September 2018

Finland´s Transmission System Operator

FINGRID

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Executive summary

Fingrid is the sole transmission system operator (TSO) in Finland

Fingrid transmits in its own network approximately

75%

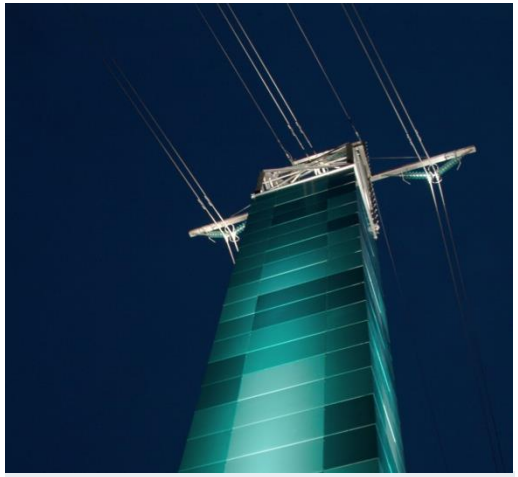
of electricity transmitted in Finland

Fingrid manages cross-border connections between **Finland and Sweden, Estonia, Russia and Norway**

Fingrid continuously **ensures power system production and consumption balance** in Finland

Fingrid's network covers entire Finland

14 400 km
of power lines
320 km
of submarine cable



over
49 000 towers

115 substation

10 reserve power
plants
> 930 MW reserve

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Fingrid has achieved its targets in 2011 - 2017

	2011	2017
Net profit	MEUR 33	MEUR 131
Return	Below regulatory allowed	Below regulatory allowed
Dividend	MEUR 7	MEUR 174
Efficiency	High benchmark study rankings	High benchmark study rankings
Investments	In schedule and budget	In schedule and budget

Fingrid has a proven track record of continuously executing its defined strategy

Key investment considerations

Regulation	Fair, stable and predictable regulatory model
Ownership	The Finnish state owns 53% and Finnish financial institutions 47%
Strategic importance	Considered as strategically important holding to the Finnish state*
Operating leverage	Construction and maintenance of the network is outsourced
Efficiency & Quality	Fingrid is one of the most cost efficient and reliable TSOs worldwide
Financials	Continuous solid operating profitability
Rating	Fingrid benefits from AA-/A+ ratings (S&P, Fitch)

* Source: Prime Minister's Office, Finland. (2016). *Government resolution on state-ownership policy.*

Fingrid provides a solid long-term investment in a stable operating environment

Company overview

Vision

We are a forerunner for electricity network operations

- We are respected and influential in energy matters in Finland and abroad
- We are a manifestation of professional skill and efficiency
- We are able to renew ourselves and we boldly embrace change

Mission

Fingrid is Finland’s transmission system operator. We secure reliable electricity for our customers and society and shape the clean, market-oriented power system of the future.

Our values

In all our operations, we are

transparent	impartial
efficient	responsible

Balanced strategy

CUSTOMERS AND SOCIETY

We secure reliable electricity and a well-functioning electricity market for society.
We offer affordable services that meet our customers' needs.

FINANCE

We operate cost-effectively and bring value to our owners.

INTERNAL PROCESSES

Adequacy of the transmission system

We carry out investments and maintenance safely and efficiently at the right time.

System operation

We operate the national grid proactively and reliably.

Promoting the electricity market

We actively maintain and develop the electricity market.

PERSONNEL AND EXPERTISE

An open, collaborative, renewing and target-oriented work community.

Corporate level strategic choices

Focus on core operations

Outstanding execution of our core operations. We do not seek to expand into new businesses or to participate in competitive businesses.

Customer oriented

We develop our business operations in a customer oriented manner and for the benefit of Finland.

World class efficiency

We utilize innovatively the best available technologies and the possibilities of digitalization. We maintain the required core competences in-house. We cooperate with the best partners.

Market oriented

We trust that well functioning markets produce the best and most innovative solutions in all areas.

Integration oriented

We actively promote the integration of European and Baltic sea electricity markets taking into account the interests of Finland.

Security and sustainability

During the transformation of the power system we maintain the current high level of system operation. Sustainability and safety are in focus in everything we do.

Strategy implementation – continuous improvement and development initiatives

Real time markets

Decentralized resources on the markets

Data quality and productivity

Fingrid into your pocket

Finnish-Swedish AC connection on track

Connecting OL3

Digital substation

Implementation of network codes

Influential culture

Fingrid operates in a matrix organisation structure

Fingrid Oyj
Jukka Ruusunen, President & CEO

GRID SERVICES AND PLANNING	ASSET MANAGEMENT	POWER SYSTEM OPERATIONS	MARKETS	FINANCE AND TREASURY	ICT	HRD COMMUNICATION	LEGAL AND ADMINISTRATIVE AFFAIRS	
								
Jussi Jyrinsalo	Kari Kuusela	Reima Päivinen	Asta Sihvonen-Punkka	Jan Montell	Kari Suominen	Tiina Miettinen	Marina Louhija	
Customers								Jussi Jyrinsalo
Finance and business development								Jan Montell
Adequacy of transmission system System operation Promotion of market functioning								Kari Kuusela Reima Päivinen Asta Sihvonen-Punkka
Personnel and competence								Tiina Miettinen

83% of Fingrid's personnel holds an academic degree

Full-time, permanent employees at the end of 2017

Executive management team is highly regarded in the Finnish business community

Fully implemented matrix structure ensures efficient strategy implementation and personnel engagement

Fingrid's business model

RESOURCES

- Personnel and expertise
- Suppliers and business partners
- Income and debt financing
- Electricity from power plants and neighbouring countries
- Grid transmission lines, substations and reserve power plants
- Land required for transmission lines; natural resources and materials
- ICT structures
- Knowledge capital on electricity, markets and customers

BUSINESS PROCESS

Adequacy of the transmission system

- Grid planning
- Grid building
- Grid maintenance

Management of electricity system operation

- Planning of the operation of the electricity system
- Monitoring and control of the electricity system
- Managing disturbances and the continuity of the electricity system

Promoting the electricity market

- Developing market rules to enable a clean electricity system
- Promoting the regional electricity markets
- Ensuring the continuity of the electricity market

SERVICES FOR CUSTOMERS

	Electricity transmission	Balance services
Guarantee-of-origin certificate	Electricity market information	Information exchange in the retail markets

IMPACTS

- Enabling the transformation of the energy system
- Reliable electricity for society and industry
- Promoting Finland's competitiveness
- Developing the electricity sector and expertise
- Financial benefits for stakeholders
- Major grid investments and employment
- Local changes in land use and the environment and energy losses in electricity transmission

Responsibility is part of our values, strategy and everything we do

Corporate responsibility management is founded on the company's strategy and guided by the company's Code of Conduct

Focus on materiality

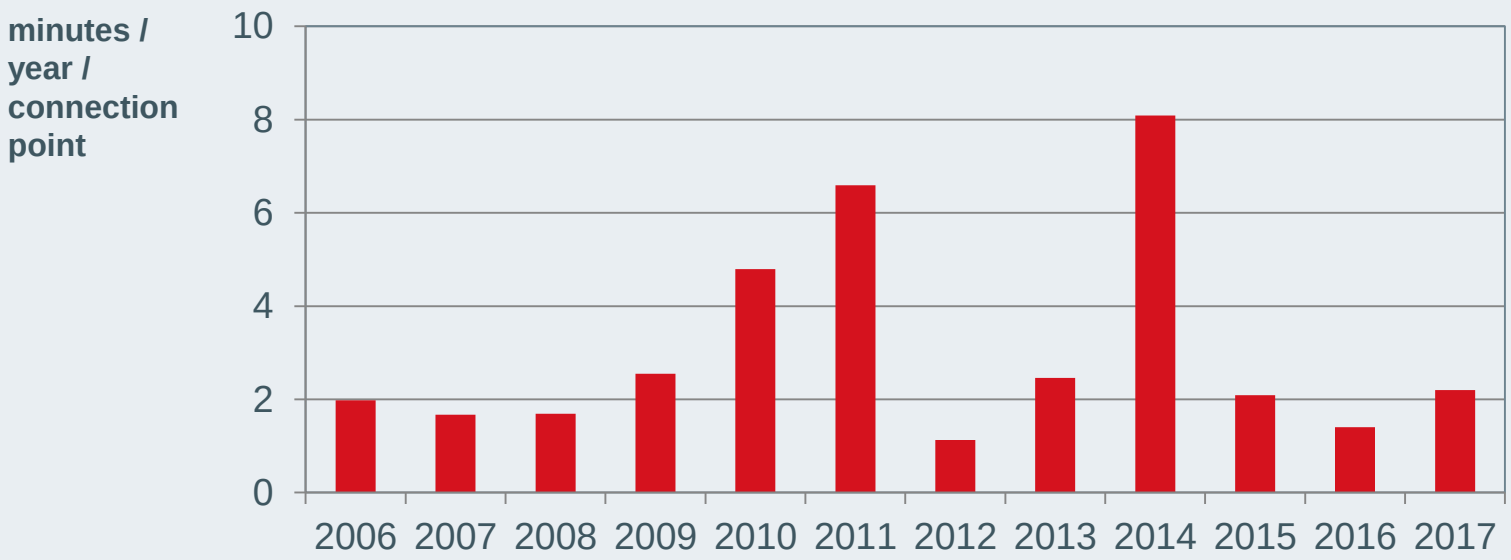
Systematic and target-oriented approach

Engagement of the personnel and suppliers

We report about responsibility as part of the annual report according to GRI Standards

Excellent reliability in the grid

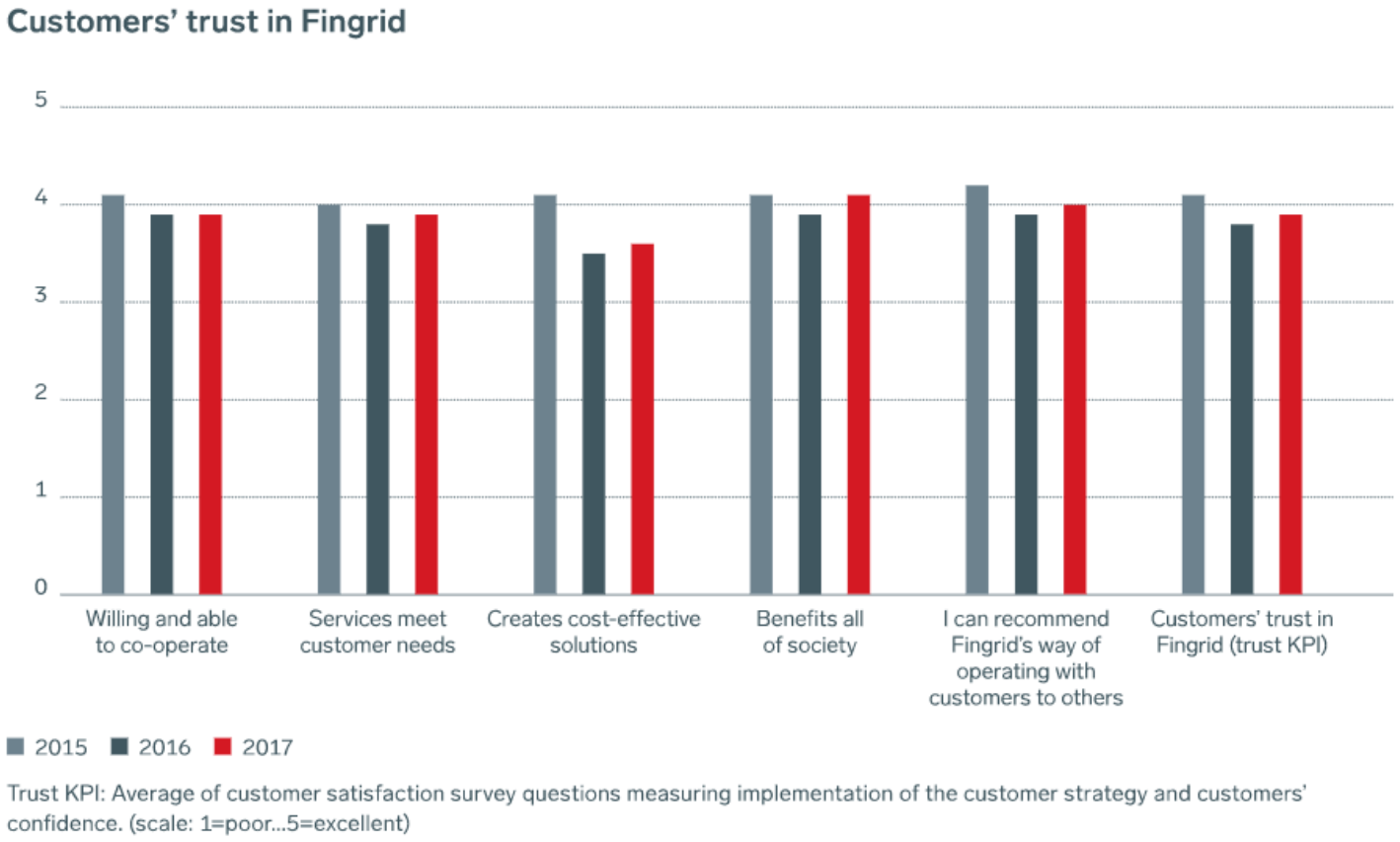
Economic losses caused by disturbances



Only 2.2 minutes outage caused by faults in the grid in 2017

For the benefit of customers and society

Customer satisfaction: High quality services

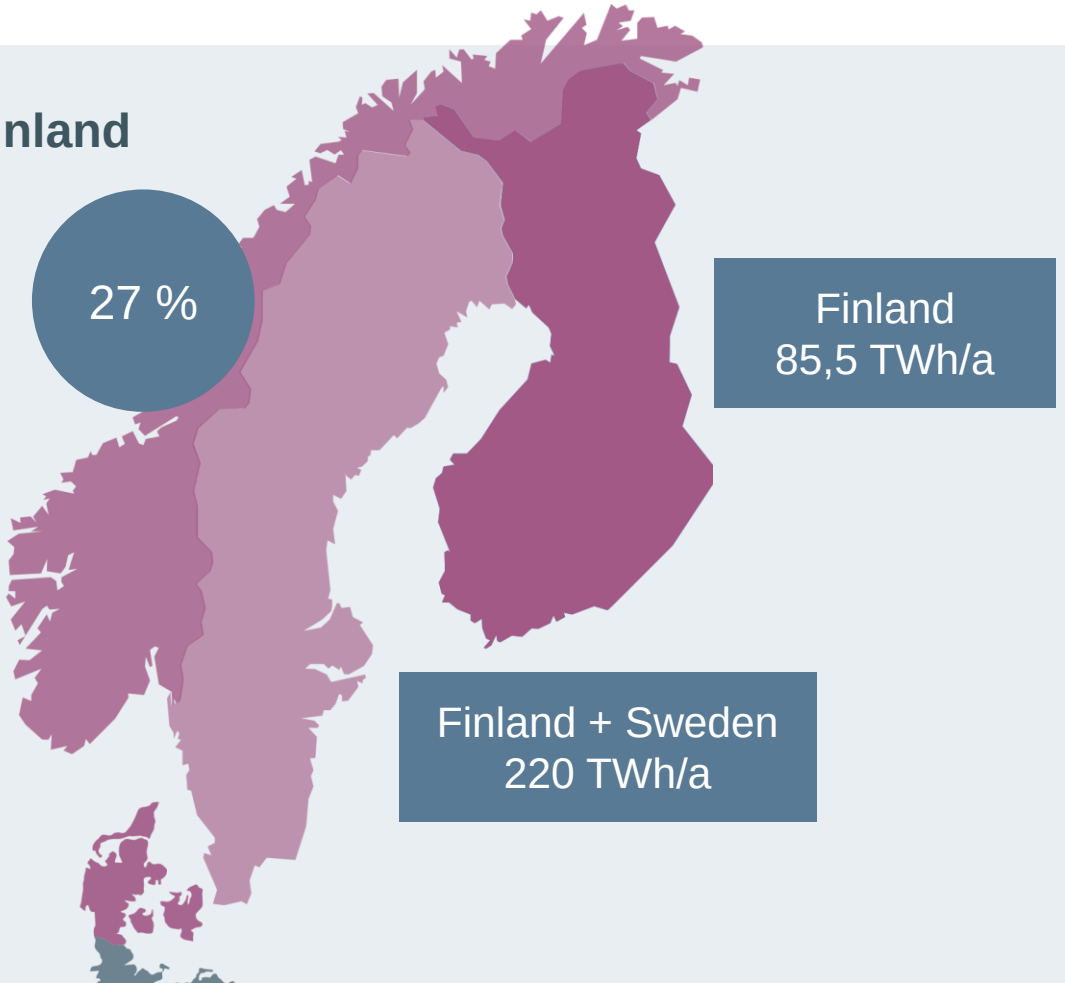


Trust KPI: Average of customer satisfaction survey questions measuring implementation of the customer strategy and customers' confidence. (scale: 1=poor...5=excellent)

The customers' trust survey grade was 3,9 (scale 1-5) in 2017

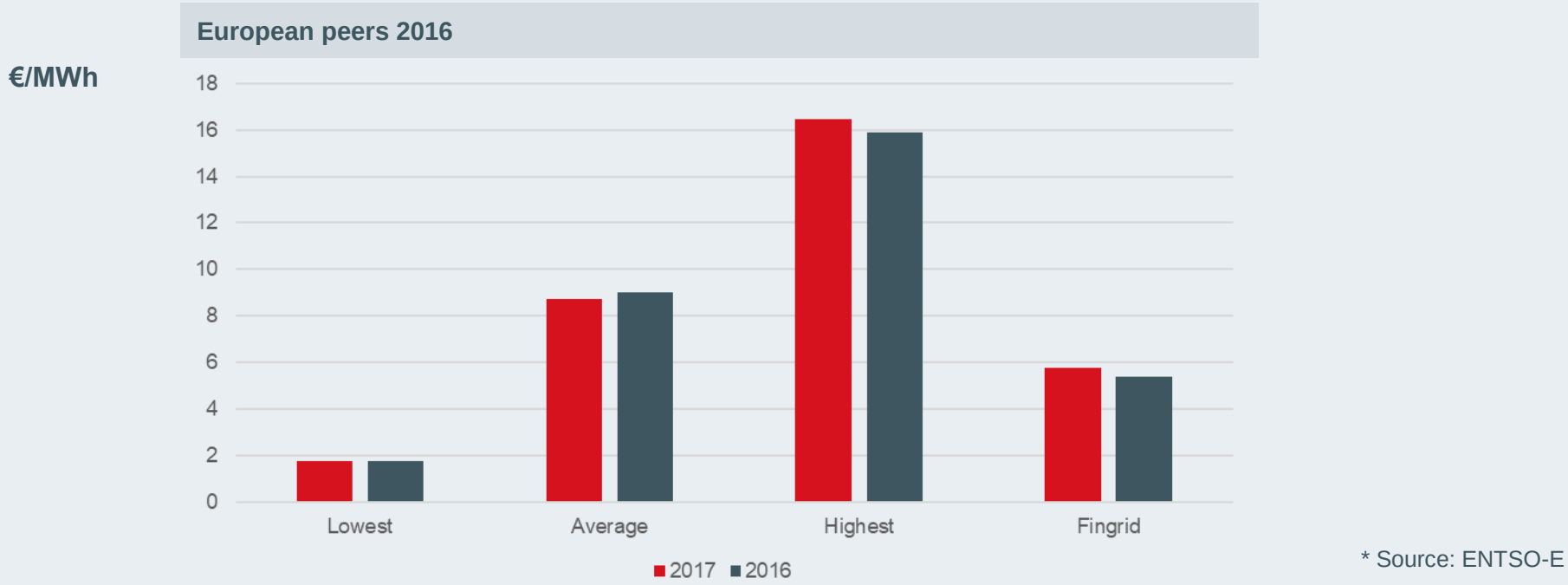
Network bottlenecks: Functioning electricity market

