

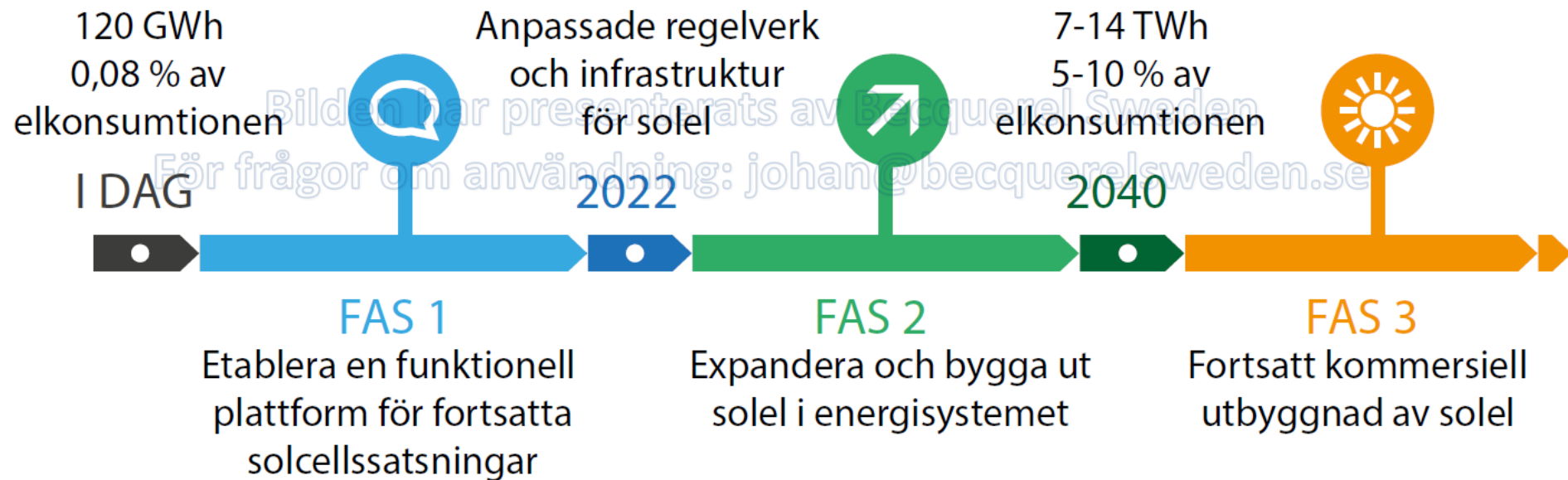
Svenska solcellsmarknadens framtid

Energimyndighetens solesstrategi

Källa:

Energimyndigheten
Förslag till strategiför ökad
användning av solesl

Energimyndigheten har utformat ett förslag på strategi och målbild för solesl utifrån Energikommissions målsättning om 100 % förnybar elproduktion till 2040.

