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Offshore Wind Development in the US – and Opportunities for the Gulf Coast

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Growth of the Global Offshore Wind Industry

- 1991: First offshore wind (OSW) farm – 11 450 kW turbines (Denmark)
- 2000: First large-scale OSW farm – 20 2 MW turbines (Denmark)
- 2009: First full-scale floating turbine – one 2.3 MW turbine (Norway)
- 2016: First (***still only***) US OSW farm – five 6 MW turbines (RI)
- 2017: First multi-array floating wind farm – five 6 MW turbines (Scotland)
- 2018: 18.5 GW at 105 OSW farms in 11 European countries (4,543 turbines)
- 2023: 60 GW projected by GWEC
- 2040: 300 GW projected by IEA

Current prototype size rapidly increasing
- Turbine capacity: 11-14 MW
- Hub height: 125 to 140 m
- Blades: 100-107 m
- Rotor diameter: 193-220 m

Credits: Block Island Wind Farm (Ørsted) and Hywind Scotland (Equinor)

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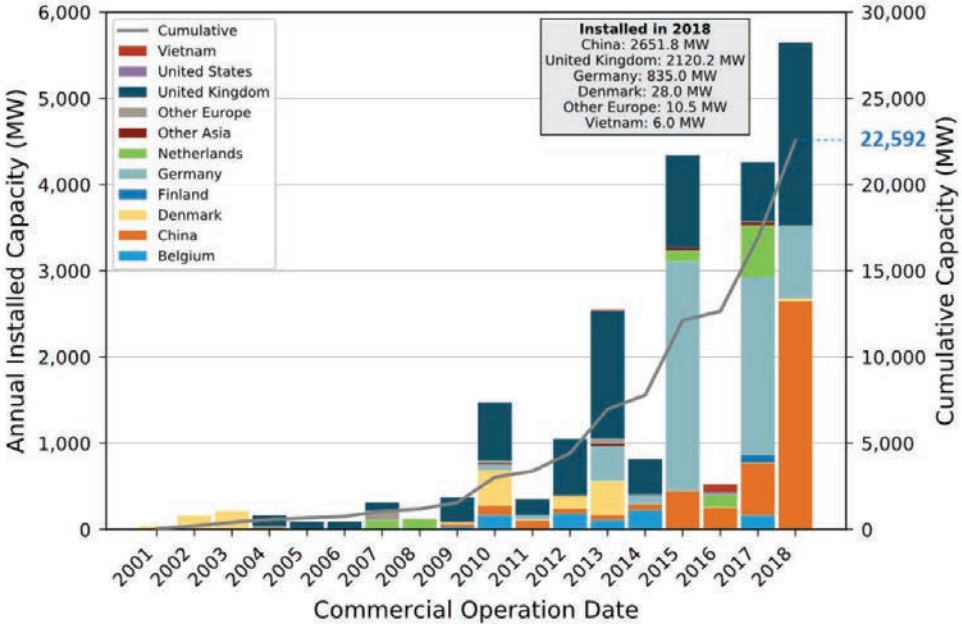
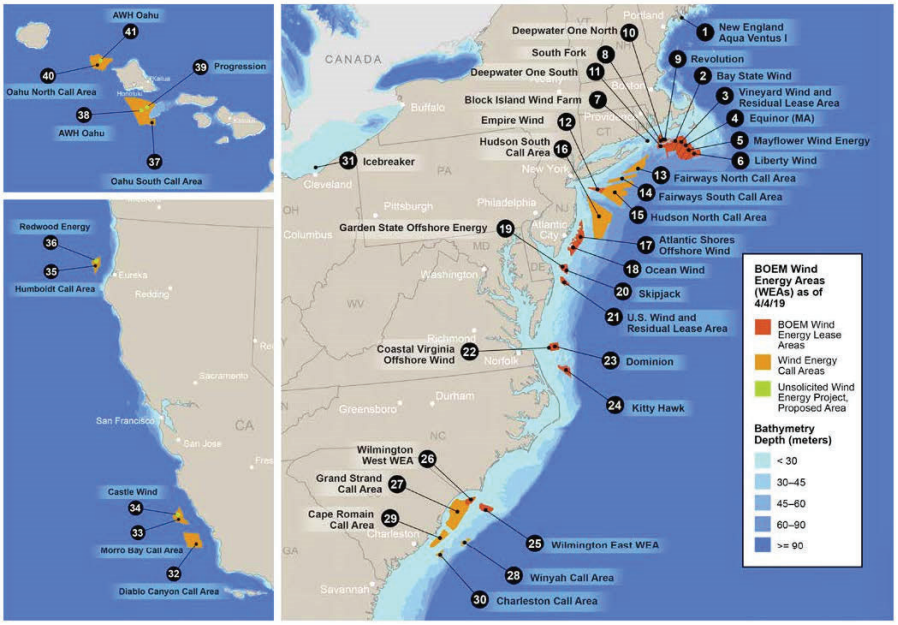
Global Offshore Wind Capacity to 2018: Annual Growth (left) and Cumulative (right)



