

# Vai pietiek tirgū vieta vējam ?

25.04.2018. [jurisozolins@me.com](mailto:jurisozolins@me.com)

Rīga, WinWind



**.... atjaunojamai enerģijai jāiemācās strādāt  
tirgus apstākļos .... (?!)**

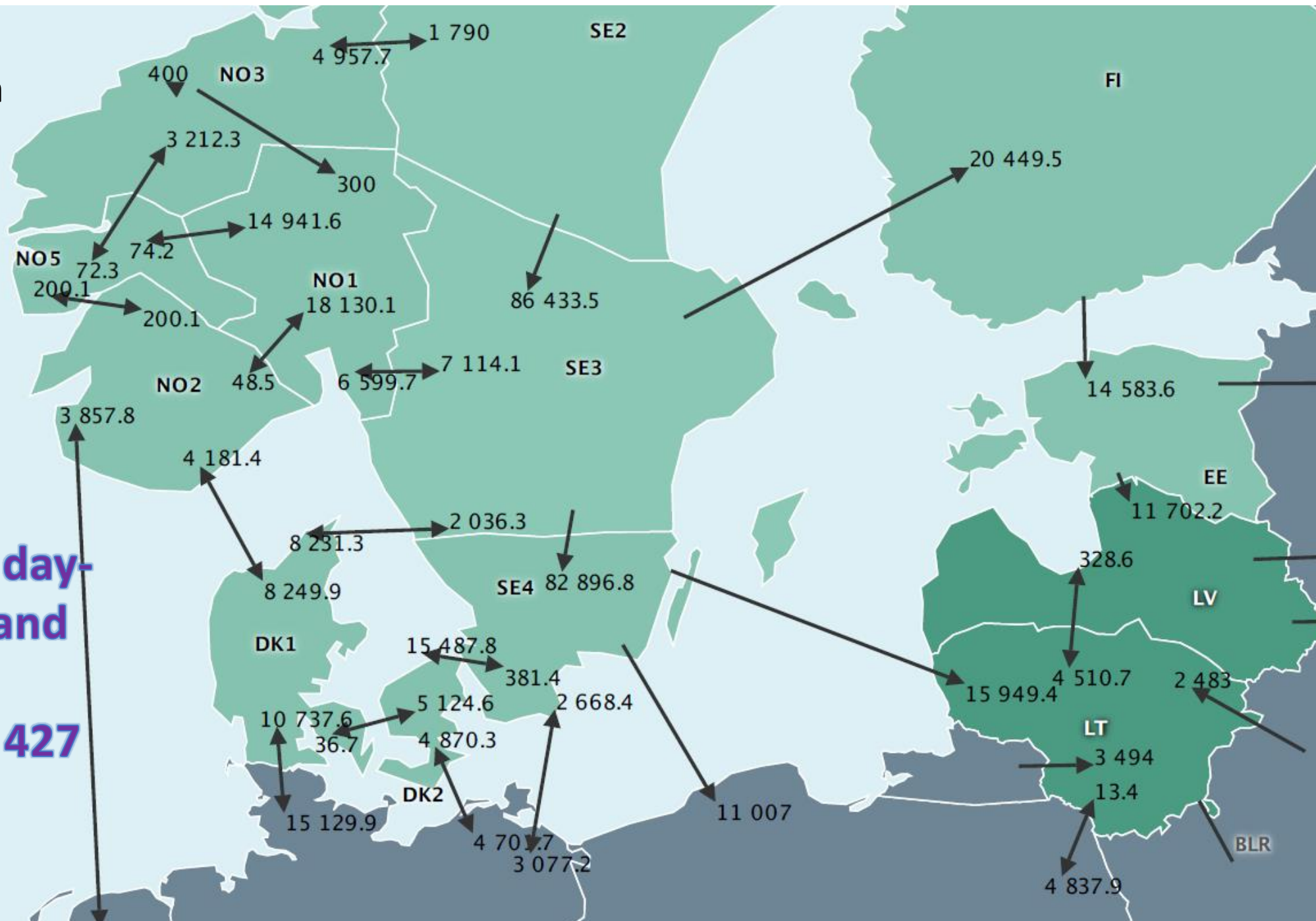
**The new market design also contributes to the EU's goal of being the world leader in energy production from renewable energy sources by allowing more flexibility to accommodate an increasing share of renewable energy in the grid. The shift to renewables and increased electrification is crucial to achieve carbon neutrality by 2050. The new electricity market design will also contribute to the creation of jobs and growth, and attract investments.**

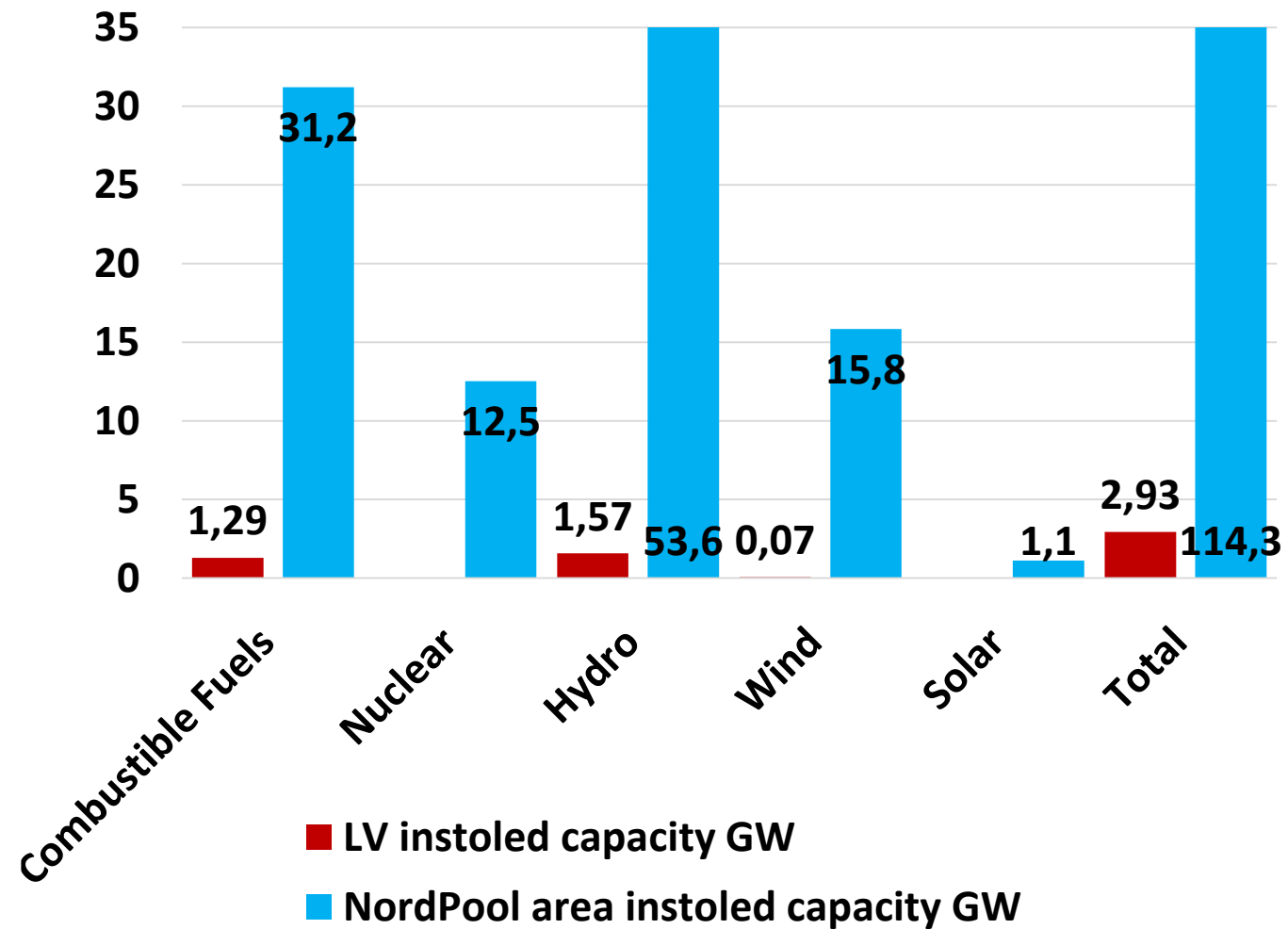
**Short –term markets to fully integrate variable renewable sources**



