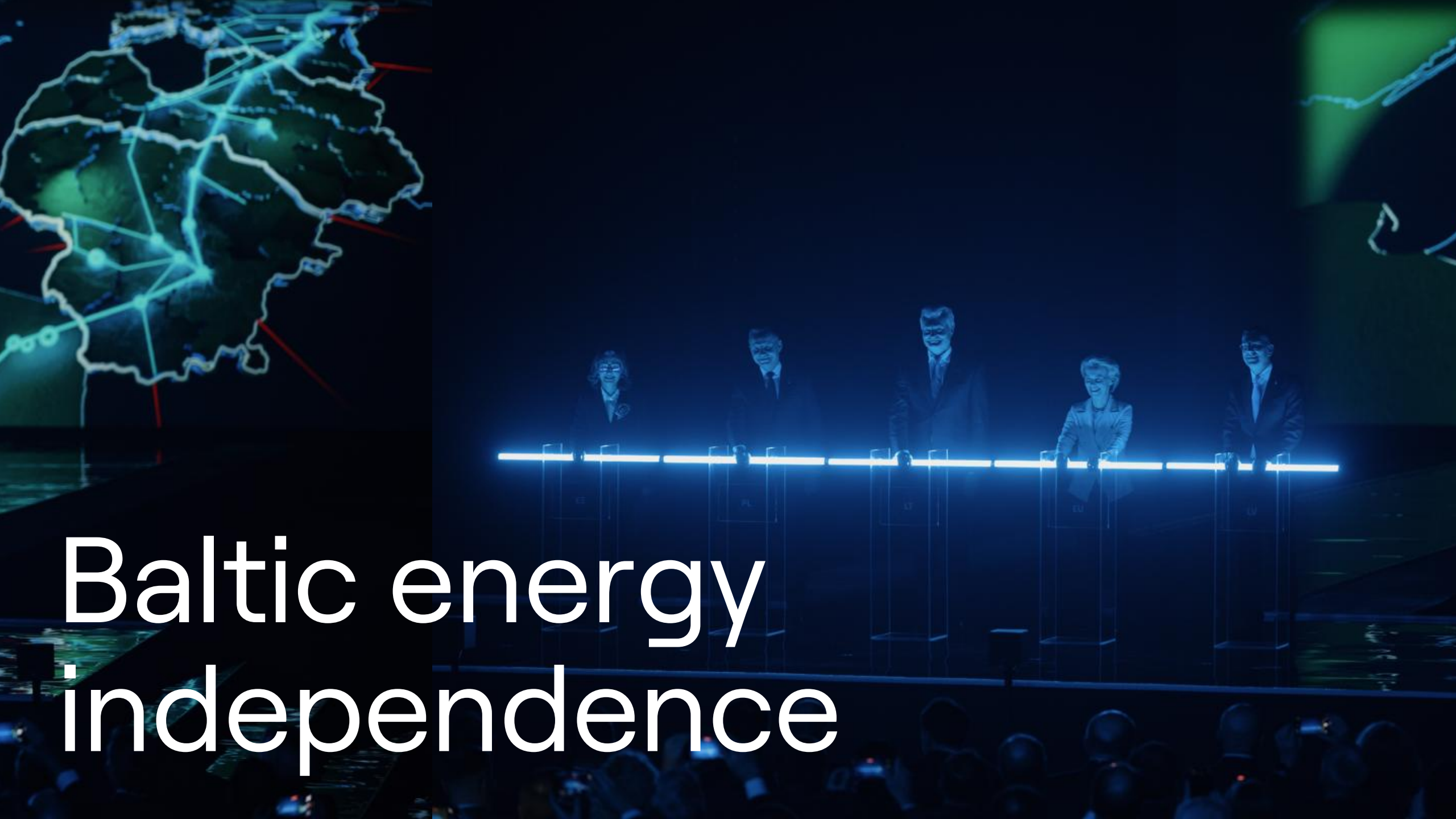


Baltic energy independence

Starting point – full energy dependency

- Lithuanian oil sector fully dependent on Russian pipeline “Druzhba”

- Lithuanian gas sector fully dependent on Russian gas and soviet era gas transmission system

- After Ignalina Nuclear power plant closure in 2009, 70% of Lithuanian electricity is imported, mostly from Russia and Belarus

- Lithuania (Baltic) power grid synchronized with Russia and Belarus power systems, and controlled in Moskow


4 steps towards
Baltic energy
independency

Step 1

Independent Oil sector

Completed in 1999, Butinge oil terminal became a major oil import and export facility, mainly oriented to Russian clients.