Congestion hours between Finland and Sweden in 2017



Affordable fees for grid services

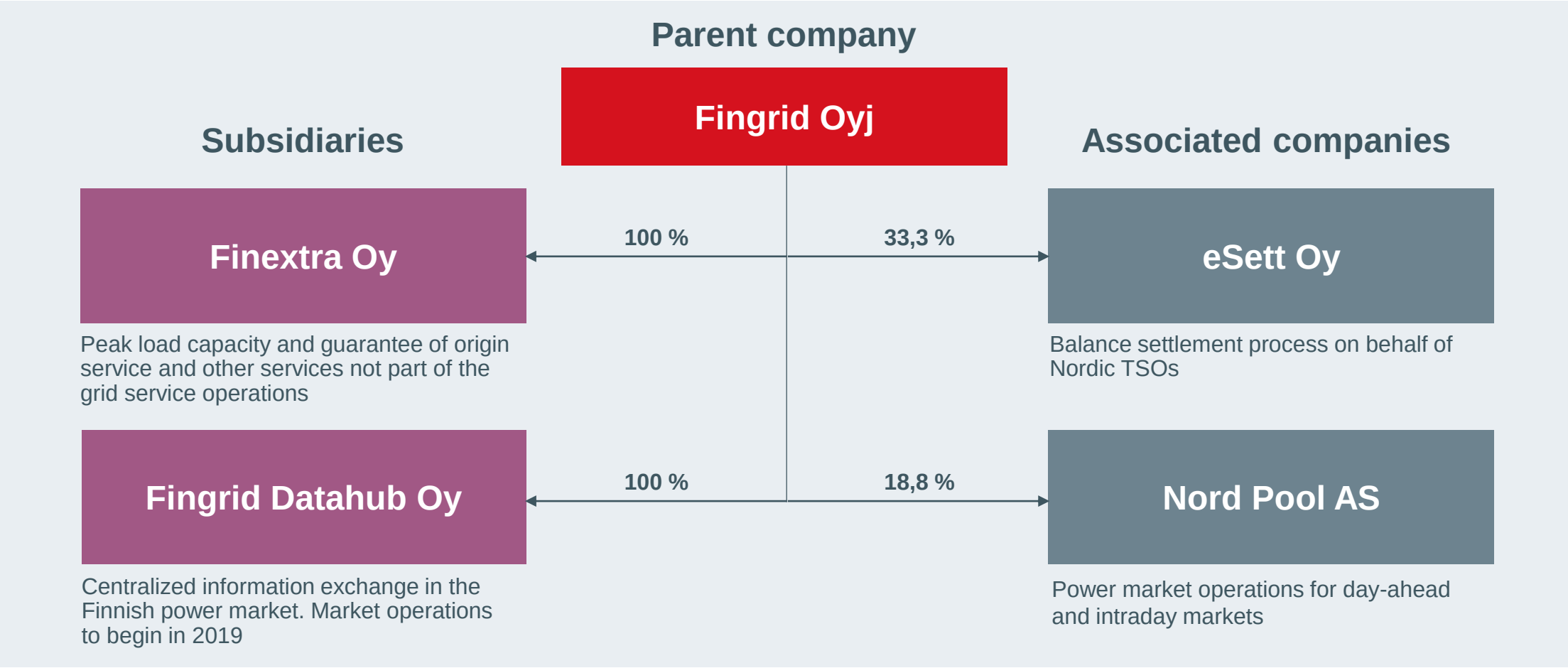
ENTSO-E comparison on grid service fees



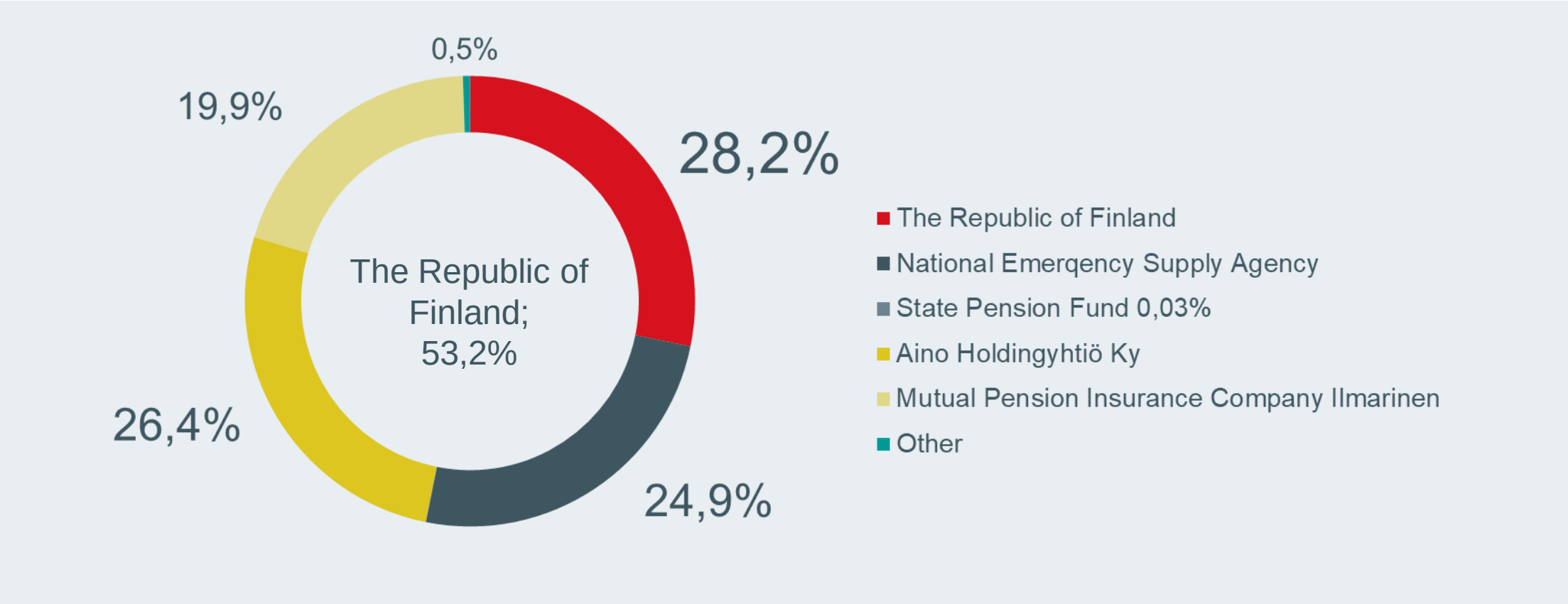
* Source: ENTSO-E

Operational targets are centered around cost competitiveness and customer service

Legal structure

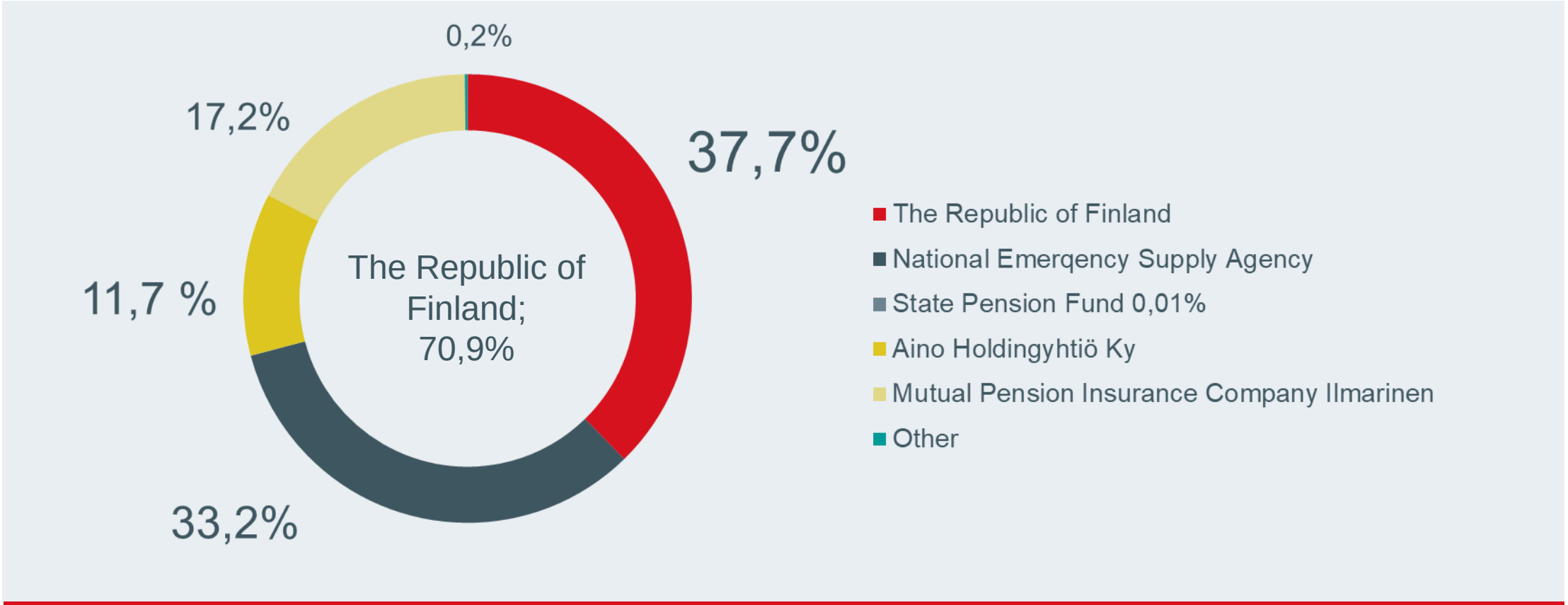


Shares



The State's minimum shareholding requirement in Fingrid is 50.1%

Voting rights



Fingrid's shareholder base is a good balance between private and public sector owners

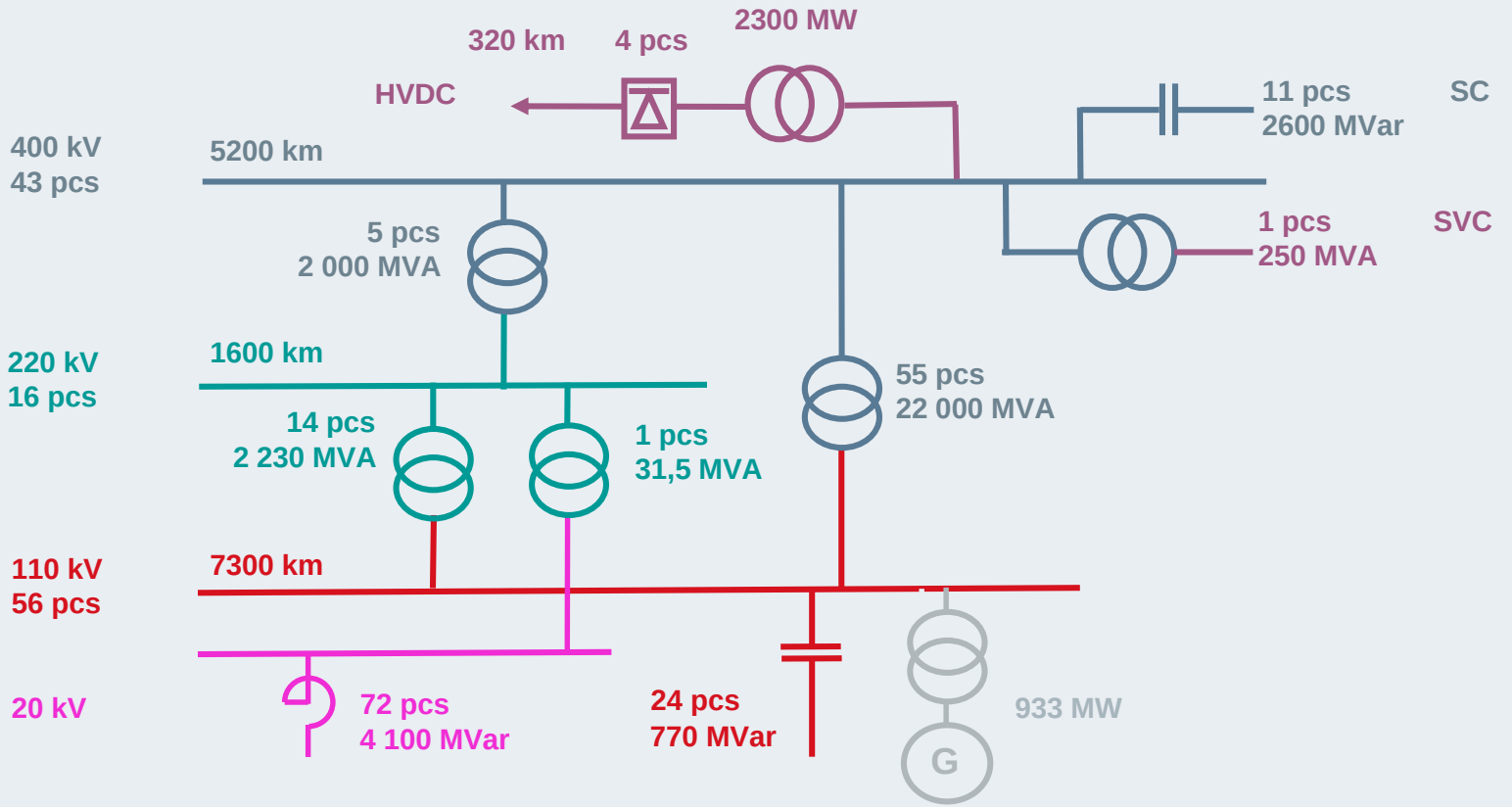
Operations

Description of operations

Fingrid owns and operates the transmission network in Finland

Fingrid transmits in its own network approximately **75 %** of electricity transmitted in Finland

Fingrid is a part of ENTSO-E, European Network of Transmission System Operators for Electricity.



Fingrid's 400 kV power lines form the backbone of the transmission network in Finland

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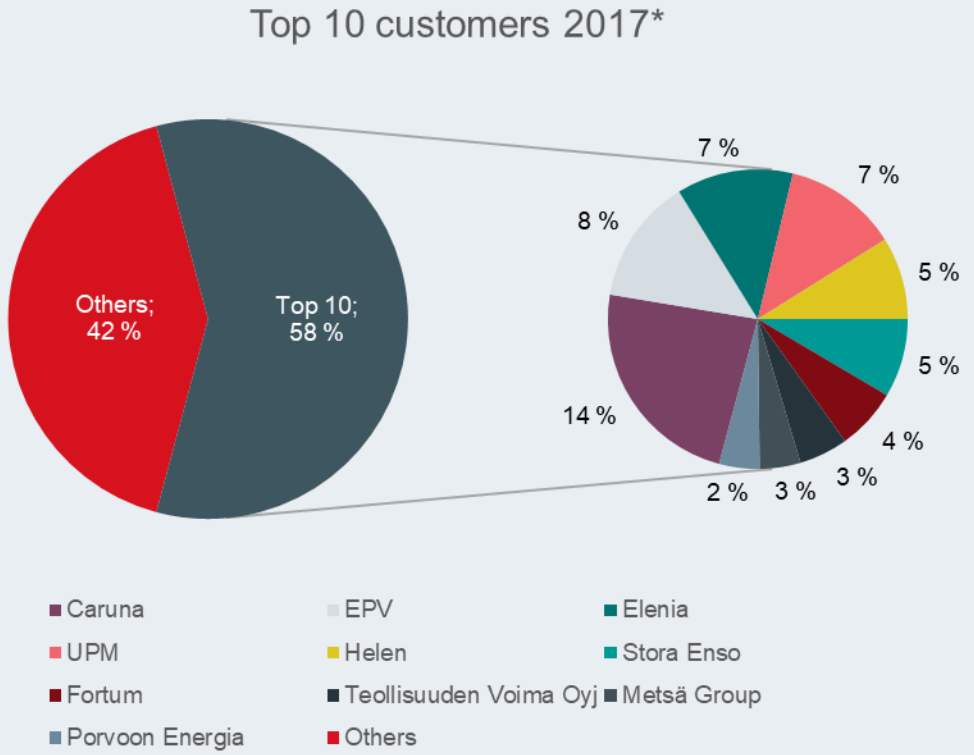
Grid service customer base consists of around 130 entities

- Customers comprise mainly of electricity producers, process industry and electricity distribution companies
- Fingrid is obligated to provide its customers a network connection point
- Ten largest customers account for 58 percent of grid service income



* based on grid service income

Credit quality of customer base is strong

Fingrid continuously maintains production and consumption balance

- Fingrid fulfils responsibility to maintain real-time balance in all market conditions
- Holders of electricity production and loads can submit bids to the balancing market concerning their capacity
- Fingrid has created a common Nordic balancing market together with other TSOs in the region
- Fingrid's core task is to ensure network functionality with automatic and manual reserves in imbalance situations

Fingrid procures the needed amount of reserve capacity to maintain the balance of the power system

Fingrid continuously maintains production and consumption balance

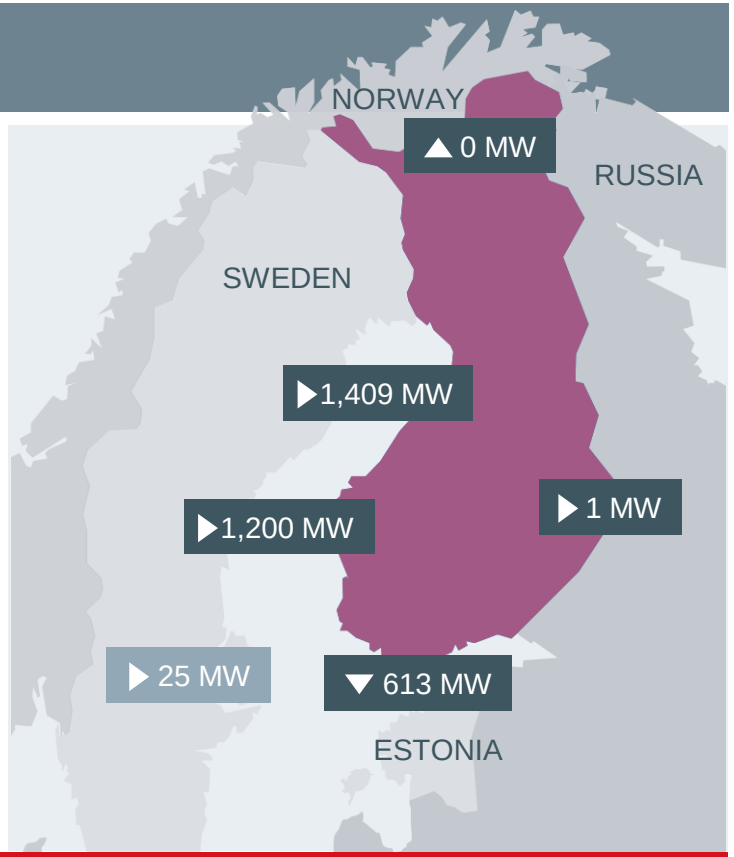
State of the power system – *illustrative example*

Consumption and production in Finland	Info
Consumption	11,172 MW
Production	9,210 MW
• Hydro power	2,382 MW
• Nuclear Power	2,774 MW
• Condensing power	10 MW
• Cogeneration district heating	2,113 MW
• Cogeneration industry	1,455 MW
• Wind power (partly estimated)	406 MW
• Other production (estimate)	70 MW
• Peak load power	0 MW
Net import/export	**1,962 MW**

Power balance	Info
Production surplus/deficit in Finland	91 MW
Surplus/deficit, cumulative	153 MWh
Instantaneous freq. measurement	49,89 Hz
Time deviation	11,60 s