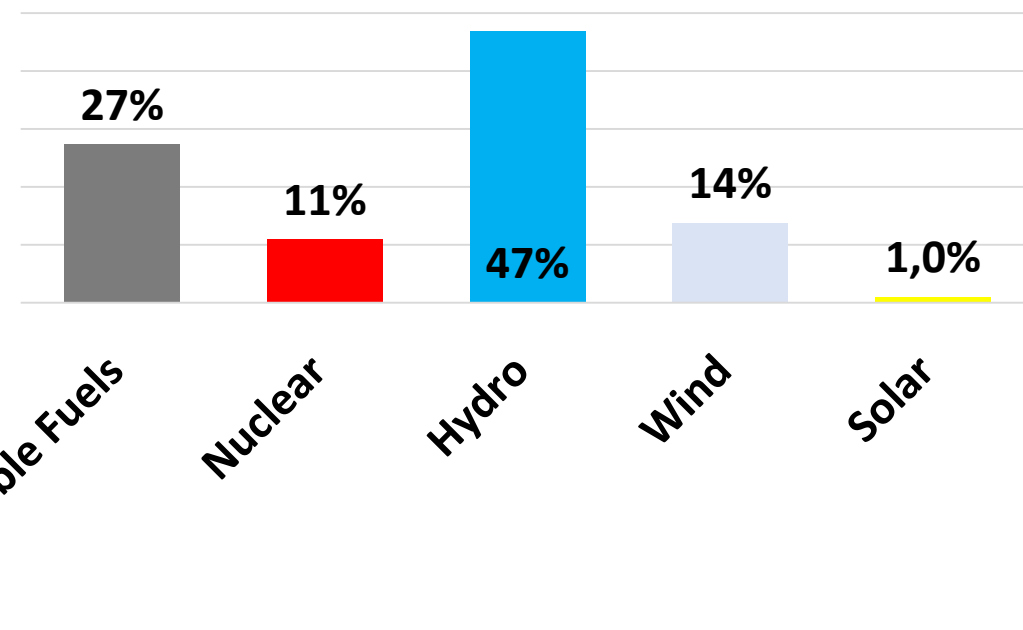
**NordPoolSpot**  
**Elsport Flows MWh**  
**25.04.2019**  
**All day**

