2022 ANNUAL REPORT

SBM OFFSHORE

TRUE.
BLUE.
TRANSITION.

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, working on floating offshore wind, wave energy and research and development of products for future energy 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. An 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 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 35 FPSO projects could reach FID between 2023-2025.

To contribute to double resiliency – SBM Offshore is executing 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 delivers tailored solutions for floating unit mooring, flexible flowline and subsea structure installation works. SBM Offshore, together with its joint venture partner, owns and operates a dedicated multi-purpose deepwater construction vessel, the Normand Installer. SBM Offshore also has dedicated product lines to provide specific floating equipment and products such as Turret Mooring Systems (TMS) and offshore (off)loading Terminals.

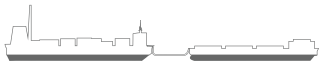
TMS

SBM Offshore is the recognized technology provider for Turrets and Mooring Systems (TMS). SBM Offshore 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.

DEEPWATER 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	FPSO *Liza Destiny*	126k	Guyana
1,600m	FPSO *Liza Unity*	220k	Guyana
1,780m	*FPSO Espirito Santo*	100k	Brazil
1,790m	FPSO *ONE GUYANA**	250k	Guyana
1,850m	*Thunder Hawk*	60k	USA
1,900m	FPSO *Prosperity**	220k	Guyana
1,900m	*FPSO Alexandre de Gusmão**	180k	Brazil
2,000m	*FPSO Sepetiba**	180k	Brazil
2,000m	*FPSO Almirante Tamandaré**	225k	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

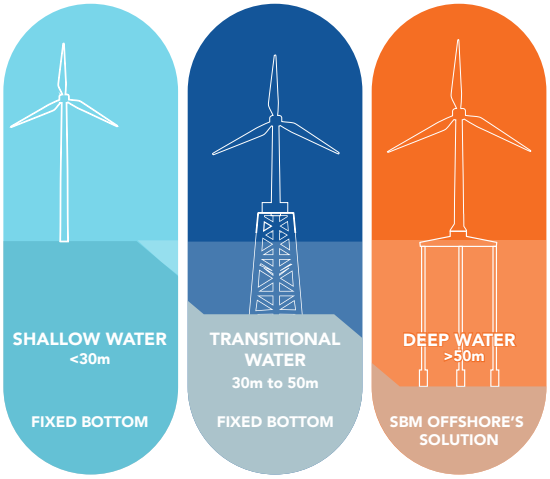
ULTRA DEEP WATER
>1,500m

New Energies

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 than conventional fixed-bottom wind turbines. This reduces visibility from shore and expands the viable area for wind energy development, potentially to 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



Future Energy Markets

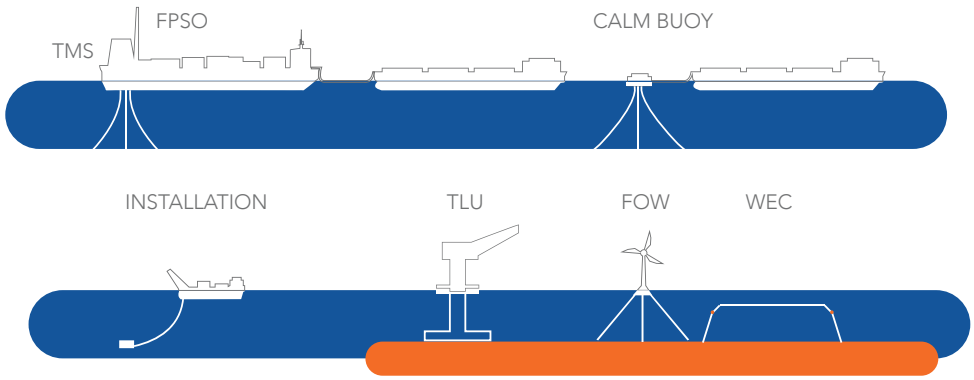
The world's demand for sustainable energy solutions is increasing as climate change is recognized as an urgent concern globally. New technologies are developing to facilitate the energy transition. Solar PV, wind energy, hydrogen-based technology, bio-fuels and Carbon Capture Utilization and Storage are recognized and envisioned as the frontiers of development. SBM Offshore is investing in the research and development of products within selected segments that support the energy transition.

