

# Gas grid infrastructure contribution to decarbonisation of energy system

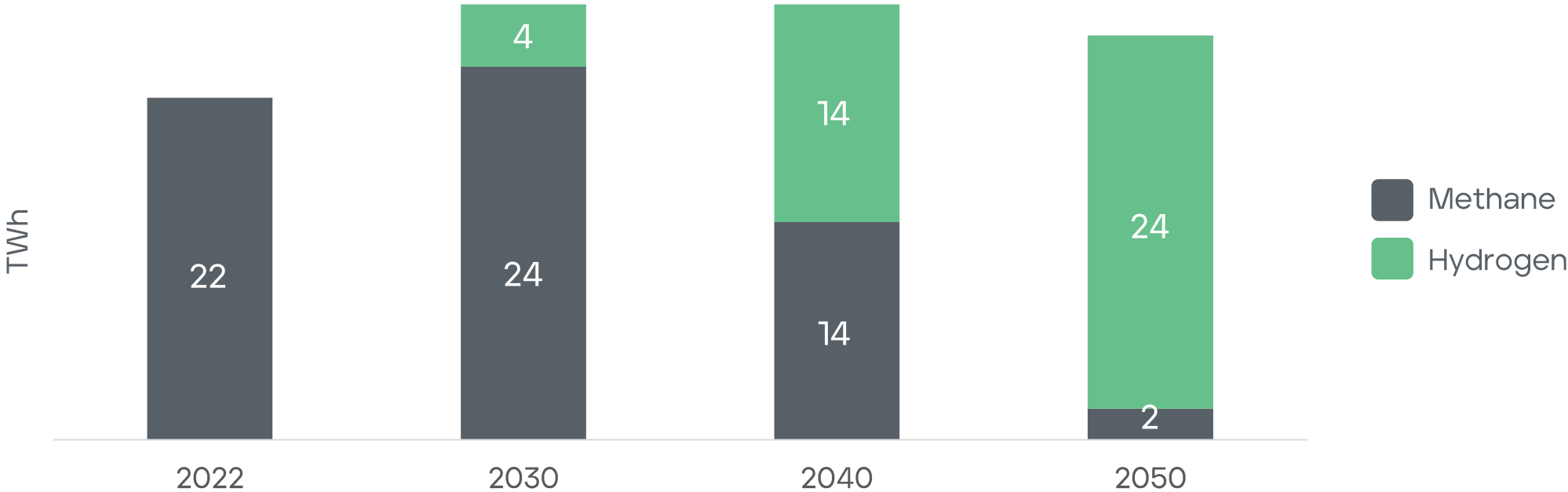
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 **Amber Grid**