**360 market participants**  
**394 TWh ( 2017) day-ahead in Nordic and Baltic**  
**Total production 427 TWh**

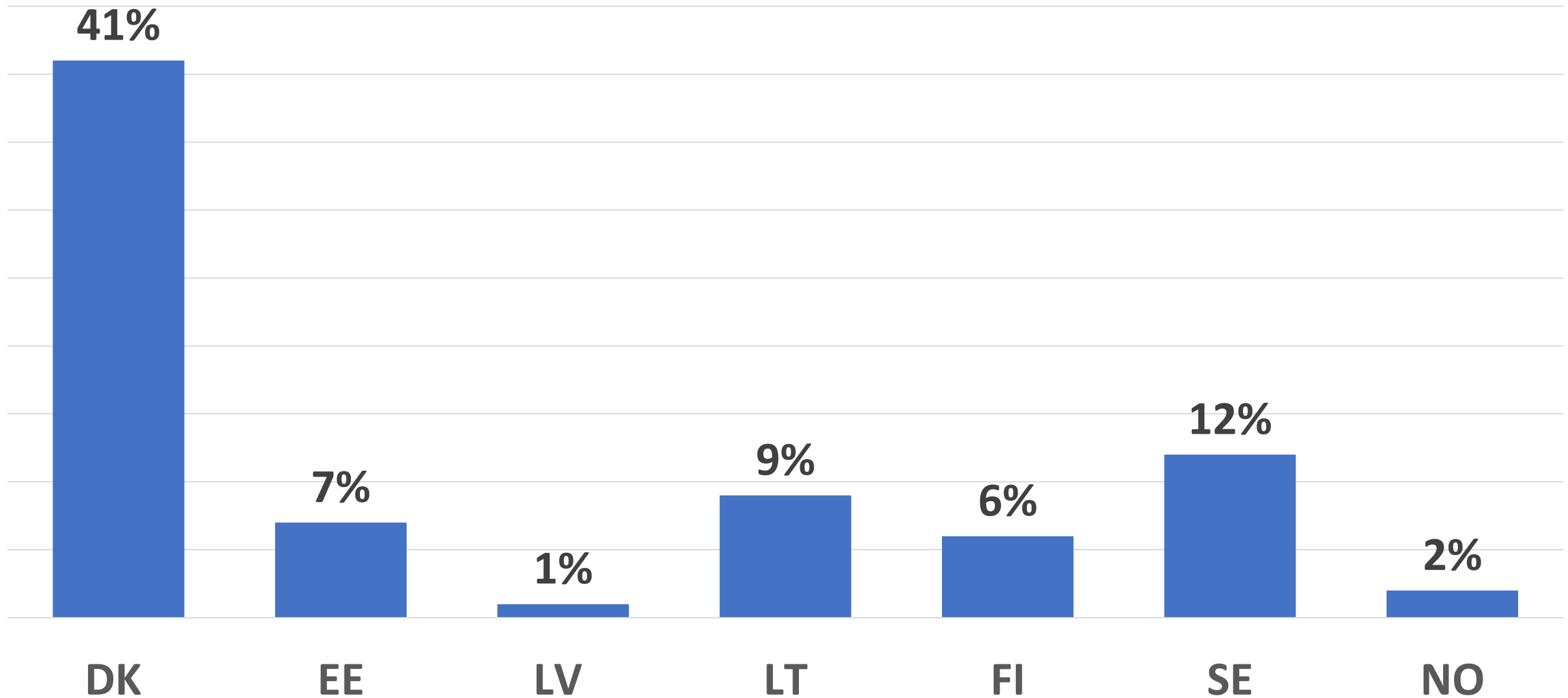




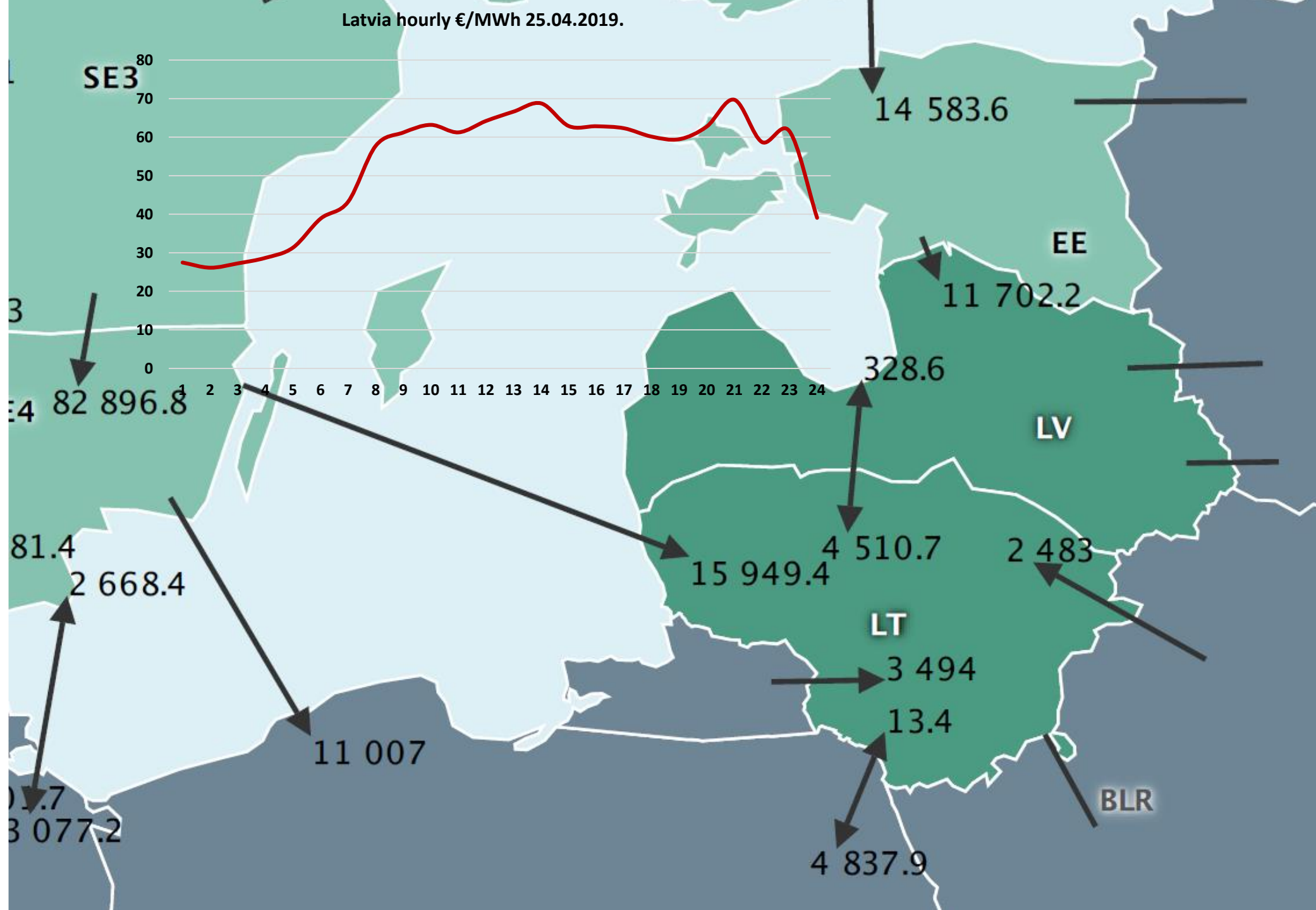
Capacities Nordpool Area



# Ar vēja ģenerēto enerģiju nosegtā daļa nacionālajā elektrības patēriņā 2018

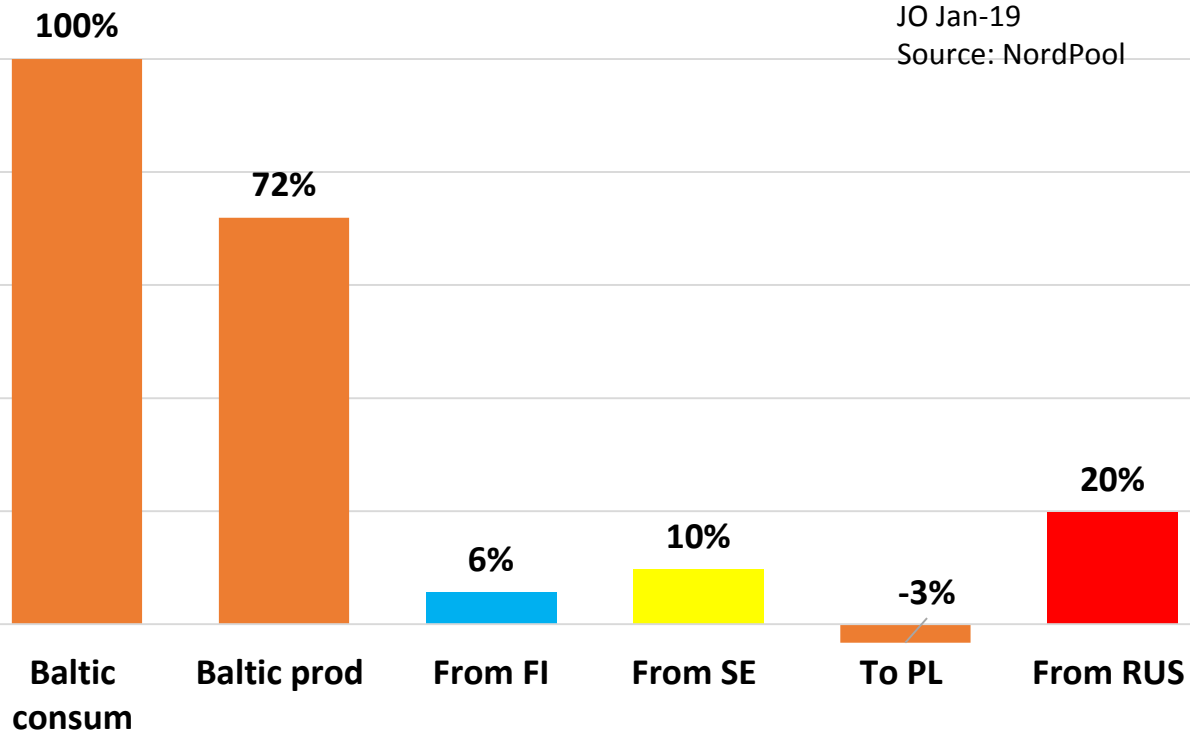


Latvia hourly €/MWh 25.04.2019.