In 2006 Russia fully cut off crude oil export through Duzhba pipeline.

Since then, Butinge crude oil terminal serves as a major import/export facility.

Step 2

Independent Gas sector

In 2014 LNG Terminal in Klaipėda starts operation

April 2022 – Lithuania fully stops importing Russian gas

May 2022 - GIPL - new gas interconnection with Poland starts commercial operation, increased interconnection with Latvia

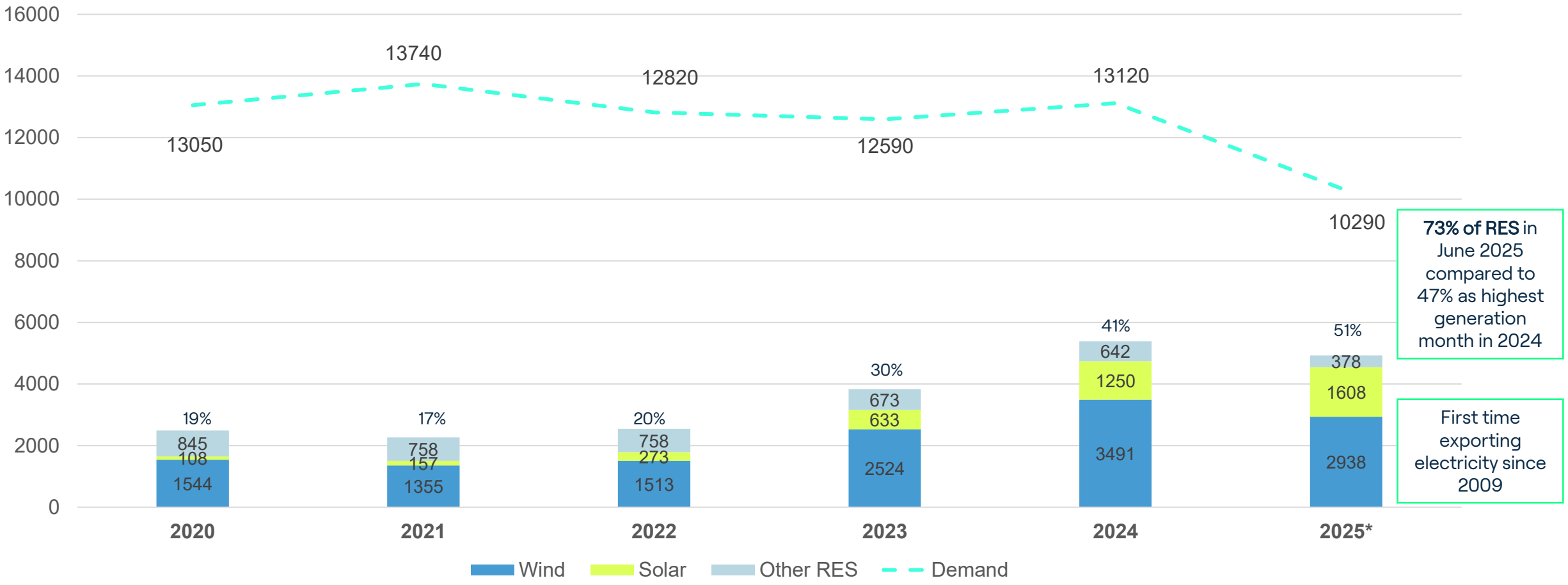
Step 3

Sustainable electricity supply

2015 – Joining EU electricity market through NordBalt and LitPol link interconnections (together 1200MW new cross-border capacities)

