

## THIS WEEK

### CFD3 bidders shrug off legal challenge

UK officials are evaluating final bids from developers in the third Contracts for Difference allocation round. **p2**

### Outage at Hornsea 1 sparks blame game

Last month's power outage at Orsted's 1.2GW wind farm was caused by its turbines "incorrectly" shutting down as protection systems responded to a dip in the network's voltage, according to a National Grid report. **p3**

### Turbine service wrinkle stalls installation at 30MW Taranto

Renexia has pushed back offshore installation at its 30MW Taranto near-shore wind farm off the coast of Puglia in south-east Italy. **p5**

## OFFSHORE



### Partners hoist 'for sale' sign at 396MW Merkur **p7**

Mayflower pegs investment levels to US bid power price **p10**

### Ambulance chasing offshore

Costs squeeze driving culture of hair-trigger damages claims across supply chain.

Two-page Focus starts on **p11**

## NEWS

### Slo-mo grid offers pile on RESS stress in Ireland **p4**

SSE takes second bite at 100MW in Highlands **p8**

Vattenfall puts suppliers on notice over human rights **p9**

Berlin hinting at 5GW offshore target boost **p15**

# Olsen push for 480MW mega-farms in Norway

Norwegian developer Fred Olsen Renewables has taken the wraps off early-stage proposals to build a pair of up to 480MW post-subsidy mega-farms in its home territory.

Consultations are underway with local communities for the Hoyanger project in the Sognog Fjordane coastal county in western Norway.

Between 40 and 80 6MW-plus turbines with tip

heights of 200 metres and rotor diameters of 140 to 160 metres will be deployed, depending on how many landowners sign up to the project, a source said.

Fred Olsen has so far penned agreements with around 30 landowners and is holding discussions with several more.

A wind farm licence application could be submitted to Norwegian

energy regulator NVE next year if the developer secures public support from the local Hoyanger and Gaular municipalities, the source added.

Construction is earmarked for the mid-2020s.

Fred Olsen is also progressing the Lauvdalsheia development in Bygland in the southern coastal county of Aust-Agder.

Project teams are working

to a similar timeline to Hoyanger, the source said, and plans are again based on 6MW-plus hardware with 200-metre tips and up to 160-metre rotors.

The company currently has two wind farms awaiting a licence approval decisions from NVE. The 100MW Laksefjorden and 100MW Digermulen are both located in the southern county of Telemark.

## Surprise switch to Spain for Penguin wave project

Finnish wave developer Wello is to install its latest Penguin device at Spanish marine test centre Bimep after an EU-backed project off Scotland was terminated.

The around 1MW Penguin WEC2 unit will shortly be towed to Bimep's grid-connected site in Armintza in the Basque region for deployment this autumn.

The device is currently moored off Hatston on the Orkney mainland awaiting transportation to Spain.

The machine was shipped to Scotland in July from the Netaman fabrication yard in the Estonian capital Tallinn for installation at the European Marine Energy Centre's Billia Croo test site.

Wello chief executive Heikki Paakkinen was unable to state why the developer's

Clean Energy from Ocean Waves-backed project, which consisted of three Penguin machines to be installed at EMEC by 2020, has ended.

The developer was granted €17m of Horizon 2020 funding by the European Commission in 2015 for the array scheme.

The company installed a prototype device at Billia Croo in March 2017 that sank in March this year.

Paakkinen said Wello has secured funding from Basque energy agency EVE for the installation and operation of the machine at Bimep.

"This new project has the potential to set in motion more projects in and around the area with many parties already showing interest in developing the site further," he claimed.



**CUTTING THE RIBBON:** EDF Renewables has inaugurated its Contract for Difference-backed 177MW Dorenell wind farm near Huntly in Moray, north-east Scotland, featuring 59 Vestas V105-3MW turbines with tip heights of 126 metres

Photo: EDF Renewables

# CfD3 bidders shrug off legal challenge

UK officials are evaluating final bids from developers in the third Contracts for Difference allocation round.

The bidding window closed on 29 August and insiders said frenzied action was unaffected by a looming legal challenge against the auction.

Results are due on 20 September with massive implications for the supply chain including turbine companies GE Renewable Energy, MHI Vestas and Siemens Gamesa.

More than 9.4GW of offshore wind was eligible to take part in the round but bids are unlikely to have covered the full capacity. Some developers are pursuing smaller projects below their consented nameplate ratings, it is understood.

ScottishPower Renewables' latest plans for its up to 1.4GW East Anglia 3 wind farm off east England centre around a bid of 800MW that will export power via HVAC wires, according to sources.

SSE Renewables is said to

## Habitats Regulations scare for 7GW Round 4 players

The failure of Orsted's Race Bank extension proposal to win Habitats Regulations Assessment approval has sent "tremors" through the UK offshore wind sector.

Fears are growing that much of the acreage in the upcoming 7GW Round 4 leasing exercise will fail to make it through HRA screening, which examines impacts on conservation sites.

Developers have begun

re-assessing the seabed the Crown Estate will make available in R4 to better understand the potential risks, said sources.

Some sites may now be too sensitive to develop, they added. The Race Bank decision "means there are fewer areas that are considered developable and we are already operating in a really constrained spatial environment", said one source.

be is targeting a project of around 1.2GW from its up to 1.5GW Seagreen site off Scotland.

All offshore bidders could credibly secure at least some capacity in the round, market sources added.

SSE, EDF Renewables and BayWa are among developers with a collective 1GW of eligible remote islands wind bids in play.

In addition, tidal developer

Simec Atlantis Energy is seeking a CfD for its 80MW MeyGen Phase 1C array in the Pentland Firth off Scotland.

Banks Renewables, which is pursuing a judicial review over the exclusion of onshore wind from the auction, declined to comment.

An initial hearing into the developer's request is to take place sometime in October and, if accepted by a judge, a full hearing will be scheduled.

## IN BRIEF

■ UK merchant bank Close Brothers Leasing is planning to lend £600m to onshore wind, solar and energy storage projects in its home country over the coming years as it looks to double its existing loan book.

■ GE Renewable Energy is to supply 33 Cypress 5.3MW turbines with 158-metre rotors for InfraVia Capital Partners' 175MW Bjorkvattnet wind farm in Sweden.

The US manufacturer also holds a 25-year full service agreement for the project, which is due to go live next year.

■ Eolus Vind has completed construction of the 68.4MW Nylandsbergen wind farm in Sundsvall, central Sweden, for owner Aquila Capital.

■ Vestas is to supply 22 V150-4.3MW turbines to BayWa for the 95MW Lyngsasa wind farm in Sweden.

■ A majority of German citizens living near wind turbines have positive attitudes towards the technology, according to a survey for Greenpeace Energy carried out by Kantar

■ Deutsche Windtechnik has secured three-year operations and maintenance contracts for five UK wind farms operated by Innogy, covering 40 Servion turbines including MM70, MM82 and MM92 models

■ Terravent Deutschland has bought the 10MW Windhubel wind farm south of Mainz in Germany from Juwi. Three Vestas V126 turbines were commissioned in June 2019.

■ WP Group and Green Wind are teaming up to provide European wind farm operators with an expanded O&M service offering.

reNEWS.biz

## Denmark scraps tip height ceiling

Denmark will this week lift a blanket 150-metre turbine tip height restriction to allow the latest hardware to be deployed at upcoming onshore wind farms.

Business Minister Simon Kollerup has issued a statutory order changing the Planning Act to give municipal authorities the right to permit wind farms without height limits in designated development zones.

Previously central government had to approve exceptions since the restriction was introduced in 2009.

## Thin pickings in German auction

Germany awarded just 176MW of new onshore wind capacity to 21 projects in the country's latest auction out of the 500MW made available. The average price was €62 per megawatt-hour, the same as in the last tender in August.

Four winning bids totalling 64.2MW were for projects in the North Rhine-Westphalia region with six more with a combined capacity of 30.2MW in Schleswig-Holstein.

## Suzlon debt hope

Turbine manufacturer Suzlon still has options to secure a debt reduction deal after rival Vestas pulled out of talks to invest in the company, according to chief commercial officer Suman Nag. The Indian company is in talks with "multiple" potential investors, he claimed.

Suzlon has until the year-end to come up with a plan to repay creditors and bondholders, he added.



Spanish contractor GES is to build the five wind farms that comprise the 231MW Valdejalón cluster in Aragon. Construction is expected to wrap up in the second quarter of 2020. The 49MW El Cabezo, 45.6MW first phase and 38MW second stage of Portillo 2, and the 49.4MW Virgen de Rodanas 1 and 49.4MW Rodanas 2 projects are owned by Copenhagen Infrastructure Partners.

Photo: GES

## IN BRIEF

■ Marine contractor DeepOcean will split its UK operations in two this November as part of a drive to secure more offshore wind work. The Norwegian company will create a cable installation division headquartered in Darlington and separate company for seabed trenching and intervention based in Blyth.

■ The UK Planning Inspectorate has completed its examination of Vattenfall's application to build the 1800MW Norfolk Vanguard wind farm off east England. Officials have now sent a recommendation on the project to BEIS Secretary Andrea Leadsom. A final consent ruling is due by 10 December.

■ Belgium's Elia will commission its new modular offshore grid MOG1 this month when the connection to Otary's 309MW Rentel wind farm goes live. The grid company will also soon complete the tie-in to the 219MW Northwester 2 wind farm, which is scheduled to go online in the first quarter of 2020.

■ Scaldis heavy-lift vessel Gulliver has completed installation of the Bladt-supplied topside for the latter's offshore substation. Semco delivered electrical components.

■ Orsted is to merge the Borkum Riffgrund West 1&2, rated at a total of 660MW, and 240MW OWP West offshore wind farms into a single development called Borkum Riffgrund 3 and the 110MW and 132MW Gode Wind 3 and 4 projects into one facility named Gode Wind 3.

