



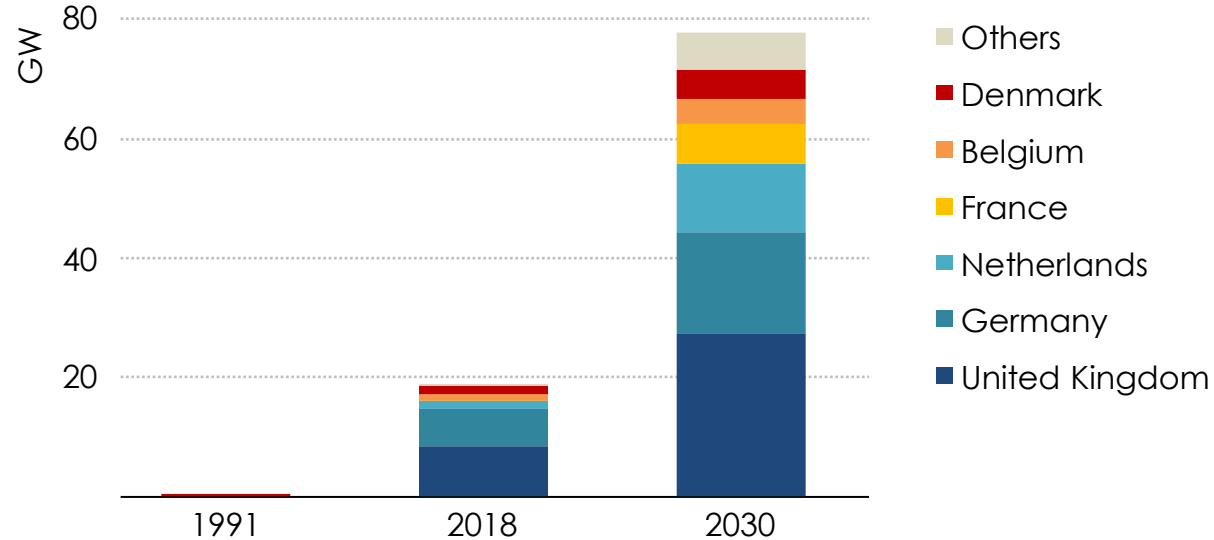
# Offshore wind outlook

Yasmine Arsalane, WEO Power Sector Modelling, IEA

Winterwind 2020, 5 February

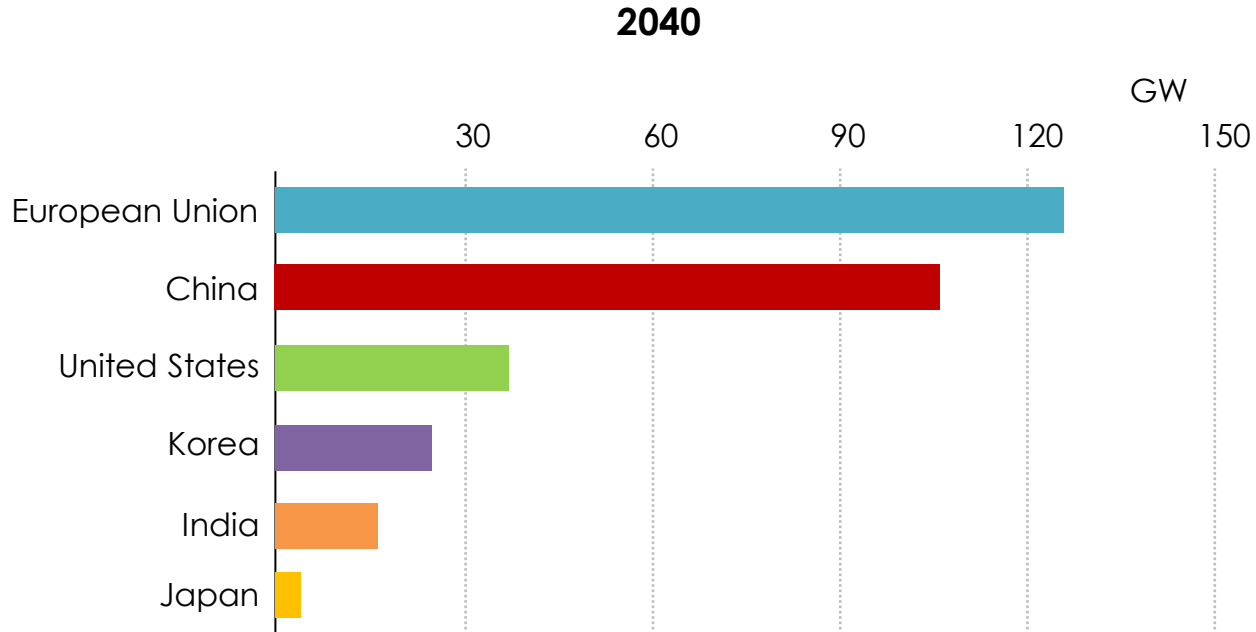
# Europe is the technology leader for offshore wind

