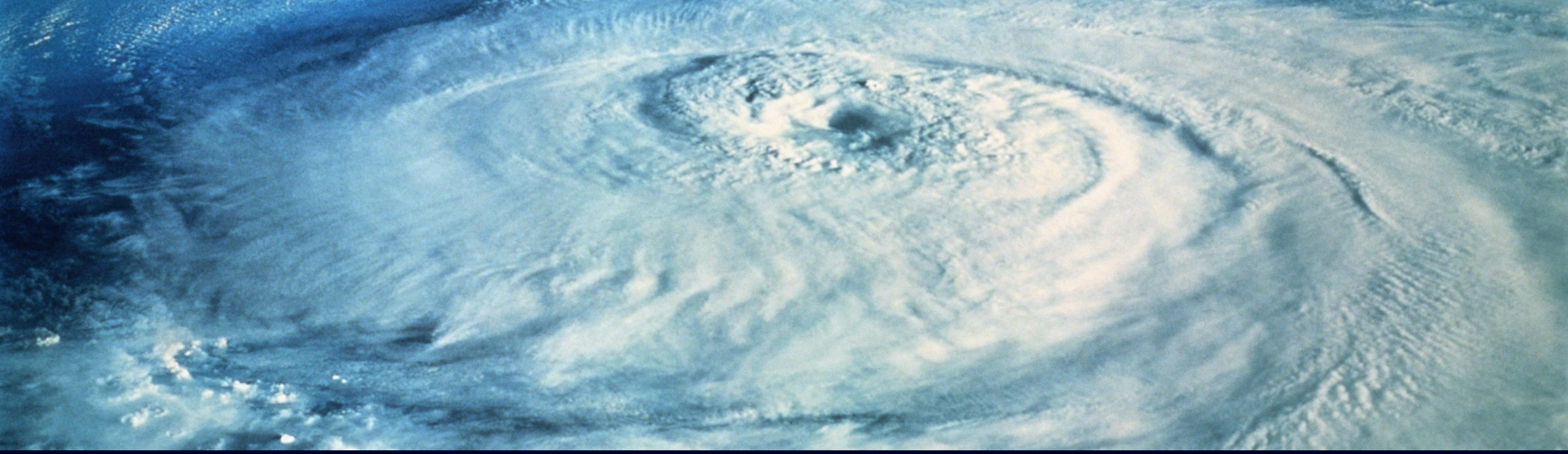

Siemens towards net-Zero 2030

Large Scale Zero Emission Projects

Nils Klippenberg
CEO
Siemens AS

SIEMENS

Siemens on track to achieve net-zero for own operations by 2030 and are working towards net-zero emissions by 2050 in our supply chain

Emission inventory

	Supply Chain	Own Operations	Use Phase
Emissions	**10.2 Mt**		
	  	  	  
Sources	▪ Production of purchased materials ▪ Upstream transport and ▪ Business travel	▪ Fuel consumption of cars ▪ Natural gas for heating and production ▪ Electricity consumption	▪ Emissions from electricity used over product lifetime
Target	**-20% by 2030** **Net-zero 2050**	**Net-zero 2030**	**-15% by 2030**

