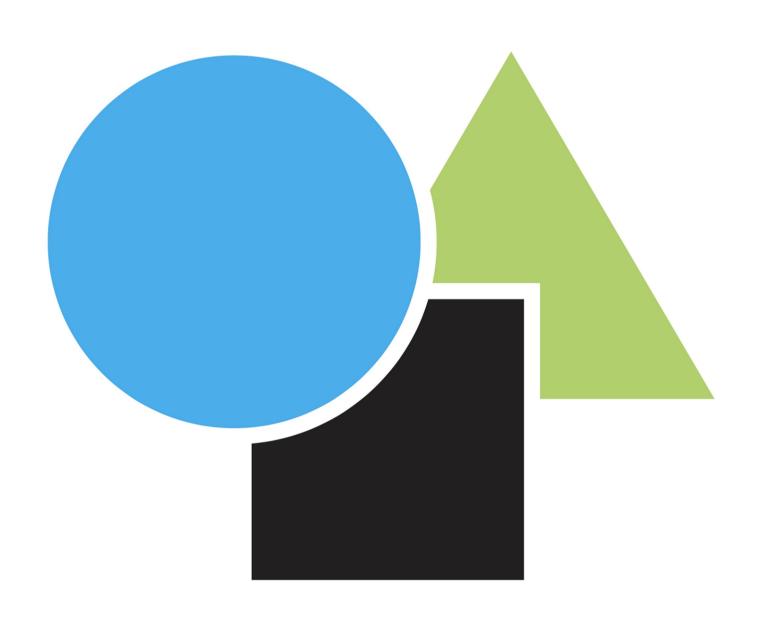
# East Coast states drive offshore wind development in the US

2019





## **Executive summary**

The offshore wind market in the United States of America (US) is set to take off in the early 2020s. US companies are seeking to diversify into the promising local offshore wind industry while established global offshore wind companies are on the lookout for new offshore wind markets. Policy developments since 2013 have seen seven US states on the East Coast commit to about 11 gigawatts (GW) of offshore wind by 2030 as state lawmakers seek to create jobs. Top global offshore wind developers have descended on the nascent market and the stakes are high. During 2018, three states selected three offshore wind projects totalling 1.4GW for contract negotiations. Growth is expected as pioneer states increase their targets while more states embrace offshore wind in their energy mix. Supply chain development opportunities for experienced offshore wind companies are emerging, especially as European developers take the lead in US offshore wind development.



Private image by Thomas Poulsen

This East Coast states drive offshore wind development in the US Report (the Report) is part of a series of reports on the global emerging offshore wind markets. The reports have been crafted by the Panticon team during the months of April through January, 2019 to mark the launch of the new name of the consultancy which is particularly strong in the Offshore Wind and Logistics sectors within the three core disciplines of Strategic Management Advisory, Mergers & Acquisitions, and Market Research & Analysis.

The Report has been created using an extensive library of data sources (see Reference section). The main data sources used as the basis for the Report were made up of 500+ pages and mainly consisted of various publications by government related organisations, academic journal articles, offshore wind industry articles, and press releases by firms across the offshore wind market supply side as well as demand side.

The Report contains forward-looking statements, which by their very nature, address matters that are, to different degrees, uncertain as they pertain to the future. These, or any other uncertainties, may cause the actual future results to be materially different than those expressed in the forward-looking statements as contained within this Report.

At Panticon, we do not undertake to update our forward-looking statements, nor do we assume any liability for actions or dispositions made by firms, organisations, and/or individuals based on information contained in this Report.

