

Offshore wind development in Sweden

Offshore wind and hydrogen conference 17 April 2024

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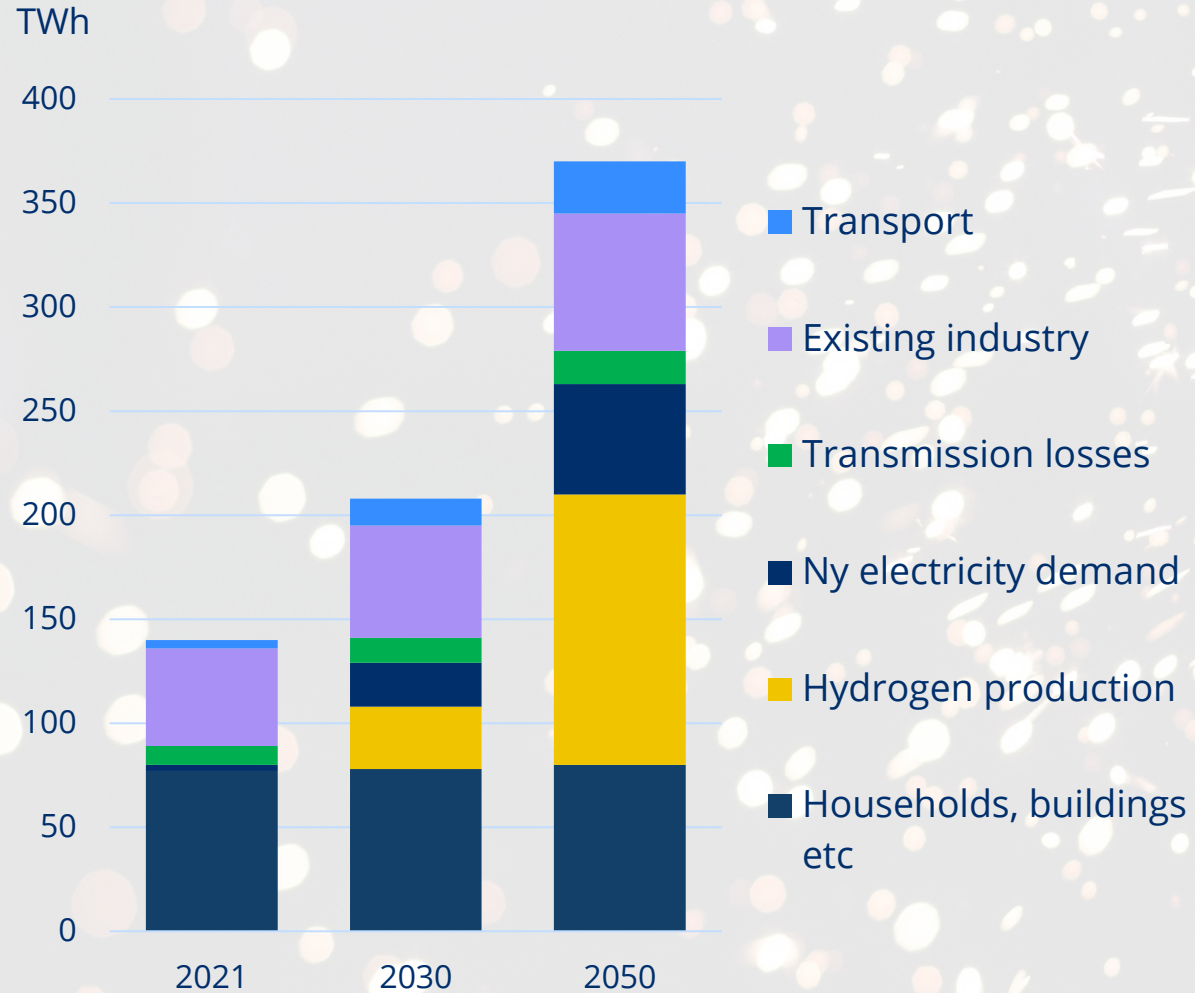
- The Swedish Wind Energy Association (SWEA) is the trade association for companies working with wind power - onshore and offshore - in Sweden
- Founded in 2009
- More than 150 member companies in the whole value chain – from wind power producers to energy intense industry

