

# <section-header>

### CHRISTOPHER HOPSON

ecurity has been reinforced and "only a handful" of the 360 exhibitors at EWEA 2015 have cancelled their participation following the terrorist attacks in Paris on Friday evening, EWEA says.

The association tells *Recharge* it decided to move forward with its annual exhibition and conference after receiving safety assurances from the local authorities and the police.

"We are taking all the necessary security and logistical measures to ensure the utmost safety and care is taken throughout the four-day event," says EWEA chief executive Giles Dickson.

The additional security measures will include "systematic checks" at

the main entrance of the event. All those entering the premises will have bags and belongings checked before they enter.

Dickson says EWEA "has not taken the decision to continue lightly, but we feel it is essential that we stand firm in the face of such adversity. We must continue as we mean to go on".

German turbine maker Enercon, one of EWEA 2015's three "event ambassadors", is among those to have pulled out.

"Against the background of this terrible incidence [sic] we cannot just go back to business as if nothing had happened and hold conversations with customers and business partners in Paris," the company says.

Swedish bearings supplier SKF

and US floating wind specialist Principle Power have also cancelled.

EWEA says it will participate in France's national mourning, including a minute's silence at the opening session. A spokesman tells *Recharge* that "to my knowledge, all the events are going ahead as planned", although EWEA has said it will make amendments to its "social programme".

"EWEA expresses its sincere condolences and sympathies to all those touched by the tragic events that unfolded in Paris on 13 November," says Dickson. "Our hearts and thoughts go out to them and the people of France at this very difficult time." GILES DICKSON INTERVIEW: Page 18

# Floating array off Portugal by 2018

### DARIUS SNIECKUS

A consortium of European and Japanese industrialists has set the seal on plans to build a 25MW floating wind array off the coast of northern Portugal by 2018, *Recharge* can reveal.

The WindFloat Atlantic (WFA) project — being developed by EDP Renewables (EDPR), Mitsubishi subsidiary Diamond Generating Europe, Chiyoda, Engie and Repsol — will be made up of three or four turbines mated to Principle Power's WindFloat platforms, anchored in 85-100 metres of water, 20km off Viana do Castelo.

"This [agreement] is a critical milestone for the project," EDPR's Carlos Martin Rivals, project director of WFA, tells *Recharge*. "It shows that there is felt to be sufficient visibility

Continued on page 2

# EWEA points to €13bn windfall

Wind energy could boost the European economy by €13bn over the next 15 years and support 366,000 jobs, according to an EWEA report released today.

The study, *Aiming High*, says wind can overtake natural gas and coal

Continued on page 10

### VISIT **RECHARGE** AT STAND **K22**

1

# Floating array is 'key milestone'

### Continued from Page 1

on the success of the project and clears the way for final consenting, engagement with the banks and [contracting] our suppliers."

With the "agreement to implement", expectations are that a final investment decision (FID) will be taken in the second quarter of 2016, followed by the construction of WindFloat units at a yard close to the offshore site.

Discussions are "very advanced" with two shortlisted turbine makers to deliver machines for the landmark project, Rivals adds. MHI Vestas was part of the original consortium developing WFA.

"We are extremely excited to welcome this strong consortium of investors into such an important project for us," says Principle Power chief executive João Metelo. "This represents a key milestone for the company



and the WindFloat concept, as it further demonstrates the technology's financial viability and competitiveness."

The flagship WindFloat1 — a three-column, semi-submersible steel structure part-filled with

static water ballast for stability and topped out with a 2MW Vestas V80 turbine — has been moored in 43 metres of water off Póvoa do Varzim, 25km south of Viana do Castelo, since 2011. The prototype, which uses a fourpoint mooring spread fixed to the seabed with drag-embedded anchors, has produced more than 16GWh since switch-on.

The second-generation WindFloat for WFA has been engineered to be up to 60% cheaper per MW than its forerunner, notes Rivals.