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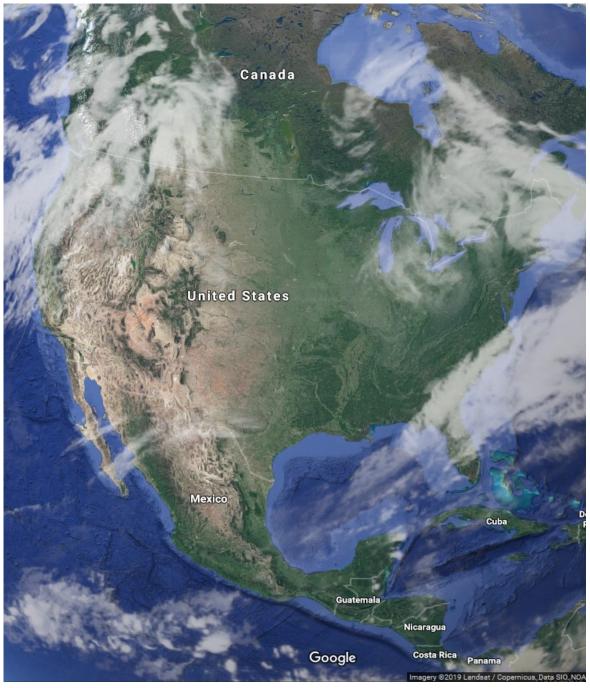


Image: Satellite map from Google Maps/cropped

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# List of abbreviations

BOEM Bureau of Ocean Energy Management

CIP Copenhagen Infrastructure Partners

DoE Department of Energy

GW Gigawatt

ITC Investment tax credit

JV Joint-venture

MW Megawatt

MWh Megawatt hours

O&M Operations and maintenance

OCS Outer Continental Shelf

ORECs Offshore wind renewable energy credits

OWF Offshore wind farm

RCEA Redwood Coast Energy Authority (California)

Sq.km Square kilometres

US The United States of America

USD United States Dollar

#### 1. Introduction

Following the completion of the 30-megawatt (MW) Block Island offshore wind farm (OWF) in 2016 in the state of Rhode Island, enthusiasm for offshore wind development in the US has gathered pace. The US is finally set to add more offshore wind capacity.

As at mid-December 2018, 13 states in the US are involved in offshore wind development at different levels. The majority are in the East Coast (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Jersey, New York, North Carolina, Rhode Island, and Virginia), two in the West Coast (California and Hawaii) and one inland state (Ohio). In terms of advancement in development, the East Coast states lead with Massachusetts, Rhode Island, New York and New Jersey in the forefront.

The US government supports offshore wind development through the federal **investment tax credit** (ITC). Until the end of 2016, the ITC stood at 30% of an OWF's cost. Once qualified for the ITC, OWF projects have several years to reach completion. The ITC is worth 18% for projects entering construction in 2018, and 12% in 2019, after which it will expire.

Meanwhile, the US **Department of Energy (DoE)** has been supporting offshore wind pilot projects. Progress has been slow due to a myriad of challenges, particularly permitting processes. The pilot projects are the 12MW Maine Aqua Ventus 1 OWF project in Maine; the 12MW Coastal Virginia Offshore Wind (CVOW) project (previously VOWTAP) in Virginia; and the 21MW Icebreaker OWF project (Great Lakes) in Ohio.

#### 1.1. Factors favouring offshore wind development

Several factors favouring offshore wind development in the US are state-specific. Factors common to all states include job creation and offshore wind's growing cost competitiveness with conventional electricity sources.

- **Politically important jobs:** The major pipeline of projects in the US and the investment associated with it means jobs, new skills, as well as manufacturing and training opportunities.
- **Falling costs of offshore wind:** Offshore wind success in Europe, including key achievements such as reduced projects costs, has contributed to growing interest for offshore wind in the US.
- **Presence of European suppliers in the US onshore wind market:** The onshore wind supply chain of top European suppliers in the US offers a great opportunity to accelerate offshore wind market maturity.
- **Limited land for onshore development in some states:** Limited land availability and long transport distances from onshore power generation locations to areas of power demand.
- **Proximity to demand centres:** Offshore wind resources are located close to high power demand centres, e.g. in New York, Massachusetts and California.
- **High power prices:** Particularly in the densely-populated North-Eastern states where power prices are high. In February 2018, Rhode Island, a North-Eastern state, recorded the highest average price of electricity of any state in the continental US, according to the US DoE.

