



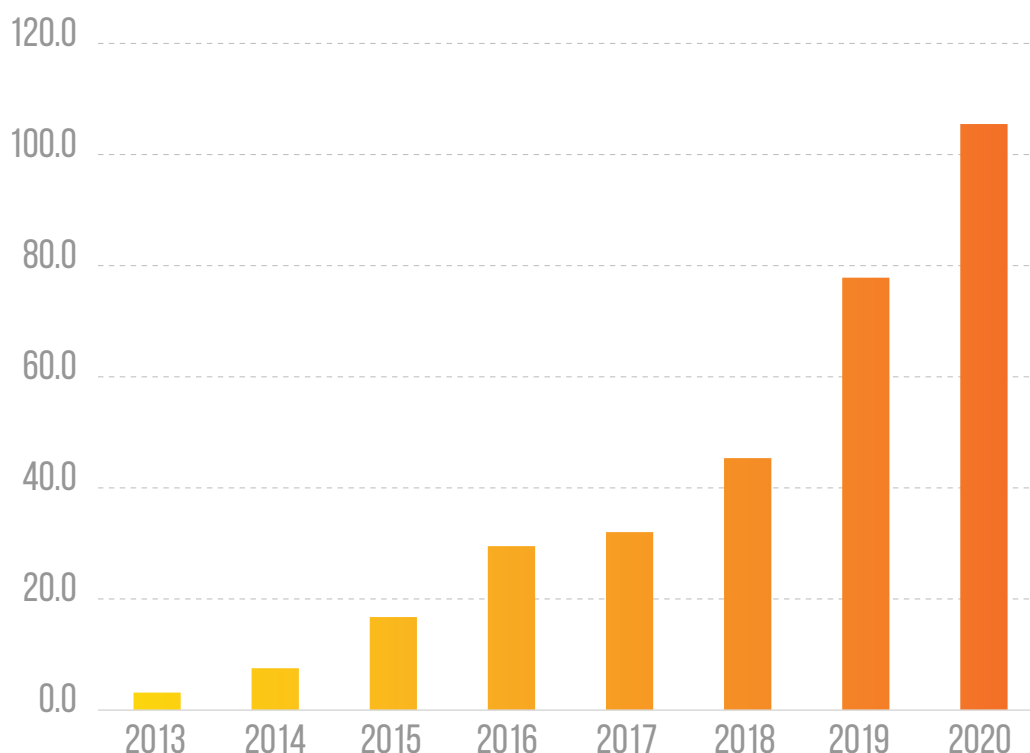
**OFFSHORE**

ENERGY. COMMITTED.

ANNUAL REPORT 2020

## 2 PERFORMANCE REVIEW & IMPACT

NUMBER OF DATA SIGNALS  
(CUMULATIVE – '000)



### FUTURE

SBM Offshore will build on the successful application of digital technologies for the execution of projects and a road map has been created for this purpose. For offshore operations, SBM Offshore will create value from – among others – reduction of major repairs, optimized maintenance and inspection programs and redefining specific services with key vendors for greater efficiency. New business models and revenue streams will be a key focus area.

### 2.1.8 INNOVATION

#### MANAGEMENT APPROACH

The key objective of innovation at SBM Offshore is to bring to market solutions that are in line with the Company's strategy, in particular those related to the Energy Transition. All parts of the organization are encouraged to contribute to innovations in their field of expertise. The development of new technology, related to core products specifically, is managed by the Group Technology Department.

Technology development and innovation programs are aligned with the long-term strategies of the Product Lines and with key programs such as emissionZERO™ and Fast4Ward®. Development roadmaps are kept up to date with technical and market developments through regular reviews.

SBM Offshore brings new technology to market through a structured stage-gate process to ensure that the technology is properly validated before being offered for sale or introduced into projects. This Technology Readiness Level (TRL) process is based on American Petroleum Institute standards (API RP17N) and includes prototype testing and full FEED level definition of new systems as part of the qualification requirements.

The Company manages its IP portfolio by registering patents and trademarks, as well as through securing trade secrets and know how. To ensure IP integrity, the Company manages the classification of documents and non disclosure agreements with partners and ensures restricted access to technology-sensitive documents. Freedom-to-operate checks are conducted to ensure respect for third-party rights. Through this approach, risks associated with Technological Developments are mitigated (see section 1.4.2).

