Item 02 – GRI Sector Standard Project for Oil, Gas, and Coal – GRI 11: Oil and Gas Sector 2021

For GSSB approval

Date 11 June 2021

Meeting 1 July 2021

Project Sector Standards Project for Oil, Gas, and Coal

Description This document presents the final draft of GRI 11: Oil and Gas Sector 2021, for GSSB approval.

A summary of the changes in the Standard compared to the exposure draft is presented in the explanatory note at the beginning of the document.

This document reflects the final outcome and consensus of the Working Group deliberations.

This document is complemented by the draft GSSB basis for conclusions (Item 03) which summarizes the significant issues raised by respondents during public comment and the GSSB responses to these, as well as a report summarizing the input relevant to GRI Topic Standards collected during the development of GRI 11: Oil and Gas Sector 2021 (Item 04).

Effective date

As part of this approval, the GSSB is also asked to consider the proposed effective date of 1 January 2023 (see line 107). This effective date coincides with the effective date for the revised Universal Standards.
Summary of key changes compared to the exposure draft

This section summarizes the key changes in GRI 11: Oil and Gas Sector 2021, compared to the exposure draft. These changes were performed based on the advice of the Oil, Gas, and Coal Working Group and in response to significant issues raised during the public comment period.

Scope of the Standard

- The scope of application of the GRI 11: Oil and Gas Sector 2021 has been supplemented by a sector key, mapping the description of the sector to prominent sector classification systems. See line 180.

The sector and sustainable development

- This section has been revised to include a more balanced description of the positive and negative contributions of the sector to sustainable development. It also now directly references the Paris Agreement and the Intergovernmental Panel on Climate Change (IPCC) report Global Warming of 1.5 °C. See lines 344-387.

S11.1 GHG emissions

- Disclosure 302-2 Energy consumption outside of the organization in GRI 302: Energy 2016 has been added to the 'what to report' to enhance reporting on other indirect (Scope 3) GHG emissions.
- Disclosure 305-5 Reduction of GHG emissions in GRI 305: Emissions 2016 and the additional sector recommendations on goals and targets have been moved to the 'what to report' under Climate adaptation, resilience, and transition as it is considered more pertinent to that topic.

S11.2 Climate adaptation, resilience, and transition

- The title of the topic has been revised to Climate resilience, adaptation, and transition, in anticipation of the likely topic name for other sectors while still highlighting the key importance of the transition to a low-carbon economy for the oil and gas sector.
- The topic includes a broader discussion on forecasts of oil and gas demand and a new inset box on scenario analysis, as a tool for assessing an organization's resilience to climate change related risks. See lines 512-526.
- The reporting has been streamlined where duplication with existing GRI Standards reporting was detected. The additional sector recommendations have been clarified and Disclosure 305-5 Reduction of GHG emissions and the recommendations on GHG emissions goals and targets, previously found under the topic of GHG emissions, have been moved to this topic to reinforce the coherence of the reporting.

S11.4 Biodiversity

- The additional sector recommendations related to Disclosure 3-3 Management of material topics now include recommendations on no net loss or net gain, as well as on the organization's commitments to preserve biodiversity.
- The additional sector recommendations regarding the mitigation hierarchy and presented along Disclosure 304-3 Habitats protected or restored, have been clarified and now refer to offsets for improved completeness and coherence of the reporting.

S11.5 Waste

- The topic no longer refers to produced water, which is now discussed in water and effluents.
- The additional sector recommendation to provide a breakdown on the composition of waste has been adjusted to support reporting on waste streams that are significant for different organizations or activities within the sector. For consistency, this additional sector recommendation has been included to all relevant disclosures for this topic: Disclosure 306-3 Waste generated, Disclosure 306-4 Waste diverted from disposal, Disclosure 306-5 Waste directed to disposal.
S11.6 Water and effluents

- The topic further details environmental impacts and management options for produced water. See lines 702-708.
- Other ‘wastewaters’ are now described and included in the ‘what to report’ to address other types of effluents specific to certain oil and gas organizations.
- The additional sector recommendation on produced water and on the amount of hydrocarbons discharged have been revised for completeness.

S11.7 Closure and rehabilitation

- The title of this topic has been revised to Closure and rehabilitation in anticipation of the likely topic name for other sectors.
- The topic discusses offshore decommissioning in more detail and emphasizes the complexity of such operations and of the related regulatory landscape. See lines 750-761.
- An additional sector disclosure on offshore structures left in place and the rationale supporting these decisions has been added to the reporting.

S11.8 Asset integrity and critical incident management

- The title of this topic has been revised to Asset integrity and critical incident management in anticipation of the likely topic name for other sectors.
- An inset box on tailings from oil sands mining and related asset integrity risks has been added.
- Reporting relevant to organizations active in oil sand mining have been grouped and are now listed as additional sector disclosures.

S11.11 Non-discrimination and equal opportunity

- The title of this topic has been revised to Non-discrimination and equal opportunity to enhance alignment with GRI 405: Diversity and Equal Opportunity 2016 and GRI 406: Non-discrimination 2016.
- Disclosure 401-3 Parental leave has been added to the ‘what to report’ while Disclosure 202-1 Ratios of standard entry level wage by gender compared to local minimum wage has been excluded. These revisions were performed for more accuracy.

S11.14 Economic impacts

- Disclosure 202-1 Ratios of standard entry level wage by gender compared to local minimum wage has been excluded from the reporting as it was identified as not relevant for the sector.

S11.15 Local communities, S11.16 Land and resource rights and S11.17 Rights of indigenous people

- Additional sector recommendations have been linked to Disclosure 3-3 Management of material topics to describe the organization’s engagement approach with vulnerable groups.

S11.16 Land and resource rights

- The title of this topic has been revised to Land and resource rights in anticipation of the likely topic name for other sectors.
- Disclosures from GRI 413: Local Communities 2016 have been removed from the ‘what to report’. The additional sector recommendations previously linked to GRI 413 disclosures have been preserved and are now presented as additional sector disclosures or recommendations linked to Disclosure 3-3 Management of material topics.

S11.17 Rights of indigenous people

- The disclosures from GRI 413: Local Communities 2016 have been removed from the ‘what to report’. The additional sector recommendations have been preserved and are now presented as additional sector disclosures or recommendations linked to Disclosure 3-3 Management of material topics.

S11.20 Anti-corruption

- The topic further details the risks related to procurement. See lines 1388-1391.
• Additional sector recommendations on procurement practices and whistleblowing mechanisms have been added to Disclosure 3-3 Management of material topics to meet stakeholder expectations.

S11.21 Payments to governments

• The additional sector disclosure on (non-corporate income tax) payments to governments has been clarified and placed as an additional sector recommendation to Disclosure 207-4 Country-by-country reporting.
GRI 11: Oil and Gas Sector 2021

SECTOR STANDARD

Effective date
This Standard is effective for reports or other materials published on or after 1 January 2023. Earlier adoption is encouraged.

Responsibility
This Standard is issued by the Global Sustainability Standards Board (GSSB). Any feedback on the GRI Standards can be submitted to TBD@globalreporting.org for the consideration of the GSSB.

Due process
This Standard was developed in the public interest and in accordance with the requirements of the GSSB Due Process Protocol. It has been developed using multi-stakeholder expertise, and with regard to authoritative intergovernmental instruments and widely held expectations of organizations relating to social, environmental, and economic responsibilities.

Legal liability
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Introduction

GRI 11: Oil and Gas Sector 2021 provides information for organizations in the oil and gas sector about their likely material topics. These topics are likely to be material for organizations in the oil and gas sector on the basis of the sector’s most significant impacts on the economy, environment, and people, including impacts on their human rights.

GRI 11 also contains a list of disclosures for organizations in the oil and gas sector to report in relation to each likely material topic. This includes disclosures from the GRI Topic Standards and other sources.

The Standard is structured as follows:

• Section 1 provides a high-level overview of the sector, including its activities, business relationships, context, and the connections between the United Nations Sustainable Development Goals (SDGs) and the likely material topics for the sector.

• Section 2 outlines the topics that are likely to be material for organizations in the oil and gas sector and therefore potentially merit reporting. For each likely material topic, the sector’s most significant impacts are described and disclosures to report information about the organization’s impacts in relation to the topic are listed.

• The Glossary contains defined terms with a specific meaning when used in the GRI Standards. The terms are underlined in the text and linked to the definitions.

• The Bibliography contains authoritative intergovernmental instruments and additional references used in developing this Standard, listed by topic. It also lists further resources that can be consulted by the organization.

The rest of the Introduction section provides an overview of the sector this Standard applies to, an overview of the system of GRI Standards, and further information on using this Standard.
Sector this Standard applies to

GRI 11 applies to organizations undertaking any of the following:

- Exploration and production of onshore and offshore oil and gas.
- Supply of equipment and services to oil fields and offshore platforms, such as drilling, exploration, seismic information services and platform construction.
- Transportation and storage of oil and gas, such as oil and gas pipeline operators.
- Refining of oil into petroleum products for use as fuels and as feedstocks for chemicals.

This Standard can be used by any organization in the oil and gas sector, regardless of size, type, geographic location, or reporting experience.

The organization must use all applicable Sector Standards for the sectors in which it has substantial activities.

Sector classifications

Table 1 lists industry groupings relevant to the oil and gas sector covered in this Standard in the Global Industry Classification Standard (GICS®) [3], the Industry Classification Benchmark (ICB) [4], the International Standard Industrial Classification of All Economic Activities (ISIC) [5], and the Sustainable Industry Classification System (SICS®) [6]. The table is intended to assist an organization in identifying whether GRI 11 applies to it and is for reference only.