- **Retirement of coal and nuclear power plants:** A big wave of retirements of coal and nuclear power plants in the coming years is expected to create opportunities for new forms of power generation, including offshore wind.
- **Streamlined permitting procedures:** The current administration's general focus on cutting red tape may shorten the lengthy and onerous environmental permitting process.

#### 1.2. Factors hindering offshore wind development

Competition among states for jobs, local-content requirements, and the current administration's support for coal power generation could delay the take-off of the US offshore wind market.

- **Higher costs than in Europe:** Across all coastlines in the US, offshore wind is still more expensive than in Europe. Although the winning bid price for **Vineyard Wind's** projects in Massachusetts was lower than expected, it reflected the soon to expire ITC.
- **Supply chain constraints:** The US has a very limited domestic offshore wind supply chain to build and service offshore projects. In particular regarding shipping, the Merchant Marine Act of 1920 (the **Jones Act**) is a key challenge. In addition, long transportation distances as well as bridge height restrictions on rivers pose logistical challenges.
- **Opposition from fishing industry:** Fishing groups in the state of Rhode Island have opposed the width of proposed transit lanes through the Vineyard Wind and Ørsted lease areas, posing a serious threat to the progress of Vineyard Wind's 800MW projects.
- **Lack of adequate state of the art infrastructure:** As at end of the third quarter of 2018, New Bedford was the only port facility somewhat ready to support offshore wind development in the US. However, it is not sufficient to support the announced aggregate state targets.
- Competition from other power sources: Increasing competition from solar power (whose prices have been falling precipitously), low-cost natural gas and coal (North Carolina), as well as from hydropower imports from Canada. In January 2018, the State of Massachusetts passed over Deepwater Wind's proposed Revolution Wind OWF in favour of a hydroelectric power project. Meanwhile, the current US administration has plans to start offshore oil drilling in the state of New Jersey waters.
- **Policy uncertainty:** The US still lacks a clearly defined national offshore wind energy policy. Meanwhile, the current administration has expressed unrelenting support for power generation from coal. In August 2018, the US **Environmental Protection Agency** replaced the prior administration's pro-renewable development **Clean Power Plan** with the more "relaxed" and coal-friendly **Affordable Clean Energy Rule**.
- **Local content requirements and competition among states:** There is intense pressure from state lawmakers on OWF developers to bring jobs to their respective states. This is complicating developers' cost reduction efforts given the announced size of target capacity per state.
- **Grid issues:** Limited optimal places for grid connection on the East Coast Transmission grid. The North East Coast common grid requires upgrades to accommodate renewable energy sources. In the state of Connecticut, bidders are responsible for transmission costs and any necessary upgrades to the onshore grid system.

## 2. Leases for offshore wind development

The Outer Continental Shelf (OCS) Lands Act requires the US Department of Interior's Bureau of Ocean Energy Management (BOEM) to award leases competitively, unless BOEM determines that there is no competitive interest.

From October 2010 through December 2018, the BOEM has leased 17 OCS totalling 7,175 square kilometres (sq.km) of federal sea areas with potential of roughly 21GW offshore wind capacity. Non-competitive and OCS include OCS-A 0478, relinquished in May 2018, for the now cancelled 454MW **Cape Wind** OWF project off Massachusetts.

