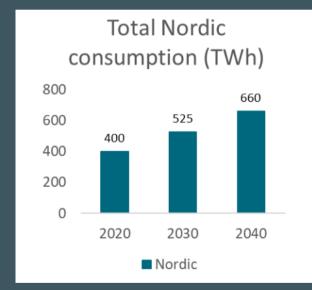
Clean electricity is the solution number 1

Electrify everything you can – directly or indirectly

Case Nordics: Carbon neutrality

will increase electricity consumption by 50-60% in the next decades



Source: Nordic Grid Perspective 2021, Climate neutral Nordics scenario



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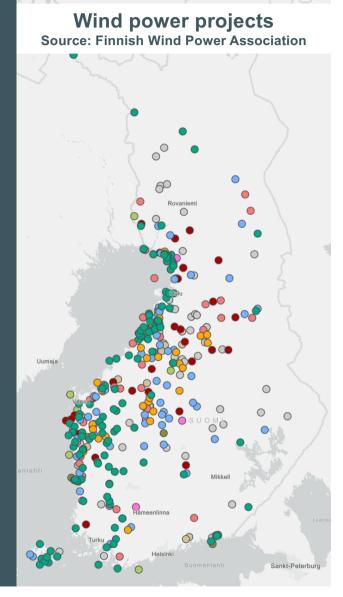
Presentation at LUT university 27.9.2022 Energy Day event in Brussels

Finland – the best place in the EU to increase production of green electricity?

- Finland:
 - Most sparsely populated EU-country
 - 5th largest EU-country by geographical size
 - · Long coastline for offshore wind
 - Competitive wind conditions
- Fingrid has received more than 180 GW of grid connection inquiries!
 - Mostly onshore wind, also solar and offshore wind
 - No subsidies market is working!



At least 300 TWh of new, clean and competitive electricity



We're not running out of renewables potential, we're running out of time

What is needed to speed up the transition?

- 1. Significant reinforcement of electricity grids
 - Nordic TSOs to invest 10.000 km of power lines and over 100 substations during the next decade. Total investments of 25 billion euros.
- 2. Speed up permit processes of green investments and power grid
- 3. New power generation is weather dependent and volatile Energy storages are needed, also for energy security and to reduce import dependency
- Energy efficiency first but not with expense of clean power intensive industry
- 5. Well functioning European energy market
 - Transition is quicker and cheaper if we do it together