■ Grid operator Energinet and the Danish Energy Agency will host a meeting for potential bidders and investors for the upcoming 800MW Thor offshore wind zone tender on 25 November.



**POWER SOCKET: TenneT has commissioned the substation topside for Orsted's 752MW Borssele 1&2 wind farm off the Netherlands. The HSM-built unit was installed by Seaway 7 earlier this summer and will be powered up as the project's 94 Siemens Gamesa 8MW turbines come online next year.**

Photo: TenneT

■ DEME Offshore jack-up Innovation has started installing 58 monopile foundations at the 487MW Seamade wind farm in the Belgian North Sea.

■ EDF Energy is leading a team of six developers in a project to tackle turbine blade erosion by sharing data on how various leading-edge protection systems perform in different conditions and geographies.

■ German rail company Deutsche Bahn is to source 25MW of electricity from the 295MW Nordsee Ost wind farm in the German North Sea under a five-year power purchase agreement with RWE Supply and Trading and project owner Innogy.

■ DEME Offshore jack-up Apollo has installed 156 out of 309 pin piles at the 950MW Moray East wind farm off Scotland with the job expected to be completed by year-end.

# Outage at Hornsea 1 sparks blame game

Last month's power outage at Orsted's 1.2GW Hornsea 1 wind farm off east England was caused by its turbines "incorrectly" shutting down as protection systems responded to a dip in the network's voltage, according to a National Grid report.

The 7MW Siemens Gamesa hardware at two of the project's three 400MW phases de-loaded on 9 August when Hornsea's output and voltage fluctuated significantly after a circuit trip caused by a lightning strike on the Eaton Socon-Wymondley line between Cambridgeshire and Hertfordshire.

"The wind turbine settings were standard settings from the manufacturer. During the incident, the turbine controllers reacted incorrectly due to an insufficiently damped electrical resonance in the sub-synchronous frequency range," said National Grid.

Software updates, which had been agreed with Siemens Gamesa before the incident, took place on 10 August to address "performance improvement opportunities" including "improved response to grid disturbances in weak grid conditions", added an Orsted report on the issue.

Siemens Gamesa said:

"While it is accurate to say that there was an issue with Hornsea 1 wind farm, the data suggest the turbines did not trigger the outage." The manufacturer declined to elaborate.

A source pointed to a number of unresolved matters in the reports, including that a third phase of the project operated normally at around 50MW during the incident.

Orsted said it believes this was the first time a wind farm has lost power in this way. "Prior to the event, each stage of Hornsea 1 had been successfully modelled and physically tested in line with all grid code requirements.

"There had been no reason

to suggest that Hornsea 1 would have responded to a fault on the grid in the way that it evidently did," said a company report on the incident.

The configuration of Hornsea's network was also "a contributory factor as it created a weak internal environment", said National Grid. Orsted has since reconfigured the system.

The loss of 737MW of output from the in-construction wind farm off Yorkshire, which was capable of exporting up to 800MW on the day, was part of the almost simultaneous loss of 1.7GW of generation on the UK grid following the lightning strike.

## French win first for Jan De Nul

Jan De Nul has broken into the French market with the award of a contract for the transport and installation of turbines at the 480MW Saint-Nazaire wind farm.

Parc du Banc de Guerande, a joint venture between developer EDF Renewables and Canada's Enbridge, chose JDN subsidiary Sodrac International for the work.

Saint-Nazaire will feature 80 GE 6MW Haliade turbines. Installation is scheduled to start in spring 2022 and be

completed by the end of that year.

EDF is expected shortly to reach financial close at the €2bn project. Eiffage and DEME have meanwhile kicked off engineering studies for monopiles at the site.

■ France is tendering for judicial and financial consultancy services for its upcoming offshore wind tenders. Interested bidders have until 7 October to submit offers.

reNEWS.biz

## PPA PRICE REPORTS

PEXAPARK



FREE Subscription

**Clyde Training Solutions**

**RENEWABLES SAFETY TRAINING IN GLASGOW. HOME TO THE PROFESSIONALS.**

Providing mandatory training for the Renewables sector, utilising experienced instructors. Our purpose built training facility offers excellent transport links via air, rail and road with over 100 car parking spaces on site, putting you and Glasgow at the centre of renewables safety training.

**clydetrainingsolutions.com**  
 t 0141 427 9411 e training@clydetrainingsolutions.com

# Slo-mo grid offers pile on RESS stress

Irish wind developers fear they could be shut out of the first round of the country's new RESS supports auction after Eirgrid issued a grid offer to just one of 16 large-scale projects.

Galetech's 23MW Taghart wind farm in County Cavan is the only proposal to receive a formal offer among the projects initially awarded grid rights in last summer's so-called ECP1 processing round, according to a system operator update.

The 15 remaining schemes totalling 500MW have yet

to reach this stage. Industry insiders said grid offers are taking too long, causing anxiety over eligibility for pre-qualification for the first RESS auction due to open in the fourth quarter.

Both planning permission and grid access are required to take part, although the final terms and conditions have yet to be published.

Developers fear projects may require grid offers to be issued, rather than just secured, to qualify.

The grid offer milestone also gives clarity on

transmission costs and location of the connection point, which are essential elements for putting together a bid. Some companies may sit out the auction if they do not have the information required to calculate an accurate price.

One senior industry figure called on officials in the Energy Department to relax the grid requirement for the first auction in light of the slow progress.

Among the projects yet to secure grid offers are ABO Wind's 48MW Castlewaller in Tipperary, Bord na Mona's 100MW Clonreen in Offaly and the 48MW Carrowleagh-Kilbride in Mayo, which is being pursued by an independent developer.

"It is certainly disappointing to see that only a single large wind farm has got a grid offer so far under ECP1 and the next will not be until the fourth quarter this year," said Irish Wind Energy Association head of policy Noel Cunniffe.

Eirgrid said it is on schedule to make grid offers that it has agreed with stakeholders including energy regulator CRU.

The operator is aiming to clear all offers by May 2020, added a spokesman.

## SSE and Coillte resuscitate 50MW Drumnahough plan

SSE Renewables and Coillte have revived plans for the 50MW-plus Drumnahough wind farm in north-west Ireland.

The partners are in the early stages of development of a 12-turbine project at a site 13km south-west of Letterkenny in County Donegal.

A 45MW iteration of the project based on 15 3MW units was consented in 2009 but left unbuilt due to a lack of grid availability.

The utility and forestry company have appointed

a consultant to undertake environmental impact assessments.

Investor BlackRock is expected to seek back-dated planning permission from Waterford County Council for its 32MW Barranafaddock wind farm after An Bord Pleanala refused to hear a case for substitute consent.

Nine of the project's 12 GE 2.85MW turbines, operational since 2015, feature rotor diameters of 103 metres, not the 90-metre configuration granted permission.

## Brakes come off at 35MW Pinewood

A Galetech-led consortium has secured planning permission for the 35MW Pinewood wind farm on the Laois-Kilkenny border in the Irish midlands.

National planning authority An Bord Pleanala has given the go-ahead for 11 turbines with tip heights of 136.5 metres, overturning an earlier

refusal by Laois County Council.

The development group includes Belgian developer Storm Windpower and GE.

The US manufacturer's 3.2MW turbine with 103-metre rotor is "the most suitable and efficient unit for this site", according to planning filings.

## You are going to need a bigger boat



Alfa Lift design – the worlds largest custom-built foundation installation vessel arriving 2021



**IN BRIEF**

- Belgian developer Windvision is planning an up to 42MW extension at its 81MW Mons et Estinnes wind farm in the Walloon province of Hainaut. The company has applied to build seven turbines at Estinnes, in the village of Vellereille-le-Sec, and at Mons, in the villages of Harmignies and Villers-Saint-Ghislain.
- Elicio has embarked on the public consultation process and launched an environmental study into a potential seven-turbine, up to 39MW wind farm at Fontaine-Valmont in Hainaut.

reNEWS.biz

**able**  
www.ableuk.com

**ABLE SUPPORTING THE OFFSHORE WIND SECTOR**

- ABLE is establishing a positive track record and reputation in the provision of Offshore Wind Installation Bases for both turbine and foundation packages and is set to develop new facilities in the near future.
- The River Tees is an ideal central location to service the needs of East Coast developments.
- ABLE seeks to provide both the facility and the associated onshore logistics utilising its extensive range of plant and equipment - including large cranes and SPMTs.

Please call Neil Etherington on +44 (0)1642 806080 or visit [www.ableuk.com](http://www.ableuk.com)

# Turbine service wrinkle stalls installation at 30MW Taranto

Italian developer Renexia has pushed back offshore installation at its 30MW Taranto near-shore wind farm off the coast of Puglia in the south-east of the country.

Work was due to begin this month but has been postponed until December due to ongoing insolvency proceedings at turbine supplier Servion.

Project sources said the German company has already manufactured the 10 3MW machines that will feature at Taranto but the developer needs to lock in a new service agreement for the hardware before installation can begin.

Basque fabricator Haizea Wind Group has

produced five of the project's 10 monopile foundations featuring integrated transition pieces at facilities in Bilbao, northern Spain.

The first units are expected to sail from the yard at the end of November.

MPI Offshore will mobilise its jack-up Resolution in Rotterdam later this year for the job of installing foundations and turbines.

Water depths are as little as four metres in places and will call for a bespoke installation approach.

Taranto must be online by July 2020 to qualify for a €161.70 per megawatt-hour feed-in tariff and €40/MWh grid connection premium.

## IN BRIEF

■ Marine contractor DeepOcean has begun laying the export cable for EDPR's WindFloat Atlantic project 20km off the coast of Viana do Castelo in Portugal. Ocean Yield vessel Connector is carrying out the work for Portuguese grid operator REN. Contractor Bourbon Offshore will shortly tow out the first WindFloat platform and associated MHI Vestas 8.4MW turbines for installation.