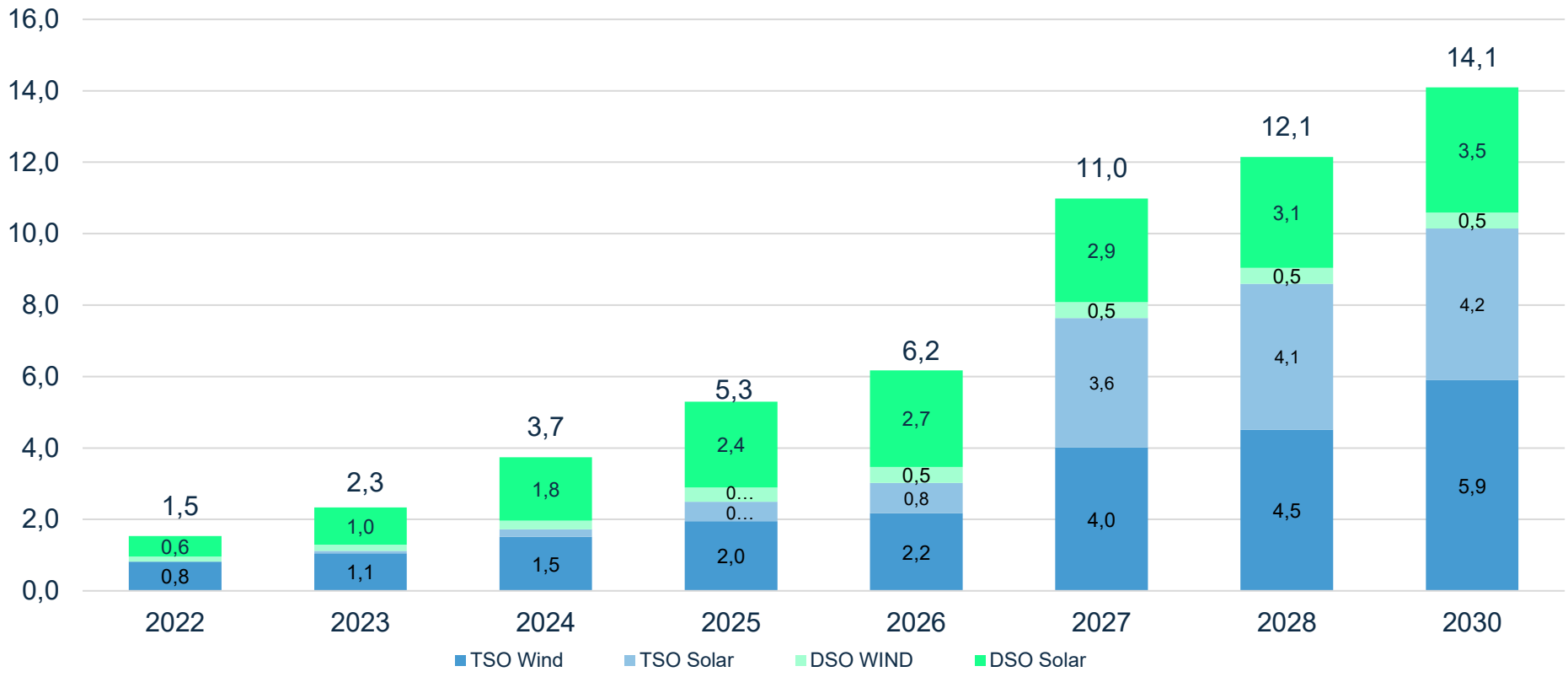
2022 – Breakthrough in Renewable energy development

Renewable energy production in Lithuania compared to total system demand, GWh



*Data of 9 months

Connected and Reserved RES Capacity (GW) – signed commitments with letters of intent



Step 4

Baltic synchronisation

Successful synchronisation on 9th of February.

All together – 41 projects implemented in the Baltic States and Poland:

- internal grids reinforcements in Baltics and Poland
- system control upgrades
- Installing BESS and synchronous condensers in Baltics
- Development of new PL-LT interconnection “Harmony Link”.

Most of the projects commissioning by the end of 2025.

“Harmony link” updated land technical solution implemented by 2030.