Unlike the balance-sheet financing of Statoil's 30MW Buchan Deep floating array off Scotland, for which an FID was taken this month, WFA will be built using project finance.

"It is a bigger challenge [to use debt financing] but we perceive it to be the best way to demonstrate the WindFloat technology to be fully commercial," says Rivals.

### RWE, EDPR and Macquarie join forces

### CHRISTOPHER HOPSON

German utility RWE, Portugal's EDP Renewables (EDPR) and Australia's Macquarie Capital have formed a consortium to bid for the 700MW up for grabs in the Dutch government's first offshore wind auction next year.

The Netherlands plans to hold annual tenders of 700MW between 2015 and 2019.

The first, for the 350MW Borssele 1 and 2 sites, will close on 31 March next year, with the winners announced by the beginning of July.

RWE has said its involvement in offshore projects will be with partners, rather than alone, as it struggles to maintain investment in renewables while coping with the massive financial impact of Germany's energy transition.

### DNV GL AT THE EWEA 2015 ANNUAL EVENT Find us at Stand H04

We like to invite you to join our side events on the 18<sup>th</sup> & 19<sup>th</sup> November:

### Expert Talk on the launch of the new Turbine. Architect Software tool

Join the launch of our new Turbine.Architect software tool, enabling turbine engineers and component developers to quickly calculate the impact of their technology on Levelised Cost of Energy for a realistic wind project. **When:** 18<sup>th</sup> November 2015, 12:00 p.m. **Where:** DNV GL booth, number H04

Breakfast Seminar on Modelling long flexible blades in Bladed

An introduction to the requirements of the next generation turbines with long, flexible blades. Join us for this breakfast seminar where we will demonstrate what DNV GL's Bladed software adds to the blade analysis process, and discuss with our experts how it can support your design team.

When: 19th November 2015, 9:30 a.m. Where: Exhibition Meeting Room A

### Workshop on Floating offshore wind - Identifying the challenges and managing the risks

Join our experts to learn more about the design challenges and risk management of floating offshore wind technology and projects. Highlights include the current status of floating offshore wind in France and how to make floating wind concepts more economic.

When: 19th November 2015, 11:30 a.m. Where: Exhibition Meeting Room A

Expert Seminar on High product quality and flexible certification

Get an exclusive introduction into DNV GL's new standard for rotor blades which will be published end 2015. Furthermore, questions on maintenance, cost reduction and your benefits on working according to this standard will be addressed. **When:** 19<sup>th</sup> November 2015, 1:45 p.m. **Where:** Exhibition Meeting Room A



# SIEMENS



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only minimum upgrades inside the nacelle, the new 7-MW turbine benefits from using the components and existing supply chain of the SWT-6.0-154, thus lowering the commercial risk.

This all goes to prove that "thinking outside the box" sometimes actually means looking inside the box.

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# Siemens to split production of 7MW model

### **BERND RADOWITZ**

iemens will spread manufacturing beyond the UK as it gears up to produce its new 7MW turbine for the world's largest offshore wind farm, the 660MW Walney Extension, offshore chief executive Michael Hannibal tells *Recharge*.

Danish utility Dong Energy last month took a final investment decision on the UK Irish Sea project, with plans to install 47 Siemens 7MW D7 turbines and 40 MHI Vestas 8MW machines.

Britain had lobbied hard to attract a more significant share of the European offshore wind manufacturing industry given its leading role in the sector. Its biggest success came this year, when Siemens started to build an offshore hub at the northeast England port of Hull for its 6MW and 7MW machines.

But Hull will only produce blades, with the nacelles coming from overseas.

"The Cuxhaven nacelle factory will support the manufacturing of the 7MW during 2017," Hannibal says.

