

NewEnergyUpdate

Who will fund the US offshore wind market ...and how?

In association with

US Offshore Wind 

CONFERENCE & EXHIBITION • JUNE 7-8 • BOSTON



Photo: ©wind Gravy / Wind.com - Stroll ASA

In association with the US Offshore Wind 2018 Conference

Acknowledgements

This white paper was put together with insights from the following industry experts:



Jim Lanard
CEO
Magellan Wind



Lorry Wagner
President
LEEDCo



Alla Weinstein
Founder and CEO
Trident Winds

Executive summary

After a long and haphazard run-up, the US offshore wind industry finally seems poised to take off. US Secretary of the Interior Ryan Zinke's endorsement of the sector in April 2018¹ was perhaps most promising sign so far of a significant project pipeline to come. And as project developers finally get down to business, one of the big questions is: who will fund their efforts? While most experts agree that there should be no shortage of takers, it is still unclear exactly who will be stepping forward and what kinds of deals will be done.

Against this backdrop, and as a prelude to the June 2018 US Offshore Wind conference and exhibition in Boston, this white paper surveys some of the main features and issues within the US offshore wind financing landscape.

3rd Annual

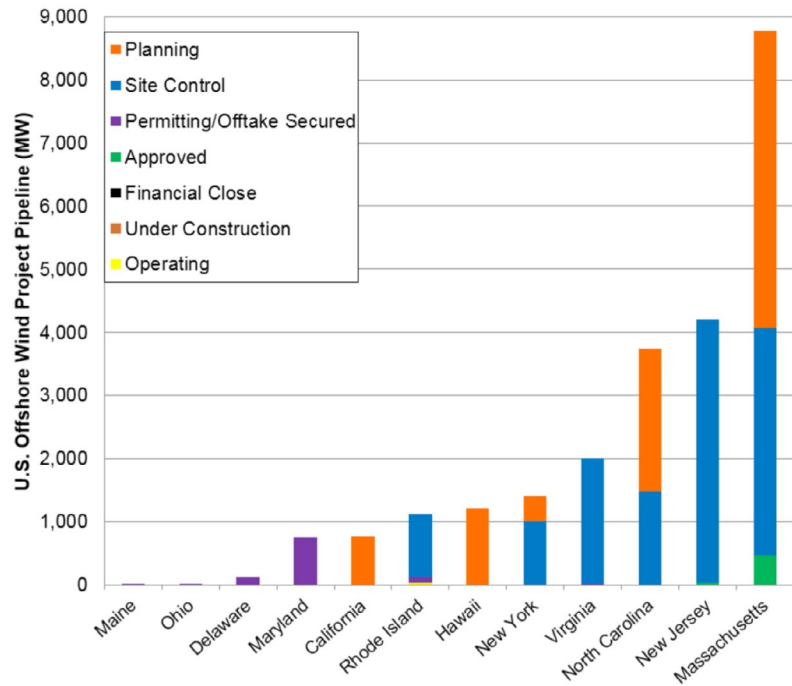
US Offshore Wind 2018
Conference & Expo
Boston Park Plaza Hotel
June 7-8

*Secure Investments and
Partnerships in the US Offshore
Wind Industry Boom*

.....
[Get The Brochure Here](#)

The financing opportunity

With US renewable energy investment falling 6% in 2017², investors will be heartened by the growing opportunity represented by offshore wind off the coast of America. Department of Energy (DoE) data from June 2017 suggests almost 24 GW of capacity could be built across 28 projects in a dozen states in coming years.



US offshore wind pipeline as of June 2017. Source: DoE Office of Energy Efficiency and Renewable Energy.

Sources of funding

Project funding for offshore is essentially provided by equity holders, which are usually the developers and owners of the projects, and debt providers, traditionally banks. This report also briefly considers the role of federal and state support mechanisms, given the importance that schemes such as the Production Tax Credit (PTC) have had in boosting investor appetite for onshore wind.

The US's first and only commercial offshore wind farm so far, Deepwater Wind's Block Island, was funded through a \$290 million project financing package provided by Societe Generale of Paris, France, and KeyBank National Association of Cleveland, Ohio. The financing from Societe Generale and KeyBank was in addition to more than \$70 million in equity funding provided by Deepwater Wind's owners, principally an entity of the global investment and technology development firm DE Shaw Group.³