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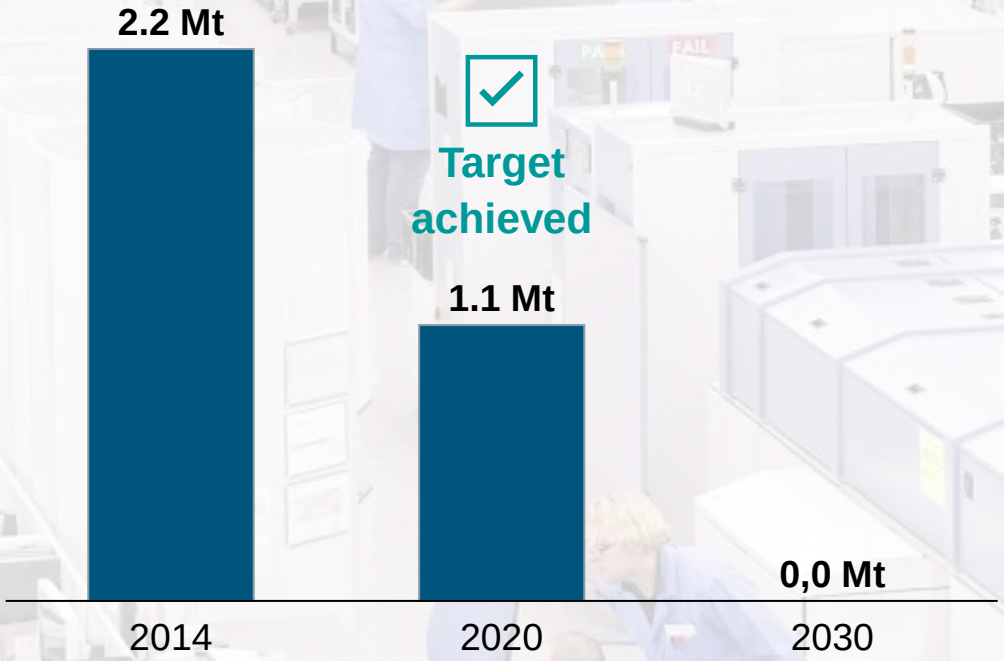
We achieved our interim target to half our CO_2 footprint by 2020 and are on track to become net zero by 2030



1 Since program launch, we managed to reduce our CO_2 emissions by >50%

2 Our investments in energy efficiency projects led to 15% reduced energy costs

3 E.g. >70% of the electricity consumption of our sites globally is covered by renewables

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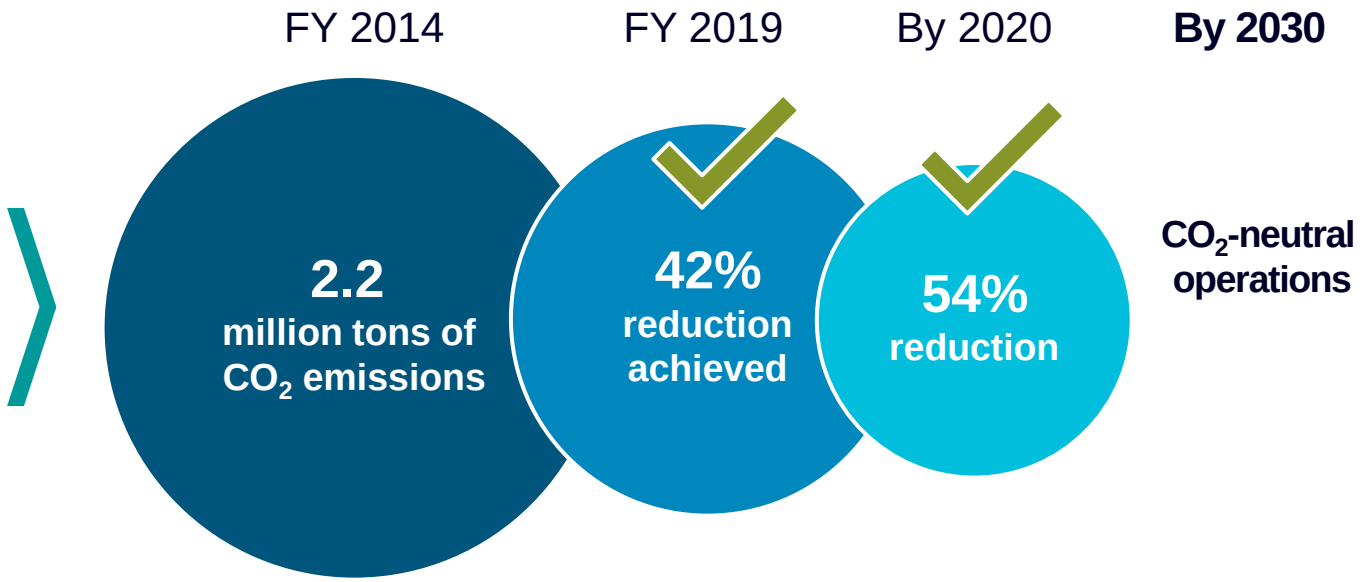
Siemens' direct contribution to decarbonization is to be CO_2-neutral by 2030

Levers for CO_2-neutral Siemens

- Drive Energy Efficiency Program
- Leverage Distributed Energy Systems
- Reduce Fleet Emissions
- Purchase Green Energy