In August, Siemens announced plans to build the 7MW nacelles at a €200m factory at the German North Sea port, following bitter protests by German offshore wind groups over the company's decision to choose the UK as a manufacturing site rather than its home market.

hotography | S

But Hannibal stresses that at the same time, the UK remains key to Siemens' offshore ambitions. "Walney Extension is yet another



clear signal that the UK remains a strong market for offshore wind power," he says.

Not all manufacturing plans for the Walney Extension megaproject are set in stone yet, Siemens tells *Recharge*. Some parts may even come from plants in Denmark, while Hull will also function as an installation base.

With manufacturing spread across several countries, the industrial giant is keeping a close eye on costs. The OEM is due to announce a new 7MW offshore logistics concept during EWEA 2015.

In a hint to policymakers, Hannibal emphasises that "a stable project pipeline will help us to further industrialise the nacelle and blade production". Several offshore projects have recently been downsized in the UK amid uncertainty about profitability due



to reduced support.

Dong Energy says it is confident about using Siemens' largely untested 7MW turbine, as it is an upgrade of its 6MW machine, which the Danish utility is very familiar with, having installed it at its 210MW Westermost Rough wind farm off northeast England.

Nevertheless, Dong has opted to install almost half of the capacity at Walney Extension with turbines from Siemens' offshore arch-rival MHI Vestas.

"We have never made a secret of the fact that we need a strong supplier base. This approach means we will have at least two strong turbine suppliers," Dong tells *Recharge*.

AFA 2015

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# Ideol signs Taiwan floating offshore pact

### DARIUS SNIECKUS

loating foundation pioneer Ideol has signed a breakthrough deal with China Steel Corporation (CSC) to jointly develop offshore wind projects off Taiwan using the French company's innovative "damping pool" technology.

The co-operation promises to open up development zones in water depths of 20-60 metres off Taiwan that have been held back by "difficult" seabeds.

Ideol's floating platform, a square, open-centre concept that can be built in steel or concrete, is designed to be moored in water depths as shallow as 30 metres, promising to be a key solution "given Taiwan's specific industrial and environmental conditions".

"This collaboration recognises our capability to compete with bottom-fixed solutions in specific environments," states Ideol chief



executive Paul de La Guérivière. "In 2016 and 2017, [we] will see

the installation of our floating technology in France and Japan. We hope that our collaboration with CSC will lead to the construction and installation of our floater in a third country after 2019."

Li-I Wei, wind-power business

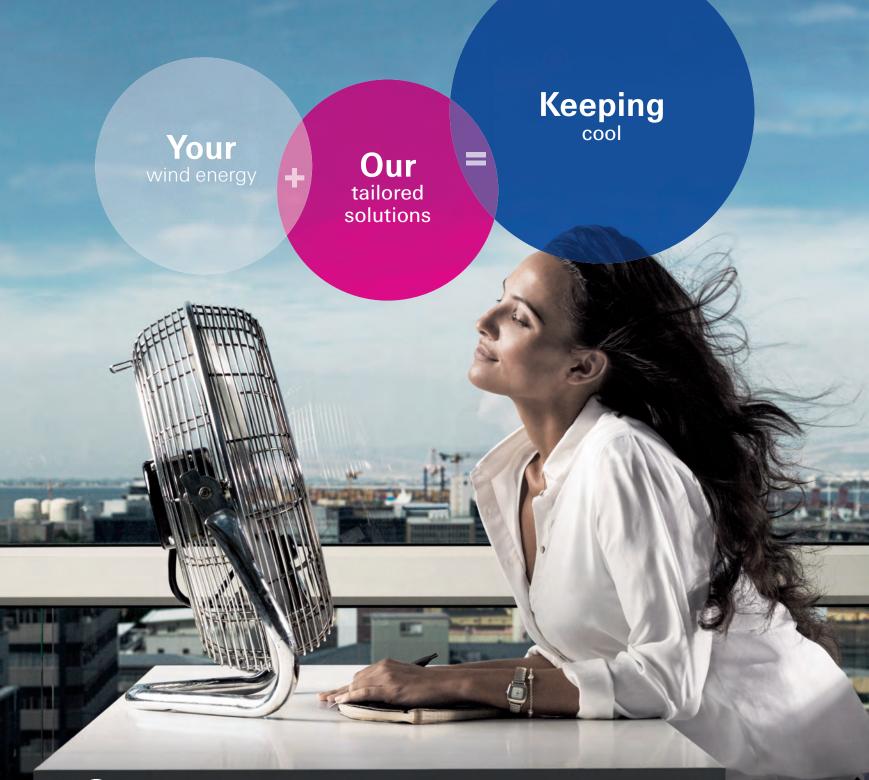
vice-commissioner at the Taiwanese steelmaker, says the company is planning to build its own wind farm in the Taiwan Strait, with floating foundations potentially playing a part when it enters service after 2019.

