







WindFloat Atlantic project starts supplying clean energy in Portugal

The first platform of the WindFloat Atlantic wind farm, after being successfully connected on 31st December, is able to supply to the grid in Portugal the energy generated by its 8,4 MW wind turbine, the world's largest installed on a floating platform.

The commissioning of this floating wind farm contributes towards the diversification of energy supply, provides access to untapped offshore wind resource and represents a significant technological leap towards a carbon-free economy.

Windplus is a consortium made up of EDP RENEWABLES, ENGIE, REPSOL and PRINCIPLE POWER.

Lisbon, 02 January 2020: WindFloat Atlantic wind farm is now operational. After the energisation of the 20-km cable connecting the offshore wind farm and the substation of Viana do Castello, the first of the three platforms comprising the Windplus consortium's wind farm, was successfully connected on 31st December. The other two units will be connected successively, until they reach 25 MW of the WFA project.

The WindFloat Atlantic units –measuring 30 metres in height and with a 50-metre distance between columns— accommodate the world's largest wind turbines installed on a floating structure of 8,4 MW, helping to increase power generation and drive significant reductions in lifecycle costs. The project took another step forward, once the second of the three platforms that make up the WindFloat Atlantic had arrived at its final destination in the past days. Once fully operational the three Wind Turbine generators making up the wind farm, with their 25 MW of installed capacity, will be able to generate enough energy to supply the equivalent of 60,000 users each year.

The commissioning of this wind farm facilitates access to untapped marine areas and represents a significant technological leap towards shaping a carbon-free economy in Portugal. The WindFloat Atlantic platforms are anchored with chains to the seabed at a depth of 100 metres. They are designed to be transported by standard towing craft, as opposed to bottom-fixed projects which require expensive vessels to be mobilized for transport, and their on-shore assembly helps scale back logistics, financial and environmental costs associated with marine construction. All of these technological advantages make it viable for the project to be replicated anywhere in the world, at a much larger scale









About WindFloat Atlantic

The project is led by the Windplus consortium, comprising EDP Renewables (54.4%), Engie (25%), Repsol (19.4%) and Principle Power Inc. (1.2%). WindFloat Atlantic project builds on the success of the WindFloat1 prototype, which was in operations between 2011 and 2016. The 2MW prototype successfully generated energy uninterruptedly over five years, surviving extreme weather conditions, including waves up to 17 metres tall and 60-knot winds, completely unscathed.

The platforms have been built in cooperation between the two countries on the Iberian peninsula: two of them were manufactured at the Setúbal shipyards (Portugal), and the third at Avilés and Ferrol shipyards (Spain). The project uses WindFloat® disruptive technology, which enables wind platforms to be installed in deep waters, inaccessible to date, where abundant wind resources can be harnessed.

This initiative has had the support from public and private institutions, encouraging companies that are leaders in their respective markets to take part in the project; while the Government of Portugal, European Commission and the European Investment Bank have provided financial support.

The partners that have made this project possible include, in addition to Principle Power, the joint venture between Navantia/Windar, the A. Silva Matos Group, Bourbon, the wind turbine supplier MHI Vestas and dynamic cable supplier JDR Cables.

About EDP Renewables (EDPR)

EDP Renewables (Euronext: EDPR) is a global leader in the renewable energy sector and the world's fourth-largest wind energy producer. With a sound development pipeline, first class assets and market-leading operating capacity, EDPR has undergone exceptional development in recent years and is currently present in 14 international markets (Belgium, Brazil, Canada, Colombia, France, Greece, Italy, Mexico, Poland, Portugal, Romania, Spain, the UK and the US). Energias de Portugal, S.A. ("EDP"), the principal shareholder of EDPR, is a global energy company and a leader in value creation, innovation and sustainability. EDP has featured on the Dow Jones Sustainability Index for 11 consecutive years.

About Engie

Our group is a global reference in low-carbon energy and services. In response to the urgency of climate change, our ambition is to become the world leader in the zero carbon transition "as a service" for our customers, in particular global









companies and local authorities. We rely on our key activities (renewable energy, gas, services) to offer competitive turnkey solutions. We rely on our key activities (renewable energy, gas, services) to offer competitive turnkey solutions.

With our 160,000 employees, our customers, partners and stakeholders, we are a community of Imaginative Builders, committed every day to more harmonious progress.

Turnover in 2018: 60.6 billion euros. The Group is listed on the Paris and Brussels stock exchanges (ENGI) and is represented in the main financial indices (CAC 40, DJ Euro Stoxx 50, Euronext 100, FTSE Eurotop 100, MSCI Europe) and non-financial indices (DJSI World, DJSI Europe and Euronext Vigeo Eiris - World 120, Eurozone 120, Europe 120, France 20, CAC 40 Governance).

About Repsol

Repsol is a global company that is present throughout the entire energy value chain. The company employs more than 25,000 people and its products are sold in more than 90 countries, reaching 10 million customers. It produces around 700,000 barrels of oil equivalent per day and has one of the most efficient refining systems in Europe, capable of processing more than one million barrels of crude oil daily. The company is well-positioned for the energy transition with its focus on developing gas production projects. It operates low-emissions electricity generation assets, including photovoltaic power projects and is pioneering development of mobility initiatives to create new solutions and energy sources for transportation. The company distributes and sells fuels and lubricants through its more than 4,700 service stations in Spain, Portugal, Peru, Italy and Mexico, making it a leader in this sector. It is also the biggest player in the liquefied petroleum gas (LPG) market in Spain.

About Principle Power

Principle Power is a global energy company that enables origination and development and offers technology and service solutions to harvest the full potential of the world's energy resources, by providing access to transitional and deep-water offshore wind sites that were previously inaccessible.

With its proven and in-demand WindFloat® technology, Principle Power is the commercial market leader in floating offshore wind. By simplifying the way offshore wind is deployed, this unique technology assists the ongoing development of the offshore wind industry as a whole, opens new deep-water markets, and has the potential to substantially decrease the cost and risk profile of offshore wind projects globally.









Media contact:

EDPR: Rafael Solís

Director of Corporate Communication & Stakeholders Management

<u>rafael.solis@edpr.com</u> Website: <u>www.edpr.com</u>

ENGIE:

Tel.: +33 (0)1 44 22 24 35 engiepress@engie.com

Investor relations:

Tel.: +33 (0)1 44 22 66 29

ir@engie.com

Repsol:

Communication Executive Managing Division

prensa@repsol.com

Website: www.repsol.com

Principle Power:

Nailia Dindarova Public Affairs Lead

ndindarova@principlepowerinc.com Website: www.principlepowerinc.com