



EXPERIENCE **MATTERS**

**2016**

ANNUAL REPORT

sustainability indicators prepared by SBM Offshore. From 2014 to 2016, PricewaterhouseCoopers Accountants N.V. provided limited assurance on all HSSE and Human Resources data. The financial data have been audited as part of the annual financial reporting process.

For Health, Safety and Security information is provided in relation to SBM Offshore's direct activities and also includes impacts outside the organization by reporting on contractors and contractor's subcontractors.

For Environment and Human Resources, information is provided in relation to impacts within the Company.

For some performance indicators the Company makes a split between onshore and offshore activities.

For Health, Safety, Security and Environment, onshore includes all SBM Offshore employees (including agency staff) in the offices, yards and installations vessels and contractors/subcontractors in the yards. Offshore includes all fleet, support shore bases and the Monaco office supporting the offshore fleet.

For Human Resources, onshore includes all SBM Offshore employees and contractors working in all the Company's offices, shore bases (supporting the offshore fleet), construction yards and Operations employees based in Monaco. Offshore includes all crew employees operating on vessels. This breakdown does not include Construction Yard employees which are treated separately.

### 6.1.6 HEALTH, SAFETY AND SECURITY REPORTING

The Health, Safety and Security performance indicators scope takes into account:

- **Employees** which include all permanent employees, part-time employees, locally hired agency staff ('direct contractors') in the fabrication sites, offices and offshore workers, i.e. all people working for the Company.

- **Contractors** which include any person employed by a Contractor or Contractor's Subcontractor(s) who is directly involved in execution of prescribed work under a contract with SBM Offshore.

HSS incidents are reported and managed through the Company's Single Reporting System (SRS) database. SRS is a web-based reporting system that is used to collect data on all incidents occurring in all locations where the Company operates.

The SRS system records safety, environmental, security incidents, loss of containments, equipment failure and damage only incidents.

Safety incidents are reported based on the incident classifications as defined by the IOGP Report 2015 – Jan 2016. Health incidents are reported based on the occupational illnesses classification given in IOGP Report Number 393 – 2007.

The Company also reports incident data from Contractor's construction facilities if the incident is related to an SBM Offshore project.

The Company uses records of exposure hours and SRS data to calculate Health and Safety performance indicators set by SBM Offshore.

The Loss of Primary Containment (LOPC) reporting is managed through the Company's Single Reporting System (SRS) database. LOPCs are reported based on the definitions and thresholds from IOGP report 456 and API standard RP 754. In 2016, a LOPC volume calculator tool has been included in SRS to assist personnel in determining quantities released based on known factors and improve accuracy of reported volumes.

KPIs used by the Company include the number of LOPCs, the number of Tier 1 Process Safety Events and the number of Tier 2 Process Safety Events.

#### LOSS OF PRIMARY CONTAINMENT (LOPC)

A LOPC is defined as an unplanned or uncontrolled release of any material from primary containment,



## 6 NON-FINANCIAL DATA

including non-toxic and non-flammable materials (e.g. steam, hot condensate, nitrogen, compressed CO<sub>2</sub> or compressed air). Tier 1 represents LOPC events of greater consequence with Tier 2 being those events of lesser consequence.

### REVISED DATA

The data for Process Safety reported in 2015 have been revised to expand the scope to include the vessels FPSO *Kikeh* and FPSO *Serpentina*.

### 6.1.7 ENVIRONMENTAL REPORTING

#### OFFSHORE

The environmental and process safety offshore performance reporting scope is comprised of 14 offshore units that use the following reporting boundaries:

- Units in the Company's fleet producing and/or storing hydrocarbons under lease and operate contracts during 2016
- Units in which the Company exercises full operational management control
- Units in which the Company has full ownership or participates in a Joint Venture (JV) partnership, where the Company controls 50% or more of the shares

The environmental and process safety performance of the Company is reported by region: Brazil, Angola, North America & Equatorial Guinea and Asia. Based on the criteria stated above, SBM Offshore reports on the environmental performance for the following 14 vessels:

- Brazil – FPSO *Espirito Santo*, FPSO *Capixaba*, FPSO *Cidade de Paraty*, FPSO *Cidade de Anchieta*, FPSO *Cidade de Ilhabela*, FPSO *Cidade de Marica*, FPSO *Cidade de Saquarema*
- Angola – FPSO *Mondo*, FPSO *Saxi Batuque* and *N'Goma* FPSO
- North America & Equatorial Guinea – FPSO *Aseng*, MOPU Deep Panuke, FPSO *Turritella*
- Asia - FSO *Yetagun*

The environmental offshore performance reporting methodology was chosen according to the

performance indicators relative to GRI and IOGP guidelines. This includes:

- Greenhouse Gases, referred to as GHG which are N<sub>2</sub>O (Nitrous Oxide), CH<sub>4</sub> (Methane) and CO<sub>2</sub> (Carbon Dioxide)
- GHG emissions per hydrocarbon production from flaring and energy generation
- Non Greenhouse Gases which are CO (Carbon Monoxide), NO<sub>x</sub> (Nitrogen Oxides), SO<sub>2</sub> (Sulphur Dioxide) and VOCs (Volatile Organic Compounds)
- Gas flared per hydrocarbon production, including gas flared on SBM Offshore account
- Energy consumption per hydrocarbon production
- Oil in Produced Water per hydrocarbon production

SBM Offshore reports some of its indicators as a weighted average, calculated pro rata over the volume of hydrocarbon production per region. This is in line with the IOGP Environmental Performance Indicators.

#### ONSHORE

SBM Offshore reports on its onshore scope 1 and 2 emissions<sup>31</sup> by operational control and discloses on the following locations; Netherlands, Monaco, Malaysia, United States of America, Brazil, Switzerland and Canada. Efforts are being made to extend the reporting scope to include all shore bases. SBM Offshore does not have absolute targets as the Company is focused on the maturity of its data collection.

For the onshore energy usage, the Company uses the World Resources Institute Greenhouse Gas Protocol (GHG Protocol) method to calculate CO<sub>2</sub> equivalents. CO<sub>2</sub> equivalency is a quantity that describes, for a given mixture and amount of greenhouse gas, the amount of CO<sub>2</sub> that would have the same global warming potential (GWP),

<sup>31</sup> The World Resources Institute GHG Protocol Corporate Standard classifies a company's GHG emissions into three 'scopes'. **Scope 1 emissions** are direct emissions from owned or controlled sources. **Scope 2 emissions** are indirect emissions from the generation of purchased energy. Scope 3 emissions are all indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions. SBM Offshore does not disclose its scope 3 emissions.