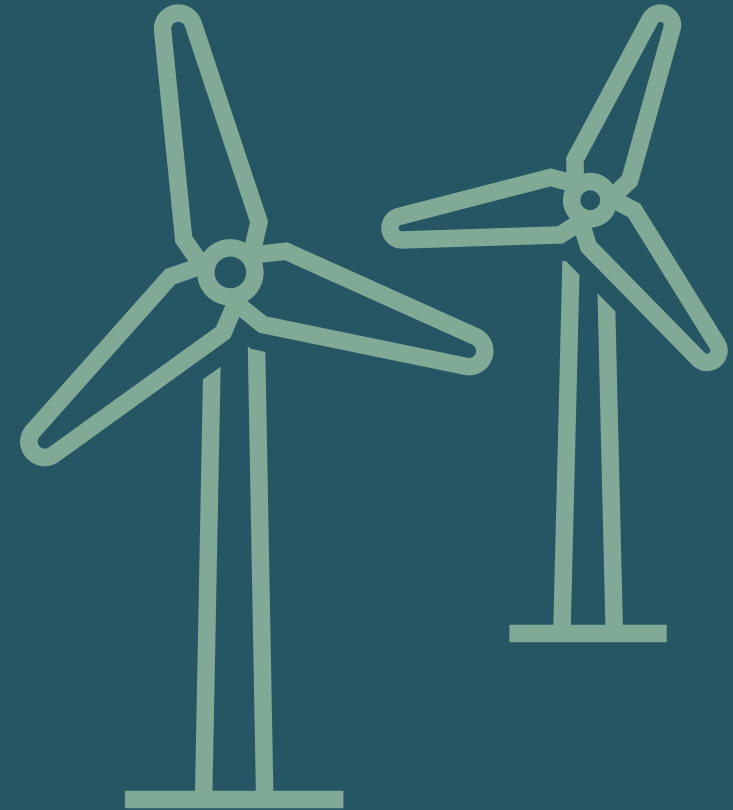


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Trends in
Finnish
Wind Power

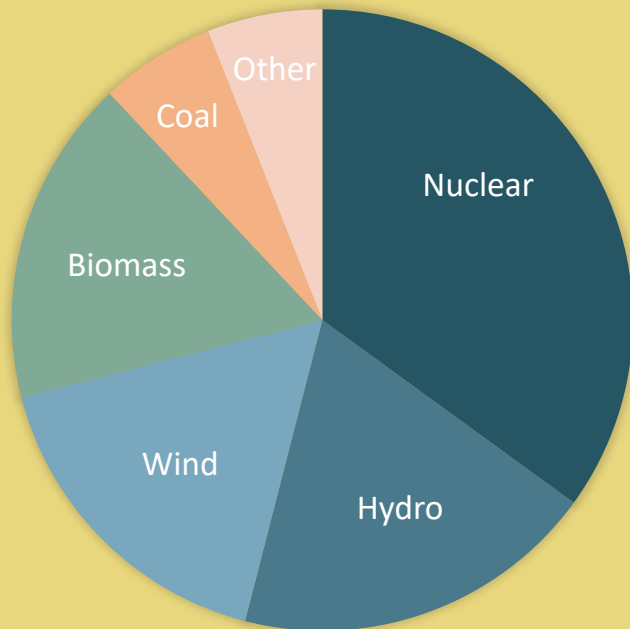
Pinja Syrjälä, Bergmann Attorneys at Law

31. Windenergietage, 9 November 2023



The Finnish Energy Sector

Electricity Generation



Source: Finnish Energy (January 2023)

