SBM OFFSHORE

ENERGY. COMMITTED.

ANNUAL REPORT 2021

1.2 BUSINESS CONTEXT

1.2.1 MARKETS AND ACTIVITIES

SBM Offshore provides floating production solutions to the offshore energy industry, both in hydrocarbon and in renewable market segments. SBM Offshore's main activities to date are the design, supply, installation, operation and life extension of Floating Production Storage and Offloading (FPSO) vessels. These are either leased to clients or supplied on a turnkey sale basis. SBM Offshore is also active in the renewable energy market, with a dedicated New Energies & Services (NES) division working on floating offshore wind and wave energy solutions, as well as investing in research and development of products for future markets.

In order to maintain its leading position in its core markets, SBM Offshore focuses on:

- Leveraging SBM Offshore's experience and business model to strengthen its position and to develop sustainable business in new areas.
- Transformation programs to increase return for customers: Fast4Ward®, focusing on better performance, delivered faster; emissionZERO®, focusing on the decarbonization of products; and Digital Transformation, to optimize SBM Offshore's ways of working and create new services.
- SDG-related targets for the short- and long-term, and delivering on the roadmaps to achieve these targets.

Based on these guidelines, SBM Offshore is developing its product portfolio within the various energy sectors.

MARKET SEGMENTATION

Hydrocarbon Energy

FPSO

SBM Offshore delivers FPSOs with production volumes typically around 200,000 barrels of oil per FPSO per day. A FPSO processes well fluids into stabilized crude oil for temporary storage on board, before being transferred to a shuttle tanker for export from the field. Oil and gas enhanced recovery systems – such as water injection, gas injection, chemical injection and gas lift systems – are used to improve production levels. SBM Offshore's latest FPSO designs include CO_2 removal from gas streams for reinjection into the well offshore.

SBM Offshore is taking a disciplined and selective approach to market opportunities focusing on the main FPSO markets of Brazil and Guyana that provide for double resiliency – i.e. both relatively low break-even prices and low GHG-emission intensity. SBM Offshore is also looking to develop business in other adjacent regions. Looking ahead, around 25 FPSO projects could reach FID between 2022-2024.

To contribute to double resiliency – SBM Offshore executes its Fast4Ward® and emissionZERO® programs, of which further detail is provided in sections 2.1.4 and 2.1.7.

Other Products and Services

SBM Offshore also has dedicated product lines to provide offshore installation services as well as specific floating equipment and products such as Turret Mooring Systems (TMS) and offshore (off)loading Terminals.

TMS

SBM Offshore is the recognized technology provider for Turrets and Mooring Systems (TMS). The Company provides the offshore industry with a complete range and variety of solutions delivered through a full EPCI product lifecycle.

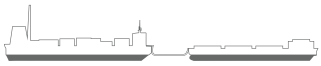
Terminals

The Catenary Anchor Leg Mooring (CALM) or Single Point Mooring (SPM) terminal is a floating buoy that performs the dual function of keeping a tanker moored and transferring fluids while allowing the ship to weathervane.
SBM Offshore provides full lifecycle solutions for terminals including design, engineering, construction, installation and aftersales services.

Installation Services

SBM Offshore delivers tailored solutions for floating unit mooring, flexible flowline and subsea structure installation works. SBM Offshore, together with its joint venture partner, own and operate a dedicated multi-purpose deep water construction vessel, the Normand Installer.

