



EXPERIENCE **MATTERS**

**2016**

ANNUAL REPORT

the IOGP average is 7.5. This is 65% lower than the industry benchmark;

- No hydrocarbon spill exceeding one barrel in size (159L) has been reported in 2016, which means that the normalized number of oil spills offshore greater than one barrel per million tonnes of hydrocarbon produced is 0 for 2015, while the industry benchmark<sup>13</sup> is 0.13.

## FUTURE

The Company has been able to reduce the gas flared under SBM Offshore account per production by 51% in two years and wants to further reduce gas flared under its control in 2017. In order to make the environmental targets more relevant for each unit, the Company has decided to adopt a different approach in the target setting for 2017. Each unit has set its own target in terms of flaring reduction. Targets range from 5 to 25% reduction between units, with a consolidated average of 9.6% reduction for 2017 at Company level.

Similar to previous years, SBM Offshore has set the target to achieve better environmental performance than the 2015 IOGP industry benchmark<sup>14</sup> for the other environmental aspects: GHG emissions, Energy Consumption, Oil in Water and Oil Spills per production.

In line with its long-term strategy, SBM Offshore has included the following environmental initiatives as part of its HSSE program for 2017:

- Align SBM Offshore practices with ISRS requirements on Environmental Hazard identification, control and monitoring
- Continue with the improvement on environmental emissions reporting

## 2.5.1 CO<sub>2</sub> CHALLENGE

A competition was designed to address the issue of climate change, while leveraging expertise to create a competitive edge. Starting in 2015, SBM Offshore tested the creative talents of its engineers by asking them to propose innovative solutions to reduce CO<sub>2</sub> emissions offshore. Five teams of young entrepreneurial employees from around the world found intelligent solutions to reduce CO<sub>2</sub>, while increasing operational efficiency on SBM Offshore's FPSOs and MOPU.

In 2016 the teams came together to share and pitch the top ideas to the jury. The winning solution, a special Flare Management System was adopted and installed offshore in December 2016 as a pilot, with the intention of expanding it to the rest of the fleet in the future. The winning team engaged with offshore crews to find the innovative solution to reduce emissions, while also increasing awareness for the issue of flaring and climate change. The pilot project also reports on the cause, source and remedy of environmental incidents on a daily basis with the objective to manage and reduce emission levels. Feedback from this pilot provides valuable information for the development of the HSSE and Sustainability Dashboard, which is part of the Group's Digitization project (see section 2.3.2 Fleet).

### CO<sub>2</sub> Challenge Findings

- Recommendations from the CO<sub>2</sub> Challenge to improve reporting of GHG emissions, by means of introducing actual gas density to calculate actual GHG emission levels, have been implemented; the result is more accurate reporting (see section 6.1.7 Environmental Reporting).
- Solutions and ideas that were not part of the winning solutions have been captured for action and follow up. Improvements on offshore operations are managed on the FPSO directly with onshore support. Other ideas have been shared with SBM Offshore's R&D program.

<sup>13</sup> Companies participating in the IOGP benchmark reported 0.13 oil spill offshore greater than one barrel per million tonnes of hydrocarbon produced, Report 2014e, p.70

<sup>14</sup> Not yet published by IOGP