Offshore wind capacity by country



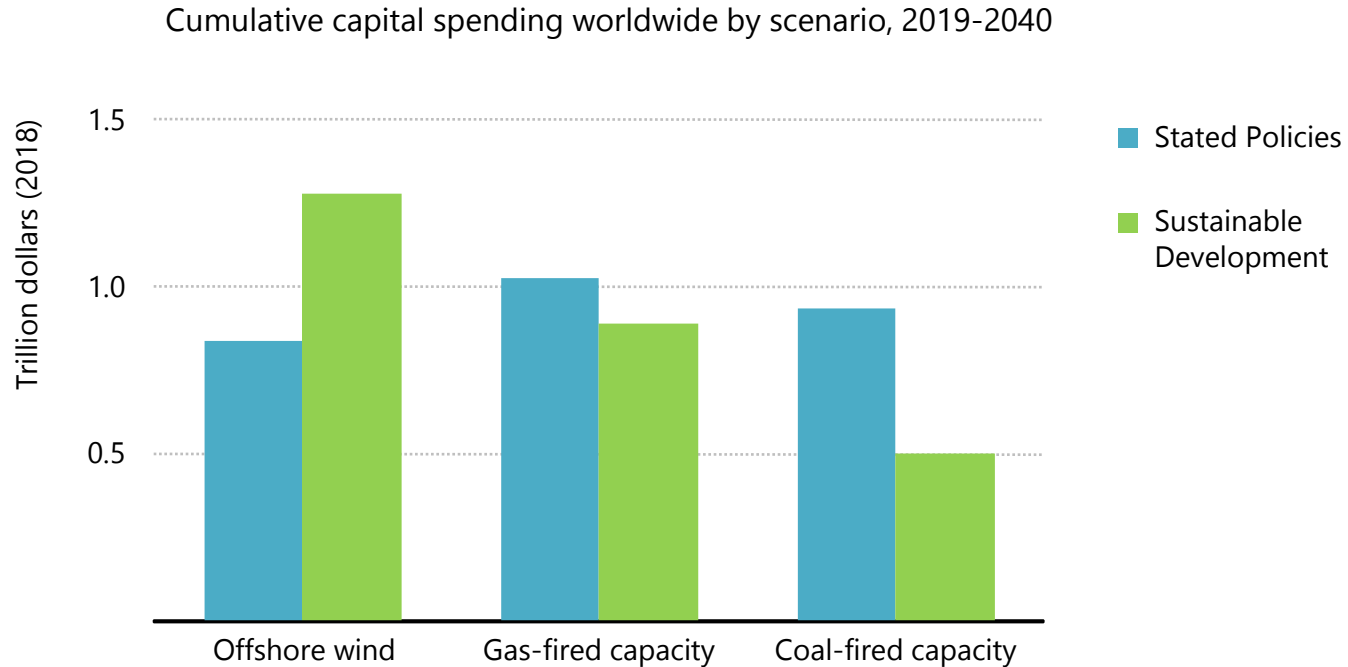
Europe has fostered the development of offshore wind technology over the past three decades and with current policies it is set to quadruple its capacity by 2030