DEEP WATER EXPERIENCE BY WATER DEPTH



		bpd	
475m	*FPSO Serpentina*	110k	Equatorial Guinea
720m	*FPSO Saxi Batuque*	100k	Angola
728m	*FPSO Mondo*	100k	Angola
960m	*FPSO Aseng*	80k	Equatorial Guinea
1,221m	*FPSO Cidade de Anchieta*	100k	Brazil
1,250m	*N'Goma FPSO*	100k	Angola
1,365m	*FPSO Kikeh*	120k	Malaysia
1,485m	*FPSO Capixaba*	100k	Brazil
1,525m	*Liza Destiny* (FPSO)	120k	Guyana
1,600m	*Liza Unity** (FPSO)	220k	Guyana
1,780m	*FPSO Espirito Santo*	100k	Brazil
1,850m	*Thunder Hawk*	60k	USA
1,900m	*Prosperity** (FPSO)	220k	Guyana
1,900m	*FPSO Alexandre de Gusmão**		Brazil
2,000m	*FPSO Sepetiba**	180k	Brazil
2,000m	*FPSO Almirante Tamandaré**		Brazil
2,100m	*FPSO Cidade de Paraty*	120k	Brazil
2,120m	*FPSO Cidade de Maricá*	150k	Brazil
2,130m	*FPSO Cidade de Saquarema*	150k	Brazil
2,140m	*FPSO Cidade de Ilhabela*	150k	Brazil

** under construction*

SHALLOW WATER
< 500m

DEEP WATER
500m to 1,500m

ULTRA DEEP WATER
>1,500m

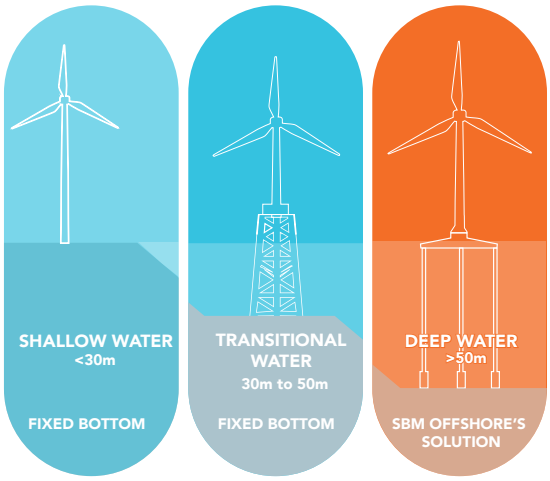
Renewable Energy

Floating Offshore Wind (FOW)

Floating Offshore Wind is opening new possibilities for wind power production locations and will play a critical role in the transition to a cleaner energy supply. Floating offshore wind turbines enable access to deeper water compared to conventional fixed-bottom wind turbines, which expands the viable area for wind energy development, reduces visibility from shore, and can potentially be located in areas with higher and steadier wind characteristics. The FOW market is developing worldwide, in anticipation of future commercial projects.

SBM Offshore has been working on Floating Offshore Wind since 2014 and is currently executing its first pilot project, leveraging its experience in EPCI of floating solutions and mooring systems. SBM Offshore is also co-developing Floating Offshore Wind projects and securing seabed rights and relevant permits, together with partners.

SEGMENTATION OF OFFSHORE WIND ENERGY SOLUTIONS



Wave Energy

While the worldwide resources of coastal wave energy are abundant, successful attempts to harness this energy from the oceans have remained elusive. Since 2009, SBM Offshore has been developing the next generation of wave energy conversion technology, called WEC S3®. Through direct conversion of the kinetic wave energy into electricity using Electro Active Polymers (EAP), this breakthrough technology addresses the limitations identified in conventional wave energy devices.

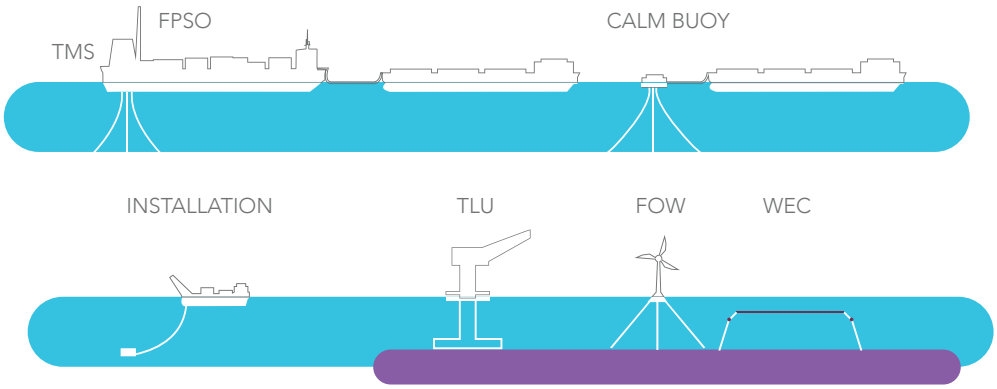
The WEC S3® technology has been successfully developed and tested in SBM Offshore's own R&D Laboratory in France. The next step towards scale up and industrialization is to successfully deploy and test a prototype at sea, that will be connected to the electricity grid. SBM Offshore has secured a test location offshore Monaco and is working diligently towards achieving this milestone.