Electricity price in Finland	Info
Elspot area price	31,48 EUR/MWh

Normal power balance	Info

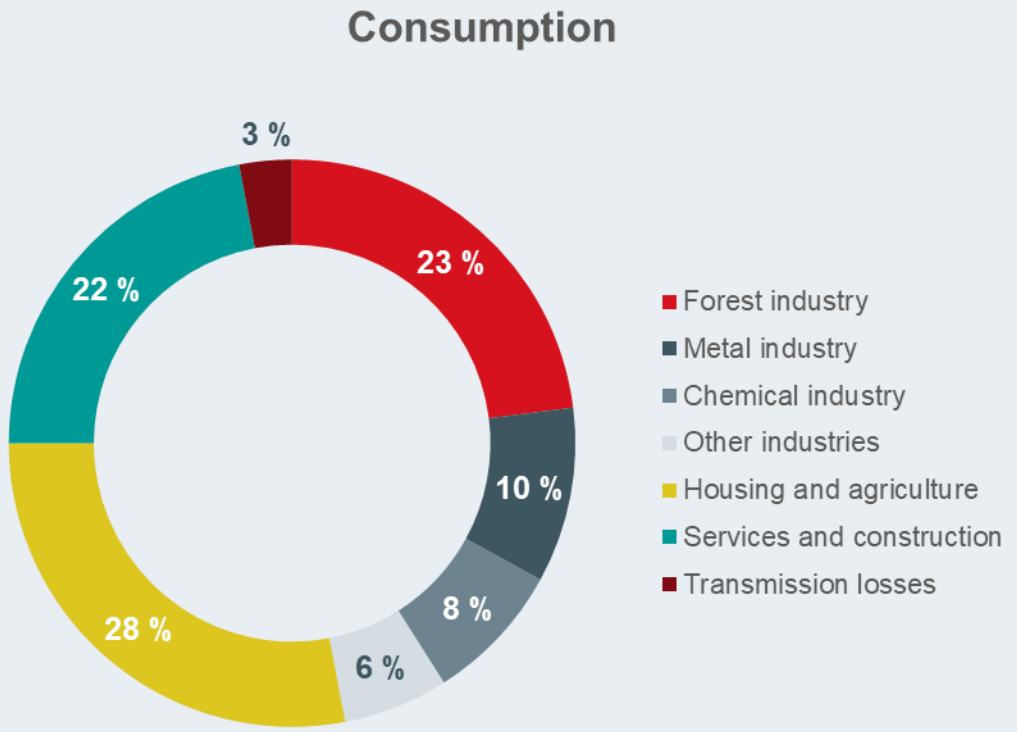


Fingrid procures the needed amount of reserve capacity to maintain the balance of the power system

Electricity consumption in Finland

Fingrid continuously maintains production and consumption balance

Electricity consumption was 85,5 TWh in Finland in 2017. Electricity imports accounted for 20,5 TWh or 24 % of total consumption



Energy-intensive industry is a major consumer in Finland accounting for 47 % of consumption in 2017

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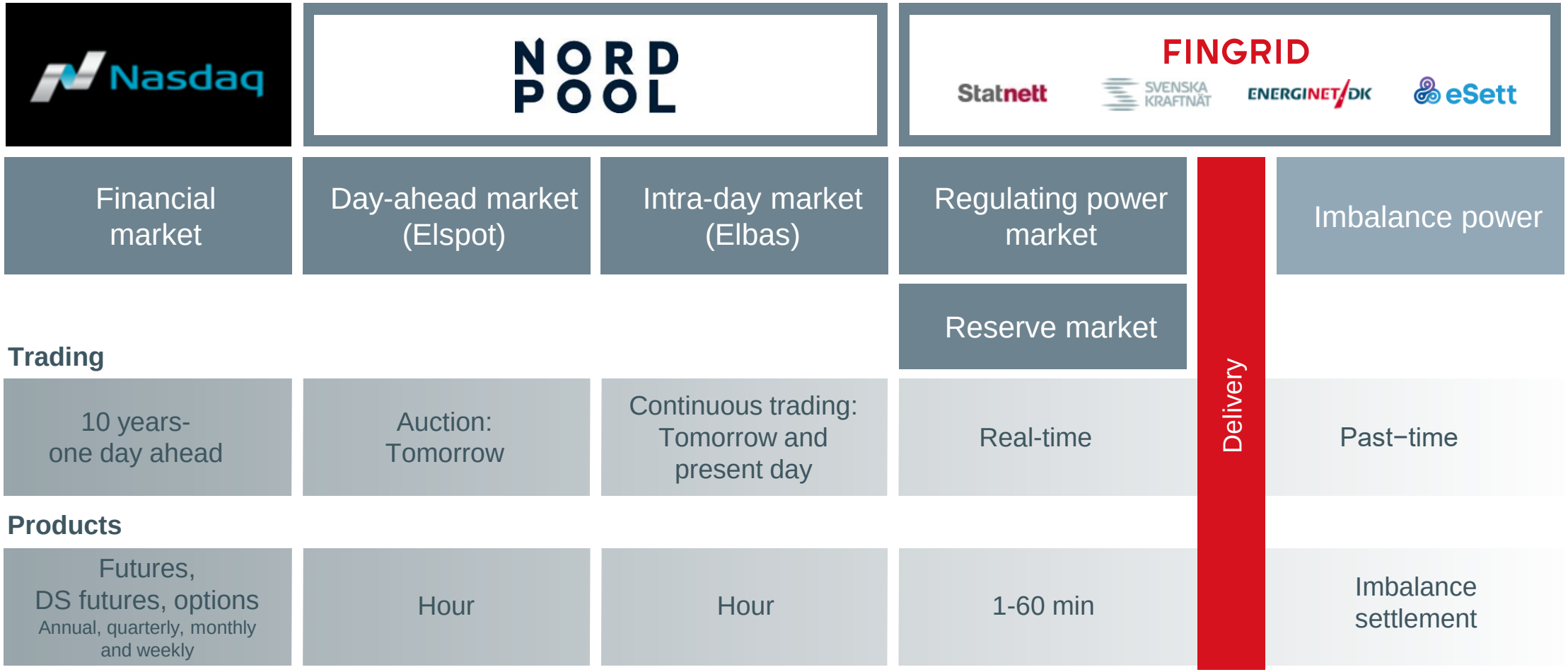
Advanced markets for all time frames



Fingrid is responsible for the imbalance power settlement after delivery

- Each party operating in the electricity market is financially responsible for an hourly power balance between its electricity production and consumption
- Fingrid acts as an open supplier, which balances the power balances of these parties after the actual power production and consumption has taken place
- A service company eSett is responsible for the financial settlement of imbalances on behalf of Fingrid
- eSett is equally owned by TSOs in Finland, Sweden and Norway

Establishment of eSett – a joint service company

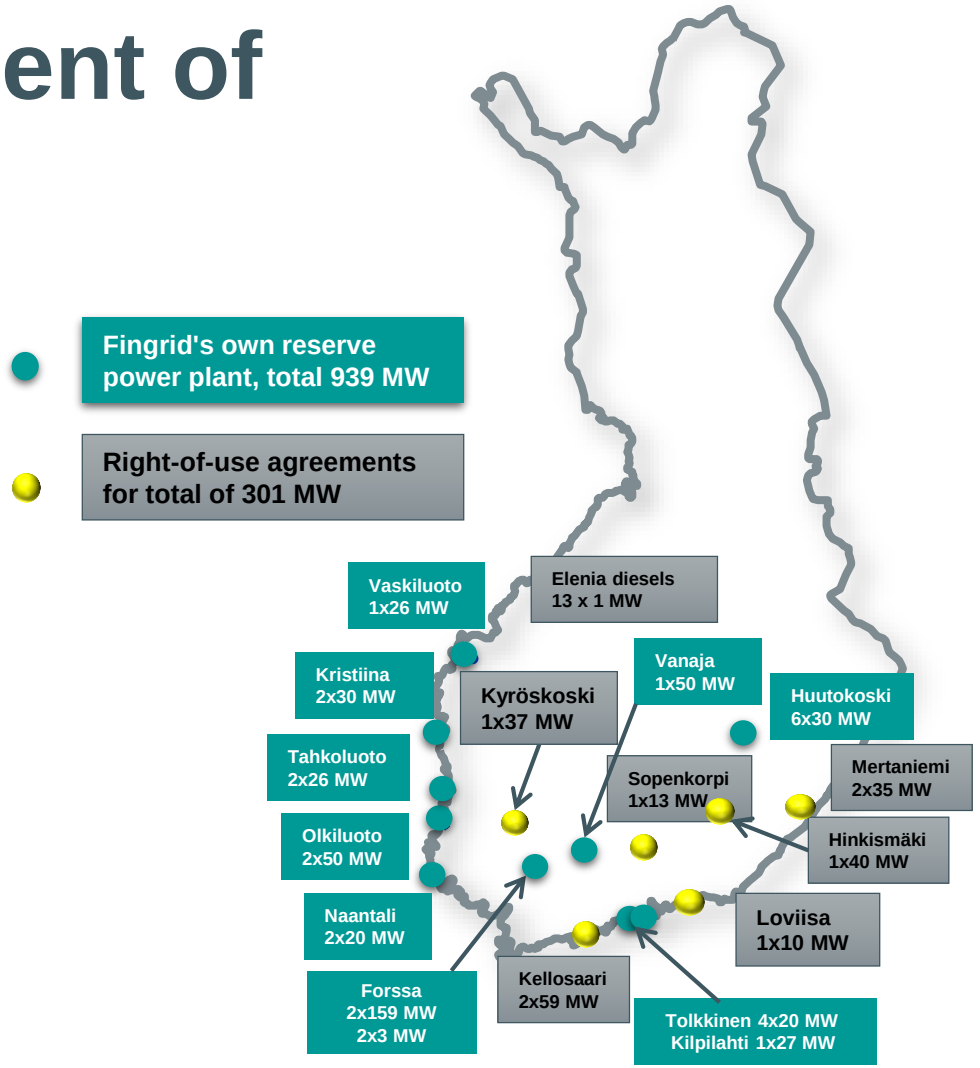
eSett Oy, the joint company of the three Nordic Transmission System Operators (TSOs) Fingrid, Statnett and Svenska kraftnät launched a joint Nordic Balance Settlement service on the first of May 2017.The new company has the objective of providing balance settlement services to participants of electricity markets in Finland, Norway and Sweden...
...The company aims to lower the entry barriers for the market parties in Finland, Norway and Sweden through equal and shared settlement rules. This will increase competition in the electricity markets in these countries, reduce long-term costs for the market parties and pave the way for the establishment of a Nordic end-user market.

Source: www.fingrid.fi

Imbalance settlement in Finland, Sweden and Norway has been performed by eSett since 1st May 2017

Fingrid owns an assortment of backup power plants

- Fingrid owns 939 MW of backup power plants and has right-of-use agreements for further 301 MW. All plants can be activated within minutes
- Backup power plants are not used to sell energy to market but solely as a reserve for imbalances and disturbances in power system
- Fingrid's own power plants are included in the regulatory asset base
- The total capacity of backup power plants comfortably exceeds the capacity of the largest power plant in the network

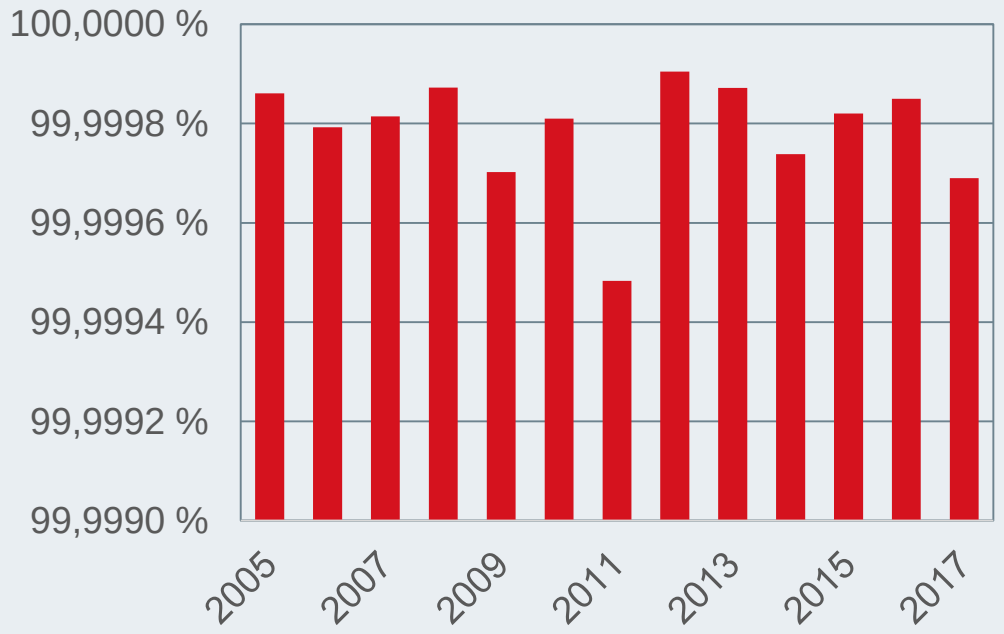


Fingrid's own backup power plants ensure reliable activation of reserves in disturbance situations

Reliability of the Finnish power system

- The power system has to withstand a fault in any individual component (N-1)
- The main reasons for disturbances have been lightning and other weather related incidents (storms)
- Major part of the disturbances are cleared with automatic reclosure schemes without any manual switching operations
- The average duration of the connection point outages is usually a couple of minutes per year

Transmission network reliability



The reliability of the Finnish power system is top class

Operations

Efficiency of operations

Key efficiency drivers

Effectiveness of the management and governance model

Outsourced network construction and maintenance

Highly centralised operations

Increasing degree of digitalisation

Fingrid's excellence in ITAMS and ITOMS benchmark studies reflect highly efficient operating model

Outsourced grid construction and maintenance

- Core feature of Fingrid's operating model is outsourcing
- Grid construction and maintenance are outsourced
- Regional maintenance is tendered among external service providers
- Fingrid has around 60 core suppliers, of which 10 account for around 90 percent of total financial value of procurements
- Grid construction projects are tendered among prequalified contractors (system of qualification of contractors)

Grid maintenance is outsourced

High operational efficiency and flexibility are achieved through comprehensive outsourcing capabilities

Fingrid uses qualified suppliers only

- A defined qualification process* for equipment suppliers, service providers and contractors
- An evaluation process of new suppliers is done annually
- Only qualified suppliers in Fingrid's supplier register are invited to bid for outsourced works
- Sustainability audits are conducted among suppliers
- Suppliers must comply with Fingrid's Supplier Code of Conduct

Hyvinkää – Hikiä transmission line construction site

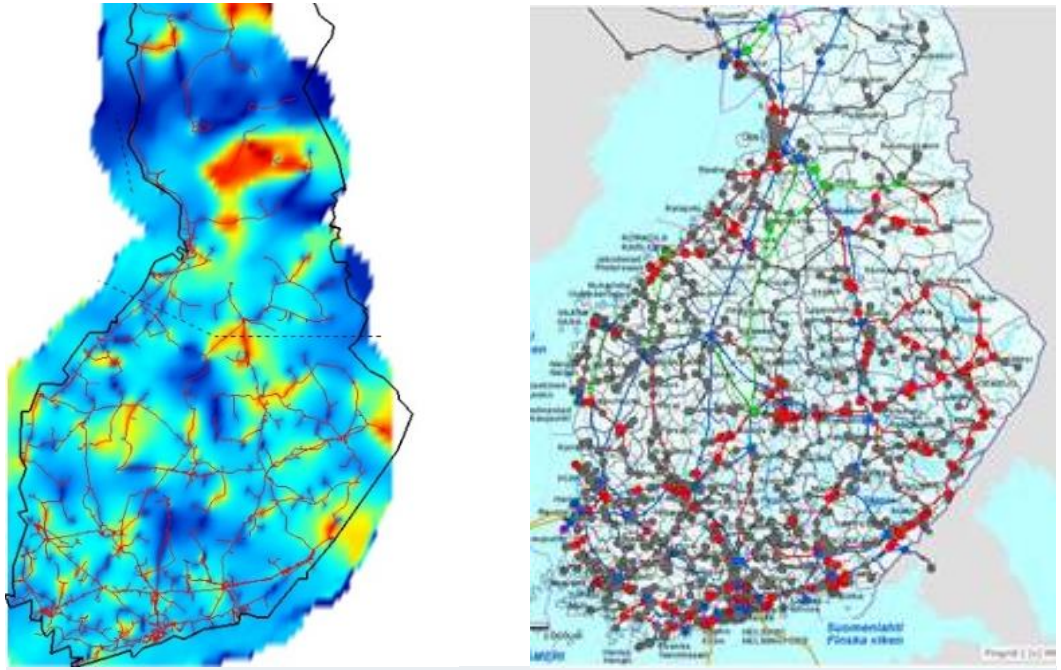
* In accordance with the EU based public procurement legislation for the sector

High operational efficiency and flexibility are achieved through comprehensive outsourcing capabilities

Investing in efficient management of information through digitalisation

- Increasing proactivity in calculations, monitoring and maintenance
- Single source for power system information
  - Improving information access and usability within stakeholders
- Adding cost aspect to operation and power system components
  - Enhanced business planning through cost operational analytics
- System utilisation and further development (2016-)

For a quick overview of the ELVIS asset management solution see video at: www.youtube.com key in BMM99tIYFBw



New ERP provides real-time network condition on map

A single asset management based ERP will further strengthen Fingrid's operational excellence

Fingrid's efficient operations are highly recognized

- In September 2018 Fingrid's Asset Management retained **ISO55001** Certificate
- Fingrid has continuously ranked among the best TSOs in the International Transmission Operations and Maintenance Study (**ITOMS**)*
- Fingrid ranked among the best TSOs in the International Transmission Asset Management Study (**ITAMS)** in 2017
- Fingrid was "exceptionally efficient" in 2013 in a study done for the Council of European Energy Regulators (**CEER**)

ISO55001

ISO 55001 is a framework for an asset management system that will help your business to pro-actively manage the lifecycle of your assets, from acquisition to decommission. This system helps you to manage the risks and costs associated with owning assets, in a structured, efficient manner that supports continual improvement and on-going value creation.

Benefits of ISO 55001

An asset management system provides a structured, best practice approach to managing the lifecycle of assets.

- Reduced risks associated with ownership of assets – anything from unnecessary maintenance costs and inefficiency to accident prevention
- Improved quality assurance for customers/regulators – where assets play a key role in the provision and quality of products and services
- New business acquisition - stakeholders gain confidence from the knowledge that a strategy is in place to ensure assets meet the necessary safety and performance requirements

Source: https://www.bsigroup.com/en-GB/Asset-Management/Getting-started-with-ISO-55001/

Excellent results from international benchmark studies

* Thirty-one TSOs from around the world participated in the 2015 study

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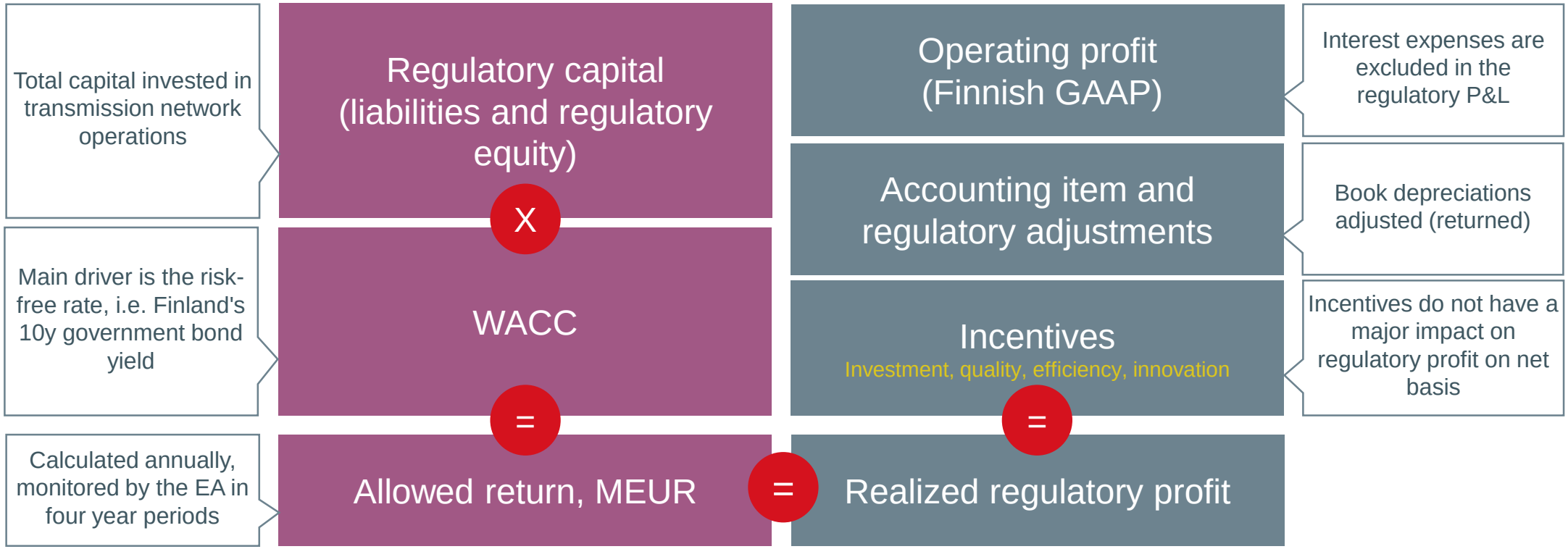
Fingrid's overall efficiency is confirmed also by regulators