# Offshore wind capacity is set to grow around the world



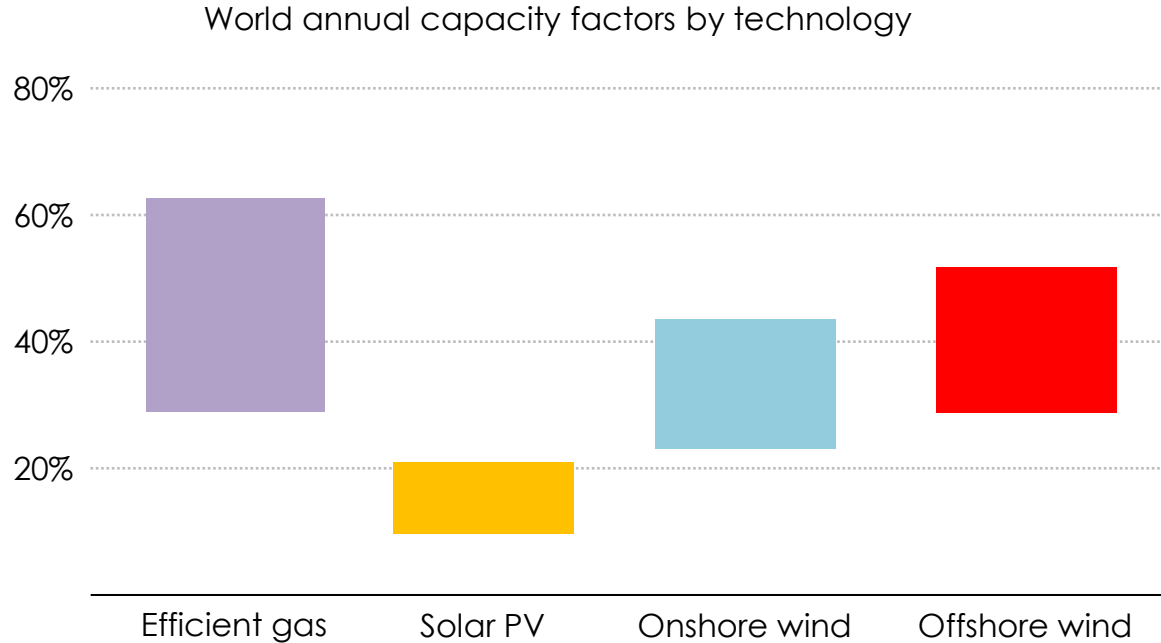
While European Union continues to be in the driver's seat through to 2040, China moves strongly forward and many new markets gain more than a foothold

# Offshore wind on course to become a \$1 trillion industry



Offshore wind capital spending over the next two decades is set to match that of gas-fired and coal-fired capacity to 2040, and easily exceed it along a sustainable energy pathway

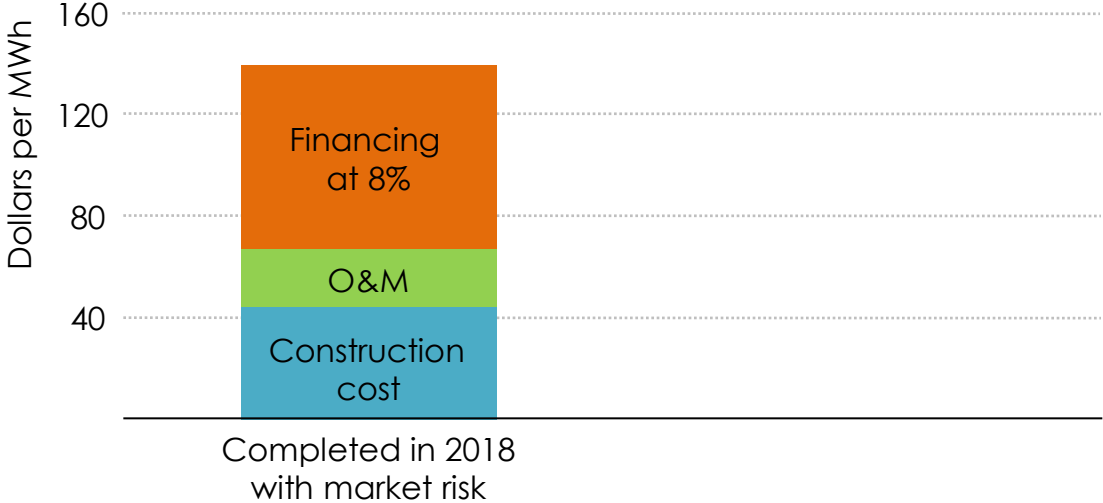
# Technology improvements are raising offshore wind's productivity



New offshore wind projects have high capacity factors that are on par with efficient gas in several regions, though offshore wind is not always available to meet demand.

