



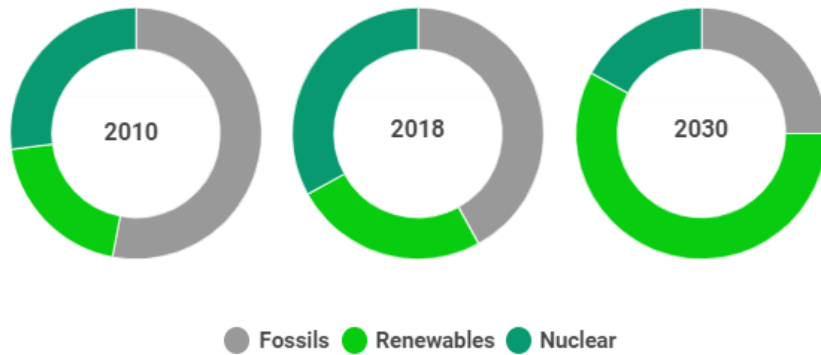
“How electricity and industry can deliver on the decarbonisation objectives”

**Kristian Ruby**

EEF Dinner – 11 February 2020

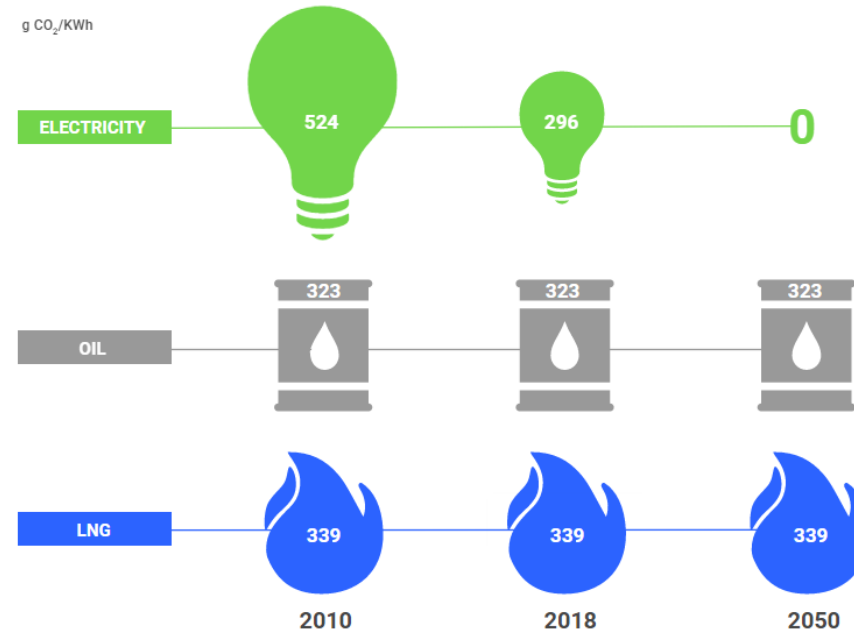


# Electricity is heading towards carbon neutrality...



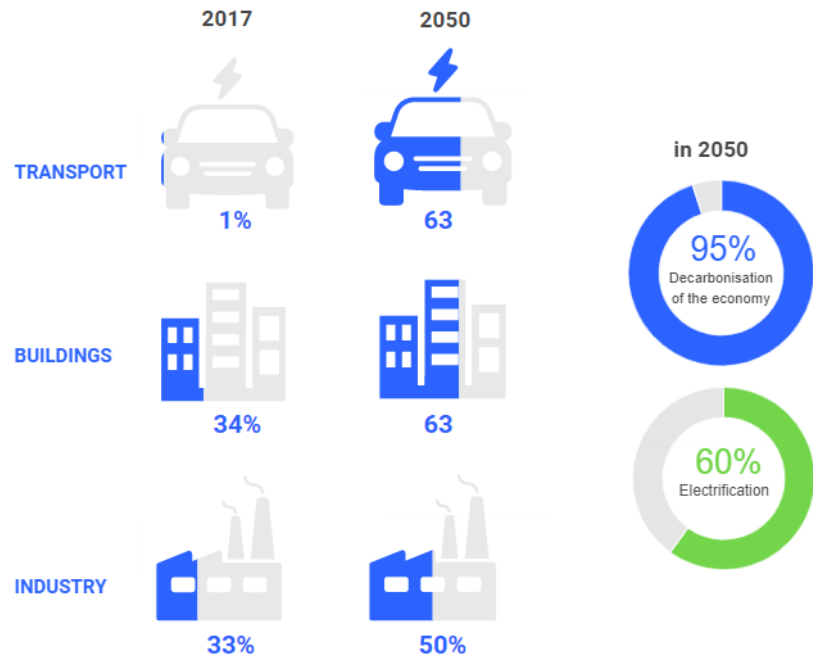
Source: Eurostat (2010), Sandbag (2018), Eurelectric (2030)