SBM Offshore is committed to a strategy that is compatible with the transition to net-zero by 2050 and takes meaningful actions, not only on new technology development, but also on repurposing oil and gas facilities into solutions for decarbonization. In this way, technology and experience are transferred in the fastest way to contribute to the energy transition. For example, SBM Offshore is working on providing offloading solutions for carbon dioxide and the development of terminals to adapt for future fluids such as ammonia.

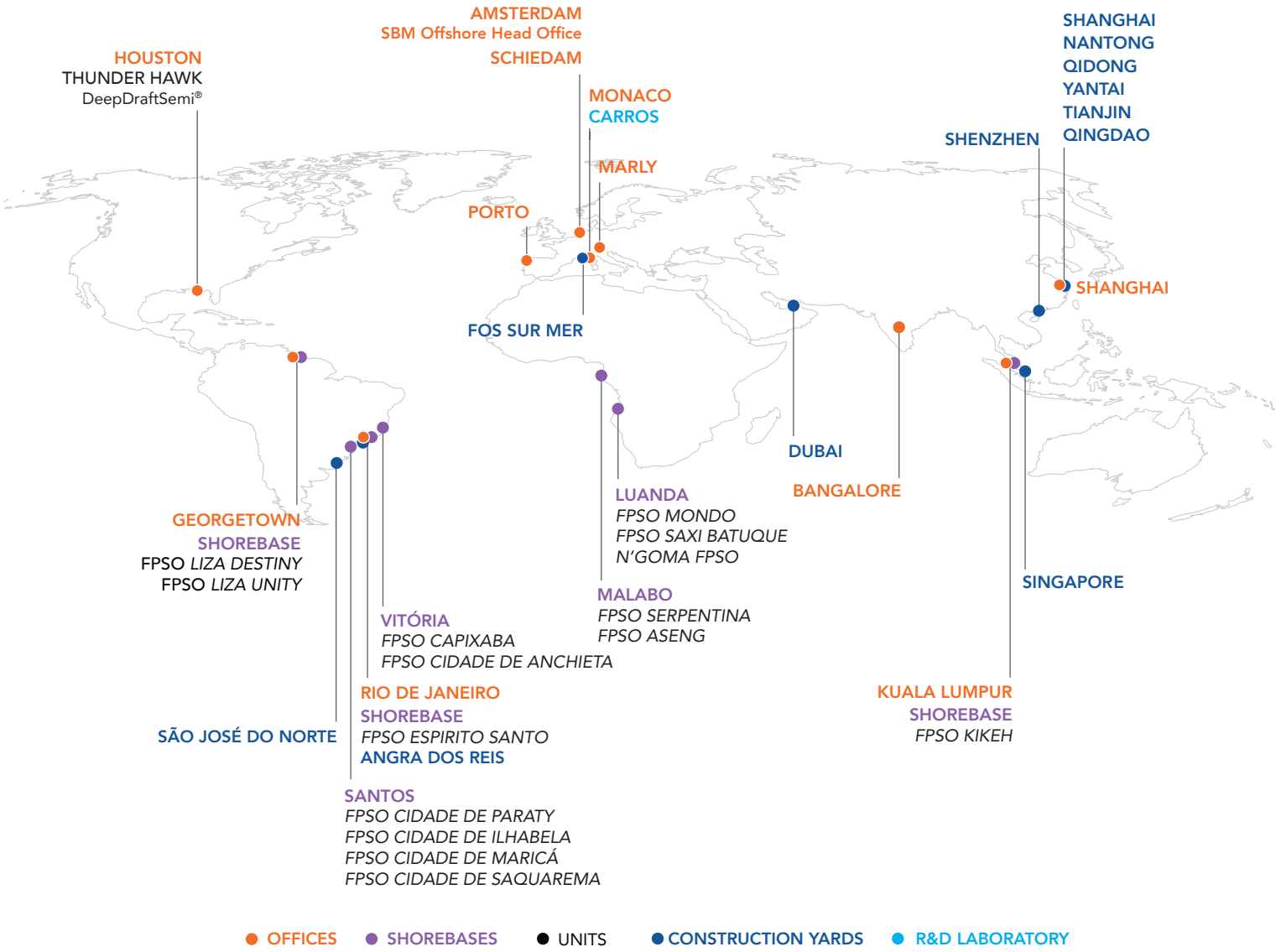
Although worldwide resources of coastal wave energy are abundant, successful attempts to harness this energy from the oceans have remained elusive. Since 2009, SBM Offshore has been developing the next generation of wave energy conversion technology, called WEC S3®. Through direct conversion of the kinetic 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 is to identify partners for pilot and commercialisation projects as well as to identify other applications for this innovative technology.