"Offshore wind is a new industry and full of challenges in Taiwan," says Wei. "We have good wind-energy potential [in the] Taiwan Strait, but [face] extreme ocean condition and geological problems."

In Japan, Ideol has an engineering deal in place with industrial conglomerate Hitachi Zosen for both concrete and steel versions for installations expected in the water by 2017. 🖬

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# Vestas unveils customisable 3MW platform

### DARIUS SNIECKUS

estas has launched its upgraded multivariant 3MW platform, featuring a bespoke range of rotor diameters, tower heights and an advanced, next-generation control system, which together will be able to push machines in this class to a nominal power rating of 3.45MW.

The platform's five rotor variants, two nacelle configurations, multiple power modes and 15 hub heights are designed to give its 3MW models "substantially more versatile market coverage".

Photograph | Vestas

"The result is that customers can select the optimal turbine configuration with higher precision, boosting performance at each unique wind site and lowering the cost of energy," says chief technology officer Anders Vedel. "Standardised components



deliver the reliability expect[ed] from Vestas, while the added versatility allows for flexible site solutions."

The V105, V112, V117 and V126 will have optional power modes to generate as much as 3.6MW, giving them an annual energy production up to 12% higher than previous models in the class, depending on individual site conditions. The V136-3.45MW will be

marketed for low-wind sites, the V126-3.45MW for medium wind, and the V117-3.45MW, V112-3.45MW and V105-3.4MW for high wind conditions.

Vestas will also begin fabricating a 166-metre tower for its 3MW platform, its tallest onshore hub height ever, which uses the company's proprietary Large Diameter Steel Tower technology.

A first installation of the tower is planned for early 2017, after expected certification early next year.

Lead-off deliveries of the smaller-rotor models are forecast for the end of next year, with the V136 series coming to market in the third quarter of 2017.





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### WHEN?

Wednesday November 18th: 10 am – 5.30 pm (winner will be announced at 5.30 pm at the CG booth during

the CG beer reception)

**Thursday November 19th: 10 am – 5.30 pm** (winner will be announced at 5.30 pm at the CG booth)

### PRIZE TO WIN? Select one of our 3 prizes!

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# How €13bn wind bonanza can boost jobs

### Continued from Page 1

if member states apply the right level of ambition in their climate and energy policies.

"Wind power can be the foundation of the European energy system within the next 15 years," says Giles Dickson, EWEA's new chief executive.

The report highlights policy priorities, including the development of renewables action plans for member states; streamlining national permitting procedures; legislation to enable well-functioning energy markets and driving reform of the Emissions Trading Scheme (ETS).

EWEA says that far from

Photograph | Siemens

imposing costs on the economy, these measures will result in a net gain of €13bn to European GDP — the equivalent of the EU's funding for transport infrastructure over the next five years — and support up to



366,000 direct and indirect jobs. Dickson stresses that onshore wind is already cheaper than any other form of new generation. "Last year, wind installed more new capacity than gas and coal combined in the EU," he notes. "Europe's energy and economic transition is under way. Now politicians must decide whether to accelerate this transition or drag their heels, which would damage investment and job creation."