■ Semco Maritime will shortly formalise a partnership with a local company to enhance provision of marine engineering services for US offshore wind farms. The company has been working with a US-based consultancy on the Vineyard Wind project off Massachusetts and other recent project bids.

"We are overlaying (power transmission) experience with knowledge about regulations, standards and permitting issues relevant to the US market," said offshore technology director Tommy Flindt.

■ The US National Offshore Wind Research and Development Consortium has selected a floating project for its first R&D technology award, which is valued at \$300,000.

The National Renewable Energy Laboratory will assess the potential of shared mooring lines to reduce the need for anchors to outer turbines and so slash costs.

■ More than 400 businesses have joined New Jersey's offshore wind supply chain registry since it launched less than six months ago.

■ Turbine manufacturers and asset owners have formed a North America committee under the auspices of the Global Wind Organisation to optimise supply chain and talent recruitment from certified training providers.

■ Virginia utility Dominion Energy is to reinvest money raised from rate overcharges in its \$300m, 12MW Coastal Virginia offshore wind pilot, which is due to be installed starting in spring 2020, along with other initiatives.

■ First power has been delivered from the 120MW Formosa 1 phase two wind farm off Taiwan. Six Siemens Gamesa 6MW turbines have started generating with a total of 10 machines installed, according to project partner Orsted. All 20 turbines

are expected to be fully operational within the next two months.

■ Tekmar Energy has been chosen by installation contractor Jan De Nul to provide cable protection systems for Taiwan Power Company's 109.2MW Changhua wind farm off the coast of the Asian island. The UK company will provide its TekLink Generation 8 technology for array and export lines.

■ Dutch foundations fabricator Sif has opened a sales office in Japan. The Tokyo base will be the first point of contact for offshore wind developers active in the region, the company said.

Singapore fabricator Sembcorp Marine has been awarded a contract by Jan De Nul to fabricate 15 jacket foundations for the 378MW Formosa 2 wind farm off Taiwan.

■ Dutch wind engineering consultancy Pondera and South Korea's Hanmi Global have been appointed joint owner's engineer by the consortium developing the 100MW Jeju Hanlim wind farm off the coast of the Asian nation.

renews.biz

seaway<sup>7</sup>

## Team up for success

Seaway Heavy Lifting (SHL) and Seaway Offshore Cables (SOC), both companies in Subsea 7's Renewables & Heavy Lifting Business Unit, provide EPCI, T&I and Integrated Services to the offshore energy sector. SHL performs the transportation and heavy lifting of offshore structures and SOC manages and performs marine cable installation, trenching activities and related IMR services.

This combination of SHL, SOC and Subsea 7's people, strength, experience, vessels and facilities provides Clients with a uniquely capable partner across a wide array of services

[www.seawayheavylifting.com](http://www.seawayheavylifting.com)  
[www.seawayoffshorecables.com](http://www.seawayoffshorecables.com)



## 21MW repowering mission for Enercon

Investment Engineering has selected 4.2MW Enercon turbines to repower the Westerse Polder wind farm in Zuid Holland, the Netherlands.

The developer said five E-126 EP3 machines with 127-metre rotors and a hub height of 135 metres will

be installed at the site near Numansdorp, replacing the existing seven 500kW NedWind NW41/50 units.

Work to remove the old hardware began in July and the modern turbines are due to be installed in the second quarter of 2020.

Preparatory efforts will

include construction of roads, foundations, crane stands and electrical infrastructure, along with a new cable route from the wind farm to the Stedin substation in Klaaswaal.

The NedWind turbines went live in 1997 and the repowered project is due to be fully commissioned by end-2020.



# Vestas gets call at 44MW Greek farm

Greek industrial conglomerate Mytilineos has opted for Vestas turbines to power its consented 44MW Makrynoros wind farm in the west of the country.

Installation of V136-3.6MW hardware at the site in Aitolokarnania will start in 2020.

The company, the parent of Protergia, one of the largest electricity retailers in Greece, won a 20-year feed-in premium contract for the project in a renewable energy auction.

Mytilineos is expanding its wind pipeline in Greece with three other projects currently under construction.

The 11MW Diakoftis and 8MW Chelona both feature Enercon E-44 0.9MW turbines and are due on line this month.

A combination of two E-44 0.9MW and four E-82 2.35MW machines will be deployed at the 11MW Pounta project, which is scheduled to go live in October 2020.

Mytilineos added 45MW to its operating wind portfolio last year with the completion of the 45MW Petalas development in western Greece, which uses Vestas V100-2.0MW turbines.

The company commissioned the 15MW Pyrgos project in the Evoia region earlier this year.

## Wind ball rolling in Balkans

Serbian utility EPS has invited expressions of interest from contractors to build its consented 66MW Kostolac wind farm 90km east of Belgrade. Companies have until 1 October to register.

The company is expecting to issue a full tender before the year-end for the supply and installation of 20 turbines with maximum hub heights of 117 metres with associated infrastructure and a second for civil engineering works.

German development bank KfW signed an €80m loan agreement for Kostolac in

2017. The wind farm will be the utility's first, according to local reports.

■ Montenegro state power utility Elektroprivreda Crne Gore (EPCG) shareholders have approved plans to build the company's first wind farm.

Construction of the 50MW Gvozd project in Niksic municipality, in a joint venture with Austria's Ivicom Holding, is expected to start next year with commissioning in 2022.

EPCG currently operates 649MW of hydropower and 225MW of coal generation.

## Providing unrivalled support services to clients for over 35 years

As a multinational renewable company, our in-house capabilities and experienced team combined with a focus on optimisation mean we can support the full lifecycle of your project and ensure your assets deliver more.

We provide asset management and O&M services for 5 GW of clients' renewable projects across the globe.

[Read more on our website](#)



Wind



Solar



Storage



T&D

### IN BRIEF

■ Nordex has secured its first deal to supply N133 4.8MW-rated turbines from the Delta4000 series for Muirhall Energy's 46MW Crossdykes wind farm in Scotland.

■ Vestas is to supply V150-4.2MW turbines totalling 60MW to the Kropuln and Storbacken wind farms in Finland for OX2 projects backed by Infracapital. Both projects will be built on a merchant basis and are due to go online in 2021.

■ Enercon is setting up a four-man

executive team to support managing director Hans-Dieter Kettwig in a range of areas including technology development and finances.

■ Nordex has commissioned a N149/4.0-4.5 turbine for VSB at Pustleben in the Thuringia region of Germany.

■ Vestas has received an order from Notus Energy Plan for two V150-5.6MW turbines for the Beesenberg 2 wind farm in Brandenburg, its first order for EnVentus units in Germany.

# Partners hoist 'for sale' sign at 396MW Merkur

Shareholders in the 396MW Merkur wind farm off Germany are looking to sell the 66-turbine North Sea project.

DEME parent company Ackermans & van Haaren listed the Belgian contractor's 12.5% stake as 'for sale' in its first-half results.

A divestment process has already started, a spokesperson told reNEWS.

Fellow stakeholders Partners Group with 50%, InfraRed Capital Partners

own 25% and Coriolis holding 12.5% are also looking to sell, sources said.

"There is no guarantee there will be a transaction but we are checking the market to see if there is any interest and a decent valuation of the asset," the Ackermans spokesperson said.

The final GE Haliade 6MW turbine was installed at the site in September 2018. The project is "of less interest to DEME as a contractor" now it is complete, he added. The

other players declined to comment on any sales.

■ Half-year DEME Group turnover hit €1.3bn, up €20m on the 2018 period, with DEME Offshore accounting for €580m of that figure.

The offshore division booked a €10.8m provisional loss in the half on O&M contracts with Servion covering turbines installed at projects off Belgium and Germany.

The company said it will take steps to recover some or all of the loss from the manufacturer, which is to be broken up and sold.

■ UK electricity regulator Ofgem has chosen Transmission Capital Partners as the preferred bidder to own and operate the high-voltage grid link for Eon's 400MW Rampion wind farm off Sussex, east England.

# EnBW and Orsted taking grid fast lane off Germany

Developers EnBW and Orsted have agreed a deal with transmission system operator TenneT to connect upcoming wind farms in the German North Sea directly to a single offshore converter platform.

The strategy will eliminate the need to construct individual offshore substations for each development.

Orsted's 900MW Borkum Riffgrund West 3 and EnBW's planned He Dreiht in Cluster 7, both north of Borkum, will tie in via 66kV cables.

The system, which also eliminates the need for 155kV connector cables, is expected to lead to "enormous cost reductions", said TenneT managing director Tim Meyerjurgens.

The 'direct to converter' system benefits all stakeholders but will require close co-ordination through all phases of the project "to manage the operational risks", said EnBW head of portfolio development for offshore

wind Holger Grubel. Orsted's wind farms are expected online in 2024 with He Dreiht following in 2025. They will connect to TenneT's DolWin5 and BorWin5 grid hubs.

■ DNV GL this week signed a four-year contract with TenneT to provide certification for the company's new HVDC grid hubs, including DolWin5.

■ UK consultancy Intertek will undertake a permitting and planning study for the North Sea Power Hub project being developed by TenneT, Energinet, Gasunie and the Port of Rotterdam.

■ Orsted has opened an offshore construction base for its 1.4GW Hornsea 2 wind farm off Yorkshire inside a former police station at Humberside Airport.

The base will house up to 30 people when offshore building work gets underway in 2020.

# Ambau opens door to Europe

Chinese turbine tower manufacturer Titan Wind Energy is shooting for a slice of the European offshore foundations business following its acquisition of troubled German fabricator Ambau.

Titan Europe president Michael Buus Neilsen said the company is already working on one potential order, which

may be sealed in November. Monopiles and transition pieces will be fabricated at Ambau's facility at Cuxhaven with 36 out of the company's former 86-strong payroll to be employed in the new business.