# Demand forecast for hydrogen and methane In Lithuania

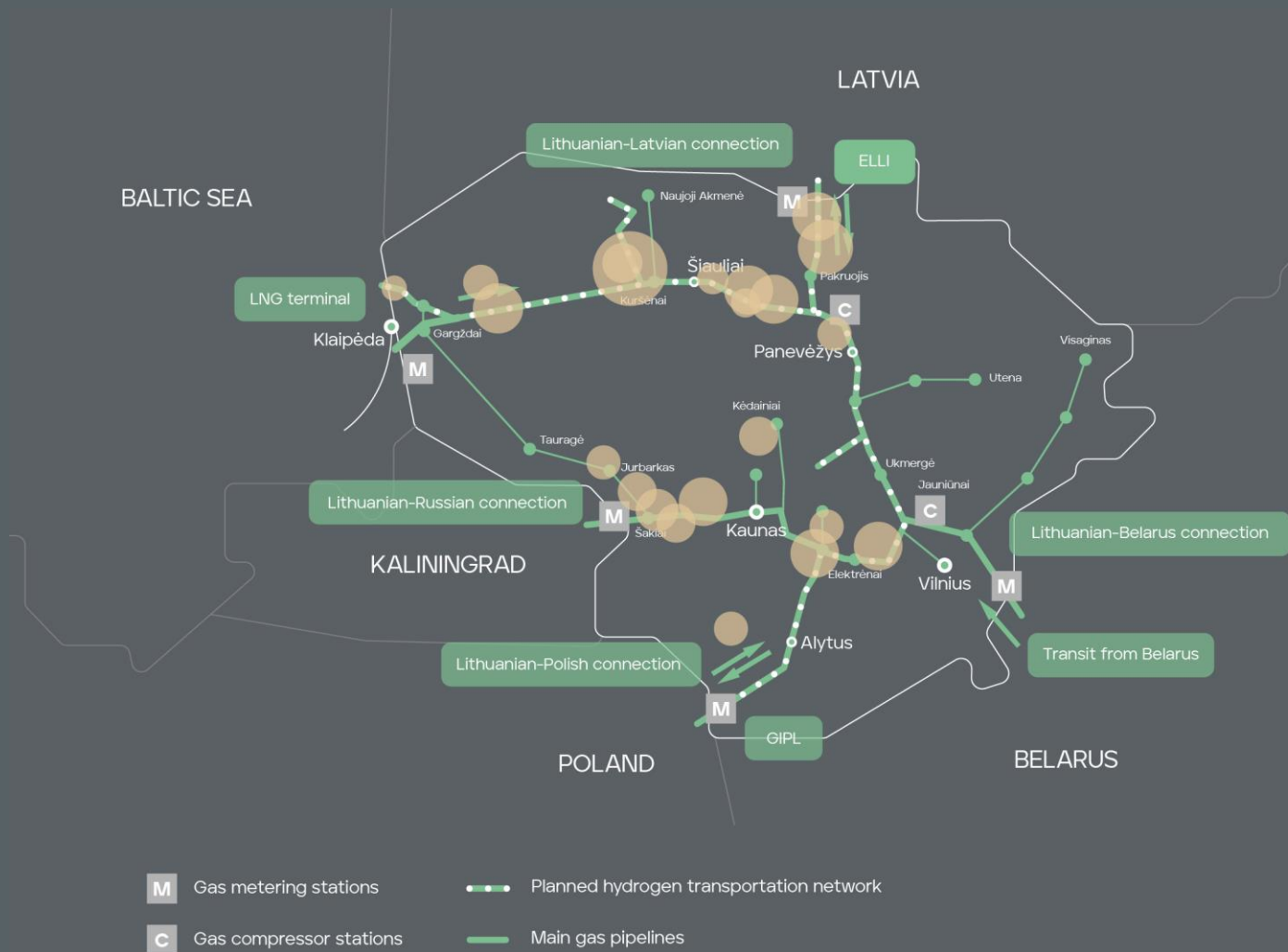


By 2050 demand for methane will almost disappear, as it will be replaced by hydrogen, and to some extent of biomethane