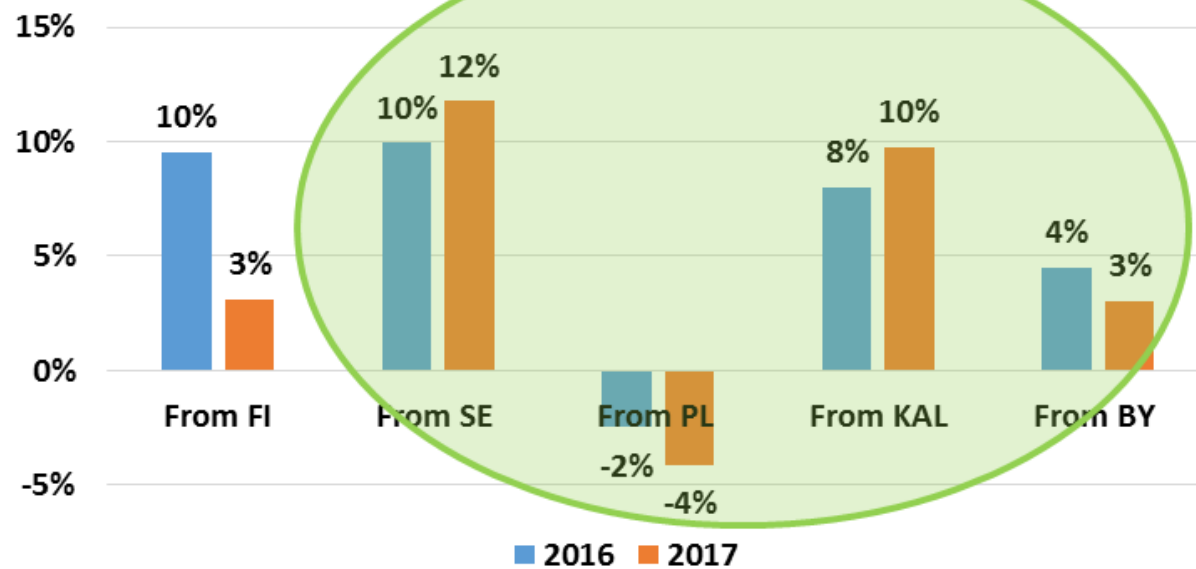


# Elektrības tirdzniecības rezultāts Baltijas tirdzniecības apgabalā NordPoolSpot Day-ahead 2018

JO Jan-19  
Source: NordPool



## Ower boarder trade balance as % of Baltic consumption



3000

JO 2019

Source: ENTSO-E

# Baltics generation GWh/month

2500

2000

1500

1000

500

0

Jan-16

Apr-16

Jul-16

Oct-16

Jan-17

Apr-17

Jul-17

Oct-17

Jan-18

Apr-18

Jul-18

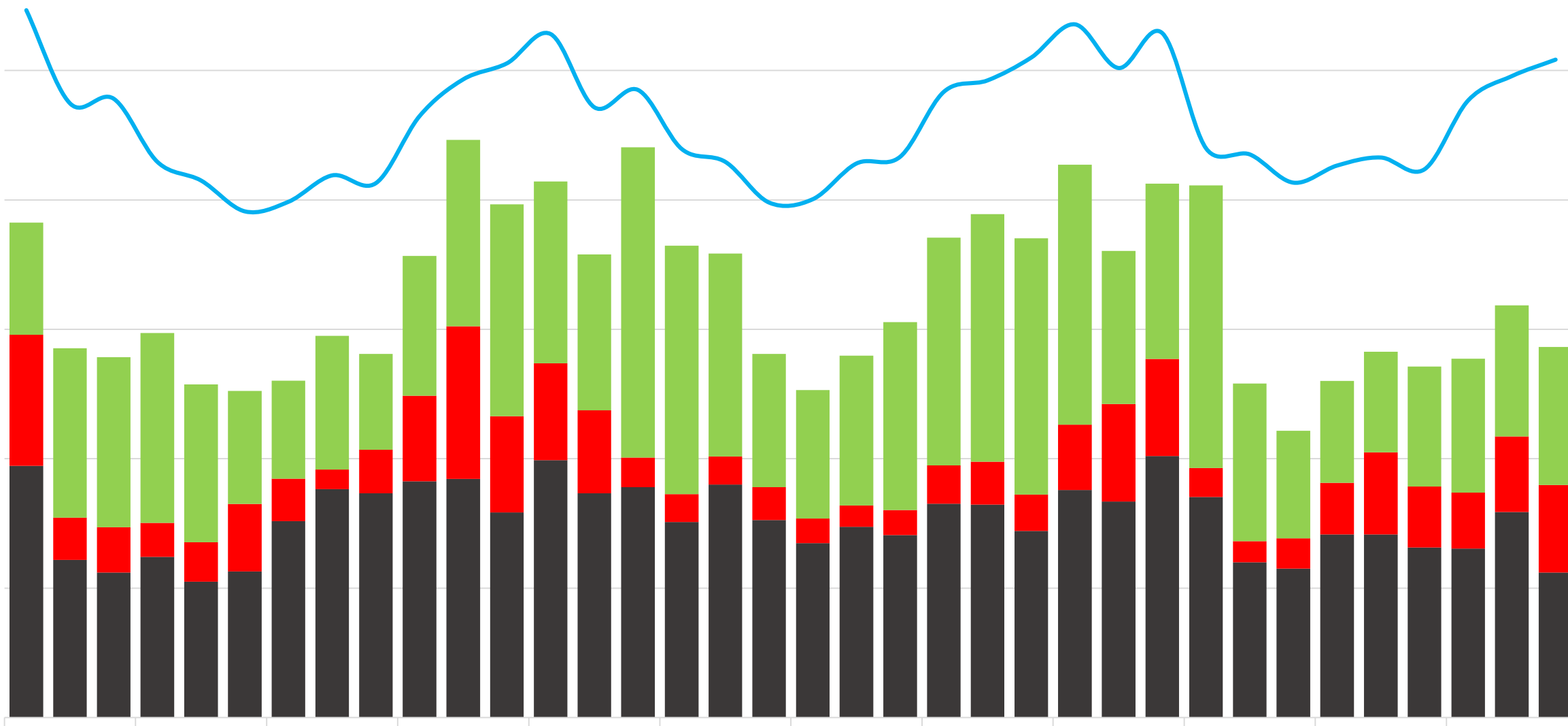
Oct-18

Of which Fossil Oil shale

Of which Fossil Gas

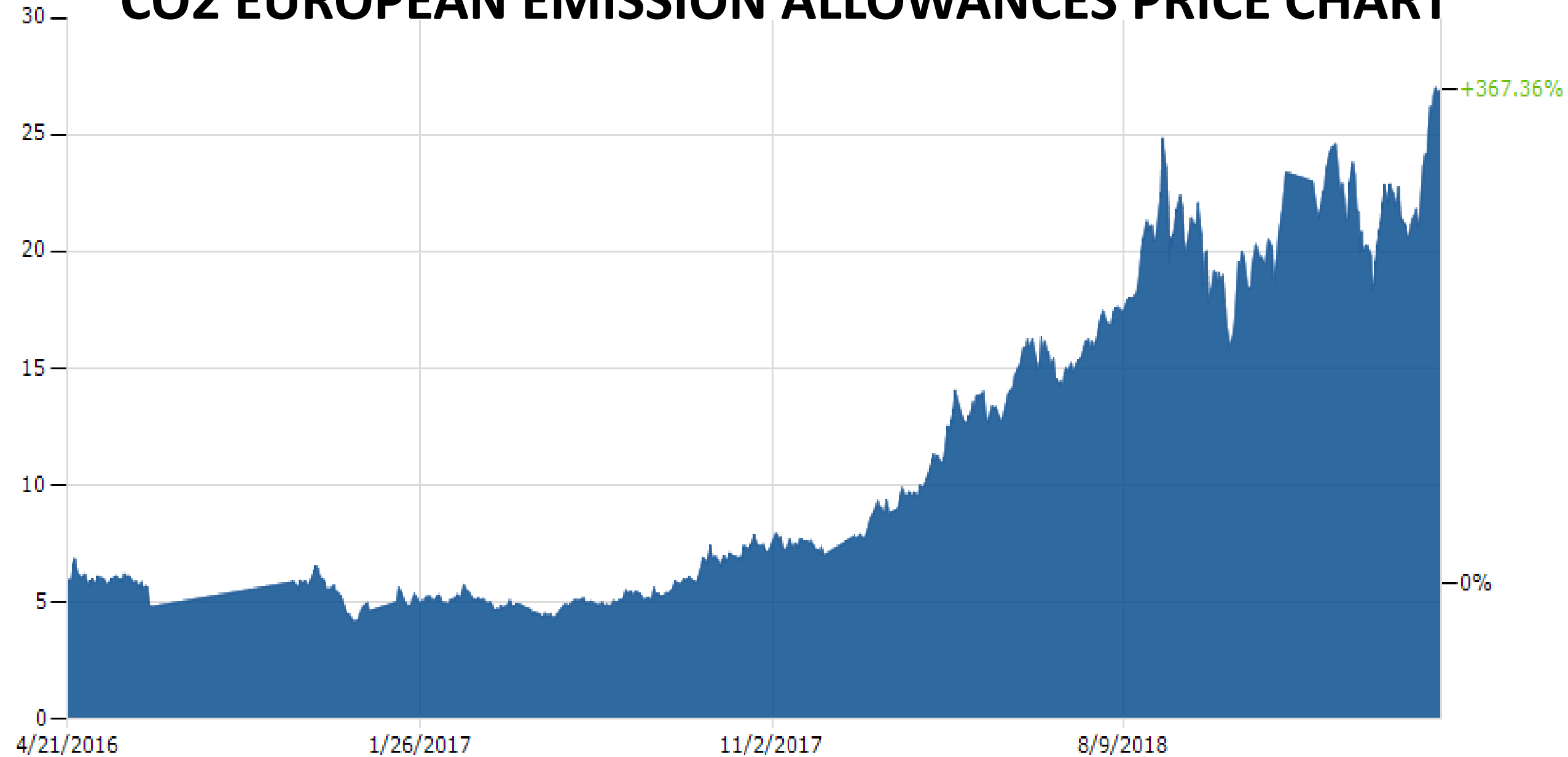
Renewable net generation

National electrical consumption

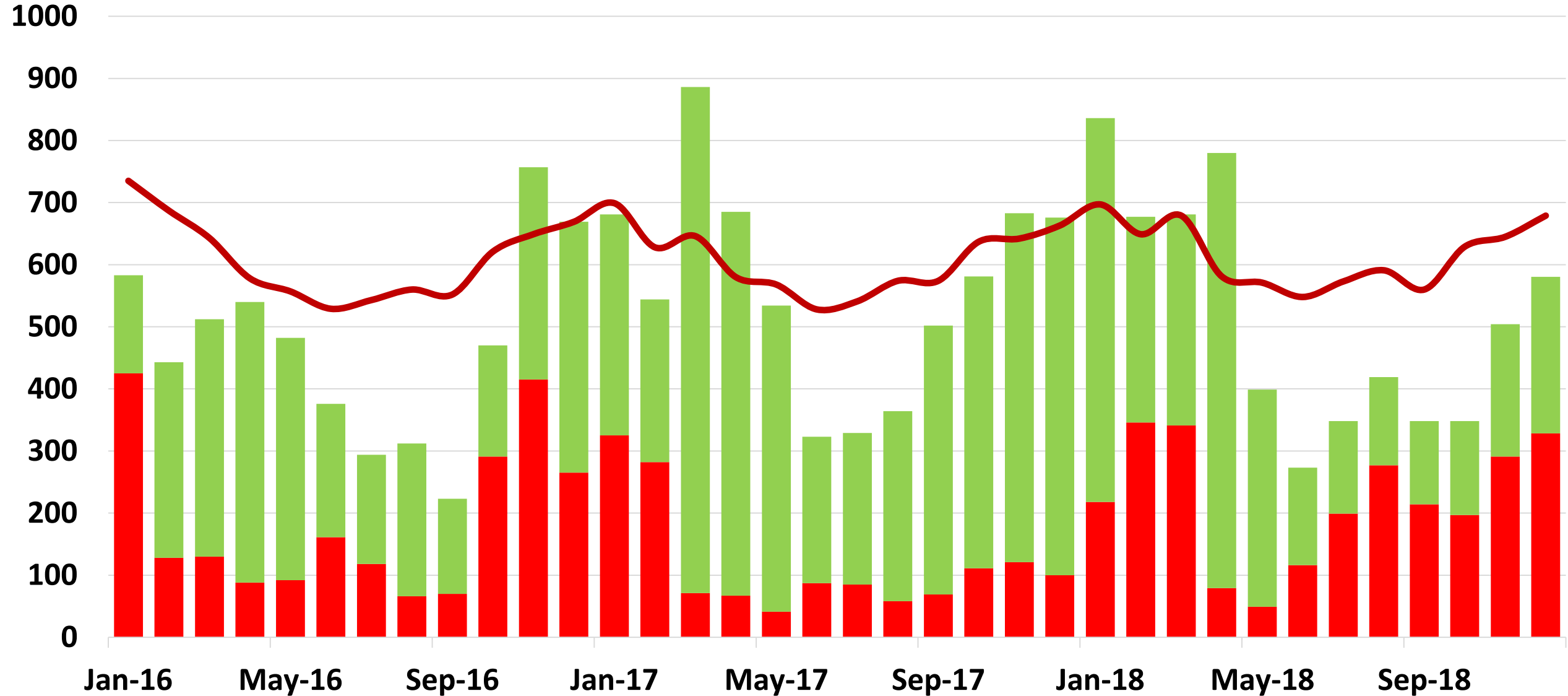




# CO2 EUROPEAN EMISSION ALLOWANCES PRICE CHART



# LV GWh/month



- Of which Fossil Gas
- Renewable net generation
- Solar net generation
- National electrical consumption