Ambau was put up for sale after entering administration earlier this year.



## The new ENERCON EP5 platform

**EFFICIENT. COMPACT. COST-OPTIMISED.**

As one of the leading companies in the renewable energy sector, ENERCON develops efficient WEC platforms and supporting technologies to meet and exceed the requirements of regenerative energy systems in today's highly competitive markets. ENERCON has introduced the new cost-optimised EP5 (E-136 EP5 / 4,650 kW, E-147 EP5 E2 / 5,000 kW, E-160 EP5 / 4,600 kW) platform to meet the demands of the high-volume segment.

[www.enercon.de](http://www.enercon.de)



# SSE takes second bite at 100MW in Highlands

SSE Renewables is having another go at developing the Glencassley wind farm in Sutherland in the Highlands.

The Scottish government refused the developer's original 23-turbine proposal with 126.5-metre tips on appeal in 2015 due to the perceived impact on wild land.

The Perth company has now filed scoping documents with ministers for a new 26-turbine project with tip heights of "at least 150 metres". SSE said the latest design takes into

consideration concerns raised by Edinburgh about the proximity of turbines to the Assynt Coigach National Scenic Area.

The new layout is focused on an area to the southern end of the previous site, closer to SSE's operational 26.65MW Achany and Eon's online Rosehall 24.7MW wind farms.

SSE has yet to identify a candidate turbine for Glencassley but said technology improvements have allowed it to pursue a

post-subsidy project using larger machines than the 3MW units proposed in its 2012 application.

Overall capacity at the site near Larig is expected to be around 100MW depending on final turbine choice. If consented, construction is expected to take 18 months.

The original application was refused at the same time as Scottish ministers pulled the plug on German developer WKN's plans for the 22-turbine Sallachy wind farm next door to Glencassley.

## ERG getting under skin at 82MW Sandy Knowe

Italian developer ERG has started ground investigations for its up to 81.6MW Sandy Knowe wind farm in southern Scotland with the work due to wrap up this year.

Construction of the 24-turbine post-subsidy project near Upper Nithsdale in Dumfries and Galloway is anticipated next year.

ERG is awaiting a decision from Scottish ministers on its proposals to boost capacity from the consented 48MW to 81.6MW while keeping tip heights unchanged at 125 metres.

The developer wants Holyrood to sign off on Siemens Gamesa 3.4MW candidate machines with a rotor diameter of 101 metres for the wind farm, which is being co-developed with

English company Burcote Wind. A turbine supply agreement and balance-of-plant contract for Sandy Knowe will be finalised next year, said an ERG spokeswoman.

English developer Clean Earth Energy has taken the wraps off plans to build the 20MW Back Hareshaw wind farm near Strathaven in central Scotland.

Scoping documents have been filed with South Lanarkshire Council proposing five turbines with 150-metre tips.

Clean Earth has also submitted early-stage proposals to build a pair of 150-metre turbines near Tacher in Caithness in the Scottish Highlands.

### IN BRIEF

■ A Scottish court is expected to hold a hearing early next month into Community Windpower's legal challenge over a stop order on construction at its Contract for Difference-backed 30MW Sneddon wind farm in East Ayrshire.

The Court of Session process hearing in Edinburgh is expected to lay down a timetable for a potential judicial review by the second week of October.

CWP and the landowner launched the challenge after the Scottish government upheld an enforcement notice issued by East Ayrshire Council to halt work on the project.

■ A public inquiry into the rejection of Norwegian developer Fred Olsen Renewables' up to 30MW Paul's Hill 2 wind farm in Scotland has kicked off in Moray. Hearings are due to wrap up in November with a decision by Scottish ministers expected next year.

reNEWS.biz

## Energiekontor nets 90MW Scottish consents one-two

Germany's Energiekontor has won approval to build two wind farms with a combined capacity of up to 91.2MW in Dumfries and Galloway, south-west Scotland.

The Scottish government granted consent for the up to 48MW Glenshimmeroch on appeal after the local authority failed to determine Energiekontor's July 2018 application.

The project near St Johns Town of Dalry will feature 10 turbines with tip heights of 149.9 metres.

Approval is also in hand for the up to 43.2MW Little Hartfell wind farm, which will employ nine turbines with up to 160-metre tips. The

local authority signed off on Nordex candidate hardware for the site in Corrie Common on the outskirts of Lockerbie.

The German turbine manufacturer's N133/4.8 machine is a suitable fit for both Glenshimmeroch and Little Hartfell, said sources. Construction of the post-subsidy wind farms could start next year.

Elsewhere in Dumfries and Galloway, Statkraft has been given a green light to build its Twentyshilling wind farm near Sanquhar using taller turbines.

The Norwegian developer said 4MW-class hardware is now in play at the around 38MW project.

## Eon looking to go long at Lorg

Eon wants to boost capacity at its consented Lorg wind farm in southern Scotland by a third to 43.2MW by employing taller turbines at the nine-unit site.

The German developer has applied to Dumfries and Galloway Council to increase the permitted height of six machines from 130 metres to the same 149.9-metre limit as the other three units.

The company has also applied for an increase in the maximum permitted rotor diameter of all nine turbines from 112 to 133 metres.

Eon has asked the local authority to sign off on Nordex N133/4.8 hardware at the post-subsidy project located between Sanquhar and Carsphairn.

Eon, which won consent in July for Lorg as a 32.4MW

project with 3.6MW turbines, has also proposed increasing the operational life of the wind farm from the current 25 years to up to 30 years.

Brookfield is eyeing larger turbines for its consented 22.5MW Polquhairn wind farm near Sinclairston in south-west Scotland.

The Canadian developer has filed scoping documents with East Ayrshire Council on raising tip heights at the nine-turbine project from 100 to 126.5 metres.

The larger hardware would boost capacity to around 32MW and Brookfield intends to file a formal application this year, said a spokeswoman.

The developer is also seeking to vary the permitted operational life of Polquhairn from 25 to 30 years.

**ATLANTIQUE OFFSHORE ENERGY**

**SeeOs**

Our modular, flexible, innovative and certified Electrical Offshore Substation

smart & committed



# 'Unique opportunity for renewables to clean up minerals sourcing'

Renewables players have yet to take substantive action to tackle human rights issues in the mineral supply chain, according to an expert.

Eniko Horvath, head researcher at the UK-based campaign group Business and Human Rights Resource Centre, said investors should

be asking more questions. The organisation has launched a tracker containing allegations of human rights abuses recorded between 2010 and May 2019 to help energy companies and investors improve decision-making on sourcing of minerals.

The centre published a

report last week stating that 86% of companies mining for minerals used in the renewables sector have been linked to alleged human rights abuses since 2010.

The study looked at copper, manganese, nickel and zinc mining and found copper had the most severe human

rights problems. A single 3MW wind turbine contains approximately 4.7 tonnes of the metal and new research from Wood Mackenzie, also published last week, predicts 5.5 million tonnes will be needed for onshore and offshore wind by 2028.

"We must not take for

granted that our urgently-needed transition to a low carbon economy must be fair as well as fast," said Horvath.

The renewables sector has a unique opportunity to improve practice in mineral supply chains by introducing rigorous human rights due diligence, she added.

## Vattenfall's suppliers on notice over human rights

Vattenfall has taken action in its supply chain following internal research that identified a severe risk of human rights issues, writes Catherine Early.

The utility has discontinued contracts with some suppliers to its renewables operations in the past year following audits on working conditions and conversations with local communities in production areas.

"Anything that involves mining is of course a high-risk area and if you then add that the mining is taking place in a high-risk country, the risks increase even more," said vice president of corporate sustainability Annika Ramskold (pictured).

The rejected suppliers are "very big on the global market", she added. Months after the contracts were cancelled the companies returned and said they would change their practices.

"You have to be firm, not only in introducing the requirements but then acting according to them," she said.

"We have managed to get a number of the suppliers to change the way they set up contracts with their workers, the way they treat them and the way they house them,"

according to Ramskold.

The company believes it will ultimately benefit from the fair treatment of workers by its suppliers. "Those workers will produce high-quality goods with fewer accidents, interruptions, and more innovation," she added.

Vattenfall recently launched its first human rights policy in an effort to place greater emphasis on the issue for staff and suppliers.

The initiative will cover the Swedish utility's operations and that of its supply chain, and will target discrimination as well as child, forced and trafficked labour.

The policy aims to provide safe and healthy working conditions, fair wages and support community engagement.

"We do not have that many policies within the company so to raise this to a policy level is a very clear sign that this matters enormously," said Ramskold.

The company has mapped its human rights risks and identified its renewables supply chain as the most severe, she said.

■ Orsted, Element Power and ITM Power have won UK government funding via the BEIS Hydrogen Supply Competition for the Gigastack feasibility study to investigate the potential delivery of green low-cost hydrogen.



Lifting Offshore Wind

Blue Tern

Suited for the deepest waters and most challenging offshore wind projects.

Fred. Olsen Windcarrier  
windcarrier.com

## IN BRIEF

■ SMRU Consulting will start monitoring the presence of North Atlantic right whales within construction mitigation zones for monopile foundations next month. The three-year US Department of Energy-funded study will inform the development of technologies to mitigate impacts on wildlife, including cetaceans, birds and bats.

■ The New York State Energy Research and Development Authority is hosting a series of open house events this month to discuss the state's offshore awards. NYSERDA staff will present details of Equinor's 816MW Empire Wind and Bay State Wind's 880MW Sunrise projects.

■ Atlas Professionals will open a US office in Boston, Massachusetts on 1 October to provide staff to the renewables industry.

■ Engineering consultancy WSP has entered into a definitive merger agreement ahead of its proposed acquisition of New York-based environmental specialist Ecology and Environment Inc.

renews.biz

# Mayflower pegs investment levels to US bid power price

US developer Mayflower Wind has given Massachusetts electric utilities a range of local supply chain investment options to consider as part of its bid into the state's recent offshore wind solicitation.