CO_2-reduction on track



Annual savings from Energy Efficiency projects add up to ~ **€13 million**

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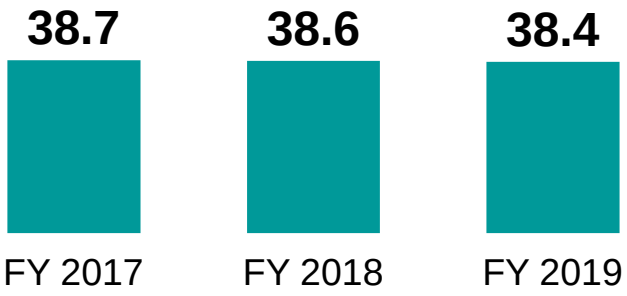
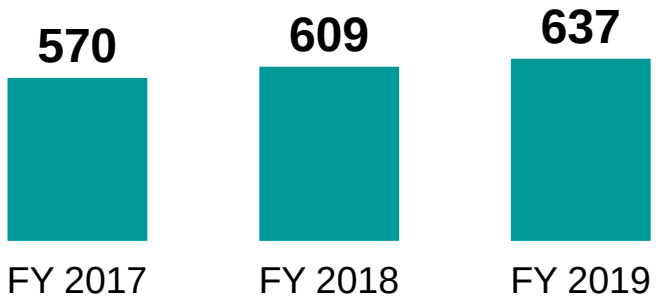
By 2019, our Environmental Portfolio saved 637 Mt CO_2 at customer sites

Environmental Portfolio revenue
(in billions of €)



Environmental Portfolio CO_2 abatement
(in millions of metric tons)[1]



Low-carbon community microgrids

Intermodal transport solutions

Building monitoring and management

Smart building solutions for commercial buildings

Efficient train fleets

Energy-efficient production processes

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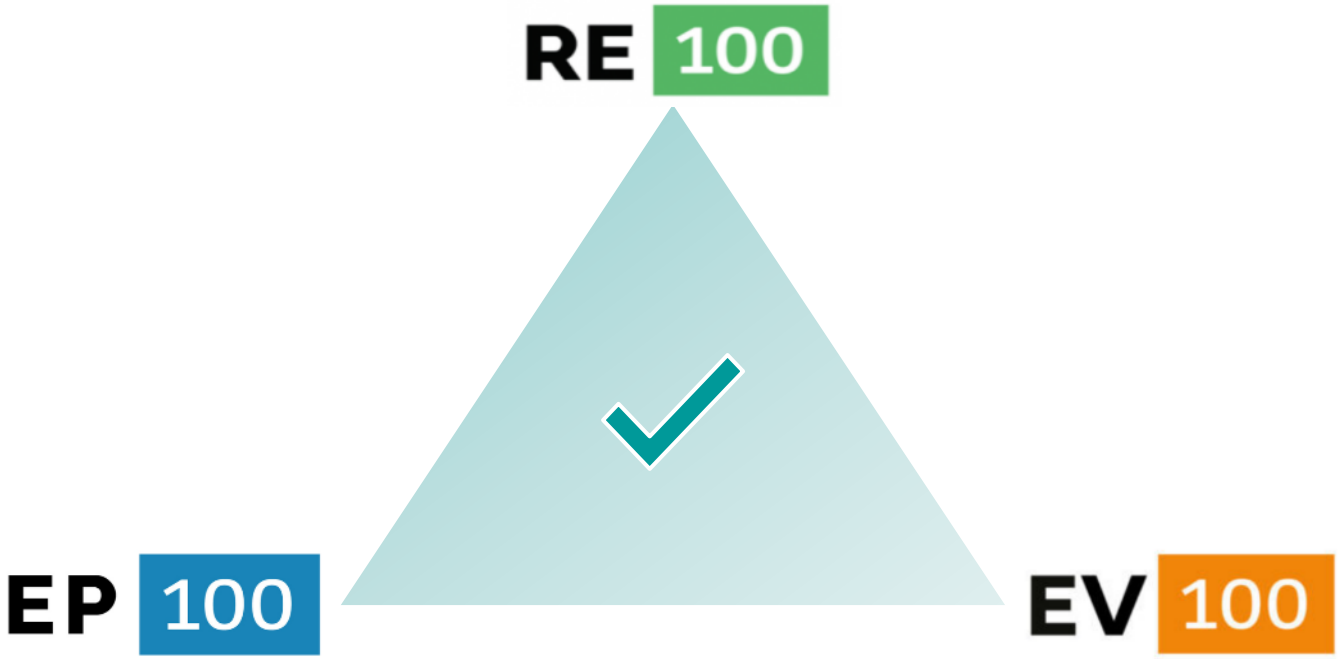
We are committed to meet the ambitious requirements of SBTI, RE100, EP100 and EV100 for decarbonization along the value chain



