What's driving down the cost of offshore wind?



Innovation

Continued research, development and implementation has resulted in cheaper, more efficient and durable components and new methods of production and maintenance. Hightech industries such as UAVs and robotics are entering the industry and helping to reduce costs. Digitalisation has played a big role, with enhanced sensoring, better modelling and realtime monitoring to help integrate offshore wind power easily into the energy system.



Industrialisation

Clear and ambitious national plans for buildout from successive governments have allowed for industrialisation in every part of the supply chain. This not only brings investment to the UK, it enables economies of scale, allowing standardisation and procurement for multiple projects simultaneously, therefore bringing down the cost per unit. With the Government's recent announcement in support for offshore wind, alongside the industry's 2030 vision we are hoping to secure a Sector Deal which would continue to bring confidence in investment in offshore wind in the UK, at all levels of the supply chain.



Both turbines and farm sizes have grown significantly, yielding more production per turbine hence producing energy at a lower cost:



The largest commercially available turbine has grown from 3.6MW in 2010 to 8.8MW in 2018.

Within a few years we expect it to reach 12MW and more!

The world's largest offshore wind farm has grown from 300MW in 2010 to 659MW in 2018.

By 2022 Hornsea 2 will reach 1400MW – over double the current world's largest!