# Right policy frameworks support offshore wind's competitiveness

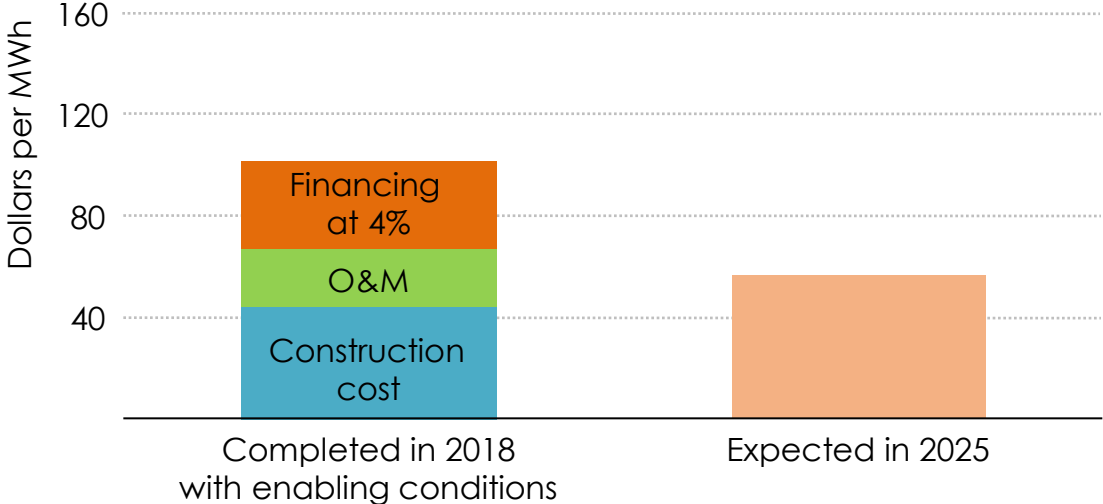
Global offshore wind average generation costs



Bigger turbines, technology learning and low financing costs are driving down costs of new projects.

# Right policy frameworks support offshore wind's competitiveness

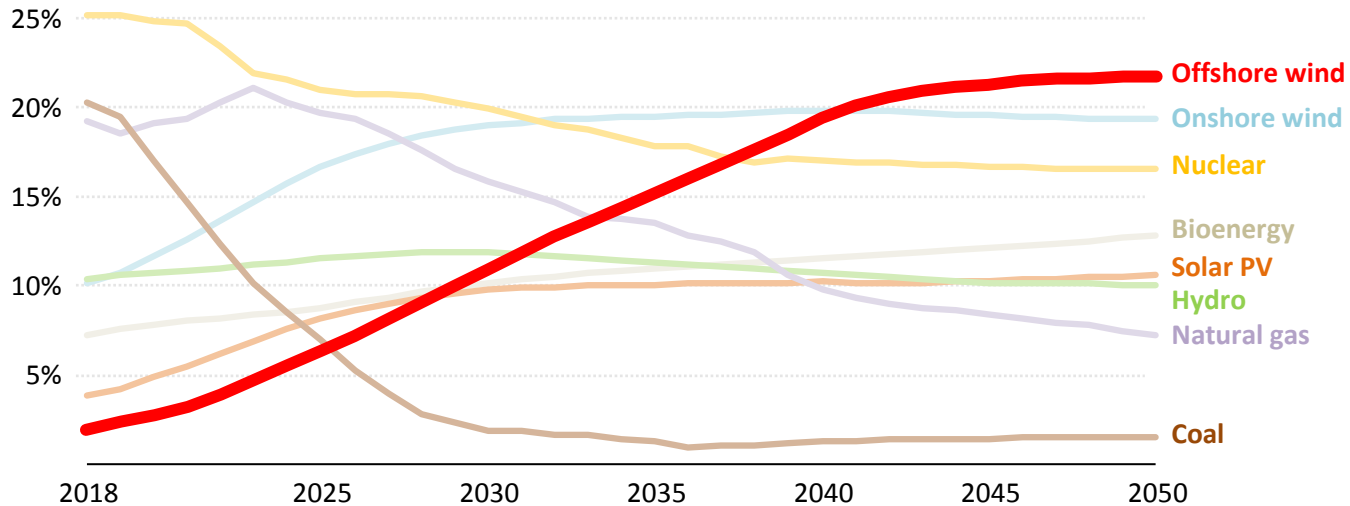
Global offshore wind average generation costs



Bigger turbines, technology learning and low financing costs are driving down costs of new projects. Policy frameworks enabling low-cost financing are essential to drive offshore wind towards competitiveness.

# A carbon neutral Europe puts offshore wind in front

Shares of electricity generation by technology in the European Union, Sustainable Development Scenario



Offshore wind is set to become the largest source of electricity in the European Union by 2040, complementing other renewables towards a fully decarbonised power system



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