Fifteen OCS', totalling 7,051 sq.km, have been competitively leased across eight auctions. Seven auctions were in North-East Coast states (Virginia, Rhode Island, Maryland, Massachusetts, New Jersey and New York) and one in a South-East Coast state (North Carolina). Prices averaged United States Dollar (USD) 67,000 per sq.km. The lowest price was USD 62 per sq.km for the November 2012 OCS-A 0482 in Delaware won by the US' **Bluewater Wind Delaware**, **LLC** (**NRG Energy**). The highest price was USD 261,862 per sq.km for the December 2018 OCS-A 0521 in Massachusetts won by **Mayflower Wind Energy**, a 50-50 joint venture (JV) between British-Dutch **Shell** and Portugal's **EDP Renewables**. Figure 1 shows the leased areas sizes and the respective prices per sq.km. The three December 2018 leases were initially auctioned as two (OCS-A 0502 and OCS-A 0503) in January 2015 but attracted no bids partly due to uncertainty over grid connections. As the US offshore wind industry gained traction, highlighted by the then record USD 132,251 per sq.km bid for lease area 0CS-A 0512 off New York won by Norway's **Equinor** (previously **Statoil**), Equinor and Germany's **PNE Wind** lodged two separate unsolicited lease requests in December 2016 and January 2017, respectively. Mainly due to the anticipated exponential demand, BOEM eventually split the two zones into three.

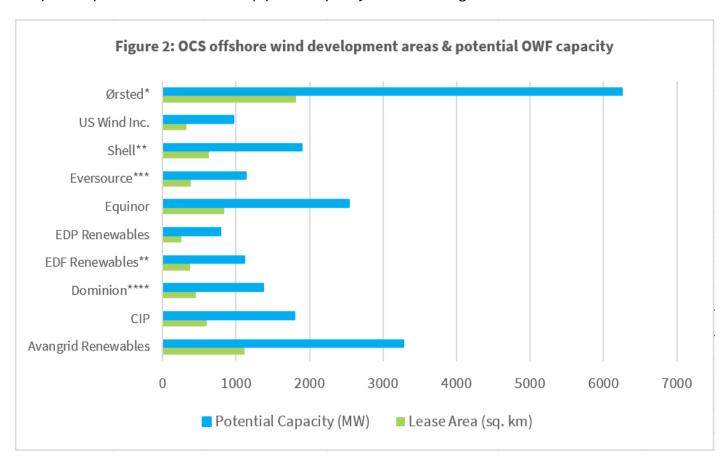


Source: Panticon (December 2018) based on BOEM, the U.S. National Renewable Energy Laboratory, and other multiple sources

Meanwhile, seven leased areas have since changed ownership while one more zone is in process of changing hands.

- April 2015 and May 2016: American RES America Developments, Inc. sold its Massachusetts (OCS-A 0500) and New Jersey (OCS-A 0498) leases to Denmark's Ørsted (previously DONG Energy) in April 2015 and May 2016, respectively.
- August 2016: Danish fund management company Copenhagen Infrastructure Partners (CIP)
  acquired Offshore MW LLC, owner of lease OCS-A 0501. CIP's involvement in the US dates back to
  June 2013 when it announced it would invest USD 200 million in the proposed 454 MW Cape Wind
  OWF.
- **November 2016:** The US' **Deepwater Wind** acquired OCS-A 0482 (now OCS-A 0519) in Delaware from compatriot NRG Energy.
- October 2018: Ørsted acquired Deepwater Wind, owner of three leases.
- **December 2018:** Shell and France's **EDF Renewables** announced that their recently formed 50-50 JV, **Atlantic Shores Offshore Wind**, is acquiring the OCS-A 0499 lease area off New Jersey from US Wind.

Based on the winners as well as subsequent sales and acquisitions, the distribution of leases and respective potential offshore wind pipeline capacity is shown in Figure 2.



<sup>\*</sup> Includes 3GW+ pipeline capacity for Deepwater Wind (acquired by Ørsted in October 2018)

<sup>\*\*\*</sup> Acquisition of lease OCS-A 0499 from US Wind pending regulatory approval as at December 20, 2018

<sup>\*\*\*</sup> In partnership with Ørsted

<sup>\*\*\*\*</sup> Ørsted EPC contractor for 12MW CVOW pilot; In July 2017, Dominion signed a memorandum of understanding with Ørsted (then DONG Energy) giving the latter exclusive rights to discuss a strategic partnership about developing the 457 sq. km OCS-A 0483 site (with 1.4GW potential capacity)

Winning an OCS lease does not translate into projects with corresponding offshore wind capacity. Rather, it is a step towards qualifying to compete for procurement mechanisms organised by states and therefore subject to the targets set by respective states (see section 3 below). So far, the states of Massachusetts, Rhode Island, and Connecticut have used competitive solicitations. New York plans to use the same. The state of Maryland has employed offshore wind renewable energy credits (ORECs). New Jersey is to follow suit.