Ambitious goals

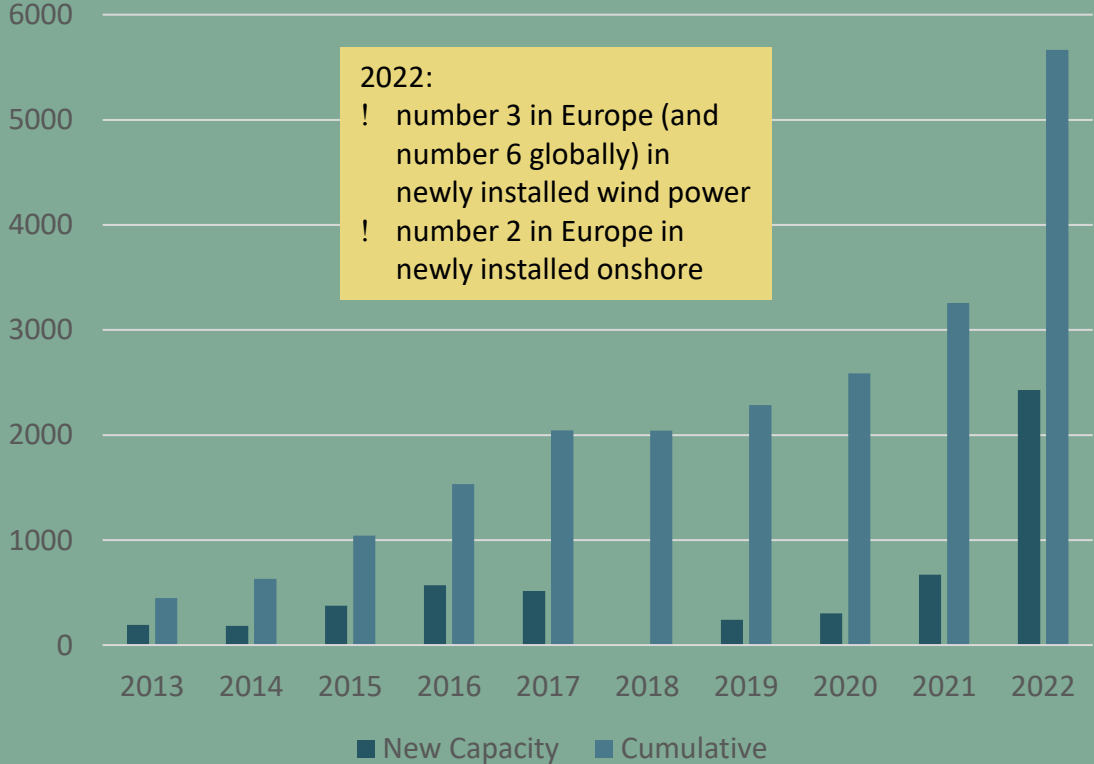
- Carbon neutrality by 2035
- “Superpower” in clean energy
- Key player in the hydrogen economy

Cross-border integration

- Part of Nord Pool power exchange
- Integrated in Nordic and Baltic transmission grid
- Development of 3 major hydrogen corridors to Nordics, Baltics and Central Europe