- Study done for the Council of European Energy Regulators (CEER) 2013
- Fingrid was "exceptionally efficient" together with four other TSOs
- Study included 21 European TSOs and performed every four years
- Comparison of total efficiency: costs in grid construction, maintenance, planning and administration during the past 20 years
- CEER is organising a new benchmarking study in 2018-2019

Operations

Earnings model

Regulatory capital and WACC defined by the Energy Authority set the allowed return



Fingrid aims to match realized regulatory profit and allowed return on an annual basis

Calculation of WACC in the regulatory model 2016-2023

Cost of equity

$C_E = R_r + \beta_{debt\ free} \times (1 + (1 - t) \times D/E) \times (R_m - R_f) + LP$

C_E = Finnish 10y bond + 0,4 x (1 + (1-20%) x 50/50) x 5% + 0,6%

C_E = Finnish 10y bond + 4,2%

Cost of debt

$C_D = R_r + DP$

C_D = Finnish 10y bond + 1,4%

WACC (pre tax)

$WACC_{post\text{-}tax} = C_E \times 50/100 + C_D \times (1 - t) \times 50/100$

$WACC_{post\text{-}tax}$ = Finnish 10y bond x 0,9 + 2,66%

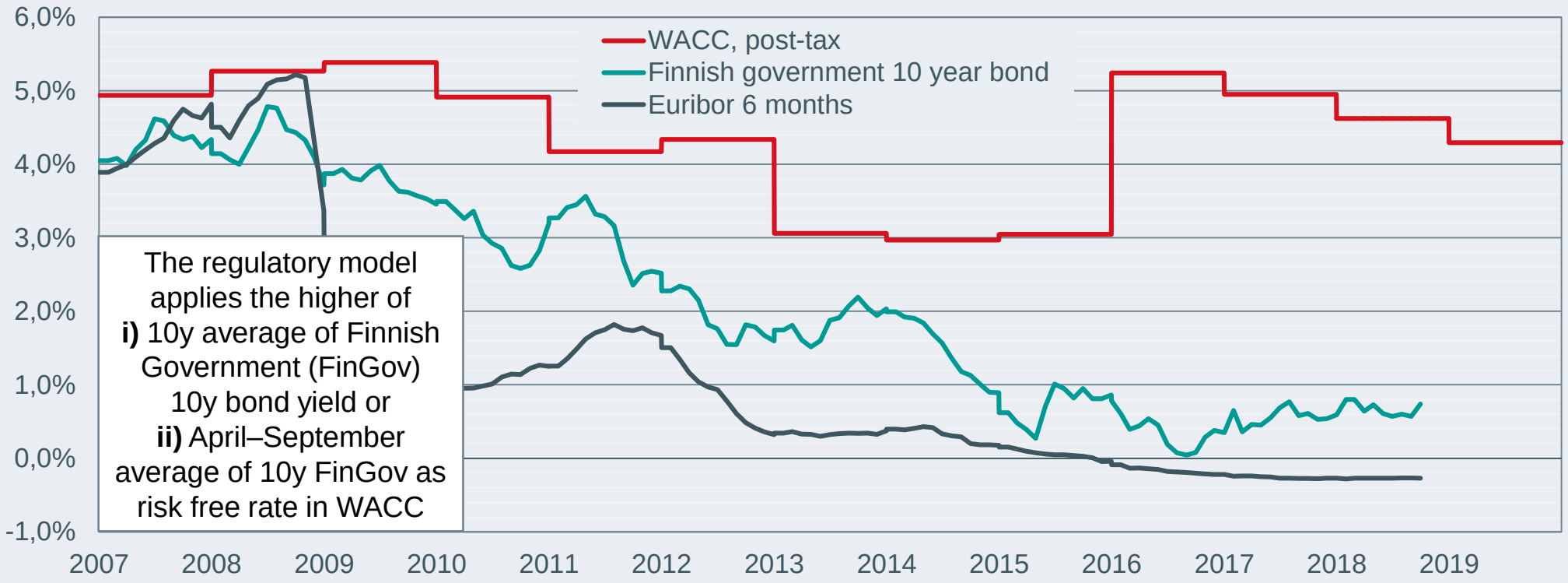
$WACC_{pre\text{-}tax}$ = Finnish 10y bond x 1,125 + 3,33%

Parameter	Value to be applied
Risk-free rate (R_r)	Greater of: a) 10-year average of 10-year Finnish government bond rate b) Average of previous year April-September government bond rate
Asset beta ($\beta_{debt\ free}$)	0,4
Market risk premium ($R_m - R_f$)	5,0%
Liquidity premium (LP)	0,6%
Capital structure (D/E)	50/50
Risk premium of debt (DP)	1,4% *
Tax rate (t)	20%

* Will be updated by end of 2019 for regulatory period 2020 – 2023 based on Bloomberg's utility sector A-BBB rated companies' fixed income indices

The core parameter defining yearly WACC is the yield of the Republic of Finland's 10-year bond

The current regulatory model benefits from relatively stable WACC* without capping upside



* Regulatory WACC 2007 – 2015 calculated as post-tax basis. From 2016 regulatory model applies pre-tax WACC.

Pre-tax WACC for 2019 calendar year 5,36% (5,78% in 2018)

Calculating the allowed return in euros: WACC x Regulatory capital

- Allowed return in euros is calculated as follows:

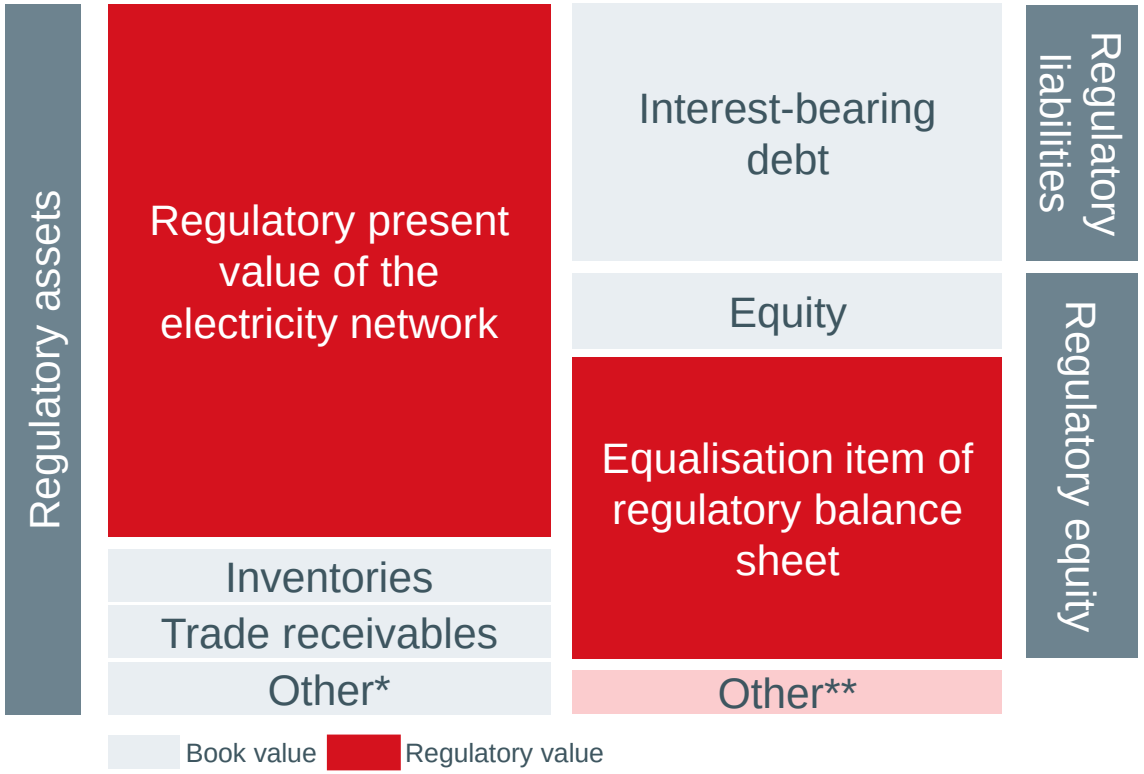
$$R_{pre\text{-}tax} = WACC_{pre\text{-}tax} \times (D+E)$$

E = regulatory amount of equity
D = regulatory amount of interest-bearing debt

$$R_{pre\text{-}tax\ 2018} = 5{,}36\% \times \sim 3{,}000\ M€ = \sim 160\ M€$$

- Regulatory capital is equal to the sum of regulatory equity and liabilities
- The equalisation item in the equity section of balance sheet balances regulatory equity and liabilities with regulatory assets

Calculating regulatory balance sheet



*Including regulatory cash
**Other is excluded from regulatory capital. Other includes deferred tax liabilities, non-interest bearing debt, provisions for liabilities and charges

Regulatory assets are mainly based on regulatory present value of the electricity network

Components in calculation of regulatory assets in regulatory model 2016-2023	
Regulatory present value of the electricity network	Based on the unit prices of components in the beginning of the regulatory period and component age / maximum age in regulation
Unit prices of components	Prices were updated to replacement value in 2016 based on the unit prices (5Y historical project data)
Investments under construction	Investments under construction are included in the RAB in book value
IT systems	Value in RAB and regulatory depreciation in book value
Regulatory allowed cash	10 % of regulated turnover

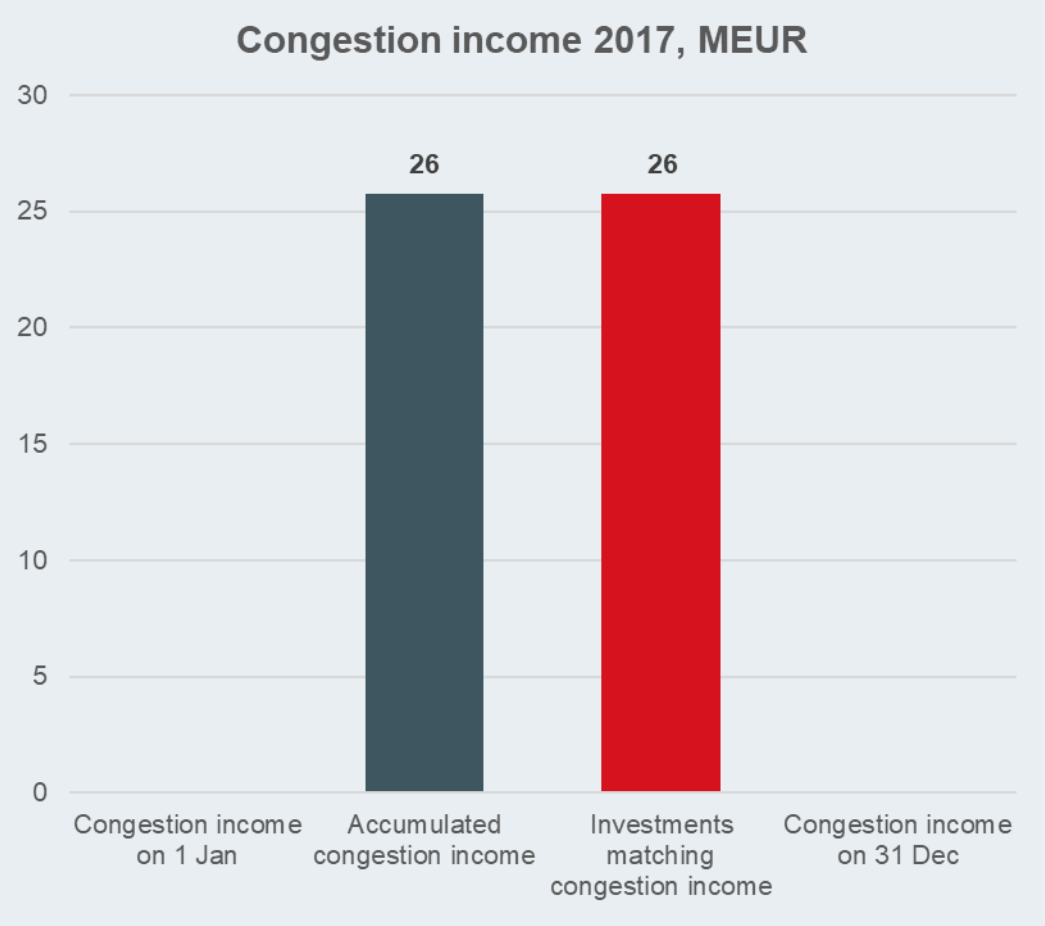
Limited contribution from incentives and adjustments to allowed return

Incentives in calculation of realized regulatory profit in regulatory model 2016-2023	
Investment incentive	Promotes reasonable and cost-efficient investments by allowing straight-line depreciations based on the replacement value of the transmission network assets. Components are included in depreciation in replacement value as long as they are utilized
Quality incentive	Cost for the society from non-delivered electricity caused by disturbances and fast reclosing operation, max +/- 3 % of allowed return, benchmarked against 8-year historical average
Efficiency improvement incentive	Target: 0%, max +/- 5 % of allowed return, benchmarked against 4-year historical average
Innovation incentive	Maximum 1,0 % of turnover is reimbursed in allowed return

Adjustments in calculation of realized regulatory profit in regulatory model 2016-2023	
Congestion income	Treated separately from the regulatory allowed return but investments financed with congestion income affect realized regulatory profit through regulatory depreciations
Inflation adjustment to regulatory depreciation	Indexed annually with CPI to match current replacement value

Congestion income

- Since 1 Jan 2016, congestion income is no longer reported in Fingrid's turnover
- Congestion income is used to increase the transmission capacity on cross-border interconnectors according to the EU regulation
- In 2017, MEUR 26 of congestion income was accumulated and all of it was used for the Hirvisuo-Pyhänselkä transmission network investment, which promotes the cross-border transmission from northern Sweden
- Fingrid's realized regulatory profit is affected by congestion income because the financed investments are included in regulatory depreciation but not in book depreciation

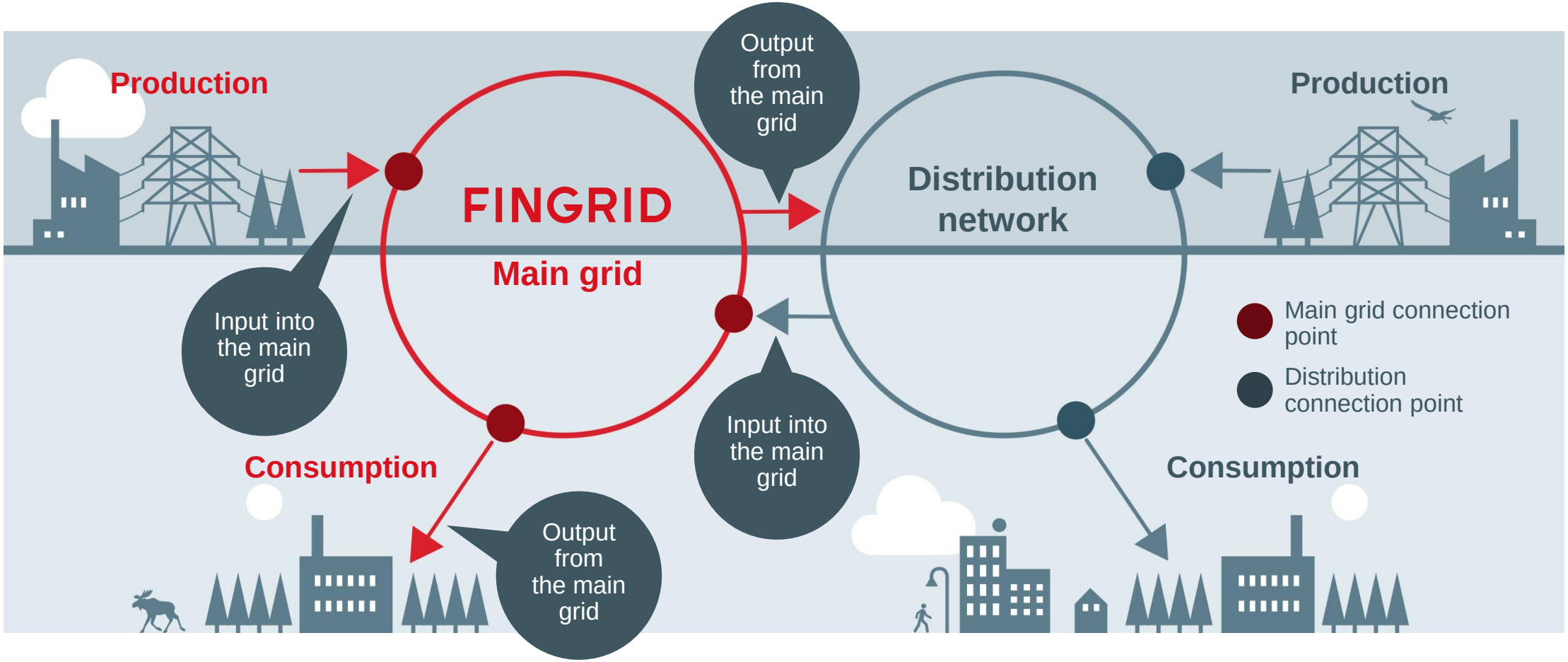


Congestion income is used for further developing the cross-border transmission capacity

Operations

Pricing

Grid service pricing is applied on both consumption and production



Grid service pricing is applied on both consumption and production

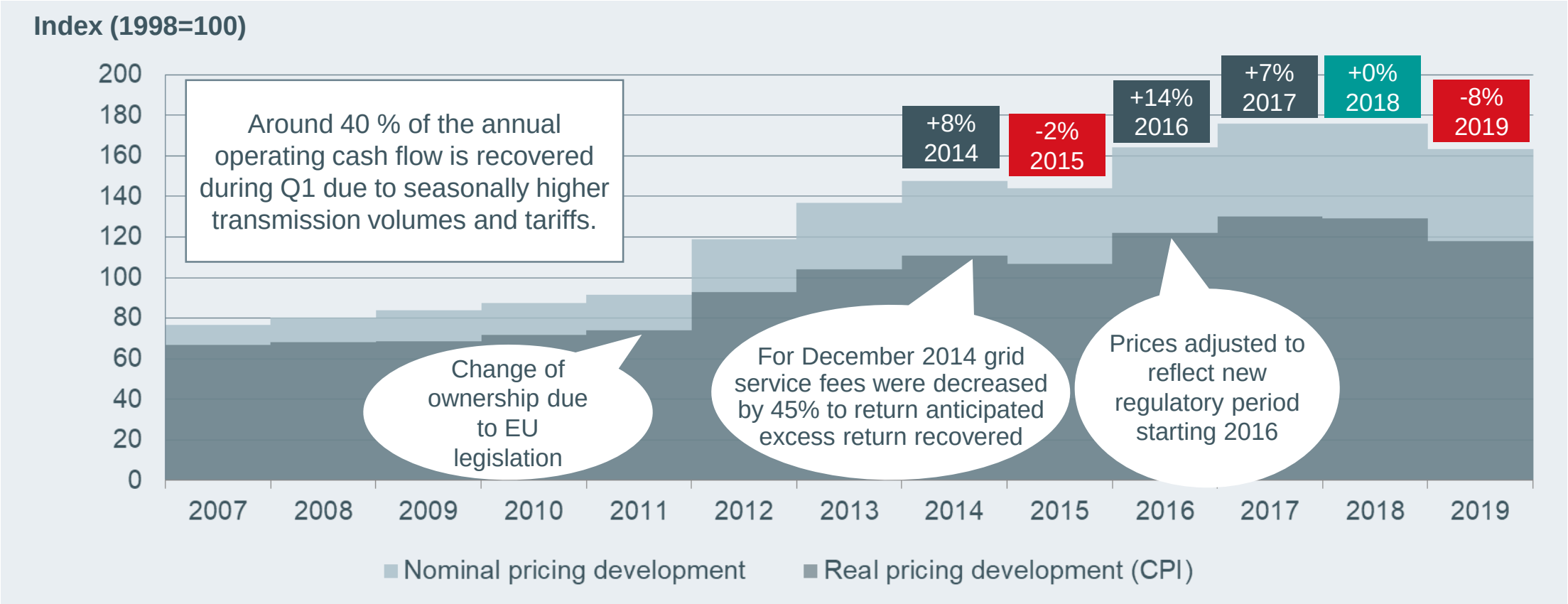
Fingrid defines the grid service pricing structure, which is approved by the Energy Authority