*Aiming High's* more optimistic scenario shows that if governments step up to the mark, Europe could reach 392GW of wind — 294GW onshore and 98GW offshore by 2030. The EU's current wind capacity of 128.8GW can already supply 10% of its power.

The report says that with current policies, it will be difficult for the EU to meet its long-term decarbonisation goals. "But with a reformed ETS, a revitalised market design and a target of at least 27% for renewables by 2030, wind energy can take top spot in Europe's electricity generation."

The International Energy Agency said last week that renewables had become the second-largest source of electricity generation after coal globally and contributed almost half of the world's new capacity in 2014.  $\square$ 

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### HAPPENING TODAY

### **Conference sessions: Top picks**

### 09.00-10.30 Opening session

### Speakers:

uesday 17 Nov

Ségolène Royal, Minister for Ecology, Sustainable Development and Energy, France
Maroš Šefčovič, Vice-President for Energy Union, European Commission
Rainer Baake, State Secretary at the Federal
Ministry for Economic Affairs and Energy, Germany
Marie-Christine Marghem, Minister of Energy, Environment and Sustainable Development, Belgium
Room: Sorbonne

Room. Sorbonne

11.30-13.00 The place of wind energy in COP 21 Room: Sorbonne

**13.30-14.15 Visionary debates** Lunch area

**14.30-16.00 Innovation for the new frontier: Offshore** Room: Montmartre

Market updates — Europe Room: Montparnasse

**Designing and operating for reliability** Room: Belleville

17.00-18.30 Rotors & blades Room: Montmartre

**Grid integration panel debate** Room: Montparnasse

Supply Chain: Glocalization Room: Belleville

17.30-18.30 Pre-opening reception debate hosted by SER WINDUSTRY FRANCE Pavilion

### NEW AT EWEA 2015 ANNUAL EVENT

### **Offshore village**

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### **Career area**

A great platform for participants to be informed about current and future job opportunities within the European wind industry. Discover the current vacancies and opportunities posted by exhibiting companies at EWEA 2015 and by other member organisations of EWEA.



### SIDE EVENTS

Networking opportunities to meet decision makers, the right people relevant to your business, and to secure deals.

### Wind Lidar. Back to Basics, and On to Real-World Applications

**14.00-16.00** (followed by a VIP reception from 16.00-17.00 at Stand P08-2)

Espace 2000 C (Level 1); all participants

Wind lidar measurements — Dr Mike Harris, Chief Lidar Scientist

**Using lidar in a measurement campaign** — Simon Feeney, Measurement Services, Renewable Energy Systems (RES)

Making the move from traditional anemometry to wind lidar in practice — Scott Mackenzie, Head of Wind Operations, Infinis Energy

**Demonstration of wind lidar** — Simon Feeney, Renewable Energy Systems (RES)

# Role of regional cooperation in delivering the vision of an Energy Union 14.00-17.10

**Espace 2000 A (Level 1); invitation only** This workshop will bring together Member State representatives involved in forming national positions on the Energy Union, as well as delegates from European transmission system operators, regulatory agencies and the wind energy industry.

Explore new offshore wind markets in Western France

### 14.30-17.00

**PEGASE (Level 2); pre-registered participants only** This workshop will introduce you to the many offshore wind opportunities in the Pays de La Loire region Be the first of your friends and colleagues to like or share first-hand content!

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### **MEET THE EXPERTS**

Media lounge, all participants

**13.15-14.00 COP21: How the business climate is changing**, Joel Meggelaars, Political Affairs Advisor — ETS, EWEA

**16.15-17.00 State aid: Where is it getting tender**, Viktoriya Kerelska, Political Affairs Advisor — Stable Frameworks, EWEA

### **VISIONARY DEBATE SERIES**

Every day from 13.30-14.15 Lunch area; all participants

EWEA and MHI Vestas Offshore Wind are proud to host a series of inspirational debates tackling some of the world's most challenging issues, moderated by Euronews anchor Chris Burns.