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Siemens commits to even more ambitious targets

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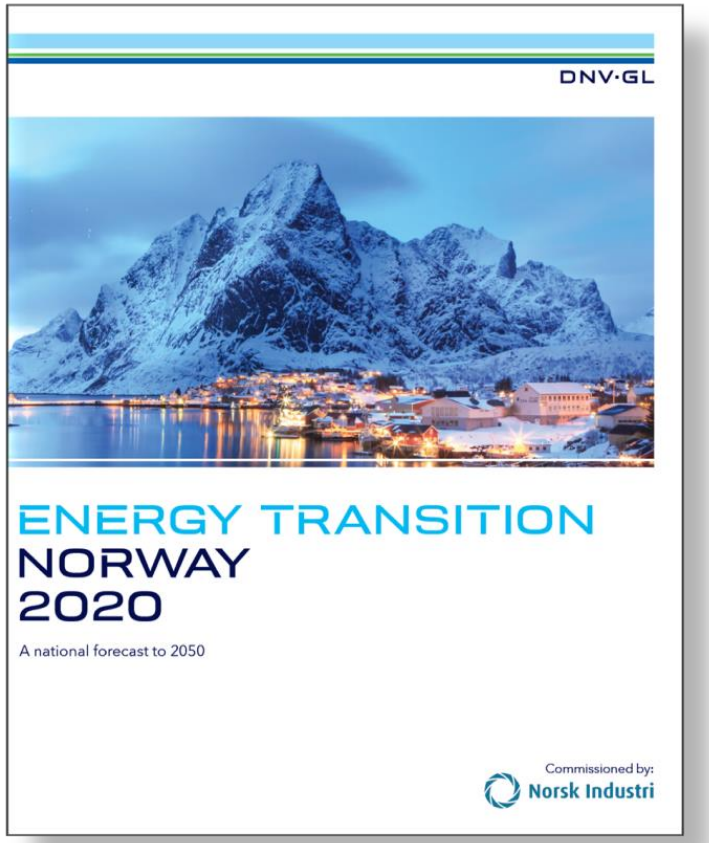
The Federation of Norwegian Industries and DNV have developed “Energy Transition Norway 2020”



The Federation of Norwegian Industries motivation:

- Global reports does not cover Norway as a unit. Norway is quite unique with high grade of renewable hydro power
- Norway needs a “fact based” outlook of the Energy Transition until 2050
- Create awareness of the Norwegian challenges
- Politicians and industries need to work hand in hand to fulfill the emission targets

DNV has developed global models for the Energy Transition Outlook towards 2050:

- Recognized internationally, describing the world into 10 regions
- Norway is now integrated as one region in the global model