Pricing EUR/MWh	2019
Consumption, winter period*	8,80
Consumption, other times	2,50
Output from the grid	0,90
Input into the grid	0,60
Power plant capacity fee	1900 €/MW/a
Reactive power fee	1000 €/Mvar/m
Reactive energy fee	5 €/Mvarh

* Winter period: 1.12.-28.2. on Monday – Friday 09.00 – 21.00

Transmission prices are seasonally adjusted and charged on consumption and use of grid

Development of announced grid service pricing in 2007–2019

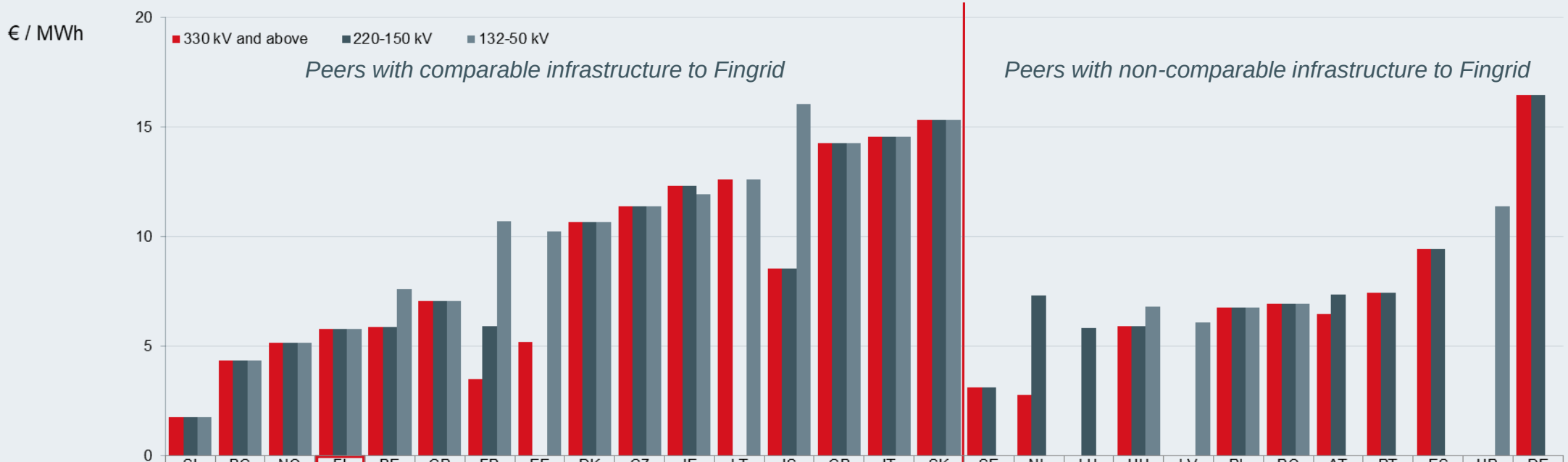


The current tariff level allows Fingrid to achieve allowed regulatory return

Transmission charges from generation to consumption

Source: Entso-e

Transmission charges from generation to consumption in Europe 2017 – including EU and ETA countries



	SI	BG	NO	FI	BE	GR	FR	EE	DK	CZ	IE	LT	IS	GB	IT	SK	SE	NL	LU	HU	LV	PL	RO	AT	PT	ES	HR	DE
330 kV and above	1,73	4,32	5,13	5,78	5,87	7,07	3,48	5,18	10,6	11,3	12,3	12,6	8,52	14,2	14,5	15,3	3,12	2,75	-	5,91	-	6,74	6,94	6,47	7,43	9,41	-	16,4
220-150 kV	1,73	4,32	5,13	5,78	5,87	7,07	5,93	-	10,6	11,3	12,3	-	8,52	14,2	14,5	15,3	3,12	7,29	5,80	5,91	-	6,74	6,94	7,36	7,43	9,41	-	16,4
132-50 kV	1,73	4,32	5,13	5,78	7,58	7,07	10,6	10,2	10,6	11,3	11,9	12,6	16,0	14,2	14,5	15,3	-	-	-	6,81	6,07	6,74	6,94	-	-	-	11,3	-

Fingrid's effectiveness and efficiency enable low charges

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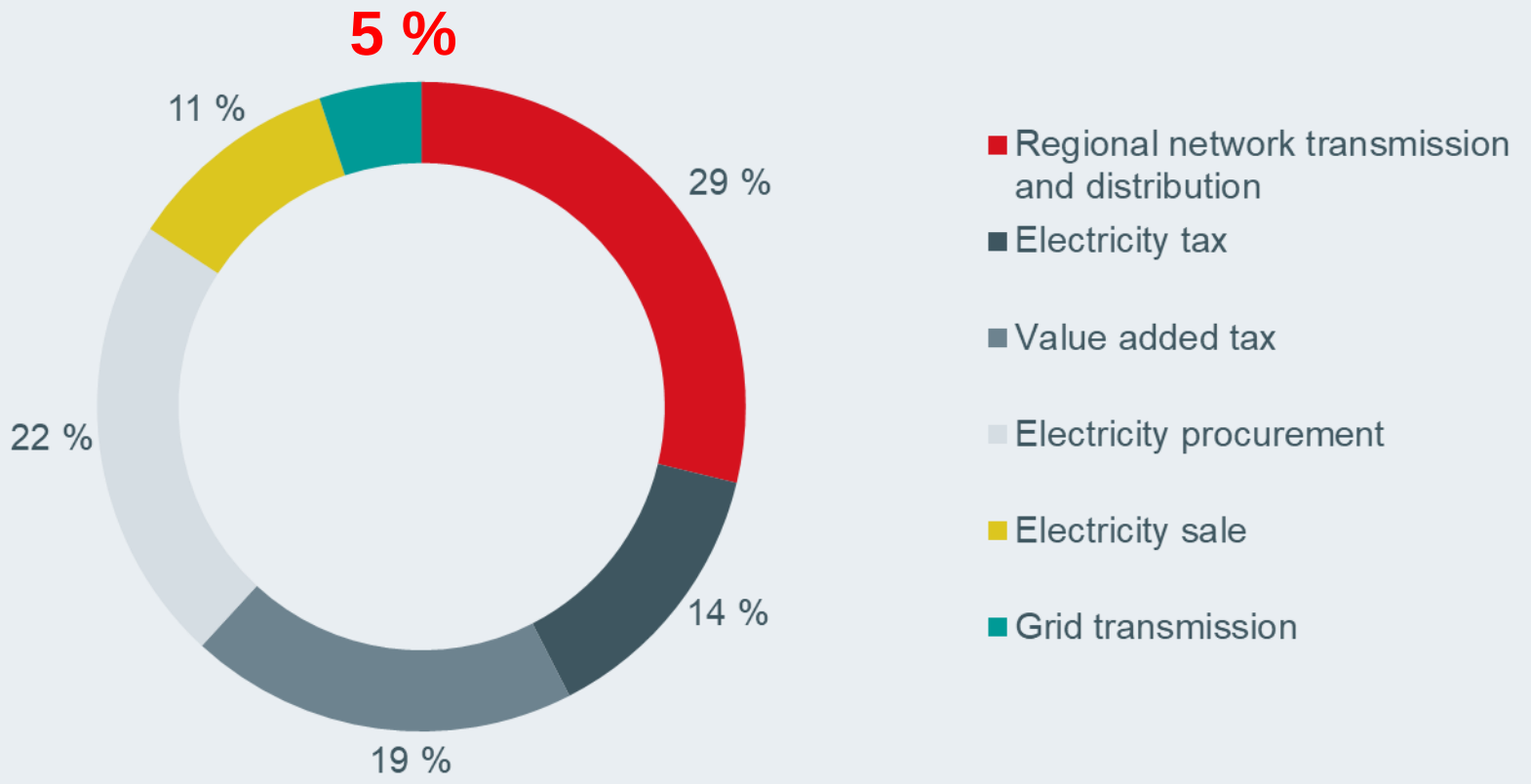
This is what makes up the consumer price



Source Energy Authority: 1.1.2018, consumption 5 000 kWh/year, electricity total price 16,42 cent/kWh

Fingrid's share of consumer price is approximately five percent

Operations

Capex

Investments are based on 5-25 year grid development plans

- Grid development plans are prepared at three levels, i.e. European, regional and national
- Fingrid decides on investments based on customers' needs, transmission system security and network capacity
- Fingrid's network construction is contracted with fixed price contracts
- Before network construction commences all environmental and planning permits are in place as Fingrid applies EIA before the investment decision

All Fingrid's investment projects have been done in schedule and budget

Grid Vision 2030

Historical Iron Lady OHTL will be modernized by
2020
around 135 M€

Huittinen – Forssa 400 kV OHTL by
2030
around 30 M€

Forest Line 400kV Oulu - Petäjävesi
2022
around 100 M€

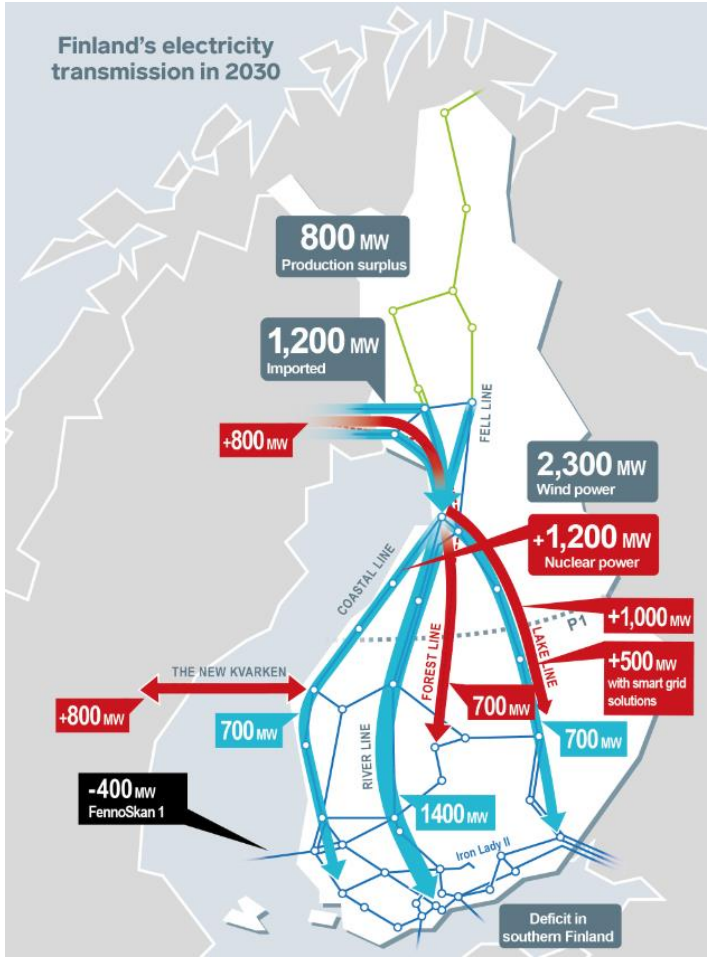
HVDC link between Sweden and Finland by
2030
around 220 M€

Third 400 kV AC interconnection between Sweden and Finland
2025
around 200 M€

Doubling the Lake Line 400kV Nuojua – Huutokoski by
2030
around 100 M€

Reinforcement of Helsinki region network
2025 – 2035
around 60 M€

Extension of the Forest Line 400kV Petäjävesi – Hikiä by
2030
around 60 M€



Total of 33 investments projects to be completed in 2018

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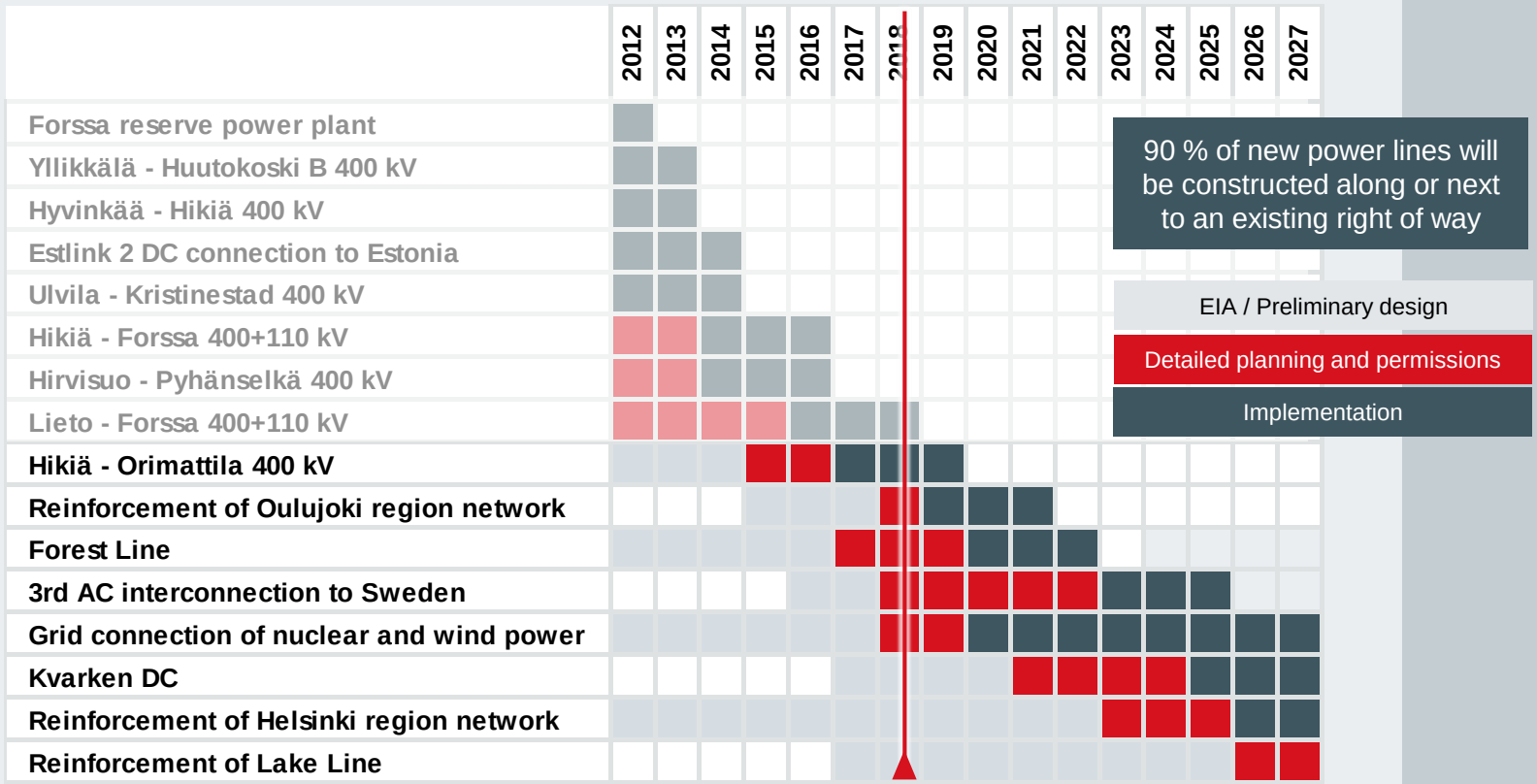
Flexible and long-term investment strategy

Note: Click to view National ten year grid development plan in Finland

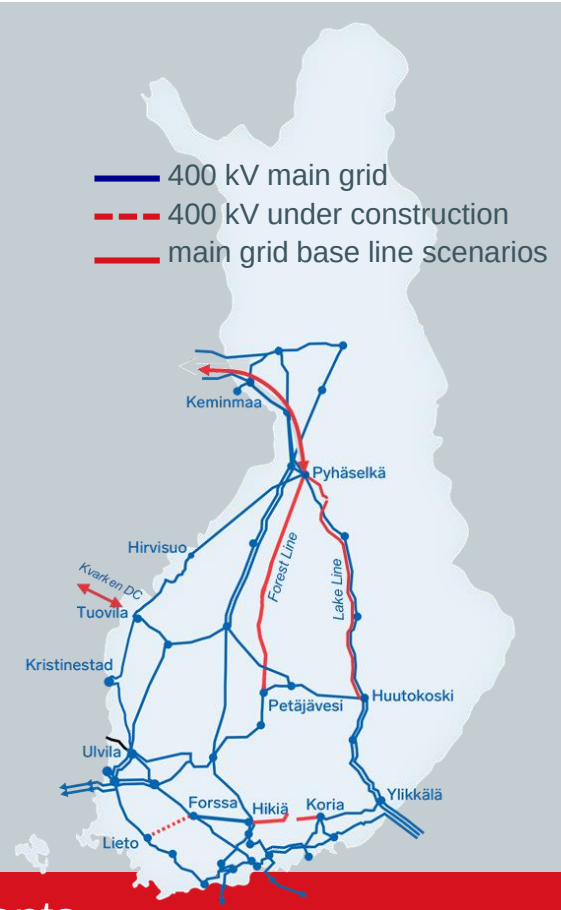


90 % of new power lines will be constructed along or next to an existing right of way

EIA / Preliminary design

Detailed planning and permissions

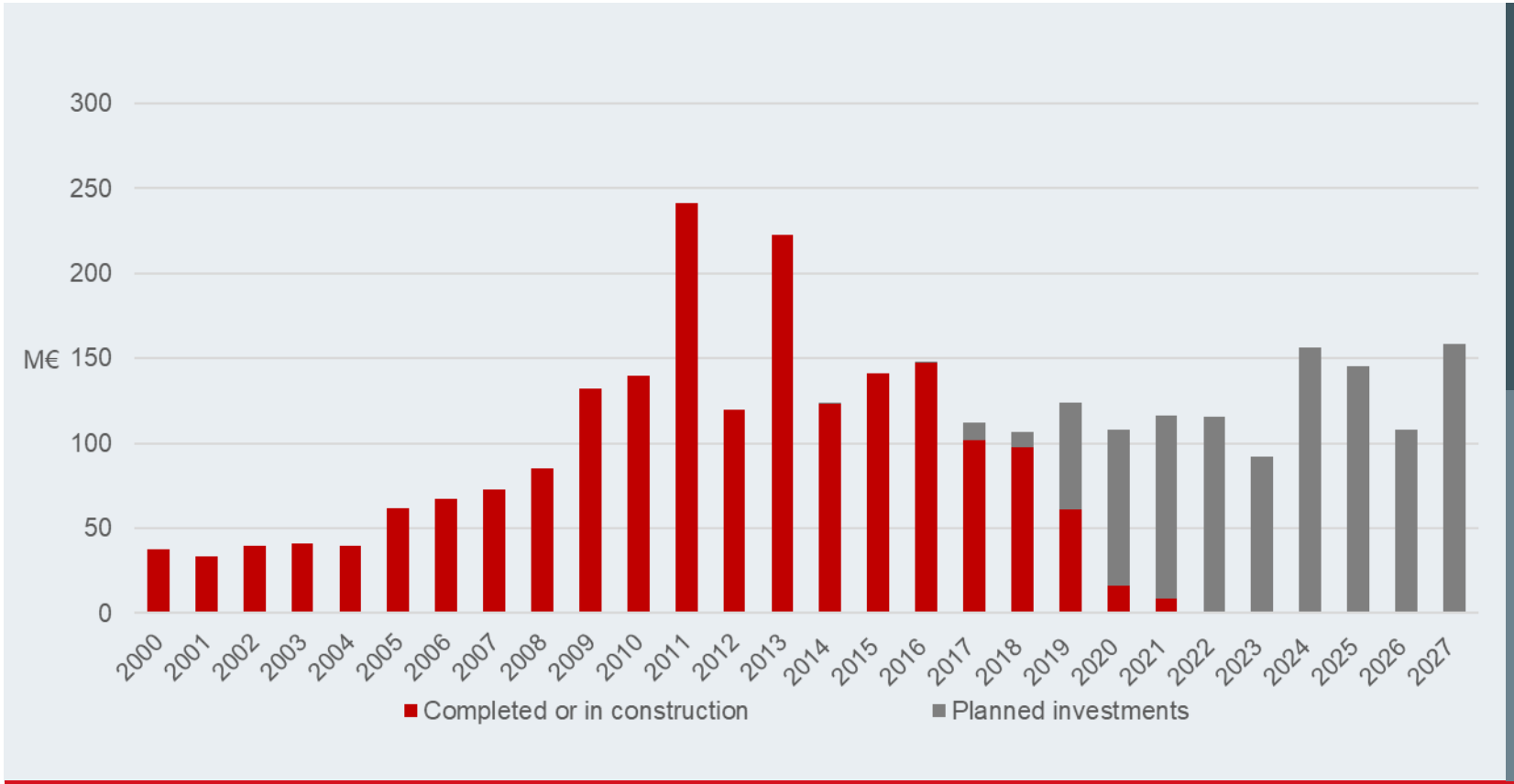
Implementation



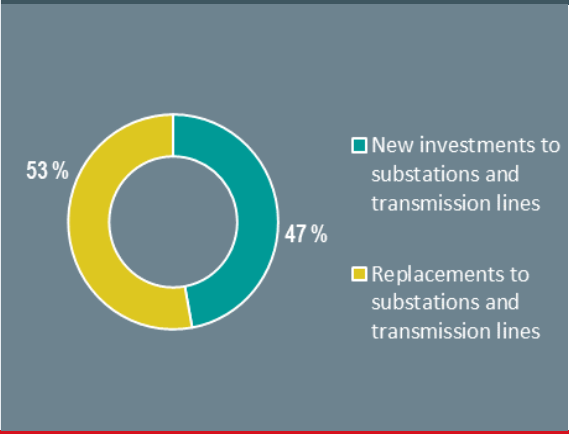
Fingrid has a long-term planning horizon for investments

