
SBM
OFFSHORE
ENERGY. COMMITTED.
ANNUAL REPORT 2020

2.1.6 EMISSIONS

MANAGEMENT APPROACH

The topic of emissions is dealt with in various parts of the organization, most notably under the HSSE and Environmental Reporting approaches as described in sections 2.1.3, 4.9.1 and 4.9.2. The Company is reporting to CDP (formerly the Carbon Disclosure Project) and considering IOGP statistics to ensure the right benchmarking.

SBM Offshore sets targets and actions within regulatory frameworks. In support of the Energy Transition the Company reduces emissions throughout the lifecycle of its products. For the long-term, the emissionZERO™ program has been introduced to align the Company's activities with our stakeholders' net zero ambitions. In 2020, SBM Offshore set targets to reduce flare emissions on its activities, to have zero oil spills and to set a company-wide target to reduce air-travel-related emissions.

Furthemore the Company strives to outpeform industry benchmarks on the following indicators :

- GHG emissions[4], gas flare[5], energy consumption[6]
- Oil in produced water[7], oil spill per production[8]

The efforts in emissions management build upon years of action taken to bring emissions down structurally. For example, between 2016 and 2020, GHG-intensity in operations has declined by over 40% with flaring intensity reducing by almost 50% . Through this approach,the Company is mitigating risks in the light of climate change and social license to operate, as mentioned in section 1.4.2.

Although the focus is on GHG emissions, and carbon emissions in particular. SBM Offshore is also addressing other emissions – such as emissions to water and non-GHG emissions. Further information can be found in sections 2.2 and 4.10.2.

2020 PERFORMANCE

During 2020 a total of 5.67 million tonnes of GHG emissions are reported, divided over Scope 1, 2 and 3 emissions .

[4] Target of 149 tonnes of GHG emissions per thousand tonnes of hydrocarbon produced as reported by companies participating in the 2018 IOGP benchmark, Report 2018ee, p.2

[5] Target of 10.5 tonnes of gas flared per thousand tonnes of hydrocarbon produced as reported by companies participating in the 2018 IOGP benchmark, Report 2018ee, p.2

[6] Target of 1.5 gigajoules of energy for every tonne of hydrocarbon produced as reported by companies participating in the 2018 IOGP benchmark, Report 2018ee, p.2

[7] Target of 12.3 tonnes of oil discharged to sea per million tonnes of hydrocarbon produced as reported by companies participating in the 2018 IOGP benchmark, Report 2018ee, p.3

[8] Target of 0.5 oil spills greater than one barrel per million tonnes of hydrocarbon produced as reported by companies participating in the 2018 IOGP benchmark, Report 2018ee, p.3

GHG EMISSIONS
(MILLION TONNES CO_2 EQUIVALENT)

SCOPE 1

All Direct Emissions from the activities of an organization or under their control (ie. fuel combustion).

OFFICES SHORE BASE

'OWN' YARDS

5.66 All emissions, incl. client production driven.
0.99 SBM Offshore account flaring

SCOPE 2

Indirect Emissions from electricity purchased and used by the organization.

OFFICES SHORE BASE

'OWN' YARDS

SCOPE 3

All other Indirect Emissions from activities of the organization, occurring from sources that they do not own or control [ie: occurring up and/or down the value chain]

SUPPLY CHAIN
CONTRACTED YARDS
for instance sourced steel and equipment

BUSINESS TRAVEL

SBM OFFSHORE TOTAL EMISSIONS

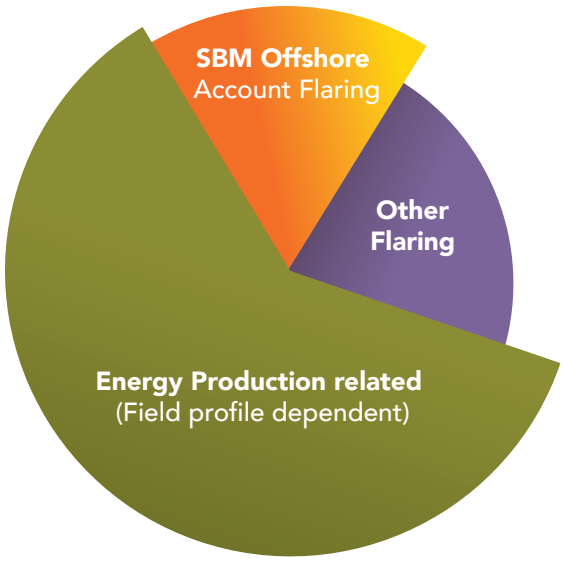
5.67

Scope 1 emissions

Emissions from fleet operations account for the majority of the carbon footprint reported by the Company, around 99% of total emissions giving 5.66 million tonnes of GHG were emitted under Scope 1 in fleet operations (Operational Control view) or 3.86 million tonnes (Equity Share view). This equates to 120.5 tonnes of GHG emissions per thousand tonnes of hydrocarbon produced, which is 19% better than the industry benchmark[9].