Table 1. Industry groupings relevant to the oil and gas sector in other classification systems

<table>
<thead>
<tr>
<th>Classification system</th>
<th>Classification number</th>
<th>Classification name</th>
</tr>
</thead>
<tbody>
<tr>
<td>GICS®</td>
<td>10101010</td>
<td>Oil &amp; Gas Drilling</td>
</tr>
<tr>
<td></td>
<td>10101020</td>
<td>Oil &amp; Gas Equipment &amp; Services</td>
</tr>
<tr>
<td></td>
<td>10102010</td>
<td>Integrated Oil &amp; Gas</td>
</tr>
<tr>
<td></td>
<td>10102020</td>
<td>Oil &amp; Gas Exploration &amp; Production</td>
</tr>
<tr>
<td></td>
<td>10102030</td>
<td>Oil &amp; Gas Refining &amp; Marketing</td>
</tr>
<tr>
<td></td>
<td>10102040</td>
<td>Oil &amp; Gas Storage &amp; Transportation</td>
</tr>
<tr>
<td>ICB</td>
<td>60101000</td>
<td>Integrated Oil &amp; Gas</td>
</tr>
<tr>
<td></td>
<td>60101010</td>
<td>Oil: Crude Producers</td>
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<tr>
<td></td>
<td>60101015</td>
<td>Offshore Drilling &amp; Other Services</td>
</tr>
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<td></td>
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<td>Oil Equipment &amp; Services</td>
</tr>
<tr>
<td></td>
<td>60101035</td>
<td>Pipelines</td>
</tr>
<tr>
<td>ISIC</td>
<td>B6</td>
<td>Extraction of crude petroleum and natural gas</td>
</tr>
<tr>
<td></td>
<td>B91</td>
<td>Support activities for petroleum and natural gas extraction</td>
</tr>
</tbody>
</table>

1 The relevant industry groupings in the Statistical Classification of Economic Activities in the European Community (NACE) [1] and the North American Industry Classification System (NAICS) [2] can also be established through available concordances with the International Standard Industrial Classification (ISIC).
<table>
<thead>
<tr>
<th>SICS®</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C192</td>
<td>Manufacture of refined petroleum products</td>
</tr>
<tr>
<td>EM-EP</td>
<td>Oil &amp; Gas – Exploration &amp; Production</td>
</tr>
<tr>
<td>EM-MD</td>
<td>Oil &amp; Gas – Midstream</td>
</tr>
<tr>
<td>EM-RM</td>
<td>Oil &amp; Gas – Refining &amp; Marketing</td>
</tr>
<tr>
<td>EM-SV</td>
<td>Oil &amp; Gas – Services</td>
</tr>
</tbody>
</table>
System of GRI Standards

This Standard is part of the GRI Sustainability Reporting Standards (GRI Standards). The GRI Standards enable an organization to report information about its most significant impacts on the economy, environment, and people, including impacts on their human rights, and how it manages these impacts.

The GRI Standards are structured as a system of interrelated standards that are organized into three series: GRI Universal Standards, GRI Sector Standards, and GRI Topic Standards (see Figure 1 in this Standard).

Universal Standards: GRI 1, GRI 2 and GRI 3

GRI 1: Foundation 2021 specifies the requirements that an organization must comply with to report in accordance with the GRI Standards. The organization begins using the GRI Standards by consulting GRI 1.

GRI 2: General Disclosures 2021 contains disclosures that an organization uses to provide information about its reporting practices and other organizational details, such as its activities, governance, and policies.

GRI 3: Material Topics 2021 provides guidance on how to determine material topics. It also contains disclosures that an organization uses to report information about its process of determining material topics, its list of material topics, and how it manages each topic.

Sector Standards

The Sector Standards provide information for organizations about their likely material topics. An organization uses the Sector Standards that apply to its sectors when determining its material topics and when determining what to report for each material topic.

Topic Standards

The Topic Standards contain disclosures that organizations use to report information about their impacts in relation to particular topics. An organization uses the Topic Standards according to the list of material topics it has determined using GRI 3.

Figure 1. GRI Standards: Universal, Sector and Topic Standards
Using this Standard

An organization in the oil and gas sector reporting in accordance with the GRI Standards is required to use this Standard first when determining its material topics and then again when determining what information to report for the material topics.

Determining material topics

Material topics are topics that represent an organization’s most significant impacts on the economy, environment, and people, including their human rights.

Section 1 of this Standard provides contextual information that can assist the organization in identifying and assessing its impacts.

Section 2 outlines the topics that are likely to be material for organizations in the oil and gas sector. The organization is required to review each topic described and determine whether it is a material topic for it.

The organization needs to use this Standard when determining its material topics. However, circumstances for each organization vary, and the organization needs to determine its material topics according to its specific circumstances, such as its business model; sectors; geographic, cultural, and legal operating context; ownership structure; and the nature of its impacts. (See GRI 3: Material Topics 2021 for step-by-step guidance on how to determine material topics.)

Because of this, not all topics listed in this Standard may be material for all organizations in the oil and gas sector. If any of the topics that are included in this Standard have been determined by the organization as not material, the organization is required to list them in the GRI content index and explain why they are not material.

See Requirement 3 in GRI 1: Foundation 2021 and Box 5 in GRI 3 for more information on using Sector Standards to determine material topics.

Determining what to report

For each material topic, an organization reports information about its impacts in relation to the topic and how it manages these impacts.

Once an organization has determined a topic included in this Standard to be material, the Standard also helps the organization identify disclosures to report information about its impacts relating to that topic.

For each topic in section 2 of this Standard, a what to report sub-section is included. What to report sub-sections list disclosures from the GRI Topic Standards that are relevant to the topic. They may also list additional sector disclosures and recommendations for the organization to report. This is done in cases where the Topic Standards do not provide disclosures, or where the disclosures from the Topic Standards do not provide sufficient information about the organization’s impacts in relation to a topic. These additional sector disclosures and recommendations may be based on other sources.

Figure 2 illustrates how what to report sub-sections are structured.

The organization is required to report the disclosures from the Topic Standards listed in what to report sub-sections for those topics it has determined to be material. If any of the Topic Standards disclosures listed are not relevant to the organization’s impacts, the organization is not required to report them. However, the organization is required to list these disclosures in the GRI content index and provide ‘not applicable’ as the reason for omission for not reporting the disclosures. See Requirement 6 in GRI 1: Foundation 2021 for more information on reasons for omission.

The additional sector disclosures and recommendations outline further information which has been identified as relevant for disclosures in the oil and gas sector to report in relation to a topic. The organization should provide sufficient information about its impacts in relation to each material topic, so that information users can make informed assessments and decisions about the organization. For this reason, reporting these additional sector disclosures and recommendations is encouraged, however it is not a requirement.
When the organization reports additional sector disclosures, it is required to list them in the GRI content index (see Requirement 7 in GRI 1: Foundation 2021).

If the organization reports information that applies to more than one material topic, it does not need to repeat this information for each topic. The organization can report this information once, with a clear explanation of all the topics it covers.

If the organization intends to publish a standalone sustainability report, it does not need to repeat information that it has already reported publicly elsewhere, such as on web pages or in its annual report. In such a case, the organization can report on a required disclosure by providing a reference in the GRI content index as to where this information can be found (e.g., by providing a link to the web page or citing the page in the annual report where the information has been published).

See Requirement 5 in GRI 1 for more information on using Sector Standards to report disclosures.

**GRI Sector Standard reference numbers**

GRI Sector Standard reference numbers are included for all disclosures listed in this Standard, both those from GRI Standards and additional sector disclosures. When listing the disclosures from this Standard in the GRI content index, the organization is required to include the associated GRI Sector Standard reference numbers (see Requirement 7 in GRI 1: Foundation 2021). This identifier helps information users assess which of the disclosures listed in the applicable Sector Standards are included in the organization’s reporting.

**Defined terms**

Defined terms are underlined in the text of the GRI Standards and linked to their definitions in the Glossary. The organization is required to apply the definitions in the Glossary.

**References and resources**

The authoritative intergovernmental instruments and additional references used in developing this Standard, as well as further resources that may be helpful for reporting on likely material topics and can be consulted by the organization are listed in the Bibliography. These complement the references and resources listed in GRI 3: Material Topics 2021 and in the GRI Topic Standards.
Figure 2. Structure of what to report sub-sections

What to report

If the organization has determined closure and rehabilitation to be a material topic, this sub-section lists the disclosures that have been identified as relevant for reporting on the topic by the oil and gas sector.

<table>
<thead>
<tr>
<th>GRI Standard</th>
<th>Disclosure</th>
<th>Additional sector recommendations</th>
<th>GRI Sector Standard reference numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRI 3: Material Topic 2021</td>
<td>Disclosure 3-3: Management of material topic</td>
<td>Management of the topic</td>
<td>3.11.7.1</td>
</tr>
<tr>
<td>GRI 402: Labor/Management Relations 2016</td>
<td>Disclosure 402.1: Minimum notice periods regarding operational changes</td>
<td>Describe the approach to engaging workers in advance of significant operational changes</td>
<td>3.11.7.2</td>
</tr>
<tr>
<td>GRI 404: Training and Education 2016</td>
<td>Disclosure 404.2: Programs for upgrading employee skills and transition assistance programs</td>
<td>Additional sector disclosures</td>
<td>3.11.7.3</td>
</tr>
</tbody>
</table>

2. Topic Standards disclosures

Disclosures from the GRI Topic Standards that have been identified as relevant for organizations in the sector(s) are listed here. When the organization has determined a topic to be material, it is required to report these disclosures or explain why they are not applicable in the GRI context index.

See the Topic Standard for the content of the disclosure, including requirements and guidance.

3. Additional sector recommendations

Additional sector recommendations may be listed. These complement Topic Standards disclosures and are recommended for an organization in the sector(s).

4. Additional sector disclosures

Additional sector disclosures may be listed. Reporting these, together with any GRI disclosures listed, ensures the organization reports sufficient

5. GRI Sector Standard reference numbers

The organization is required to include GRI Sector Standard reference numbers in the GRI content index.
1. Sector profile

Oil and gas are non-renewable natural resources, used by humans for thousands of years and with particular intensity during the last two centuries. The oil and gas sector is a large global industry producing fuel for transportation and for energy generation, as well as raw materials for chemical products and polymers. The outputs of the sector are also used in construction, clothing, fertilizers and insecticides, medical and electronic equipment, and a range of everyday objects. The combustion of oil and gas generates air emissions, including greenhouse gases (GHGs), which are the main contributor to climate change.

