

## Monday, 3 December 2018

Ostend (BE) | SeaMade reaches Financial Close for its 487 MW Offshore Wind Farm in the Belgian North Sea.

## **Key facts:**

- SeaMade NV is responsible for the simultaneous development of both the Mermaid and Seastar offshore wind farms, resulting in the single largest wind farm financed and built in Belgium. SeaMade is a partnership between Otary, ENGIE Electrabel and Eneco Wind Belgium.
- Financial close is reached on schedule, only two years after Financial close of the Rentel offshore wind project. The latter successfully completed its construction activities last summer, while SeaMade will start its construction activities in summer 2019.
- The SeaMade project attracted a very high level of interest and commitment from both the offshore wind industry and the financing community. SeaMade is financed by a unique group of public and private equity investors, while commercial lenders, multilateral institutions and export credit agencies provide non-recourse debt financing.
- SeaMade will build 58 wind turbines with a total capacity of 487 MW and will be connected through two offshore substations to the Elia Modular Offshore Grid.
- SeaMade has a key contribution to Belgium's objectives in terms of development of renewable energy. As of 2020, SeaMade will deliver renewable energy for 485,000 households, also allowing for a reduction of more than 500,000 tons of CO2 emissions per year

#### Significant contribution to Belgium's climate goals

SeaMade is developing the last two domain concessions which were made available for offshore wind projects by the Belgian government to contribute to its 20/20/20 climate change targets.

Despite a significant reduction in the tariff scheme, SeaMade remained committed to a transition to a cleaner energy mix and will contribute significantly to the binding goal of having 13% of our energy produced out of renewable energy sources by 2020. Half of this renewable energy production will come from offshore wind energy. SeaMade will contribute to almost one quarter of the required offshore energy production.

# Project financed by public and private investors, commercial lenders, multilateral institutions and an export credit agency

The SeaMade project is the second project successfully developed and financed by Otary RS NV. SeaMade stands for a combination of two offshore wind projects, previously known as Mermaid (235 MW) and Seastar (252 MW).

**Otary RS NV** has the majority interest in the SeaMade Project. Otary's shareholders include investment and development companies Green Offshore and Power @ Sea, dredging and marine engineering specialist DEME and green energy actors Aspiravi and Elicio. The Walloon environmental holding SRIW Environnement, as well as the Flemish and Walloon energy and utility holding companies Z-Kracht/Nuhma and Socofe are also Otary shareholders. Through participations in various operational projects, the Otary partners shaped the Belgian offshore wind landscape as well as an innovative industry. In addition to Otary, ENGIE Electrabel and Eneco Wind Belgium have a minority interest in SeaMade (respectively 17.5% and 12.5%).

The project is financed by an international lending consortium consisting of the European Investment Bank, the Danish export credit agency EKF and 15 commercial banks. This group includes Santander, Bank of China, Belfius, BNP Paribas, Commerzbank, Rabobank, ASN Bank, ING, KBC, KfW IPEX, MUFG, Siemens Bank, Société Générale, SMTB and Triodos. The nature of the banking consortium, made of [Belgium, Dutch, French, German, Chinese, Japanese and Spanish] banks, illustrates the confidence of the international financing community in the further development of renewable energy in Belgium. The European Investment Bank provides a EUR 250 M commitment via the European Fund for Strategic Investments (EFSI or Junker Plan).

Upon having obtained state aid clearance in September 2018, the debt financing has been raised in a record time for such a complex infrastructure project, building upon the proven experience of management, shareholders and contractors.

#### **Project particularities**

The construction of the project has already been initiated with offshore works to start in summer 2019 to have both wind farms operational before end of 2020.

**Turbines** – The 58 offshore wind turbines will be installed and maintained by Siemens Gamesa. With a hub height of 109 meters and a rotor diameter of 167 meters, the rotor is wider than the wingspan of two Airbus A380s, the largest passenger aircraft in the world or two times the height of the atomium. With a blade tip height of 193 meters, they will be the largest wind turbines installed thus far in the Belgian North Sea, in terms of dimensions. This turbine model has a base capacity of 8 MW with a power boost function bringing capacity to 8.4 MW.