SBM OFFSHORE ACTIVITIES



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


AMSTERDAM
SBM Offshore Head Office
SCHIEDAM
HOUSTON
THUNDER HAWK
DeepDraftSemi®
MONACO
CARROS
MARLY
PORTO
FOS SUR MER
SHANGHAI
NANTONG
QIDONG
YANTAI
TIANJIN
QINGDAO
SHENZHEN
SHANGHAI
DUBAI
BANGALORE
LUANDA
FPSO MONDO
FPSO SAXI BATUQUE
N'GOMA FPSO
MALABO
FPSO SERPENTINA
FPSO ASENG
SINGAPORE
GEORGETOWN
SHOREBASE
FPSO LIZA DESTINY
FPSO LIZA UNITY
VITÓRIA
FPSO CAPIXABA
FPSO CIDADE DE ANCHIETA
RIO DE JANEIRO
SHOREBASE
FPSO ESPIRITO SANTO
ANGRA DOS REIS
SÃO JOSÉ DO NORTE
SANTOS
FPSO CIDADE DE PARATY
FPSO CIDADE DE ILHABELA
FPSO CIDADE DE MARICÁ
FPSO CIDADE DE SAQUAREMA
KUALA LUMPUR
SHOREBASE
FPSO KIKEH
OFFICES
SHOREBASES
UNITS
CONSTRUCTION YARDS
R&D LABORATORY

SBM OFFSHORE PART OF ENERGY INDUSTRY AND LOCAL COMMUNITY

SBM Offshore aims to be an energy transition company, reducing carbon in its operations and developing alternative energy sources. SBM Offshore embraces the Paris Agreement and strives to be a leader in transparency. Along the way, there are many questions that SBM Offshore cannot answer on its own, thus it is working with, and listening to, others.

SBM Offshore has been actively involved in technology development in the energy industry by cooperating with its value chain business partners and working with other companies, universities, class societies, etc. For instance, SBM Offshore is among the 24 participants in the Joint Industry Projects (JIP) for Anchoring and Mooring Design of Floating Photovoltaics.

Moreover, SBM Offshore is seeking to understand and contribute to the mitigation of the challenges faced by local communities and has carried out social activities in the respective regions where it operates, (see section 2.2).

