL SHAREHOLDERS' EQUITY** | | **287,799,224.16** | **273,932,927.19** |
| **ACCUMULATED APPROPRIATIONS** | 23 | **448,896,757.27** | **448,896,757.27** |
| **PROVISIONS FOR LIABILITIES AND CHARGES** | 30 | **1,480,946.78** | **1,667,546.78** |
| **LIABILITIES** | | | |
| **Non-current liabilities** | | | |
| Bonds | 24,25 | 698,544,173.57 | 746,396,266.02 |
| Loans from financial institutions | | 151,203,463.20 | 172,865,800.86 |
| | | **849,747,636.77** | **919,262,066.88** |
| **CURRENT LIABILITIES** | | | |
| Bonds | 24 | 127,852,092.56 | 144,809,226.23 |
| Loans from financial institutions | | 21,662,337.66 | 20,709,956.71 |
| Trade payables | | 24,801,601.35 | 14,617,272.60 |
| Liabilities to Group companies | 26 | 1,102,734.71 | 502,586.32 |
| Liabilities to associated companies | 27 | 151,737.02 | 2,057.00 |
| Other liabilities | 28 | 136,671,358.46 | 86,432,083.11 |
| Accruals | 29 | 29,557,978.70 | 36,170,334.82 |
| | | **341,799,840.46** | **303,243,516.79** |
| **TOTAL LIABILITIES** | | **1,191,547,477.23** | **1,222,505,583.67** |
| **TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES** | | **1,929,724,405.44** | **1,947,002,814.91** |

Notes are an integral part of the financial statements.

## 7.3 Parent company cash flow statement

| | Note | 1 Jan - 31 Dec, 2016 € | 1 Jan - 31 Dec, 2015 € |
|---|---|---|---|
| **Cash flow from operating activities:** | | | |
| Profit for the financial year | 22 | 103,866,300.72 | 123,741,895.80 |
| Adjustments: | | | |
| Business transactions not involving a payment transaction | 33 | 104,488,603.07 | 101,194,099.56 |
| Interest and other finance costs | | 28,312,997.36 | 36,664,709.62 |
| Interest income | | -7,332,443.33 | -13,273,942.62 |
| Dividend income | | -859,062.19 | -555,517.89 |
| Taxes | | 25,722,449.53 | 30,721,273.94 |
| Changes in working capital: | | | |
| Change in trade receivables and other receivables | | -13,573,931.59 | -12,005,406.78 |
| Change in inventories | | 395,852.70 | 177,962.49 |
| Change in trade payables and other liabilities | | 7,437,144.67 | -7,952,730.92 |
| Congestion income | | 39,864,046.47 | |
| Change in provisions | | -186,600.00 | -17,500.00 |
| Interest paid | | -22,481,770.87 | -25,423,150.53 |
| Interest received | | 436,541.27 | 820,524.86 |
| Taxes paid | 10 | -33,782,121.37 | -20,469,032.40 |
| Net cash flow from operating activities | | 232,308,006.44 | 213,623,185.13 |
| **Cash flow from investing activities:** | | | |
| Purchase of property, plant and equipment | 13 | -138,768,010.88 | -151,451,793.93 |
| Purchase of intangible assets | 12 | -3,284,749.24 | -1,812,888.00 |
| Purchase of other assets | 14 | -82,347.14 | -414,196.31 |
| Proceeds from sale of other assets | 14 | 152,000.00 | 500,000.00 |
| Proceeds from sale of property, plant and equipment | 13 | 5,885,200.00 | 5,065,609.18 |
| Loans granted | | -4,300,000.00 | -900,000.00 |
| Dividends received | 9 | 859,062.19 | 555,517.89 |
| Contributions received | | | 15,000,000.00 |
| Net cash flow from investing activities | | -139,538,845.07 | -133,457,751.17 |
| **Cash flow from financing activities:** | | | |
| Proceeds from current financing (liabilities) | | 240,118,091.67 | 285,317,516.75 |
| Payments of current financing (liabilities) | | -195,087,574.26 | -366,163,563.46 |
| Proceeds from non-current financing (liabilities) | | 80,000,000.00 | 107,424,078.03 |
| Payments of non-current financing (liabilities) | | -164,824,440.82 | -104,220,179.01 |
| Dividends paid | 22 | -90,000,003.75 | -65,000,001.35 |
| Net cash flow from financing activities | | -129,793,927.16 | -142,642,149.04 |
| **Change in cash and cash equivalents and financial assets** | | -37,024,765.79 | **-62,476,715.08** |
| **Cash and cash equivalents and financial assets 1 Jan** | | **116,357,592.37** | **178,834,307.45** |
| **Cash and cash equivalents and financial assets 31 Dec** | 21 | **79,332,826.58** | **116,357,592.37** |

Notes are an integral part of the financial statements.

# 7.4 Notes to the financial statements of parent company

## 1. ACCOUNTING PRINCIPLES

Fingrid Oyj's financial statements have been drawn up in accordance with the Finnish Accounting Standards (FAS). The items in the financial statements are valued at original acquisition cost.

**Foreign currency transactions**
Commercial transactions and financial items denominated in foreign currencies are recognised at the foreign exchange mid-rate quoted by the European Central Bank (ECB) at the transaction date. Interest-bearing liabilities and receivables and the derivatives hedging these items are valued at the mid-rate quoted by the ECB at the closing date. Foreign exchange gains and losses on interest-bearing liabilities and receivables, and on the instruments hedging these items, are recognised at maturity under finance income and costs. Foreign exchange rate differences arising from the derivatives used to hedge commercial currency flows are recognised to adjust the corresponding item in the income statement.

**Interest and currency derivatives**
Interest rate and currency swaps, foreign exchange forwards and interest rate options are used, in accordance with the Treasury Policy, to hedge the interest rate and foreign exchange risk, as well as the commercial items, in Fingrid’s balance sheet items. The accounting principles for derivative contracts are the same as for the underlying items. The interest rate items of interest rate and currency swaps and interest rate options are accrued and recognised in the income statement under interest income and costs. The interest portion of forward foreign exchange contracts hedging the interest-bearing liabilities and receivables is accrued over the maturity of the contracts and recognised under finance income and costs. Premiums paid or received on interest rate options are accrued over the hedging period.

**Electricity derivatives**
Fingrid hedges its loss energy purchases by employing forward instruments quoted on the NASDAQ OMX Oslo ASA. There can also be trading in the OTC market in instruments corresponding to Nasdaq OMX Oslo ASA’s financial instruments. The profits and losses arising from these contracts are used to adjust the loss energy purchases in the income statement in the period in which the hedging impacts profit or loss.