FINGRID

Investments in 2000–2027



Investments in 2018-2027 MEUR 1230



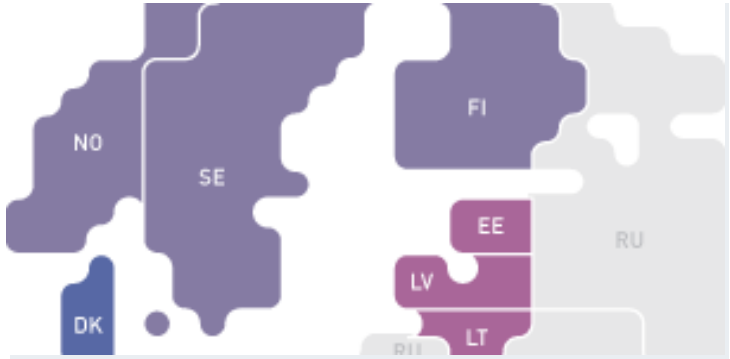
Investments are driven by network aging, market development and connecting new production capacity

Operating environment

Fingrid's operating environment in three geographical levels

Europe

- Vision: integrated electricity market working on one European grid
- Strong changes in the generation fleet (nuclear, renewables, gas)
- Electricity market from Helsinki to Lisbon achieved in 2014
- Structural bottlenecks will remain in the grid – licensing main obstacle



Baltic Sea region

- Transmission capacity between the Nordic region and Continental Europe will double by 2020
- Stronger connection between the Nordic region, Baltic states and Poland

Finland

- Energy and climate strategy 2030
- Share of price elastic generation decreases
- Modest growth in electricity demand
- Role of cross-border connections increases

Towards a highly developed electricity market in Europe

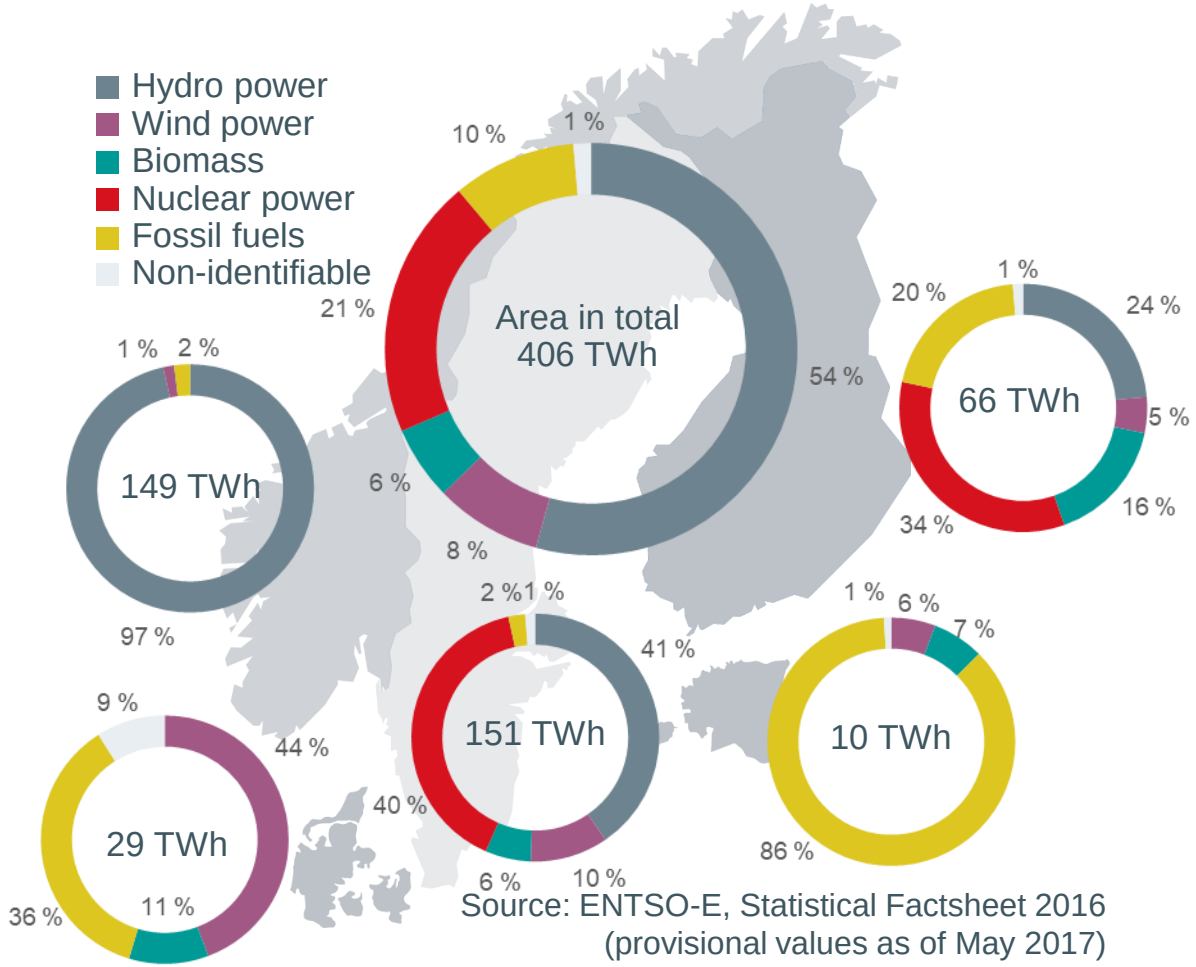
- Improving efficiency and competitiveness of the power sector
  - efficient market price
  - cross-border trade
  - efficient dispatching via "the invisible hand" of the markets
- Delivering benefits for end-users and trust to market players
- Contributing to the security of supply
- Reaching the 20-20-20 goals of EU: better environment, more renewables

Market coupling

Electricity market from Helsinki to Lisbon since 2014

Hydro power is the main energy source in the Nordic region

- Significant hydro power generation capacity in Norway and Sweden drive the electricity price in Finland
- Nuclear power generation is an important base load power generation source in Sweden and Finland
- Renewable power generation consist of hydro power, biomass fired cogeneration and wind power

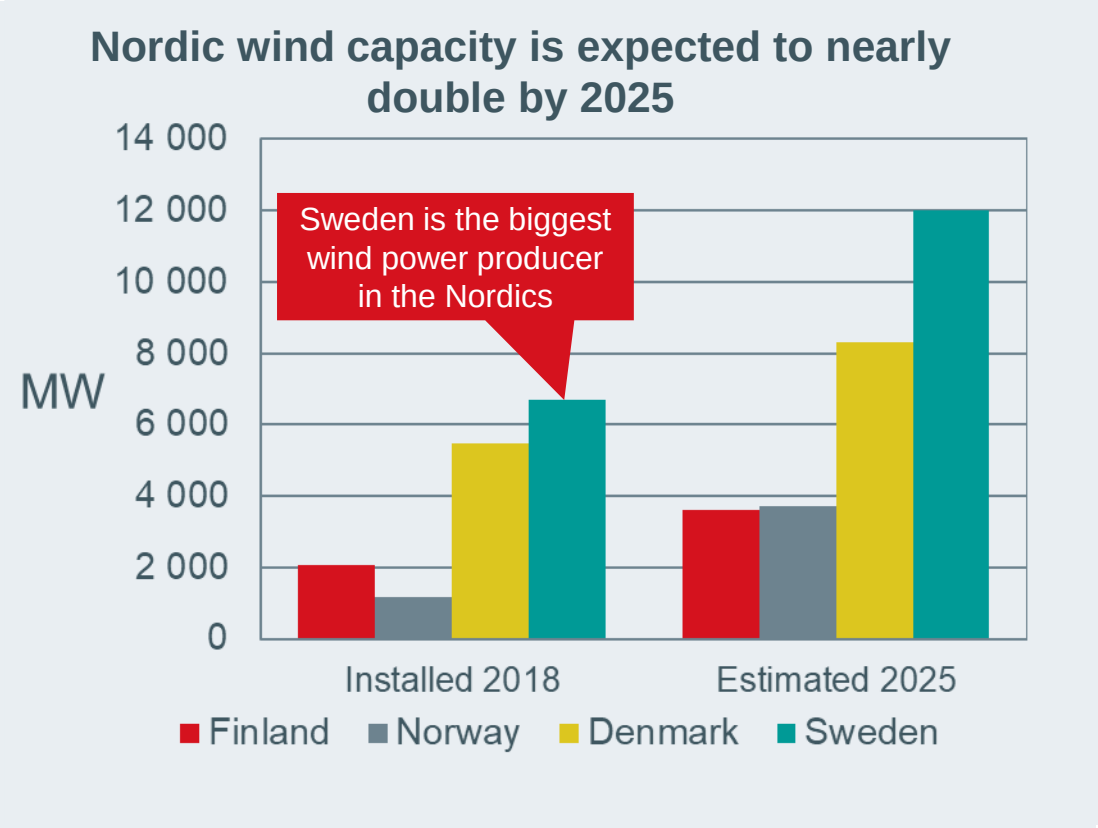


Source: ENTSO-E, Statistical Factsheet 2016 (provisional values as of May 2017)

Nordic electricity price is driven by hydrological conditions in Scandinavia

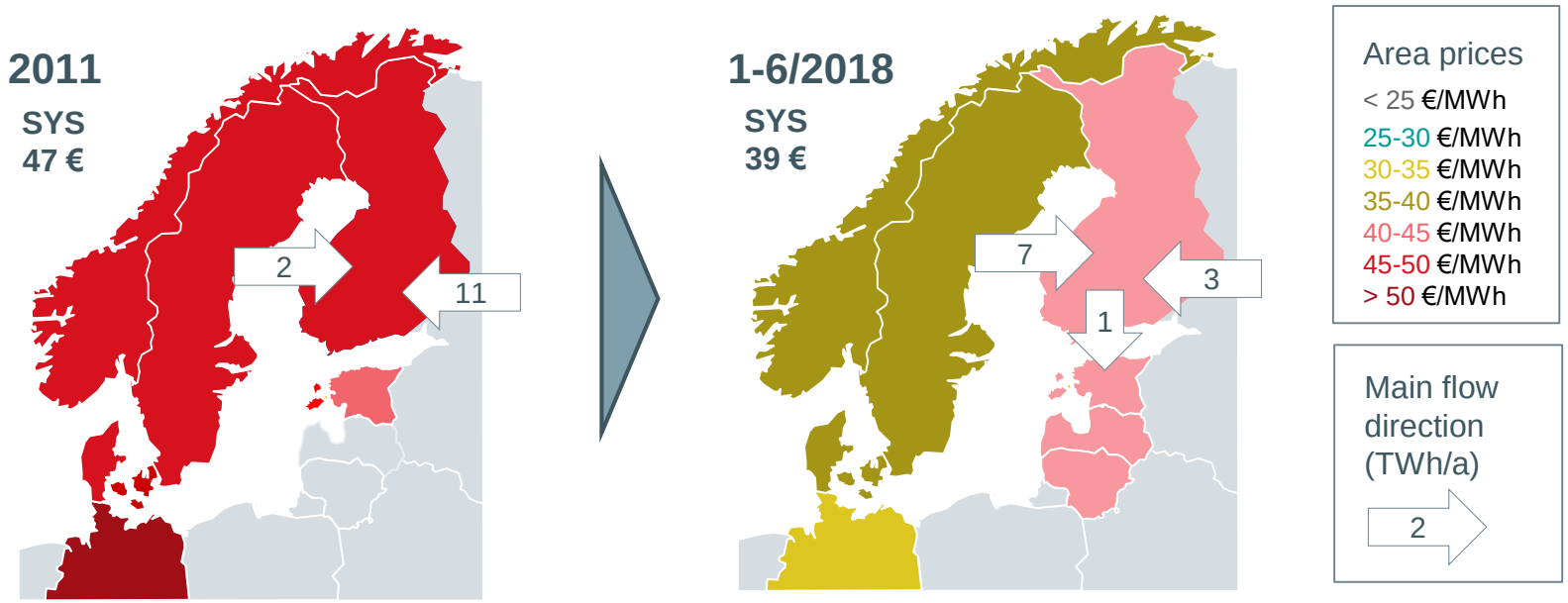
Wind power competitiveness has clearly improved

- First ~2000 MW of wind in Finland has been built with incentive from feed-in tariff
- New Finnish renewable electricity auction scheduled for fall 2018, size (1.4 TWh) corresponds to ~400 MW of new wind
- Investment decision of first Finnish wind farms with no subsidies has been made in 2018
- Most of the planned new onshore wind power projects (>10 GW in total) are located along the west coast where Fingrid is already making significant network investments



Fingrid promotes the development of market based wind power generation in Finland

Nordic electricity spot prices started to increase

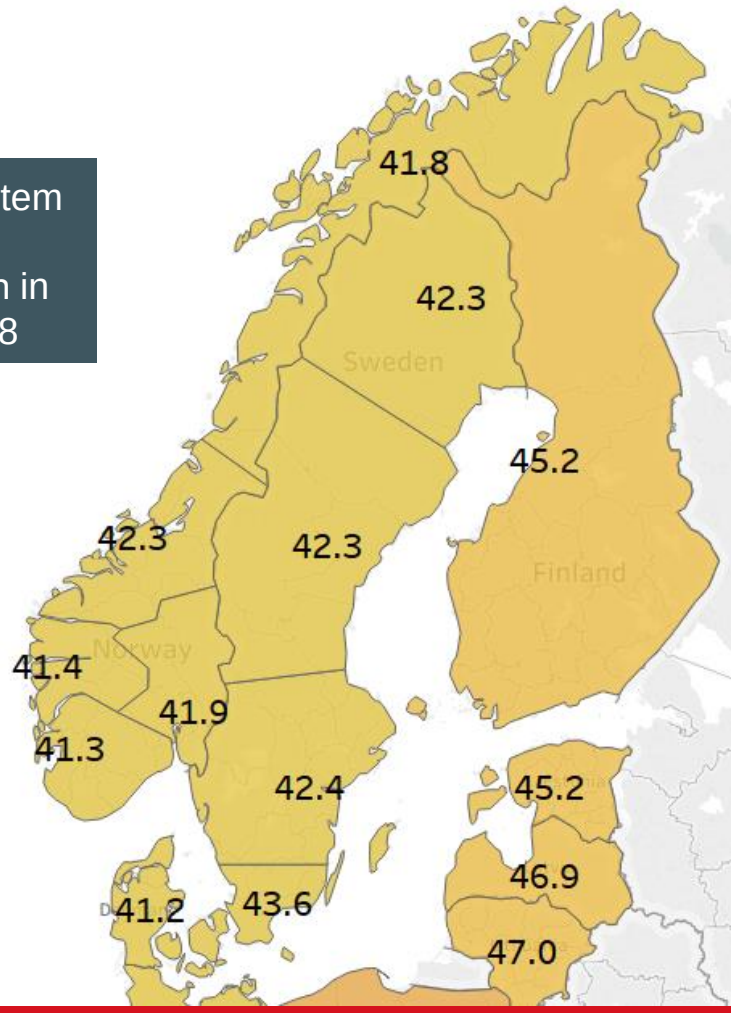


- Subsidised wind power generation has pushed the wholesale price to an artificially low level
  - Producers have cut their capacity in response to low profitability
- Electricity consumption in Finland has started to slightly increase after large drop caused by the financial crisis
- Olkiluoto 3 nuclear power plant trial runs are expected to start in 2019. Olkiluoto 3 will increase Finnish production capacity roughly by 13%

Finland is well-connected in Baltic Sea power market

- Finland is a net importer of electricity mainly from Scandinavia
- Finland is expected to remain as a net importer of electricity even after the 1600 MW nuclear project Olkiluoto 3 is commissioned
- Cross-border lines between Finland and Sweden have a crucial role of limiting price differentials between the markets
- Fingrid has established a 24/7 service to ensure continuous specialist availability to solve issues in cross-border connections, and is investing in new transmission capacity between the countries.

Nordic system price
42 €/MWh in 1-8/2018

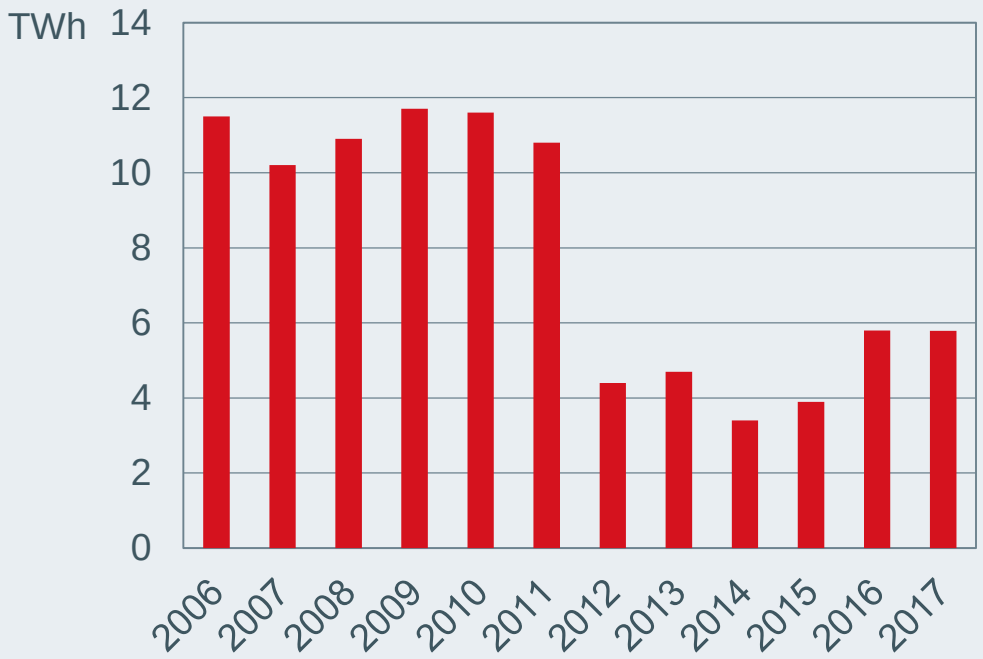


Finland is a net importer of electricity mainly from Scandinavia

Cross-border transmission between Finland and Russia

- Imports from Russia have stabilized on a lower level
  - Russia now has capacity payment of around 30-50€/MWh on exports to Finland
  - Decreasing day-ahead market price difference between Finland and Russia
- Towards more efficient trade
  - Increased cooperation between power exchanges
  - Common rules between EU and Russia
  - Dynamic transmission tariff between Finland and Russia
- First commercial exports to Russia in 2015
  - Very small volumes