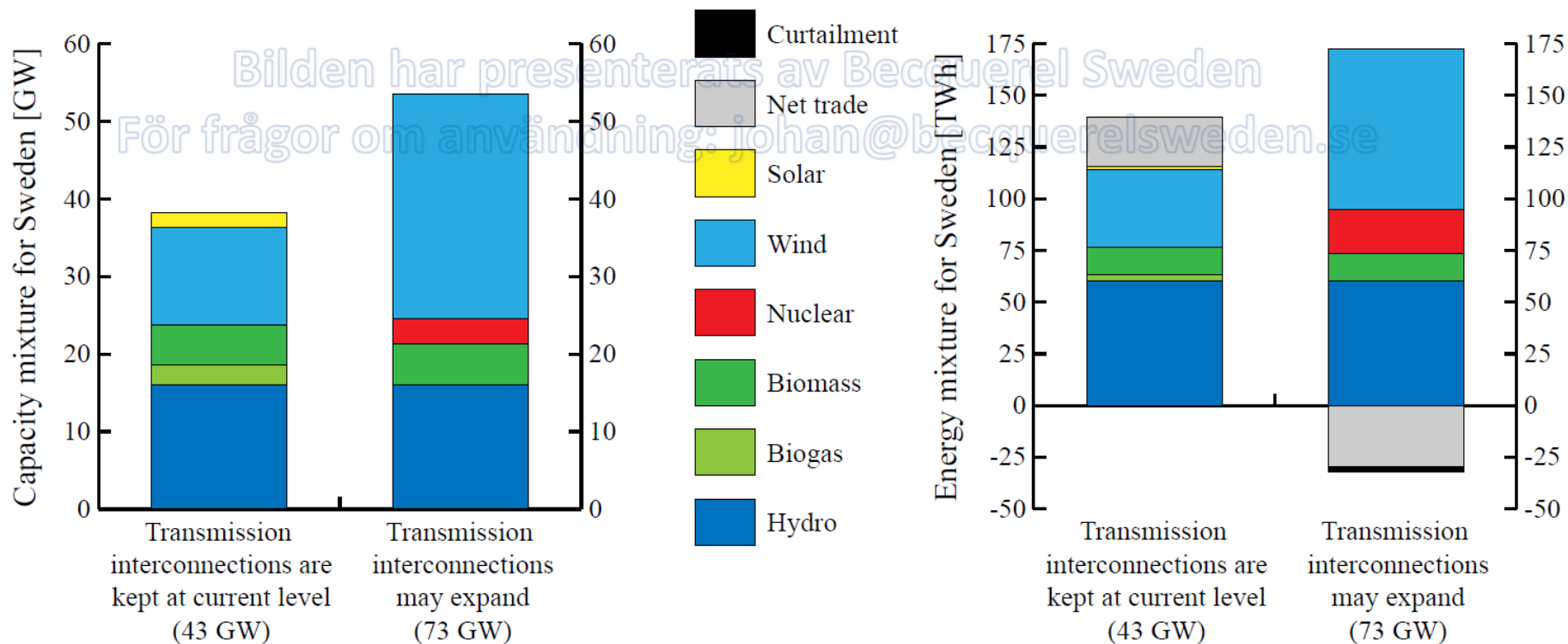


Svenska solcellsmarknadens framtid

The cost of a future low-carbon electricity system without nuclear power — the case of Sweden

Xiaoming Kan, Fredrik Hedenus, Lina Reichenberg

A future interconnected European electricity system is modeled for the year 2045 with hourly time resolution and a techno-economic cost optimization for capacity investment and dispatch of generation, transmission, storage and demand-response, given a 10 g/kWh cap on CO₂ emission.

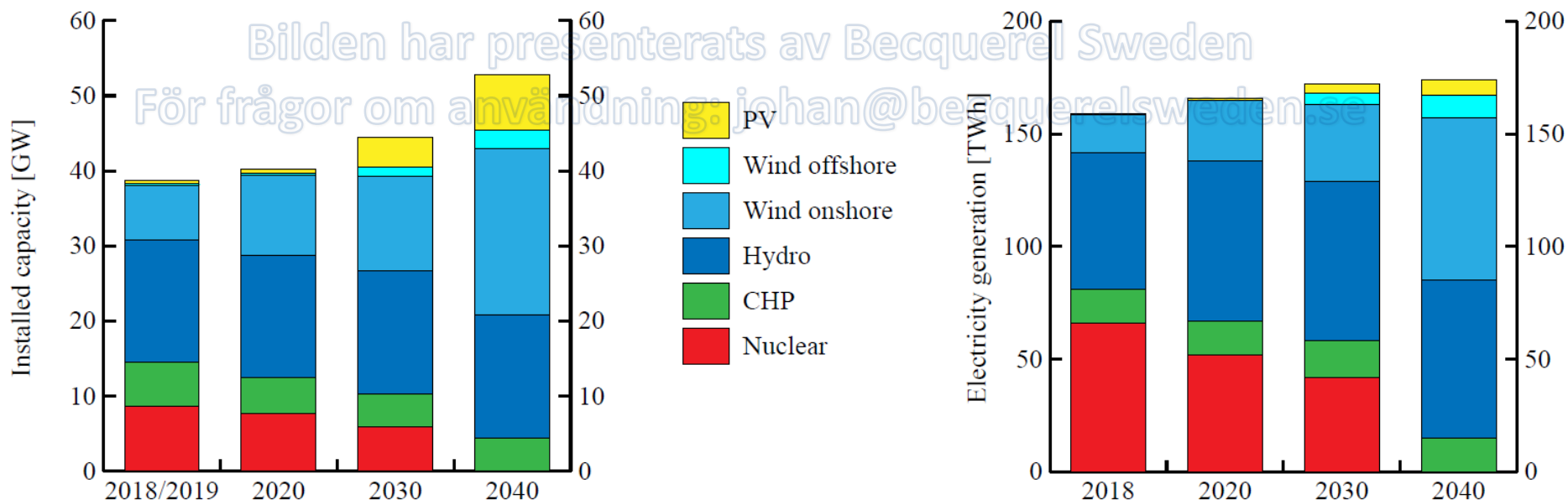


Svenska solcellsmarknadens framtid

Långsiktig marknadsanalys 2018 — Långsiktsscenarier för elsystemets utveckling fram till år 2040

Svenska Kraftnät

All scenarios in the LMA are based on the current power system and electricity market, as well as decisions on future measures. A starting point is that unprofitable production should be closed down and new built if the market price is high enough. In the scenario for the year 2040, it has been assumed that Swedish nuclear power is decommissioned.



Svenska solcellsmarknadens framtid

Summary of different simulations for the future PV market in Sweden

		Chalmers	SVK	Lappenranta
Year		2045	2040	2040
Main simulation constraint		10 gCO ₂ /kWh	No nuclear 2040	100 % RE to 2050
Main LCOE parameters	CAPEX Centralized	690 \$/kW	unknown	680 → 370 €/kW
	CAPEX decentralized	-	unknown	1090 → 610 €/kW
	OPEX Centralized	30 \$/kW/yr	unknown	10.2 → 5.6 €/kW/yr
	OPEX decentralized	-	unknown	20 → 9 €/kW/yr
	Lifetime	25 yr	unknown	30 → 40 yr
	WACC Centralized	5 %	unknown	7 %
	WACC decentralized	-	unknown	4 %
PV market size in Sweden	Installed capacity	1.8 GW / 0 GW	7.4 GW	23.5 GW
	Produced electricity	1.8 TWh / 0 TWh	7 TWh	27.5 TWh
	PV penetration	1.3 % / 0 %	4 %	16.9 %
Notes with regards to PV		Self-consumption business model not included	Self-consumption business model not included?	Includes decreasing prices for PV