### PICTAWALL

Share your emotions on the big screen at EWEA 2015!

Publish a picture, tweet or video on Twitter or Instagram with #EWEA2015 or #Yestowindpower. Enjoy as it appears in real time on the big screen on the EWEA 2015 exhibition floor!

### CHILL OUT Opening reception

### From 18.30-19.30

WINDUSTRY FRANCE Pavilion, Exhibition Hall, Pavilion 1; all participants

The ideal opportunity to network with the biggest names in the industry, catch up with old friends and make new connections.

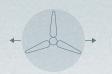
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EVENT AMBASSADOR **EWEA 2015** 17 - 20 November Booth H13

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NEW: E-103 EP2 Ø 103 m IEC IIIa



Ø 92 m IEC Ila



Ø 82 m IEC la + lla

### EWEA 2015 | RECHARGE | OFFICIAL EVENT DAILY

# G20 spends \$450bn a year propping up fossil fuels

### CHRISTOPHER HOPSON

he world's biggest economies are spending \$452bn (€420bn) a year subsidising fossil-fuel production — almost four times the amount provided to renewables — a study has found.

The report, Empty Promises, by the UK's Overseas Development Institute (ODI) think-tank and US advocacy group Oil Change International, analyses for the first time three types of production subsidy for oil, gas and coal. It identifies \$78bn a year in national subsidies delivered through direct spending and tax breaks; \$88bn in support from public finance; and \$286bn in support by majority state-owned companies.

"By providing subsidies for fossil-fuel production, the G20 countries are creating a 'lose-lose' scenario," the ODI says. "They are directing large volumes of finance into high-carbon assets that cannot be exploited without catastrophic climate effects. This diverts investment from economic low-carbon alternatives such as wind, solar and hydropower."

Russia is the worst offender, handing out \$22.81bn a year in national subsidies to fossil-fuel production in 2013 and 2014, followed by the US (\$20.49bn), the UK (\$9bn), Australia (\$5bn), Brazil (\$4.95bn), China (\$3.37bn), Germany (\$2.79bn), Canada (\$2.74bn), Argentina (\$2.19bn) and Mexico (\$1.35bn).



Of the two other European country on the list, Italy provided \$1.2bn in direct spending and tax breaks, but France spent only \$125m.

Launching the International Energy Agency's latest World Energy Outlook last week,

executive director Fatih Birol said: "Fossil-fuel subsidies are public enemy number one for the growth of renewable energy. I don't understand some countries - they have renewable-energy programmes and at the same time have subsidies for fossil fuels."



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# A change in direction for wind

EWEA's new boss is pushing for Europe's power markets to be designed around renewables, writes **Christopher Hopson** 

### CHRISTOPHER HOPSON

new chief executive often means a shift in an organisation's direction, and EWEA is no exception.

In his first interview since his appointment in September, new EWEA boss Giles Dickson tells *Recharge* that the association must broaden its outreach and improve communications with government, the wider media and like-minded organisations. The conversation, he says, needs to be focused on how wind energy takes its inevitable, central role within the European power market — in terms of grid integration and market design.

"We are the voice of the wind industry, so we are the people who communicate to everyone out there the benefits of wind," says the 48-year-old Briton. "This means we have to be talking to everybody — not just those who are already involved or who believe in wind and other renewables, but to those who are sceptical, indifferent, or simply don't know much about wind.

"We need to be ensuring that people understand wind is mainstream power generation, and that there are good reasons not to be sceptical or indifferent about something which makes economic sense."

Dickson's dual background as both an intergovernmental negotiator and a corporate communications professional made him an ideal candidate for the role. He joins EWEA from Alstom, where he was vicepresident of global public affairs, engaging with governments, international organisations and "opinion formers" in areas such as energy

and climate. He had previously been a senior UK civil servant in Brussels, leading negotiations with the EU on environmental, social and regional policy.