Source: US DOE 2018 Offshore Wind Technologies Market Report (Aug. 2019)

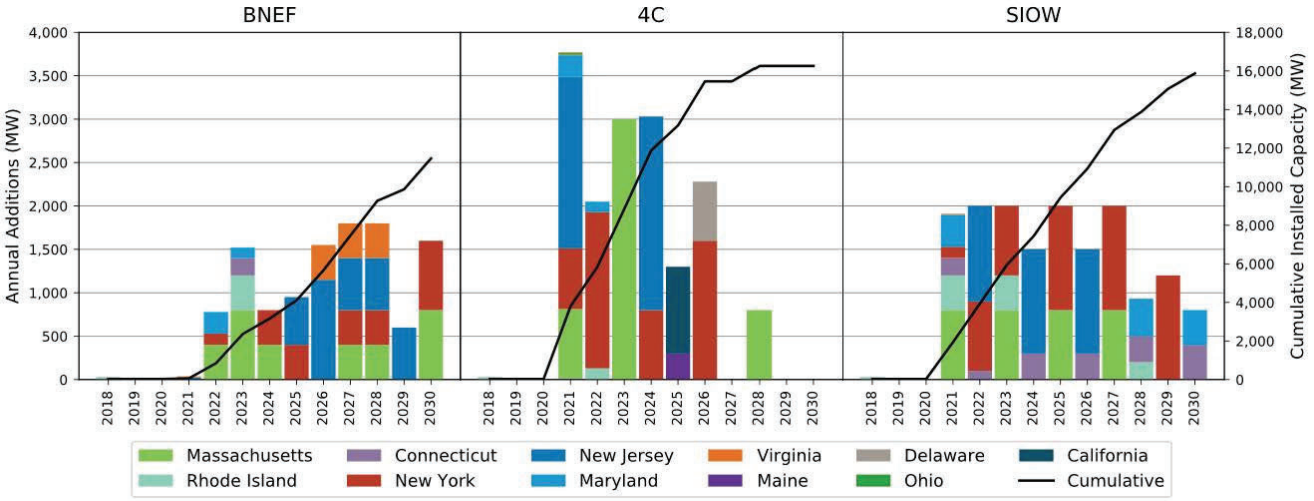
US Wind Energy Lease Areas and Candidate Lease Areas



Source: US DOE 2018 Offshore Wind Technologies Market Report (Aug. 2019)

Projected Additions to US Offshore Wind Capacity

Annually and Cumulatively – 2018-2030



Source: US DOE 2018 Offshore Wind Technologies Market Report (Aug. 2019)

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East Coast State Goals for OSW: 25,930 MW by 2035

State	Goal (MW)	Year
Connecticut	2,000	2030
Maryland	1,200	2030
Massachusetts	3,200	2035
New Jersey	7,500	2035
New York	9,000	2035
Rhode Island	430	2023
Virginia	2,600	2026

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Title search: Offshore Wind Development in the US and Opportunities for the Gulf Coast

Also available as part of the eCourse
2020 Renewable Energy Law eConference

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"Offshore Wind Development in the US and Opportunities for the Gulf Coast"