In addition to a required bid for a 408MW project, the Shell-EDPR joint venture has provided three outlines for a possible 804MW iteration.

"By providing proposals for the 804MW project with three levels of investment, there is real transparency in the pricing of offshore wind," said Mayflower Wind president John Hartnett.

"The utilities get to select the one most suited to the state's priorities."

A 'low price energy' proposal includes a baseline of investment for research, workforce training and economic development, along with the lowest price bid compared with those

published to date in New Jersey and Rhode Island, and Vineyard Wind's offer in an earlier Massachusetts solicitation.

An 'infrastructure and innovation' proposal adds strategic near-term investments in ports, start-ups and local jobs.

A 'Massachusetts manufacturing' proposal builds up further with an investment alongside a local partner in a tower fabrication facility in the state, which would serve domestic and international markets.

The latter two options "reflect an increase on the (power) price but it is not a significant increase", said Hartnett. The tower plant would come online in late 2021 or early 2022 to supply Mayflower's project.

The 'manufacturing' option also adds investment during 2020-23 as well as lease

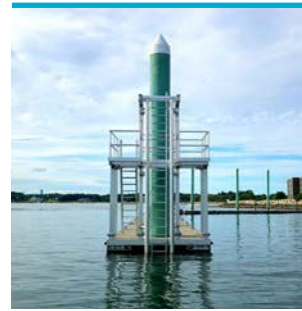
payments over the next 12 years to support tower fabrication.

Hartnett said the New Bedford terminal is "a very key port". "We have an option with Massachusetts Clean Energy Center for using that port for construction."

The developer's bid proposals cover long-term investments in the port for operations and maintenance facilities upgrades in addition to short-term commitments.

In the event of a contract award, Mayflower will work with DEME Group to train Massachusetts staff on offshore wind farms in Europe.

Hartnett said "we plan to work with DEME and local colleges and other labour groups to further develop the specifics of the training programme" with a view to launching programmes in 2020.



**HIGH POINT:** Massachusetts Maritime Academy on Cape Cod has completed a tower for training workers to safely board and return from offshore turbines (above). The academy is also in the process of modifying a Carolina Skiff boat so it can be operated as a crew transfer vessel. The unit should be ready in the next few weeks. RelyOn Nutec, one of the largest providers of Global Wind Organisation courses, has been hired to set the MMA's offshore wind curriculum. Photo: Anna Woring/MMA



**MARINE POWER SYSTEMS**  
Swansea, south Wales

# THIS IS RENEWABLE.

Wave power is the next big thing in renewable energy. Swansea-based Marine Power Systems and its revolutionary WaveSub are piloting a steady course into a multi-billion pound market.

THIS IS BUSINESS.  
THIS IS WALES.



Find out what Wales can do for your business:  
+44 (0) 3000 6 03000 | [tradeandinvest.wales](http://tradeandinvest.wales)

# Ambulance chasing offshore

Costs squeeze driving culture of hair-trigger damages claims across supply chain, writes Patrick Browne

**A**ggressive efforts to drive down offshore wind costs are leading to the emergence of a compensation culture that is forcing companies to rethink their involvement in the sector.

The number of claims being made by project owners against suppliers and by contractors against sub-contractors has increased substantially in recent years, according to market sources, hurting relationships throughout the industry.

Damages are commonly being sought over alleged late delivery of work scopes, defective components, poor workmanship and installation issues such as failed target burial depth for cables, it is understood.

Engineering, procurement, construction and installation company Boskalis last month said it is allocating more than €100m to cover contract provisions this year.

Chief executive Peter Berdowski added there has recently been a “drastically



**HEADS YOU LOSE:** Danish contractor MT Højgaard found itself on the wrong end of a damages case over the 174MW Robin Rigg wind farm off Scotland despite completing work to industry standards of the time

Photo: Eon

changed attitude” among clients “under pressure from the disappearance of subsidies” that “has resulted in a considerably more tense situation” and “lengthy claim procedures”.

Few claims cases make it into the limelight as most are either settled or resolved behind closed doors in arbitration.

However, senior figures in the legal, insurance and

contracting communities agreed with Berdowski’s assessment of the situation.

“The pressure caused by zero or minimal subsidies has resulted in tight margins and parties on all sides are looking to reduce cost. This has led to more formal dispute resolution

processes arising,” said Louise Shiels (*pictured left*), a partner at Scottish law firm Brodies LLP.

Low prices have meant contractors are unable to invest the capital required to deliver projects to standard, according to Energi Coast chairman James Ritchie.

Harsher terms and conditions are being written into contracts



12

renews.biz

## Sector-specific standardised contracts ‘could slow claims’

**S**tandardised contracts could reduce the number of claims and prevent smaller supply chain companies falling foul of calls for damages, according to industry figures.

Offshore wind companies currently use off-the-peg contracts drawn up by international trade bodies for use in the wider construction industry.

The lack of a sector-specific set of contracts is notable given the greater risk level and unpredictable nature of offshore wind projects, said Louise Shiels of Brodies LLP.

The way standard construction contracts are currently modified and altered to suit the sector, with ad-hoc clauses added or amended during negotiations, ultimately makes responsibility for

issues difficult to allocate. “A lack of clarity in the wording of these modified standard contracts has historically made arbitrating dispute cases difficult,” said Rebecca Williams of Watson Farley and Williams.

The International Federation of Consulting Engineers is currently working on a standardised contract specifically for the offshore wind sector, she added.

Energi Coast’s James Richie called on the supply chain to pull together to help inform the development of the terms for any specific contract for the sector.

“The industry needs to decide what it is reasonably expecting from each member of the supply chain to proportion risk and responsibility fairly and equitably,” he said. ■




DEME Offshore is a leading provider of services and solutions for the offshore wind industry. We provide foundation, cable, turbine and substation installation, as well as maintenance and repair solutions. We design and deliver these solutions under Transport and Installation (T&I), Engineering, Procurement, Construction and Installation (EPCI) or Balance of Plant (BOP) contracts. We have the skills, technology and a high-tech fleet of vessels to perform in the most challenging marine environments. Always working closely with our customers, we understand what it takes to deliver a project cost-effectively, safely and on time.

[www.deme-group.com](http://www.deme-group.com)

11 as developers and sub-contractors try to pass risk down the supply chain, added Ritchie, who is also chief executive of cable protection company Tekmar.

"The mood on projects has become more adversarial and less co-operative, and claims have become endemic in the industry," he said.

Liquidated damages, a clause in contracts to ensure that work is done by a certain time, are being enforced more frequently to recover losses during construction, said market sources, with companies typically fined at least 0.1% of total contract value for each day late.

In some cases contractors are penalised for delays even though developers have been late handing over key data needed to complete work scopes, claimed sources.

"If you are not careful companies will even try to push weather risk onto you these days," one said.

"If you are working at a profit margin of below 10% and have vessel costs of

€100,000 a day, 10 days late can be the difference between finishing a project in the black or red."

The legal precedent set in the case of MT Hojgaard versus Eon has placed a big



burden on contractors, said Rebecca Williams (left), a partner at law firm

Watson Farley & Williams.

The Danish company was found liable by the UK Supreme Court in 2017 for remedial costs of €26.25m for faulty grouting connections on foundations at the 174MW Robin Rigg wind farm off Scotland, even though the work was completed according to industry standards at the time.

Williams also pointed out large EPCI bundles are a hotbed for claims. Turnkey players typically share risk through so-called back-to-back contracts, which means that when claims are made sub-contractors are forced to shoulder some of the costs, she said. This process is

## Crossed wires on the grid

The UK's offshore transmission operator regime is ripe for disputes due to the misalignment of commercial interests between developers and OFTOs, said legal experts.

Developers are forced to sell assets for a fixed price at set dates that often do not allow time for seabed surveys and remedial works on export cables and substations to be fully completed, which they then have to pay for anyway.

"This results in developers entering into highly complex indemnification regimes with OFTOs whereby developers

agree to compensate transmission owners for future repair costs," said Rebecca Williams of Watson Farley and Williams.

OFTOs have good leverage to secure highly favourable agreements as developers require cables and substations to be online in order to earn revenue, she added. OFTOs are paid a fixed rate by Ofgem for operating transmission assets.

"Developers are hamstrung. It is a fundamental problem of the regulatory regime in the UK and one that is difficult to navigate." ■

negatively affecting smaller companies that cannot bear losses.

"As soon as anybody makes a claim everybody gets hit. There are companies that have either left the sector or gone bankrupt because of the changing nature of the industry," said Ritchie.

Contractors are also struggling to invest the

resources required to cover legal and insurance costs.

Insurance in the form of performance bonds starts at around 20% of the value of a contract and securing payouts in the event of a claim is difficult. "If you burn your insurers then life is going to become really expensive for you," said a source.

Williams said there is a 50-50

split in litigation currently between legacy issues at operational wind farm and disputes occurring during construction.

The most common claims concern faults in cables



followed by foundations, according to Robert Bates (left), an underwriter at insurance

outfit GCube. "Cables and foundations are inherently challenging to install but there are a number of common themes across claims including contractor error, inadequate training, and a lack of communication between suppliers and contractors," he said.

Bates warned that should the volume of claims continue to increase there may not be enough insurers willing to cover companies.

"Persistent claims could lead to premiums increasing, restrictions being placed on coverage, and even some insurers pulling out of the offshore wind sector if it is not profitable," he said. ■

NANTES SAINT-NAZAIRE PORT

BOOST YOUR DEVELOPMENT

### AT THE HEART OF A PORT FACILITY DEDICATED TO ENVIRONMENTAL TECHNOLOGIES

Are you driving an **innovative and sustainable project**?

