

How do we achieve the goals in practice

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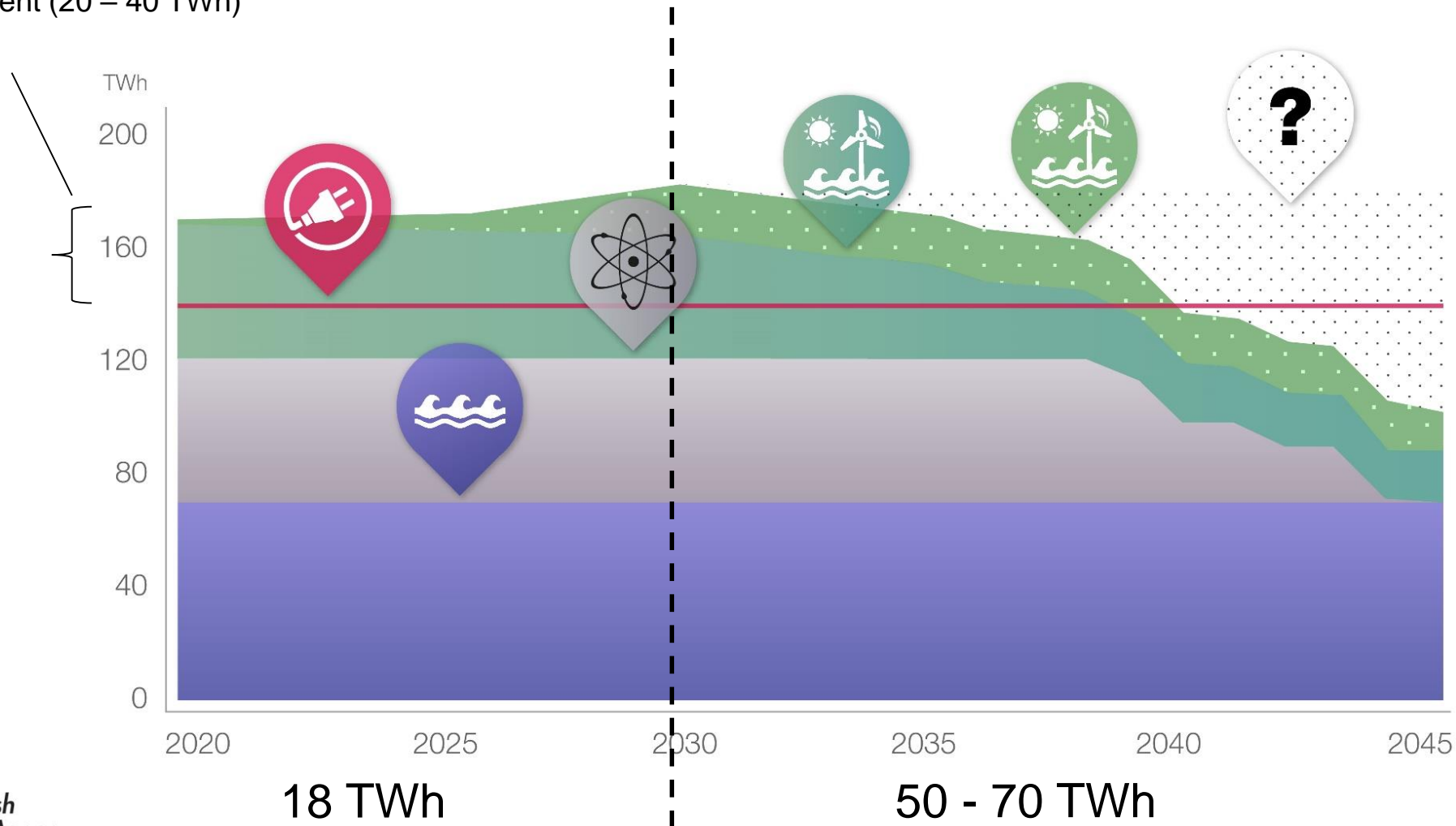
Swedish Energy Agency

New ambition level – 100 % renewables in electricity

- Climate policy a driver
- Agreement between 5 political parties
- Reach 100 % renewables in electricity by year 2040
- A main question for us is how we can reach it and what the consequences are.

