

A long, low wooden pier structure extends horizontally across the middle of the frame. It is supported by a series of vertical wooden posts of varying heights and thicknesses, some of which appear weathered or broken. The pier is situated in a calm body of water that reflects the structure and the sky. In the background, a distant shoreline with some buildings and trees is visible under a pale, overcast sky.

Litgrid Annual Report 2014

29 April 2015, Vilnius



Litgrid mission:

ensure reliable electricity transmission and enable competition in the open electricity market

Litgrid vision:

full-fledged integration of Lithuania's electricity system into the European electricity infrastructure and the common electricity market, by creating opportunities for competitive economy



**Daivis
Virbickas**

Chairman of the
Board

Corporate
management,
strategy, power
system operation



**Vidmantas
Grušas**

Transmission
grid
management



**Karolis
Sankovski**

Strategic
infrastructure
development



**Rimantas
Busila**

Finance



**Rolandas
Masilevičius**

ITT, physical,
and
information
security



Scheda	P	Q	S	I	V	F	T	C	D	E	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
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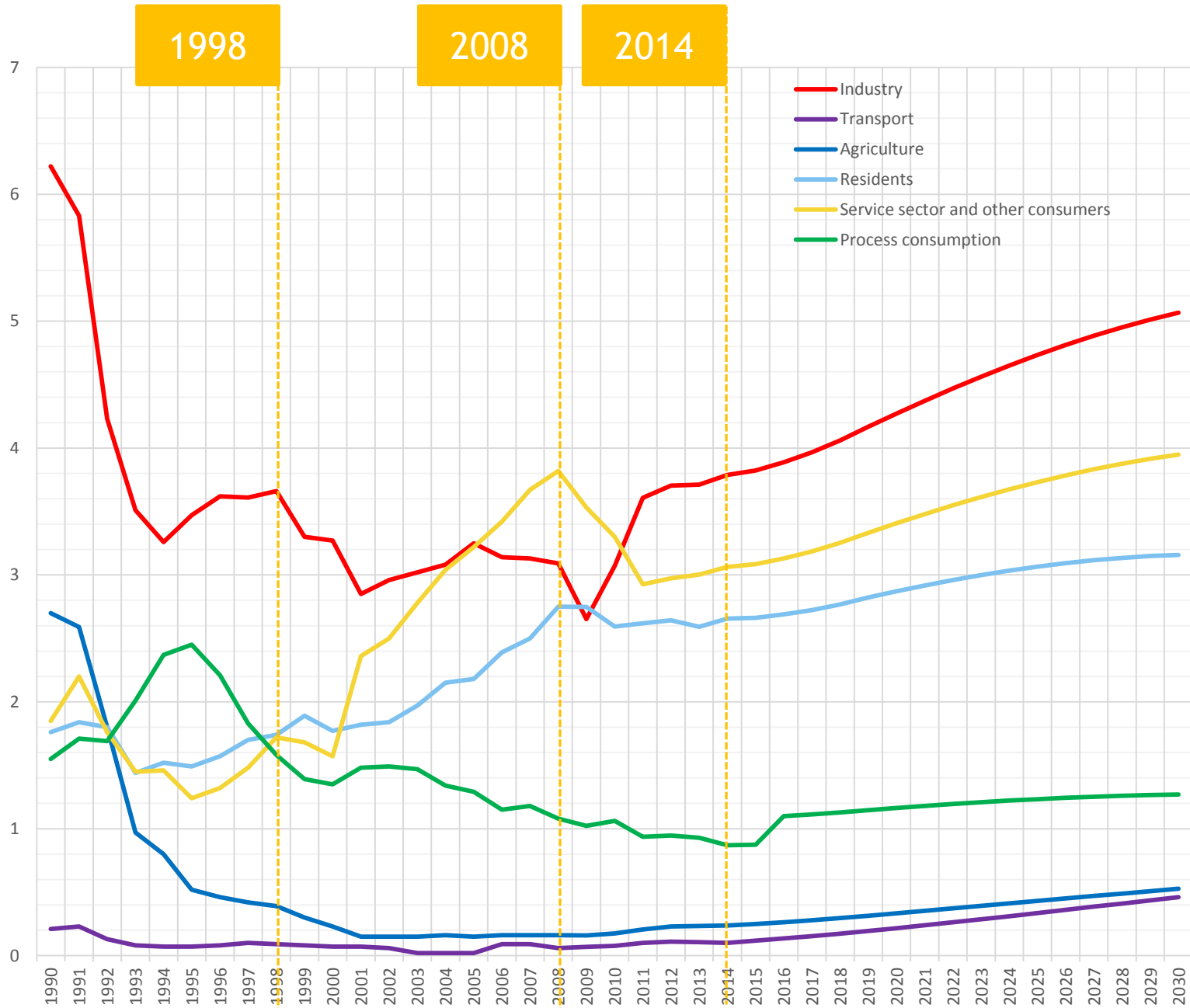




Capacities of the transmission grid exceed current consumption demand.