Offshore Wind in Sweden

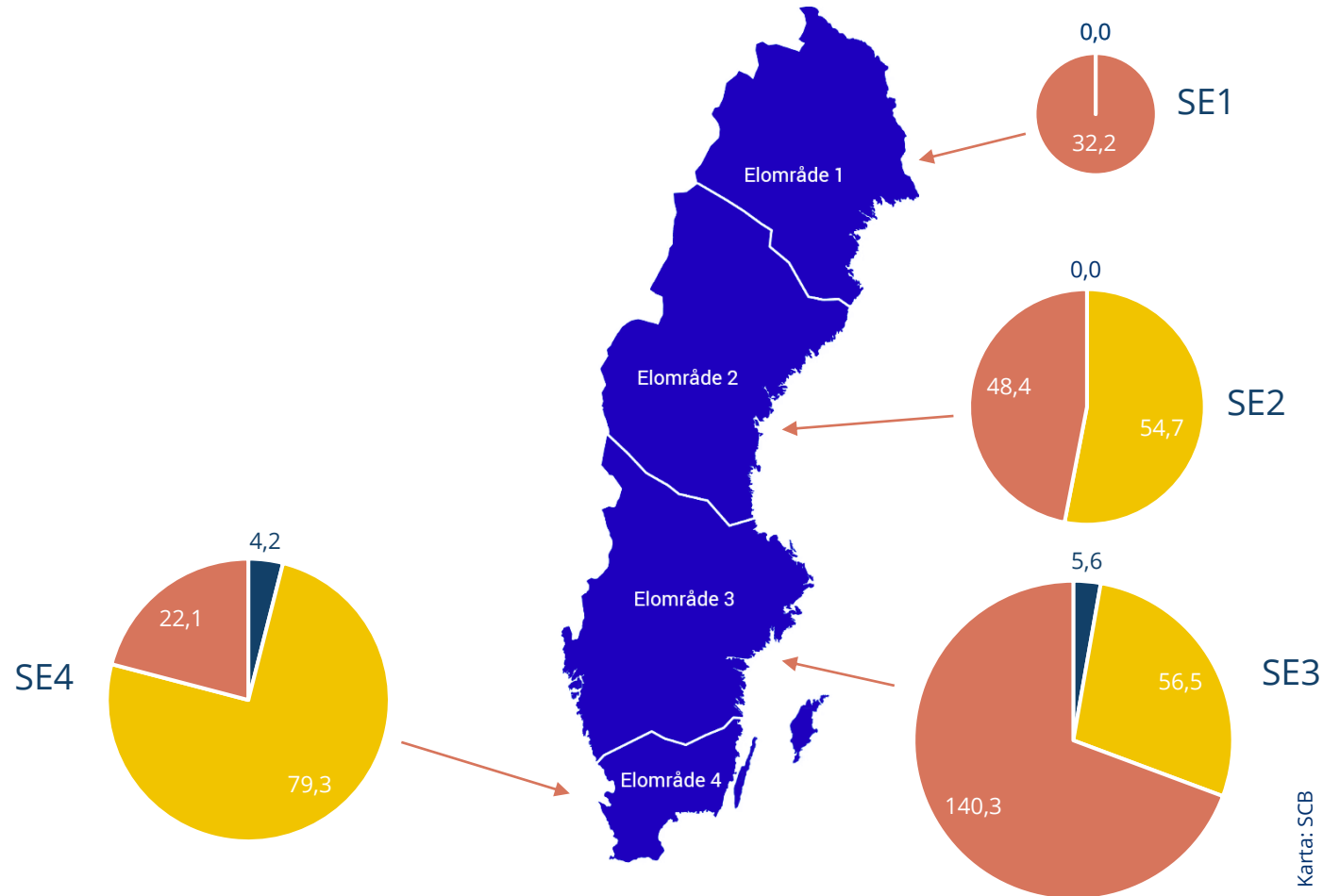
- Targets:
 - Net zero emissions 2045
 - Proposed energy target: plan for 300 TWh electricity use 2045
- Offshore parks online
 - Lillgrund (Vattenfall)
 - Kårehamn (RWE)
- Open door market based developer driven system (under revision)



Strong increase in electricity demand



Offshore windpower under development



443 TWh Offshore wind power under development * (113 GW)

- Granted permits (in total 9,8 TWh)
- In permitting process (in total 191 TWh)
- In consultation (in total 242 TWh)

Statistik om vindkraftens utbyggnad - Svensk Vindenergi

*not including 120 TWh 27 GW in early planning

Karta: SCB

Projects applying for permits in SEZ



32 GW (25 GW without overlaps)

Source: Havsbaserad vindkraft -
Regeringen.se

Offshore regulations under evaluation

- Revision of the Maritime spatial plans: indicative target to enable 120 TWh offshore energy (dec 2024)
- Inquiry Commission of Off Shore Wind Power Utredningen om havsbaserad vindkraft (30 Nov 2024) will investigate exclusivity and a more streamlined regulation
- Grid connection of OffShore Wind TSO Svenska Kraftnät is planning to be able to connect 14,5 GW until 2041 (half of the indicative targets in the maritime spatial plans)



Foto: iStock Photo

Is Sweden on track?

The Swedish government has proposed 300 TWh to 2045, but where is the sense of urgency?

- 280 TWh electricity demand in Sweden already by 2035 (agency report): + 110 TWh new electricity generation
- Energy intense industry: + 70 TWh already 2030

There is enough wind power in permitting process to meet the industry needs but:

- Will enough projects go through the permitting process?
- Will investments be realised – investment climate under pressure and international competition is a reality

Conclusion

1. Sweden's competitiveness depends on our ability to meet the increased electricity demand of the industrial and transport sectors. Electricity production must be emission-free and at the lowest possible cost.
2. Sweden needs to secure and accelerate expansion of electricity production by 2035. Wind power is the fastest and cheapest form of power to be deployed on a large scale.
3. The global expansion of wind will benefit a strong Swedish supply chain with world class companies
4. Key now:
 - The government needs to make a real connection between industrial and energy policy.
 - Shorten permitting processes for both new electricity generation and grid.
 - Market reforms focusing on securing a good long-term investment climate.

Swedish Offshore Wind Forum 2024

- The offshore wind energy industry, together with key stakeholders and politicians, will gather to discuss opportunities for offshore wind power - and the opportunities that come with the expansion. We will discuss offshore wind power's role in regional development, securing green baseload and opportunities for the supply chain
- The program is under way, tickets, exhibition and sponsor opportunities are out now



Thank you!

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