**Connected to the world**, the Le Carnet port facility offers a new solution, fitting your development needs, **at the heart of a dynamic industrial area**. Take the opportunity right now to discover your future business location in a **110-hectare park** with its own **fluvo-maritime accesses**.

Document available for downloading on [www.nantes.port.fr](http://www.nantes.port.fr)

Contact us before **29th November 2019** on (+33) (0)240 442 125 or via e-mail at [lecarnet@nantes.port.fr](mailto:lecarnet@nantes.port.fr)

Photos Franck Badoire (unless otherwise indicated).



# Grid constraint alarm bells ringing in Ireland

The Irish wind industry is calling for grid operators to be given more resources after system operator Eirgrid revealed new figures showing turbine constraints running at a record rate.

First-half 'dispatch down', the curtailment of output from wind farms, was 6.7% in the Republic, up from 5% for full-year 2018 and 3.7% in 2017.

The figures are the highest

recorded, according to Eirgrid data, since 2011.

Dispatch down was worst in the north-west at 9.5% in the latest half with the south-west at 8.9%. The south-east was least affected on 4.2%.

In March and April, dispatch down hit 9.2% and 9%, respectively, among the highest monthly totals ever seen.

Dispatch down occurs when the system operators

reduce the volume of wind generation on the system to ensure grid stability.

Irish Wind Energy Association chief executive David Connolly said the figures are "disappointing". "Every increase means revenue lost by wind farm operators and more carbon dioxide emissions on the system."

Eirgrid and distribution system operator ESB Networks are "doing all they can to improve the situation" but "must get the resources they need", he added. "We hope the (energy regulator) CRU will ensure this when approving its budget for the next five years early in 2020."

He added: "In the coming years we are going to need to see the transmission system strengthened and expanded so we can maximise the amount of power our wind farms can produce and get it to where it is needed."

## RES maps out 80MW in North

RES is the early stages of developing two new subsidy-free wind farms in Northern Ireland.

Environmental surveys are underway to inform final layout and design of the 14-turbine, 59MW Ballygilbert project 3km north-west of Carncastle in Antrim.

A public exhibition will be held this month with a planning application to the

Department for Infrastructure on the cards for later this year, said UK and Ireland head of wind projects Fraser Merry.

The developer has also filed to build the 22MW Magheramore wind farm 4km south of Dungiven in Derry, which also comprises an energy storage element.

Consent for six turbines with 150-metre tip heights is being sought.

### IN BRIEF

■ Irish consultancy Brightwind has created an open-source library of resource assessment data to support project final investment decisions. The offering will simplify energy yield predictions, which are currently done separately by companies using their own in-house data tools, said Brightwind.

■ Renewables provided 44% of Northern Ireland's electricity consumption in the 12 months to June 2019, an all-time record for the six counties. Onshore wind supplied 85% of the total.

■ Vestas is to sell 80% of its shares in subsidiaries owning the Pantelimon, Pegasus and Apollo wind farms in Romania to an undisclosed buyer for €136m. Closure of the deal is expected within eight to 10 weeks.

■ Enel Green Power has started building the 39MW Campoliva 2 and 35MW Primoral wind farms in the Zaragoza region of Spain. Both projects, featuring 15 2.6MW and 10 3.4MW turbines, respectively, are due online this year.

renews.biz

## Tender call for RESS overseers

Irish energy regulator CRU is to appoint two independent observers to oversee the first auction under new support scheme RESS.

Procurement has been launched for a market auditor and auction monitor, which will serve one-year terms with options to extend by up to two years.

The auction monitor will oversee how transmission system operator Eirgrid, which will run the rounds, carries out its duties, including the bidder qualification process.

A final report must be filed within two days of provisional auction results, outlining any non-compliance or irregularities with RESS rules.

The auditor will provide "independent assurance to the market" on the operation of the auction and must report to the CRU and the Irish Energy Department at "reasonable intervals".

Qualification for the first auction is due to open this year but the round is not expected to take place until 2020.



**FEHILY  
TIMONEY**  
— 30 YEARS —

Energy & Planning  
Infrastructure  
Waste & Resource Management  
Urban Development  
Environment  
Geotechnical  
Digital  
Industrial

**Consultants in Engineering  
& Environmental Sciences**

— Cork | Dublin | Carlow —

[www.fehilytimoney.ie](http://www.fehilytimoney.ie)

**Arklow Bank**  
Offshore Wind Since 2004  
EIS and Planning Consents  
Managed by Fehily Timoney

# 100MW permitting pipeline at Epuron

Epuron is lining up to file construction applications for 100MW of French wind farms before the year-end, kicking off this month with the three-turbine Porspoder in the western department of Finistere.

The subsidiary of Italian developer ERG is hoping to obtain approval in late 2020 or early 2021 for the up to 12MW project, which will employ Vestas or Nordex turbines with tip heights of 140 metres. Commissioning is planned for 2024 at the latest. Paperwork will be filed

in late October for the 18MW Saint-Loup-sur-Cher wind farm in the central department of Loir-et-Cher. Six up to 165-metre-tall machines could go live in 2021 or 2022.

Further applications will follow, including for the 13.5MW Saint-Vincent-La-Chatre site in the eastern department of Deux-Sevres, which will employ three N149/4500 turbines and is scheduled to go live by 2024.

The 21MW La Perche wind farm in the central department of Cher is

planned around seven 3MW turbines with a maximum tip height of 165 metres with commissioning set for 2023.

The 18MW Boules wind farm in the western department of Vendee will employ six turbines and go live in 2024.

Epuron is aiming to repower the 12MW SBEA project in the western department of Loire-Atlantique. The site, owned by UK fund Impax, has been in operation for 10 years.

Five N80/2500 turbines will be replaced by 180-metre-tall turbines to lift overall capacity to up to 18MW. Commissioning is planned for 2024.

The company also has a further 75MW-plus in its pipeline of mature projects and is waiting for consents to land for two wind farms.

The 45MW Terre et Vents de Ravieres in the north-western department of Yonne will use 10 Vestas or Nordex



**GROWTH SPURT: Epuron commissioned the 17.6MW Torfou wind farm last December**

Photo: Epuron/ERG

turbines with tips of up to 200 metres. Permitting could be completed early next year with commissioning in 2022.

The 15MW La Boeme farm in the western Charente department is planned to feature five 150-metre-tall turbines with commissioning scheduled for 2023.

Epuron has an additional 500MW of projects in earlier stages of development.

## Consenting finish line in sight for French duo

Developers Elements and Elicio are looking to wrap up permitting this year for a pair of French wind farms.

Public consultations will finish on 27 September for Montpellier-based Elements' up to 22MW Passa project in the southern department of Pyrenees-Orientales.

Six 2.4MW to 3.6MW turbines with a maximum tip height of 152 metres are scheduled to go online next year.

Belgium's Elicio is on a slightly slower schedule at its 12MW Hauts de Saints Aubins wind farm in the northern department of Somme with public consultations to close in early October.

The project, which will feature four 3MW turbines with a tip height of up to 150 metres, will be commissioned in 2021 at the earliest.

Elicio recently raised more than €50,000 in a crowdfunding campaign to part-finance the development.



## 2019

### BEIJING RENEWABLE ENERGY INVESTMENT SUMMIT

### 北京可再生能源投资高峰论坛

THE KEY EVENT TO BE MARKED FOR TOP INVESTORS AND RENEWABLE ENERGY PLAYERS WORLDWIDE

This inaugural summit will provide an important platform to discuss the investment trends that are shaping the energy transition across the world

## 21 OCTOBER BEIJING, CHINA

KEY TOPICS

-  Power system 2.0: Renewable Energy as the leading generation source
-  Financing the energy transition
-  Globalising the energy transition

LEARN MORE ABOUT THIS SUMMIT AT [WWW.GWEC.NET](http://WWW.GWEC.NET)

ORGANISERS





## 180MW sale ends Polish legal battle

Polish energy group Tauron has almost doubled its wind portfolio following the acquisition of five operational farms in the north of the country from in.ventus.

The €137m deal brings to an end a long-running legal dispute between the two companies.

The 32MW Sniatowo, 34MW Mogilno, 32MW Inowroclaw, 34MW Dobrzyn and 48MW Goldap projects all employ Vestas V90 turbines and were commissioned by in.ventus between 2009 and 2011.

Tauron said the agreement ends actions brought by in.ventus and its financial backer, Hamburg Commercial Bank, against Tauron subsidiaries following termination of long-term contracts to purchase green certificates from the wind farms.

## GLOBAL NEWS IN BRIEF

■ Enel Green Power has secured rights to develop an unnamed 190MW wind farm in India's latest auction with operations expected to start in 2021.

■ Tilt Renewables has taken a final investment decision to build the 133MW Waipipi wind farm in New Zealand featuring 31 Siemens Gamesa 4.3MW turbines.

■ Apex Clean Energy is to sell a 200MW portion of the 525MW Aviator Wind project in Texas to Facebook when commercial operations start next year.

■ GES of Spain has won a contract to install 36 Envision 2.5MW turbines at an unnamed 90MW wind farm in the Yucatan region of Mexico.

■ Orsted's US onshore wind arm Lincoln Clean Energy will start building the 230MW Plum Creek project in Nebraska after receiving

a 'final notice to proceed' for operations in 2020.

■ The US Department of Energy has awarded funding to renewable consultancy Natural Power to develop and test a smart curtailment system to protect bats while minimising power loss at wind farms.

■ Invenery has acquired the 231MW Changing Winds project in Texas from Tri Global Energy and local community owners.

■ Pattern Development has completed construction and started operations at the 220MW Grady wind farm in New Mexico, which features 84 Siemens Gamesa 2.625MW turbines.

■ US wind farm operator Longroad Energy has secured a long-term asset management contract from DIF Capital Partners covering the 183MW IWP project in Idaho.