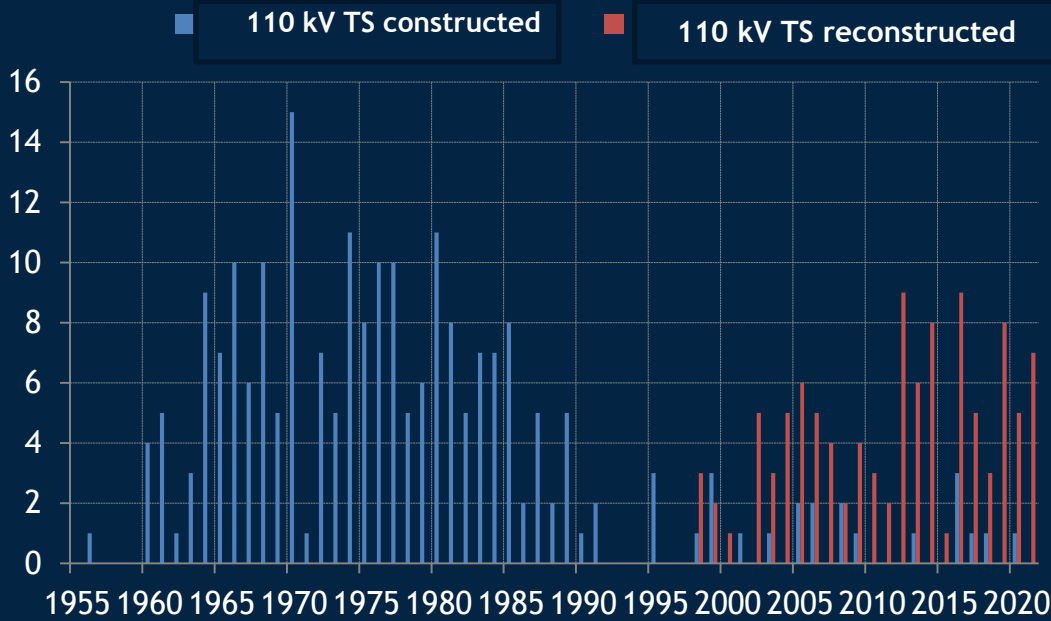
Reconstruction of infrastructure is required.

New links will enable access to energy markets that have been inaccessible to date.



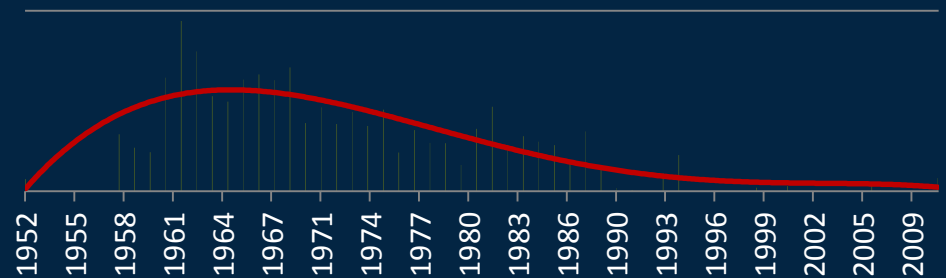
Responsible investments in grid reliability

110 kV TS construction and reconstruction



TS – transformer substation

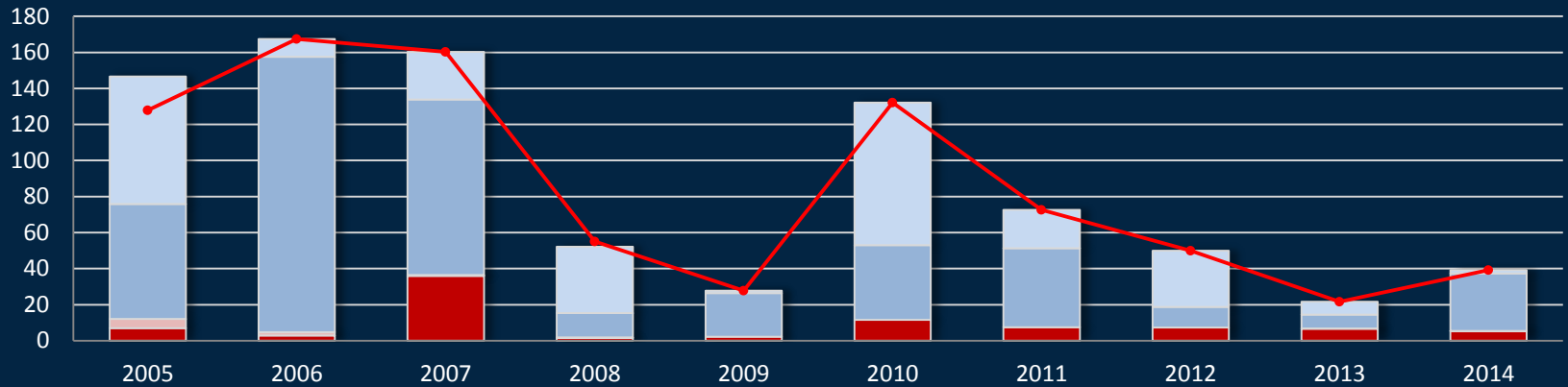
Construction of 330-110 kV overhead power lines



