

Pathways towards a carbon neutral energy future

Nordic Energy Technology Perspectives

Hilde Marit Kvile
Senior Adviser



Nordic Energy Research
and The Nordic Council of Ministers

Who we are

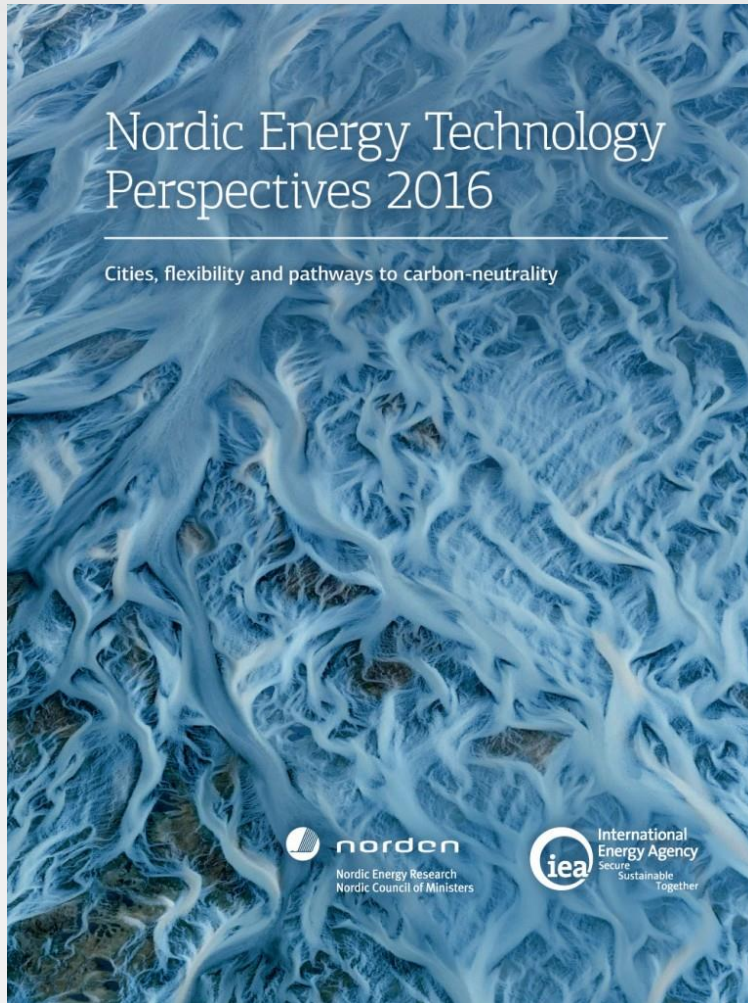
- Under the Nordic Council of Ministers
- Platform for cooperative energy research and policy development
- We fund R&D to promote a sustainable future
- We contribute to policy-making