The oil and gas sector comprises organizations of different sizes and ownership status. State-owned oil and gas enterprises are present in most oil and gas resource-rich countries, representing some of the largest organizations in the sector. Privately held oil and gas organizations are also important and are, in general, vertically integrated and operate internationally. Medium-sized organizations may operate in specific regions or countries, or deliver products, services and technology, such as surveying of resources, drilling, design, planning, and construction, to exploration and production organizations.

Sector activities and business relationships

When determining its material topics, the organization should consider the impacts of both its activities and its business relationships.

Activities

The impacts of an organization vary according to the types of activities it undertakes. The following list outlines some of the key activities of the oil and gas sector. This list is not exhaustive.

- **Exploration**: Surveying of resources, including aerial surveys, seismic testing, and exploratory drilling.
- **Development**: Design, planning, and construction of oil and gas fields, including processing and worker facilities.
- **Production**: Extraction of oil and gas from onshore or offshore reserves, and separation of oil, gas and water.
- **Oil sands mining**: Extraction of bitumen from oil sands using surface mining or in situ techniques.
- **Closure and rehabilitation**: Closure, decommissioning, dismantling, removal, disposal, or modification of assets, facilities and sites.
- **Refining**: Refining of oil into petroleum products for use as fuels and as feedstocks for chemicals.
- **Processing**: Processing of gas into pipe-quality natural gas and natural gas liquids, including removing hydrocarbons and fluids.
- **Transportation**: Marine and land transportation of oil and gas.
- **Storage and pipelines**: Distribution and storage of oil and gas in tanks and marine vessels and distribution via marine and land-based pipelines.
- **Sales and marketing**: Selling of oil and gas products for the purpose of, for example, fuels, gas for retail use, and inputs in the production of specialty chemicals, petrochemicals, and polymers.

Business relationships

An organization's business relationships include relationships that it has with business partners, with entities in its value chain including those beyond the first tier, and with any other entities directly linked to its operations, products, or services. The following types of business relationships are prevalent in the oil and gas sector and are of particular relevance when identifying the impacts of organizations in the sector.
Joint ventures are arrangements in which organizations share the costs, benefits, and liabilities of oil and gas activities. An organization in the oil and gas sector can be involved with negative impacts as a result of a joint venture, even if it is a non-operating partner.

State-owned enterprises (SOEs) are often the largest producers of oil and gas and hold ownership of the majority of global reserves. They may also serve as joint venture partners to publicly traded oil and gas organizations. SOEs have specific challenges relating to transparency and governance, which are addressed in different likely material topics in this Standard.

Suppliers and contractors are used in large numbers in the oil and gas sector to perform certain activities, such as drilling and construction, or to provide other services and products. Some of the significant impacts covered in this Standard concern the supply chain.

Customers use oil and gas to produce energy, heat, and materials. When combusting oil and gas, they generate greenhouse gases (GHGs) and other air emissions. While the primary responsibility for reducing and managing their emissions lies with customers, organizations extracting and producing oil and gas are also expected to take actions to tackle emissions from the combustion of their products and to disclose the related GHG emissions (Scope 3 GHG emissions). As such, this Standard includes not only direct (Scope 1) and indirect (Scope 2) GHG emissions, but also other indirect (Scope 3) GHG emissions.

The sector and sustainable development

Energy is a key driver of economic growth and sustainable development. Oil and gas have been fundamental sources of the world’s energy, contributing to economic growth and poverty reduction.

Together, oil and gas represent the most important resources for electricity production, providing over 50% [12] of the total supply. In 2020, 90% of the transportation sector’s energy needs were met by oil products [11]. The oil and gas sector today also meets much of society’s needs for raw materials used in the production of specialty chemicals, petrochemicals, and polymers. Currently, oil and gas are the world’s most actively traded commodities.

At present, oil and gas are considered strategic assets in regions or countries where they generate critical revenue streams or support energy independence. For example, the percentage of gross domestic product attributable to oil revenues has reached 45% in some resource-rich countries [19]. Revenues from this sector can contribute to local and national economic development, together with job creation, investments, and infrastructure, business, and skills development.

The majority of the world’s countries have committed to combating climate change, as outlined in the Paris Agreement [7]. The International Panel on Climate Change (IPCC) warns that continuing to emit greenhouse gas (GHG) at the current rate could result in dangerous global temperature increases leading to magnified risks of extreme weather and climate events [14]. Other reports show that with current policy commitments the world is heading toward a dangerous 3.2°C rise in temperature by 2100 [17].

These projections underline the need to transition to a low-carbon economy, based on affordable, reliable, and sustainable energy. Achieving net zero GHG emissions by 2050 is required to limit global warming to 1.5°C above pre-industrial levels, a level predicted to pose significantly lower risks to natural and human systems than a warming of 2°C [14]. Combined, the GHGs released by extracting, refining, and burning oil and gas represent 55% of all energy-related GHG emissions and constitute the largest contribution to anthropogenic climate change. Action taken by the oil and gas sector is essential to the transition to a low-carbon economy.

The number of oil and gas operations closing will increase in the context of transition to a low-carbon economy, and impacts of these closures on workers and communities will consequently rise. A just transition refers to a fair and equitable pathway through industrial transformation to a sustainable future, where governments and organizations work in collaboration. Such a transition integrates worker-centric public policies and programs with employer policies and programs to provide a secure and decent future for all workers, their families, and the communities that rely on them. The path for transitioning to a low-carbon economy will vary for different countries according to factors such as their economic conditions and capability to respond to and mitigate impacts of climate change.
Besides contributing to climate change, the activities of the oil and gas sector generate further negative impacts on the environment and people, including impacts on their human rights. These impacts include loss of biodiversity; soil, water and air pollution; conflict and social disruption, and threats to human health. Vulnerable groups such as indigenous peoples or women may be disproportionately affected, and oil and gas operations may continue to generate negative impacts after their closure.

Negative impacts can be intensified by inadequate governance of natural resources. The large revenues derived from the oil and gas sector can lead to corruption and mismanagement of resources. Economies dependent on oil and gas can also be vulnerable to commodity price and production fluctuations.

### Sustainable Development Goals

The Sustainable Development Goals (SDGs), part of the 2030 Agenda for Sustainable Development adopted by the 193 United Nations (UN) member states, comprise the world’s comprehensive plan of action to achieving sustainable development [8].

Since the SDGs and targets associated with them are integrated and indivisible, oil and gas organizations have the potential to contribute to all SDGs by enhancing their positive impacts, or by preventing and mitigating their negative impacts, on the economy, environment, and people.

The oil and gas sector is particularly relevant to achieving Goal 13: Climate Action and, given the potential impact of climate change on the development agenda, this will influence the achievement of every goal, while contributing to the transition to a low-carbon economy.

The oil and gas sector also plays a fundamental role in achieving Goal 7: Affordable and Clean Energy. Ensuring access to energy for all while transitioning toward a low-carbon economy is one of the challenges faced by the sector. Millions of people still lack access to energy. This hinders their access to basic services such as those recognized in Goal 3: Good Health and Wellbeing and Goal 4: Quality Education as well as their income-generating opportunities, which are crucial to achieving Goal 1: No Poverty. More broadly, affordable and reliable energy is a fundamental input for the world economy and therefore instrumental for achieving Goal 8: Decent Work and Economic Growth.

In countries that produce oil and gas, the sector generates high revenues and attracts significant investment. However, the large revenues derived from the sector carry a risk of corruption and conflict over resources, which have a bearing on Goal 16: Peace and Justice Strong Institutions.

Table 2 presents connections between the likely material topics for the oil and gas sector and the SDGs. These links were identified based on an assessment of the impacts described in each likely material topic, the targets associated with each SDG, and existing mapping undertaken for the sector (see references [13] and [15] in the Bibliography).

Table 2 is not a reporting tool but presents connections between the oil and gas sector’s significant impacts and the goals of the 2030 Agenda for Sustainable Development. See references [20] and [21] in the Bibliography for information on reporting progress towards the SDGs using the GRI Standards.