Reliability of transmission network

END, MWh

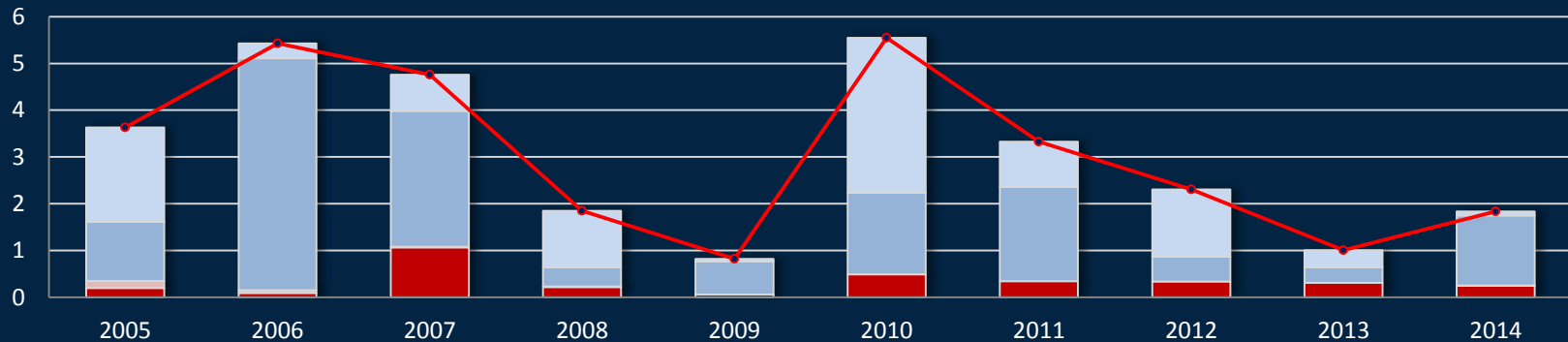
5,4 MWh



END, *Electricity not delivered*

AIT, min.

0,25 min.



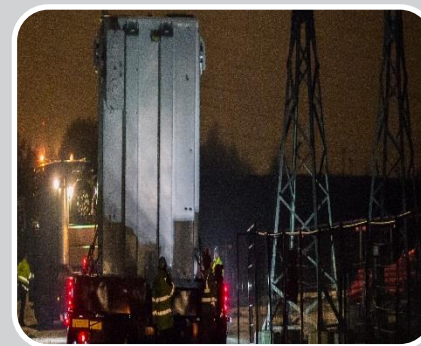
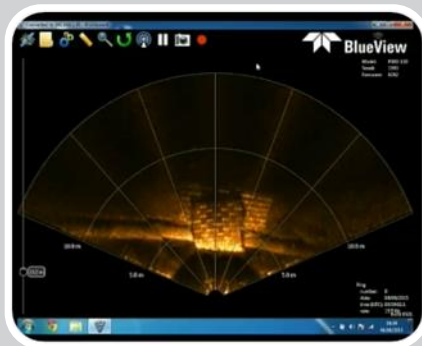
AIT, *Average interruption time*

Strategic Projects



NordBalt

- First electricity interconnection between Lithuania and Sweden
- 450 km long undersea cable
- 700 MW capacity
- HVDC direct current converters in Klaipėda and Nibru (Sweden)



2004

Completion of the Feasibility Study on Interconnection of the Lithuanian and Swedish power systems

2009

The Baltic Seabed Survey

In 2010, agreements between Lithuanian and Swedish TSOs were signed, in December - contract on the link-related works concluded.

In 2011, agreement on the intersection of NordBalt and Nord Stream was signed.

In 2011, construction of Klaipėda-Telšiai line launched.

In 2012, manufacture of the undersea cable launched.

In 2014, undersea cable laying works, direct current converter station construction works launched.

In 2014, TS reconstruction in Klaipėda completed.

In 2015, current converter equipment delivered to Klaipėda. Manufacture of the undersea cable completed. Cable laying in the sea continued. 80 % of the link-related works completed.



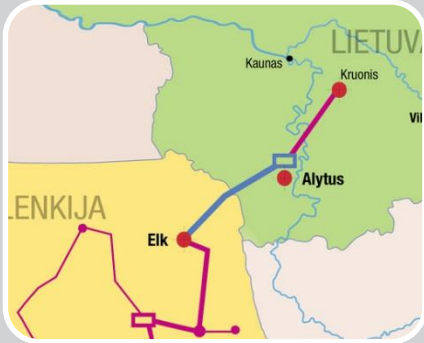
NordBalt

- Estimated project value: € 552 million
- Powerful link between Lithuanian and Swedish power systems to meet the demand of alternative energy sources
- Already - lower prices on futures on the electricity market



LitPol Link

- First power link between Lithuanian and Western European power grids
- Power line Alytus-Elk (Poland)
- 500 MW power capacity as of 2015
- HVDC direct current converter station near Alytus



Since 1992
Possible options of
the link project
studied, feasibility
studies conducted
2006
Political declaration
by Lithuania and
Poland on
interconnection of
the power systems

In 2011, TSO
agreements on
project
implementation
signed between
Lithuania and Poland
In 2013, contracts
signed for the
launch of works
related to line and
current converter
station construction

In 2014, line and
converter station
construction works
launched
Construction of
overhead line
supports, building of
the converter
station
Reconstruction of
Alytus TS

In 2015, equipment
for direct current
converter station
delivered
75 % of the link-
related works
completed

- Estimated project value: €370 million
- Finally, the homestretch of the project planned for almost 20 years
- First direct energy link between the Baltic States and Western Europe



LitPol Link

Electricity links - strategic projects of the European Union, the Baltic Sea Region, and Lithuania

- LitPol Link and NordBalt offers Lithuania an opportunity to choose energy resources and guarantee energy independence
- Put on the European energy map they mean the implementation of the Baltic Energy Market Interconnection Plan (BEMIP)