GERMAN RENEWABLES CRISIS SUMMIT

# Berlin hinting at 5GW offshore target boost

The German offshore wind industry has called on Berlin to introduce an expanded sector target for 2030 after Energy Minister Peter Altmaier signalled his backing for up to 5GW of additional capacity.

Altmaier indicated he is mulling a 20GW goal, up from the existing 15GW, after a renewables crisis summit in the capital last week.

Developers said they are increasingly confident officials will lift the cap and the wider

industry has welcomed the minister's signal.

Matthias Zelinger, managing director of trade group VDMA Power Systems, described the meeting as a "constructive start" although "a concrete figure remains unclear".

"We now need a catalogue of measures for climate protection and for strengthening the industry."

Executives are expecting the government to issue a

firm plan ahead of a high-level government 'Climate Cabinet' meeting scheduled for 20 September.

The German Offshore Wind Energy Foundation said: "The minister said he can imagine increasing the 15GW target to 20GW for 2030 but it is not yet law. We need to see real action."

Offshore wind group BWO welcomed the minister's support but said it wants a stakeholder meeting to be held without delay.

"Through such a meeting we are optimistic that a consensus can be reached to increase Germany's offshore wind expansion target from 15GW to 20GW in 2030," said a spokesman.

"We hope that the new climate legislation including the offshore wind increase will come into effect late this year or at the beginning of 2020 at the latest; the earlier, the better."

Public opposition to new high voltage power lines was reportedly one potential sticking point flagged by Altmaier.

"We are speaking about an increase of the offshore

## Permitting delays top target for new onshore action plan

The German government also pledged to address the crisis in the onshore wind sector following the summit.

Just 300MW went online in the first half of this year with installations unlikely to top 1.5GW for the full 12 months compared with annual build rates of 4.3GW-plus in 2015-17.

Energy Minister Peter Altmaier said an action plan will be put together shortly focused on accelerated permitting, according to wind association BWE. More than 11GW of projects are currently stuck in planning

with opposition from citizen groups, strict environmental regulations and restrictive state policies delaying consents by up to four years.

Berlin is mulling a number of "quick fixes", added BWE, including a relaxation of exclusion zones around radar stations from 15km to between 10km and 5km. The plan will also put pressure on states to implement clear renewables targets and identify areas for wind development.

The document could be launched on 20 September at the 'Climate Cabinet' meeting.



**LISTENING MODE:** Federal Energy Minister Peter Altmaier (left) with Lower Saxony Minister of Economic Affairs Olaf Lies after the crisis talks with state government officials and wind sector representatives last week Photo: BMWi/Susanne Eriksson

target in the second half of the 2020s. We believe there is enough time to resolve any issues," said BWO.

in the German North and Baltic seas between 2019 and 2022.

■ Fugro is to carry out geotechnical investigations for Federal Maritime and Hydrographic Agency BSH at potential offshore wind sites

■ Northland Power has completed installing 31 MHI Vestas turbines on monopile foundations at the 269MW Deutsche Bucht wind farm in the German North Sea.

Conference • Exhibition • Social & Side Events

The most important event in the ocean energy calendar

# REGISTER NOW

30 SEPTEMBER 1 OCTOBER

# 2019 DUBLIN, IRELAND

2019 OCEAN ENERGY EUROPE



Supported by seaI SUSTAINABLE ENERGY AUTHORITY OF IRELAND



<p>renewableUK SUBSEA UK 29-30 October   Aberdeen</p> <h2 style="color: white;">2019 CABLES</h2> <p style="background-color: #FFD700; border-radius: 50%; padding: 5px; display: inline-block;">Book Now!</p>	<p>renewableUK scottishrenewables 31 October   Aberdeen</p> <h2 style="color: white;">2019 FLOATING OFFSHORE WIND UK</h2> <p style="background-color: #FFD700; border-radius: 50%; padding: 5px; display: inline-block;">Book Now!</p>
<p>Co-organised by  </p> <p>Event partners    </p>	<p>Co-organised by  </p> <p>Event partners    </p>
<p><b>Exhibition bookings open!</b>  <a href="https://Events.RenewableUK.com/Cables19">Events.RenewableUK.com/Cables19</a>                  #Cables19</p> <p style="font-size: small;">Attend.Exhibit.Sponsor.Present</p>	<p><b>Programme &amp; Registration Live</b>  <a href="https://Events.RenewableUK.com/FOW19">Events.RenewableUK.com/FOW19</a>                  #FOW19</p> <p style="font-size: small;">Attend.Exhibit.Sponsor.Present</p>

# Scottish Green New Deal to take fight to climate change

Scotland has unveiled a low carbon blueprint in its annual Programme for Government aimed at accelerating the country's journey towards net zero emissions by 2045.

Climate change action took centre stage in First Minister Nicola Sturgeon's suite of policies that Holyrood will introduce between now and the Scottish elections in 2021.

Key measures include a Green New Deal aimed at

kick-starting private sector investment across different sectors of the economy, including renewables.

The initiative features a £3bn Green Investment Portfolio to help bring to market investment opportunities for renewables and other projects over the next three years.

Officials will issue the first call for projects in November. Holyrood wants to back

schemes with a minimum value of £5m, it is understood. "These will be reasonably chunky. The government wants to come up with projects that foreign investors can buy into," said a source.

Other initiatives include a Green Growth Accelerator, which will allow local authorities to borrow to invest in projects that reduce emissions. The measures will be supported from next year

by a new Scottish National Investment Bank, which will lay out a minimum of £2bn over 10 years.

The bank will have an initial sum of £130m at its disposal in 2020 followed by a further £340m the following year.

The Scottish government has also committed to publish an updated assessment of the renewable and low carbon generation capacity required to meet the net zero target in next year's Energy Statement.

Scottish Renewables senior policy manager Fabrice Leveque said clarity on the capacity needed by 2045 could inform new planning frameworks, "which will shape onshore and offshore wind's contribution over the coming decades".

The frameworks include a draft Sectoral Marine Plan for Offshore Wind to be released in the autumn with a final version due in 2020.

## UK National Infrastructure Strategy focus on net zero

Whitehall officials will publish a National Infrastructure Strategy this autumn outlining further details on how the UK government intends to make progress towards its 2050 net zero emissions target.

The Treasury will set out key priorities in a first-of-a-kind document that will respond to last year's recommendations by the National Infrastructure Commission, it said.

The strategy is expected to call for renewable energy to take an increasing role in decarbonising other sectors including transport, said sources.

"(The strategy) has to respond to the fact we are now a net zero by 2050 country... with low carbon transport infrastructure — electric vehicles, increasing rail electrification and so on — powered by low-cost offshore and onshore wind," said one.

## £4bn black hole in Ofgem network charges plan

Ofgem proposals on overhauling network charges could raise UK system costs by up to £4bn out to 2040.

Research by consultancies Frontier Economics and LCP found Ofgem's Targeted Charging Review is less cost-beneficial than assumed in the regulator's 'minded-to' consultation and draft impact assessment issued last November. The plans, due to

come into effect from 2021, will impose fixed grid use charges and remove so-called embedded benefits and other payments to transmission and distribution network-connected generators.

The analysis, commissioned by Ofgem, shows system costs will rise by between £1bn to £4bn by 2040 due to a slowdown in post-subsidy onshore wind and solar

capacity. Ofgem's minded-to consultation assumed there would be a system cost impact of between minus £20m and plus £330m with no associated hit to onshore wind and solar deployment.

RenewableUK director of future electricity systems Barnaby Wharton said: "It now falls to Ofgem to explain how these proposals can be compatible with net zero."

**WHAT'S BEYOND THE HORIZON?**

Find out in **COPENHAGEN** at **Offshore 2019**, the world's leading offshore wind event.

**26-28 November 2019**  
Bella Center

**Book your stand**

**Wind EUROPE OFFSHORE 2019**  
26-28 NOVEMBER COPENHAGEN

EVENT AMBASSADORS:  
**M/V**  
MHI VESTAS OFFSHORE WIND

**Orsted**



**Van Oord**  
Marine Ingenuity

IN COLLABORATION WITH:  
**wind denmark**

To become an exhibitor or sponsor please contact: [sales@windeurope.org](mailto:sales@windeurope.org) or find out more at: [windeurope.org/offshore2019](http://windeurope.org/offshore2019)





Publisher **Renews Limited**  
**St George's House, St George's Street,**  
**Winchester, Hampshire,**  
**SO23 8BG, UK.**

ISSN 1478-307X

© All articles appearing in reNEWS are protected by copyright. Any unauthorised reproduction is strictly prohibited.

**Editorial**

Editor-in-chief **Dan Rigden**  
 +44 (0)1962 890 449 ■ dan@reNEWS.biz

Editor **Stephen Dunne**  
 +353 87 760 9207 ■ stephen@reNEWS.biz

Production editor **Richard Crockett**  
 ■ production@reNEWS.biz

Senior correspondent **Tim Probert**  
 +44 (0)1892 534 478 ■ tim@reNEWS.biz

Senior news correspondent **Patrick Browne**  
 +44 (0)7562 465668 ■ patrick@reNEWS.biz

European offshore wind correspondent  
**Girija Shettar**  
 +44 (0)7765 081076 ■ girija@reNEWS.biz

France **Lisa Louis**  
 +33 676 930 784 ■ lisa@reNEWS.biz

Netherlands, Belgium **Sian Crampsie**  
 +44 (0)7711 007277 ■ siancrampsie@btinternet.com

US **Sara Verbruggen**  
 +44 (0)7981 256908 ■ sara@vbfreelance.com

Asia **Andrew Silver**  
 +886 902 452 947 ■ aesilver360@gmail.com

Web editor **Robin Lancaster**  
 +44 (0)7464 930 784 ■ robin@reNEWS.biz

**Sales**

Sales manager **Tom Allerston**  
 +44 (0)1962 849 302 ■ tom@reNEWS.biz

Sales and marketing executive  
**Stephanie Partridge**  
 +44 (0)1962 890 468 ■ stephanie@renews.biz

Senior sales executive **Cassi Davison**  
 +44 (0)1962 790 460 ■ cassi@reNEWS.biz

Sales executive **Guy Dano**  
 +44 (0)1962 890 440 ■ guy@reNEWS.biz

Coming next in our series  
 of in-depth market reports:

**GLOBAL  
 OFFSHORE**

To advertise contact:  
 sales@reNEWS.biz

**Subscriptions**

12-month subscription to reNEWS  
 costs £460/€535 + VAT.