Future Energy Markets

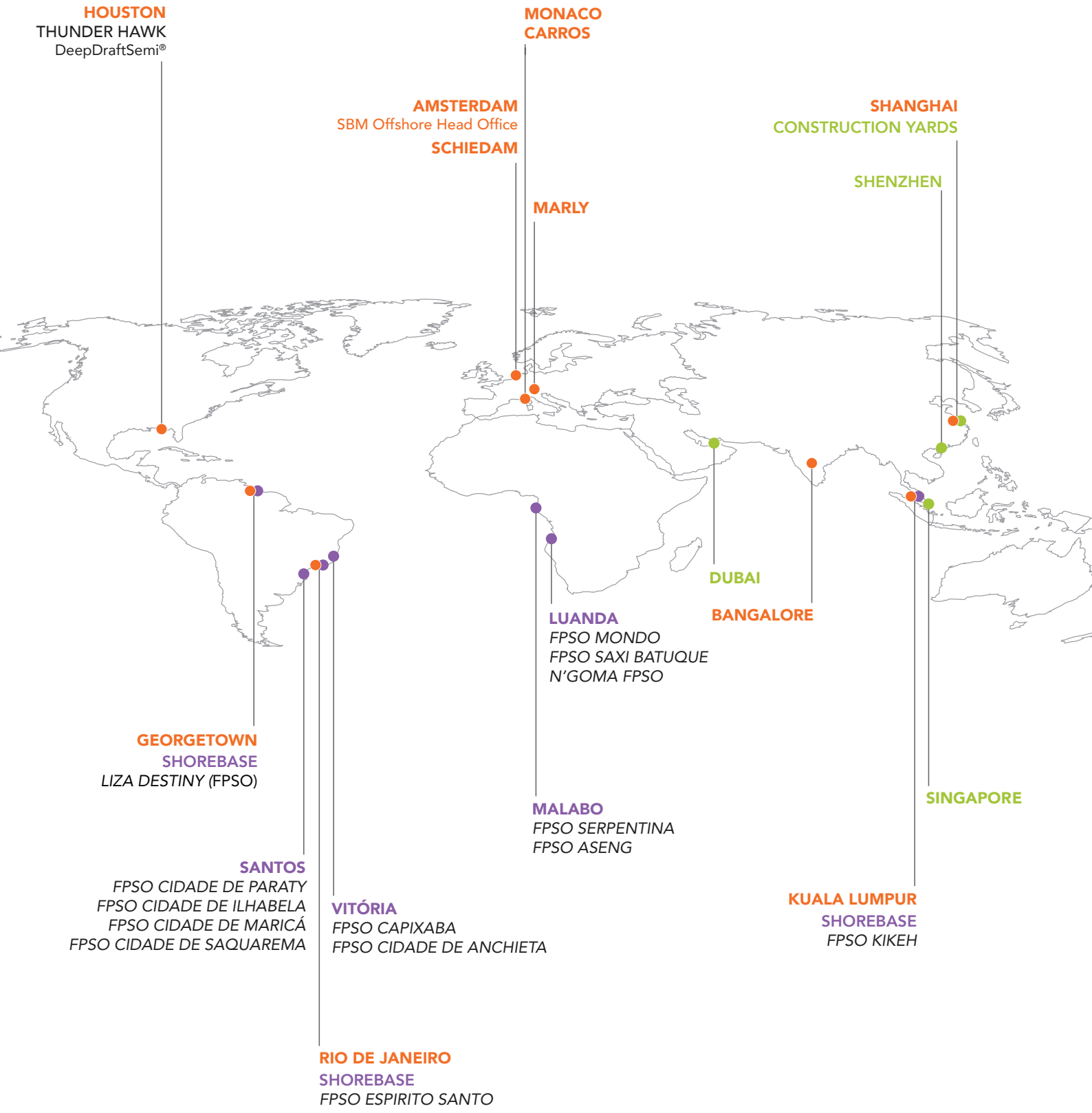
The world's demand for sustainable energy solutions is increasing and energy transition has been put in the spotlight since climate change is largely recognized as an urgent agenda globally. The energy system is in evolution. Solar PV, wind energy, hydrogen-based technology, bio-fuels and Carbon Capture Utilization and Storage are recognized and envisioned as the frontiers going forward. SBM Offshore is investing in research and development of products within selected segments that support this energy transition.