### Table 2: Links between the likely material topics for the oil and gas sector and the Sustainable Development Goals.

<table>
<thead>
<tr>
<th>Likely material topic</th>
<th>Corresponding SDGs</th>
</tr>
</thead>
<tbody>
<tr>
<td>S11.1 GHG emissions</td>
<td>Goal 13: Climate Action</td>
</tr>
<tr>
<td></td>
<td>Goal 14: Life Below Water</td>
</tr>
<tr>
<td>S11.2 Climate adaptation, resilience, and transition</td>
<td>Goal 1: No Poverty</td>
</tr>
<tr>
<td></td>
<td>Goal 7: Affordable and Clean Energy</td>
</tr>
<tr>
<td></td>
<td>Goal 8: Decent Work and Economic Growth</td>
</tr>
<tr>
<td></td>
<td>Goal 9: Industry, Innovation and Infrastructure</td>
</tr>
<tr>
<td></td>
<td>Goal 12: Sustainable Consumption and Production</td>
</tr>
<tr>
<td>Likely material topic</td>
<td>Corresponding SDGs</td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------------</td>
</tr>
</tbody>
</table>
| **S11.3 Air emissions** | Goal 3: Good Health and Well-being  
                          Goal 11: Sustainable Cities and Communities  
                          Goal 15: Life on Land |
| **S11.4 Biodiversity** | Goal 6: Clean Water and Sanitation  
                          Goal 12: Responsible Consumption and Production  
                          Goal 14: Life Below Water  
                          Goal 15: Life on Land |
| **S11.5 Waste** | Goal 3: Good Health and Well-being  
                        Goal 6: Clean Water and Sanitation  
                        Goal 12: Responsible Consumption and Production  
                        Goal 15: Life on Land |
| **S11.6 Water and effluents** | Goal 6: Clean Water and Sanitation  
                                      Goal 12: Responsible Consumption and Production  
                                      Goal 14: Life Below Water  
                                      Goal 15: Life on Land |
| **S11.7 Closure and rehabilitation** | Goal 4: Quality Education  
                                          Goal 8: Decent Work and Economic Growth  
                                          Goal 11: Sustainable Cities and Communities  
                                          Goal 14: Life Below Water  
                                          Goal 15: Life on Land |
| **S11.8 Asset integrity and critical incident management** | Goal 11: Sustainable Cities and Communities  
                                                             Goal 14: Life Below Water |
| **S11.9 Occupational health and safety** | Goal 3: Good Health and Well-being  
                                          Goal 8: Decent Work and Economic Growth |
| **S11.10 Employment practices** | Goal 1: No Poverty  
                                      Goal 4: Quality Education  
                                      Goal 5: Gender Equality  
                                      Goal 8: Decent Work and Economic Growth  
                                      Goal 10: Reduced Inequalities |
| **S11.11 Non-discrimination and equal opportunity** | Goal 4: Quality Education  
                                              Goal 5: Gender Equality  
                                              Goal 8: Decent Work and Economic Growth  
                                              Goal 10: Reduced Inequalities  
                                              Goal 16: Peace, Justice and Strong Institutions |
| **S11.12 Forced labor and modern slavery** | Goal 8: Decent Work and Economic Growth  
                                                 Goal 16: Peace, Justice and Strong Institutions |
| **S11.13 Freedom of association and collective bargaining** | Goal 8: Decent Work and Economic Growth  
                                                              Goal 16: Peace, Justice and Strong Institutions |
<table>
<thead>
<tr>
<th>Likely material topic</th>
<th>Corresponding SDGs</th>
</tr>
</thead>
</table>
| **S11.14 Economic impacts**           | Goal 1: No Poverty  
Goal 5: Gender Equality  
Goal 8: Decent Work and Economic Growth  
Goal 9: Industry, Innovation and Infrastructure  
Goal 10: Reduced Inequalities |
| **S11.15 Local communities**          | Goal 1: No Poverty  
Goal 3: Good Health and Well-being  
Goal 5: Gender Equality  
Goal 6: Clean Water and Sanitation  
Goal 16: Peace, Justice and Strong Institutions |
| **S11.16 Land and resource rights**   | Goal 1: No Poverty  
Goal 2: Zero Hunger  
Goal 11: Sustainable Cities and Communities  
Goal 16: Peace, Justice and Strong Institutions |
| **S11.17 Rights of indigenous peoples** | Goal 1: No Poverty  
Goal 3: Good Health and Well-being  
Goal 5: Gender Equality  
Goal 11: Sustainable Cities and Communities  
Goal 16: Peace, Justice and Strong Institutions |
| **S11.18 Conflict and security**      | Goal 16: Peace, Justice and Strong Institutions |
| **S11.19 Anti-competitive behavior**  | Goal 16: Peace, Justice and Strong Institutions |
| **S11.20 Anti-corruption**            | Goal 12: Responsible Consumption and Production  
Goal 16: Peace, Justice and Strong Institutions |
| **S11.21 Payments to governments**    | Goal 1: No Poverty  
Goal 16: Peace, Justice and Strong Institutions  
Goal 17: Partnerships for the Goals |
| **S11.22 Public policy**              | Goal 16: Peace, Justice and Strong Institutions |
2. Likely material topics

This section comprises the likely material topics for the oil and gas sector. Each topic describes the sector’s most significant impacts related to the topic and lists disclosures that have been identified as relevant for reporting on the topic by oil and gas sector. The organization is required to review each topic in this section and determine whether it is a material topic for the organization, and then to determine what information to report for its material topics.

S11.1 GHG emissions

Greenhouse gas (GHG) emissions comprise air emissions that contribute to climate change, such as carbon dioxide (CO₂) and methane (CH₄). This topic covers direct (Scope 1) and energy indirect (Scope 2) GHG emissions related to an organization’s activities, as well as other indirect (Scope 3) GHG emissions related to the end use of an organization’s products.

Greenhouse gas (GHG) emissions are the single biggest contributor to climate change. The oil and gas sector’s activities and the use of oil and gas products are responsible for a large portion of two major GHGs: carbon dioxide (CO₂) and methane (CH₄). Globally, it is estimated that the sector is responsible for a quarter of all anthropogenic emissions of CH₄, which has a notably higher global warming potential than CO₂. Recent measurements indicate that available figures on CH₄ emissions from the sector could be underestimates. Other GHGs from oil and gas activities include ethane (C₂H₆), nitrous oxide (N₂O), hydrofluorocarbons (HCF₃), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃).

GHG emissions from oil and gas activities are classified as direct (Scope 1) GHG emissions in the case of activities owned or controlled by the organization or energy indirect (Scope 2) GHG emissions in the case of purchased or acquired electricity, heating, cooling, and steam consumed by the organization. Currently, 15% of the world’s energy-related GHG emissions come from the process of producing and distributing oil and gas [35].

Direct (Scope 1) GHG emissions comprise emissions from fuel combustion during production, process emissions such as those during loading and tankage, and fugitive emissions such as those from piping and equipment leaks. A substantial source of the sector’s Scope 1 GHG emissions is flaring and venting, which aim to dispose of gas that cannot be contained or handled otherwise for safety, technical, or economic reasons. These practices occur during oil and gas production, storage, refining, and electricity generation.

Box 2. Flaring and venting

When gas needs to be disposed of, it may be flared (burned off), or vented (released without being burned). Flaring converts gas to CO₂, while venting releases CH₄ directly to the atmosphere. Given that CH₄ has a higher global warming potential than CO₂, routing associated gases to an efficient flare system instead of venting is considered best practice and there is wide agreement that routine venting should be eliminated.

Flaring also represents a major source of emissions. While large amounts of gases resulting from oil and gas activities are used or conserved, flaring still routinely occurs. According to the World Bank, routine flaring occurs ‘during normal oil production operations in the absence of sufficient facilities or amenable geology to re-inject the produced gas, utilize it on-site, or dispatch it to a market’. Increases in shale oil production has further contributed to volumes of flaring.

The amount of natural gas flared in 2018 resulted in emissions of approximately 275 mega tons of CO₂, as well as other GHGs such as methane, black carbon and N₂O.

See references [33], [45] and [47] in the Bibliography.

Energy indirect (Scope 2) GHG emissions originate from stationary and mobile sources (e.g., transportation of materials, products, or waste); extraction; oil refining; liquefaction and regasification of natural gas; and operation of facilities and equipment. The depletion of traditional oil and gas resources has led the sector to move production to more difficult settings, which may involve more complex extraction methods such as offshore deep-water drilling or oil sands mining. Despite the
sector’s ongoing improvements in production efficiency, these conditions are likely to increase the amount of energy used during production and transportation and, as such, GHG emissions resulting from these activities.

GHG emissions resulting from the end use of products are classified as other indirect (Scope 3) GHG emissions. For the oil and gas sector, these constitute the most significant GHG emissions and over half of global CO₂ emissions [32]. The majority of Scope 3 GHG emissions originate from combustion processes related to construction, electricity and heat generation, manufacturing, and transportation. Volumes of these emissions have increased together with higher energy demands.

### What to report

If the organization has determined GHG emissions to be a material topic, this sub-section lists the disclosures that have been identified as relevant for reporting on the topic by the oil and gas sector.

<table>
<thead>
<tr>
<th>GRI Standard</th>
<th>Disclosure</th>
<th>Additional sector recommendations</th>
<th>GRI Sector Standard ref. no</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Management of the topic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRI 3: Material Topics 2021</td>
<td>Disclosure 3-3 Management of material topics</td>
<td>Describe actions taken to manage flaring and venting and the effectiveness of actions taken.</td>
<td>S11.1.1</td>
</tr>
<tr>
<td><strong>Topic Standards disclosures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRI 302: Energy 2016</td>
<td>Disclosure 302-1 Energy consumption within the organization</td>
<td></td>
<td>S11.1.2</td>
</tr>
<tr>
<td></td>
<td>Disclosure 302-2 Energy consumption outside of the organization</td>
<td></td>
<td>S11.1.3</td>
</tr>
<tr>
<td></td>
<td>Disclosure 302-3 Energy intensity</td>
<td></td>
<td>S11.1.4</td>
</tr>
<tr>
<td>GRI 305: Emissions 2016</td>
<td>Disclosure 305-1 Direct (Scope 1) GHG emissions</td>
<td>- Report the percentage of gross direct (Scope 1) GHG emissions from CH₄. - Report the breakdown of gross direct (Scope 1) GHG emissions by type of source (stationary, combustion, process, fugitive).²</td>
<td>S11.1.5</td>
</tr>
<tr>
<td></td>
<td>Disclosure 305-2 Energy indirect (Scope 2) GHG emissions</td>
<td></td>
<td>S11.1.6</td>
</tr>
<tr>
<td></td>
<td>Disclosure 305-3 Other indirect (Scope 3) GHG emissions</td>
<td></td>
<td>S11.1.7</td>
</tr>
<tr>
<td></td>
<td>Disclosure 305-4 GHG emissions intensity</td>
<td></td>
<td>S11.1.8</td>
</tr>
</tbody>
</table>

² This additional sector recommendation is based on clause 2.2.5.3 in GRI 305: Emissions 2016.
References and resources

GRI 302: Energy 2016 and GRI 305: Emissions 2016 list authoritative intergovernmental instruments and additional references relevant to reporting on this topic.

The additional authoritative instruments and references used in developing this topic, as well as resources that may be helpful for reporting on the topic by the oil and gas sector are listed in the Bibliography.
S11.2 Climate adaptation, resilience, and transition

Climate adaptation, resilience, and transition refer to how an organization adjusts to current and anticipated climate change-related risks, as well as how it contributes to the ability of societies and economies to withstand impacts from climate change. This topic covers an organization’s strategy in relation to the transition to a low-carbon economy and the impacts of that transition on workers and local communities.

Signatories of the Paris Agreement have committed to keeping global warming ‘well below 2°C’, yet fossil fuel reserves that are currently available globally far exceed the maximum amount that can be burned while remaining within this limit [76]. This means organizations in the oil and gas sector need to establish targets for carbon emissions; modify their business models; and invest in renewable energy, technologies to remove CO\textsubscript{2} from the atmosphere [66], and nature-based solutions to mitigate climate change, such as reforestation, afforestation, coastal and wetland restoration.