3rd Annual

US Offshore Wind 2018
Conference & Expo
Boston Park Plaza Hotel
June 7-8

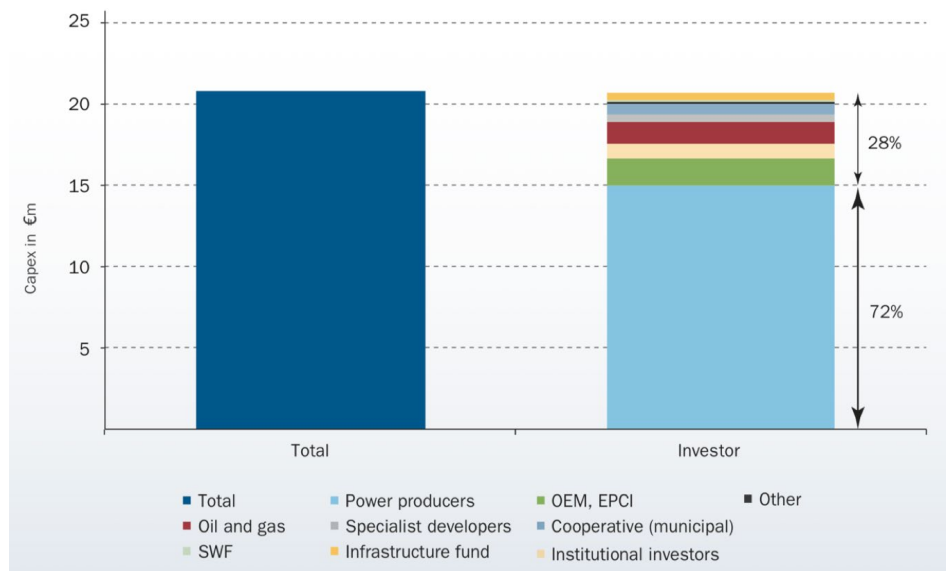
*Secure Investments and
Partnerships in the US Offshore
Wind Industry Boom*

[Get The Brochure Here](#)

Equity players

Most experts agree that future projects will be dominated by international financiers, at least until US equity and debt providers become comfortable with offshore wind. "There is plenty of appetite from international investors to invest in offshore wind projects in the US," says Alla Weinstein, Founder and CEO of Trident Winds. In contrast, though, "none of the US investors or utilities understand this space," Weinstein says.

On the equity side, the experience early on in the development of the European offshore wind market suggests power producers will dominate the financing process by far. In 2013, for example, European Wind Energy Association (EWEA, now WindEurope) figures showed 72% of investment was from power companies.



Cumulative investment in European offshore wind up until June 2013 (SWF: Sovereign Wealth Fund, OEM/EPCI: Original Equipment Manufacturer/Engineering, Procurement, Construction and Installation firm). Source: EWEA.

A review of 20 operational, in-development and proposed US offshore wind farms confirms the international nature of early equity investors, with almost 11 GW out of a total 14 GW having non-US ownership.

3rd Annual
US Offshore Wind 2018
 Conference & Expo
 Boston Park Plaza Hotel
 June 7-8

*Secure Investments and
 Partnerships in the US Offshore
 Wind Industry Boom*

[**Get The Brochure Here**](#)

Project	State	Minimum capacity (MW)	Owner
Block Island	Rhode Island	30	Deepwater Wind
Fisherman's Atlantic City	New Jersey	24	EDF
Virginia Offshore Wind	Virginia	12	Dominion Resources/Orsted
Icebreaker	Ohio	21	LEEDco/Fred Olsen Renewables
New England Aqua Ventus I	Maine	12	Maine Aqua Ventus/DCNS
Vineyard Wind	Massachusetts	1600	Vinyard Power/Copenhagen Infrastructure Partners/Avangrid Renewables
Bay State Wind	Massachusetts	2000	Orsted/Eversource Energy
Deepwater ONE	Rhode Island	210	Deepwater Wind
South Fork	Rhode Island	90	Deepwater Wind
Empire Wind	New York	1000	Statoil North America
Galveston	Texas	150	Herman J Schellstede & Associates
Garden State	Delaware	680	Deepwater Wind
Maryland	Maryland	500	US Wind/Renexia
New Jersey Ocean Wind	New Jersey	1950	Orsted
New Jersey US Wind	New Jersey	2230	US Wind/Renexia
Kitty Hawk	North Carolina	1500	Avangrid Renewables/Iberdrola
Skipjack Offshore Wind	Delaware	120	Deepwater Wind
Vermillion Bay	Louisiana	36	Coastal Point Energy
Dominion Phase One	Virginia	500	Dominion Resources
Dominion Phase Two	Virginia	1500	Dominion Resources

US offshore wind project ownership. Source: 4C Offshore.

Who will provide debt?

Turning to debt, Jim Lanard, CEO of Magellan Wind, says European investors are again likely to take the lead. "They understand the risks so much better than US banks at this point," he says. "But it could come from US debt [providers] that have studied this in anticipation that the market is going to grow. Very few of us anticipate that raising the debt and equity will be a problem."

What is still unclear, however, is what kind of premium banks, and in particular US institutions, might apply to cover perceived risks.

3rd Annual

US Offshore Wind 2018
Conference & Expo
Boston Park Plaza Hotel
June 7-8

*Secure Investments and
Partnerships in the US Offshore
Wind Industry Boom*

[Get The Brochure Here](#)

The role of government

The US onshore wind industry has benefited significantly from the federal PTC, to the point that a rush to beat the retirement of the program is expected to have an impact on global turbine installation volumes over the next couple of years.⁴ However, the fact the PTC is due to end in 2019 means the credit will not be available by the time most upcoming offshore wind projects start to come online. It is unclear whether the industry might benefit from other forms of support, though.