# RES generation, Baltics GWh/month

1400

JO 2019  
Source: ENTSO-E

1200

1000

800

600

400

200

0

Jan-16

Apr-16

Jul-16

Oct-16

Jan-17

Apr-17

Jul-17

Oct-17

Jan-18

Apr-18

Jul-18

Oct-18

Wind net generation

Solar net generation

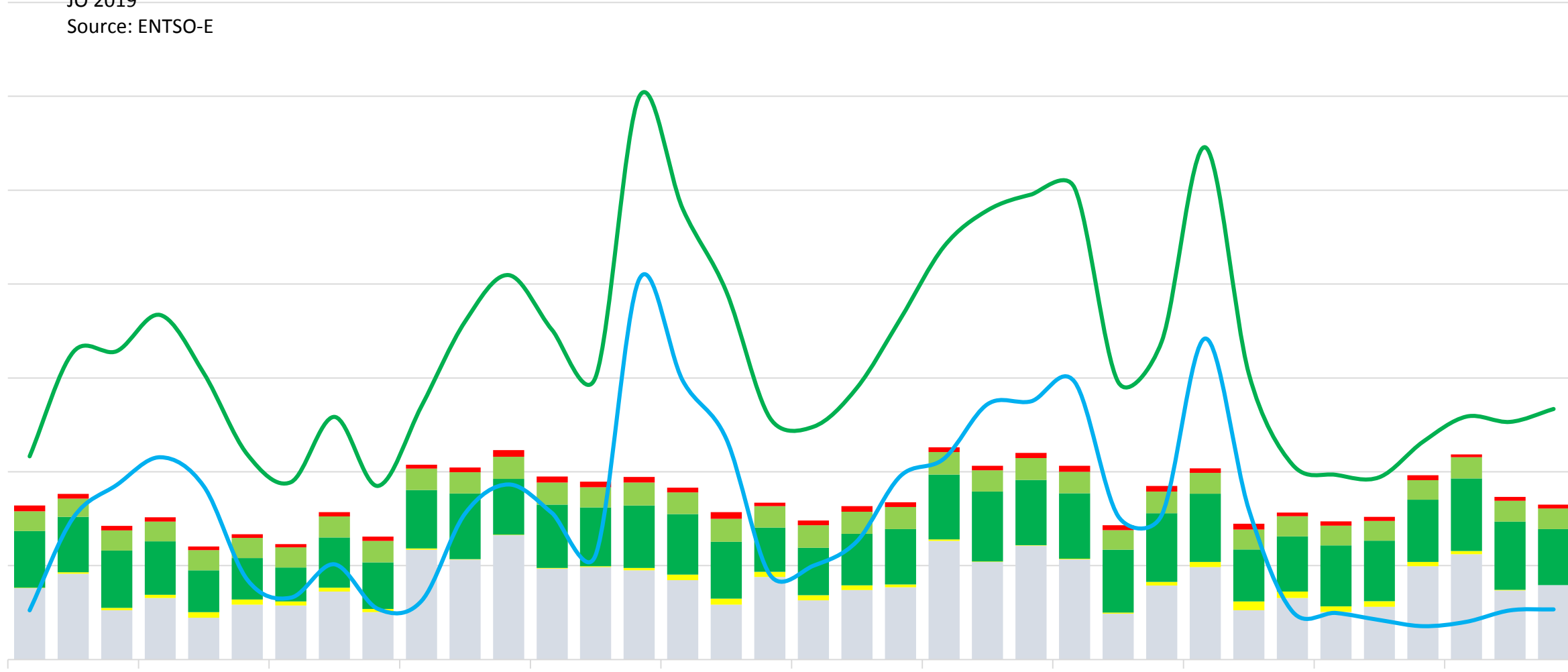
Of which Biomass

Of which Biogas

Renewable Waste net generation

Renewable net generation

Renewable Hydro net generation



# Gas , RES and Hydro

1400

JO 2019  
Source: ENTSO-E

1200

1000

800

600

400

200

0

Jan-16 Apr-16 Jul-16 Oct-16 Jan-17 Apr-17 Jul-17 Oct-17 Jan-18 Apr-18 Jul-18 Oct-18

