



**OFFSHORE**

ENERGY. COMMITTED.

# ANNUAL REPORT 2018

## 2 STRATEGY AND PERFORMANCE

### 2.6 HEALTH, SAFETY, SECURITY AND ENVIRONMENT

#### MANAGEMENT APPROACH

SBM Offshore is committed to safeguard the Health, Safety and Security (HSS) of its employees, subcontractors and assets, as well as managing the Company's environmental impact. The foundations for the achievements of the Company are based on a structured risk management approach in deploying industry best practices and adopting environmentally friendly innovations in the operations of its offshore units.

The Company continues to develop its integrated Management System and promote a proactive Health, Safety, Security & Environment (HSSE) culture amongst all employees and the companies to whom SBM Offshore outsources. Similarly, SBM Offshore is managing its footprint by operating in an environmentally robust and sustainable manner to minimize the impact of the Company's activities on local ecosystems and to proactively protect the environment.

#### 2018 PERFORMANCE

SBM Offshore's HSSE performance is monitored and assessed through different performance indicators, with a specific focus on the core following ones:

- Total Recordable Injury Frequency Rate (TRIFR) and Occupational Illness Frequency Rate (OIFR)
- Level of security risk: incidents resulting in harm or injury to personnel
- Prevention of flaring: flaring or related emissions into the air
- Reduction in consumption, recycle and re-use: energy consumption and waste management
- Compliance with set procedures and implementation of control measures for oil in water discharges into the sea
- Prevention of discharges: prevent oil and chemical spills

All incidents with an actual or a potential consequence for the Health, Safety, Security of personnel and/or impact on the environment are reported, investigated to determine the immediate and root causes, are communicated to the relevant parties within the organization and corrective measures are taken. HSSE performance and data are tracked on a daily basis and consolidated on a monthly basis, to be disclosed annually.

HSSE results are recorded and reported in accordance with the Global Reporting Initiative (GRI) Standards and International Association of Oil and Gas Producers (IOGP) guidelines. The results are compared to previous years, as well as benchmarked against the IOGP averages.

#### Key targets

In line with its long-term strategy of continuous improvement, SBM Offshore set for 2018 the following targets:

- To achieve a TRIFR better than 0.26
- To reduce the gas flared under SBM Offshore control by 9.6% compared to 2017
- To achieve on all offshore units better environmental performance than the 2016 IOGP industry benchmark for the following environmental aspects: GHG emissions<sup>2</sup>, gas flared<sup>3</sup>, energy consumption<sup>4</sup>, oil in produced water<sup>5</sup> and oil spills per production<sup>6</sup>

#### Key achievements

The Company continued to expand the HSSE initiatives in 2018 as follows:

- Maintain all International Safety Management (ISM) and International Ship and Port Security (ISPS) certifications on offshore units and shorebases, as well as verification of compliance with ISO 14001 and OHSAS 18001 requirements for SBM Offshore Operations. This includes obtaining the ISO 14001 and OHSAS 18001 compliance verification on the most recent unit, FPSO *Cidade de Saquarema*.
- Celebrate the five-year anniversary of the Company-wide Life Day and engagement with employees via multi-disciplinary monthly campaigns.
- Strengthen manager and supervisor engagement skills to support the ownership of a safety culture amongst leaders to cascade and embed the Company HSSE culture throughout the organization and all activities.

<sup>2</sup> Companies participating in the 2016 IOGP benchmark reported 151 tonnes of GHG emissions per thousand tonnes of hydrocarbon produced, Report 2016e, p.24

<sup>3</sup> Companies participating in the 2016 IOGP benchmark reported 12.9 tonnes of gas flared per thousand tonnes of hydrocarbon produced, Report 2016e, p.34

<sup>4</sup> Companies participating in the 2016 IOGP benchmark consumed 1.4 gigajoules of energy for every tonne of hydrocarbon produced, Report 2016e, p.32

<sup>5</sup> Companies participating in the 2016 IOGP benchmark reported 10.2 tonnes of oil discharged to sea per million tonnes of hydrocarbon produced, Report 2016e, p.40