Transitioning to a low-carbon economy requires organizations to set emissions targets that are consistent with the goal of limiting global warming to well below 2°C under the Paris Agreement. Actions to reduce emissions linked to the process of extracting and distributing oil and gas, which are direct (Scope 1) and energy indirect (Scope 2) GHG emissions, offer important and immediate opportunities for the sector to contribute to reducing global GHG emissions. The sector also faces expectations to address indirect Scope 3 emissions related to the use of oil and gas products. Actions to reduce these emissions can include, for example, diversification into lower carbon businesses, such as renewables.

The transition to a low-carbon economy creates uncertainty about the future demand for oil and gas. The IEA estimates that, based on current policies, demand for oil will level off around 2030 while, in some regions, demand for gas will begin decreasing by 2040 [66]. In a scenario that sees the energy transition accelerate to achieve net-zero GHG emissions by 2050, demand for oil could drop by almost 75% between 2020 and 2050 and demand for gas could peak before 2030 [65]. The decrease in the demand for oil and gas will translate into lower utilization of existing production facilities and decreased development of reserves. Depending on the speed of this process, some fields and facilities may need to be re-evaluated or even written-off prematurely, becoming stranded assets. This will affect oil and gas organizations financially and generate significant impacts for workers, governments and other stakeholders.

**Box 1. Scenario analysis for climate transition**

Scenario analysis is a process that considers alternative situations to assess future outcomes. Organizations can use it to gauge the potential outcomes of their strategies in uncertain circumstances or conditions. Scenario analysis can employ various methodologies, qualitative and quantitative. The Task Force on Climate-related Financial Disclosures (TCFD) recommendations suggest scenario analysis as a way to help organizations understand climate change-related risks and opportunities [79].

Scenario analysis is well suited to explore the risks that transitioning to a low-carbon economy poses to oil and gas organizations because it allows them to consider alternative forms of future states simultaneously. Organizations typically define scenarios according to the speed of transition, expressed in the resulting average global temperature changes. A scenario compatible with the commitments of countries in the Paris Agreement will require a temperature rise well below 2°C. Other scenarios can be defined according to an organization’s national context. The organization can then translate the expected reductions in GHG emissions compatible with such a temperature rise into expected revenue.

The transition may affect employment, government revenues, and economic development in regions where the sector operates. More frequent closures are expected, which are less likely to be counterbalanced by openings, as has been the case in the past. Workers may face other potential impacts related to employability, reskilling, and desirable re-employment opportunities. Closure of operations without adequate provisions for decommissioning and rehabilitation may also result in an economic burden for governments and local communities (see also Closure and rehabilitation), particularly in countries where oil and gas production provides a large percentage of revenues.
To ensure a just transition to a low-carbon economy, the different dependency levels of workers, local communities, and national economies on the oil and gas sector has to be recognized, and quality jobs for those affected created [77]. Examples of actions that organizations may take to contribute to a just transition include providing adequate advance notice of closures; collaborating with governments and unions; advocating for climate consistent policy (see also Public policy); retraining, reskilling, and redeploying workers; and making alternative investments in the affected communities. Meaningful, early consultations with stakeholders and local communities have also been identified as crucial to achieving a just transition (see also Closure and rehabilitation).

**What to report**

If the organization has determined climate adaptation, resilience, and transition to be a material topic, this sub-section lists the disclosures that have been identified as relevant for reporting on the topic by the oil and gas sector.

<table>
<thead>
<tr>
<th>GRI Standard</th>
<th>Disclosure</th>
<th>Additional sector recommendations</th>
<th>GRI Sector Standard ref. no</th>
</tr>
</thead>
</table>
| GRI 3: Material Topics 2021 | Disclosure 3-3 Management of material topics | - Describe policies, commitments, and actions of the organization to prevent or mitigate the impacts of the transition to a low-carbon economy on workers and local communities.  
- Report the level and function within the organization that has been assigned responsibility for managing risks and opportunities due to climate change.  
- Describe the board’s oversight in managing risks and opportunities due to climate change.  
- Report whether responsibility to manage climate change-related impacts is linked to performance assessments or incentive mechanisms, including in the remuneration policies for highest governance body members and senior executives.  
- Describe the climate change-related scenarios used to assess the resilience of the organization’s strategy, including a 2°C or lower scenario. | S11.2.1 |
<table>
<thead>
<tr>
<th>Topic Standards disclosures</th>
<th>Disclosures</th>
<th>Requirements</th>
</tr>
</thead>
</table>
- Report the internal carbon-pricing and oil and gas pricing assumptions that have informed the identification of risks and opportunities due to climate change.  
- Describe how climate change-related risks and opportunities affect or could affect the organization’s operations or revenue, including:  
  - development of currently proven and probable reserves;  
  - potential write-offs and early closure of existing assets;  
  - oil and gas production volumes for the current reporting period and projected volumes for the next five years.  
- Report the percentage of capital expenditure (CapEx) that is allocated to investments in:  
  - prospecting, exploration and development of new reserves;  
  - energy from renewable sources (by type of source);  
  - technologies to remove CO₂ from the atmosphere and nature-based solutions to mitigate climate change;  
  - other research and development initiatives that can address the organization’s risks related to climate change.  
- Net mass of CO₂ in metric tons captured and removed from the atmosphere (CO₂ stored less the GHG emitted in the process). |
| GRI 305: Emissions 2016 | Disclosure 305-5 | Report how the goals and targets for GHG emissions are set, specify whether they are informed by scientific consensus and list any authoritative intergovernmental instruments or mandatory legislation the goals and targets are aligned with. |

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3 The definition of reserves used by the organization for this additional sector recommendation should be the same as the definition used in its consolidated financial statements or equivalent documents.

4 The mass of the CO₂ captured using carbon capture and storage less the mass of CO₂ emitted as a result of or during the process, is sometimes known as ‘net reduction of emissions’ [67]
- Report the Scopes (1, 2, 3) of GHG emissions, activities, and business relationships to which the goals and targets apply.
- Report the baseline for the goals and targets and the timeline for achieving them.

## Additional sector disclosures

Describe the organization’s approach to public policy development and lobbying on climate change, including:
- the organization’s stance on significant issues related to climate change that are the focus of its participation in public policy development and lobbying, and any differences between these positions and its stated policies, goals, or other public positions;
- whether it is a member of, or contributes to, any representative associations or committees that participate in public policy development and lobbying on climate change, including:
  - the nature of this contribution;
  - any differences between the organization’s stated policies, goals, or other public positions on significant issues related to climate change; and the positions of the representative associations or committees. \(^5\)

## References and resources

544 **References and resources**

545 *GRI 201: Economic Performance 2016* and *GRI 305: Emissions 2016* list authoritative intergovernmental instruments and additional references relevant to reporting on this topic.

547 The additional authoritative instruments and references used in developing this topic, as well as resources that may be helpful for reporting on the topic by the oil and gas sector are listed in the *Bibliography*.

\(^{5}\) These additional sector disclosures are based on reporting recommendations 1.2.1 and 1.2.2 in *GRI 415: Public Policy 2016*. 
S11.3 Air emissions

Air emissions include pollutants that have negative impacts on air quality, ecosystems, and human and animal health. This topic covers impacts from emissions of sulfur oxides (SOx), nitrogen oxides (NOx), particulate matter (PM), volatile organic compounds (VOC), carbon monoxide (CO), and heavy metals, such as lead, mercury, and cadmium.

The activities of the oil and gas sector and the combustion of oil and gas are anthropogenic sources of other air emissions besides greenhouse gases (GHGs). These include SOx, NOx, PM, VOCs, hazardous air pollutants (HAP), such as benzene (C6H6) and hydrogen sulfide (H2S), and ozone (O3).

These air emissions can be released during production and processing, refining, distribution, and storage. They can result from activities such as flaring and venting; fuel combustion for powering machinery; loading; and transportation of supplies and products. Air emissions can also result from evaporation losses, fugitive emissions from equipment leaks and failures, and process-safety incidents and events. A significant number of air emissions also result from fuel combustion by end users.

Globally, air pollution causes acute health problems and millions of deaths annually by contributing to heart and lung diseases, strokes, respiratory infections, and neurological damage. Children, the elderly, and the poor are disproportionately affected by these emissions, as are local communities adjacent to operational sites. Air emissions may lead to widespread and diverse impacts on ecosystems, while affecting other economic activities that depend on these ecosystems. For example, NOx emissions that enter oceans, lakes, or other water bodies can alter their chemistry, negatively impacting land and aquatic life. NOx and SOx emissions can lead to acid rain and increase ocean acidification. These emissions can also cause damage to plant life by, for example, impairing photosynthesis and reducing growth.

What to report

If the organization has determined air emissions to be a material topic, this sub-section lists the disclosures that have been identified as relevant for reporting on the topic by the oil and gas sector.

<table>
<thead>
<tr>
<th>GRI Standard</th>
<th>Disclosure</th>
<th>Additional sector recommendations</th>
<th>GRI Sector Standard ref. no</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management of the topic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRI 3: Material Topics 2021</td>
<td>Disclosure 3-3 Management of material topics</td>
<td></td>
<td>S11.3.1</td>
</tr>
<tr>
<td>Topic Standards disclosures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRI 305: Emissions 2016</td>
<td>Disclosure 305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions</td>
<td></td>
<td>S11.3.2</td>
</tr>
</tbody>
</table>

The scope of this topic does not include carbon dioxide CO2 and methane CH4, which are reported under GHG emissions.
**References and resources**

**GRI 416: Customer Health and Safety 2016**

Disclosure 416-1 Assessment of the health and safety impacts of product and service categories

Describe actions taken to improve product quality to reduce air emissions.

S11.3.3

**GRI 305: Emissions 2016** and **GRI 416: Customer Health and Safety 2016** list authoritative intergovernmental instruments and additional references relevant to reporting on this topic.

The additional authoritative instruments and references used in developing this topic, as well as resources that may be helpful for reporting on the topic by the oil and gas sector are listed in the **Bibliography**.
S11.4 Biodiversity

Biodiversity is the variability among living organisms. It includes diversity within species, between species and of ecosystems. Biodiversity not only has intrinsic value, but is also vital to human health, food security, economic prosperity, and mitigation of climate change and adaptation to its impacts. This topic covers impacts on biodiversity, including on plant and animal species, genetic diversity and natural ecosystems.