**Research and development expenses**
Research and development expenses are treated as annual expenses.

**Valuation of fixed assets**
Fixed assets are capitalised under immediate acquisition cost. Planned straight-line depreciation on the acquisition price is calculated on the basis of the useful life of the fixed asset. Depreciation on fixed assets taken into use during the financial year is calculated on an item-by-item basis from the month of introduction.

The depreciation periods are as follows:

| | |
|---|---|
| Goodwill | 20 years |
| Other non-current expenses: | |
| Rights of use to line areas | 30–40 years |
| Other rights of use according to useful life, maximum | 10 years |
| Computer software | 3 years |
| Buildings and structures | |
| Substation buildings and separate buildings | 40 years |
| Substation structures | 30 years |
| Buildings and structures at gas turbine power plants | 20–40 years |
| Separate structures | 15 years |
| Transmission lines | |
| Transmission lines 400 kV | 40 years |
| Direct current lines | 40 years |
| Transmission lines 110–220 kV | 30 years |
| Creosote-impregnated towers and related disposal costs* | 30 years |
| Aluminium towers of transmission lines (400 kV) | 10 years |
| Optical ground wires | 10–20 years |
| Machinery and equipment | |
| Substation machinery | 10–30 years |
| Gas turbine power plants | 20 years |
| Other machinery and equipment | 3–5 years |

*Disposal costs are discounted at present value and added to the value of the fixed asset and recognised under provisions for liabilities and charges.

Goodwill is depreciated over a 20-year period, since grid operations are a long-term business in which income is accrued over several decades.

**Emission rights**

Emission rights are treated in accordance with the net procedure in conformance with statement 1767/2005 of the Finnish Accounting Board.

**Valuation of inventories**
Inventories are recognised according to the FIFO principle at acquisition cost, or at the lower of replacement cost or probable market price.

**Cash in hand, bank receivables and financial securities**
Cash in hand and bank receivables include cash assets and bank balances. Financial securities include certificates of deposit, commercial papers and investments in short-term money-market funds. Quoted securities and comparable assets are valued at the lower of original acquisition cost or probable market price.

**Interest-bearing liabilities**
Fingrid’s non-current interest-bearing liabilities consist of loans from financial institutions and bonds issued under the Euro Medium Term Note (EMTN) programme. The current interest-bearing liabilities consist of commercial papers issued under the domestic and international programmes and of the current portion of noncurrent borrowings and bonds maturing within a year. The outstanding notes under the programmes are denominated in euros and foreign currencies. Fingrid has both fixed and floating rate debt and debt with interest rate structures. The interest is accrued over the maturity of the debt. The differential of a bond issued over or under par value is accrued over the life of the bond. The arrangement fees of the revolving credit facilities are, as a rule, immediately recognised as an expense, and the commitment fees are recognised as an expense over the maturity of the facility.

**Financial risk management**
The principles applied to the management of financial risks are presented in chapters 5.2 and 5.3 of the Notes to the Consolidated Financial Statements.

**Income taxes**
Taxes include the accrued tax corresponding to the profit for the financial year as well as tax adjustments for previous financial years.

**Deferred taxes**
Deferred tax assets and liabilities are not recorded in the income statement or balance sheet. Information concerning these is presented in the notes.

## 2. TURNOVER BY BUSINESS AREA

The business of Fingrid Oyj comprises entirely transmission grid business with system responsibility. For that reason, there is no distribution of turnover by business area.

| TURNOVER, €1,000 | 2016 | 2015 |
|---|---|---|
| Grid service income | 382,395 | 333,005 |
| Imbalance power sales | 153,881 | 137,127 |
| Cross-border transmission | 24,015 | 11,174 |
| ITC income | 13,199 | 15,298 |
| Estlink congestion income | 0 | 4,180 |
| Nordic congestion income | 0 | 86,762 |
| Income from peak load capacity services | 295 | 273 |
| Income from guarantee-of-origin services | 244 | 458 |
| Other operating income | 7,382 | 4,127 |
| **Total** | **581,410** | **592,403** |

| 3. OTHER OPERATING INCOME, €1,000 | 2016 | 2015 |
|---|---|---|
| Rental income | 922 | 1,196 |
| Capital gains of fixed assets | 3,796 | 2,424 |
| Contributions received | 282 | 199 |
| Congestion income | 6,325 | |
| Other income | 1,368 | 1,539 |
| **Total** | **12,693** | **5,358** |

| 4. MATERIALS AND SERVICES, €1,000 | 2016 | 2015 |
|---|---|---|
| Purchases during the financial year | 170,793 | 154,208 |
| Loss energy purchases | 57,555 | 68,566 |
| Change in inventories, increase (-) or decrease (+) | 396 | 178 |
| Materials and consumables | 228,745 | 222,951 |
| Services | 13,010 | 10,481 |
| **Total** | **241,755** | **233,432** |

| 5. PERSONNEL EXPENSES, €1,000 | 2016 | 2015 |
|---|---|---|
| Salaries and bonuses | 22,735 | 21,320 |
| Pension expenses | 4,433 | 3,518 |
| Other personnel expenses | 1,430 | 967 |
| **Total** | **28,598** | **25,804** |

| Salaries and bonuses of the members of the Board of Directors and President and CEO, €1,000 | 2016 | 2015 |
|---|---|---|
| Juhani Järvi, Chairman (since 6 June 2014) | 34 | 19 |
| Helena Walldén, Chairman (until 6 April 2016) | 11 | 38 |
| Juha Majanen, Vice Chairman (since 22 March 2012) | 23 | 21 |
| Sanna Syri, Member of the Board (since 14 April 2015) | 20 | 13 |

| | | |
|---|---|---|
| Esko Torsti, Member of the Board (since 22 March 2012) | 20 | 18 |
| Anu Hämäläinen, Member of the Board (since 6 April 2016) | 14 | |
| Sirpa Ojala, Member of the Board (until 14 April 2015) | | 5 |
| Jukka Ruusunen, Presiden and CEO | 352 | 324 |

**Number of salaried employees in the company during the financial year:**

| | | |
|---|---|---|
| Personnel, average | 336 | 319 |
| Personnel, 31 Dec | 334 | 315 |

| DEPRECATION ACCORDING TO PLAN, €1,000 | 2016 | 2015 |
|---|---|---|
| Goodwill | 6,433 | 6,433 |
| Other non-current expenses | 5,856 | 5,961 |
| Buildings and structures | 8,100 | 7,303 |
| Machinery and equipment | 50,973 | 47,643 |
| Transmission lines | 36,904 | 35,982 |
| **Total*** | **108,267** | **103,323** |
| Deprecation on the electricity grid (notes 12 and 13) | 88,967 | 94,249 |