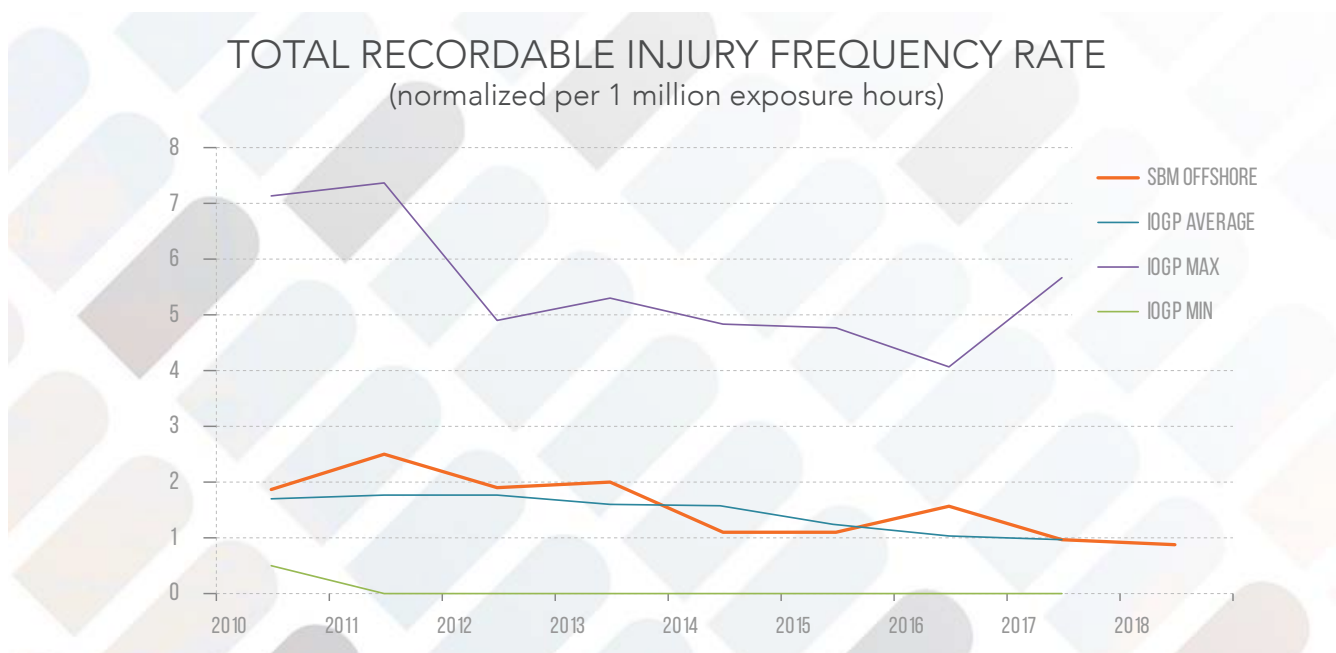
<sup>6</sup> Companies participating in the 2016 IOGP benchmark reported 0.4 oil spills greater than one barrel per million tonnes of hydrocarbon produced, Report 2016e, p.47

- Conduct a sensing survey to assess the maturity level of the safety culture on all offshore units and shorebases and develop related action plans.
- Strengthen SBM Offshore Management System HSSE sections to embrace the International Sustainability Rating System (ISRS) ambition and verify the implementation and application of the improvement actions identified during the ISRS maturity assessment.
- Pursue the objective to reduce the volume of gas flared under the control of the offshore units, fostering ownership and promoting local initiatives.

- Foster initiatives on waste minimization and reduce the use of plastic on offshore units.
- Promote health management on SBM Offshore activities with offshore units health risk assessment developed and cascaded worldwide, stress survey and awareness campaigns as well as Life Day relaxation activities.

The following graph shows that SBM Offshore's Total Recordable Injury Frequency Rate has remained around the IOGP average since 2010<sup>7</sup>.

<sup>7</sup> For this graph normalized per 1 million exposure hours; includes IOGP Contributing Members (maximum, average, minimum)



### Key results

Despite further progress in the overall journey of 'No Harm, No Defects, No Leaks', regrettably, one yard contractor staff member was fatally injured in an incident on a FPSO construction project in Singapore. Following the investigation, root causes have been analyzed and appropriate measures have been put into effect. A large number of objectives have, however, been achieved and the following HSS performance was recorded in 2018:

- SBM Offshore performed significantly better than our TRIFR target of 0.29 and achieved an overall TRIFR of 0.18 in 2018 compared to 0.19 in 2017.
- The Occupational Illness Frequency Rate (OIFR) for employees deteriorated to 0.33 in 2018 from 0.02 in 2017. The 2018 rate is a result of three events, for which two were related to gastric disorders onboard offshore units, which triggered several individuals to be impacted (14 individuals exposed

on one event) thereby resulting in an increase of the OIFR.

- The frequency of incidents with high potential to harm people remained stable at 0.09 in 2018, similar to the 2017 frequency rate.
- Seven 'work-related' security incidents (as opposed to safety incidents) were reported. None of these security incidents resulted in any actual injury or physical harm to SBM Offshore personnel. Throughout 2018, the security function maintained a strong focus on providing training and awareness sessions to personnel, as well as supporting the organization with security advice during the early phases of exploring new country entry opportunities.
- Dow Jones Sustainability Index (DJSI): three sections out of the HSSE sections were assessed as best in class performance .