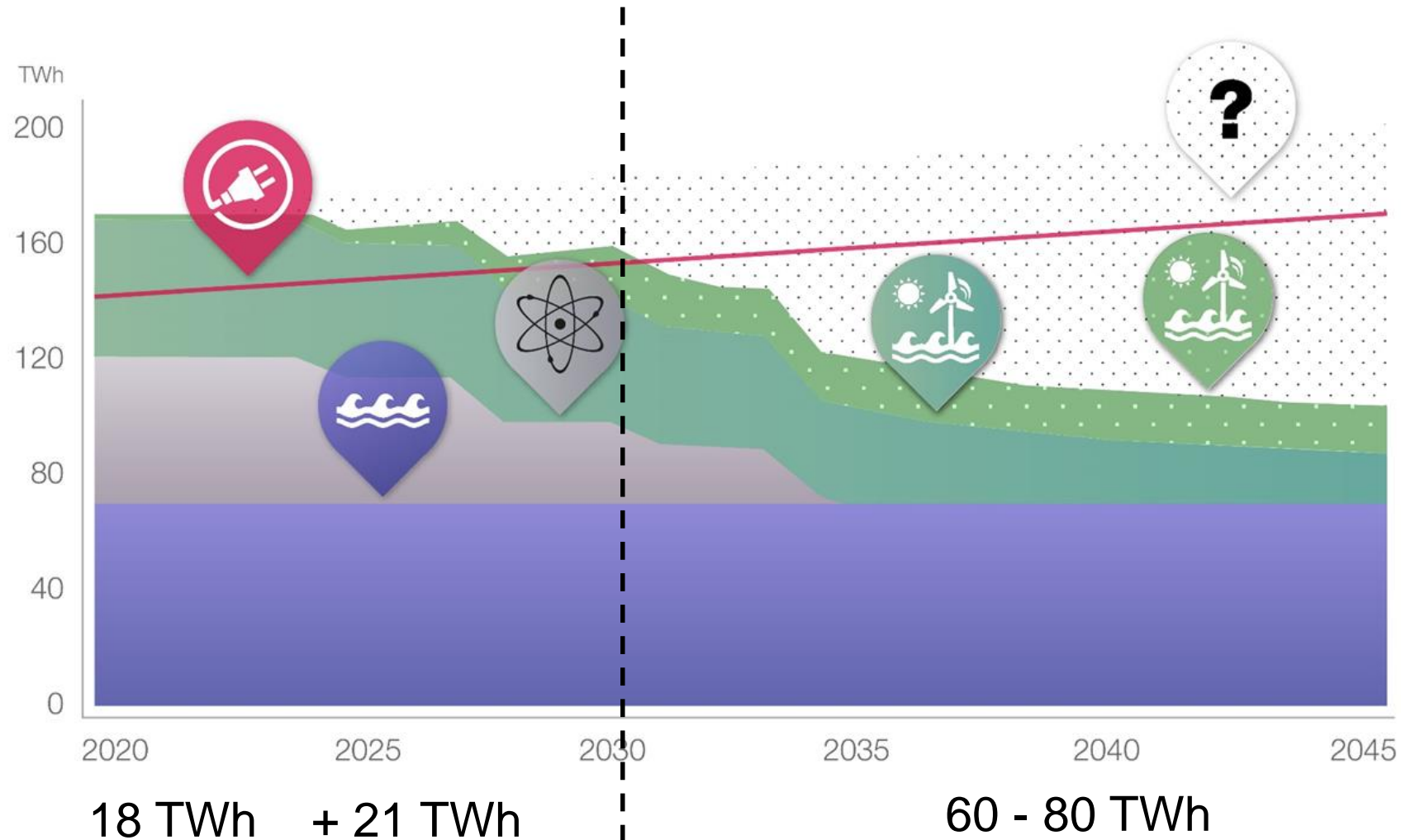
The road to 100 % renewables

Net export estimated by the Energy agreement (20 – 40 TWh)