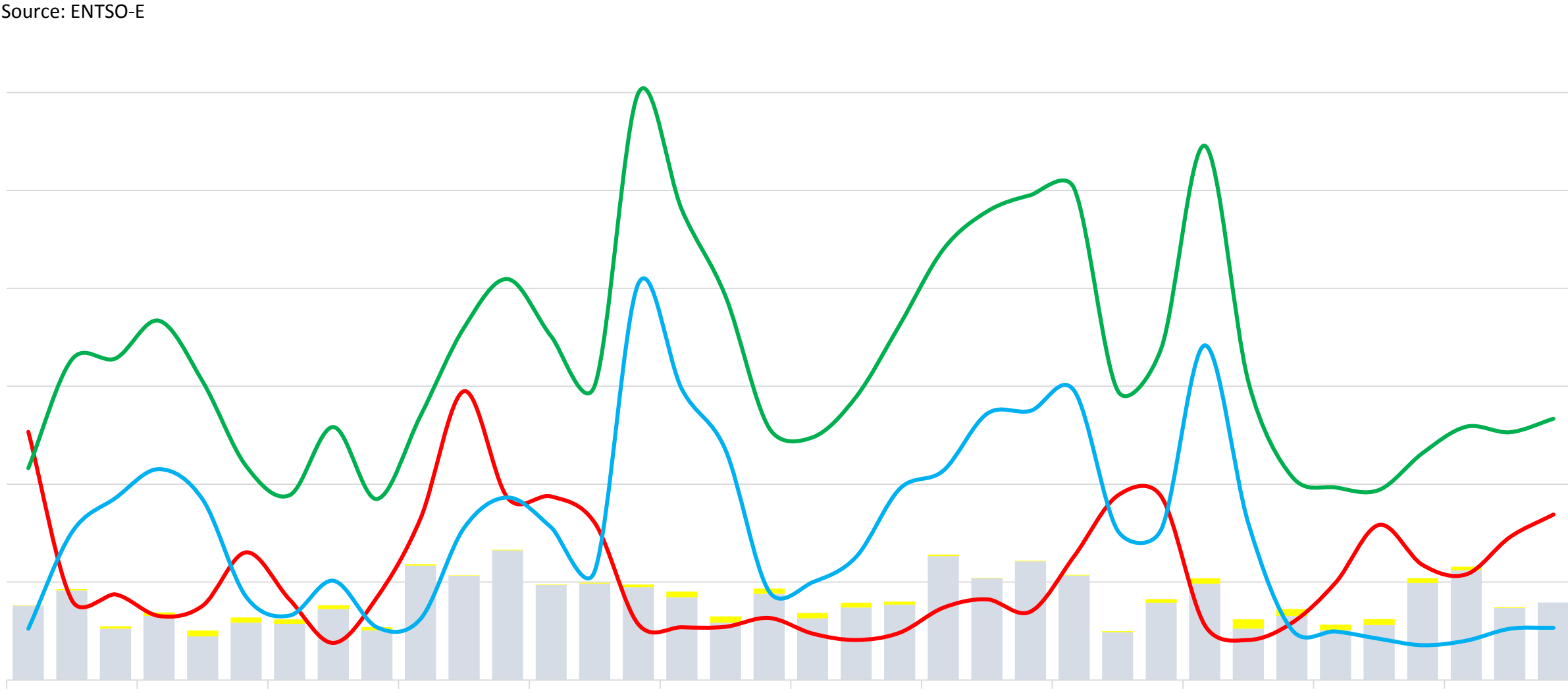
Wind net generation

Solar net generation

Of which Fossil Gas

Renewable net generation

Renewable Hydro net generation

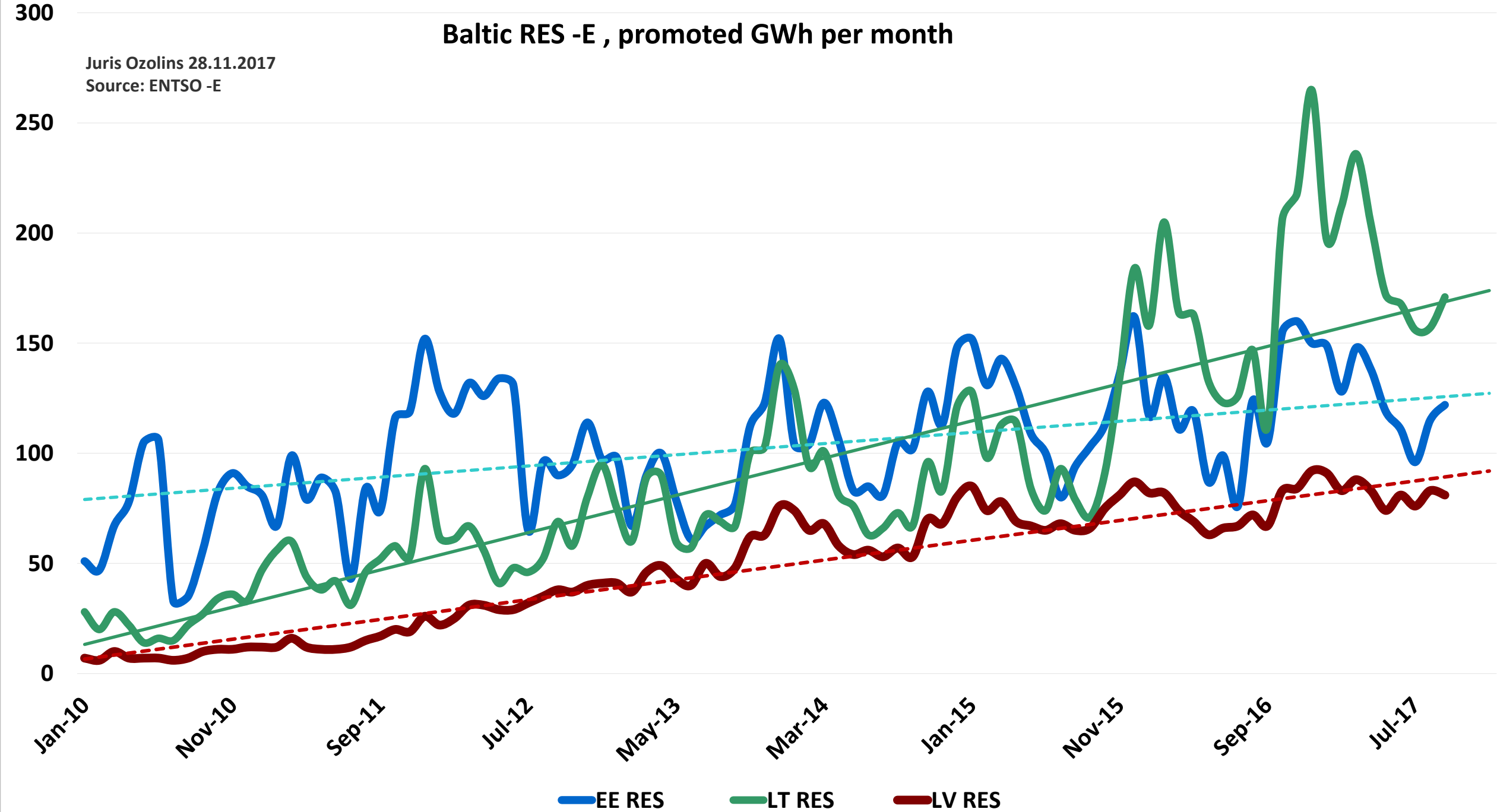




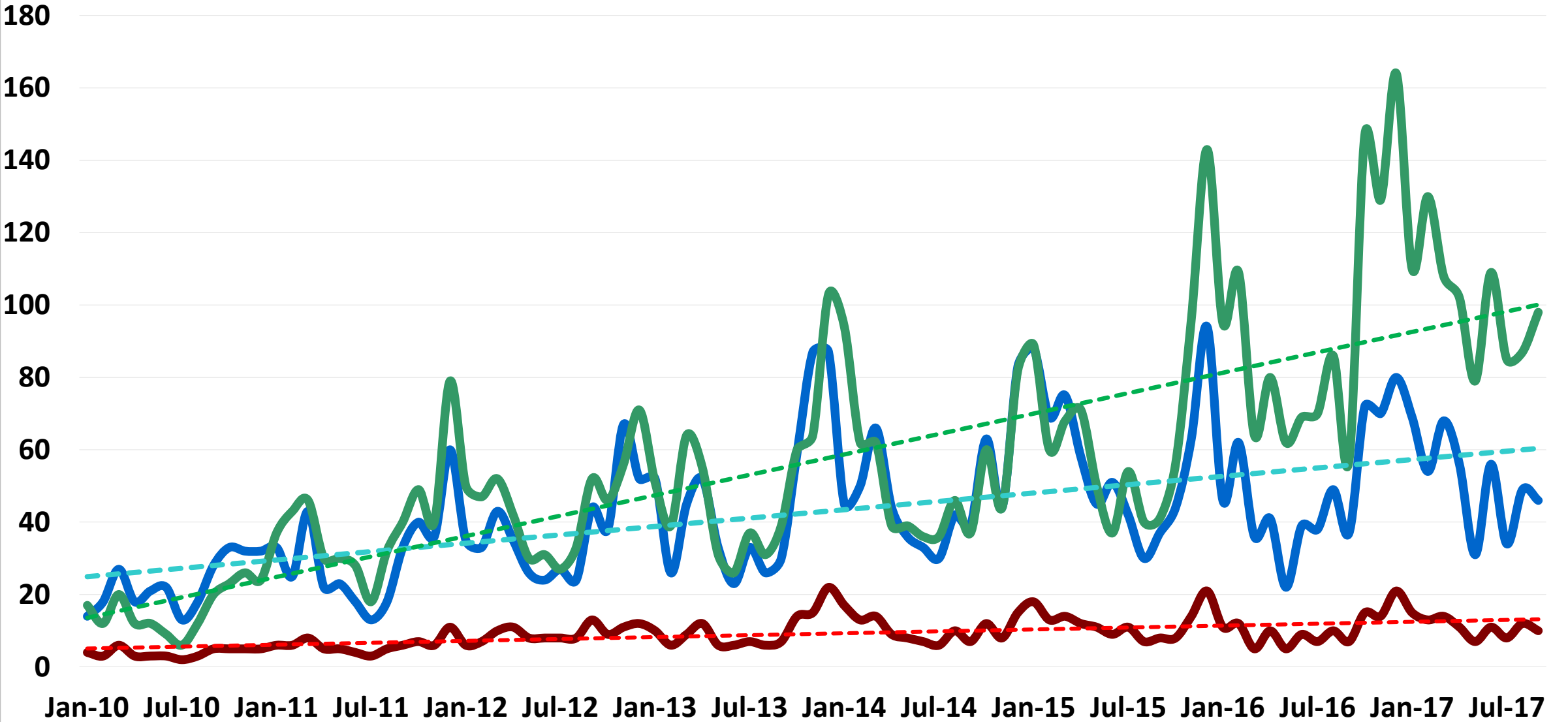
# Baltic RES -E , promoted GWh per month