The Oxford University graduate is almost academic in his depth of knowledge on renewable energy, particularly the challenges facing wind power. Early on in his career at Alstom, he was involved in advocacy on smart grids, which has helped to shape his thoughts on how wind fits into a continent-wide energy system geared towards conventional power.

"It's key that people outside

the industry understand that, yes, wind is a variable source of electricity generation, but that if power markets are designed in the right way then that variability can be effectively managed."

EWEA forecasts that the European wind industry is on course to reach 320GW — 254GW of onshore and 66GW of offshore — by 2030, supplying almost a quarter of the continent's power needs. "However, these

We have to be talking to everybody... not just those who are already involved in the wind industry

> figures can only be delivered if there are effectively functioning wholesale electricity markets, fully delivered structural ETS [Emissions Trading Scheme] reforms and major investments in the physical grid infrastructure in Europe."

For more on Dickson's views on energy union and EU targets, read the full article in the latest issue of Recharge, available for free at Stand K22.

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# European developers win US offshore leases

### **RICHARD A KESSLER**

US offshore wind auction last week, winning two lease areas supporting up to 3.4GW in federal waters off New Jersey.

RES America Developments, part of the UK's Renewable Energy Systems (RES), bid \$880,715 for the 650sq km South Lease Area, while US Wind, a unit of Italian renewables developer Renexia, bid \$1,006,240 for the 742sq km North Lease Area, according to the Bureau of Ocean Energy Management (BOEM), which held the auction.

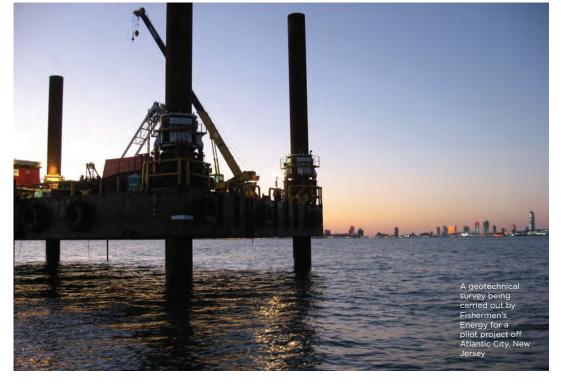
Prices paid by RES and US Wind for the acreage could ultimately be a bargain given the nearby Greater New Jersey-New York metropolitan region — a massive market badly in need of clean and competitively priced electricity.

Or it could be money poorly spent, given New Jersey's failure to fully implement the landmark Offshore Wind Economic Development Act (Oweda) that Governor Chris Christie signed into law in 2010, which has left the industry there essentially rudderless.

RES and US Wind are betting that after years of delay, the New Jersey Board of Public Utilities (BPU) will finally enact longawaited rules for the Offshore Renewable Energy Certificate (Orec) programme, as directed by Oweda.

BOEM officials say they were told by the BPU that it is moving

Wind Measurements



in this direction, although the timing is unclear.

That was not enough to reassure many developers, with only three of 13 pre-selected by the BOEM taking part in bidding.

Notably on the sidelines was Garden State Offshore Energy, a joint venture of US outfit Deepwater Wind and a unit of PSEG, the state's dominant electricity utility. So was OffshoreMW, backed by deeppocketed private investment firm Blackstone Group, which is positive about its future involvement in the sector.

The law requires that a percentage of electricity sold in the state must come from offshore

**Expert Reports** 

# US competitive auction winners

**New Jersey** US Wind RES America Developments

Maryland US Wind (two leases)

### Massachusetts

OffshoreMW RES America Developments (since sold to Dong Energy)

Rhode Island-Massachusetts Deepwater Wind

**Virginia** Dominion

**Project Engineering** 

wind — enough to support at least 1.1GW of generation from "qualified" projects. For a project to be in the running, it must bring "net benefits" to the state, although it is unclear how this is to be determined and could prove to be a heavy burden. The project owner would then obtain one Orec for each MWh, with state utilities required to purchase the certificates at a price set by the BPU.