## 7. OTHER OPERATING EXPENSES, €1,000

| | 2016 | 2015 |
|---|---|---|
| Contracts, assignments etc. undertaken externally | 53,277 | 45,722 |
| Grid rents | 241 | 229 |
| Other rental expenses | 2,575 | 2,498 |
| Other costs | 9,681 | 9,455 |
| **Total** | 65,774 | 57,904 |

## 8. AUDITORS' FEES, €1,000

| | 2016 | 2015 |
|---|---|---|
| PricewaterhouseCoopers Oy: | | |
| Auditing fee | 61 | 42 |
| Tax consulting | 21 | 16 |
| Assignments referred to in the Auditing Act, Chapter 1, Section 1, Subsection 2 | 3 | |
| Other fees | 60 | 58 |
| **Total** | 142 | 116 |

## 9. FINANCE INCOME AND COSTS, €1,000

| | 2016 | 2015 |
|---|---|---|
| Dividend income from Group companies | 294 | |
| Dividend income from others | 565 | 556 |
| Interest and other finance income from others | 7,332 | 13,274 |
| | 8,192 | 13,829 |
| Interest and other finance costs to others | -28,313 | -36,665 |
| | -28,313 | -36,665 |
| **Total** | -20,121 | -22,835 |

## 10. INCOME TAXES, €1,000

| | 2016 | 2015 |
|---|---|---|
| Income taxes for the financial year | 25,722 | 30,721 |
| **Total** | 25,722 | 30,721 |

The company will pay its income taxes in accordance with the underlying tax rate, with no tax planning

| Deferred tax assets and liabilities, €1,000 | | |
|---|---|---|
| **Deferred tax assets** | | |
| On temporary differences | 296 | 334 |
| | 296 | 334 |
| **Deferred tax liabilities** | | |
| On temporary differences | 242 | 256 |
| On appropriations | 89,779 | 89,779 |
| | 90,021 | 90,035 |
| **Total** | 89,725 | 89,701 |

| 11. GOODWILL, €1,000 | 2016 | 2015 |
|---|---|---|
| Cost at 1 Jan | 128,664 | 128,664 |
| Cost at 31 Dec | 128,664 | 128,664 |
| Accumulated depreciation according to plan 1 Jan | -117,942 | -111,509 |
| Depreciation according to plan 1 Jan–31 Dec | -6,433 | -6,433 |
| **Carrying amount 31 Dec** | **4,289** | **10,722** |
| Accumulated depreciation difference 1 Jan | -10,722 | -17,155 |
| Decrease in depreciation difference reserve 1 Jan–31 Dec | 6,433 | 6,433 |
| **Accumulated depreciation in excess of plan 31 Dec** | **-4,289** | **-10,722** |

| 12. OTHER NON-CURRENT EXPENSES, €1,000 | 2016 | 2015 |
|---|---|---|
| Cost at 1 Jan | 180,861 | 180,215 |
| Increases 1 Jan–31 Dec | 3,548 | 2,576 |
| Decreases 1 Jan–31 Dec | -690 | -1,929 |
| **Cost at 31 Dec** | 183,719 | 180,861 |
| Accumulated depreciation according to plan 1 Jan | -98,519 | -93,724 |
| Decreases, depreciation according to plan 1 Jan–31 Dec | 427 | 1,166 |
| Depreciation according to plan 1 Jan–31 Dec | -5,856 | -5,961 |
| **Carrying amount 31 Dec*** | 79,770 | 82,342 |
| Accumulated depreciation difference 1 Jan | -55,954 | -57,354 |
| Increase in depreciation difference reserve 1 Jan–31 Dec | -737 | -753 |
| Decrease in depreciation difference reserve 1 Jan–31 Dec | 1,496 | 2,154 |
| **Accumulated depreciation in excess of plan 31 Dec** | -55,195 | **-55,954** |

| *Net capital expenditure in electricity grid, €1,000 | 2016 | 2015 |
|---|---|---|
| Carrying amount 31 Dec | 74,378 | 77,101 |
| Carrying amount 1 Jan | -77,101 | -80,742 |
| Depreciation according to plan 1 Jan–31 Dec | 3,941 | 5,050 |

| | | |
|---|---|---|
| Decreases 1 Jan–31 Dec | 263 | 763 |
| **Total** | **1,482** | **2,171** |

| **13. TANGIBLE ASSETS, €1,000** | **2016** | **2015** |
|---|---|---|
| **Land and water areas** | | |
| Cost at 1 Jan | 15,349 | 14,974 |
| Increases 1 Jan–31 Dec | 393 | 442 |
| Decreases 1 Jan–31 Dec | -41 | -67 |
| **Cost at 31 Dec** | **15,701** | **15,349** |
| | | |
| **Buildings and structures** | | |
| Cost at 1 Jan | 218,637 | 200,650 |
| Increases 1 Jan–31 Dec | 34,634 | 18,214 |
| Decreases 1 Jan–31 Dec | -168 | -227 |
| **Cost at 31 Dec** | **253,104** | **218,637** |
| Accumulated depreciation according to plan 1 Jan | -51,436 | -44,192 |
| Decreases, depreciation according to plan 1 Jan–31 Dec | 73 | 59 |
| Depreciation according to plan 1 Jan–31 Dec | -8,100 | -7,303 |
| **Carrying amount 31 Dec** | **193,640** | **167,201** |
| | | |
| Accumulated depreciation difference 1 Jan | -13,534 | -13,590 |
| Increase in depreciation difference reserve 1 Jan–31 Dec | -970 | -852 |
| Decrease in depreciation difference reserve 1 Jan–31 Dec | 925 | 908 |
| **Accumulated depreciation in excess of plan 31 Dec** | **-13,579** | **-13,534** |
| | | |
| **Machinery and equipment** | | |
| Cost at 1 Jan | 1,029,839 | 991,645 |
| Increases 1 Jan–31 Dec | 61,839 | 38,824 |
| Decreases 1 Jan–31 Dec | -100 | -630 |
| **Cost at 31 Dec** | **1,091,578** | **1,029,839** |
| Accumulated depreciation according to plan 1 Jan | -464,296 | -416,959 |
| Decreases, depreciation according to plan 1 Jan–31 Dec | 8 | 306 |
| Depreciation according to plan 1 Jan–31 Dec | -50,973 | -47,643 |
| **Carrying amount 31 Dec** | **576,317** | **565,543** |
| Accumulated depreciation difference 1 Jan | -184,046 | -188,372 |
| Increase in depreciation difference reserve 1 Jan–31 Dec | -782 | -2,012 |
| Decrease in depreciation difference reserve 1 Jan–31 Dec | 7,665 | 6,338 |
| **Accumulated depreciation in excess of plan 31 Dec** | **-177,163** | **-184,046** |
| | | |
| **Transmission lines** | | |
| Cost at 1 Jan | 1,221,808 | 1,197,089 |
| Increases 1 Jan–31 Dec | 74,414 | 30,003 |
| Decreases 1 Jan–31 Dec | -5,565 | -5,283 |