Juris Ozolins 28.11.2017

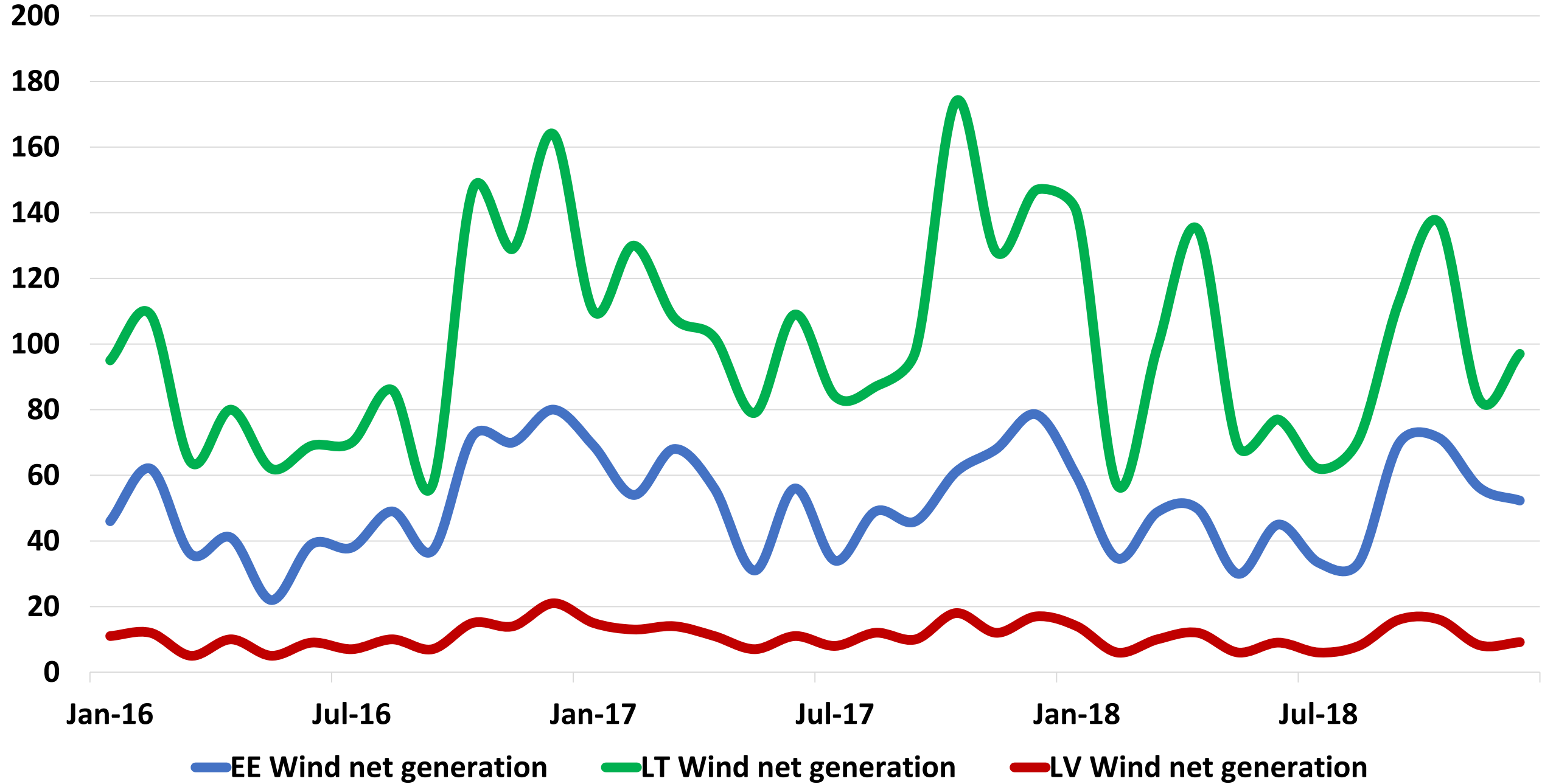
Source: ENTSO -E



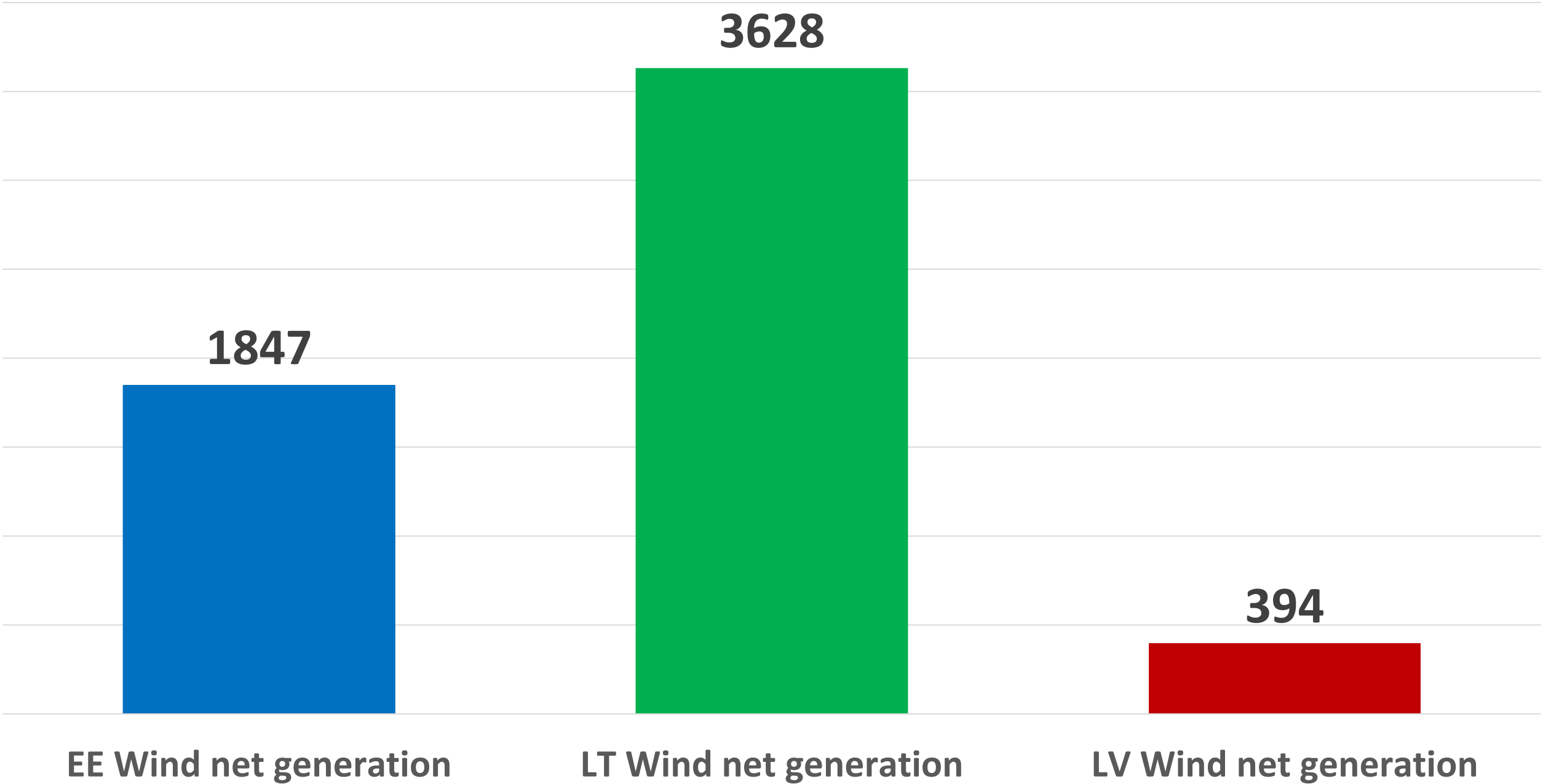
# Wind GWh



# Baltic wind GWh/m 2016-2018

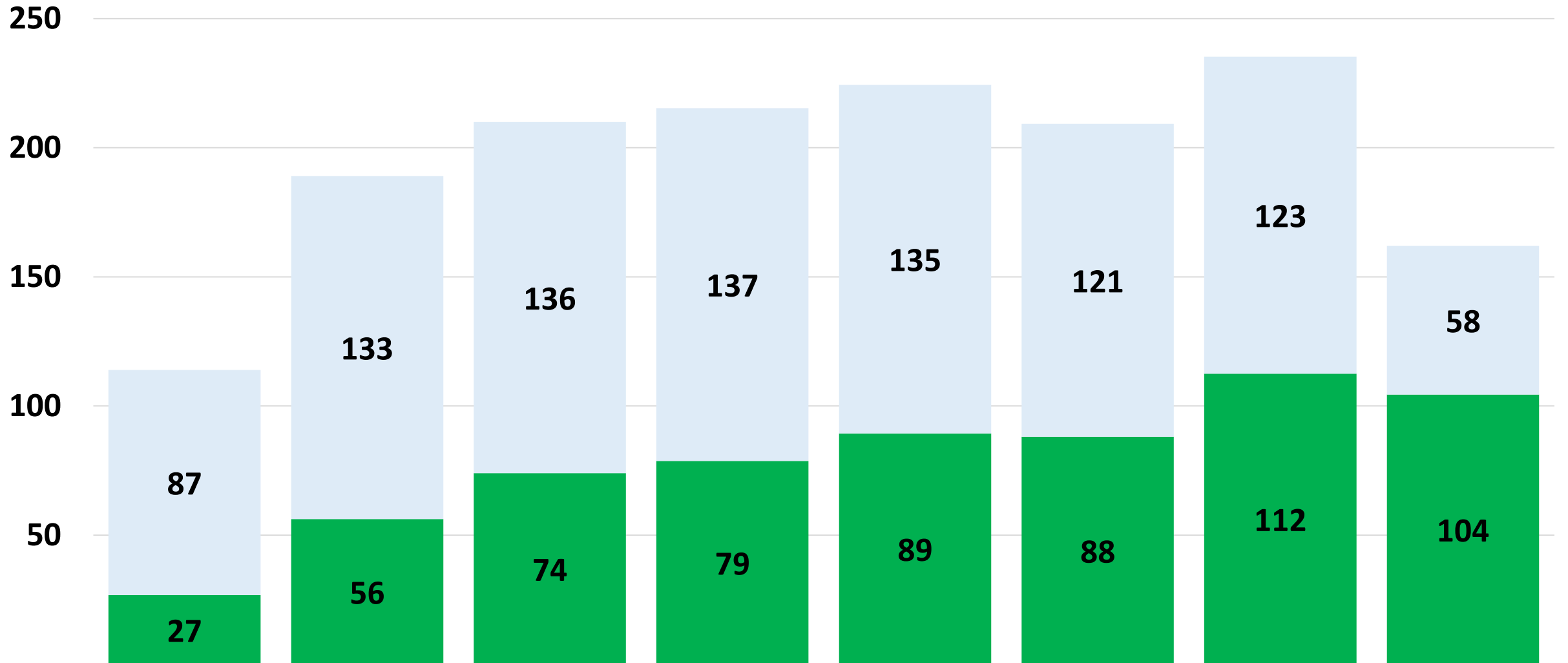


# Wind production GWh 2016-2018





# Atbalsts virs tirgus cenas milj.€

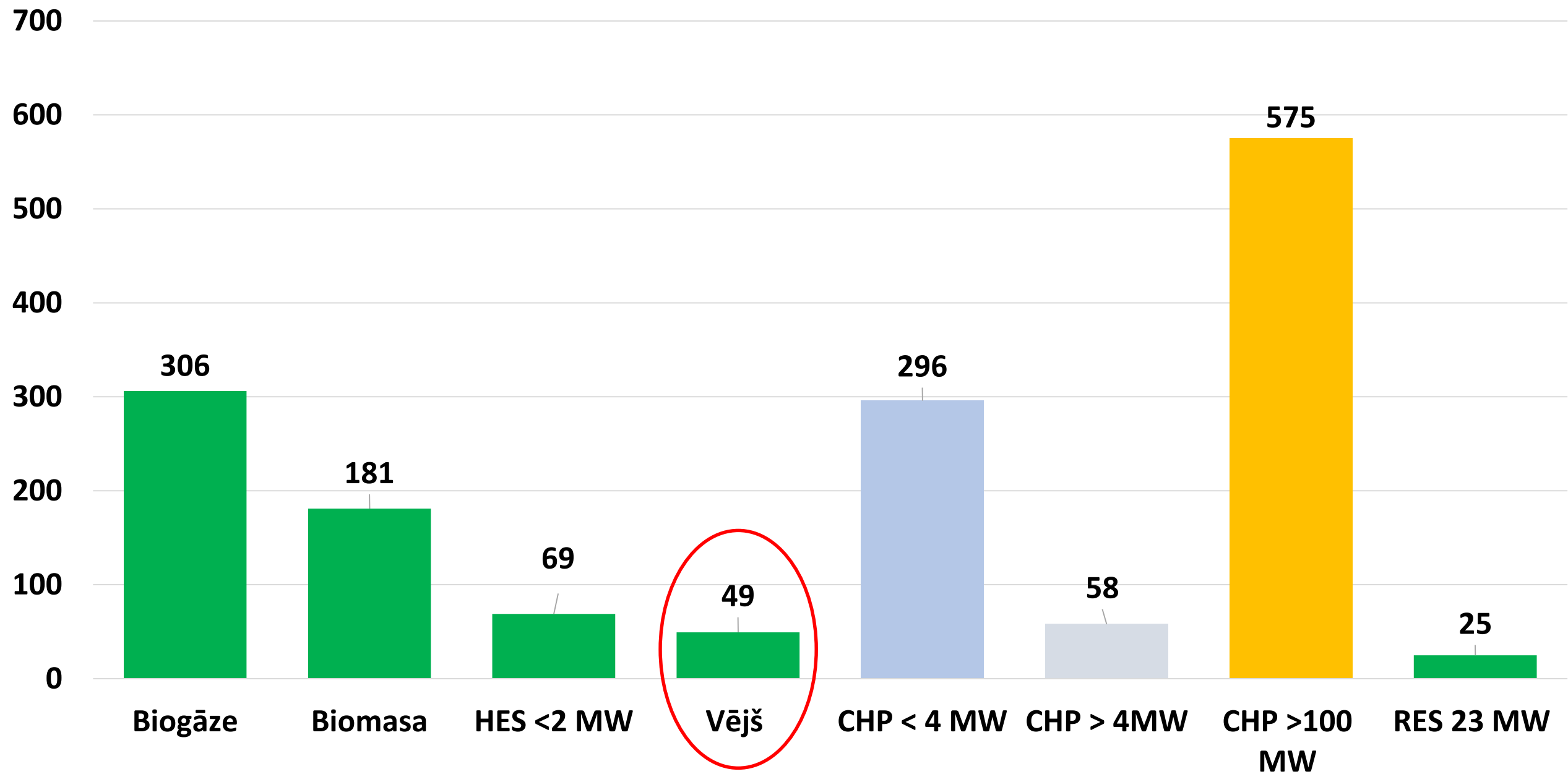


J.Ozolins Mar-2019  
Source: EPT

■ Visi AER (RES)