## 2 STRATEGY AND PERFORMANCE

The following environmental performance was recorded in 2018<sup>8</sup>:

- GHG emissions from energy generation and gas flared relative to the hydrocarbon production decreased compared to 2017. A total of 5,105,292 tonnes of GHG have been produced in 2018, representing 97.79 tonnes of GHG emissions per thousand tonnes of hydrocarbon produced, which is better than 2017 and 35% lower than the industry benchmark<sup>9</sup>. This decrease is mainly due to a 10% reduction in the volume of gas flared compared to 2017 (see next point).
- The total gas flared in 2018 was 9.81 tonnes per thousand tonnes of hydrocarbon produced (of which 62% was requested by the client) compared to 10.9 in 2017 thereby achieving a 10% reduction which is better than the 9.6% set target. The Company reports a total gas flared per production below the IOGP industry benchmark<sup>10</sup> of 12.1.
- Out of the 11 units which participated in the flaring reduction challenge, seven met their individual target (ranging between 1 and 20% target reduction between units)
- The volume of energy consumption used per hydrocarbon produced remained stable at 1.11 gigajoules of energy for every tonne of hydrocarbon produced (compared to 1.12 in 2017), which is 26% lower than the industry benchmark<sup>11</sup>
- The quantity of oil discharged to sea per hydrocarbon production was 3.50 tonnes per million tonnes of hydrocarbon produced, compared to 2.55 in 2017, while the IOGP average is 13.3. The Company continues to perform in this aspect much better than the industry, as the IOGP average also showed an increase over the previous year.
- There was no hydrocarbon spill exceeding one barrel in volume (159L) reported, while the industry benchmark<sup>12</sup> is 0.5.

### FUTURE

SBM Offshore has the ambition to continue to improve its HSSE performance and has therefore decided to set the following targets for 2019:

- 2019 TRIFR target of 0.29
- 20% reduction of quantity of gas flared under SBM Offshore control
- All offshore units to achieve better environmental performance than the 2017 IOGP industry benchmark for the following environmental aspects: GHG emissions<sup>13</sup>, gas flared<sup>14</sup>, energy consumption<sup>15</sup>, oil in produced water<sup>16</sup> and oil spills per production<sup>17</sup>

To structure its continuous improvement and achieve its ambition in 2019, SBM Offshore has planned the following HSSE initiatives to progress toward the goals of 'No Harm, No Defects, No Leaks':

- Engage at project and offshore unit level to support the ownership of a safety culture among leaders and supervisors
- Deploy the nine Life Saving Rules published in October 2018 by the IOGP, to continue the journey started in 2011 by adopting the recently updated industry practices of the current SBM Offshore 12 Life Saving Rules
- Verify effectiveness of key controls and Lessons Learned arising out the fatal accident investigation
- Develop health management and performance reporting through enhanced health surveillance programs and mental and social health initiatives
- Maintain compliance with all existing certification requirements on shorebases and offshore units

<sup>8</sup> Detailed data are provided in the non-financial table, section 5.3.2

<sup>9</sup> Companies participating in the 2017 IOGP benchmark reported 151 tonnes of GHG emissions per thousand tonnes of hydrocarbon produced, Report 2017e, p.25

<sup>10</sup> Companies participating in the 2017 IOGP benchmark reported 12.1 tonnes of gas flared per thousand tonnes of hydrocarbon produced, Report 2017e, p.35

<sup>11</sup> Companies participating in the 2017 IOGP benchmark consumed 1.5 gigajoules of energy for every tonne of hydrocarbon produced, Report 2017e, p.33

<sup>12</sup> Companies participating in the 2017 IOGP benchmark reported 0.5 oil spills greater than one barrel per million tonnes of hydrocarbon produced, Report 2017e, p.48

<sup>13</sup> Target of 151 tonnes of GHG Emissions per thousand tonnes of hydrocarbon produced as reported by companies participating in the 2017 IOGP benchmark, Report 2017e, p. 25

<sup>14</sup> Target of 12.1 tonnes of gas flared per thousand tonnes of hydrocarbon produced as reported by companies participating in the 2017 IOGP benchmark, Report 2017e, p.35

<sup>15</sup> Target of 1.5 gigajoules of energy for every tonne of hydrocarbon produced as reported by companies participating in the 2017 IOGP benchmark, Report 2017e, p.33

<sup>16</sup> Target of 13.3 tonnes of oil discharged to sea per million tonnes of hydrocarbon produced as reported by companies participating in the 2017 IOGP benchmark, Report 2017e, p.41

<sup>17</sup> Target of 0.5 oil spills greater than one barrel per million tonnes of hydrocarbon produced as reported by companies participating in the 2017 IOGP benchmark, Report 2017e, p.48