Scope 1 emissions from fleet operations mainly relate to the required production profile of the oil field and the subsequent energy production, e.g. from gas turbines. (61.1% of Scope 1 emissions from operations). Other key emission categories are from flaring attributable to the SBM Offshore account (17.5%) and other flaring (21.4%).

Scope 1 emissions from fleet operations reported



The Company instituted a performance program measuring flare emissions on SBM Offshore account since the launch of the internal CO_2 Challenge in 2015. For 2020, SBM Offshore set a target to reduce the absolute mass of gas flared in its fleet by 25% compared with 2019. The Company takes pride that it exceeded the target achieving a 36% reduction.

In 2020, SBM Offshore ramped up production in Guyana through *Liza Destiny* (FPSO). Start-up is a transition phase with inherently higher flaring emissions. This project was analyzed in detail to improve our emission performance during this critical phase for future projects. A key factor is the offshore commissioning of gas management systems, in particular in the gas treatment plant, main gas compression and flash gas compression. In addition to holding an in-depth lessons-learned review on the matter, the Company introduced a reduction factor for flare emission performance contribution to its short-term incentive calculations. This operation was not part of the 25% target mentioned above, as the project did not have a full year operation in 2019.

In order to address future Scope 1 emissions, SBM Offshore has targets for Innovation, Technology and Infrastructure, in line with SDG 9. In 2020, the Company spent 52% of its technology development budget on non-carbon technology, well above the 30% target set. Also, the Company provided Scope 1 emission outlooks for 100% of its FPSO tenders, which enables client engagement on emission reduction solutions in early project stages.

To further reduce emissions from the power generation aspect of existing assets, SBM Offshore is dependent on investments by clients and JV partners. SBM Offshore is ready to lead, co-develop and deliver on such investments.

Scope 2 & 3 Emissions

To address Scope 2 emissions, SBM Offshore was proud to have achieved green certifications for 91% of its offices in 2019. In 2020, it expanded the scope of this initiative to project offices, with 62.5% of them now being assessed for sustainability certifications.

As part of climate action (SDG 13), SBM Offshore is committed to setting an air-travel-related CO_2 emissions target for the future. In 2021, the Company will commit to 20% lower air-travel-related CO_2 emissions compared with 2019. Remote working and less travel and consumption during 2020 will provide lessons in structurally lowering emissions from business travel. The target takes into account the fact that a portion of our business travel relates to offshore operations, e.g. crew changes, where volumes are difficult to reduce significantly in short time-frames.

SBM Offshore is proud to have improved to a B-score in CDP, meaning the Company is 'taking coordinated action on climate issues'. Further explanation is given in section 1.4.3.

Relating to other emissions :

- The Company's energy intensity is 11% better than the industry benchmark[10]. Energy consumption volumes can be found in section 4.10.2.
- The quantity of oil discharged to sea per hydrocarbon production was 5.09 tonnes per million tonnes of hydrocarbon produced, well below IOGP.

[9] Companies participating in the 2018 IOGP benchmark reported 149 tonnes of GHG emissions per thousand tonnes of hydrocarbon produced, Report 2018ee, p.2

[10] Companies participating in the 2018 IOGP benchmark consumed 1.5 gigajoules of energy for every tonne of hydrocarbon produced, Report 2018ee, p.2

EMISSIONZERO™

Early in 2020, SBM Offshore announced the emissionZERO™ concept, which has evolved over the year into a program targeting near zero emissions from Operations. This ambition has also been made part of the sustainability policy.

EmissionZERO™ brings to market floating energy production solutions with near zero emissions. The Company sets targets in line with the net-zero ambitions of key stakeholders, and calls for their active engagement. EmissionZERO™ is a program for continuous product development, providing a platform for stakeholder engagement at the same time.

Key commitments :

- the Company works towards near zero emissions from operations (scope 1 emissions)
- the Company sources green electricity to run its business (scope 2 emissions)
- the Company executes projects and procures with continued emission reductions in mind (scope 3 emissions)

Activities comprise new product development, embedding emissionZERO™ in SBM Offshore's ways of working and running a platform for engagement.