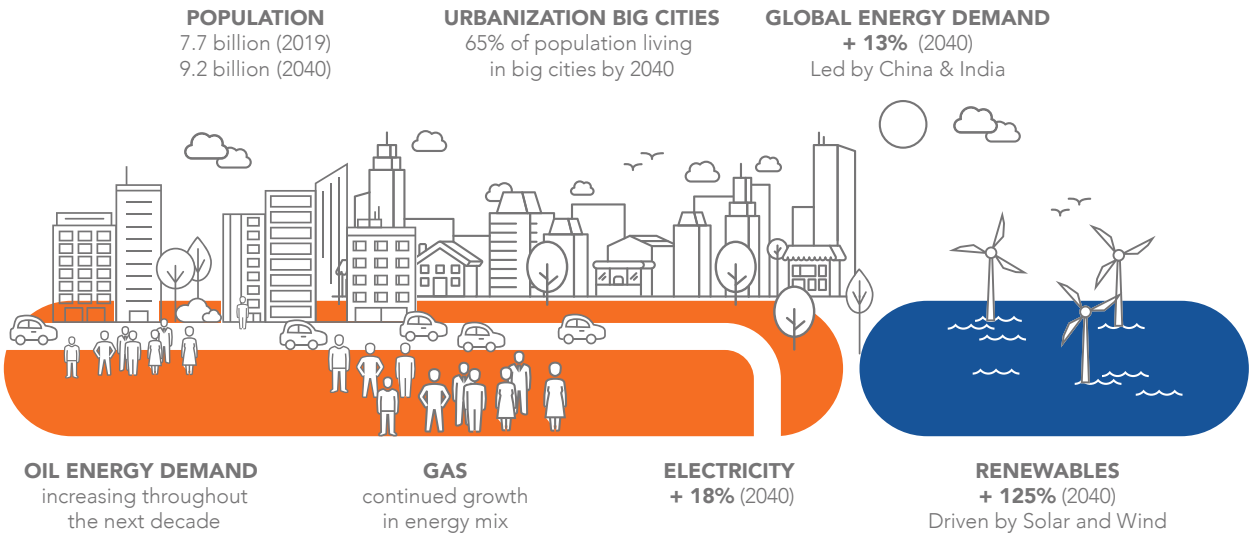
CURRENT, NEAR-TERM AND FUTURE IMPACTS ON SBM OFFSHORE'S ACTIVITIES

In 2022, the world continues to adapt to a post-pandemic reality strained by inflationary shocks, energy scarcity and geopolitical tensions. Amidst geopolitical strife and rapid technological advancement, the energy transition and the demand for lower-emission solutions have been accelerating. More and more countries are focusing on energy source diversification and self-sufficiency. Many structural measures are being taken, especially in the EU, to accelerate renewable development. For Floating Offshore Wind, up to 2022, the installed capacity is less than 200 MW globally. The forecast of the cumulative installed capacity by 2030 is in the range of 6-12GW with the most intensive construction activities mainly coming in the last three years of the decade.

In addition, there is an increasing focus across most sectors on Environmental, Social and Governance (ESG) targets. Companies are repositioning and adjusting their strategies towards operating in a carbon-neutral environment using the ESG framework.

Moreover, the importance of energy availability, security and affordability came to the forefront during the energy crisis in 2022, highlighting the need to maintain the supply of hydrocarbons. In the FPSO market, there were 9 FPSO awards, 5 of which were in SBM Offshore's key regions of Brazil and Guyana.

OUTLOOK OF WORLD ENERGY DEMAND



Sources: IEA World Energy Outlook 2022, United Nations World Urbanization Prospects, worldometers.info

MACRO TRENDS

According to the United Nations' world population projection, by 2040, 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 in the coming decades. While oil and natural gas will still play a key role in the primary energy mix, renewable energy is increasing its share and governments are raising their decarbonization targets. The demand for oil and natural gas is expected to continue to grow until the middle of the next decade, as geopolitical tensions have underlined fragilities and dependencies in the energy system, after which it should plateau towards 2040. 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, there is a need for its capabilities to deliver sizeable deepwater projects across the energy mix. SBM Offshore's success will depend on partnering with other companies similarly committed to its energy transition strategy and activities, with a focus on the lifecycle value of projects, from early client engagement until the end of field recycling phases.

1.2.2 STAKEHOLDERS AND MATERIAL TOPICS

SBM Offshore's main stakeholders are its clients, employees, suppliers, shareholders and lenders (banks). Other important stakeholders are regulators, class society organisations, yards, partners, local communities and non-governmental organizations (NGOs). Throughout the year, SBM Offshore engages with these stakeholders and listens to their feedback, as part of its daily business.

SBM Offshore carries out a materiality assessment, factoring in the views of stakeholders and the impacts SBM Offshore has on economics, environment and society. The process is explained in section 5.1.2, with example engagement and outcomes mentioned below.

Example engagements during 2022

Stakeholder Group	Engagement
All key stakeholders	Materiality update meetings
Employees	Pulse Survey, Management Calls and Virtual Townhalls.
Shareholders	Annual General Meeting. Engagement with representative groups – e.g. VBDO (Dutch Association of Investors for Sustainable Development).
Lenders	Ongoing environmental and social due diligence during project financing and the definition of actions for further improvement.
NGOs	Engagement with representatives regarding business transparency, ship recycling and climate action.