| | | |
|---|---|---|
| **Cost at 31 Dec** | **1,290,658** | **1,221,808** |
| Accumulated depreciation according to plan 1 Jan | -448,824 | -416,065 |
| Decreases, depreciation according to plan 1 Jan–31 Dec | 3,944 | 3,223 |
| Depreciation according to plan 1 Jan–31 Dec | -36,904 | -35,982 |
| **Carrying amount 31 Dec** | **808,875** | **772,985** |
| Accumulated depreciation difference 1 Jan | -369,891 | -357,675 |
| Increase in depreciation difference reserve 1 Jan–31 Dec | -50,934 | -14,391 |
| Decrease in depreciation difference reserve 1 Jan–31 Dec | 36,904 | 2,175 |
| **Accumulated depreciation in excess of plan 31 Dec** | **-383,922** | **-369,891** |
| **Other property, plant and equipment** | | |
| Cost at 1 Jan | 118 | 118 |
| **Cost at 31 Dec** | **118** | **118** |
| **Prepayments and purchases in progress** | | |
| Cost at 1 Jan | 120,816 | 78,687 |
| Increases 1 Jan–31 Dec | 116,534 | 134,335 |
| Transfers to other tangible and intangible assets 1 Jan - 31 Dec | -177,946 | -92,206 |
| **Cost at 31 Dec** | **59,404** | **120,816** |
| **Tangible assets total*** | **1,654,054** | **1,642,011** |

| ***Net capital expenditure in electricity grid, €1,000** | **2016** | **2015** |
|---|---|---|
| Carrying amount 31 Dec | 1,618,586 | 1,635,324 |
| Carrying amount 1 Jan | -1,635,324 | -1,598,045 |
| Depreciation according to plan 1 Jan–31 Dec | 85,026 | 89,199 |
| Decreases 1 Jan–31 Dec | 1,742 | 2,451 |
| **Total** | **70,030** | **128,930** |

Fingrid's reserve power plants are included in the property, plant and equipment of the transmission system.

| **14. INVESTMENTS, €1,000** | **2016** | **2015** |
|---|---|---|
| **Interests in Group companies** | | |
| Cost at 1 Jan | 505 | 505 |
| Increases 1 Jan–31 Dec | 3 | |
| **Cost at 31 Dec** | **507** | **505** |
| **Interests in associated companies** | | |
| Cost at 1 Jan | 8,588 | 8,642 |
| Decreases 1 Jan–31 Dec | | -55 |
| **Cost at 31 Dec** | **8,588** | **8,588** |
| **Other shares and interests** | | |
| Cost at 1 Jan | 1,885 | 1,417 |
| Increases 1 Jan–31 Dec | 227 | 469 |

| | | |
|---|---|---|
| Decreases 1 Jan–31 Dec | -147 | |
| **Cost at 31 Dec** | **1,965** | **1,885** |
| | | |
| **Investments total** | **11,060** | **10,978** |

| **15. INVENTORIES, €1,000** | **2016** | **2015** |
|---|---|---|
| **Materials and consumables at 31 Dec** | 12,139 | 12,647 |
| Work in progress | 131 | 18 |
| **Total** | **12,269** | **12,665** |

| **16. OTHER NON-CURRENT RECEIVABLES, €1,000** | **2016** | **2015** |
|---|---|---|
| Loan receivables from Group companies | 2,808 | |
| Loan receivables from associated companies | 4,000 | 2,500 |
| **Total** | **6,808** | **2,500** |

| **17. RECEIVABLES FROM GROUP COMPANIES, €1,000** | **2016** | **2015** |
|---|---|---|
| **Current:** | | |
| Trade receivables | 799 | 209 |
| Interest receivables | 27 | |
| **Total** | **827** | **209** |

| **18. RECEIVABLES FROM ASSOCIATED COMPANIES, €1,000** | **2016** | **2015** |
|---|---|---|
| **Current:** | | |
| Trade receivables | 125 | 39 |
| Interest receivables | 18 | 9 |
| **Total** | **144** | **48** |

| **19. PREPAYMENTS AND ACCRUED INCOME, €1,000** | **2016** | **2015** |
|---|---|---|
| Interest and other financial items | 7,333 | 8,202 |
| Accruals of sales and purchases | 1,666 | 6,111 |
| Other prepayments and accrued income | 200 | 178 |
| **Total** | **9,199** | **14,491** |

| **20. UNRECORDED EXPENSES AND PAR VALUE DIFFERENTIALS ON THE ISSUE OF LOANS INCLUDED IN PREPAYMENTS AND ACCRUED INCOME, €1,000** | **2016** | **2015** |
|---|---|---|
| **Par value differentials** | **1,039** | **1,184** |

| **21. CASH AND CASH EQUIVALENTS, €1,000** | **2016** | **2015** |
|---|---|---|
| Commercial papers | 12,991 | 53,935 |
| Short-term money market funds | 44,402 | 39,324 |
| Bank deposits | 10,000 | 10,000 |
| Cash in hand and bank receivables | 11,939 | 13,099 |
| **Total** | **79,333** | **116,358** |

| 22. SHAREHOLDERS' EQUITY, €1,000 | 2016 | 2015 |
|---|---|---|
| Share capital 1 Jan | 55,922 | 55,922 |
| **Share capital 31 Dec** | **55,922** | **55,922** |
| Share premium account 1 Jan | 55,922 | 55,922 |
| **Share premium account 31 Dec** | **55,922** | **55,922** |
| Profit from previous financial years 1 Jan | **162,088** | **103,346** |
| Dividend distribution | -90,000 | -65,000 |
| **Profit from previous financial years 31 Dec** | **72,088** | **38,346** |
| **Profit for the financial year** | **103,866** | **123,742** |
| **Shareholders' equity 31 Dec** | **287,799** | **273,933** |
| **Distributable shareholders' equity** | **175,954** | **162,088** |

| Number of shares | Series A shares | Series B shares | Total |
|---|---|---|---|
| 1 Jan 2016 | 2,078 | 1,247 | 3,325 |
| 31 Dec 2016 | **2,078** | **1,247** | **3,325** |

Series A shares confer three votes each at the Annual General Meeting and Series B shares one vote each. When electing members of the Board of Directors, Series A shares confer 10 votes each at the Annual General Meeting and Series B shares one vote each.