- 2021 report to be released end of November

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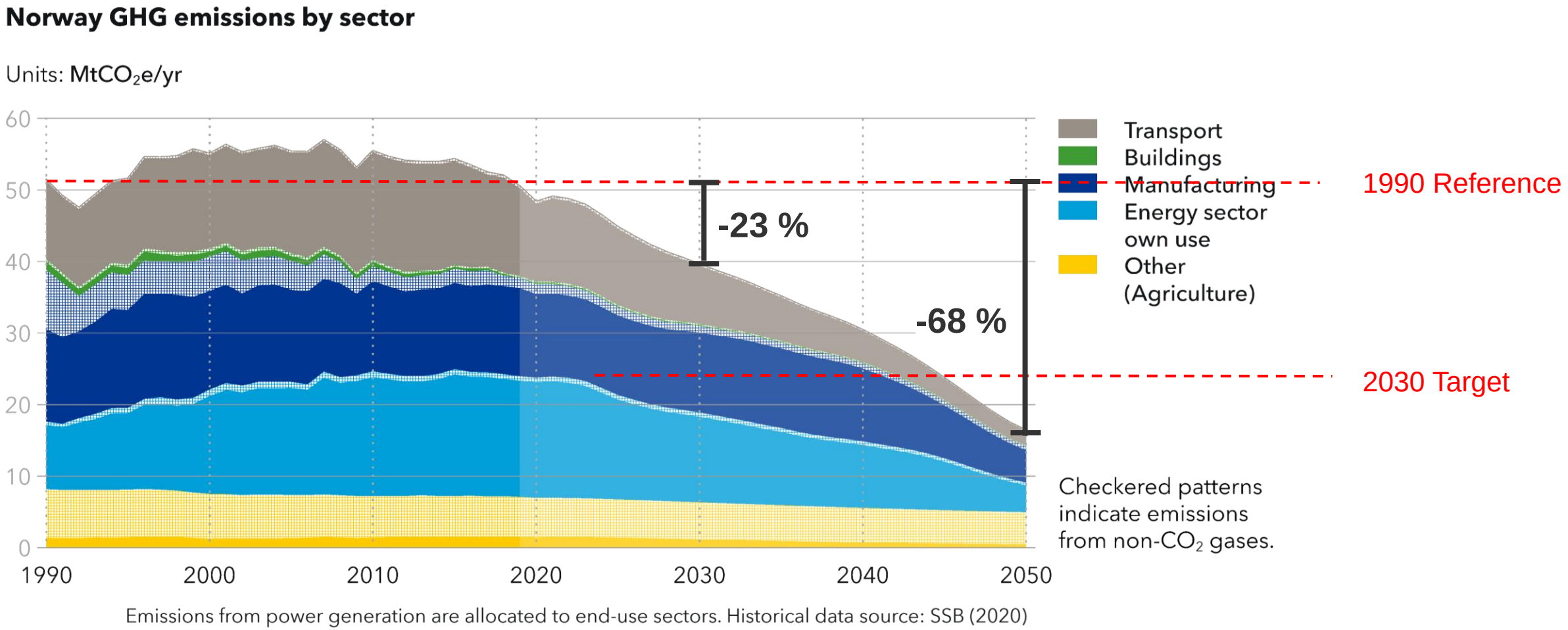
With the current policies and incentive schemes Norway will not reach the emission targets by 2030 nor 2500



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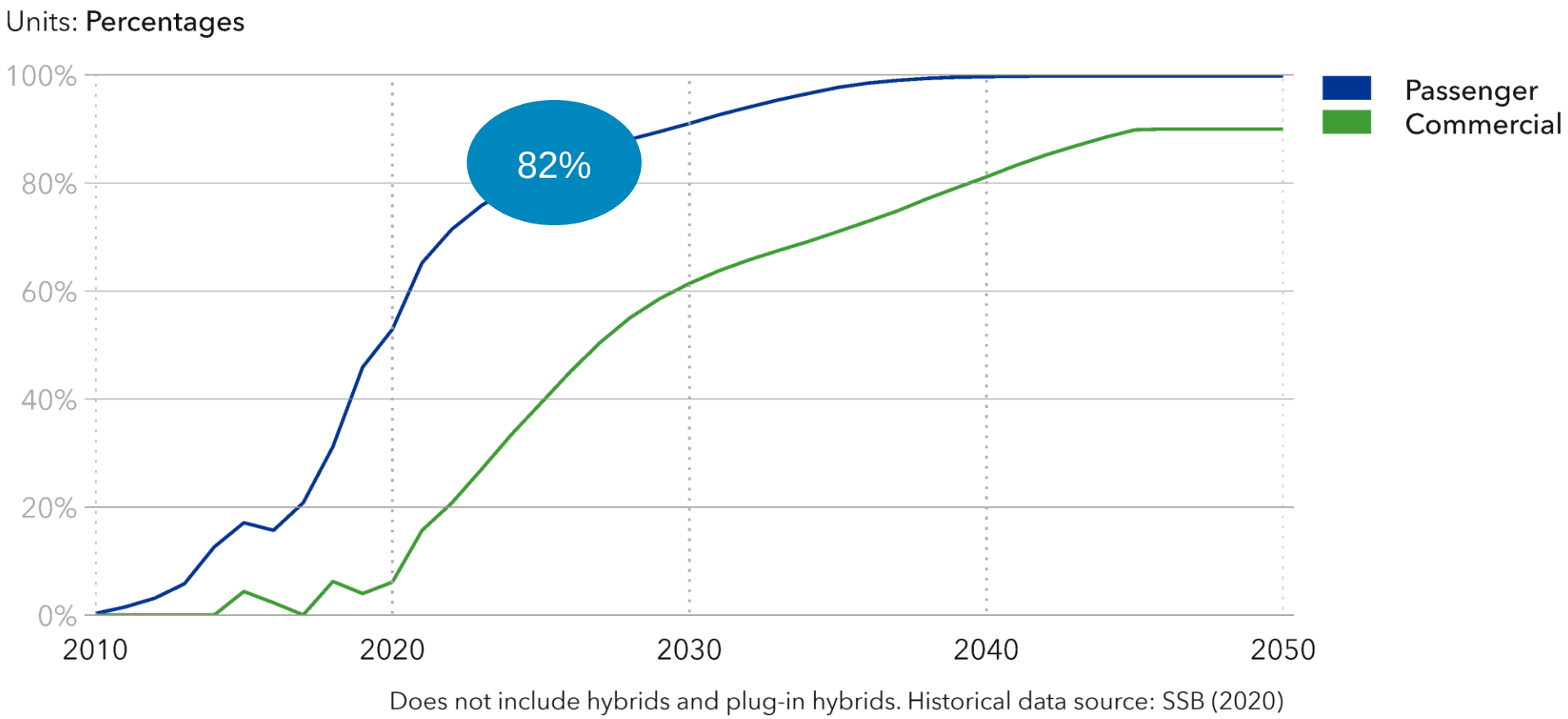
Yes, we are a front runner in uptake of electrical passenger cars!