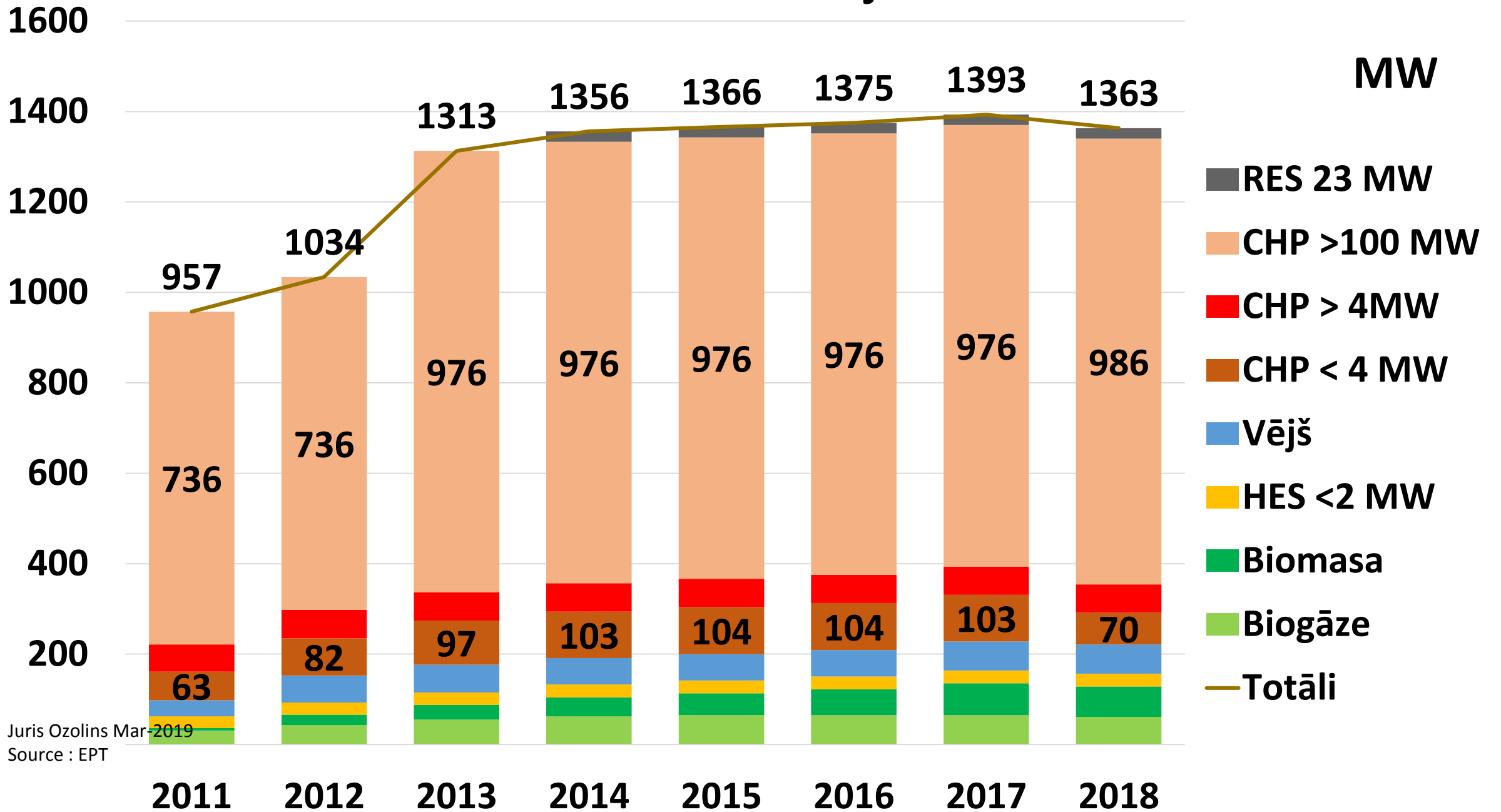
■ Fosil( gāzes koģenrācija un sistēmas jaudas)

# 2011-2018 milj.EUR



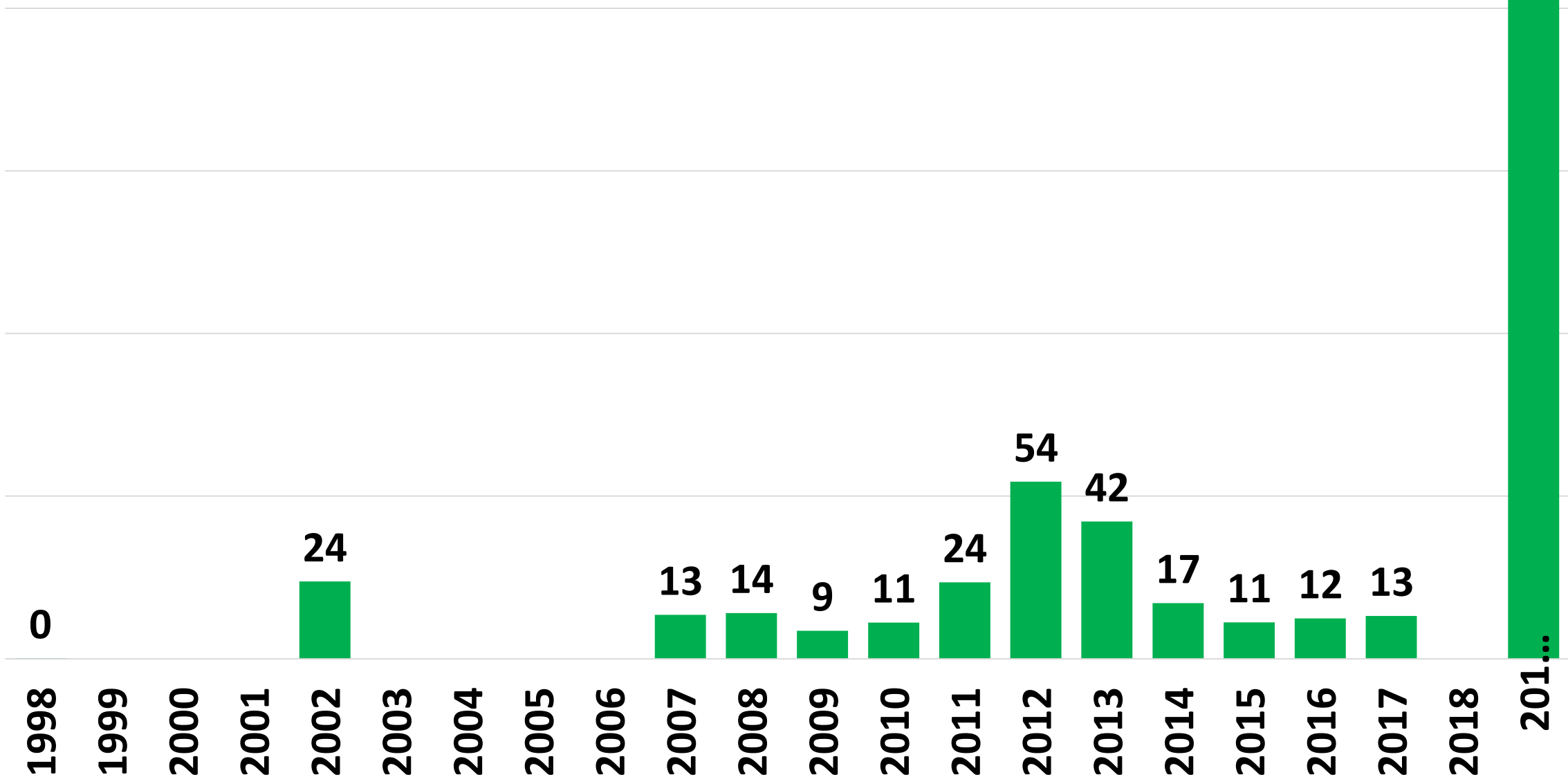
# Ar atbalstu ievestās jaudās MWeI

MW



# Instilētās AER ģenerācijas jaudas MW/gadā un darbā 2019

Bez Daugavas HES kaskādes





# Bloomberg New Energy Finance

In onshore wind, turbine prices have dropped steeply. Since December 2016, they are down 17% according to the [2018 BNEF Wind Turbine Price Index](#) ([web](#) | terminal). We forecast a temporary stabilization at just below \$0.8 million per MW in 2019. Despite this, the year will be a moment of truth for onshore wind turbine makers and their suppliers.

<https://www.4coffshore.com/offshorewind/index.aspx?lat=54.783&lon=14.121&wfid=DE46>