Nordic Energy Research
and The Nordic Council of Ministers



Nordic Energy Technology Perspectives 2016



Ambitious Nordic climate targets 2050



Carbon neutral



No net emissions of greenhouse gases



100 % renewables -> 75 % reduction of greenhouse gases



Emissions cut by at least 80 %



50-75 % cuts in greenhouse gas emissions





Electricity
and heat



Industry



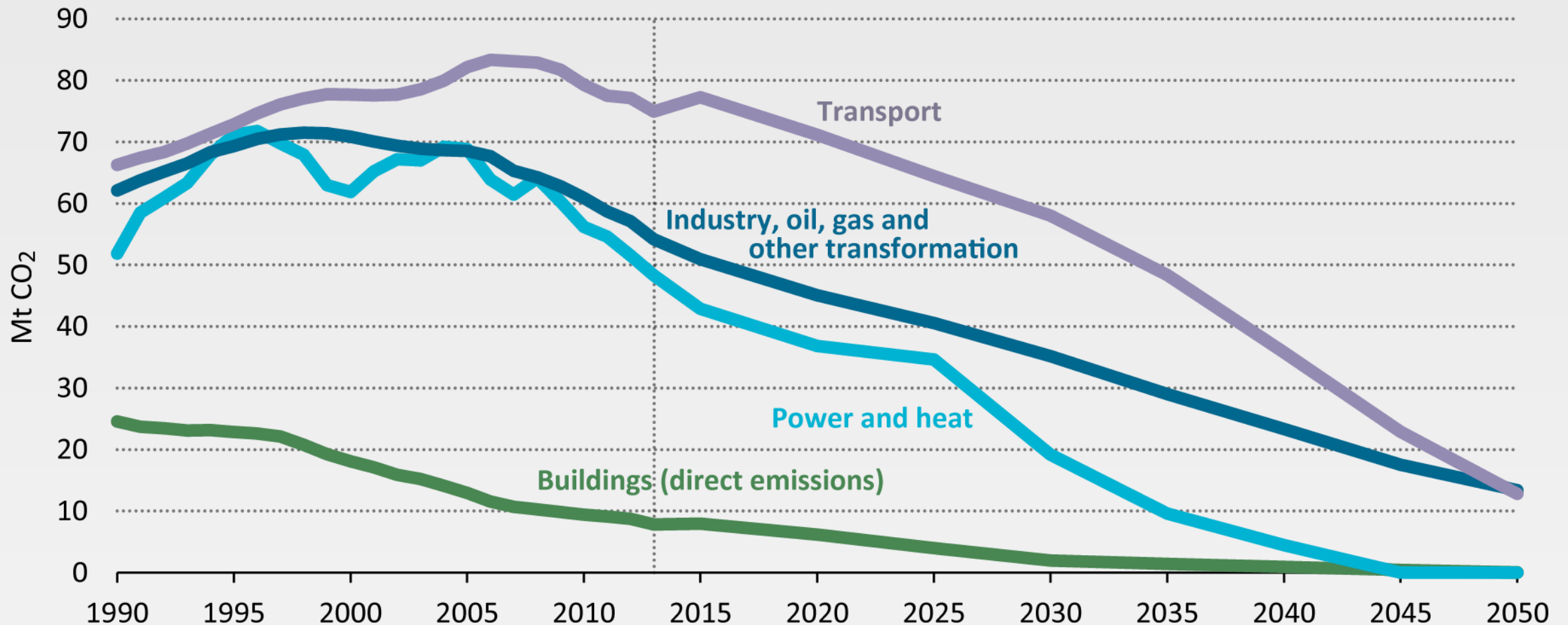
Buildings



Transport

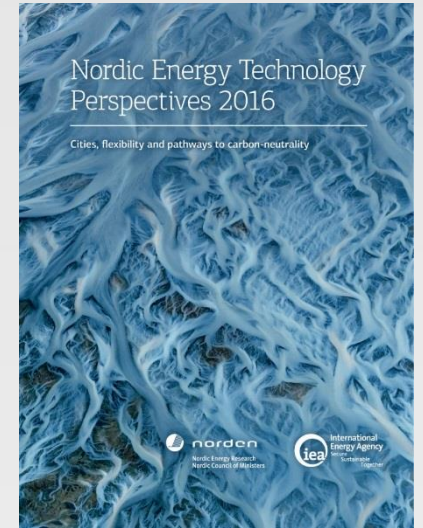
Demand sectors most challenging

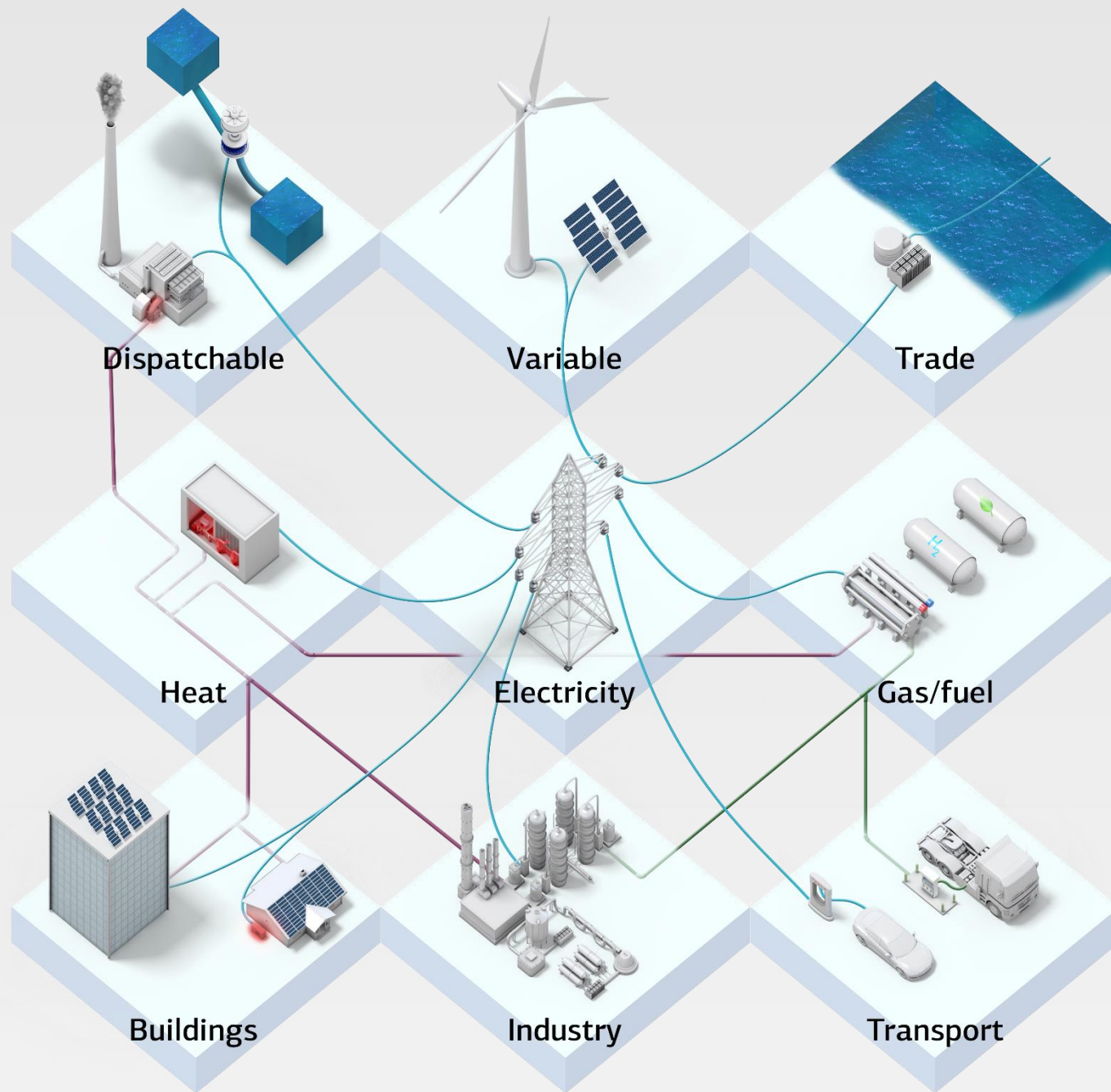
Nordic CO₂ emissions in the Carbon Neutral Scenario