– What does it take for heavy vehicles?

Norway market share of electric vehicles in new sales



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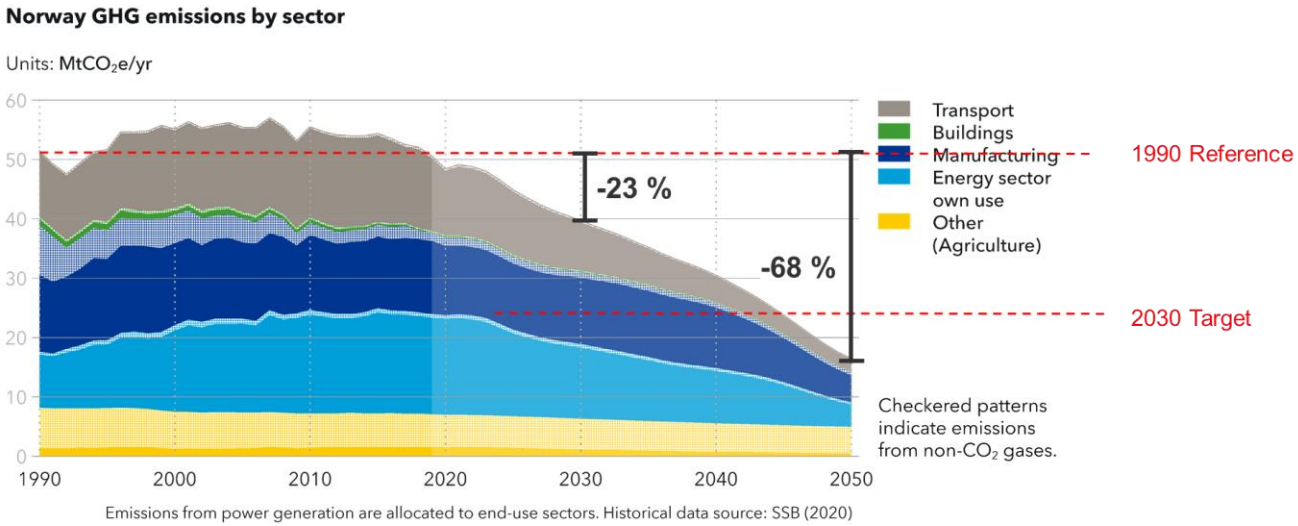
Key instruments in the different sectors