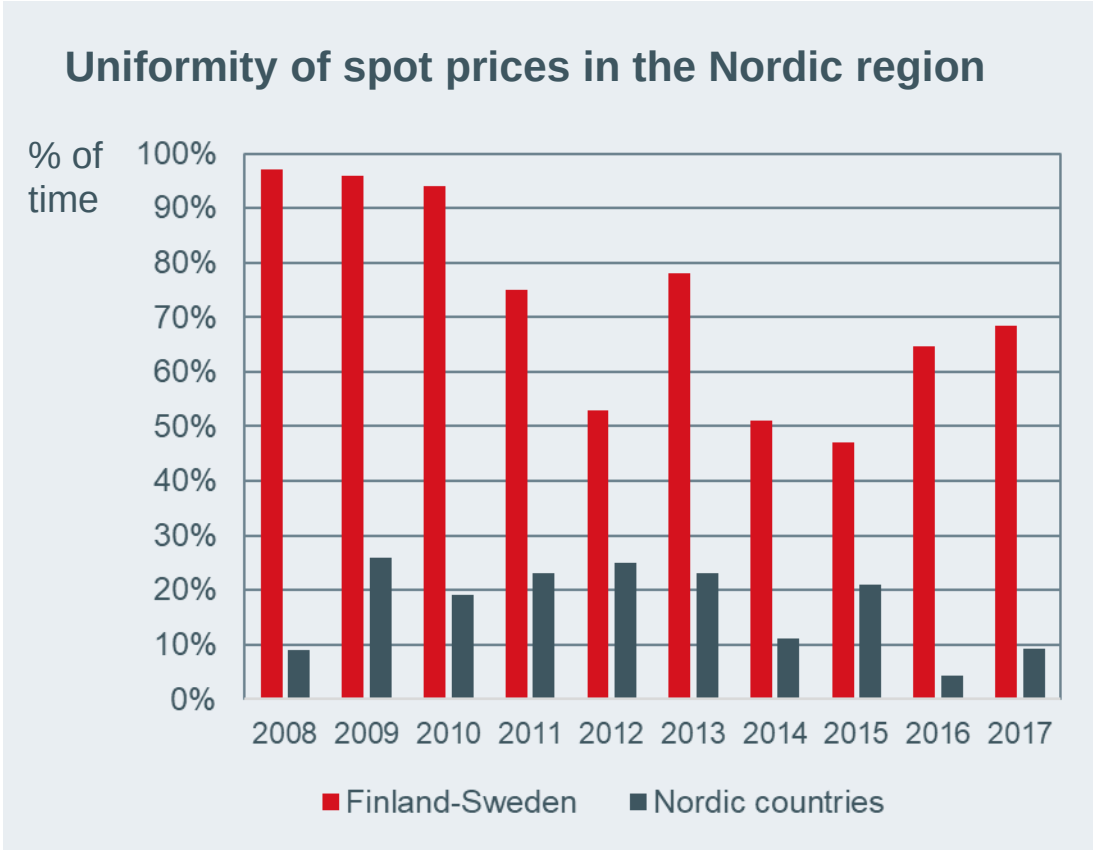
Annual electricity export from Russia to Finland



Finland's cross-border transmission with Russia is driven by power market development in EU and Russia

The Baltic Sea region* forms a well-developed regional market

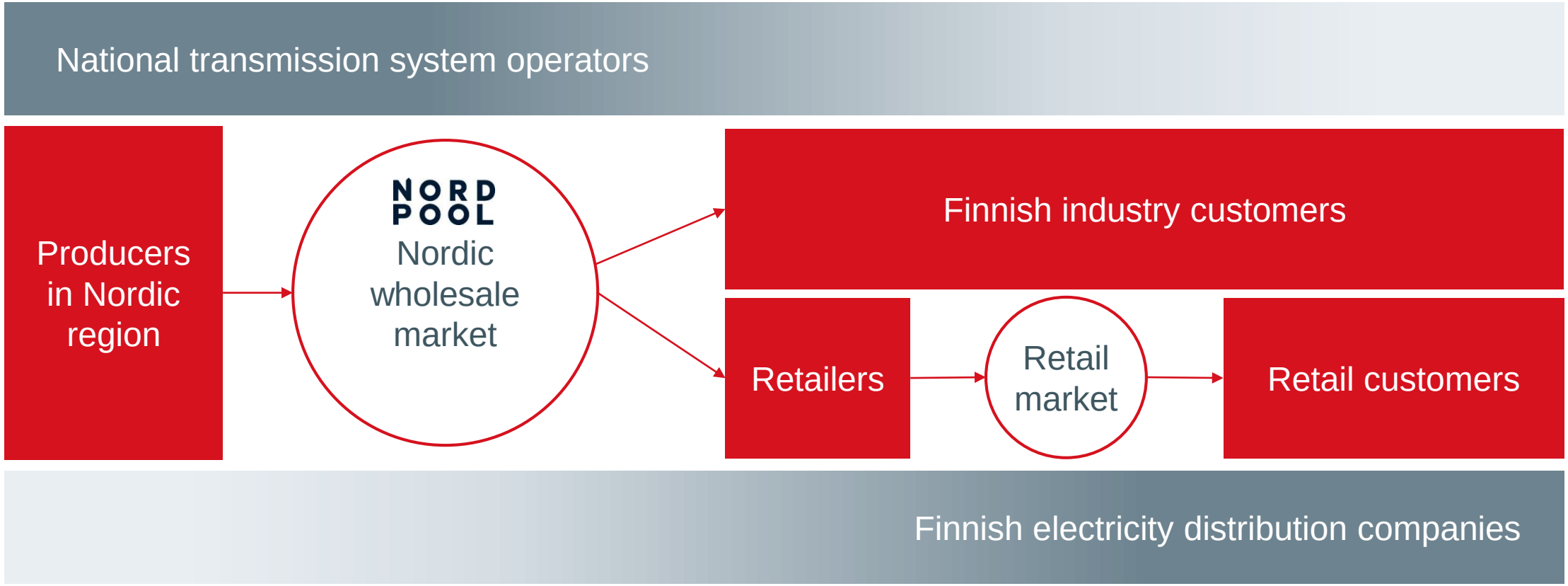
- In 2017 a single price area between Finland and Sweden existed 68 percent of the time and 9 percent of the time between all the Nordic countries
- This was caused by very good hydrological situation in Sweden and Norway that decreased the Swedish area price even further



* Finland, Sweden, Norway, Denmark, Poland, Estonia, Latvia, Lithuania

The availability of cross-border transmission capacity is continuously improved

Market structure and business areas in the Baltic Sea area

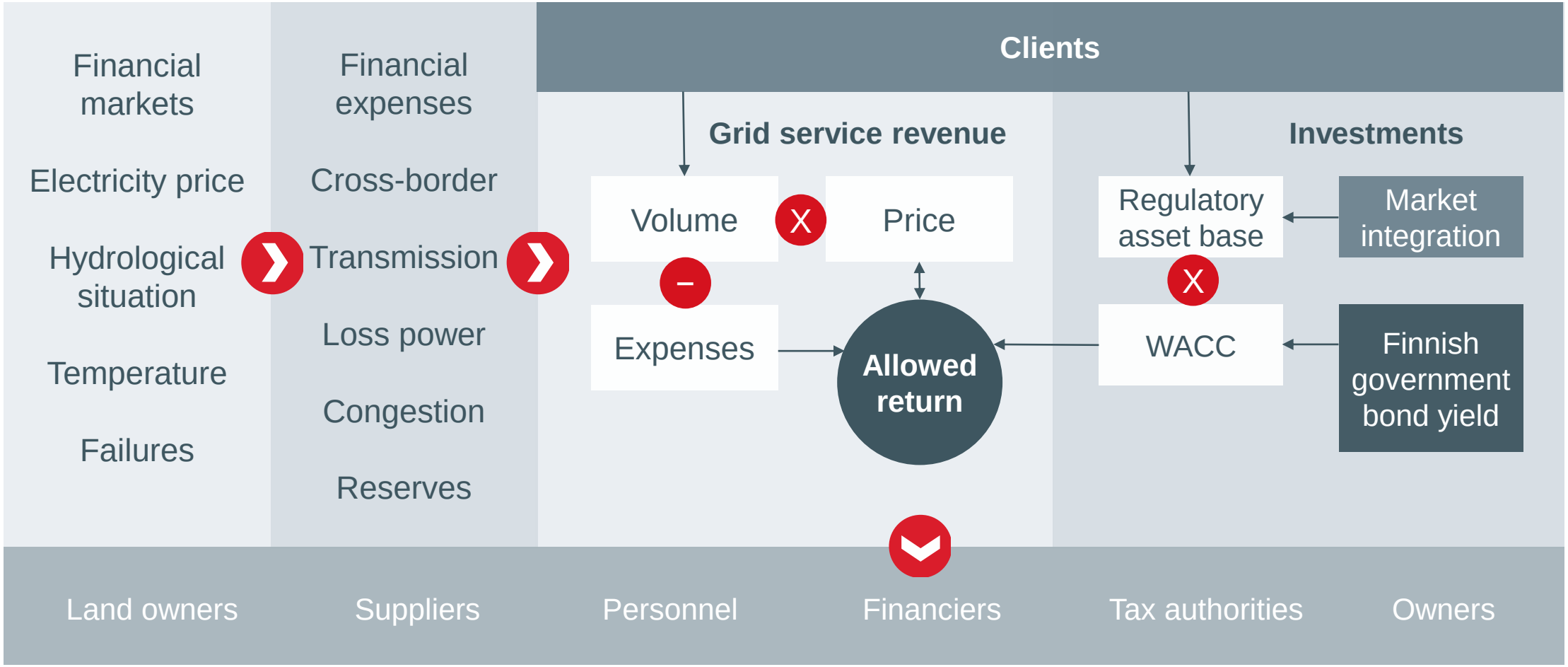


Power generation is unregulated whereas transmission and distribution are regulated by national authorities

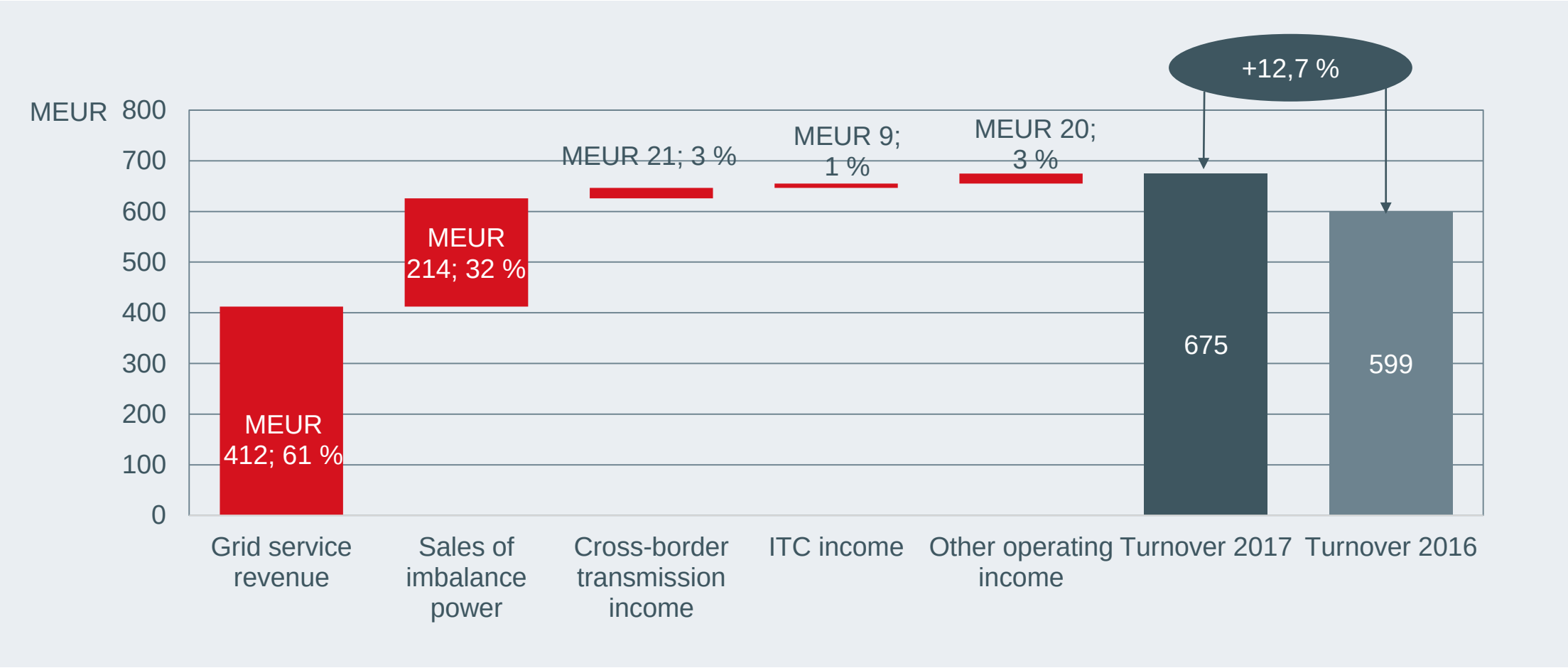
Financials

Financial performance

Main economic drivers of transmission network operations



IFRS Turnover breakdown in 2017



Breakdown of main sources of turnover

Grid service revenue

- Grid service revenue consists mainly of the unit price for electricity transmission multiplied by electricity consumption and production

Sales of imbalance power

- Fingrid sells and purchases imbalance power in order to stabilise the hourly power balance of the balance responsible parties
- The net of imbalance power sales and purchases is slightly positive and used to cover reserve costs
- Imbalance power boosts turnover as well as costs

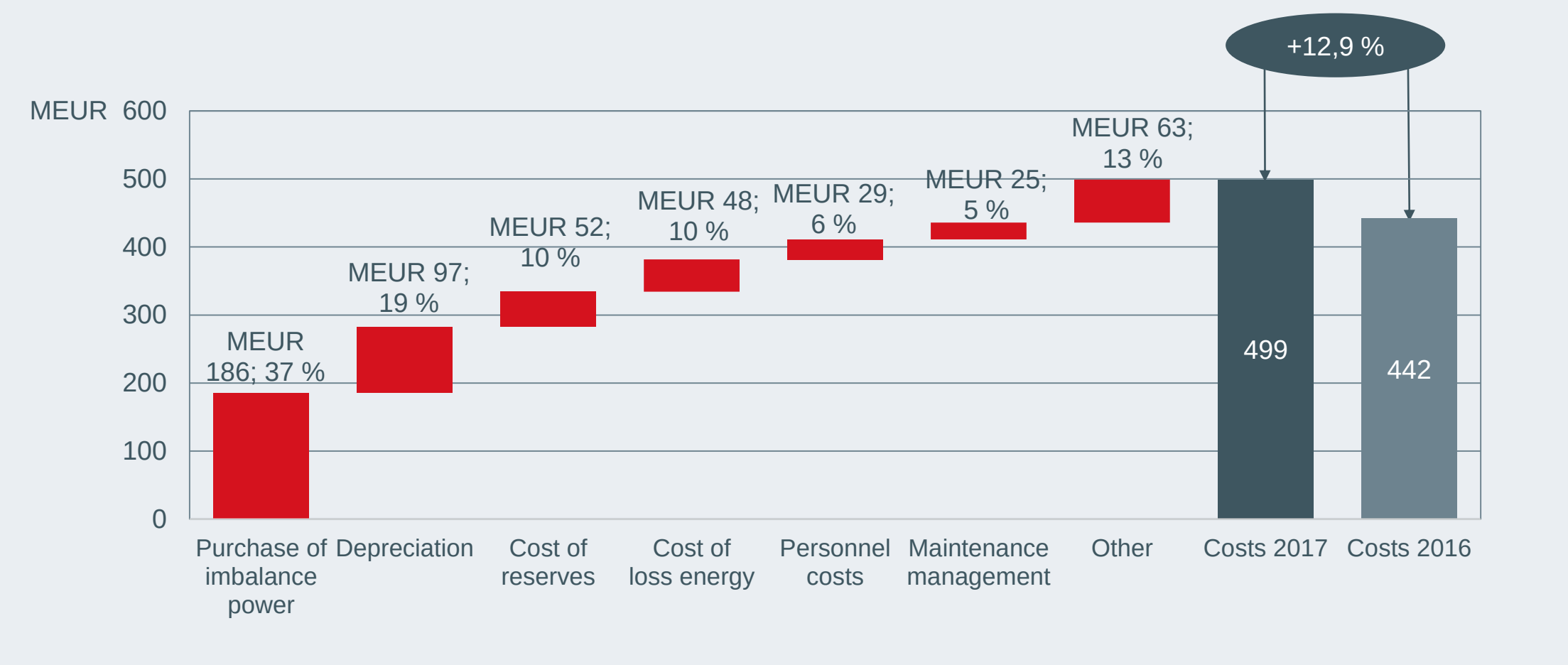
Cross-border transmission income

- Fingrid offers transmission services on the cross-border connections with Russia available to all electricity market parties. The contractual terms are equal and public.

ITC income (Inter TSO Compensation)

- Income received for the use of Fingrid's grid by other European TSOs

IFRS Cost breakdown 2017



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Breakdown of main costs

Purchase of imbalance power

- Fingrid sells and purchases imbalance power in order to stabilise the hourly power balance of the balance responsible parties
- The net of imbalance power sales and purchases is slightly positive and used to cover reserve costs
- Imbalance power boosts turnover as well as costs

Depreciation

- The level of yearly depreciations are stable thanks to continuous and stable investments

Cost of reserves

- Fingrid maintains reserve power to balance the frequency of the electricity grid
- The cost of reserves is recovered in grid network tariff and payments collected in balance services

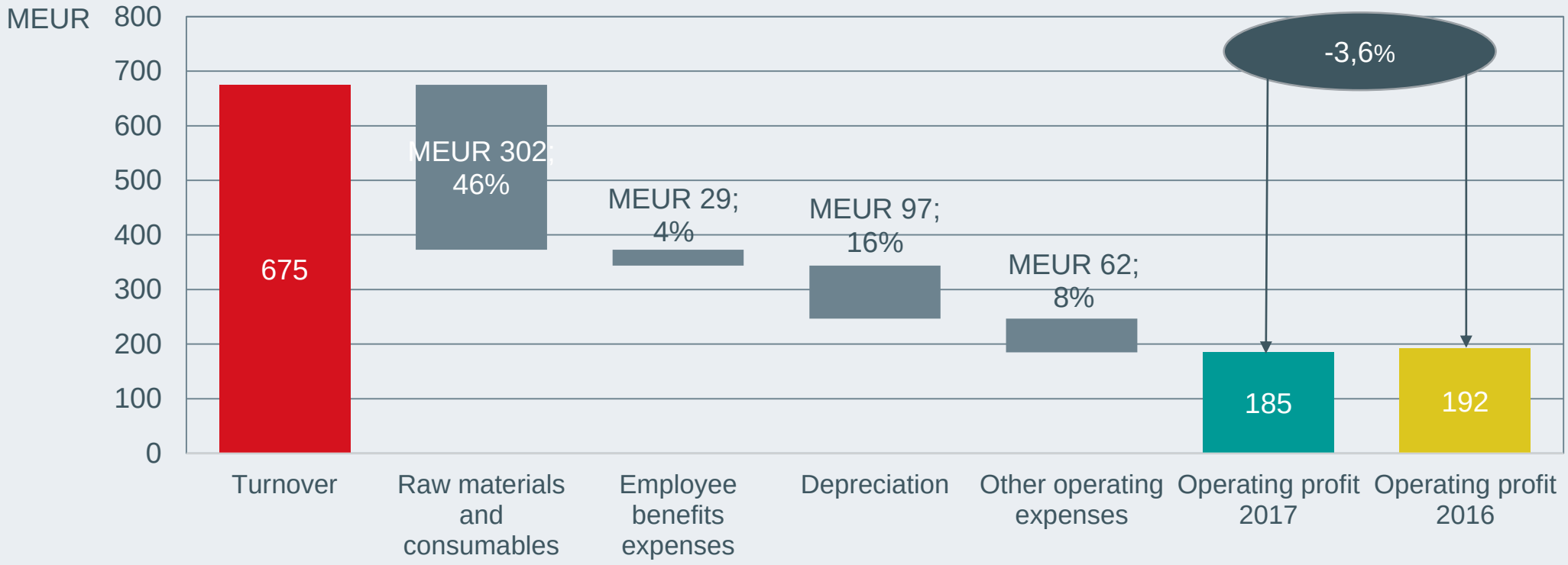
Cost of loss energy

- Loss energy is hedged up to four years in advance to ensure stable tariff

Personnel costs

- Fingrid's personnel costs are moderate thanks to outsourcing model used in most operations

IFRS Operating profit in 2017



Fingrid Oyj consolidated profit and loss (IFRS)

- Turnover has increased because of pricing increases and imbalance power sales treated as external turnover
- Since 2016, congestion income is no longer presented as turnover in profit and loss statement
- Employee expenses remain at notably low level due to outsourced operating model

IFRS profit and loss 2012 – 2017 in MEUR						
	2017	2016	2015	2014	2013	2012
TURNOVER	**675**	**599**	**605**	**572**	**547**	**526**
Raw materials and consumables used	-302	-248	-241	-264	-270	-267
Employee benefits expenses	-29	-29	-26	-25	-23	-22
Depreciation	-97	-99	-94	-92	-82	-76
Other operating expenses	-62	-30	-82	-48	-58	-66
OPERATING PROFIT (EBIT)	**185**	**192**	**163**	**143**	**115**	**95**
EBIT-%	*27 %*	*32 %*	*27 %*	*25 %*	*21 %*	*18 %*
Finance income and costs	-23	-19	-34	-11	-29	-7
PROFIT BEFORE TAXES*	**164**	**174**	**129**	**133**	**87**	**88**
Income taxes	-33	-35	-26	-26	3	-21
PROFIT FOR THE PERIOD	**131**	**139**	**104**	**106**	**91**	**67**
Other comprehensive income**	-1	6	5	0	-5	6
TOTAL COMPREHENSIVE INCOME	**130**	**145**	**109**	**106**	**86**	**73**

* Includes share of profit of associated companies

** Other comprehensive income consists of cash flow hedges, translation reserves and available-for-sale financial assets.