Electricity Market

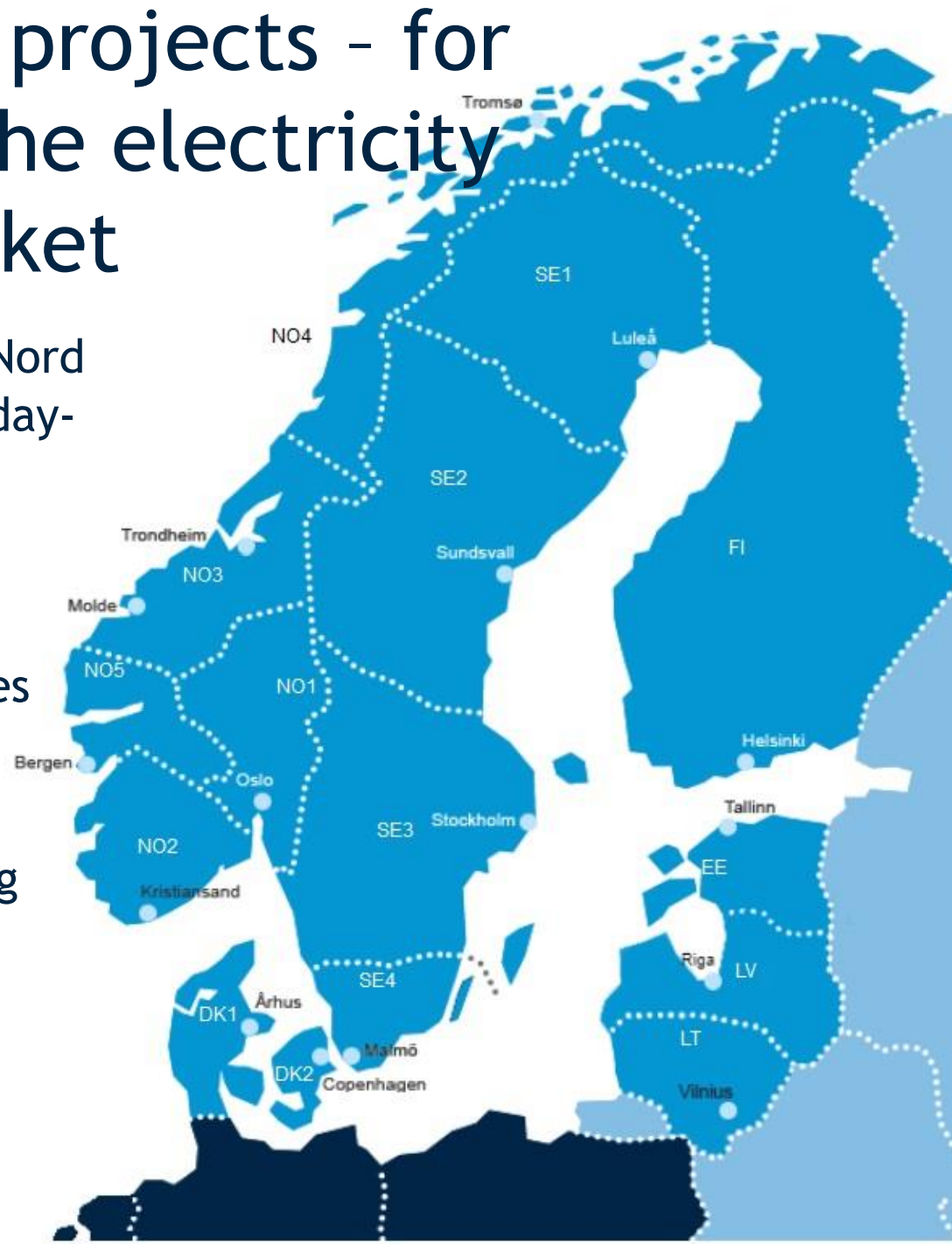
Infrastructure projects - for operation of the electricity market