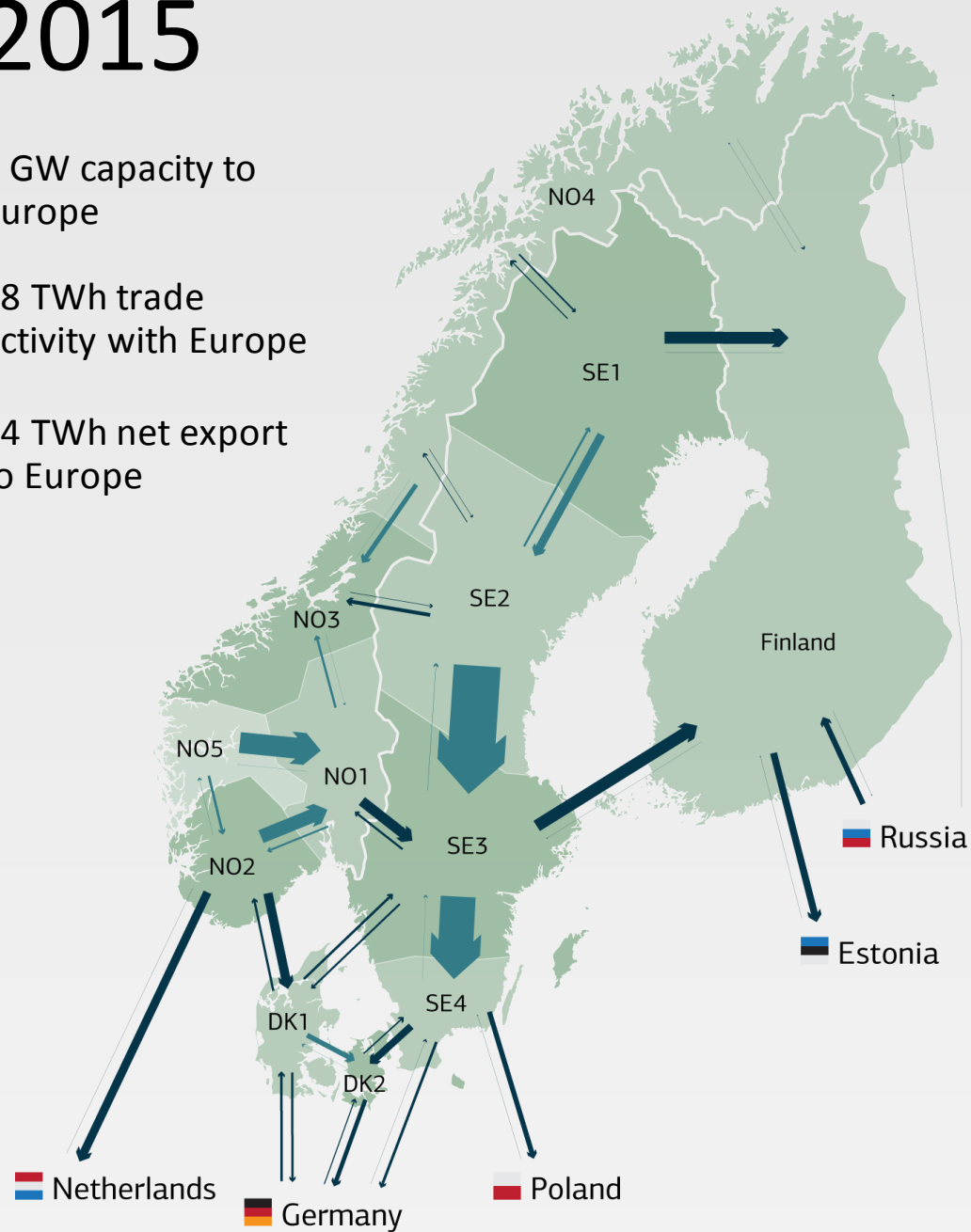
Three strategic actions

1. Tap into the positive momentum of cities in transport and buildings
2. Ramp up decarbonisation of long-distance transport and the industrial sector
3. Incentivise and plan for an electricity system distributed, interconnected and flexible