Series B shares have the right before Series A shares to obtain the annual dividend specified below from the funds available for profit distribution. If the annual dividend cannot be distributed in some year, the shares confer a right to receive the undistributed amount from the funds available for profit distribution in the subsequent years; however, such that Series B shares have the right over Series A shares to receive the annual dividend and the undistributed amount. Series B shares have no right to receive any other dividend.

Fingrid Oyj's Annual General Meeting decides on the annual dividend.
Eighty-two (82) per cent of the dividends to be distributed for each financial year is distributed for all Series A shares and eighteen (18) per cent for all Series B shares, however such that EUR twenty (20) million of the dividends to be distributed for each financial year is first distributed for all Series B shares. If the above-mentioned EUR twenty (20) million minimum amount for the financial period is not distributed (all or in part) for Series B shares in a financial period, Series B shares confer the right to receive the undistributed minimum amount in question (or the accumulated undistributed minimum amount accrued during such financial periods) in the next profit distribution, in any disbursements paid out, or in any other distribution of assets prior to any other dividends, disbursements or asset distribution until the undistributed minimum amount has been distributed in full for Series B shares.

There are no non-controlling interests.

| 23. ACCUMULATED APPROPRIATIONS, €1,000 | 2016 | 2015 |
|---|---|---|
| Accumulated depreciation from the difference between depreciation according to plan and depreciation carried out in taxation | **448,897** | **448,897** |

| 24. BONDS, €1,000 | | | | | 2016 | 2015 |
|---|---|---|---|---|---|---|
| Currency | Nominal value | Maturity date | Interest | | | |
| EUR | 20,000 | 4/11/2017 | floating rate | | 20,000 | 20,000 |
| EUR | 25,000 | 4/11/2017 | floating rate | | 25,000 | 25,000 |
| EUR | 30,000 | 6/15/2017 | | 3.07% | 30,000 | 30,000 |
| EUR | 50,000 | 9/21/2020 | floating rate | | 50,000 | |
| EUR | 30,000 | 9/19/2022 | floating rate | | 30,000 | |
| EUR | 30,000 | 9/11/2023 | | 2.71% | 30,000 | 30,000 |

| | | | | | | |
|---|---|---|---|---|---|---|
| EUR | 300,000 | 4/3/2024 | | 3.50% | 300,000 | 300,000 |
| EUR | 25,000 | 3/27/2028 | | 2.71% | 25,000 | 25,000 |
| EUR | 10,000 | 9/12/2028 | | 3.27% | 10,000 | 10,000 |
| EUR | 80,000 | 4/24/2029 | | 2.95% | 80,000 | 80,000 |
| EUR | 30,000 | 5/30/2029 | | 2.89% | 30,000 | 30,000 |
| | | | | | **630,000** | **550,000** |
| JPY | 500,000 | 6/22/2017 | | 1.28% | 4,507 | 4,507 |
| | | | | | **4,507** | **4,507** |
| NOK | 200,000 | 10/17/2016 | | 5.15% | | 24,620 |
| NOK | 200,000 | 4/11/2017 | | 5.16% | 24,620 | 24,620 |
| NOK | 200,000 | 11/10/2017 | | 5.12% | 23,725 | 23,725 |
| NOK | 200,000 | 11/12/2019 | | 5.37% | 23,725 | 23,725 |
| NOK | 100,000 | 9/16/2025 | | 4.31% | 12,512 | 12,512 |
| | | | | | **84,582** | **109,201** |
| SEK | 100,000 | 1/15/2016 | | 3.30% | | 10,390 |
| SEK | 500,000 | 10/18/2016 | floating rate | | | 54,900 |
| SEK | 500,000 | 10/18/2016 | | 3.50% | | 54,900 |
| SEK | 1,000,000 | 11/19/2018 | floating rate | | 107,308 | 107,308 |
| | | | | | **107,308** | **227,497** |
| Bonds, non-current, total | | | | | 698,544 | 746,396 |
| Bonds, current, total | | | | | 127,852 | 144,809 |
| **Total** | | | | | **826,396** | **891,205** |

| 25. LOANS FALLING DUE IN FIVE YEARS OR MORE, €1,000 | 2016 | 2015 |
|---|---|---|
| Bonds | 517,512 | 487,512 |
| Loans from financial institutions | 90,216 | 107,879 |
| **Total** | **607,728** | **595,391** |

| 26. LIABILITIES TO GROUP COMPANIES, €1,000 | 2016 | 2015 |
|---|---|---|
| **Current:** | | |
| Other liabilities | 1,103 | 503 |
| **Total** | **1,103** | **503** |

| 27. LIABILITIES TO ASSOCIATED COMPANIES, €1,000 | 2016 | 2015 |
|---|---|---|
| **Current:** | | |
| Trade payables | 152 | 2 |

| | | |
|---|---|---|
| **Total** | **152** | **2** |

| **28. OTHER LIABILITIES, €1,000** | **2016** | **2015** |
|---|---|---|
| **Current:** | | |
| Other loans/Commercial papers (international and domestic) | 120,128 | 75,003 |
| Value added tax | 11,860 | 7,787 |
| Electricity tax | 3,093 | 3,045 |
| advances received | 923 | 15 |
| Other liabilities | 667 | 582 |
| **Total** | **136,671** | **86,432** |

| **29. ACCRUALS, €1,000** | **2016** | **2015** |
|---|---|---|
| **Current:** | | |
| Interest and other financial items | 12,822 | 14,739 |
| Salaries and additional personnel expenses | 5,693 | 4,310 |
| Accruals of sales and purchases | 5,766 | 3,784 |
| Other accruals | 5,277 | 13,336 |
| **Total** | **29,558** | **36,170** |

| **30. PROVISIONS FOR LIABILITIES AND CHARGES, €1,000** | **2016** | **2015** |
|---|---|---|
| Creosote-impregnated and CCA-impregnated wooden towers, disposal costs | 1,481 | 1,668 |
| **Total** | **1,481** | **1,668** |