2012 Lithuania - member of Nord Pool Spot electricity exchange (day-ahead market)

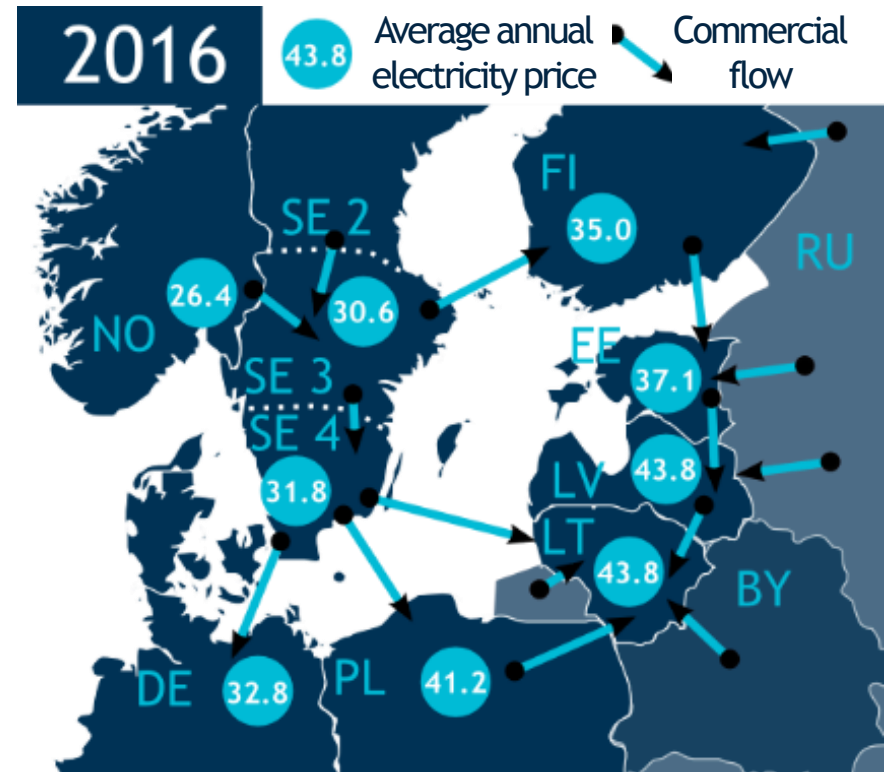
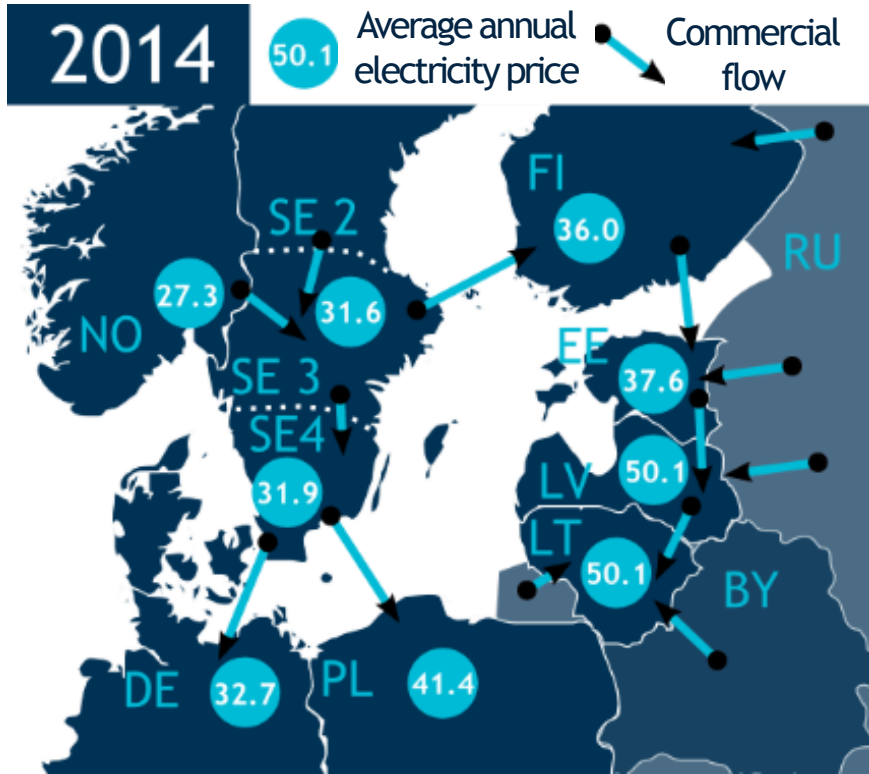
2013 intra-day exchange launched in Lithuania

2014 Nasdaq OMX Commodities financial products of electricity market introduced

2015 Common Baltic balancing block - a step towards common Nordic and Baltic electricity balancing market



Futures prices indicate 12 % decrease of the electricity market prices

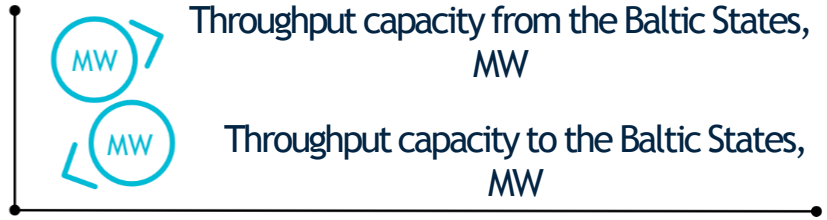




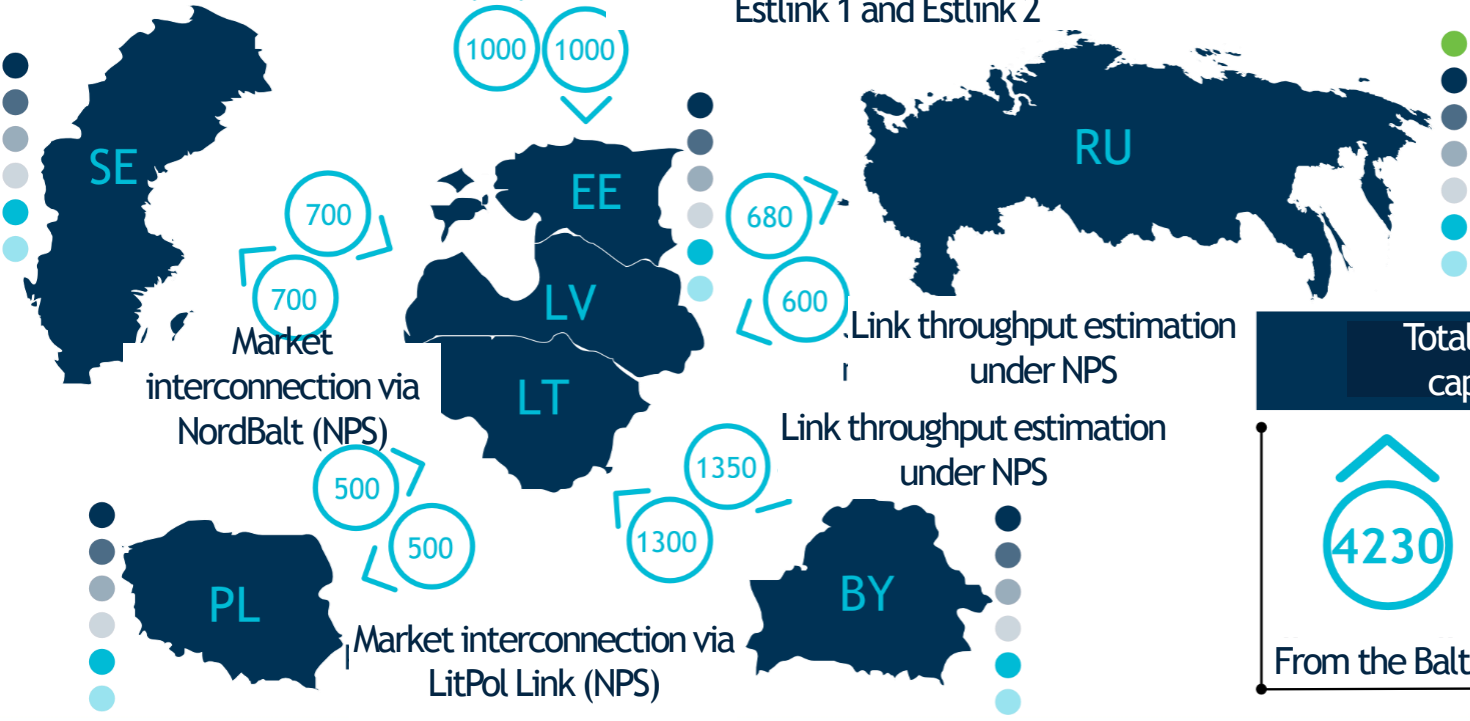
In 2016 we are to become the crossroad of power flows