SBM Offshore commits to a strategy that is compatible with the transition to net-zero by 2050 and takes meaningful actions, not only for new technology development, but also to re-purpose oil & gas facilities and solutions to be used in the decarbonization business. In this way, the technology and experience are transferred in the fastest way to contribute to the energy transition. For example, SBM Offshore has developed a jetty-free Tower Loading Unit (TLU) which can aid in remote areas, such as islands, to switch from coal to gas, producing power from cleaner fuel. This jetty-less fluid transfer solution can have applications in nascent energy markets, among which Carbon Capture Utilization and Storage and Ammonia Transport are the areas of particular promise.

SBM OFFSHORE ACTIVITIES



CALM Buoy	Catenary Anchor Leg Mooring Buoy	**TLU**	Tower Loading Unit
FOW	Floating Offshore Wind	**TMS**	Turret Mooring System
FPSO	Floating Production Storage and Offloading	**WEC**	Wave Energy Convertor

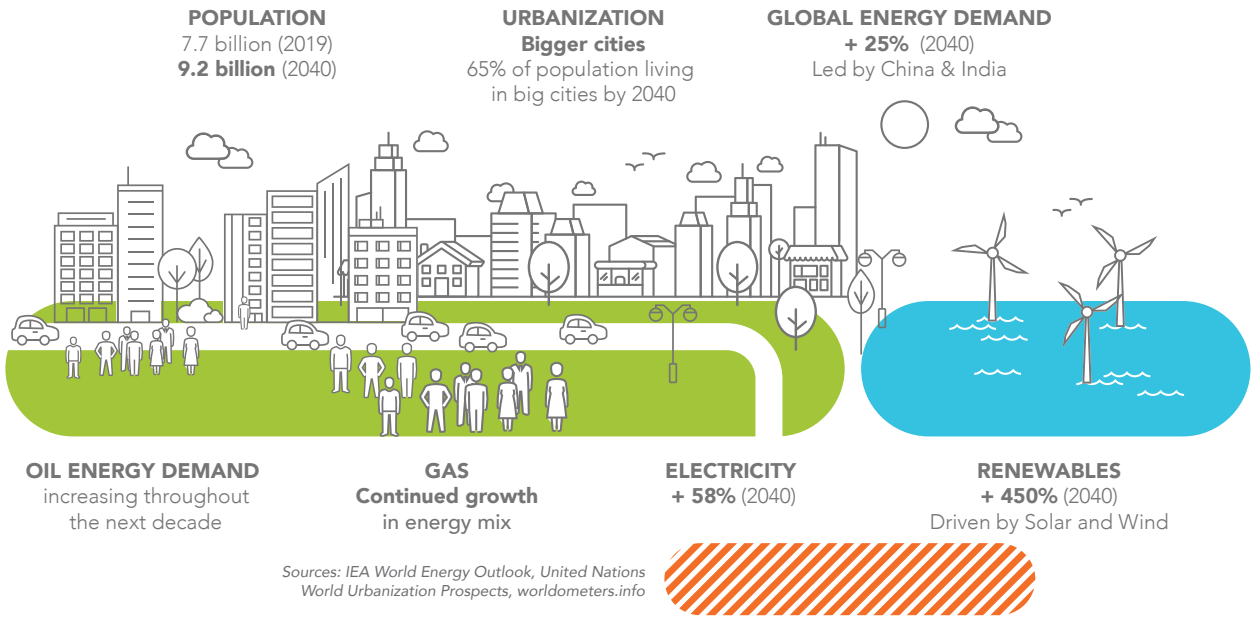

HOUSTON
THUNDER HAWK
DeepDraftSemi®
MONACO
CARROS
AMSTERDAM
SBM Offshore Head Office
SCHIEDAM
MARLY
SHANGHAI
CONSTRUCTION YARDS
SHENZHEN
DUBAI
BANGALORE
LUANDA
FPSO MONDO
FPSO SAXI BATUQUE
N'GOMA FPSO
GEORGETOWN
SHOREBASE
LIZA DESTINY (FPSO)
MALABO
FPSO SERPENTINA
FPSO ASENG
SINGAPORE
SANTOS
FPSO CIDADE DE PARATY
FPSO CIDADE DE ILHABELA
FPSO CIDADE DE MARICÁ
FPSO CIDADE DE SAQUAREMA
VITÓRIA
FPSO CAPIXABA
FPSO CIDADE DE ANCHIETA
KUALA LUMPUR
SHOREBASE
FPSO KIKEH
RIO DE JANEIRO
SHOREBASE
FPSO ESPIRITO SANTO
OFFICES
SHOREBASES
UNITS
CONSTRUCTION YARDS

CURRENT, NEAR-TERM AND FUTURE IMPACTS ON SBM OFFSHORE'S ACTIVITIES

Almost two years after the COVID-19 pandemic changed the world, the demand for oil recovered to near pre-COVID-19 levels and oil prices reached multi-year highs. Whereas in 2020, there were only three FPSOs awarded in the market, in 2021 this figure increased to nine FPSOs. Most of these projects are in SBM Offshore's key regions of Brazil and Guyana.

During 2021, the energy transition and the demand for lower-emission solutions have been accelerating, with clients repositioning and adjusting their strategies towards operating in a carbon-neutral environment. In addition, there is an increasing focus across most sectors on Environmental, Social and Governance (ESG) targets.