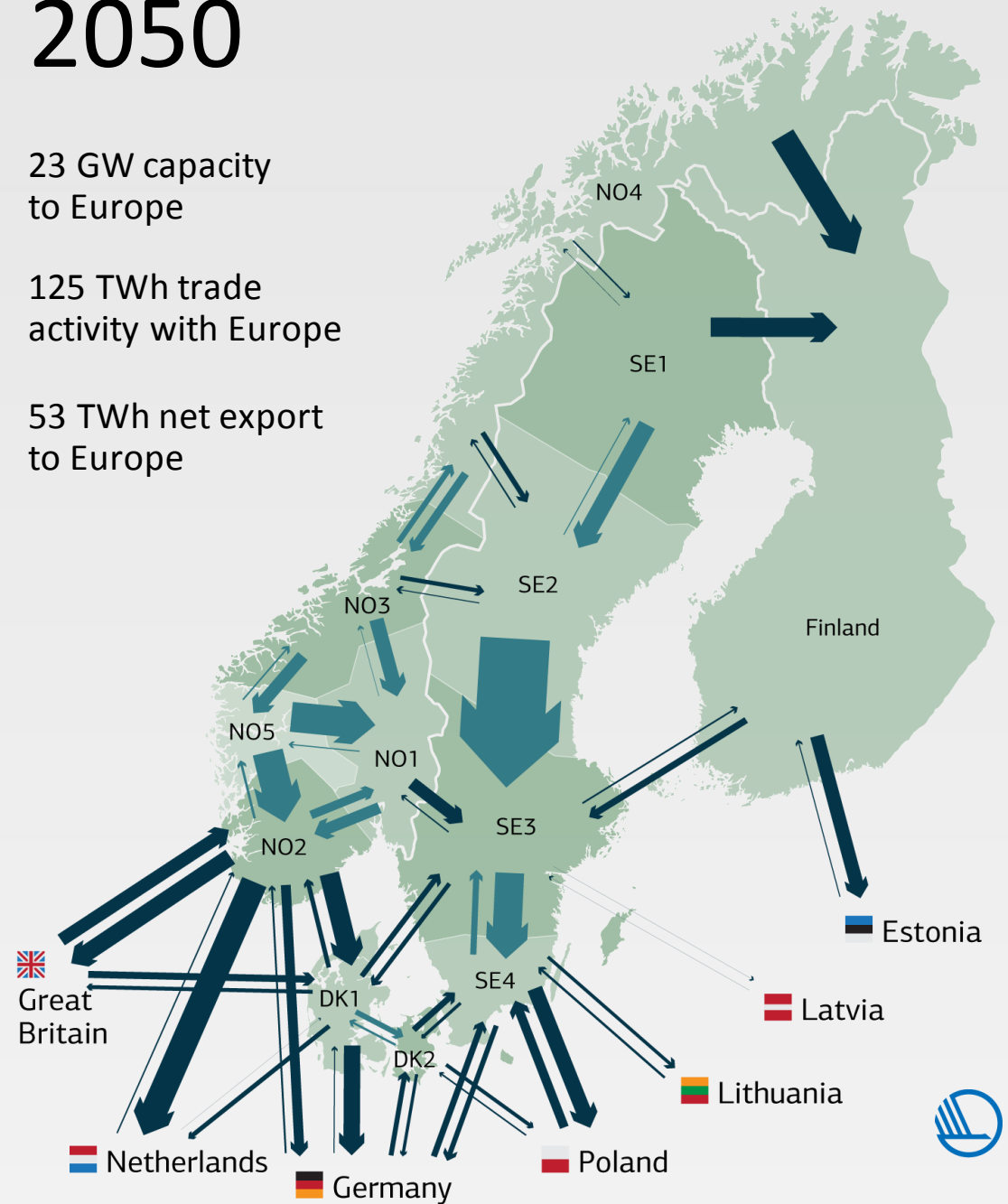




14 TWh net export
to Europe



53 TWh net export
to Europe



Nordic - Baltic Cooperation

- Baltic Energy Technology Scenarios
 - Ongoing project, will finish in 2017
 - Find how to reach the Baltic climate and energy targets in the most cost efficient way
- More systematic cooperation between Nordic and Baltic countries



Thank you for your attention

More information at
www.nordicenergy.org