

Technology Game Changers in Renewables

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futureWind&Marine 2020





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Renewables

Game changer

“An event, idea, or procedure that effects a significant shift in the current way of doing or thinking about something.”

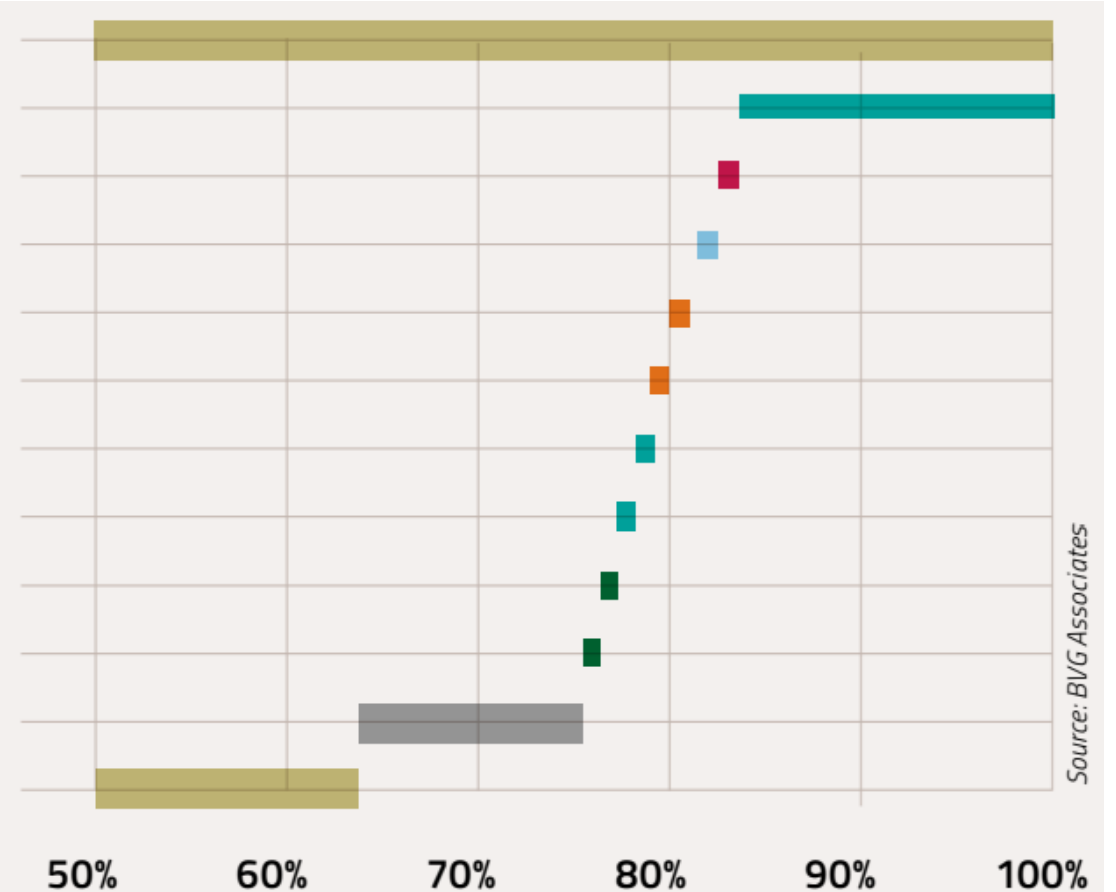


Turbine size

LCOE for a wind farm with FID in 2017

- Increase in turbine rating
- Introduction of multi-variable optimisation of array layouts
- Improvements in range of working conditions for turbine installation
- Improvements in blade aerodynamics
- Improvements in blade materials and manufacture
- Improvements in AC power take-off system design
- Improvements in components (nacelle)
- Improvements in monopile designs and design standards
- Improvements in monopile manufacturing
- 49 other innovations

LCOE for a wind farm with FID in 2030



Taken from InnoEnergy's report "Future renewable energy costs: Offshore wind"



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Data and digitalisation

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- Training anc
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Source: Programming Soul