- Transport sector
  - Electric and Hydrogen onshore
  - Hydrogen, Ammonia, Electric at sea
- Industry Sector
  - Already high degree of Electrification
  - Hydrogen to substitute gas
- Oil & Gas sector
  - Electrification from shore or offshore wind
  - Carbon capture and Storage (CCS)

Increased demand for Renewable Energy

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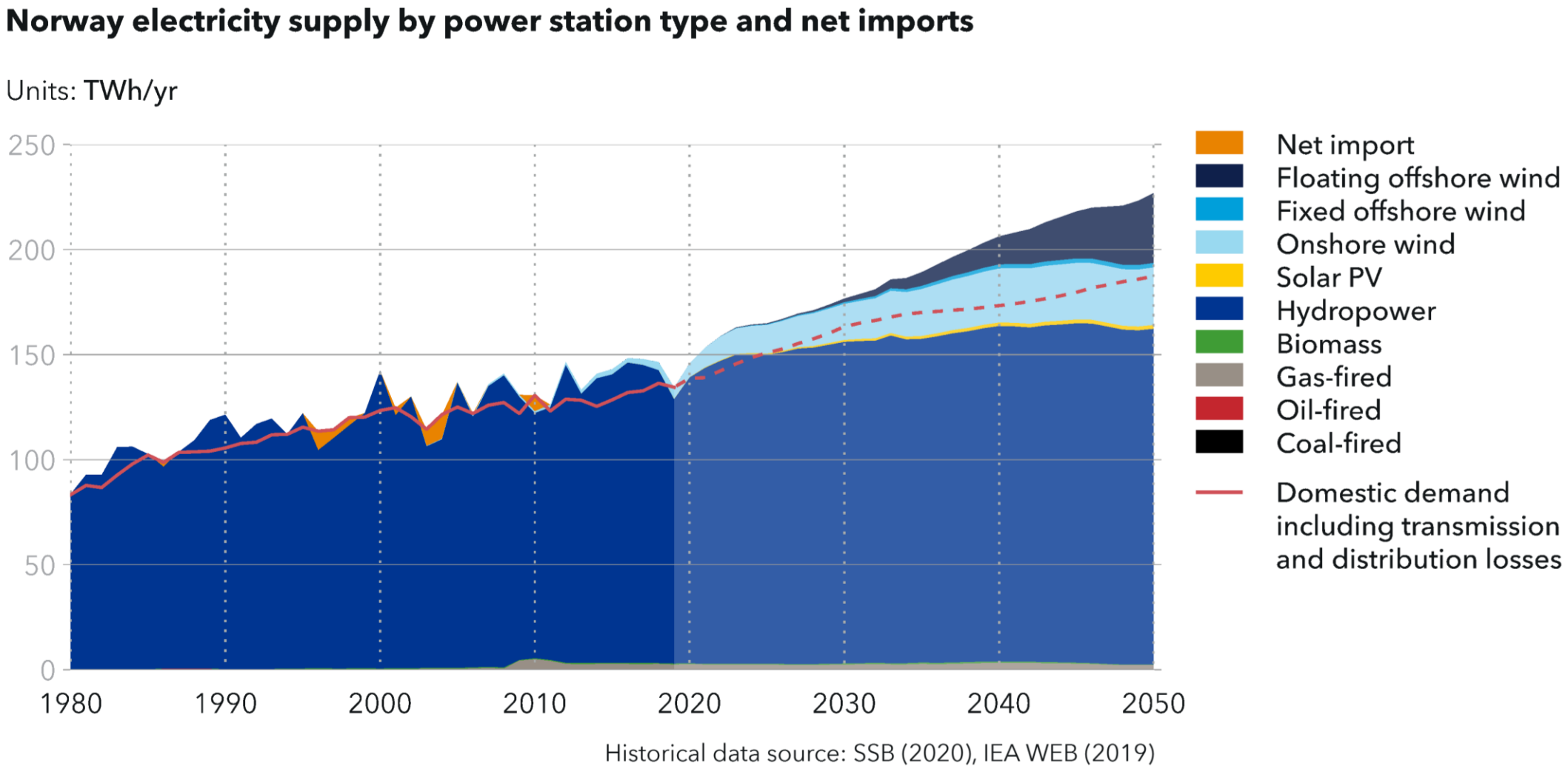
Higher electricity demand supplied by offshore wind