Source: Lithuania Energy System Transformation to 2050, DNV, 2023

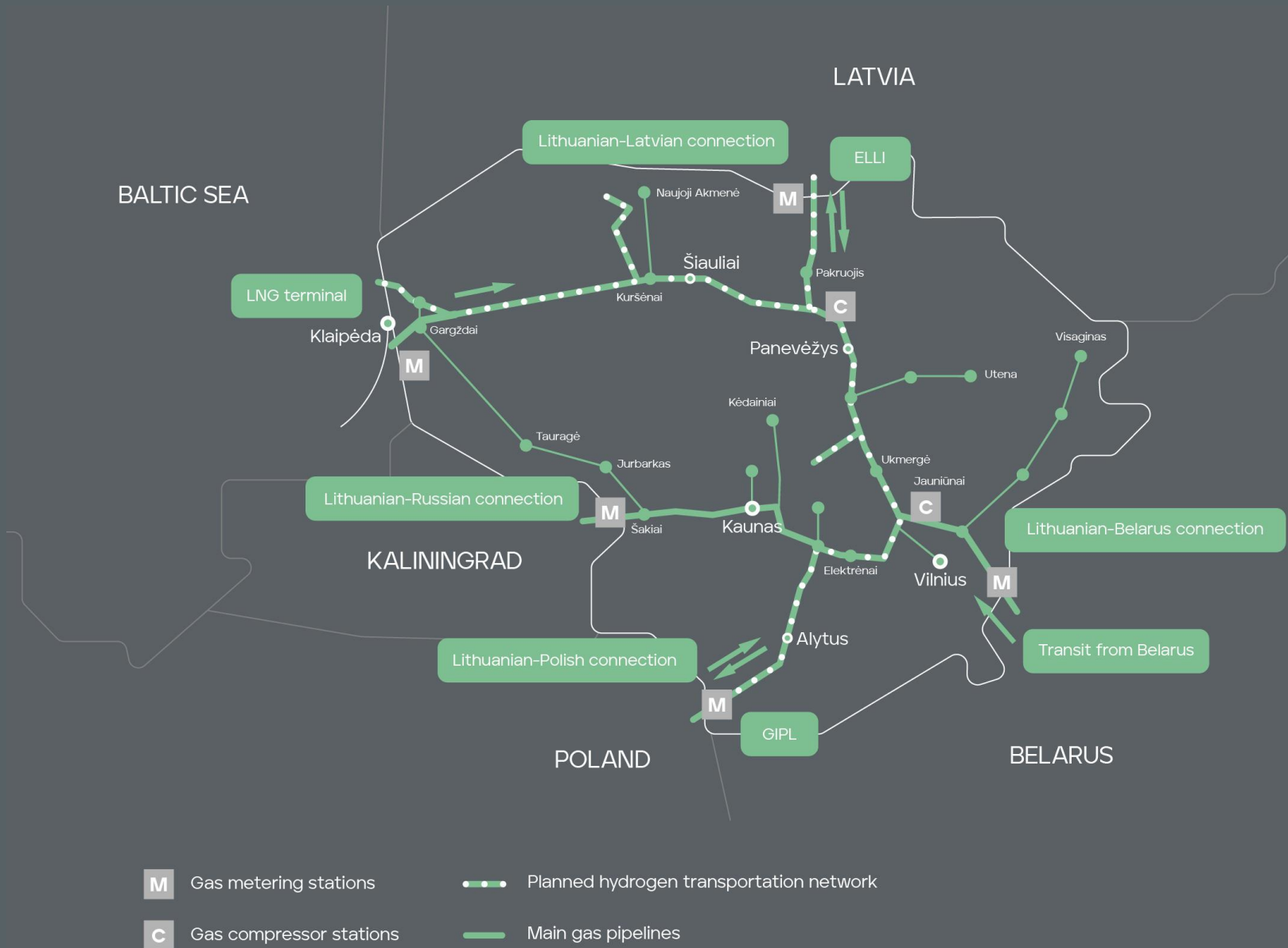


# 2023 – first biomethane in the gas grid



- Tube Green – first biomethane producer connected to transmission grid in Northern Lithuania. Already has produced up to 20 GWh of biomethane
- 20 connections to transmission grid is planning to be connected in 2024-2027
- If all of those will be connected – 2 TWh/y planned injection into grid
- System of guarantees of origin is in place for biomethane. In coming years, GO's for green hydrogen will be available for market to use green energy





# Hydrogen blending by 2030

Green hydrogen could be moderately blended in the gas grid

By 2030, the existing gas transmission infrastructure will be adjusted for 2-5% of hydrogen into natural gas



# Green hydrogen grid in Lithuania

The main sectors of green hydrogen are:

- 1. Fertilizers & Oil
- 2. Transport
- 3. Energy production



 Electrolyzers     Oil refining     Production of fertilizers     Planned hydrogen transportation network



# Unlocking Baltic area hydrogen production potential: Nordic-Baltic Hydrogen Corridor

Target – to establish Nordic-Baltic Hydrogen Corridor ~2030

Today pre-feasibility study to determine business case and key parameters of the pipeline is ongoing

All countries in the region has ambitious decarbonization targets, with green hydrogen expected to be produced for local needs and exports



Thank you for  
your attention!

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