# And already emitting less than oil or LNG



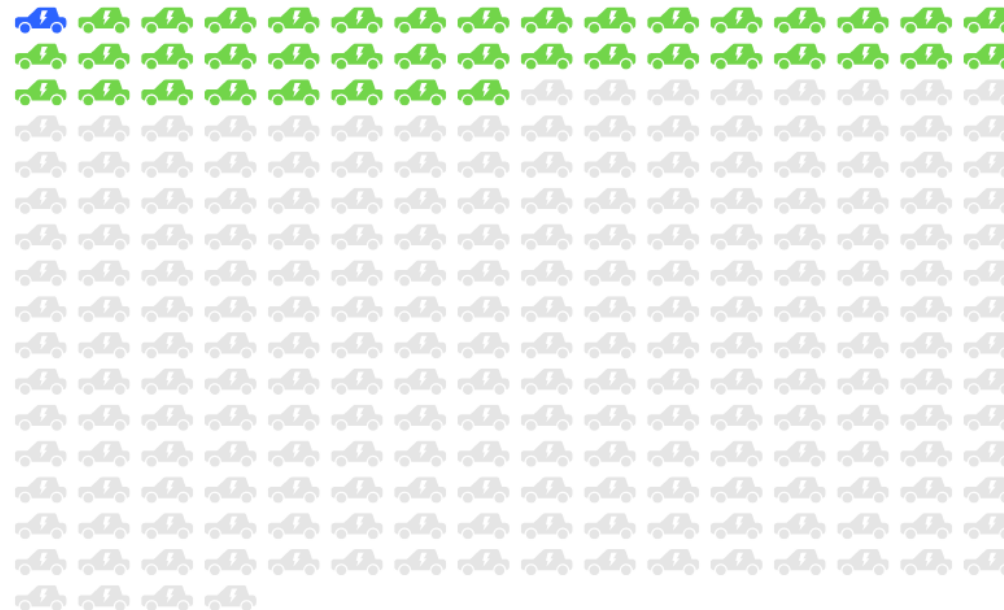
Source: Eurelectric (Electricity & LNG), UFE (Oil)

# Electricity offers a huge potential to decarbonise Europe, especially in transport but also buildings and industry






















Source: Eurelectric

Electric vehicles  
x40 in 2030 vs today



● Number of EVs in 2018 ● Needed electrification by 2030 ● Total number of cars on the roads

# Electrification by industry sub-sector

		2015 Baseline	2050 Scenario 1	2050 Scenario 2	2050 Scenario 3
 <b>Chemicals</b>	Direct electrification rate	30%	35% 	36% 	39% 
 <b>Iron &amp; Steel</b>	Direct electrification rate	32%	38% 	39% 	42% 
 <b>Other industries</b>	Direct electrification rate	35%	39% 	47% 	55% 
 <b>Total industries</b>	Direct electrification rate	33%	38% 	44% 	50% 
	Total electricity demand as part of TFC <sup>1</sup>	33%	45% 	53% 	60% 

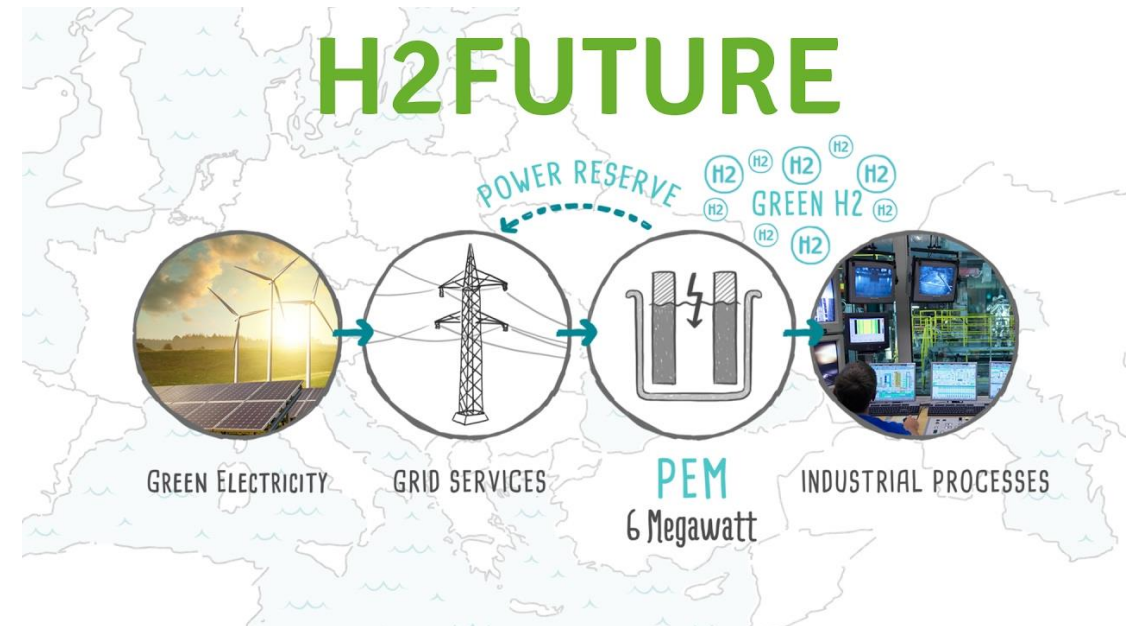
<sup>1</sup> Includes direct electrification, indirect electrification and electricity demand driven by production of CCS and biofuels

