Sustainability strategies for Oil and Gas

Industry perspective
2020
The current renewed focus on sustainability is driven by the role of Oil and Gas in global Greenhouse Gas (GHG) emissions.

**GHG emissions by sector**

Global GHG emissions, 2000-2018, Gt CO₂ equivalent

- Global GHG emissions continue to rise by 2% per annum such that meeting the emissions level needed to limit temperature rise to 1.5°C will require drastic action.
- Energy accounts for 2/3 of global emissions, driven by the combustion of coal, Oil and Gas for power generation.
- Direct contributions of Oil and Gas operations are significant and account for 10% of global GHG emissions.
- Major IOCs have been taking action to manage emissions from their own operations resulting in a flattening or reduction in GHG emissions intensity in recent years.
- However, there are growing calls for companies to take further action to reduce own emissions and emissions from Oil and Gas combustion for power generation.

Discussion

**Breakdown of global GHG emissions, 2018, Gt CO₂ equivalent**

<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>F-gases</td>
<td>2.4%</td>
<td>4.8%</td>
<td>6.6%</td>
<td>1.0%</td>
</tr>
<tr>
<td>CH₄</td>
<td>34%</td>
<td>34%</td>
<td>34%</td>
<td>34%</td>
</tr>
<tr>
<td>N₂O</td>
<td>32%</td>
<td>32%</td>
<td>32%</td>
<td>32%</td>
</tr>
<tr>
<td>CO₂</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Non-energy</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
</tr>
</tbody>
</table>

**Oil and Gas co. emissions intensity, 2015-2018, '000t CO₂ eq. / MMboe**

<table>
<thead>
<tr>
<th>Company</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exxon Mobil</td>
<td>61</td>
<td>61</td>
<td>64</td>
</tr>
<tr>
<td>Eni</td>
<td>73</td>
<td>72</td>
<td>71</td>
</tr>
<tr>
<td>Chevron</td>
<td>69</td>
<td>66</td>
<td>64</td>
</tr>
<tr>
<td>Shell</td>
<td>53</td>
<td>48</td>
<td>45</td>
</tr>
<tr>
<td>Total</td>
<td>57</td>
<td>41</td>
<td>45</td>
</tr>
<tr>
<td>ConocoPhillips</td>
<td>48</td>
<td>45</td>
<td>41</td>
</tr>
<tr>
<td>BP</td>
<td>45</td>
<td>41</td>
<td>41</td>
</tr>
</tbody>
</table>
Growing societal expectations to manage emissions is creating pressure on Oil and Gas companies in four key areas

**Key drivers for Oil and Gas emissions management**

**Evolving policies and regulation**
- Commitments to the reduction of emissions in accord with the 2015 Paris Agreement
- Growing application of carbon pricing mechanisms

**Public and shareholder activism**
- Shareholder pressure and resolutions to provide transparency on emissions and efforts to address climate concerns
- Public activism highlighting the negative role of the sector in climate change

**Changing investment strategies**
- Rise of sustainability indices and tools highlighting sustainability performance
- Investment strategies of private equity, investment banks and government institutions to decarbonize investment portfolios

**Improvement in renewables energy economics**
- Reduction in the Levelized Cost of Electricity (LCOE) from renewable sources of power
- Growing contribution from solar and wind to future power generation
As a consequence, sustainability has evolved into a business imperative critical for long-term competitiveness.

### Evolution of sustainability in Oil and Gas

<table>
<thead>
<tr>
<th>Element</th>
<th>From …</th>
<th>To …</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective</td>
<td>• Regulatory license to operate</td>
<td>• Social license to operate</td>
</tr>
<tr>
<td>Focus</td>
<td>• Efficient HSSE performance • Fulfill corporate social responsibilities</td>
<td>• Reduce emission to address climate change • Enable energy transition</td>
</tr>
<tr>
<td>Stakeholder</td>
<td>• Regulator, employee and local community</td>
<td>• Regulator, employees and local community • Shareholder and customer</td>
</tr>
<tr>
<td>Reporting</td>
<td>• Voluntary and ad-hoc</td>
<td>• Standard and regular practice</td>
</tr>
<tr>
<td>Responsibility</td>
<td>• HSE, PR with input from line management</td>
<td>• Clear board oversight • Senior management accountability</td>
</tr>
</tbody>
</table>

Sustainability is a critical necessity for being a good corporate citizen.

Sustainability is a critical pillar for long-term business competitiveness.