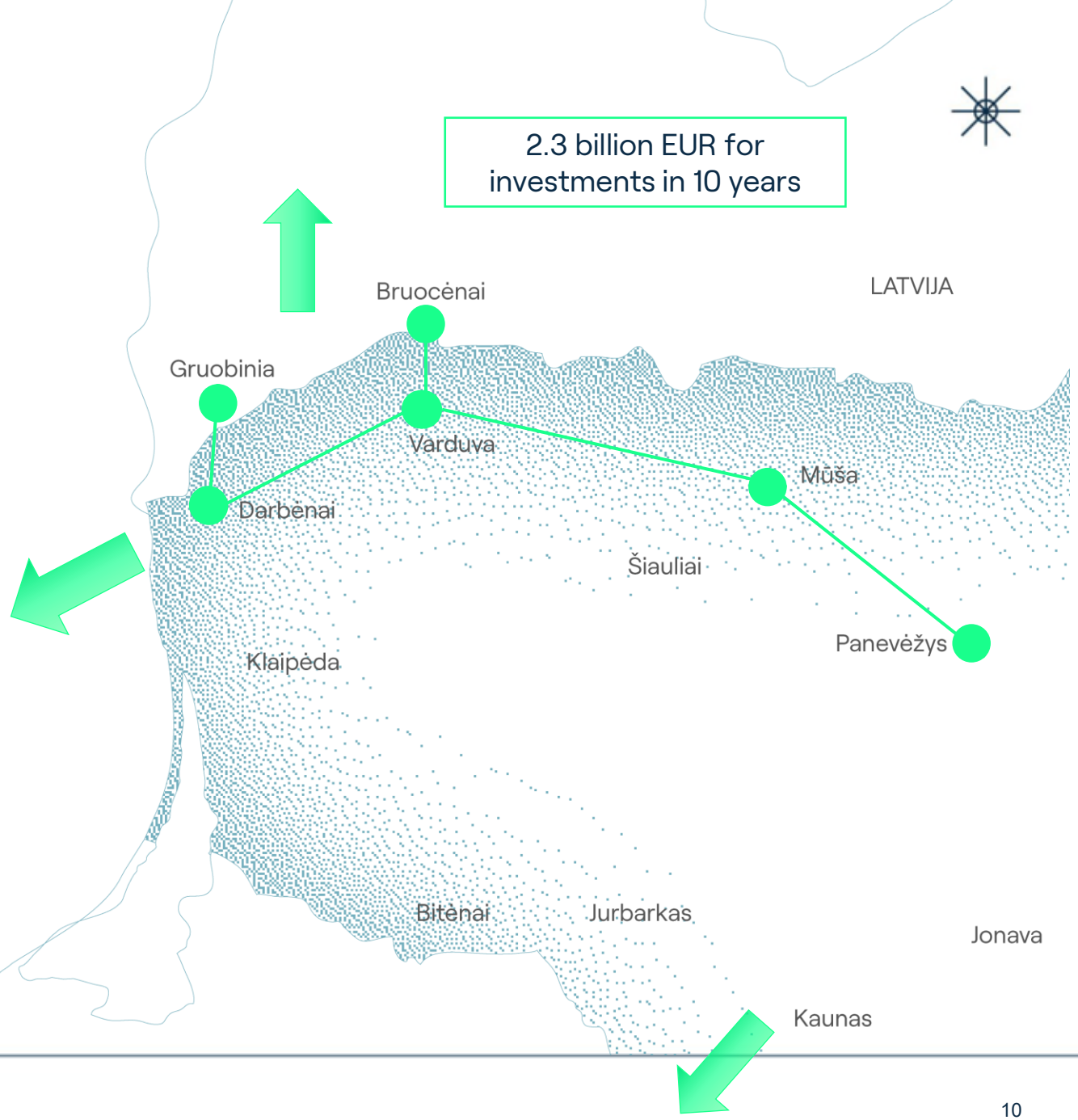
What's next?