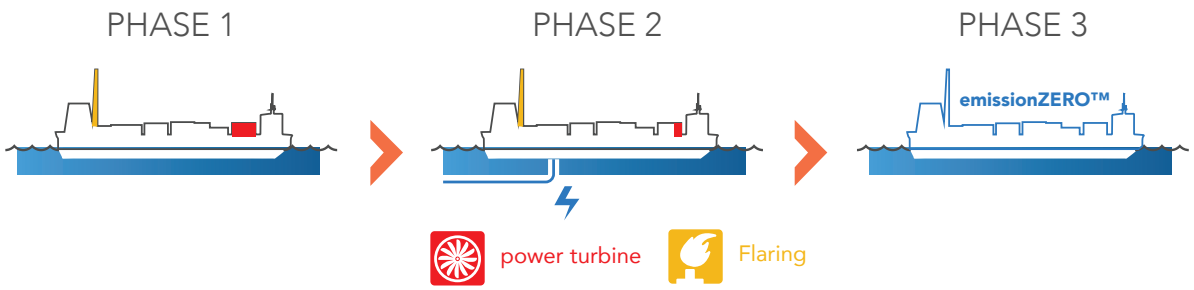
Key achievements on emissionZERO™ have been :

- The launch of the concept and brand in Q1 2020
- The engagement with strategic and key client accounts and suppliers during the year
- The enrichment of our Fast4Ward® product catalogue with lower carbon solutions
- The qualification of new technology, in particular carbon capture and energy storage
- The establishment of a portfolio of ideas and projects to further reduce the carbon footprint of our activities

Development of an emissionZERO™ based FPSO is a key element of the program and is planned in three phases: Phase 1 will accelerate existing technology into upcoming tenders; Phase 2 focuses on alternative forms of power generation – for instance importing renewable energy from shore or floating renewable energy solutions, as well as carbon capture and storage; and Phase 3 will look at emission reduction effects of remote operations and renewable energy storage.

The success of the program is highly dependent on market acceptance. SBM Offshore therefore is open for business on emissionZERO™ and welcomes engagement with its value chain.

EMISSIONZERO™ - THE PATH



Our ambition is that emissionZERO™ brings to market floating energy production solutions with near zero emissions

- New product & technology development
- Embed emissionZERO™ in SBM Offshore's ways of working
- A platform for engagement

FUTURE

The Company is committed to the ramp-up of emissionZERO™ in the coming years and to keep setting targets to reduce emissions, as explained in section 2.2.

Furthermore, the Company continues to expand the work under TCFD, begun in 2019 (see section 1.4.3).

To reduce flaring in 2021, the Company has set a target for reduction in SBM Offshore's account as explained in section 2.2. This target reflects the lessons learned from the achievements and challenges in 2020.

Furthermore, SBM Offshore remains committed to achieve better environmental performance than the 2019 IOGP industry benchmark[11] for energy consumption[12] and oil spills per production[13]; and 50% better than the 2019 IOGP industry benchmark[14] for oil in produced water[15].

[11] IOGP data series environmental performance indicators - 2019 data, report number 2019e.
[12] Target of 1.5 gigajoules of energy for every tonne of hydrocarbon produced as reported by companies participating in the 2019 IOGP benchmark, Report 2019e, p.23
[13] Target of 0.5 oil spills greater than one barrel per million tonnes of hydrocarbon produced as reported by companies participating in the 2019 IOGP benchmark, Report 2019e, p.36
[14] IOGP data series environmental performance indicators - 2019 data, report number 2019e.
[15] Target of 13 tonnes of oil discharged to sea per million tonnes of hydrocarbon produced as reported by companies participating in the 2019 IOGP benchmark, Report 2019e, p.30

2.1.7 DIGITALIZATION

MANAGEMENT APPROACH

The Company aims to increase lifecycle value through better use of data and digital technology hence its Digital Transformation program is a key enabler for increasing Company value. SBM Offshore sets short-term targets in this area, for example, to increase efficiency, to increase the connected data set and to bring new services to market.

The Transformation program is aimed at upgrading the main data systems, enabling more automation, improving efficiency, and gaining insight, ultimately leading to safer and more sustainable operations. Digital Transformation is also enabling the creation of new business opportunities, both within product development and digital services, to secure new revenue streams for the Company. The Digital Transformation program is under the responsibility of the Chief Strategy Officer and sponsored by the CEO. Digital solutions are brought to market through the *Services* function described in section 1.3.3.

The Digital Transformation program plays a key role in achieving efficiencies defined in the Fast4Ward® program. The program covers five areas :

1. Data Company – focused on streamlining the data and information model of the Company
2. Smart Execution – focused on further digitalization of the EPC stage of SBM Offshore's projects
3. Smart Operations – focused on the transformation of asset operations
4. Smart Services – focused on developing new business from data and digital technologies