Wholesale market

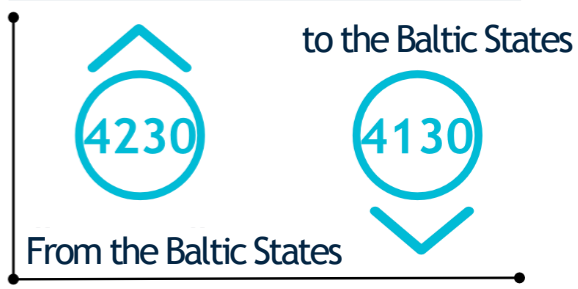
- Capacity market
- Physical electricity market
- Day ahead market
- Intraday market
- Balancing market
- Bilateral transactions
- Financial market



Interconnection between markets via Estlink 1 and Estlink 2



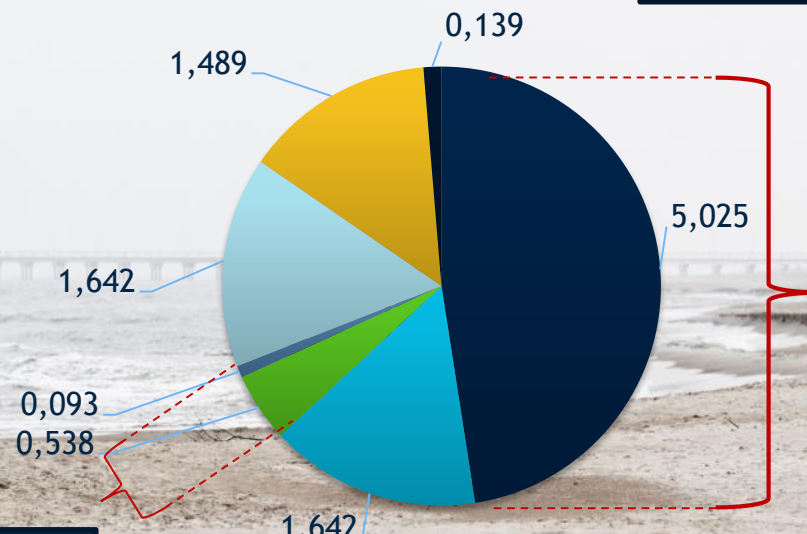
Total throughput capacity, MW



Regulated Activity

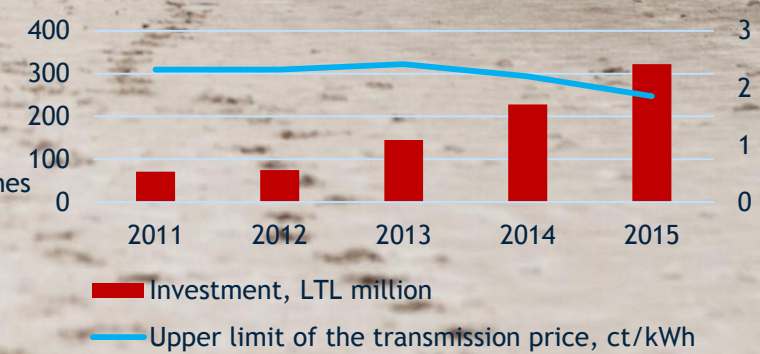
Consumer price on electricity in 2015– 12.787 euro cents/kWh

The value of investment into strategic power infrastructure (...) is expected to cut the major share of the electricity price “pie” and offer unparalleled opportunity to boost competitive abilities of the national industry and business several decades ahead