Operating profit stabilized on a solid level

Fingrid Oyj consolidated assets (IFRS)

- Tangible assets stabilized because of stabilized investments in grid assets
- Tangible assets were on average 77 % of total assets
- Current assets on average 11 % of total assets

IFRS assets 2012 – 2017 in MEUR						
	2017	2016	2015	2014	2013	2012
Intangible assets	188	185	183	183	181	179
Tangible assets	1 676	1 690	1 677	1 640	1 623	1 485
Investments (associated companies and available for sale)	10	10	10	11	11	9
Receivables	46	40	51	55	60	103
NON-CURRENT ASSETS	**1 920**	**1 925**	**1 922**	**1 889**	**1 875**	**1 776**
Inventories	14	12	13	13	11	10
Derivative instruments	0	3	3	11	2	4
Trade receivables and other receivables	96	82	70	57	76	88
Financial assets recognised in income statement at fair value	63	58	93	116	195	207
Cash and cash equivalents	20	22	23	63	22	6
CURRENT ASSETS	**193**	**177**	**203**	**261**	**307**	**316**
TOTAL ASSETS	**2 113**	**2 102**	**2 124**	**2 151**	**2 182**	**2 092**

Tangible assets on a stable level thanks to a defined long-term investment plan

Fingrid Oyj consolidated liabilities (IFRS)

- Growth in equity has resulted from low dividend payments in 2010-2015
- Current liabilities on average total 17 % of total equity and liabilities
- Borrowings (current and non-current) totalled on average 56 % of total equity and liabilities
- Trade payables on average 22 % of current liabilities

IFRS liabilities 2012 – 2017 in MEUR						
	2017	**2016**	**2015**	**2014**	**2013**	**2012**
Share capital and premium	112	112	112	112	112	112
Retained earnings	687	654	606	567	542	465
Other equity	0	0	-6	-12	-12	-7
EQUITY	**798**	**766**	**711**	**667**	**643**	**570**
Borrowings	813	843	907	962	975	1 032
Other non-current liabilities	141	146	174	170	160	185
NON-CURRENT LIABILITIES	**954**	**989**	**1 081**	**1 132**	**1 136**	**1 217**
Borrowings	269	265	236	263	319	212
Derivative instruments	8	8	30	17	16	11
Trade payables and other liabilities	84	75	66	72	70	83
CURRENT LIABILITIES	**361**	**347**	**332**	**352**	**404**	**305**
TOTAL EQUITY AND LIABILITIES	**2 113**	**2 102**	**2 124**	**2 151**	**2 182**	**2 092**

Balance sheet has remained stable in 2012-2017

Fingrid Oyj consolidated cash flow (IFRS)

- Strong operating cash flow
- Peak investment years behind and now stabilized
- Cash and cash equivalents reduced to achieve more appropriate capital structure

IFRS cash flow 2012 – 2017 in MEUR						
	2017	2016	2015	2014	2013	2012
Cash flow from operations	273	252	279	227	202	181
Change in working capital	-40	-20	-63	-21	-43	-37
Net cash flow from operations	**233**	**232**	**216**	**206**	**159**	**145**
Net cash flow from investments	-107	-139	-135	-111	-226	-146
Net cash flow after investments	**126**	**94**	**80**	**95**	**-68**	**-1**
Net borrowings	-24	-40	-78	-51	84	22
Dividends paid	-98	-90	-65	-82	-13	-11
Net cash flow from financing activities	**-122**	**-130**	**-143**	**-133**	**71**	**11**
Net change in cash and cash eqv.	**4**	**-37**	**-62**	**-38**	**3**	**10**
Cash and cash equivalents 1 Jan	80	117	179	217	214	204
Cash and cash equivalents at the end of period	84	80	117	179	217	214

Strong and improving net cash flow after investments

Financials

Financing

Financial risk management principles

Liquidity risk

- Cash, cash equivalents and committed credit facilities cover at least 110 percent of short-term debt
- Undrawn MEUR 300 revolving credit facility (RCF) until 2022
- Continuous cash flow forecasting

Refinancing risk

- Refinancing in any given year less than 30 % of total debt
- Even maturity profile
- Diversified funding sources
- Strong credit rating from at least two major rating agencies

Credit and counterparty risk

- Prequalification of suppliers based on predetermined financial criteria
- Continuous credit risk analysis and monitoring
- Counterparty credit rating requirements and limits
- ISDAs in force for derivatives

Market price risk

- Derivatives only for hedging purposes
- Interest rate risk hedging of debt; convergence towards 12 months' average interest re-fixing time
- Material currency and commodity risk fully hedged
- Loss power hedging horizon up to 4 years, 12 months fully hedged

Fingrid applies a conservative financial policy

Fingrid debt programme overview

- Long presence in the capital and money markets since 1998 with debt programmes:
  - EMTN Programme, MEUR 1,500 since 1998
  - ECP Programme, MEUR 600 since 1998
  - CP Programme, MEUR 150 since 1998
- MEUR 300 Revolving Credit Facility (RCF) until December 2022 is provided by the dealers. The facility supports the company's liquidity reserve and is undrawn
- A total of MEUR 50 uncommitted overdraft limits to be used for liquidity management
- Long-term bilateral loans provided by the European Investment Bank (EIB) and Nordic Investment Bank (NIB)

Fingrid's core relationship banks are the dealers of the EMTN Programme

BNP PARIBAS
Danske Bank
ING
Nordea
SEB
OP
Swedbank

Fingrid is a well-established issuer on international private and public debt capital markets

Green bond framework established

Note: Click to view more information of Fingrid's Green Financing

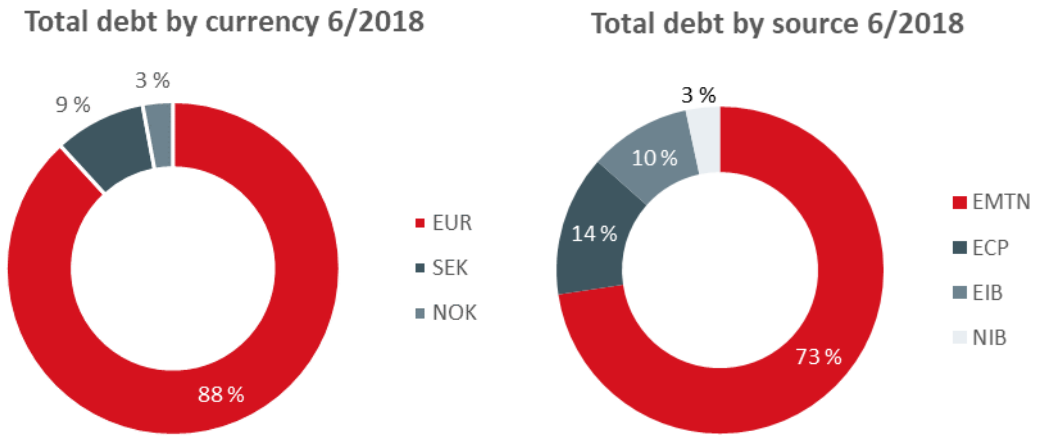
- Fingrid established a Green Bonds Framework in 2017 that enables the company to acquire financing for green projects
- Fingrid's Green Bond Framework received a Medium Green** assessment from third party CICERO
- Fingrid has defined eligible investment projects as those i) reducing losses, ii) connecting renewable power* iii) cross-border projects and/or iv) smart grids
- Around MEUR 150 in 16 investment projects identified as Green bond eligible investment costs mainly in 2015-2018

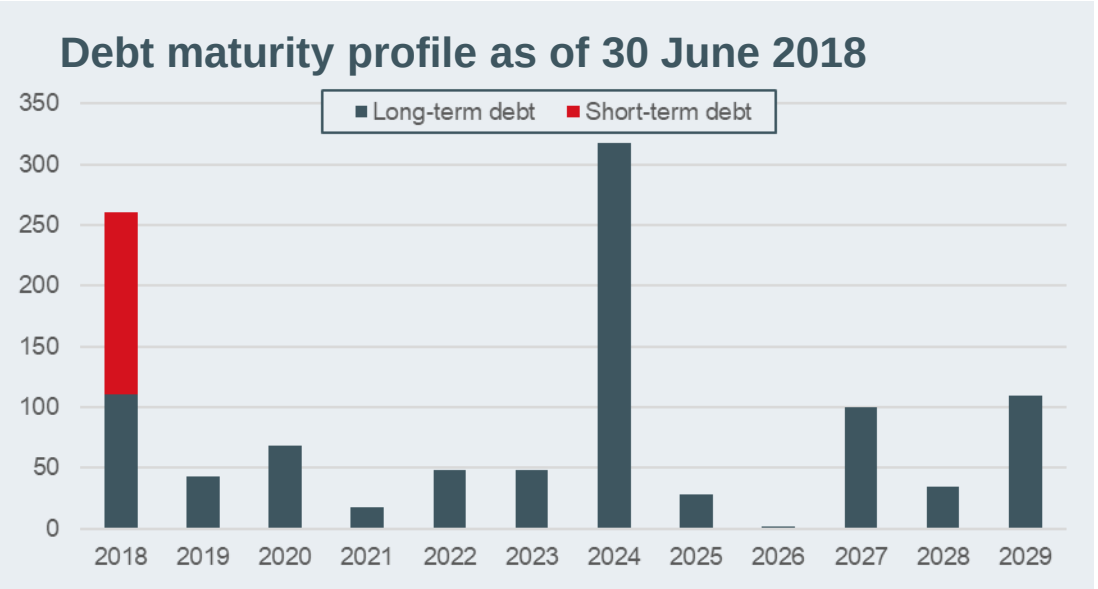
* Wind, hydro, solar and bioenergy
** Scale: dark green, medium green, light green, brown

Fingrid issued inaugural MEUR 100 green bond in November 2017

Weighted average debt maturity was 5,4 years in June 2018

- Fingrid aims to maintain a well-distributed debt maturity profile
- Debt portfolio consists mostly of private placements and a couple of public bonds





Short-term debt*	**26% of total**	**MEUR 267****
Long-term debt	74% of total	MEUR 810**
Total gross debt		**MEUR 1077****

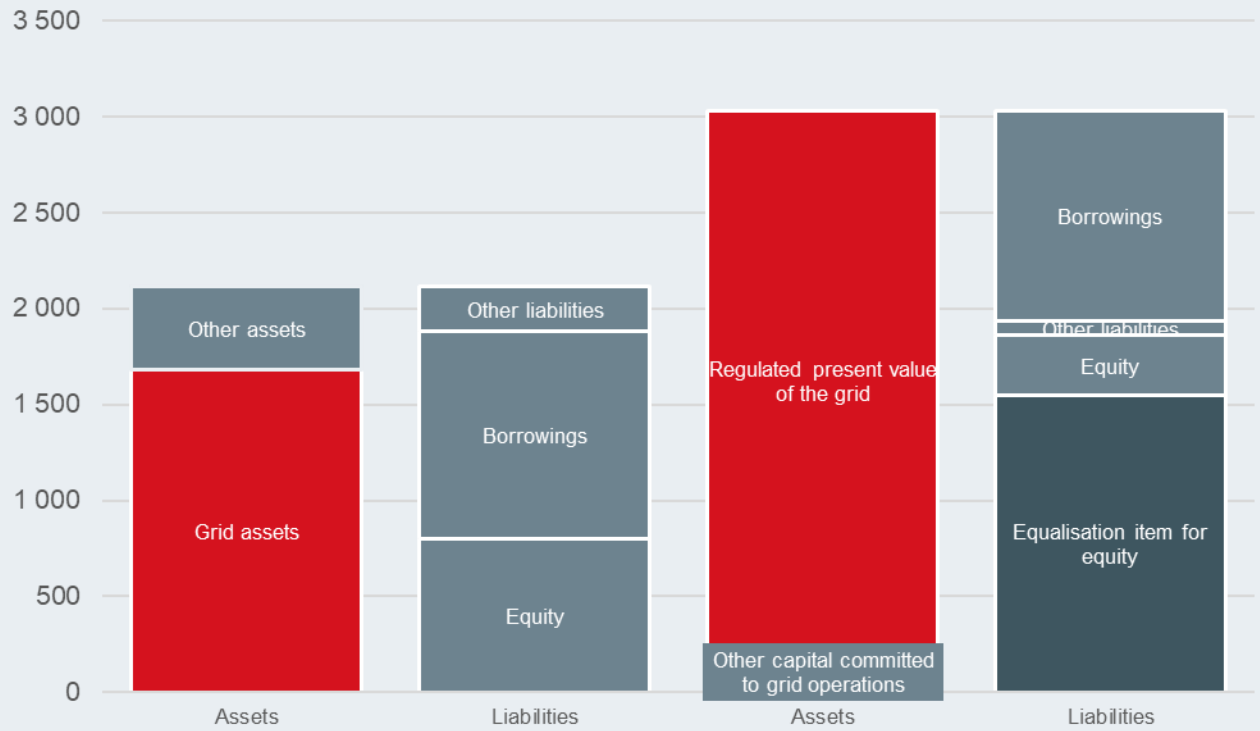
* Debt maturing in next 12 months
** Presented as notional values and hence, may differ from the published IFRS figures

Debt maturity profile is well-distributed

Strong IFRS and regulatory capital structure

- Total shareholders' equity and liabilities amount to MEUR 2,113
- Regulatory balance sheet amount to around MEUR 3,000 of which approximately MEUR 2,950 is used as adjusted capital in calculation of allowed financial result
- Grid assets are recognised at fair value for the purposes of the company's regulatory balance sheet

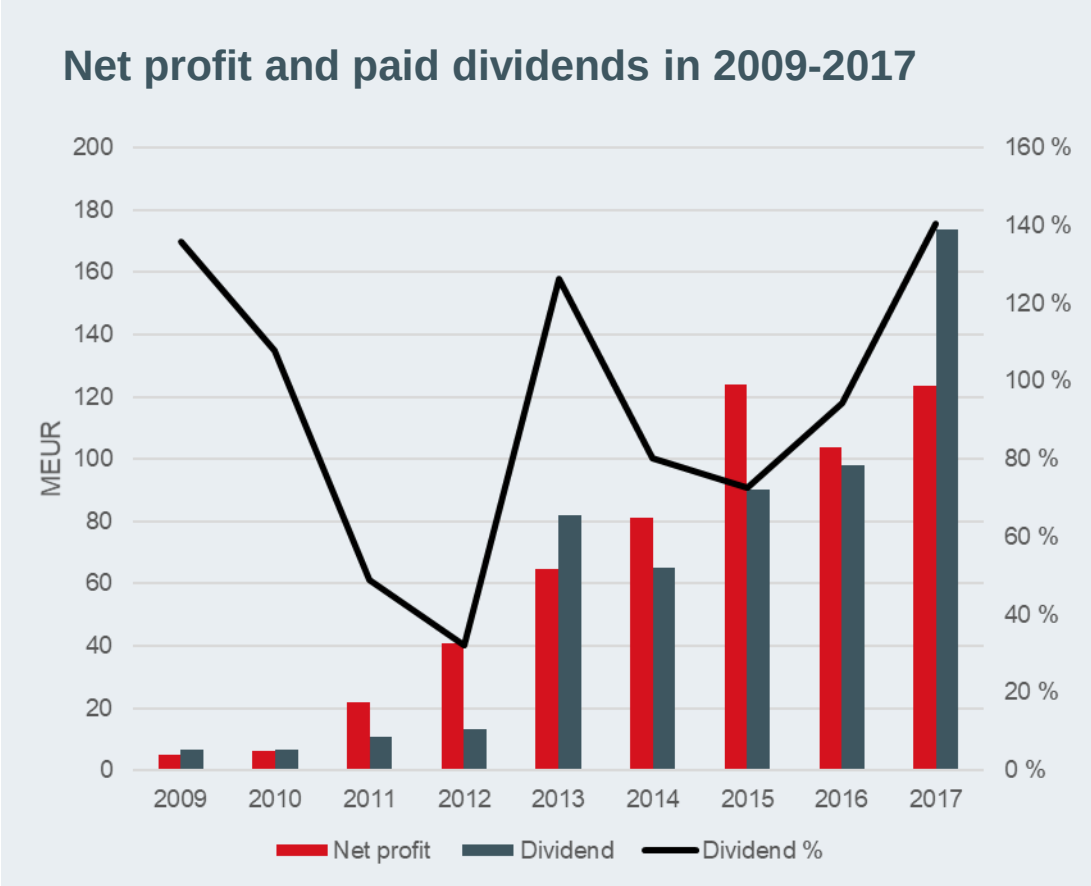
IFRS and regulatory capital structure as of 31 December 2017



Equity to total assets ratio is 38 % (IFRS) and 62% (regulatory)

Fingrid targets to distribute substantially all of parent company profit as dividend

- The guiding principle is to distribute substantially all of the parent company profit as dividend
- MEUR 174 dividend of 2017 parent company FAS net profit
- Prevailing conditions and investment needs are always considered before taking decision on dividend to be paid
- The policy ensures that shareholders receive a reasonable ROI
- This will enable long-term implementation of the strategy while allowing operative flexibility



Dividend policy aims to ensure reasonable return and take company's financial targets into account

FINGRID

Ratings

Fingrid aims to maintain high credit ratings

S&P
A-1+/AA-
Stable

Short-term/
Issuer Rating

"*The upgrade primarily stems from the positive impact on Fingrid's earnings from modifications in the regulatory model for TSOs in Finland. These changes have increased Fingrid's allowed regulatory return, and made it more stable. Thanks to these changes, alongside previous tariff increases and the company's modest capital spending program, Fingrid has seen an improvement in its credit measures, which we believe should be sustainable*."

S&P Global, 28 October 2016

Fitch
F1/AA-
Stable

Short-term/
Senior
Unsecured

"*The affirmation reflected the good visibility on the company's results until 2023 (the same regulatory model is applied through 2016-2023), the supportive features of the regulatory framework in Finland, and Fingrid's conservative financial structure."*

Fitch Ratings, 5 December 2017

"Fingrid's issuer rating of 'A+' is the highest that Fitch assigns to a regulated network in Europe, reflecting a very strong business and financial profile."

Fitch Ratings, 5 December 2017

Fingrid is committed to maintain credit rating at least at 'A-' level in all circumstances

Key rating factors according to the rating agencies

S&P Global

1. Company's excellent business risk profile and significant financial risk profile
2. A "high" likelihood that Finland would provide timely and sufficient extraordinary support to Fingrid the event of financial distress

Fitch

1. Fingrid's credit profile benefits from its monopoly position, low business risk and a highly supportive regulatory framework
2. The Stable Outlook reflects Fitch's expectation that, after the peak of investment spending in 2013, leverage will decline to within the guidance for an 'A' rating. Furthermore Fingrid benefits from ample liquidity to meet immediate funding needs

Fingrid's low business risk profile and supportive regulatory framework are key credit strengths

Thank you!

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