Without the revenue mechanism, there is little incentive for utilities to enter into long-term off-take deals for relatively high-cost offshore wind energy, whatever its economic development and environmental positives. 🖬

**Construction Supervision** 

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Wind Yield Reports

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# Nobelwind moves ahead after raising €655m

### ANDREW LEE

he 165MW Nobelwind offshore wind project will go forward off Belgium after its developer raised €655m to build the plant.

Nobelwind confirmed it will use 50 MHI Vestas 3.3MW V112 turbines at the project, 45km off Ostend. Other contractors include Jan de Nul, Bladt, Prysmian and DeepOcean.

Construction will begin in spring next year, with completion scheduled for the second half of 2017. It will provide power for 186,000 homes under a long-term utility supply deal.

The Nobelwind consortium tapped a range of international backers for the finance, with the European Investment Bank anchoring the project with €250m. Other institutions include BNP Paribas Fortis, Rabobank, Sumitomo Mitsui Banking and



Mizuho Bank, with the Danish and Norwegian credit export agencies also involved. The Nobelwind consortium includes offshore wind specialist Parkwind — which also developed the Northwind and Belwind projects off Belgium — and Japanese conglomerate Sumitomo, which acquired a 39% stake in 2014.

Sumitomo's involvement marks the first time a Japanese company had bought into a European offshore wind project early in the development phase.

Sumitomo said: "By leveraging the experience and know-how gained through the project, Sumitomo aims to continue development of offshore wind farms in Europe and contribute to global sustainability."

UK outfit Mott MacDonald acted as the lenders' technical adviser during project financing and will now monitor construction in an ongoing role.

Marios Papalexandrou, Mott MacDonald's project manager, said: "Our technical, environmental and commercial review under very strict timelines played a key role in the project reaching this milestone." 🖬

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# Concrete progress expected on North Sea grid

### **CHRISTOPHER HOPSON**

he European Commission (EC) is making a major push towards an integrated North Sea offshore grid, arguing that "the time has now come" to finally make concrete project proposals under next year's Dutch presidency of the EU.

The EC vice-president for Energy Union, Maroš Šefčovič, who today makes a keynote address at EWEA 2015, told an energy infrastructure forum in Copenhagen last week: "We have been talking about this for many years... I therefore very much welcome the Dutch plans to prioritise the issue under their upcoming presidency.

Photograph | European C

of the significant benefits of a regional, co-operative approach for the development of a North Sea energy system."

"There is plenty of evidence

An official close to the North



Seas Countries Offshore Grid Initiative tells *Recharge* that good progress was made on the detail of the grid plan at a recent conference of the ten countries involved and the EC in the Belgian coastal city of Ostend. The group envisages construction beginning through bilateral and trilateral agreements, rather than "from the top down for the whole North Sea".

This year, European leaders signed up to a package of policies including taking "urgent measures" to reach a minimum interconnection target of 10% of total generation by 2020 and 15% by 2030. Šefčovič said: "Every year from now on, an investment of not less than €205bn is needed in order to meet our objectives. Almost half of it is needed for investment in electricity generation capacities and reinforcing the grids.

"The bulk of these much-needed investments will be privately financed. Reviving investment in energy and most particularly in strategic projects around Europe is one of the main priorities... the objective being to unlock at least €315bn of additional investment over the next three years."

However, he points out that this capital spend will only happen if the market conditions are right and the political landscape is predictable and reliable.

"Therefore [under Energy Union], we want to redesign the electricity market, reform the Emissions Trading Scheme and to put all other legislative proposals on the table by the end of next year." E

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