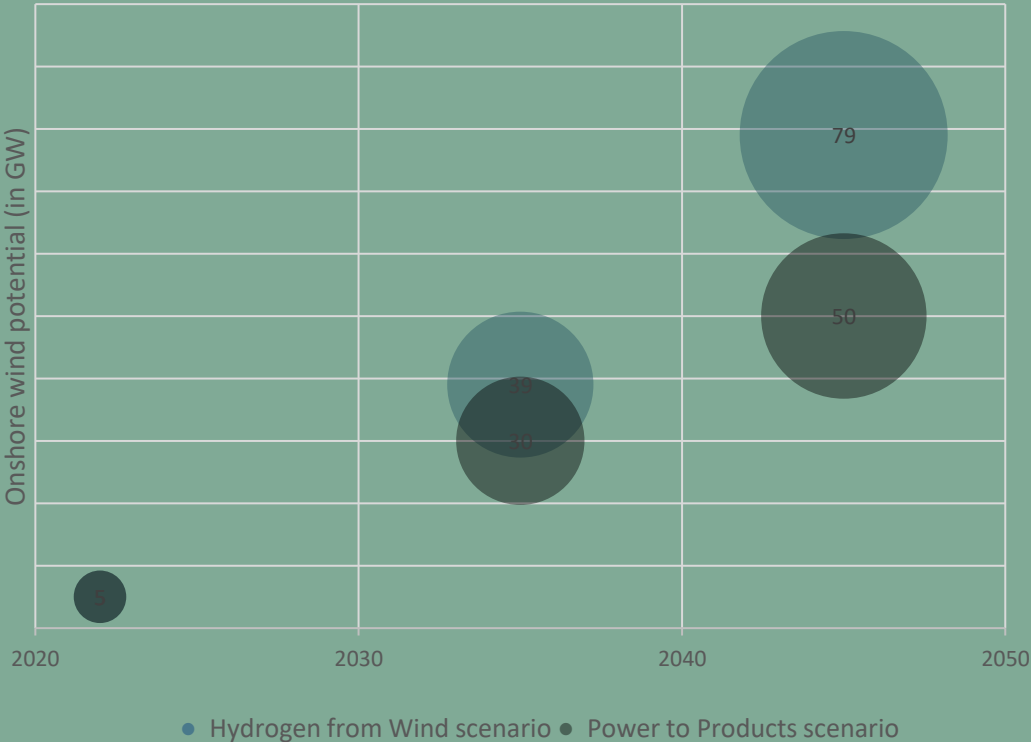
Onshore Wind

Installed capacity (MW)



Source: Finnish Wind Power Association (December 2022)

Outlook



Source: Finnish TSO Fingrid (March 2023)



The Finnish Context



Very Finnish animals

Typical species to be considered in project development include flying squirrels, wolves, eagles, and bears.



Low population density

Only 5.5 Mio inhabitants, with 50% of the population living in the very south.



Project locations

Projects currently concentrated on the west coast and in Lapland, but increasingly expanding to other areas.



Excellent wind conditions

Best conditions on the west coast and in Lapland, with good conditions also further inland.



Arctic Environment

Project development in northern Finland needs to consider arctic specifics, including reindeer herding.



National security

Coordination with the Defence Forces, in particular Eastern Finland.



Project Development in a Nutshell



Land Procurement

- Long-term land leases
- Production-based lease element increasingly common



EIA and Zoning

- Threshold for mandatory EIA: 10 WTGs or 45 MW
- Zoning typically via local master plan
- EIA and zoning can be conducted in parallel
- Appeals are common and should be priced in



Permitting

- Building permits
- Defence Forces approval
- Flight obstacle permits
- (Environmental permit, depending on noise and flicker impact)
- (Special permits to accommodate local specifics)



Grid Connection

- Good overall availability, but local bottlenecks
- Binding grid connection agreement requires project maturity
- Developer cooperation and joint infrastructure increasingly common



Financing

- Project financing often with foreign lenders
- Bankability of (baseload) PPAs currently challenging
- Construction time loans increasingly common