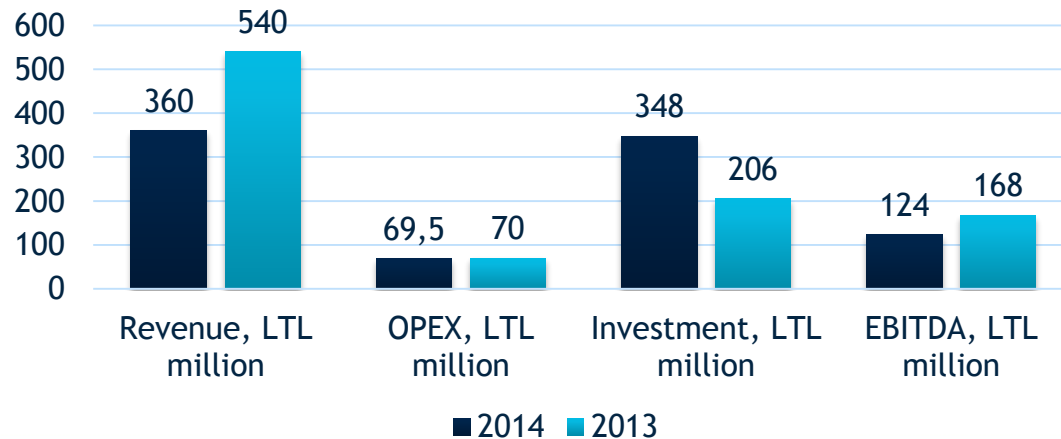
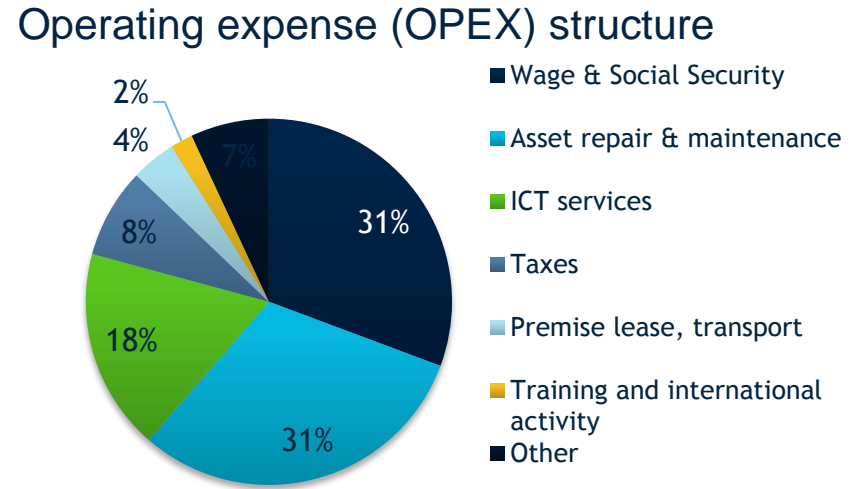
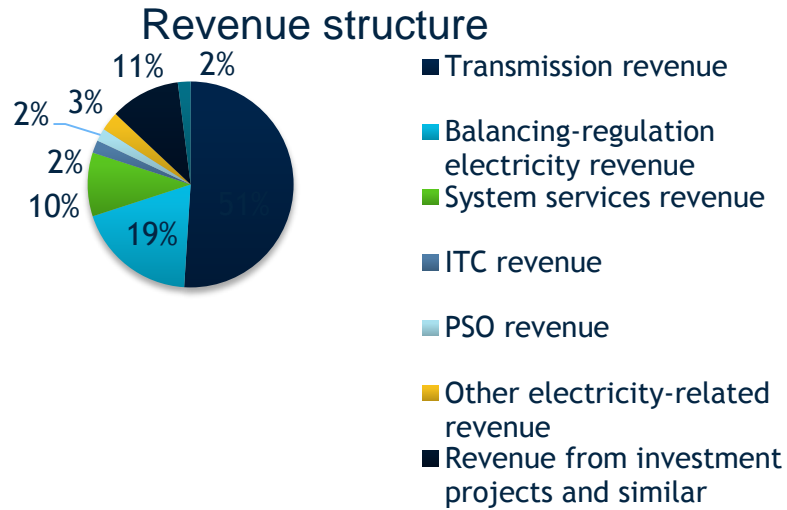
Litgrid share in the electricity bill - 0.631 euro cent/kWh, or less than 5 % of the rate fixed

- Acquisition price
- PSO
- Transmission services
- System services
- Distribution services through medium voltage lines
- Distribution services through low voltage lines
- Public supply services





Key financial indicators, revenue and cost structure in 2014



Upcoming Tasks and Challenges



Integration of the Baltic States into the Continental Europe - path guided by the experience of Poland and other Central European countries

1951-1958

European Continental Network (ECN) was established in 1951, when Austria, Belgium, France, West Germany, Italy, Luxembourg, the Netherlands, and Switzerland agreed to join their power grids into a common synchronous area. The common grid was completed in 1958.