**Substations** - Each of the Project's two wind farms, Mermaid and Seastar, will have its own offshore substation, which will collect electricity produced, convert it from 33 kV to 220 kV and export it into the Offshore Grid operated by Elia System Operator NV, the Transmission System Operator. Capitalizing on a successful collaboration on numerous previous offshore wind farms, ENGIE Fabricom, Tractebel, Smulders and Geosea will be responsible for the full EPCI of the substations, including engineering, procurement, construction, transport, installation and commissioning.

**Export Cable** – Both wind farms will be connected through two 220-245 kV XLPE 800mm<sup>2</sup> Aluminum submarine high voltage cables to the Belgian Modular Offshore Grid. The so-called export cables have a combined length of around 28km, and a cable diameter of around 247mm weighing approximately 96.4 kg per running meter. Production will be performed by Hellenic Cables in Greece and installation will be done by Tideway in 2020.

**Foundations and Inter-Array Cables** - The Engineering, Procurement, Construction and Installation contract of the foundations and inter-array cables will be undertaken by Dredging International NV, subsidiary of Dredging, Environmental & Marine Engineering NV, a leading player in this market. The 33 kV AC IACs will connect each WTG to the relevant offshore substation in looped strings. The WTGs will be mounted on a foundation structure, consisting of a monopile foundation on top of which a bolted transition piece is placed.

**Ostend** – The SeaMade projects are located 40-50 km off the coast from Ostend and will be operated and serviced from the Otary logistical hub in the port of Ostend.

Mathias Verkest – CEO SeaMade: "We are pleased that our project milestones are achieved in time trough tremendous efforts of many as we are working on a quite ambitious timing towards 2020. It is a token of trust to continue cooperation with very experienced partners that have a proven track-record in working together in Belgium and elsewhere. The SeaMade financing, provided by an international lending consortium consisting of the European Investment Bank, the Danish export credit agency EKF and 15 commercial banks, successfully concludes the government's ambition of developing about 2,200 MW of offshore energy. Offshore energy is becoming more and more predominant in the Belgian energy mix providing clean energy to 50% of the household consumption in Belgium on an annual basis."

"100% renewable and 100% local produced energy is what we want to deliver the residential customers of Eneco. With the investment in SeaMade we walk the talk", says Miguel de Schaetzen, CEO Eneco Wind Belgium. "So, we are extremely glad that SeaMade, our second offshore project in Belgium, really can kick-off. This proves that the belief in offshore wind technology is genuine and attractive. As a sustainable energy pioneer, Eneco is proud to contribute to the Belgian Climate goals."

**Philippe Van Troeye – CEO ENGIE Benelux**: "This project is a "première" for ENGIE Electrabel in Belgium. It strengthens our position as biggest green power producer of the country and further materializes our ambition of making of Belgium a front runner of the energy efficiency with an always more efficient, closer and greener energy. The project will rely on the contribution and expertise of our subsidiary ENGIE Fabricom, a major actor of electric connection solutions for offshore wind farms."

Philippe De Backer – State Secretary of the North Sea: "Belgium remains being a frontrunner in the offshore wind industry which has become a global industry. Despite the limited surface of the Belgian North Sea, we are still the fifth producer of offshore wind worldwide. This is thanks to our Belgian companies which focused on the green energy market. With great success. Offshore energy is now an important export product. Financial Close of the last offshore windfarms to be constructed demonstrates once again the ambition of our country. We honour our climate and renewable goals and this at market prices. As State Secretary of the North Sea, I continue to believe in renewable energy. That's why I will double the capacity of offshore energy at our North Sea."

#### **North Sea Wave**

The development of an offshore wave project will now be assumed by the newly incorporated entity North Sea Wave NV, which mirrors the shareholding structure of SeaMade NV. The development of wave energy convertors has not yet come to technical and financial maturity but will be closely scrutinized by North Sea Wave. The development of a wave project will depend on the technical and commercial maturity, but also financial and economic feasibility, possibly within a broader regulatory context.

