Global Offshore Wind Market Outlook and Review
of Bottom-Fixed and Floating Wind Turbines 2020 to 2030

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Comparative Snapshot

The Opportunity Pipeline Has Seen Exponential Growth over a Short Time Horizon
Opportunity Pipeline, Floating Snapshot
February 2020 vs. June 2019

- Over the last nine months, Floating Wind has seen Double Digit increases to the Project Opportunities Pipeline.
- The No. of Projects are up 25% and No. of Units have risen by 25%.
- Total MW have gained 29%.

<table>
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<tr>
<th></th>
<th>JUNE 2019</th>
<th>FEBRUARY 2020</th>
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<tbody>
<tr>
<td>NO. PROJECTS</td>
<td>51</td>
<td>64</td>
</tr>
<tr>
<td>NO. UNITS</td>
<td>1,808</td>
<td>2,253</td>
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<tr>
<td>CAPACITY IN TOTAL MW</td>
<td>15,169</td>
<td>19,511</td>
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</tbody>
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25% 25% 29%
Offshore Wind Demand Outlook for Bottom-Fixed and Floating Segments

2020 to 2030 Project Start-Ups
Total Global Market Map

Fixed Units: 10,932
Floating Units: 1,480
USA-Atlantic

2020 to 2030 Project Start-Ups
The potential offshore wind market across the Eastern seaboard exceeds 23 GW led from aggressive renewables' goals for each state shown.

The US offshore wind market is poised for exponential growth with over 18 GW potentially commissioned before 2030.

New York state expanded its renewables policy to reach 70% renewable energy by 2030. New York now intends to install 9,000 MW of offshore wind by 2035 - enough to power six million homes.

Data Source: BOEM, New York State, Massachusetts, New Jersey, Maryland, Ohio, Virginia, Connecticut & Rhode Island
USA-Atlantic Offshore Wind Projects

- According to the AWEA, about 26 GW of Offshore Wind is ‘somewhere’ in the development pipeline with the Northeastern Seaboard, greater US Atlantic coast and the Great Lakes.

- As illustrated, Q FWE has about 18 GW of named projects presently identified for Start-Up by 2027 representing a total addressable market of $57 billion in CapEx. Forty percent of this spend, $25.3 billion, is allocated to projects already Under Development while $22 billion is earmarked for Planned projects and $7.4 billion for Possible projects in this region.

- On a regional basis per the time period defined, the US-Atlantic ranks third for Bottom-Fixed only projects as measured in Total MW (17,826), a 19% share compared to Europe which ranks first as the top market for Bottom-Fixed wind with about 44,953 Total MW, a 47% share, compared to Asia Pacific which ranks second at 32,611 MW, a 34% share.

- A review of total units reveals that the US Atlantic ranks third globally with a 16% share of Bottom-Fixed OTG units compared to Europe’s 44% share and Asia Pacific’s 38% stake.

- With respect to the number of projects, the Americas-US Atlantic ranked third at 13% counting 23 projects versus Asia Pacific which holds the number one spot with 82 projects, a 45% share.