Multiple User Subscription (10 users)  
 costs £1575/€1795 + VAT.

Corporate Subscription (unlimited)  
 costs £2725/€3095 + VAT.

reNEWS.biz

# European capitals must come clean onshore

Governments across Europe must wake up to the warning lights flashing over onshore wind. New policies are urgently needed to spur growth despite predictions the sector can deliver up to 74GW of capacity by 2030 to meet ambitious emissions policies in many countries.

The recently published reNEWS *European Onshore 2019* report details stuttering progress in virtually all the main markets of Germany, Spain, France, the UK, the Netherlands and Belgium while emerging areas such as eastern Europe are proving slow to get off the ground.

Capitals must fully live up to their obligations under Brussels' Clean Energy Package. Among other measures, the initiative mandates that countries have to set up one-stop shops to deal with renewables project consenting within three years of first applications, a veritable revolution compared with existing permitting waits. This one action could clear consenting logjams and simplify procedures for developers in several countries.

Decisions in repowering cases would have to be made within one year, which will be vital to ensure

the ageing European wind farm fleet, 22GW of which is due to reach the end of operations within the next five years, can get a new lease of life.

There is also a desperate need for national energy and climate plans to be converted from draft documents into firm roadmaps. Specific policies on routes to market, five-year auction timetables and budgets - all of which have to be included under EU rules - are required to forge a future for the sector.

European Commission President-elect Ursula von der Leyen has committed to making climate change action central to the next commission's work. She does not have an easy task with two reports painting a contrasting view this week.

One shows that five member states are still planning new fossil fuel subsidies out to 2030 while another calculates that the global energy transition requires a fivefold increase in wind, as well as a 10-fold jump in solar, to meet Paris commitments.

Von der Leyen has the chance to crack the whip. The onshore wind industry, which has been the star pupil of existing efforts to decarbonise the power system, now needs help.

## Offshore ball in Dublin's court

The Irish Wind Energy Association is rightly calling for greater urgency from Dublin to sign up to the legislative and policy changes required to deliver on ambitions for at least 3.5GW of installed offshore wind by 2030.

Chief executive David Connolly will tell delegates at this week's IWEA meeting in the Irish capital that new marine consenting rules must be a priority and that "urgent financial support" is needed for the local supply chain.

He will also call for new support scheme RESS to be opened as quickly as possible and for clarity on grid connection policy. "It may be more than 10 years to 2030 but that is a very short space of time to build an offshore wind industry from scratch

and there is absolutely no time to waste," he said. Offshore wind will be a vital source of electricity in the next decade as demand is set to soar, driven by a wave of new power-hungry data centres, population growth and a massive electrification agenda, largely in transport. At the same time peat and coal-fired power plants are being shut down.

Dublin must also get interconnections right as there is a natural ceiling on demand in a country of fewer than 5 million people. Several links, including a first with France, are in the pipeline but ensuring Ireland is plugged into the UK and the wider European network is essential. A 3.5GW target sounds about right for 2030 needs but the nascent sector has the potential to deliver much more.

## IN THE FRAME



**CASH GENERATOR:** OX2 has commissioned the 21.6MW Stigshojden wind farm in north-east Sweden featuring six Vestas V117-3.6MW turbines with 150-metre tips. The local developer sold the project in Vasterbotten county to Swiss asset manager Fontavis in 2017, making it the first completed greenfield asset held by Fontavis Renewable Infrastructure Fund Europe.

# 9GW renewables rush at Engie

French developer Engie has set out a two-year plan to deliver 9GW of new renewables capacity in global markets, writes Lisa Louis.

New onshore and offshore wind totalling 5GW as well as 2.1GW of solar and 1.9GW of hydro will lift the company to a total installed generation base of 33GW by end-2021, senior officials told a press briefing in Paris last week.

The developer already has clear line of sight on 8.5GW, some of which has already been commissioned with the remainder either in construction or holding authorisation.

The remaining 500MW will come from a longer-term 2.8GW portfolio of renewables projects at an advanced stage.

“Renewable energy is an important element in the fight against climate change and so it is crucial to have a wide-ranging energy mix on offer for our clients,” executive vice president Gwenaelle Avice-Huet told the briefing.

Engie plans to finance half of the new capacity via power purchase agreements, a marked increase on the existing 500MW backed by off-take deals. Avice-Huet said

power deals are increasing as large energy users are switching to an ‘as consumed’ model where buyers only pay for the electricity they need rather than the ‘as produced’ concept where customers will buy all of the power from a project.

The company intends to increase the annual operating income from its renewables activities by 8% to 11% per year to reach €1.6bn in 2021.

Engie has also set up a new global renewables business unit to lead the push. The division’s new director general Thierry Kalfon said: “Our team will develop a global strategy (and) performance plans for the company’s business units, manage our global partnerships and accelerate development.”

Kalfon said 4.6GW ambitions in onshore wind are achievable as there will be a huge global increase in capacity in the coming years, largely due to falling costs and improving turbine technology.

In Europe, Engie’s home market of France will play a starring role with 161MW already in construction and further 361MW with consent and due online by end-2021.

Avice-Huet welcomed work

## STEPPING UP FOR 2021

Onshore wind		
Project, location	MW	Status
Campo Largo 2, Brazil	361	Under construction
Dakota Range 3, US	151	Permitted
East Fork, US	196	Under construction
French pipeline	161	Under construction
French pipeline	361	Permitted
Jumbo Hill, US	161	Under construction
King Plains, US	248	Permitted
Las Lomas, US	200	Permitted
Live Oaks, US	200	Commissioned
Prairie Hill, US	300	Permitted
Ras Ghareb, Egypt	262	Under construction
SECI 3-4 Phase 2, India	252	Under construction
Solomon Forks, US	277	Under construction
Spain, several projects	640	Under construction
Triple H, US	250	Permitted
Tonstad, Norway	208	Under construction

by Paris to reduce consenting delays and set a 36GW onshore capacity goal for 2028 but said the government must do more for the renewable energy sector.

She called on officials to open up more military and radar-affected areas to onshore wind development.

“Paris needs to reform its repowering legislation as most projects have to be put through the years-long authorisation process again even though we are only replacing old machines with better performing and less noisy ones,” she added.

The developer has 1.2GW of permitted projects in the US to add to a total Americas haul of 450MW commissioned this year, including sites in Brazil.

Offshore wind energy is part of Engie’s plan (see story right), although only one project will be commissioned before the end of 2021, the 487MW Seamade off Belgium. Engie subsidiary Electrabel is developing the project jointly with Otary and Eneco.

Umburanas, Brazil	253	Commissioned
Willogoleche, Australia	119	Under construction
<b>TOTAL</b>		<b>4600MW</b>

Solar		
Akin, Mexico	100	Under construction
French pipeline	144	Under construction
French pipeline	401	Permitted
Gujarat, India	200	Permitted
Kadapa, India	250	Commissioned
Kathu, South Africa	200	Commissioned
Longdraw, US	225	Permitted
Nueva Xcala, Mexico	200	Permitted
Paracatu, Brazil	158	Commissioned
Tropezon, Mexico	126	Under construction
Villa Ahumada, Mexico	150	Under construction
<b>TOTAL</b>		<b>2154MW</b>

Offshore wind		
Seamade, Belgium	487	Under construction

## Leading role awaits for offshore wind alliance

Engie has set its sights on a near-trebling of an existing 5.5GW pipeline of offshore wind projects being developed in a joint venture with Portugal’s EDPR.

The partners are aiming to amass a portfolio of 14GW over the coming years with around 6GW to be in construction by 2025.

“That should be feasible given that global installed offshore wind capacity is expected to increase to 150GW by 2030 from its current 20GW,” said global renewables boss Thierry Kalfon.

The partners formally launched their 50-50 offshore wind alliance earlier this year and will target several markets for growth. French plans to auction more than 1GW per year in the 2020s are of particular interest.

Kalfon said: “Our alliance is making us stronger and more competitive.” The partners complement each other, he

added, with Engie good at energy management, financial and industrial engineering and development, and EDPR known for its expertise in development, procurement and project management.

Some 1.5GW of the existing 5.5GW portfolio is currently under construction, including the 487MW Seamade wind farm off Belgium and 950MW Moray East off Scotland, which is expected online in 2021-22.

Remaining projects include the 950MW Moray West, 24MW French floating project Golfe du Lion, the B&C 400MW project in Poland and 1.5GW Mayflower in the US.

In France, Engie is leading the LEM consortium, which is building the Noirmoutier and Treport projects, each rated at 496MW. Both are scheduled to be up and running in 2023, although that timetable could slip depending on the outcome of final appeals against consents.



**TWO-YEAR SURGE:** Gwenaelle Avice-Huet (standing) and Thierry Kalfon address journalists

Photo: reNEWS



**LIVE @ AWEA Offshore WINDPOWER**

**LIVE COVERAGE FROM THE RENEWS DIGITAL SHOW DAILY**



SPR chief throws down gauntlet



RO ripples will hit offshore - Ewing

The **only** place to be seen by thousands of industry professionals ...

Contact SALES or email [sales@renews.biz](mailto:sales@renews.biz) to advertise