Oil and gas activities can be the source of pressures on the environments in which they take place, and have direct, indirect, and cumulative impacts on biodiversity in the short and long term. These impacts can be exacerbated when activities occur in protected areas or areas of high biodiversity value, and may extend well beyond the closure and rehabilitation of operational sites or geographic boundaries of activities. Biodiversity impacts from oil and gas activities include contamination of air, soil, and water, soil erosion, and sedimentation of waterways. Other impacts can include animal mortality or increased vulnerability to predators, habitat fragmentation and conversion, and the introduction of invasive species and pathogens. Impacts on biodiversity can result in limitations in the availability, accessibility, or quality of resources, which may in turn impact the well-being and livelihoods of local communities and indigenous peoples.

These impacts can result from both onshore and offshore activities, such as land clearance; seismic testing and drilling of exploration wells; construction of assets and facilities, infrastructure, and pipelines; road development and transportation; water discharge; disposal of drilling waste; spills and leaks. Threats to biodiversity will increase as easily accessible oil and gas resources are depleted and oil and gas activities move into more remote areas. For example, the extent of offshore exploration activities in some regions indicates that coastal and marine protected areas may face a greater threat to their biodiversity than terrestrial areas.

The oil and gas sector can also contribute to cumulative impacts on biodiversity. For example, as onshore oil and gas activities expand into an area, new access routes are installed, which typically require clearing land. This leads to habitat fragmentation and conversion but can also result in increased use of the area, or even encourage other sectors to establish operations in the same areas, intensifying impacts. Changes to land use to accommodate the sector’s activities can exacerbate the effects of climate change if they result in removal of carbon sinks. In turn, climate change is likely to affect all aspects of biodiversity, including individual organisms, populations, species distribution, and the composition and function of ecosystems, and the impacts are anticipated to worsen with increasing temperatures.

To limit and manage its impacts on biodiversity, the oil and gas sector has been developing and, in some cases, already using a mitigation hierarchy tool that helps inform its actions. The mitigation hierarchy consists of four sequential steps to reduce the negative impacts of activities on the natural environment. Priority is given to preventive measures starting with avoidance of negative impacts and, where avoidance is not possible, to minimization of those impacts. When negative impacts cannot be avoided or minimized, remediation measures may be used, such as rehabilitation or restoration of biodiversity. Offsetting measures may also be applied to residual impacts after all other measures have been applied (see reference [120] in the Bibliography).
### What to report

If the organization has determined biodiversity to be a material topic, this sub-section lists the disclosures that have been identified as relevant for reporting on the topic by the oil and gas sector.

<table>
<thead>
<tr>
<th>GRI Standard</th>
<th>Disclosure</th>
<th>Additional sector recommendations</th>
<th>GRI Sector Standard ref. no</th>
</tr>
</thead>
</table>
| GRI 3: Material Topics 2021 | Disclosure 3-3 Management of material topics | - Describe policies and commitments to achieving no net loss or a net gain to biodiversity on operational sites; and whether these commitments apply to existing and future operations and to operations beyond areas of high biodiversity value.  
- Report whether application of the mitigation hierarchy has informed actions to manage biodiversity related impacts. | S11.4.1 |

### Topic Standards disclosures

| GRI 304: Biodiversity 2016 | Disclosure 304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas | Report significant impacts on biodiversity with reference to affected habitats and ecosystems. | S11.4.2 |
| Disclosure 304-2 Significant impacts of activities, products, and services on biodiversity |  |
| Disclosure 304-3 Habitats protected or restored | Describe how the application of the mitigation hierarchy, if applicable, has resulted in:  
- areas protected through avoidance measures or offset measures;  
- areas restored through on-site restoration measures or offset measures. | S11.4.4 |
| Disclosure 304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations |  |

### References and resources

**GRI 304: Biodiversity 2016** lists authoritative intergovernmental instruments and additional references relevant to reporting on this topic.

The additional authoritative instruments and references used in developing this topic, as well as resources that may be helpful for reporting on the topic by the oil and gas sector are listed in the **Bibliography**.
S11.5 Waste

Waste refers to anything that a holder discards, intends to discard, or is required to discard. When inadequately managed, waste can have negative impacts on the environment and human health, which can extend beyond the locations where waste is generated and discarded. This topic covers impacts from waste, including as a result of construction and rehabilitation activities.

Oil and gas activities typically generate high volumes of waste, including those involving hazardous waste. The largest waste streams derive from extraction or processing of oil and gas and can consist of drilling muds and cuttings, scale, and sludges, which in turn, can contain chemical additives, hydrocarbons, metals, naturally occurring radioactive material (NORM) and salts. These waste streams may contaminate surface water, groundwater, seawater, and food sources with chemicals or heavy metals, and negatively impact plant and animal species as well as human health. Impacts can depend on an organization’s approach to waste management, regulation, and on availability of recovery and disposal facilities in the proximity of oil and gas activities.

Waste streams that cannot be reduced, or diverted from disposal, are typically stored, treated or disposed through various methods. When disposed of in underground injection wells, drilling waste can trigger seismicity or lead to contamination of groundwater. In some offshore operations, drilling fluids might also be discharged into waterways or the ocean, depending on regulation and the availability of alternative outlets. If waste is disposed of on land or if hazardous substances from waste storage facilities leach into the ground, other impacts can include contamination of land, loss of land productivity, and erosion. In remote areas with limited recovery and disposal methods, waste impacts can be more severe or harder to monitor.

In oil sands mining, the largest waste stream is tailings, a hazardous waste stream produced during the process of separating oil from sand (see Asset integrity and critical incident management). Some tailings ponds have been found to leach chemicals, causing health risks for local communities and wildlife.

When operations end, closure and rehabilitation activities usually involve the final disposal of hazardous chemicals and managing substantial quantities of materials from disused structures or equipment (see Closure and rehabilitation). Other typical wastes from oil and gas activities include waste oils, construction waste, and domestic and office waste.

Box 3. Use of materials

The type and quantity of materials used by an organization in the oil and gas sector can signify its dependence on natural resources and the impacts it has on their availability. Environmental impacts depend on the organization’s approach to sourcing, use, and disposal of these materials.

Oil and gas extraction, development, production, and processing activities represent a large proportion of the sector’s use of materials. Concrete, cement, steel and other metals are necessary for the construction of offshore platforms and onshore facilities as well as for the equipment and infrastructure needed to extract, process and transport oil and gas (e.g., valves, tubing and pipelines). Large volumes of chemicals are used during drilling and well completion.

The oil and gas sector has opportunities for efficient use of materials. These include making use of its significant purchasing power to create demand for more responsibly produced materials or implementing circularity measures that aim at reusing or recycling materials from disused structures, such as steel and concrete.

> The use of materials is addressed in GRI 301: Materials 2016.
What to report

If the organization has determined waste to be a material topic, this sub-section lists the disclosures that have been identified as relevant for reporting on the topic by the oil and gas sector.

<table>
<thead>
<tr>
<th>GRI Standard</th>
<th>Disclosure</th>
<th>Additional sector recommendations</th>
<th>GRI Sector Standard ref. no</th>
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<tr>
<td>Management of the topic</td>
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<tr>
<td>GRI 3: Material Topics 2021</td>
<td>Disclosure 3-3 Management of material topics</td>
<td>S11.5.1</td>
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</table>

Topic Standards disclosures

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<thead>
<tr>
<th>GRI Standard</th>
<th>Disclosure</th>
<th>Additional sector recommendations</th>
<th>GRI Sector Standard ref. no</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRI 306: Waste 2020</td>
<td>Disclosure 306-1 Waste generation and significant waste-related impacts</td>
<td>S11.5.2</td>
<td></td>
</tr>
<tr>
<td>Disclosure 306-2 Management of significant waste-related impacts</td>
<td>S11.5.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disclosure 306-3 Waste generated</td>
<td>When reporting the composition of the waste generated, include a breakdown of the following waste streams, if applicable: o drilling waste (muds and cuttings); o scale and sludges; o tailings.</td>
<td>S11.5.4</td>
<td></td>
</tr>
<tr>
<td>Disclosure 306-4 Waste diverted from disposal</td>
<td>When reporting the composition of the waste diverted from disposal, include a breakdown of the following waste streams, if applicable: o drilling waste (muds and cuttings); o scale and sludges; o tailings.</td>
<td>S11.5.5</td>
<td></td>
</tr>
<tr>
<td>Disclosure 306-5 Waste directed to disposal</td>
<td>When reporting the composition of the waste directed to disposal, include a breakdown of the following waste streams, if applicable: o drilling waste (muds and cuttings); o scale and sludges; o tailings.</td>
<td>S11.5.6</td>
<td></td>
</tr>
</tbody>
</table>

References and resources

GRI 306: Waste 2020 lists authoritative intergovernmental instruments and additional references relevant to reporting on this topic.

The additional authoritative instruments and references used in developing this topic, as well as resources that may be helpful for reporting on the topic by the oil and gas sector are listed in the Bibliography.
S11.6 Water and effluents

Recognized by the United Nations as a human right, access to fresh water is essential for human life and well-being. The amount of water withdrawn and consumed by an organization and the quality of its discharges can have impacts on ecosystems and people.

Oil and gas activities can reduce water availability for local communities and other sectors that also rely on the resource. They can have impacts on the quality of surface water, groundwater and seawater, which can translate into long-term impacts on ecosystems and biodiversity, cause health and development problems for humans, and impair food security.

Extraction and processing are the oil and gas sector activities that use the largest volumes of water. The quantity of water required for these activities vary according to the resource type and extraction method, local geology, and the degree of processing required. Some extraction or processing methods, including hydraulic fracturing and oil sands mining are particularly water-intensive. The amount of water withdrawn for certain activities also varies according to an organization’s ability to substitute the use of freshwater, the quality of water required, recycling infrastructure and on the characteristics of local water resources.

The oil and gas sector’s activities may also involve managing large quantities of produced water or process wastewater, which typically contain hydrocarbons, chemicals, or other hazardous substances. To minimize water impacts, produced water and process wastewater may be reinjected for well stimulation or reused in other processes. If not, they may be discharged to surface water, groundwater, seawater, or a third party; dispersed over land; or stored in evaporation ponds. When discharged, the impacts to water vary according to the sensitivity of the receiving waterbody and quality of the water discharged.