OUTLOOK OF WORLD ENERGY DEMAND



Sources: IEA World Energy Outlook, United Nations World Urbanization Prospects, worldometers.info

MACRO TRENDS

According to the United Nations' world population projection, by 2040, the world population will surpass 9 billion people, with 65% of the total population living in big cities close to the oceans. Global energy demand is set to grow by more than 25% in the coming decades. While oil and natural gas will still play a significant part in the primary energy mix, renewable energy is increasing its share. The demand for oil is expected to continue to grow in the coming years, after which it should plateau towards the end of the decade. Despite this, field depletion plays an important role for new greenfield projects to be sanctioned. Supply gaps are probable and offshore deep water oil production will continue in the years to come. Geopolitical events make energy supply and demand inherently volatile. Section 1.4.3 presents climate change scenarios which provide insight into various possible developments relating to decelerated and accelerated energy transition paths.

SBM Offshore expects that, in the coming years, a combination of a robust technology portfolio, strong project management and engineering capabilities, operations expertise and financing capabilities will be needed to deliver sizeable deep-water projects across the energy mix. In addition, its success will depend on partnering with other companies similarly committed to its energy transition strategy and activities, with a focus on lifecycle value of projects, from early client engagement until end of field recycling phases.

1.2.2 STAKEHOLDERS AND MATERIAL TOPICS

SBM Offshore values its stakeholder network, which consists of people and organizations with high standards in life and business. This network is the basis for a sustained and sustainable business.

The main stakeholders are SBM Offshore' clients, employees, business partners, suppliers, shareholders and banks (lenders). Other important stakeholders are regulators, class society organisations, yards, export credit agencies, local communities, non-governmental organizations (NGOs), industry associations, universities, researchers and potential investors. Throughout the year,