**31. DERIVATIVE AGREEMENTS, €1,000**

| | **2016** | | | | **2015** | | | | **Hierarchy level** |
|---|---|---|---|---|---|---|---|---|---|
| **Interest rate and currency derivatives** | Fair value pos. 31.12.16 | Fair value neg. 31.12.16 | Net fair value 31.12.16 | Nominal value 31.12.16 | Fair value pos. 31.12.15 | Fair value neg. 31.12.15 | Net fair value 31.12.15 | Nominal value 31.12.15 | |
| Cross-currency swaps | 6,930 | -12,487 | -5,558 | 196,396 | 15,286 | -20,297 | -5,011 | 341,205 | Level 2 |
| Forward contracts | 46 | | 46 | 2,271 | | -88 | -88 | 4,505 | Level 2 |
| Interest rate swaps | 26,667 | -6,725 | 19,943 | 360,000 | 24,348 | -9,442 | 14,905 | 430,000 | Level 2 |
| Bought interest rate options | 1,350 | | 1,350 | 518,820 | 862 | | 862 | 358,820 | Level 2 |
| **Total** | **34,993** | **-19,212** | **15,781** | **1,077,487** | **40,496** | **-29,827** | **10,668** | **1,134,531** | |
| **Electricity derivatives** | Fair value pos. 31.12.16 | Fair value neg. 31.12.16 | Net fair value 31.12.16 | Volume TWh 31.12.16 | Fair value pos. 31.12.15 | Fair value neg. 31.12.15 | Net fair value 31.12.15 | Volume TWh 31.12.15 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Electricity forward contracts. NASDAQ OMX Commodities, not designated as hedge accounting | 1,640 | -8,157 | -6,518 | 4.07 | -49,060 | -49,060 | 4.22 | Level 1 |
| **Total** | **1,640** | **-8,157** | **-6,518** | **4.07** | **-49,060** | **-49,060** | **4.22** | |

| 32. COMMITMENTS AND CONTINGENT LIABILITIES, €1,000 | 2016 | 2015 |
|---|---|---|
| **Rental liabilities** | | |
| Liabilities for the next year | 3,536 | 2,643 |
| Liabilities for subsequent years | 28,653 | 23,299 |
| | **32,189** | **25,942** |
| **Right-of-use agreements** | | |
| Liabilities for the next year | 7,601 | 8,017 |
| Liabilities for subsequent years | 72,677 | 81,048 |
| | **80,278** | **89,065** |
| **Pledges** | | |
| Pledge covering property lease agreements | 9 | 9 |
| Pledge covering customs credit account | 280 | 280 |
| Default fund covering electricity exchange purchases | | 863 |
| | **289** | **1,151** |
| **Other financial commitments** | | |
| Rent security deposit, guarantee | 38 | 38 |
| Credit facility commitment fee and commitment fee: | | |
| Commitment fee for the next year | 395 | 326 |
| Liabilities for subsequent years | 1,154 | 1,154 |
| | **1,587** | **1,518** |

| 33. OPERATING CASH FLOW ADJUSTMENTS, €1,000 | 2016 | 2015 |
|---|---|---|
| **Business transactions not involving a payment transaction** | | |
| Depreciation | 108,267 | 103,323 |
| Capital gains/losses (-/+) on tangible and intangible assets | -3,778 | -2,129 |
| **Total** | **104,489** | **101,194** |

## 34. LEGAL PROCEEDINGS AND PROCEEDINGS BY AUTHORITIES

A lawsuit was initiated against Fingrid in December 2016, demanding non-specified damages due to an alleged breach of contract. The alleged injury is continuous and the claim amounted to EUR 135,000 by the time the lawsuit was initiated. Fingrid has contested the claims presented in the lawsuit. The case is currently before the court. In Fingrid’s view, the legal proceedings are not likely to have a substantial impact on the company’s financial result or financial position. Thus no provisions were recognised in the financial statements in relation to these proceedings.

There are no other ongoing legal proceedings or proceedings by authorities that would have a material impact on Fingrid's business.

## 35. SEPARATION OF BUSINESSES IN ACCORDANCE WITH THE ELECTRICITY MARKET ACT

**Imbalance power and regulating power**
Each electricity market party must ensure its electricity balance by making an agreement with either Fingrid or some other party. Fingrid buys and sells imbalance power in order to stabilise the hourly power balance of an electricity market party (balance responsible party). Imbalance power trade and pricing are based on a balance service agreement with equal and public terms and conditions.

Fingrid is responsible for the continuous power balance in Finland by buying and selling regulating power in Finland. The balance responsible parties can participate in the Nordic balancing power market by submitting bids on their available capacity. The terms and conditions of participation in the regulating power market and the pricing of balancing power are based on the balance service agreement.

Fingrid is also responsible for the national balance settlement. The balance settlement takes place after the utilisation hours by determining the actual electricity generation, consumption and electricity trade. The outcome of the balance settlement is power balances for each party to the electricity trade.

**Management of balance operation**
In accordance with a decision by the Energy Market Authority, Fingrid Oyj shall separate the duties pertaining to national power balance operation by virtue of Chapter 12 of the Electricity Market Act. The management of balance operation is a part of grid operations.

The income statement of the balance service unit is separated by means of cost accounting as follows:

| | |
|---|---|
| Income | direct |
| Separate costs | direct |
| Production costs | matching principle |
| Administrative costs | matching principle |
| Depreciation | matching principle in accordance with Fingrid Oyj's depreciation principle |
| Finance income and costs | on the basis of imputed debt |
| Income taxes | based on result |

The average number of personnel during 2016 was 12 (14). The operating profit was 4 (6) per cent of turnover.

| **MANAGEMENT OF BALANCE OPERATION, SEPARATED INCOME STATEMENT** | **1 Jan - 31 Dec, 2016**<br>**€1,000** | **1 Jan - 31 Dec, 2015**<br>**€1,000** |
|---|---|---|
| **TURNOVER*** | **165,393** | **148,240** |
| Other operating income | 1 | 1 |
| Materials and services* | -156,520 | -136,914 |
| Personnel costs | -1,385 | -1,552 |
| Depreciation and amortisation expense | -181 | -306 |
| Other operating expenses | -1,129 | -1,208 |
| **OPERATING PROFIT** | **6,178** | **8,261** |
| Finance income and costs | 48 | 30 |
| **PROFIT/LOSS BEFORE APPROPRIATIONS AND TAXES** | **6,226** | **8,291** |
| Appropriations | -89 | 35 |
| Income taxes | -884 | 0 |
| **PROFIT/LOSS FOR THE FINANCIAL YEAR** | **5,253** | **8,327** |

Turnover includes EUR 9.2 (8.8) million in sales of imbalance power to balance provider Fingrid Oyj, and Materials and services includes EUR 6.5 (7.2) million euros in purchases by Fingrid Oyj.