Contamination can also result from injection of drilling fluids into wells and flowback from hydraulic fracturing. This can cause underground contaminants to seep and pollute groundwater resources. Inefficient treatment of water discharges, oil spills from transportation accidents, ruptured pipelines or seepage, or failure of an oil sands tailings dam can also have similar impacts on water quality (see Asset integrity and critical incident management).

The oil and gas sector’s impacts on water additionally depend on the quantity of local water resources; where water is scarce, the sector has a greater impact. A large proportion of the world’s oil and gas resources are found in areas that are arid or experience water stress. In such areas, the sector’s activities are likely to increase competition for water in demand for other uses – such as for household use and fishing, aquaculture, or agricultural activities. This may exacerbate tensions between, as well as within, sectors or local communities. Droughts, floods, and other extreme weather events related to climate change will likely pose more frequent challenges related to water availability and quality in the future.
What to report

If the organization has determined water and effluents to be a material topic, this sub-section lists the disclosures that have been identified as relevant for reporting on the topic by the oil and gas sector.

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<thead>
<tr>
<th>GRI Standard</th>
<th>Disclosure</th>
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<td>Management of the topic</td>
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<td>GRI 3: Material Topics 2021</td>
<td>Disclosure 3-3 Management of material topics</td>
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<td>S11.6.1</td>
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<tr>
<td>Topic Standards disclosures</td>
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</tr>
<tr>
<td>GRI 303: Water and Effluents 2018</td>
<td>Disclosure 303-1 Interactions with water as a shared resource</td>
<td></td>
<td>S11.6.2</td>
</tr>
<tr>
<td></td>
<td>Disclosure 303-2 Management of water discharge-related impacts</td>
<td></td>
<td>S11.6.3</td>
</tr>
<tr>
<td></td>
<td>Disclosure 303-3 Water withdrawal</td>
<td></td>
<td>S11.6.4</td>
</tr>
<tr>
<td></td>
<td>Disclosure 303-4 Water discharge</td>
<td>- Report volume in megaliters of produced water and process wastewater discharged.</td>
<td>S11.6.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Report the concentration (mg/L) of hydrocarbons discharged in produced water and process wastewater.</td>
<td></td>
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<tr>
<td></td>
<td>Disclosure 303-5 Water consumption</td>
<td></td>
<td>S11.6.6</td>
</tr>
</tbody>
</table>

References and resources

GRI 303: Water and Effluents 2018 lists authoritative intergovernmental instruments and additional references relevant to reporting on this topic.

The additional authoritative instruments and references used in developing this topic, as well as resources that may be helpful for reporting on the topic by the oil and gas sector are listed in the Bibliography.
S11.7 Closure and rehabilitation

At the end of commercial use, organizations are expected to close assets and facilities and rehabilitate operational sites. Effective planning and execution of this phase takes into account the impacts that can occur during and after closure. This topic covers an organization’s approach to closure and rehabilitation, including how the organization considers the impacts on the environment, local communities, and workers.

Oil and gas facilities can continue to generate environmental impacts after closure, including soil and water contamination, changes to landforms, and disturbance of biodiversity and wildlife. Closure can also lead to lasting impacts on local communities. Closure often requires planning that begins in the early phases of a project’s lifecycle to anticipate potential impacts. Failure to close facilities and rehabilitate sites effectively can render land unusable for other productive purposes, due to contamination or to the presence of hazardous materials. It can also result in health and safety hazards.

Closure and rehabilitation of oil and gas fields can include removal and final disposal of hazardous substances and chemicals; capping or plugging of abandoned wells; dismantling structures and reusing, recycling or disposing of materials. It can also include the management of waste; surface water and groundwater quality issues resulting from spills and leaks; and restoration of lands to a condition or economic value that is equivalent to the pre-development state. Closing oil sands mining sites also involves managing tailings ponds (see also Asset integrity and critical incident management).

Several international conventions (see references [165], [166] and [167] in the Bibliography) require decommissioning and removing all offshore structures at the end of field life. However, these requirements may be subject to different interpretations across countries, where national regulations or regional conventions can take precedence over international conventions. As a result, organizations in the oil and gas sector may lack clear rules for filing decommissioning plans with local governments and taking action on them once offshore structures become disused.

Decommissioning and dismantling offshore structures can be more costly and complex than for onshore structures, due to their size, weight, and location. There may be additional complexities and environmental considerations when, for example, structures that should be removed become part of benthic communities and habitats. In some cases, decommissioning can occur in situ and structures may be left in place. When this happens, impacts can include marine pollution from corrosion, ecosystem changes, damage to fishing equipment, and navigational hazards to shipping.

The closure and rehabilitation phase may offer additional employment opportunities to local communities. However, once this phase is completed, workers may be retrenched and local communities may face economic downturn and social disruption if they have come to depend on the oil and gas sector’s activities for employment as well as for income, taxes and other payments to governments, community development, and other benefits.

Impacts from closure can be worsened if there is insufficient notice or lack of adequate planning for economic revitalization, social protection, and labor transition. Without clearly assigned responsible parties or allocated funds, closed oil and gas facilities can leave a legacy of environmental issues and financial burdens for communities and governments. The need to reduce GHG emissions and to transition to a low-carbon economy (see Climate adaptation, resilience and transition) is expected to lead to more frequent closures. These are less likely to be counterbalanced by openings, as has been the case in the past. Collaboration between local and national governments and organizations in the oil and gas sector, as well as with workers and unions, is necessary to mitigate significant socioeconomic and environmental impacts requires and ensure a just transition.

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7 Benthic is defined by the Merriam Webster as “of, relating to, or occurring at the bottom of a body of water, or, of, relating to, or occurring in the depths of the ocean” [168].
Technological solutions that would allow repurposing or extending the life of assets after production ceases (e.g., using pipelines for CO₂ storage or transport of low-carbon fuels) are being tested, but have yet to be proven effective and economically viable.

What to report

If the organization has determined closure and rehabilitation to be a material topic, this sub-section lists the disclosures that have been identified as relevant for reporting on the topic by the oil and gas sector.

<table>
<thead>
<tr>
<th>GRI Standard</th>
<th>Disclosure</th>
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<tbody>
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<td>Management of the topic</td>
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<tr>
<td>GRI 3: Material Topics 2021</td>
<td>Disclosure 3-3 Management of material topics</td>
<td>Describe the approach to engaging workers in advance of significant operational changes.</td>
<td>S11.7.1</td>
</tr>
<tr>
<td>Topic Standards disclosures</td>
<td></td>
<td></td>
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<tr>
<td>GRI 402: Labor/Management Relations 2016</td>
<td>Disclosure 402-1 Minimum notice periods regarding operational changes</td>
<td></td>
<td>S11.7.2</td>
</tr>
<tr>
<td>GRI 404: Training and Education 2016</td>
<td>Disclosure 404-2 Programs for upgrading employee skills and transition assistance programs</td>
<td></td>
<td>S11.7.3</td>
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<tr>
<td>Additional sector disclosures</td>
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<tr>
<td>List the operational sites that:</td>
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<td>o have closure and rehabilitation plans in place;</td>
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<td>o have been closed;</td>
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<tr>
<td>o are in the process of being closed.</td>
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<td>S11.7.4</td>
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<td>List the decommissioned structures left in place and describe the rationale for leaving them in place.</td>
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<td></td>
<td>S11.7.5</td>
</tr>
<tr>
<td>Report the total monetary value of financial provisions for closure and rehabilitation made by the organization, including post-closure monitoring and aftercare for operational sites.</td>
<td></td>
<td></td>
<td>S11.7.6</td>
</tr>
</tbody>
</table>

References and resources

GRI 402: Labor/Management Relations 2016 and GRI 404: Training and Education 2016 list authoritative intergovernmental instruments and additional references relevant to reporting on this topic. The additional authoritative instruments and references used in developing this topic, as well as resources that may be helpful for reporting on the topic by the oil and gas sector are listed in the Bibliography.
S11.8 Asset integrity and critical incident management

Asset integrity and critical incident management deal with prevention and control of incidents that can lead to fatalities, injuries or ill health, environmental impacts, and damage to local communities and infrastructure. This topic covers impacts from such incidents and an organization's approach to managing them.

Critical incidents in the oil and gas sector can have catastrophic consequences for workers, local communities (see Occupational health and safety and Local communities), the environment and activities that depend on these resources, such as fishing and agriculture, affecting livelihoods, and compromising food safety and security. They can also lead to ecosystem and habitat degradation and animal mortality.

Critical incidents related to the oil and gas sector include loss of control or containment of hazardous waste, well blowout, explosions, fires, unplanned plant disruption and shutdown, and tailing dam failures from operations related to oil sands. Oil and gas spills and leaks, for example due to undetected failures in equipment or which occur during distribution of oil and gas by water, road, or rail transport or pipelines, may pollute the soil and water as well as harm species (see also Water and effluents and Biodiversity). Events or incidents involving methane and other GHG emissions also contribute to climate change (see GHG emissions).

Organizations in the oil and gas sector can prevent critical incidents with an effective process safety management system. Process safety refers to the systematic application of good design, construction, and operating principles to ensure the safe containment of hazardous materials; it also addresses the sources or factors likeliest to lead to potential incidents. A process safety management system can also limit impacts associated with critical incidents related to extreme weather events, which are likely to increase in frequency and intensity due to the effects of climate change.

Box 4. Oil sands tailings

Oil sands mining typically uses large amounts of water to separate bitumen from sand. This generates tailings, which contain large quantities of hazardous waste, including hydrocarbons and heavy metals. On average, 1.5 barrels of tailings get stored for each barrel of bitumen produced.

Tailings facilities for oil sands mining present considerable asset integrity risks. Available technology to treat oil sand tailings currently fails to effectively manage this waste. As a result, tailings continue to accumulate in ponds, which cover increasingly vast areas of land. Poor design or management of tailing ponds can cause leaks or dam failures, polluting the surrounding surface water, groundwater, or cause critical incidents that may have severe impacts on the local environment and communities.