1995-2004

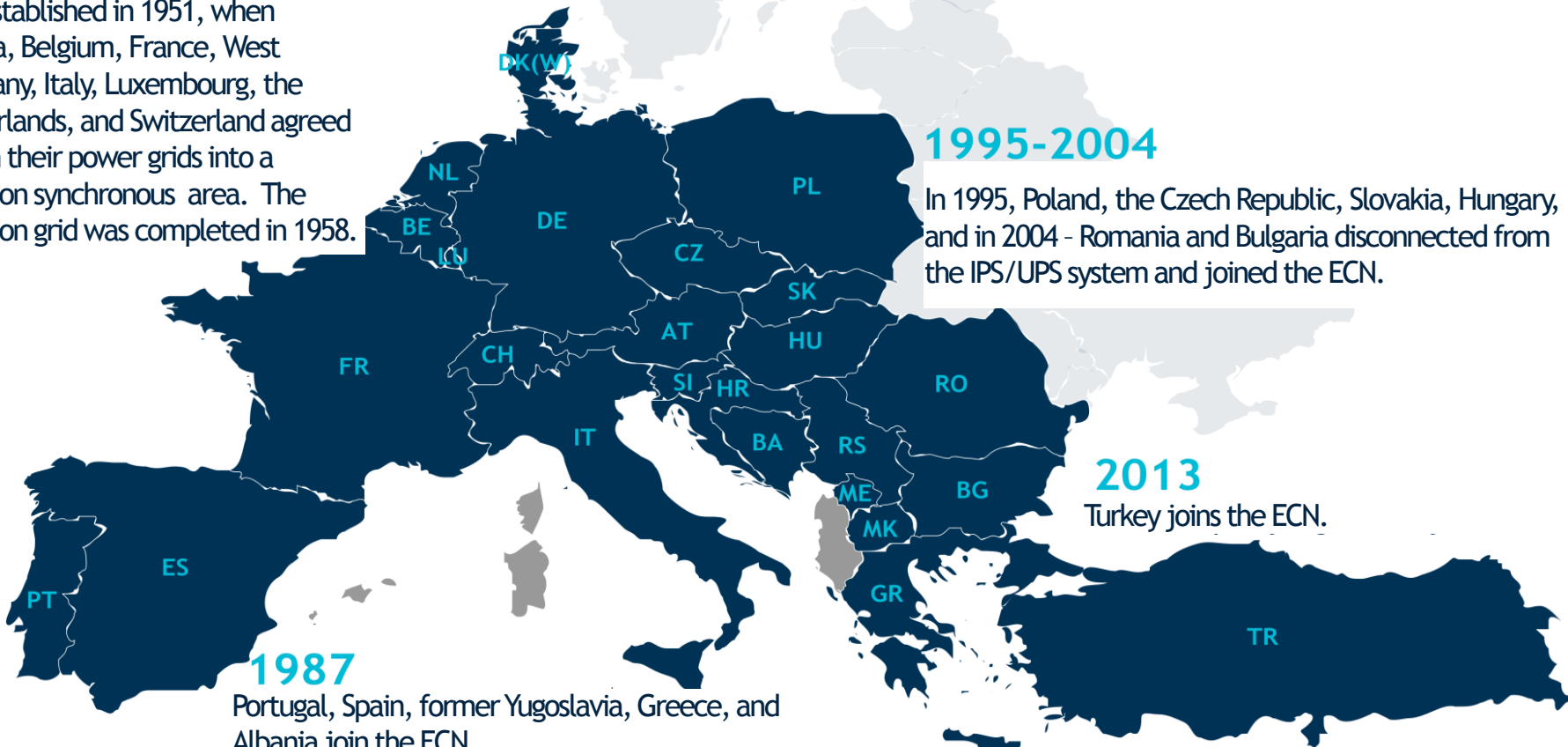
In 1995, Poland, the Czech Republic, Slovakia, Hungary, and in 2004 - Romania and Bulgaria disconnected from the IPS/UPS system and joined the ECN.

2013

Turkey joins the ECN.

1987

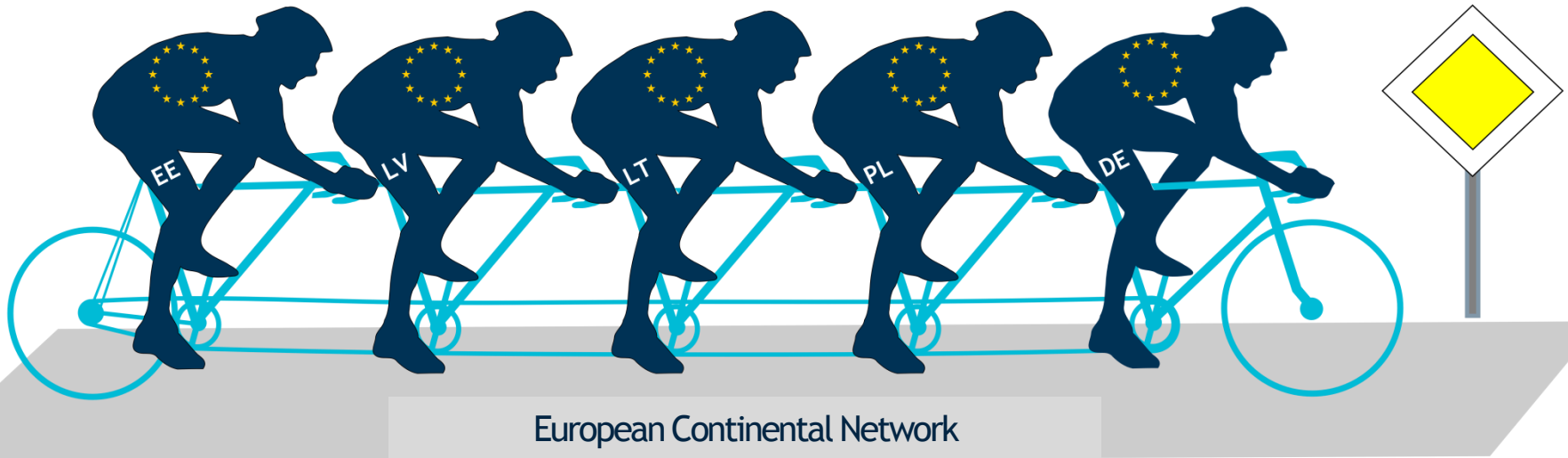
Portugal, Spain, former Yugoslavia, Greece, and Albania join the ECN.



Baltic States to Join the ECN Team

Benefits of integration of the Baltic States into the ECN:

- Reliable operations of the power grids and secure power transmission.
- Coordinated actions in maintenance of installations and planning of further network development.
- Common power grid management regulations: network codes common for all countries of the European Union.
- Guaranteed power availability from the Western European grids.



Our Team at Litgrid







Empowering the growth of
Lithuania