## 3. Offshore wind targets and tenders

The US does not have a national target for offshore wind installations.

From April 2013 through early October 2018, Massachusetts, New York, New Jersey, and Virginia, each set 1GW-plus offshore wind targets up to 2030, totalling 7.5GW. Other states – Maryland, Rhode Island and Connecticut - have made less ambitious targets.

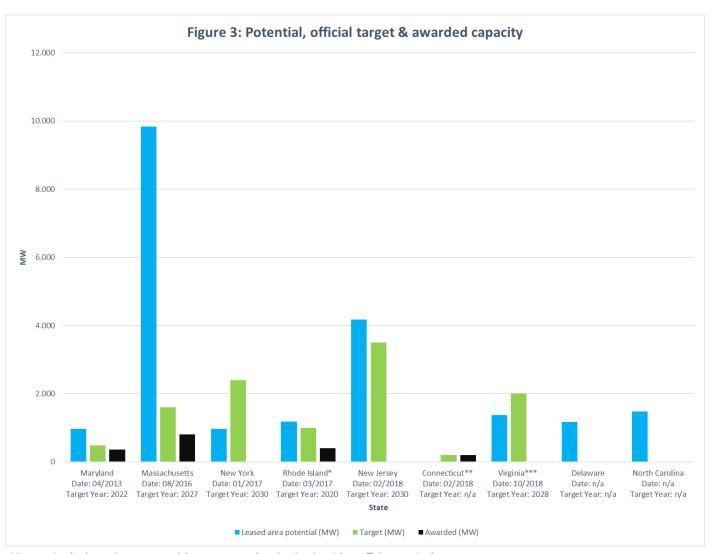
May 2017: The Maryland Public Service Commission awarded ORECs to developers U.S. Wind Inc. and Deepwater Wind (acquired by Ørsted in October 2018) for two proposed OWFs totalling 368MW. The ORECs are at a levelized price of USD 131.93/megawatt hours (MWh) for a period of 20 years.

May 2018: The Commonwealth's Electric Distribution Companies (EDCs) selected Vineyard Wind for contract negotiations to procure power from the proposed 800MW Vineyard Wind OWF after a highly competitive auction. Vineyard Wind and the EDCs concluded contract negotiations in July 2018 after which the contracts were submitted for approval to Massachusetts Department of Public Utilities before the 31 July 2018 deadline. The 20-year-term contracts will be delivered in two phases. Prices (RECs) for the Phases 1 and 2, each 400MW, will begin at USD 74/MWh and USD 65/MWh, respectively, and escalate by 2.5% each year. Phase 1 is set for commercial operation in 2022 and Phase 2 in 2023.

**May 2018:** Rhode Island, in collaboration with Massachusetts, selected Deepwater Wind (acquired by Ørsted in October 2018) for contract negotiations to procure power from Deepwater Wind's proposed 400MW Revolution Wind OWF.

**June 2018:** Connecticut followed suit with a tender, conditional on bidders having won the tender in Massachusetts, and selected Deepwater Wind's (acquired by Ørsted in October 2018) proposed 200MW Revolution Wind OWF.

Potential capacity of the leased zones, the state targets and the capacity tendered/awarded are shown in Figure 3 (at page 14).



<sup>\*</sup>Target includes other renewable energy technologies besides offshore wind

Source: Panticon (December 2018), based on multiple sources

Going forward, New York plans to procure 800MW of offshore wind through two solicitations by end of spring 2019. Massachusetts is expected to issue its second offshore wind request for proposals by summer 2019. In addition, in July 2018, Massachusetts authorities initiated a legislation process to double the official offshore wind cumulative capacity target with the target year set for 2035.

