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ECON

INFRASTRUCTURE
CONSEQUENCES of
ETS and RES
POLICIES



Infrastructure needs depend on energy policy scenario

- Who will decide investments: Market or politicians?
- Where will investments be made?
- What investments will be made?
- When will investments be made?

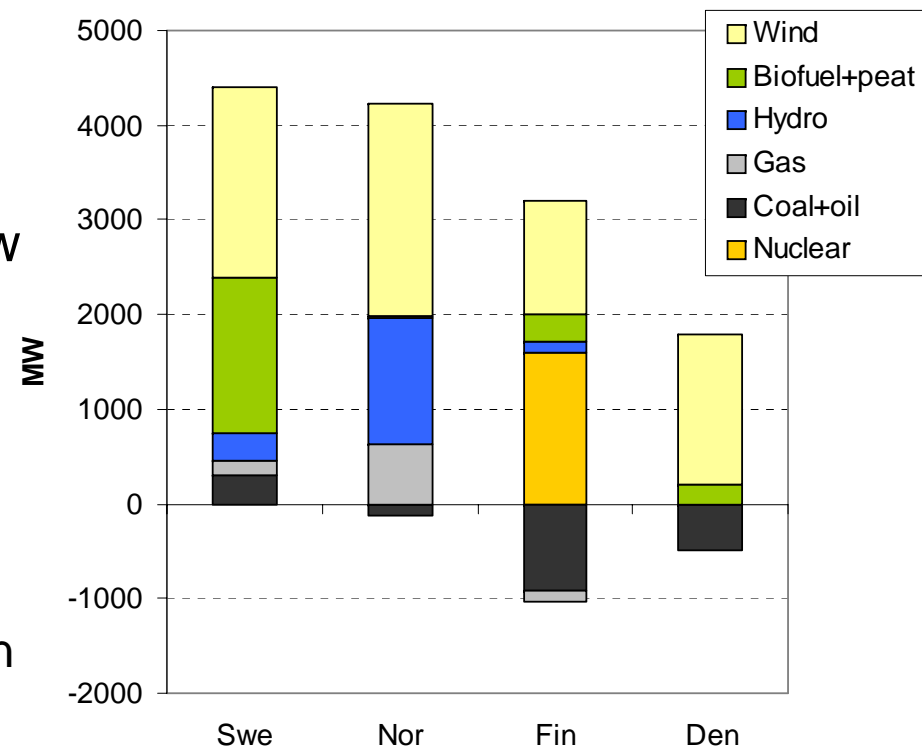
Climate policy effects

- ETS: Introduce cost on emitting technologies
 - ✓ Short-term effect: Allocation method? Fuel switching may impact on trade flows. Depends on existing capacity.
 - ✓ Long-term effect: Investment incentives and free allowances? Different rules in different countries?
 - ✓ Increased investments in gas power: Need for gas pipelines? Or more transmission capacity?
- RES policies: Differences in indigenous energy sources important
 - ✓ Wind power: Location and system effects, plus trade
 - Location: Vis-à-vis demand, plus resources differ between countries
 - ✓ Biofueled CHP: New DH infrastructure

Model results

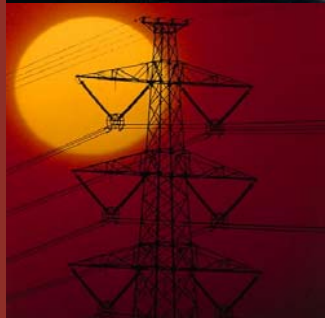
- Natural gas: From 20 to 180 TWh in 2020
 - ✓ Gas prices, CO2 prices and RES policies
- Renewables: Lion share of new investments to 2020
 - ✓ Shifts in supply-demand balance in the market areas
 - ✓ Need for domestic infrastructure investments
 - ✓ Increased Nordic coordination challenges?
- Funding of bio CHP in Norway
 - ✓ New DH networks

Change in installed capacity 2005-2020



Model: ECON Classic





Thank you!

www.NordicEnergyPerspectives.org

