KATI RUOHOMÄKI FUTURE ENERGY SOLUTIONS LAPPEENRANTA, SEPTEMBER 2024

How to accelerate green growth: with a stick or a carrot





Finland is well-positioned to lead in the energy transition

- Strong national climate policy targets:
 - 2035 carbon-neutrality
 - capturing point source CO2 emissions (fossil&biogenic) by mid-2030s
 - Doubling clean electricity
- Energy sector fit for future:
 - Strong transmission grids
 - Excellent wind power conditions on- and offshore
 - >94% of power production fossil-free
- Heritage in efficient process industries and ICT, vast mineral resources





Finland benefits from public-private collaboration on climate

- Finland is committed to achieving carbon neutrality by 2035
- Finnish business is strongly committed to ambitious climate action
 - we are part of the solution
 - The investment challenge is massive: both in existing technology and new low-carbon solutions
 - Businesses call for a stable and predictable operating environment
 - Important to utilize the most cost-effective and market-based means to reduce emissions.
- Finland is one of the world's leading cleantech innovation countries we see the opportunity in reducing emissions globally
- Climate roadmaps are our tool to achieve the ambitious goal
 - 14 business sector specific roadmaps are integrated and interlinked, first released in 2021, updated in 2024.
 - See <u>www.climate2035.fi</u> for more details



Green transition opens opportunities

270 mrd

Investment plans for the green transition in the industry in Finland by 2030.

EK Data Dashboard of Green Investments in Finland

85 - 100 mrd

Export revenues from the green transition by 2035

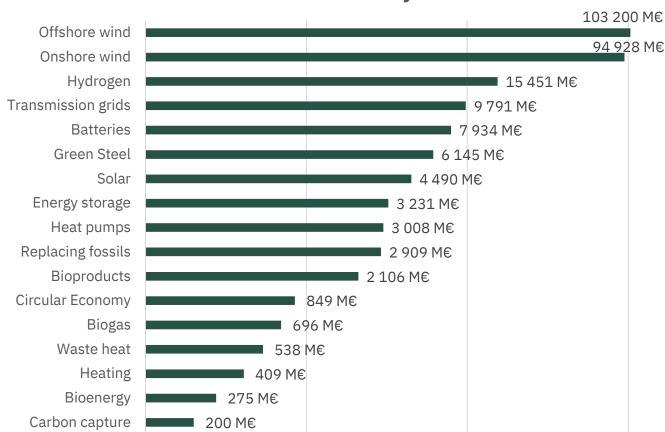
CLC, 2023, Finland's Moonshots for Green Growth Maximizing Finland's Growth and Handprint in the Green Transition

+ Services, technologies, commerce & infra



270b€ investment plans for the green transition

Investment amount by theme







Clean energy as a catalyst for green transition in Europe

- Energy transition is a key economic megatrend in the coming decades, and electrification a
 key driver in the transition directly and indirectly via hydrogen. Clean electricity an
 increasingly important driver of competitiveness, together with transmission infra.
 - Average EU energy prices will not be competitive with USA for decades (BE energy study 2024).
 - Nordic electricity market has shown its effectiviness, and can offer lower than EU average prices: hydro and nuclear form a base to utilize the region's excellent renewables potential.
 - Clean electricity can be used in hydrogen, e-fuels etc. to help others to phase out fossil fuels.
 - Market-driven approach needs defenders in the EU!

Messages to the EU Clean Industrial Deal:

- EU should give nuclear power the same status as renewable energy in all regulations and financing.
- Carbon removals (capture+storage/use) need new EU legislation and incentives to grow in volume
- The present energy efficiency target determined as an absolute consumption creates a cap for energy use, also for clean energy. EU should change the target to reduce only fossil energy, and let the consumption grow, if needed for instance for hydrogen production.