Lanard notes that some early developers may be able to exercise a right in the PTC to choose an Investment Tax Credit instead, which is paid upfront when the capital expenditure is completed. For most, even this won't be an option, though.

Outlook and conclusions

Just as the US offshore wind industry will, of necessity, inherit a good deal of European technology and know-how, so too it will likely benefit from a fair amount of European funding initially. The good news, says Lorry Wagner, president of LEEDCo, is that "all the major debt players already have a US presence."

This is likely a good thing because it means the probable early investors in US offshore wind will be entities that have first-hand experience of the industry already, and so are able to close deals rapidly and with favorable rates. All that remains to be seen is whether US deals will follow similar structures to those seen in Europe, and how the European deal-making culture will mesh with US banking mentalities.

The industry will be hoping any issues can be resolved as quickly and easily as possible. Having got this far, it would look bad if things went awry for want of a handshake.

References

1. Deign, J, Greentech Media, April 11, 2018: The US Wind Sector Toasts Trump's New Love of Offshore. Available at <https://www.greentechmedia.com/articles/read/us-wind-sector-toasts-trumps-new-love-of-offshore#gs.ZcYyPV4>.
2. Teirstein, Z, Grist, April 6, 2018: Rich countries invested less money in renewables last year. U.S. cities are picking up the slack. Available at <https://grist.org/article/rich-countries-invested-less-money-in-renewables-last-year-in-the-u-s-cities-are-picking-up-the-slack/>.
3. Deepwater Wind press release, March 2, 2015: Block Island Wind Farm Now Fully Financed. Available at <http://dwwind.com/press/block-island-wind-farm-now-fully-financed/>.
4. Deign, J, Greentech Media, April 9, 2018: Wind Forecast: Doubling Global Capacity by 2027 Will Be a Breeze. Available at <https://www.greentechmedia.com/articles/read/wind-forecast-doubling-capacity-by-2027-will-be-a-breeze#gs.0Kb1BbE>.

3rd Annual

US Offshore Wind 2018
Conference & Expo
Boston Park Plaza Hotel
June 7-8

*Secure Investments and
Partnerships in the US Offshore
Wind Industry Boom*

[Get The Brochure Here](#)

US Offshore Wind

organized by
NewEnergyUpdate

in association with
WIND ENERGY
update

CONFERENCE & EXHIBITION • JUNE 7-8 • BOSTON

SECURE INVESTMENTS AND PARTNERSHIPS IN THE US OFFSHORE WIND INDUSTRY BOOM

EXECUTIVE SPEAKERS CONFIRMED FOR #USOW18



Walter Cruickshank
Acting Director
Bureau of Ocean Energy
Management



Bryan Martin
Chairman of the Board Deepwater Wind
Managing Director D.E. Shaw & Co.



John B. Lavelle
CEO, Offshore Wind
GE Renewable Energy



Thomas Brostrøm
President
Ørsted



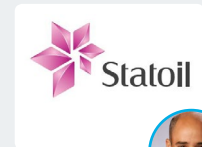
Dr. Valerie Reed
Acting Director of the Wind
Energy Technologies Office
U.S. Department of Energy



Lars Thaaing Pedersen
CEO
Vineyard Wind



Gunnar Groebler
SVP Business Area Wind
Vattenfall



Stephen Bull
SVP, Wind and CCS
Statoil

1000+
ATTENDEES

15+
HOURS OF
NETWORKING

45+
SPONSORS AND
EXHIBITORS

BUILD YOUR US OFFSHORE WIND BUSINESS PLAN AT THE USOW18 EVENT!

- MARKET STRUCTURE AND EVOLUTION
- US OFFSHORE WIND DEVELOPMENT PIPELINE
- PROJECT PLANNING & EXECUTION FOR COMMERCIAL DEPLOYMENT
- SUPPLY CHAIN, INFRASTRUCTURE AND VESSEL REQUIREMENTS
- COST REDUCTION TECHNOLOGY ROADMAP
- NEW FOR 2018!** COMMERCIALIZING FLOATING WIND TURBINES BREAKOUT SESSION
- NEW FOR 2018!** OPPORTUNITIES IN THE US OFFSHORE WIND SUPPLY CHAIN BREAKOUT SESSION

Gold Sponsor

Helaba
Landesbank
Hessen-Thüringen

EVERSHEDS SUTHERLAND

Linklaters

APB
AMS, PATEL & BREWER, LLP

innogy

CLIFFORD CHANCE

Silver Sponsor

AON ROVOP
KNOWLEDGE IN DEPTH

DAMEN

NGI

AVANGRID RENEWABLES

Seaway Heavy Lifting

Bronze Sponsor

KeyBank

Keystone ENGINEERING INC.

Exhibitors

ARUP

Blount BOATS

Epsilon ASSOCIATES INC.

Modulift
working between the beach and the land

straightpoint
making the Wind industry a safer place

ZTT

UPTIME

OCEANEERING

[Click here to secure last remaining tickets](#)