**MANAGEMENT OF BALANCE OPERATION, SEPARATED BALANCE SHEET**

| **ASSETS** | **31 Dec 2016**<br>**€1,000** | **31 Dec 2015**<br>**€1,000** |
|---|---|---|
| **NON-CURRENT ASSETS** | | |
| **Intangible assets** | | |
| Other non-current expenses | 385 | 415 |

| | | |
|---|---|---|
| **Tangible assets** | | |
| Machinery and equipment | 247 | 254 |
| Prepayments and purchases in progress | 62 | 62 |
| **Investments** | | |
| Interests in associated companies | 2,001 | 2,001 |
| **TOTAL NON-CURRENT ASSETS** | **2,695** | **2,732** |
| **CURRENT ASSETS** | | |
| **Non-current** | | |
| Loan receivables from associated companies | 4,000 | 2,500 |
| **Current receivables** | | |
| Trade receivables | 27,420 | 21,368 |
| Receivables from Group companies | 18,469 | 14,899 |
| Receivables from associated companies | 144 | 48 |
| Other receivables | 1,504 | 1,616 |
| | 47,537 | 37,931 |
| Cash in hand and bank receivables | 1 | 1 |
| **TOTAL CURRENT ASSETS** | **51,538** | **40,432** |
| **TOTAL ASSETS** | **54,233** | **43,164** |

| **SHAREHOLDERS' EQUITY AND LIABILITIES** | **31 Dec 2016** | **31 Dec 2015** |
|---|---|---|
| | **€1,000** | **€1,000** |
| **EQUITY** | | |
| Share capital | 32 | 32 |
| Share premium account | 286 | 286 |
| Profit from previous financial years | 16,620 | 8,293 |
| Profit for the financial year | 5,253 | 8,327 |
| **TOTAL SHAREHOLDERS' EQUITY** | **22,190** | **16,937** |
| **ACCUMULATED APPROPRIATIONS** | **-470** | **-560** |
| **LIABILITIES** | | |
| **Current liabilities** | | |
| Trade payables | 30,724 | 26,020 |
| Liabilities to Group companies | 906 | 766 |
| Accruals | 884 | |
| | 32,513 | 26,786 |
| **TOTAL LIABILITIES** | **32,513** | **26,786** |

| | | |
|---|---|---|
| **TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES** | **54,233** | **43,164** |

**Development of information exchange**
It is Fingrid's task to develop the exchange of information required for electricity trade and imbalance settlement as set out in the Electricity Market Act. Fingrid's information exchange services are part of the electricity markets' information exchange environment. In order to develop the effective and accurate exchange of information, Fingrid works in close co-operation with e.g. electricity market parties, interest groups, service providers, supervisory authorities, legislators, organisations that develop national and international communications and other transmission system operators.

In accordance with a decision by the Energy Market Authority, Fingrid Oyj must separate the duties pertaining to the development of information exchange by virtue of Chapter 12 of the Electricity Market Act. The development of information exchange is a part of grid operations.

The separation of the income statement for the development of information exchange is realised by means of cost accounting as follows:

| | |
|---|---|
| Income | direct |
| Separate costs | direct |
| Administrative costs | matching principle |
| Income taxes | based on result |

| DEVELOPMENT OF INFORMATION EXCHANGE, SEPARATED INCOME STATEMENT | 1 Jan - 31 Dec, 2016 €1,000 | 1 Jan - 31 Dec, 2015 €1,000 |
|---|---|---|
| **TURNOVER** | **595** | **528** |
| Personnel costs | -144 | -165 |
| Other operating expenses | -392 | -236 |
| **OPERATING PROFIT** | **59** | **127** |
| **PROFIT/LOSS BEFORE APPROPRIATIONS AND TAXES** | **59** | **127** |
| Income taxes | -12 | -25 |
| **PROFIT/LOSS FOR THE FINANCIAL YEAR** | **48** | **102** |

**DEVELOPMENT OF INFORMATION EXCHANGE, SEPARATED BALANCE SHEET**

| ASSETS | 31 Dec 2016 €1,000 | 31 Dec 2015 €1,000 |
|---|---|---|
| **CURRENT ASSETS** | | |
| Trade receivables | | 56 |
| Other receivables | 147 | 159 |
| **TOTAL CURRENT ASSETS** | **147** | **215** |
| **TOTAL ASSETS** | **147** | **215** |

| SHAREHOLDERS' EQUITY AND LIABILITIES | 31 Dec 2016 | 31 Dec 2015 |
|---|---|---|

| | €1,000 | €1,000 |
|---|---|---|
| **EQUITY** | | |
| Share capital | 3 | 3 |
| Profits/losses from previous financial years | -636 | -738 |
| Profit for the financial year | 48 | 102 |
| **TOTAL SHAREHOLDERS' EQUITY** | **-586** | **-634** |
| **LIABILITIES** | | |
| **Current liabilities** | | |
| Trade payables | 12 | 10 |
| Liabilities to Group companies | 686 | 716 |
| Other liabilities | 36 | 123 |
| | 734 | 849 |
| **TOTAL LIABILITIES** | **734** | **849** |
| **TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES** | **147** | **215** |

**Grid operations**
Grid operations refers to licensed electricity system operation that takes place on the electricity grid. Electricity system operations are defined in Chapter 1 of the Electricity Market Act (588/2013) and grid operations are defined in Chapter 5. Of Fingrid Oyj's operations, activities related to the management of the power reserve system and guarantees of origin for electricity, as well as the data hub project that was started in 2015 are not included in grid operations. Operations that are not part of grid operations constitute 'other operations' as referred to in Chapter 12 of the Electricity Market Act and must be separated from grid operations in accordance with that Chapter.

The income statement and balance sheet of grid operations and other operations have, in compliance with Chapter 12 of the Electricity Market Act, been separated by means of cost accounting as follows:

| | |
|---|---|
| Income | direct |
| Separate costs | direct |
| Production costs | matching principle |
| Administrative costs | matching principle |
| Depreciation | matching principle in accordance with Fingrid Oyj's depreciation principle |
| Finance income and costs | on the basis of imputed debt |
| Income taxes | based on result |
| Balance sheet items | matching principle |

| | TRANSMISSION SYSTEM OPERATION | OTHER OPERATION |
|---|---|---|
| | **1 Jan - 31 Dec, 2016** | **1 Jan - 31 Dec, 2016** |
| **SEPARATED INCOME STATEMENT** | **€1,000** | **€1,000** |
| **TURNOVER** | **578,390** | **3,019** |
| Other operating income | 12,693 | |
| Materials and services | -241,755 | |
| Personnel costs | -27,796 | -802 |
| Depreciation and amortisation expense | -108,267 | |
| Other operating expenses | -64,229 | -1,545 |

| | | |
|---|---|---|
| **OPERATING PROFIT** | **149,037** | **673** |
| Finance income and costs | -20,451 | 329 |
| **PROFIT BEFORE EXTRAORDINARY ITEMS** | **128,587** | **1,002** |
| **PROFIT/LOSS BEFORE APPROPRIATIONS AND TAXES** | **128,587** | **1,002** |
| Income taxes | -25,522 | -200 |
| **PROFIT/LOSS FOR THE FINANCIAL YEAR** | **103,065** | **802** |