#### Green energy for 485,000 households

The SeaMade project will provide green energy to 485,000 households and will allow a reduction of 500,000 tons of CO2 emissions per year. The wind turbines are expected to produce green energy as from 2020. The wind energy produced by SeaMade will contribute to the Belgian 2020 climate objectives and to securing the future energy supply.

#### **Further information**

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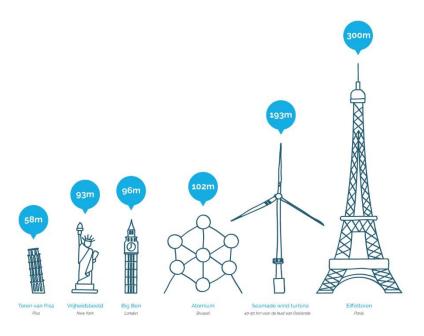
#### **About Seamade**

SeaMade NV, a combination of SEAstar and merMAID, is a cooperation between:

- Otary RS NV 70%
- Electrabel NV 17.5%
- Eneco Wind Belgium SA 12.5%

### **Key facts**

- Total investment: € 1,3 billion
- Total capacity of 487 MW
- 40-50 km from the port of Ostend
- 58 SGRE 8,0 MW offshore wind turbines
- Height wind turbine at hub: 109 m
- Diameter rotor: 167 m
- Two offshore substations connecting to Elia's offshore grid (MOG)
- Yearly consumption of 485,000 households
- Creation of 1,400 direct and 1,400 indirect jobs during the development and construction phase
- Creation of 100 long term jobs when operational



## **About Otary RS NV**

The Otary partnership, is grouping various Belgian specialists in renewable energy: including investment and development companies Green Offshore and Power @ Sea, dredging and marine engineering specialist DEME and green energy players Aspiravi and Elicio. The Walloon environmental holding SRIW Environnement, and the Flemish and Walloon energy and utility holding companies Z-Kracht/Nuhma and Socofe are the Otary shareholders.

In addition to the SeaMade concessions, Otary also holds the Rentel concession. The Otary partners shaped the offshore wind landscape in the Belgian Northsea. Otary partners are not only involved in SeaMade, but also C-Power, Northwind, Rentel and Norther, totalling 1.707 MW at sea, but also participate in other RES projects in Belgium and abroad.

#### **About ENGIE Electrabel NV**

ENGIE Electrabel is part of the ENGIE Group, global leader in energy. ENGIE Electrabel is the largest energy supplier on the Belgian market, where it is active in electricity generation, sales of electricity and natural gas and energy services. The company offers value-added energy solutions as well as tailored services to its 2 million residential, professional and industrial customers. ENGIE Electrabel has a diversified production base of 9 529 MW in Belgium, close to its customers. It consists of facilities that operate from renewable sources, conventional and nuclear power plants. ENGIE Electrabel's generation facilities are one of the lowest emitters of CO2 in Europe. The company is the country's largest producer of green energy with a total capacity of 647 MW in renewable energy.

#### **About Eneco Wind Belgium NV**

With a production capacity of more than 1,000 MW, the Eneco group is a leading actor for the delivery and production of renewable energy and one of the largest players in the wind energy sector in the Benelux and the UK. Eneco Wind Belgium is the group company responsible for onshore and offshore

wind energy generation in Belgium. Eneco Wind Belgium disposes of 96 onshore wind turbines (with a capacity of more than 200 MW) and has 25 % stake in the Belgian offshore wind farm Norther (44 turbines, 370 MW). Besides the production and distribution of sustainable energy, its main goal is to achieve global sustainability. The company with over 300 employees and business units in Mechelen, Gent and Waver, strives to deliver its 1 million customers with 100% sustainable and 100% locally produced energy by 2025.

For more information: www.eneco.be

#### **Project advisers**

Financial Advisor: Société Générale

Legal Counsel: Allen & Overy (project), Loyens & Loeff (lenders), Linklaters (EIB)

Technical advisor: Mott McDonald

Insurance Advisor and Broker: Marsh / Averbo Lenders insurance advisor: Benatar & Co

Tax & accounting Advisor: PWC Model auditor: Mazars LLP