<sup>\*\*</sup>No leased zone off Connecticut; Project located in Rhode Island OCS lease OCS-A 0486

<sup>\*\*\*</sup>According to the 2018 Virginia Energy Plan (October 2018)

# 4. Floating offshore wind

When it comes to floating offshore wind plans, the US has a pilot project yet to receive of permits – the two-turbine 12 MW Aqua Ventus I in off the state of Maine. But it is the US West Coast states of California and Hawaii that offer most potential. Reasons include the narrow continental shelf and opposition to nearshore turbine installation. However, the BOEM is yet to lease areas in the West Coast of the US and floating offshore wind has not taken off. Hindering factors include the US Navy's sensitive military projects in the federal waters [off California] as well as the still relatively higher costs of floating technology.

Both California and Hawaii have attracted interest from global and local floating technology players during 2018.

Though challenges remain, California, with higher power demand, is pulling ahead of Hawaii. Most recently, in September 2018, the BOEM held a task force meeting to review and discuss the issuance of a Call for Information and Nominations on areas for potential offshore wind leasing in California.

- December 2017: Principle Power signed a MoU with California's Redwood Coast Energy Authority (RCEA) to explore the floating offshore wind potential of the Humboldt coast of California. In April 2018, RCEA entered into a public-private partnership with a consortium comprising Principle Power, EDPR Offshore North America, and Aker Solutions to develop a 100 -150MW floating OWF project, the Redwood Coast Offshore Wind Project (RCOWP), off Humboldt County in Northern California, using Principle Power's WindFloat semisubmersible platform. In September 2018, RCEA and the consortium submitted a lease application to the BOEM to advance the project.
- June 2018: US company Magellan Wind and Danish fund manager CIP partnered to develop an
  early-stage portfolio of floating offshore wind off California with focus on deployment of Stiesdal
  Offshore Technologies TetraSpar floating foundation.
- The same month, Germany's **EnBW** and US start-up **Trident Winds** formed a JV, Castle Wind, to build the up-to-1GW **Morro Bay** floating OWF off California.

#### 5. Developers and owners

The tenders in the second quarter of 2018 in the three states (Massachusetts, Rhode Island and Connecticut) attracted bids from three players, i.e. Vineyard Wind (**Avangrid Renewables** and CIP), Rhode Island-based Deepwater Wind (acquired by Ørsted in October 2018) and the **Bay State Wind** (Ørsted and **Eversource Energy**, a 50-50 JV). Vineyard Wind and Deepwater Wind emerged victorious and looked set to reap the first-mover advantages. However, the October 2018 announcement by offshore wind titan Ørsted to acquire Deepwater Wind has put Ørsted back into contention for market leadership (see Figure 2 above) in the US offshore wind market despite its lack of success at tenders in the second quarter of 2018. Meanwhile, other developers, including **US Wind** and Equinor, are still very active (see Figure 2 above). More mergers and acquisitions are anticipated. The emergent offshore wind market in the US, albeit in the East Coast, is already consolidating.

## 6. Local offshore wind farm supply chain

As the world's number two onshore wind market, the US hosts manufacturing facilities (onshore wind) of both global offshore wind turbine suppliers and global offshore turbine component suppliers. Therefore, apart from offshore balance of plant, transitioning to a local offshore wind turbine supply chain would not take long time. Three main factors would facilitate such a transition.

#### 6.1 Offshore wind pipeline volume

There is alignment between states (very focused on politically important jobs) and offshore developers (local production is less costly than importing components from Europe) for a local supply chain. Indeed, the state offshore wind targets and tenders so far have seen OWF developers commit to investing in port infrastructure or awarding contracts to local companies. Some examples are highlighted below.