# Transforming industry processes

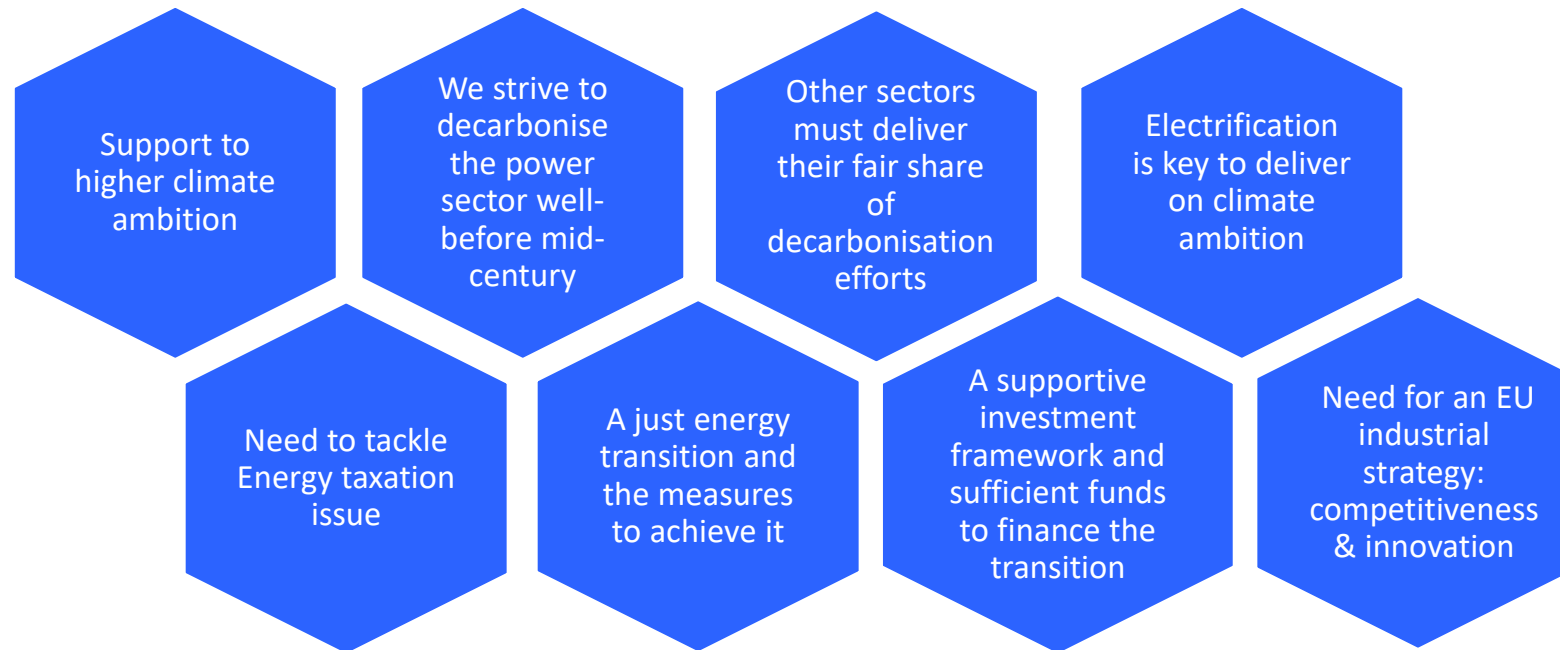
## Vattenfall - Hybrit



## Verbund – H2FUTURE



# Powering the Green Deal



**THANK YOU**