Internal grid strengthening:

- Development of new lines connecting generation capacities in the Western part of Lithuania with demand centers in the East
- Installing critical infrastructure protection measures

Cross-border grid development:

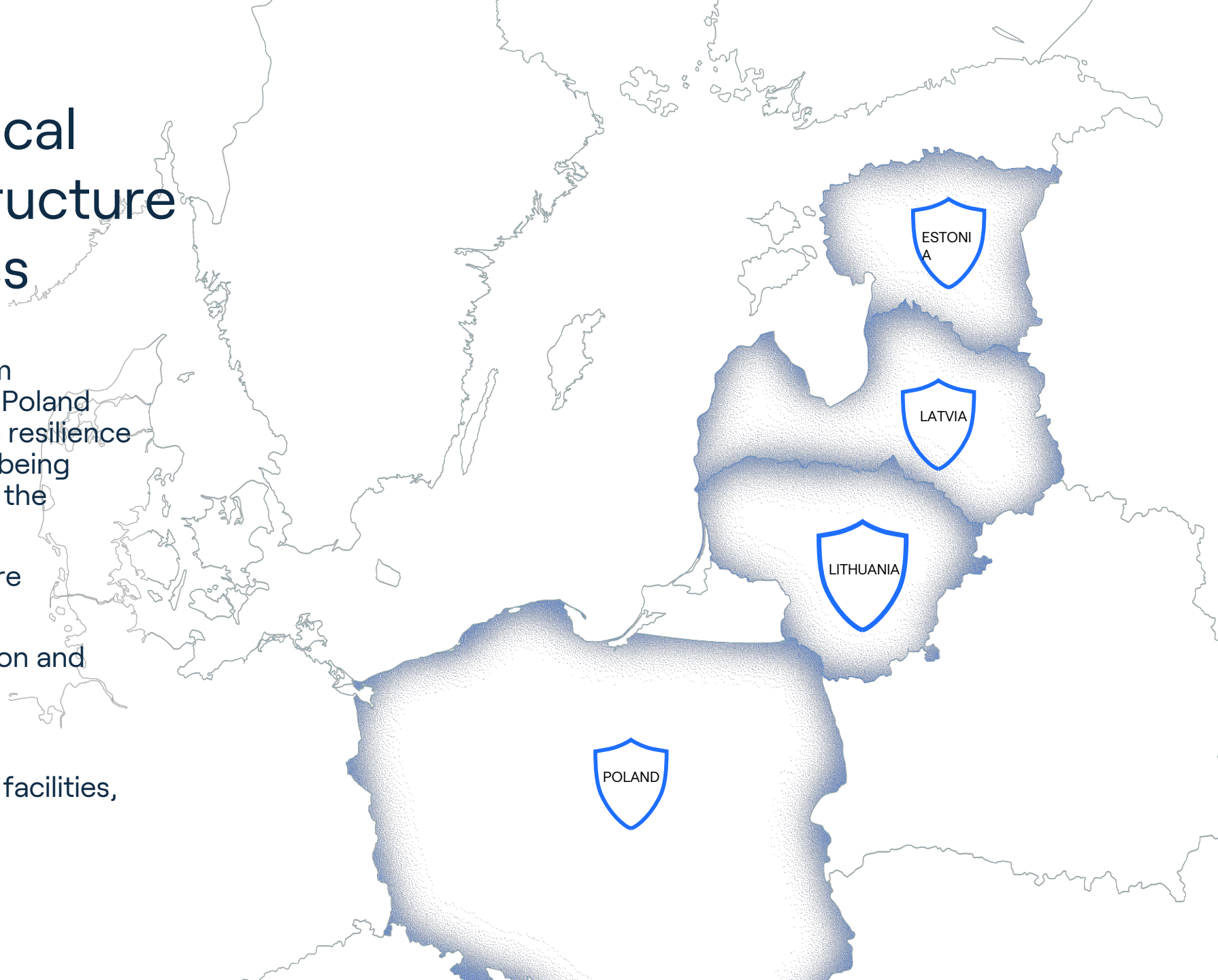
- Better Baltic integration with Latvian-Lithuanian cross-border increase
- Assuring higher security of supply and market integration through Polish-Lithuania interconnection Harmony link
- Investigation of Baltic energy system integration with Central Europe through Regional Energy HUB



Protection of critical electricity infrastructure in the Baltic States

The electricity transmission system operators of the Baltic States and Poland are cooperating to strengthen the resilience of energy systems. The measures being implemented and planned include the following solutions:

- Electronic maritime infrastructure protection systems
- Unmanned aerial vehicle detection and neutralization systems
- Electronic protection systems
- Protective structures for critical facilities, perimeter protection
- Ensuring equipment reserves



Litgrid

Thank you

Kristina Kilpė
Litgrid international affairs manager