**Massachusetts:** Vineyard Wind has committed to using New Bedford's Marine Commerce Terminal for its 800MW OWF project. In April 2018, the developer announced plans to build an O&M facility at Vineyard Haven.

**Rhode Island:** In May 2018, Deepwater Wind (acquired by Ørsted in October 2018) announced it would invest USD 40 million into port-facility upgrades in Providence and Quonset Point.

**New York:** New York is looking at a range of potential sites, from the South Brooklyn Marine Terminal to the Port of Coeymans up the Hudson River and off the coast of Long Island.

**Connecticut:** Deepwater Wind (acquired by Ørsted in October 2018) committed to using the **Port of New London**. This includes:

- Up to USD 15 million upgrades to the New London State Pier
- Use of the New London as a construction/assembly base for foundation components and offshore substation
- Contracting a Connecticut-based boat builder to construct one of the project's crew transfer vessels.

#### Maryland:

- US Wind (268 MW OWF project) plans to run O&M out of Ocean City, with a laydown and handling facility at Tradepoint Atlantic in Baltimore.
- Deepwater Wind (120 MW Skipjack OWF project) is investing in steelworks and port facilities in the Greater Baltimore area.

**Virginia:** The Portsmouth and Newport News Marine Terminals stand out among five ports with potential to support offshore wind activities.

However, the current pipeline volume is insufficient for global offshore turbine manufacturers and other offshore wind turbine component manufacturers to establish manufacturing facilities in the US. The five GE turbines installed at the Block Island OWF were imported from France. Siemens Gamesa, selected in August 2018 by Dominion Energy and Ørsted to supply two turbines for the 12MW CVOW pilot project, will import the machines from Europe. MHI Vestas, selected preferred supplier in November 2018 for the 800MW Vineyard Wind projects off Massachusetts, is expected to import turbines from Denmark. The US needs an annual 1GW-plus pipeline by 2025 to build up a competitive supply chain if it is to achieve Northern European levels of maturity. Either other states have to come on board with clear policy certainty or the front-runner states should increase their targets. Otherwise, the front-runner states will need to co-operate and forego their manufacturing hub ambitions and settle for operations and maintenance (O&M) jobs. Opportunities to sell offshore wind generated power to neighbouring states, e.g. Deepwater Wind's (acquired by Ørsted in October 2018) 120MW Skipjack OWF project in Delaware supplying Maryland, could facilitate a faster build-up of a local supply chain.

#### 6.2 Synergies from local offshore oil and gas industry

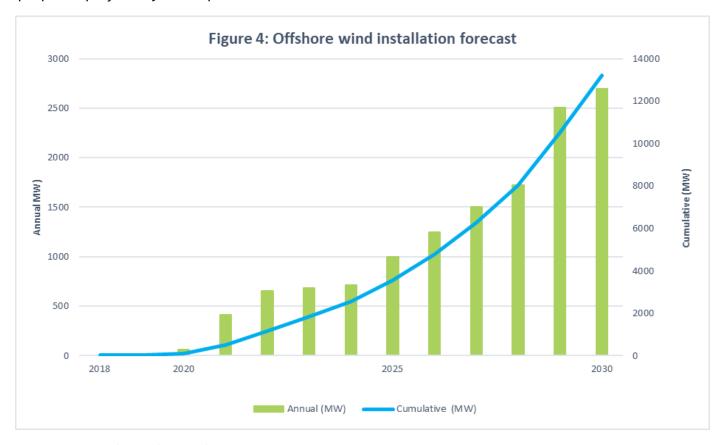
In the short- to medium-term, up to 2025, the supply chain around ports infrastructure, Jones Act-compliant vessels, foundations, and other secondary steel work will take precedence. Post-2025, when the levelized cost of energy is expected to drop in line with European trends and there is enough installed capacity to convince other states of the benefits of offshore wind, component manufacturing and turbine assembly could take root. Barring a sustained rebound in oil prices sufficient to revive oil and gas exploration operations in the Gulf of Mexico, US registered vessels serving the oil and gas industry could accelerate Jones Act compliance as well as local foundations manufacture.