The road to 100 % renewables –

nuclear phase out 2025 – 2035, increased use of electricity: 30 TWh

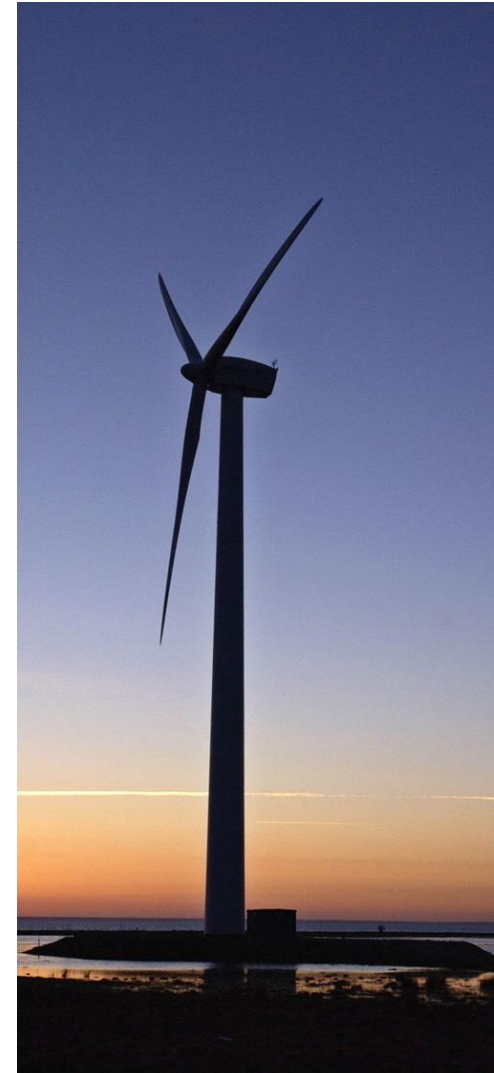


Observations

- **It's a big transition of the electricity system!** – There is probably a need for 80 – 120 TWh of renewables to 2045. Wind power has the big potential and will stand for at least 60 TWh, presumably. This will affect big parts of society. The need is more shifted to after 2030.
- **Costs and resource efficiency is essential!** – The need for support can be from approximately 0 to 1 000 billion SEK depending on what “roads” we choose.
- **Big challenges for planning and acceptance** – At least 150 permits (with 30 turbines each) in good wind sites and large turbines but 500 permits in poorer wind sites and smaller turbines.
- **Year 2040 is soon** – Long leads, permit processes and life times for grid and power plants means that a big part of the electricity system of 2040 are already being planned for. Adjustment for policies and regulation has to be started soon even if the challenges comes later.
- **Energy agency is going to make a study this year to go further with this**

Main issues

- Volume
- Energy Policy needs to change
- Energy Agency report about offshore
- Less competition more synergy
- Need for other energy sources



Winterwind

- Being able to cope with harsh climate is crucial
- Low dense population in the north
- High wind speeds – and cold
- Wind is not always a resource
- Winterwind is part of making wind a resource...

ENERGIVÄRLDEN

Välkommen till Energimyndighetens nya konferens, Energivärlden – tema vind.

Ta del av den senaste vindkraftsforskningen inom både teknik och miljö, lär av erfarenheter från andra länder och delta i diskussioner.

Boka in 29–30 maj i Stockholm.

19 februari öppnar vi anmälan!

I samarbete med [SWPTC](#), [StandUpforWind](#), [Vindforsk](#), [Vindlov](#), [Vindval](#) och [Nätverket för vindbruk](#).