#### 2020 PERFORMANCE

In 2020, the Company continued the trend of increasingly diversifying its development efforts in emerging technologies associated with gas, power and renewable energies, exceeding the target of allocating 30% of the technology budget to non-carbon technology

developments. Some of the main development projects undertaken in 2020 include :

- The continued development of the Company's unique Floating Offshore Wind TLP concept for an increased range of water depths, more severe environmental conditions and large turbines. The concept has been adopted by the PGL floating wind farm development project and has entered the EPC phase.
- The completion of the design and fabrication of the first sections of the innovative S3® Wave Energy Converter (WEC) project at SBM Offshore's R&D Laboratory. The project is on track to deliver a prototype in the water in 2022.
- The design and technology qualification of a topside module to capture CO<sub>2</sub> from FPSO gas turbine exhaust.
- The visual inspection of void tanks on an FPSO using a remotely operated drone, witnessed by a surveyor from the Classification Society.
- The development of a concept for a new Floating Power Generation Unit based on a converted LNG carrier.
- The development of a floating renewable hydrogen production concept based on the Company's Floating Offshore Wind TLP design.

During 2020, a total of 34 TRL steps on various technology development projects were passed and the Company filed 8 new patent applications to strengthen its existing portfolio of 158 patent families; in particular in the area of renewables and digital applications. Over the course of 2020, four innovation projects reached market-ready status.

## FUTURE

The Company continues to focus its technology development activities on the energy transition by allocating more than 50% of its technology development budgets to non-carbon technologies. These include investments in topside technologies to deliver the ambitions of the Company's emissionZERO™ FPSO program. The Company will also continue to invest in research and development for its innovative S3® Wave Energy Converter and Floating Offshore Wind solutions.

### 2.1.9 ENERGY TRANSITION

#### MANAGEMENT APPROACH

Key elements that enable the Company's success in the energy transition area are :

- Product Development for Floating Offshore Wind and Wave Energy
- Technology Development supporting these product developments (see more detail in section 2.1.8)
- The emissionZERO™ program explained in section 2.1.6
- SDGs the Company is committed to, as explained in section 2.2

Product development for energy transition is addressed through the Company's New Energies & Services business unit, in collaboration with the Technology Department. SBM Offshore continues to evaluate its renewables and gas performance growth through measurement against full company revenues, in line with its 2030 ambition. The Company monitors its commercial pipeline that will allow the Company to achieve its envisioned growth goals.

By addressing the energy transition in this manner, SBM Offshore is addressing material risks of oil price dependency, portfolio risks and Climate Change described in section 1.4.2.

## 2020 PERFORMANCE

In line with our strategy to innovate and our ambition to have 25% of the Company's revenues from renewables and gas by 2030, SBM Offshore has made significant achievements in 2020 :

- SBM Offshore has been contracted by EDF Renouvelables for the engineering, procurement, construction and installation of three floating units and their mooring systems for offshore wind turbines, with a total capacity of 25.2 MW. The units will be deployed offshore Marseille for the project Provence Grand Large. The Company has made progress on the design and the turnkey phase is ongoing, with expected installation in 2022.
- Progress has been made in the innovative S3® Wave Energy Converter pilot project, with expected installation offshore Monaco in 2022.
- Research and Development investments in renewable energy products, with 52% of the total 2020 R&D budget applied to non-carbon technologies. This includes further development of Floating Offshore Wind and Wave Energy Converter products, as well as studies within energy storage, desalination, hydrogen and ammonia for offshore applications.
- Strengthening of the Company's position in the Gas and LNG markets, focusing on LNG-to-Power and LNG Terminals.
- SBM Offshore is working on projects that address emissions reduction along the lifecycle of its business, as part of its emissionZERO™ portfolio.
- In December, the Company launched the New Energies & Services business entity, placing it prominently in the organization, reporting to the CEO.

## FUTURE

SBM Offshore will build upon these achievements and is looking at developing from renewable energy pilots to commercial energy infrastructure as well as increasing its role in the supply chain with the aim of creating more value.