**SEPARATED BALANCE SHEET**

| | **TRANSMISSION SYSTEM OPERATION** | **OTHER OPERATION** |
|---|---|---|
| **ASSETS** | **31 Dec 2016** | **31 Dec 2016** |
| | **€1,000** | **€1,000** |
| **Intangible assets:** | | |
| Goodwill | 4,289 | |
| Other intangible assets | 79,770 | |
| | **84,059** | |
| **Tangible assets** | | |
| Land and water areas | 15,701 | |
| Buildings and structures | 193,640 | |
| Machinery and equipment | 576,317 | |
| Transmission lines | 808,875 | |
| Other property, plant and equipment | 118 | |
| Prepayments and purchases in progress | 59,404 | |
| | **1,654,054** | |
| **Investments:** | | |
| Interests in Group companies | | 507 |
| Interests in associated companies | 8,588 | |
| Other shares and interests | 1,965 | |
| | **10,553** | **507** |
| **TOTAL NON-CURRENT ASSETS** | **1,748,666** | **507** |
| **CURRENT ASSETS** | | |
| Inventories | 12,269 | |
| **Receivables** | | |
| **Non-current** | | |
| Loan receivables from Group companies | | 2,808 |
| Loan receivables from associated companies | 4,000 | |
| | **4,000** | **2,808** |

| | | |
|---|---|---|
| **Current** | | |
| Trade receivables | 70,674 | |
| Receivables from Group companies | 3,706 | 827 |
| Receivables from associated companies | 144 | |
| Other receivables | 1,298 | |
| Prepayments and accured income | 9,199 | |
| | **85,022** | **827** |
| Financial securities | 57,394 | |
| Cash in hand and bank receivables | 21,939 | |
| **TOTAL CURRENT ASSETS** | **180,623** | **3,634** |
| **TOTAL ASSETS** | **1,929,289** | **4,141** |

**SEPARATED BALANCE SHEET**

| | **TRANSMISSION SYSTEM OPERATION** | **OTHER OPERATION** |
|---|---|---|
| **SHAREHOLDERS' EQUITY AND LIABILITIES** | **31 Dec 2016** | **31 Dec 2016** |
| | **€1,000** | **€1,000** |
| **EQUITY** | | |
| Share capital | 55,920 | 3 |
| Share premium account | 55,922 | |
| Profit from previous financial years | 72,630 | -542 |
| Profit for the financial year | 103,065 | 802 |
| **TOTAL SHAREHOLDERS' EQUITY** | **287,537** | **262** |
| **ACCUMULATED APPROPRIATIONS** | **448,897** | |
| **PROVISIONS FOR LIABILITIES AND CHARGES** | **1,481** | |
| **LIABILITIES** | | |
| **Non-current liabilities** | | |
| Bonds | 698,544 | |
| Loans from financial institutions | 151,203 | |
| | **849,748** | |
| **Current liabilities** | | |
| Bonds | 127,852 | |
| Loans from financial institutions | 21,662 | |
| Trade payables | 24,802 | |
| Liabilities to Group companies | 1,103 | 3,706 |
| Liabilities to associated companies | 152 | |
| Other liabilities | 136,653 | 19 |
| Accruals | 29,404 | 154 |
| | **341,627** | **3,879** |

| | | |
|---|---|---|
| **TOTAL LIABILITIES** | **1,191,374** | **3,879** |
| **TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES** | **1,929,289** | **4,141** |

**Other non-current assets included in the separated balance sheet for grid operations**

| SEPARATED BALANCE SHEET | TRANSMISSION SYSTEM OPERATION |
|---|---|
| **ASSETS** | **31 Dec 2016** |
| | **€1,000** |
| **Intangible assets:** | |
| Other intangible assets | 5,392 |
| | **5,392** |
| **Tangible assets** | |
| Land and water areas | 15,459 |
| Buildings and structures | 4,170 |
| Machinery and equipment | 14,512 |
| Transmission lines | 1,209 |
| Other property, plant and equipment | 118 |
| Prepayments and purchases in progress | 59,404 |
| | **94,872** |
| **TOTAL NON-CURRENT ASSETS** | **100,264** |

**Congestion income in grid operations**
The congestion income received by a grid owner must be used for the purposes stated in EC Regulation 714/2009, Article 16, Paragraph 6: guaranteeing the actual availability of the allocated capacity, and maintaining or increasing interconnection capacities through network investments. As a consequence of the change in the regulation governing Fingrid's grid pricing, the company will include the congestion income received after 1 January 2016 as accruals in the item other liabilities in the balance sheet. Of the accruals, congestion income will be recognised in the income statement as other operating income when their corresponding costs, as defined in the regulation, accrue as annual expenses in the income statement. Alternatively, they are entered in the balance sheet against investments, as defined by regulation, to lower the acquisition cost of property, plant and equipment, which lowers the depreciation of the property, plant and equipment in question. The congestion income received before 1 January 2016 was recognised in turnover. The congestion income from 2016 was used for improving and maintaining the cross-border transmission connections, and in part also for the Hirvisuo–Pyhänselkä transmission network investment, which supports the cross-border transmission from northern Sweden.

| **Congestion income, €1,000** | **2016** |
|---|---|
| Congestion income on 1 Jan | |
| Accumulated congestion income | 39,863 |
| Expenses matching congestion income | -6,325 |
| Investments matching congestion income | -33,538 |
| **Congestion income on 31 Dec** | |

**Countertrade**
In terms of the costs arising from countertrade used to safeguard system security in grid operations, congestion income may be used to offset countertrade costs arising from cross-border transmission connections.

| **Counter trade, €1,000** | **2016** | **2015** |
|---|---|---|
| Counter-trade between Finland and Sweden | 2,531 | 783 |

| | | |
|---|---|---|
| Counter-trade between Finland and Estonia | 87 | 768 |
| Counter-trade between Finland's internal connections | 1,242 | 2,233 |
| **Total counter-trade** | **3,861** | **3,784** |

## 36. EMISSION RIGHTS

Fingrid has not been granted free-of-charge emission rights for the emissions trade period 2013–2020.
The use of emission rights had no impact on the financial result in 2016.

| | **2016** | **2015** |
|---|---|---|
| Total $CO_2$ emissions $tCO_2$ | 10,326 | 6,697 |

## 8 SIGNATURES FOR THE ANNUAL REVIEW AND FOR THE FINANCIAL STATEMENTS

Helsinki, 17 February 2017

| | |
|---|---|
| Juhani Järvi<br>Chair | Juha Majanen<br>Deputy Chairman |
| Sanna Syri | Esko Torsti |
| Anu Hämäläinen | Jukka Ruusunen<br>President & CEO |

**Auditor’s notation**

A report on the audit carried out has been submitted today.

Helsinki, 17 February 2017

PricewaterhouseCoopers Oy
Authorised Public Accountants

Jouko Malinen, APA