



**OFFSHORE**

ENERGY. COMMITTED.

ANNUAL REPORT 2020

## 4.10.2 ENVIRONMENT

|  | Year to Year      |                   | 2020 - Regional Breakdown |                   |                           |                          |               |
|--|-------------------|-------------------|---------------------------|-------------------|---------------------------|--------------------------|---------------|
|  | 2020              | 2019 (revised)    | Brazil                    | Angola            | North America & Caribbean | Asia & Equatorial Guinea | Europe        |
| Number of offshore units (vessels)                             | 13                | 12                | 7                         | 3                 | 1                         | 2                        | -             |
| <b>SBM Offshore Production</b>                                 |                   |                   |                           |                   |                           |                          |               |
| Hydrocarbon Production (tonnes)                                | 46,987,495        | 47,492,381        | 33,431,698                | 6,825,727         | 4,114,800                 | 2,615,269                | -             |
| <b>Energy Consumption</b>                                      |                   |                   |                           |                   |                           |                          |               |
| <b>Total Energy Consumption<sup>1</sup></b>                    | <b>63,161,957</b> | <b>60,762,908</b> | <b>39,216,434</b>         | <b>12,733,608</b> | <b>3,645,868</b>          | <b>7,551,095</b>         | <b>14,953</b> |
| <b>Offshore Energy Consumption</b>                             | <b>63,133,658</b> | <b>60,720,811</b> | <b>39,215,603</b>         | <b>12,733,252</b> | <b>3,636,908</b>          | <b>7,547,894</b>         | <b>-</b>      |
| Onshore Energy Consumption                                     | 28,300            | 42,097            | 831                       | 355               | 8,960                     | 3,201                    | 14,953        |
| Offshore Energy consumption per production <sup>2</sup>        | 1.34              | 1.28              | 1.17                      | 1.87              | 0.88                      | 2.89                     | -             |
| <b>Emissions – Offshore</b>                                    |                   |                   |                           |                   |                           |                          |               |
| <b>GHG Scope 1</b>   |                   |                   |                           |                   |                           |                          |               |
| Carbon dioxide (CO <sub>2</sub> in tonnes)                     | 5,248,326         | 5,100,732         | 2,372,705                 | 1,247,923         | 947,604                   | 680,095                  | -             |
| Methane (CH <sub>4</sub> in tonnes)                            | 12,844            | 11,818            | 2,104                     | 3,725             | 5,221                     | 1,793                    | -             |
| Nitrous oxide (N <sub>2</sub> O in tonnes)                     | 311               | 304               | 169                       | 69                | 33                        | 40                       | -             |
| <b>Emissions – Onshore</b>                                     |                   |                   |                           |                   |                           |                          |               |
| GHG Scope 1 <sup>3</sup>                                       | 165               | 233               |                           |                   | 0.7                       |                          | 164           |
| GHG Scope 2 (location based) <sup>3</sup>                      | 2,516             | 3,429             | 32                        | 39                | 1,200                     | 530                      | 715           |
| GHG Scope 2 (market based)                                     | 588               | 510               | 32                        | 39                | 49                        | 446                      | 23            |
| GHG Scope 3 - Air travel <sup>4</sup>                          | 8,231             | 27,742            | 2,851                     | n.a. <sup>5</sup> | 426                       | 198                      | 4,755         |
| <b>Flaring</b>   |                   |                   |                           |                   |                           |                          |               |
| Total Gas Flared per production <sup>6</sup>                   | 14.08             | 12.77             | 2.48                      | 28.82             | 70.09                     | 35.71                    | -             |
| Gas Flared on SBM Offshore account per production <sup>6</sup> | 6.32              | 4.30              | 1.99                      | 7.96              | 40.53                     | 3.69                     | -             |
| Proportion of Gas Flared on SBM Offshore account               | 44.9%             | 33.7%             | 80.1%                     | 27.6%             | 57.8%                     | 10.3%                    | -             |
| <b>Other/Air Pollution – Non Greenhouse Gas Emissions</b>      |                   |                   |                           |                   |                           |                          |               |
| Carbon monoxide (CO in tonnes)                                 | 7,601             | 7,095             | 2,606                     | 1,938             | 2,041                     | 1,016                    | -             |
| Nitrogen oxides (NOx in tonnes)                                | 7,710             | 7,384             | 4,473                     | 1,571             | 639                       | 1,027                    | -             |
| Sulphur dioxides (SO <sub>2</sub> in tonnes)                   | 142               | 137               | 56                        | 17                | 25                        | 43                       | -             |
| Volatile organic compounds (VOCs in tonnes)                    | 1,372             | 1,259             | 195                       | 402               | 580                       | 195                      | -             |
| <b>Emissions – (Offshore+Onshore)</b>                          |                   |                   |                           |                   |                           |                          |               |
| <b>Volume of GHG (CO<sub>2</sub> eq. in tonnes)</b>            | <b>5,671,147</b>  | <b>5,515,367</b>  | <b>2,478,549</b>          | <b>1,361,803</b>  | <b>1,088,514</b>          | <b>737,337</b>           | <b>4,942</b>  |
| <b>Offshore GHG emissions (operational control)</b>            | <b>5,662,163</b>  | <b>5,486,881</b>  | <b>2,475,667</b>          | <b>1,361,765</b>  | <b>1,088,038</b>          | <b>736,694</b>           | <b>-</b>      |
| Offshore GHG emissions (equity share in tonnes) <sup>7</sup>   | 3,864,477         | 3,301,828         | 1,705,433                 | 680,882           | 1,088,038                 | 390,122                  | -             |
| Onshore GHG emissions (offices + airtravel in tonnes)          | 8,984             | 28,486            | 2,883                     | 39                | 476                       | 644                      | 4,942         |
| Offshore GHG emissions per production <sup>8</sup>             | 120.50            | 115.53            | 74.05                     | 199.50            | 264.42                    | 281.69                   | -             |
| <b>Discharges</b>  |                   |                   |                           |                   |                           |                          |               |
| Quantity of oil in produced water discharges <sup>9</sup>      | 5.09              | 5.77              | 0.76                      | 12.34             | 0.47                      | 48.88                    | -             |

1 GJ = gigajoule, energy from fuel gas and marine gas oil

2 Gigajoule per tonnes of hydrocarbon production

3 Tonnes of CO<sub>2</sub> equivalents

4 Split per region is based on Travel agencies

5 Emissions related to flights are reported in the other regions

6 Tonnes of gas flared per thousand tonnes of hydrocarbon production

7 Equity share of operational control scope

8 Tonnes of GHG emissions per thousand tonnes of HC production

9 Tonnes of oil discharged to sea per million tonnes of hydrocarbon production