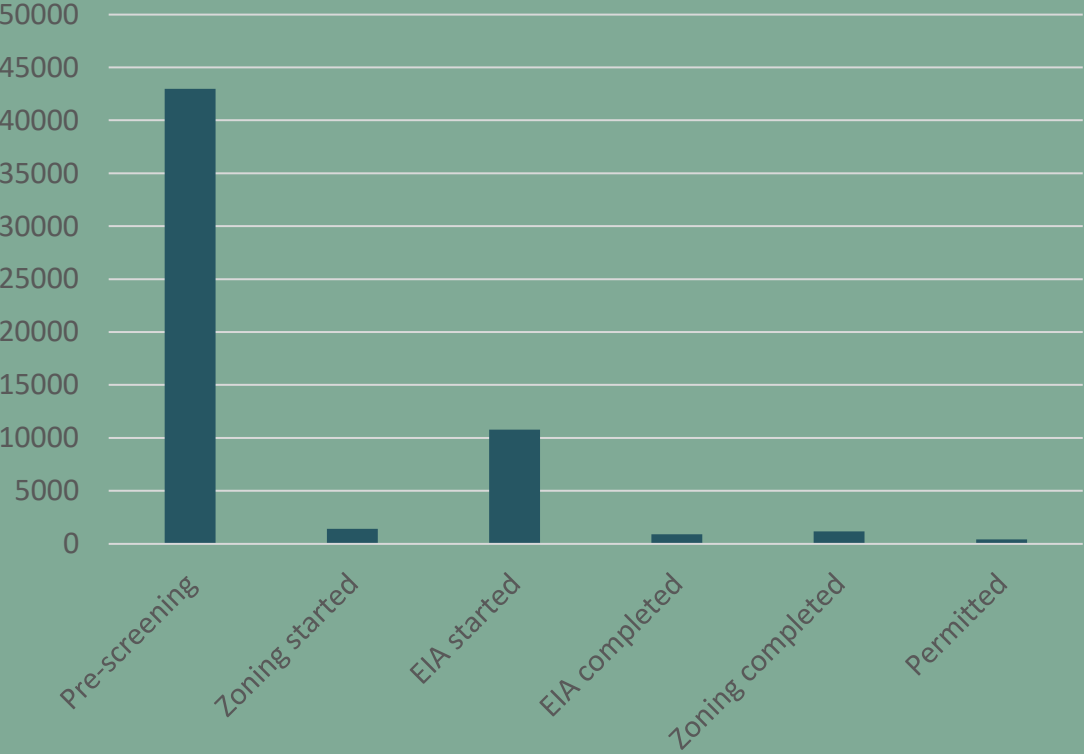


Business Models

- Exit at ready-to-built or completion
- Own consumption (direct ownership or “Mankala”-model)
- PPA
- Merchant

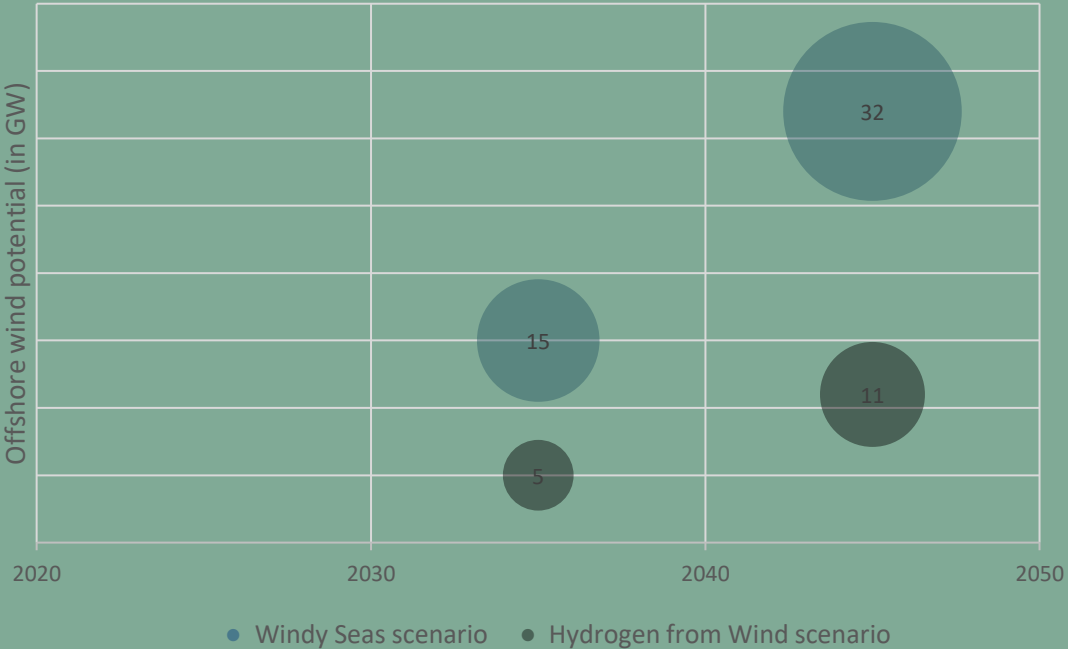
Offshore Wind

Project Pipeline (MW)



Source: Finnish Wind Power Association (May 2023)