# 6.3 Synergies from local onshore supply chain

The US is likely to tap into relationships with the already established and extensive onshore local supply chain which includes the top global manufacturers. Jones Act-compliant vessels could facilitate shipping of, for example, blades manufactured in the US' inland wind belt.

# 7. Offshore wind installation forecast

The forecast (Figure 4) is largely based on the announced offshore wind targets in six states as well as proposed projects by developers.



Source: Panticon (December 2018)

# 8. Conclusion

Based on the announced state targets up to 2030, New Jersey, New York, Massachusetts, and Virginia are expected to dominate the US offshore market. With the May and June 2018 developments in Massachusetts, Rhode Island and Connecticut to collectively procure 1.4GW of offshore wind, and the record December 2018 auctions, more pieces are falling into place in the US' offshore wind development. This is expected to accelerate offshore wind plans in other states as well as increase local and international investment appetite. As individual states seek to create local jobs, there are opportunities for experienced European companies to export their expertise and facilitate local supply chain development. However, opposition from fishing groups and policy uncertainty such as the August 2018 replacement of the pro-renewables Clean Power Plan with the less green focused Affordable Clean Energy Rule could lead to delays in the short term.

#### References

- 1. Bureau of Ocean Energy Management (BOEM)
- 2. Connecticut Department of Energy and Environmental Protection, 13 June 2018: Gov. Malloy and DEEP Announce Selection of 250 MW of Renewable Energy Projects
- 3. Copenhagen Infrastructure Partners, 18 June 2013: Cape Wind 200 m USD investment
- 4. Copenhagen Infrastructure Partners, 25 August 2016: Copenhagen Infrastructure Partners acquires offshore wind project in Massachusetts, United States
- 5. Environmental Protection Agency, 21 August 2018: EPA Proposes Affordable Clean Energy (ACE) Rule
- 6. Maryland Public Service Commission, 11 May 2017: Maryland PSC Awards ORECS to Two Offshore Wind Developers
- 7. Massachusetts Department of Energy Resources, 23 May 2018: Project Selected to Bring Offshore Wind Energy to the Commonwealth
- 8. Massachusetts Department of Energy Resources, 1 August 2018: Petitions for Approval of Proposed Long-Term Contracts for Offshore Wind Energy Pursuant to Section 83C of Chapter 188 of the Acts of 2016, DPU 18-76, 1877, 18-78.
- 9. Offshorewind.biz
- 10. Poulsen, T. and Hasager, C. B.: How Expensive Is Expensive Enough? Opportunities for Cost Reductions in Offshore Wind Energy Logistics, Energies, 9 (6), 437, June 2016; https://doi.org/10.3390/en9060437
- 11. Poulsen, T. and Lema, R.: Is the supply chain ready for the green transformation? The case of offshore wind logistics, Renewable and Sustainable Energy Reviews, Volume 73, June 2017, Pages 758-771; https://doi.org/10.1016/j.rser.2017.01.181
- 12. RechargeNews
- 13. RI.gov., 23 May 2018: Rhode Island and Massachusetts Announce Largest Procurement of Offshore Wind in Nation's History
- 14. US Department of Energy
- 15. US Department of Interior, 14 December 2018: BIDDING BONANZA! Trump Administration Smashes Record for Offshore Wind Auction with \$405 Million in Winning Bids

#### Who we are

At Panticon, we are particularly strong in the Offshore Wind and Logistics sectors within our three core disciplines of **Strategic Management Advisory**, **Mergers & Acquisitions**, and **Market Intelligence**. We are mainly focusing on the business side to improve our clients' performance, create value in the long-term, and to create sustainable competitive advantages.

#### How we create value

- Tailor-made strategies
- Support M&A endeavours
- Share knowledge
- Analyse markets
- Advise our clients in every aspect of our three core disciplines





Private image by Thomas Poulsen



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