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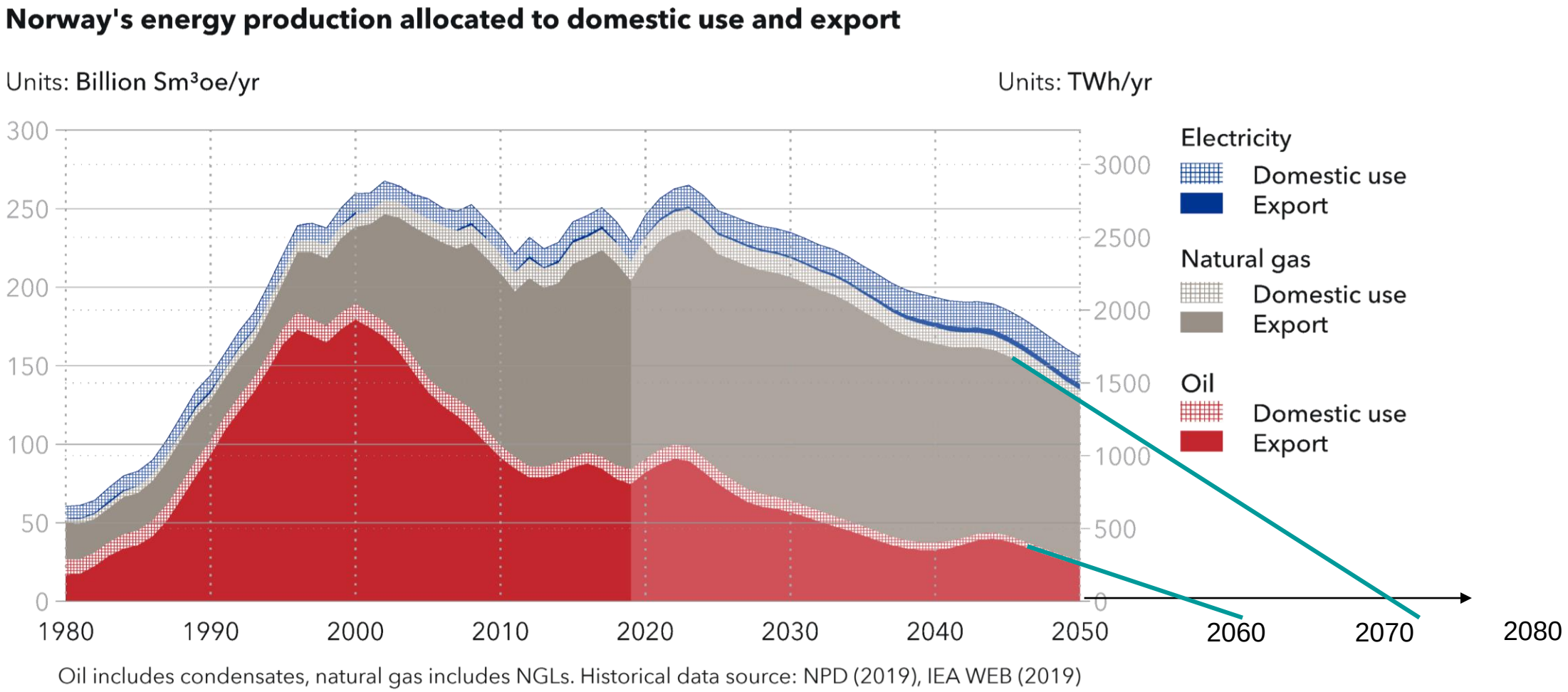
Gas and Oil “fuel” our welfare – for the time being…..



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Closing remarks

- Norway will not fulfill the committed GHG emission targets (Paris and Green Deal) with current policies
- Norwegian Energy demand will increase dramatically – more than 60%
- It’s not likely that market forces alone will create sufficient green solutions in time for 2030 nor 2050
- Risk reduction political schemes necessary to move the cost curve for different technologies downwards
- Time is of essence – infrastructure onshore and offshore to be build ahead of demand
- Europe needs energy from Norway – setting high ambitions for offshore (floating) wind will transform the O&G service industry, create jobs, make supply for onshore demand, and ensure energy export income also in the future

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