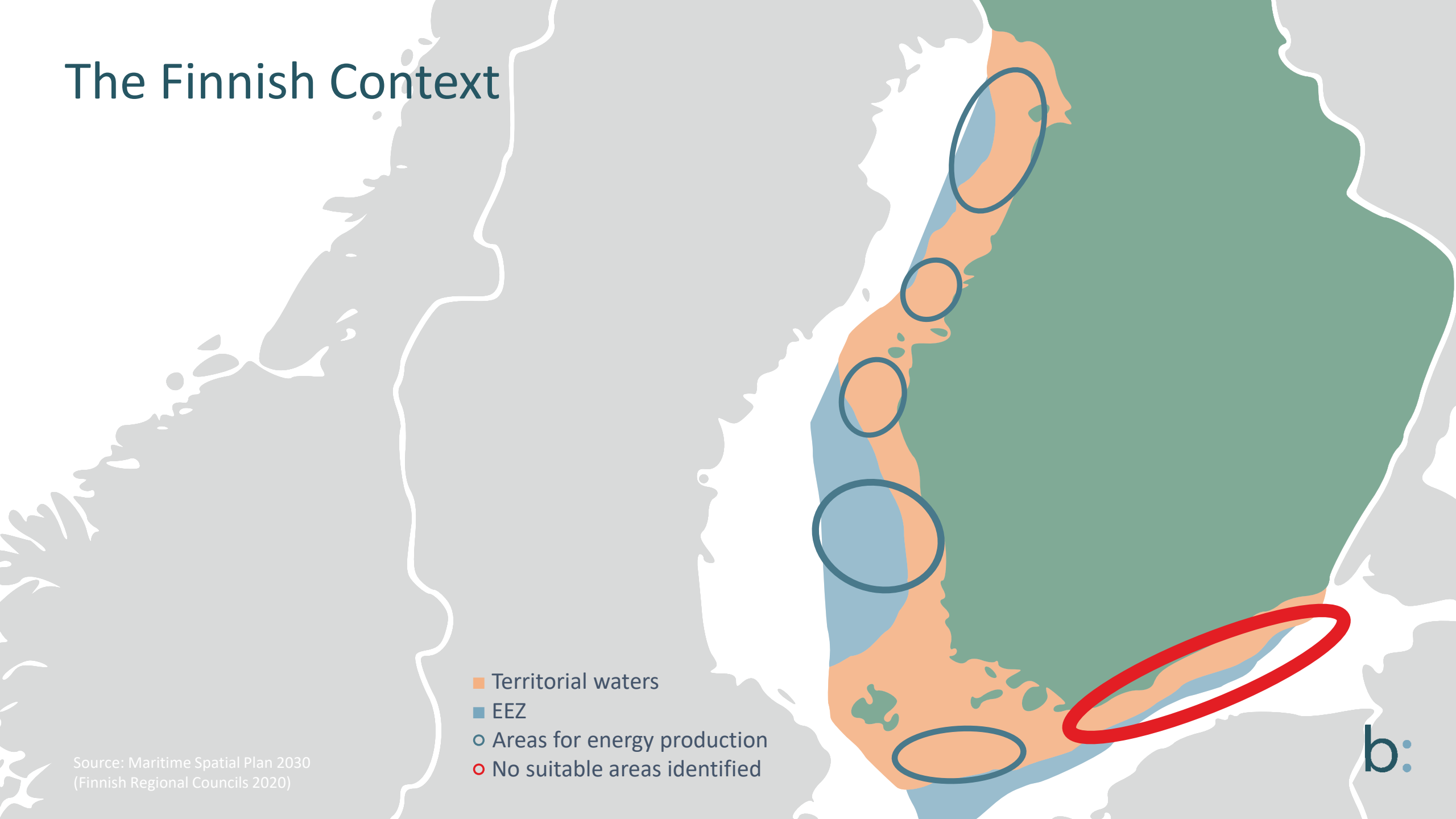
Outlook



Source: Finnish TSO Fingrid (March 2023)



The Finnish Context



- Territorial waters
- EEZ
- Areas for energy production
- No suitable areas identified

Source: Maritime Spatial Plan 2030
(Finnish Regional Councils 2020)

What else is happening?



Clean Hydrogen



Solar



Reserve Markets

berg:mann

Our industry focused lawyers are dedicated to your success.

In transactions, in day-to-day business, or in court.

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