Source: Strategy& analysis
Oil and Gas companies have responded to the new sustainability imperative by taking actions in six main areas

### Oil and Gas sustainability responses

<table>
<thead>
<tr>
<th>Commitments and targets</th>
<th>Investment in technology</th>
<th>Low carbon business models</th>
<th>Governance and performance management</th>
<th>Investment screening and portfolio</th>
<th>Standards and reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Commitments to long-term sustainability objectives, especially on decarbonization</td>
<td>• Investment in digital and other technologies to reduce / mitigate emissions</td>
<td>• Increasing investment in low carbon energy sources and technologies</td>
<td>• Strengthened governance structures to elevate sustainability management to Board level</td>
<td>• Evaluation of investment opportunities including sensitivities on carbon pricing</td>
<td>• Adoption of industry-wide standards and participation in industry initiatives</td>
</tr>
<tr>
<td>• Continuous improvement targets</td>
<td>• Evaluation and piloting of “adjacent” technologies e.g. carbon capture, hydrogen</td>
<td>• Establishment of new energy venture organizations</td>
<td>• Improved visibility on sustainability performance and link to executive remuneration</td>
<td>• Portfolio actions to reduce exposure to assets with high carbon footprints</td>
<td>• Linking of sustainability reporting to established standards e.g. UN SDG</td>
</tr>
</tbody>
</table>

Source: Strategy& analysis
Different approaches to decarbonization and expansion into low carbon illustrate different levels of priorities in the sector

Oil and Gas company sustainability positioning

- **Net Zero commitment for scope 1, 2, 3**
- **Partial pledged commitment to Scope 1, 2, 3**
- **Partial pledged commitment to Scope 1, 2**
- **Net Zero to Scope 1, 2**

Commitment towards new energy

- **ADNOC**
- **Qatar Petroleum**
- **ExxonMobil**
- **Kuwait Petroleum Corporation**
- **Saudi Aramco**
- **Chevron**
- **Equinor**
- **BP**
- **Repsol**
- **Shell**
- **Eni**
- **Total**

Commitment for emission reduction

- **Sustainability and new energy priorities focused primarily on HSE and CSR aspects related Oil and Gas activities**
- **Strong focus on Oil and Gas related sustainability action with selective focus on few new energy areas**
- **Strong commitment in new energy areas to enable energy transitions in addition of reducing impact from Oil and Gas**

Sustainability strategies for Oil and Gas

Source: Strategy& analysis
Holistic Oil and Gas sustainability strategies include elements required for compliance along with strategic choices

Elements of a sustainability strategy for Oil and Gas

Holistic Oil and Gas sustainability strategies comprise four main elements:

1. **Vision and Objectives** that express the intent of the strategy and the relevance to broader company objectives

2. Elements related to **Health and Safety**, **Environmental Impact**, and **Contribution to Society** that demonstrate how the company will comply with policies and regulations, incorporate best-practices and align with stakeholders

3. Elements related to **GHG Emissions** and **Low Carbon Energy** that include elements of compliance, but also strategic choices for the company in terms of positioning for the energy transition

4. **Corporate Governance and Transparency** to meet regulatory requirements and proactively communicate the company sustainability strategy and performance
Current focus on energy transition requires companies to make strategic choices on sustainability positioning...

Strategic choices for Oil and Gas sustainability strategies

- **Commitments and targets**: Reduction in scope 1,2 intensity → Net zero in scope 1,2,3
- **Low carbon business models**: Primary focus on Oil and Gas → Transition to low carbon energy
- **Investment screening and portfolio**: Financially optimized portfolio → Sustainability optimized portfolio
- **Investment in technology**: Focus on core Oil and Gas operations → Transition technology / energy ventures
- **Governance and performance management**: Embedded with existing structures → Explicit sustainability structures
- **Standards and reporting**: Minimum required by law → Proactive, transparent and structured

Source: Strategy& analysis
... that need to be considered in the context of the overall balancing of sustainability and profitability objectives

Achieving a sustainability and profitability balance

- **Sustainability** has emerged as a topic of **critical importance** for Oil and Gas companies.
- As important as sustainability is for stakeholders, **companies also need to remain profitable and attractive for investors**.
- Successful sustainability strategies require a **conscious choice on the sustainability positioning** that best reflects key stakeholder expectations, and delivers an **optimum sustainability impact for any given investment**.
- This impact may be expressed in monetary terms or in **broader terms around importance for continuity of the business**.

Typical questions in developing a sustainability strategy

- What are the **expectations of stakeholders** in balancing sustainability and profitability?
- What are essential activities required to retain **license to operate in HS&E** and contribution to society?
- How can **HSE&S performance** be further improved?
- What is the **sustainability vision** for the company in terms of Net Zero vs. continuous improvement in emission intensity?
- What are the **investments required** to achieve the greatest impact in terms of emissions reductions?
- What is the optimal **sustainability governance** structure for the company?
- What **reporting standards and frameworks** should the company employ?
- What **new technologies** should be piloted and adopted?
- Which **new business models** should the company consider (if any)?
- What are the **core competencies** that can be leveraged to expand into new business models?
- How should sustainability vision, targets and performance be **communicated to stakeholders**?
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