What to report

If the organization has determined asset and critical incident management to be a material topic, this sub-section lists the disclosures that have been identified as relevant for reporting on the topic by the oil and gas sector.

<table>
<thead>
<tr>
<th>GRI Standard</th>
<th>Disclosure</th>
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<td>GRI 3: Material Topics 2021</td>
<td>Disclosure 3-3 Management of material topics</td>
<td></td>
<td>S11.8.1</td>
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</tbody>
</table>

Topic Standards disclosures
For each significant spill, report the cause of the spill and the volume of spill recovered.

### Additional sector disclosures

Report the total number of Tier 1 and Tier 2 process safety events, and a breakdown of this total by business activity (e.g., exploration, development, production, closure and rehabilitation, refining, processing, transportation, storage).^8^

The following additional sector disclosures are for organizations with oil sands mining operations.

- List the organization’s tailings facilities.
- For each tailings facility:
  - describe the tailings facility;
  - report whether the facility is active, inactive or closed;
  - report the date and main findings of the most recent risk assessment.
- Describe actions taken to:
  - manage impacts from tailings facilities, including during closure and post-closure;
  - prevent catastrophic failures of tailings facilities.^9^

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**References and resources**

*GRI 306: Effluents and Waste 2016* lists authoritative intergovernmental instruments and additional resources relevant to reporting on this topic. The additional authoritative instruments and references used in developing this topic, as well as resources that may be helpful for reporting on the topic by the oil and gas sector are listed in the *Bibliography*.

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^8^ Definitions for Tier 1 and Tier 2 process safety events can be found in the API Recommended Practice 754, Process Safety Performance Indicators for the Refining and Petrochemical Industries [*176*]. API RP 754 focuses on refining and petrochemical operations but can be applied more widely.

^9^ Definitions for tailings facility and catastrophic failure can be found in the Global Industry Standard on Tailings Management (GISTM) [*183*].
S11.9 Occupational health and safety

Healthy and safe work conditions are recognized as a human right. Occupational health and safety involves prevention of physical and mental harm to workers and promotion of workers’ health. This topic covers impacts related to workers’ health and safety.

Many work-related hazards are associated with activities undertaken in the oil and gas sector, such as working with heavy machinery and exposure to or handling of explosive, flammable, poisonous, or harmful substances. Despite efforts to eliminate work-related hazards and improve workers’ health and well-being, work-related injuries and ill health, including fatalities, are still prevalent in the sector.

Hazardous practices in the oil and gas sector may fail to consider the needs of employees. Organizations in the sector may fail to consider the needs of employees. The oil and gas sector makes extensive use of technology, including automation, which can contribute to stress and solitary work. Work-related injuries and ill health, including fatalities, are still prevalent in the sector.

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What to report

If the organization has determined occupational health and safety to be a material topic, this subsection lists the disclosures that have been identified as relevant for reporting on the topic by the oil and gas sector.

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<thead>
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<tr>
<td>GRI 3: Material Topics 2021</td>
<td>Disclosure 3-3 Management of material topics</td>
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<td>S11.9.1</td>
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<tr>
<td>Topic Standards disclosures</td>
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</tr>
<tr>
<td>GRI 403: Occupational Health and Safety 2018</td>
<td>Disclosure 403-1 Occupational health and safety management system</td>
<td></td>
<td>S11.9.2</td>
</tr>
<tr>
<td></td>
<td>Disclosure 403-2 Hazard identification, risk assessment, and incident investigation</td>
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<td>S11.9.3</td>
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<td>Disclosure 403-3 Occupational health services</td>
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<td>S11.9.4</td>
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<tr>
<td></td>
<td>Disclosure 403-4 Worker participation, consultation, and communication on occupational health and safety</td>
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<td>S11.9.5</td>
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<tr>
<td></td>
<td>Disclosure 403-5 Worker training on occupational health and safety</td>
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<td>S11.9.6</td>
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<td></td>
<td>Disclosure 403-6 Promotion of worker health</td>
<td></td>
<td>S11.9.7</td>
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<tr>
<td></td>
<td>Disclosure 403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships</td>
<td></td>
<td>S11.9.8</td>
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<tr>
<td></td>
<td>Disclosure 403-8 Workers covered by an occupational health and safety management system</td>
<td></td>
<td>S11.9.9</td>
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<tr>
<td></td>
<td>Disclosure 403-9 Work-related injuries</td>
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<td>S11.9.10</td>
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<td></td>
<td>Disclosure 403-10 Work-related ill health</td>
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<td>S11.9.11</td>
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</table>

References and resources

GRI 403: Occupational Health and Safety 2018 lists authoritative intergovernmental instruments and additional references relevant to reporting on this topic.

The additional authoritative instruments and references used in developing this topic, as well as resources that may be helpful for reporting on the topic by the oil and gas sector are listed in the Bibliography.
S11.10 Employment practices

Employment practices refer to an organization’s approach to job creation, terms of employment and working conditions for its workers. This topic also covers the employment conditions in an organization’s supply chain.

The oil and gas sector generates employment opportunities across the value chain. This can have positive socioeconomic impacts on communities, countries, and regions. While the sector usually offers well-paid opportunities for skilled workers, employment practices in the sector are also associated with negative impacts. Examples include impacts related to disparities in working conditions for contract workers, ineffective labor-management consultations, and job insecurity.

Many jobs in the oil and gas sector have complex shift patterns, involving long shifts and night shifts, to ensure continuity of operations around the clock. This can cause high levels of fatigue and augment risks related to health and safety (see Occupational health and safety and Asset integrity and critical incident management) if organizations do not provide for sufficient rest time. Organizations in the oil and gas sector may also use fly-in fly-out (FIFO) work arrangements, in which workers are flown to operational sites for several weeks at a time and often required to work extended shifts. Workers on ships can also be at risk of remaining at sea for extended periods of time. Irregular work shifts and schedules, time spent away from families, and potentially limited communication facilities can further impact the physical, psychological, and/or social health of workers.

Various activities in the oil and gas sector are outsourced to suppliers. This is common during peak periods, such as during construction or maintenance works, or for specific activities, such as catering, drilling, security, and transportation. Outsourcing activities and using workers employed by suppliers could allow organizations in the oil and gas sector to reduce their labor costs or to bypass collective agreements that are in place for employees (see also Freedom of association and collective bargaining).

Compared to employees, workers employed by suppliers commonly have less favorable employment conditions, lower remuneration, less training, higher accident rates, and less job security. They often lack social protection and access to grievance mechanisms. Workers beyond the first tiers of business relationships in organizations’ supply chains may also be subject to low standards for working conditions, exposing organizations in the oil and gas sector to human rights violations through their business relationships (see also Forced labor and modern slavery).

Employment terms can vary between local workers, migrant workers (brought in temporarily), and contract workers. Remuneration for these groups of workers may be unequal, while benefits, such as bonuses, housing allowances, and private insurance plans, may only be offered to some migrant workers. Lack of relevant skills, knowledge, or accessible training programs can also restrict local communities from accessing employment opportunities created by the oil and gas sector (see also Economic impacts).

Job security is also a concern in the oil and gas sector. Closure and rehabilitation or oil price drops can occur suddenly, leading to job losses and increasing pressure on remaining workers. Low job security is further compounded by automation and changing business models, such as changes triggered by the transition to a low-carbon economy. Organizations in the sector can support workers by planning for a just transition, including implementing timely measures that aim to develop their skills and improve their employability in other sectors.
What to report

If the organization has determined employment practices to be a material topic, this sub-section lists the disclosures that have been identified as relevant for reporting on the topic by the oil and gas sector.

<table>
<thead>
<tr>
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<td>S11.10.1</td>
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<tr>
<td>Topic Standards disclosures</td>
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</tr>
<tr>
<td>GRI 401: Employment 2016</td>
<td>Disclosure 401-1 New employee hires and employee turnover</td>
<td></td>
<td>S11.10.2</td>
</tr>
<tr>
<td></td>
<td>Disclosure 401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees</td>
<td></td>
<td>S11.10.3</td>
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<tr>
<td></td>
<td>Disclosure 401-3 Parental leave</td>
<td></td>
<td>S11.10.4</td>
</tr>
<tr>
<td>GRI 402: Labor/Management Relations 2016</td>
<td>Disclosure 402-1 Minimum notice periods regarding operational changes</td>
<td></td>
<td>S11.10.5</td>
</tr>
<tr>
<td>GRI 404: Training and Education 2016</td>
<td>Disclosure 404-1 Average hours of training per year per employee</td>
<td></td>
<td>S11.10.6</td>
</tr>
<tr>
<td></td>
<td>Disclosure 404-2 Programs for upgrading employee skills and transition assistance programs</td>
<td></td>
<td>S11.10.7</td>
</tr>
<tr>
<td>GRI 414: Supplier Social Assessment 2016</td>
<td>Disclosure 414-1 New suppliers that were screened using social criteria</td>
<td></td>
<td>S11.10.8</td>
</tr>
<tr>
<td></td>
<td>Disclosure 414-2 Negative social impacts in the supply chain and actions taken</td>
<td></td>
<td>S11.10.9</td>
</tr>
</tbody>
</table>

References and resources


The additional authoritative instruments and references used in developing this topic, as well as resources that may be helpful for reporting on the topic by the oil and gas sector are listed in the Bibliography.
S11.11 Non-discrimination and equal opportunity

Freedom from discrimination is a human right and a fundamental right at work. Discrimination can impose unequal burdens on individuals or deny fair opportunities on the basis of individual merit. This topic covers impacts from discrimination and practices related to diversity, inclusion, and equal opportunity.

The conditions, locations, necessary skills, and types of work associated with the oil and gas sector can set a barrier for entry, hinder employee diversity, and result in discriminatory practices. These can impede access to jobs and career development, as well as lead to inequalities in treatment, remuneration, and benefits.

Documented cases of discrimination in the oil and gas sector concern race, color, sex, gender, disability, religion, national extraction, and worker status. For example, jobseekers from local communities may be excluded from the hiring process because of a recruitment system bias that favors a dominant ethnic group or utilizes migrant workers. Compared to some migrant workers, local workers may receive significantly lower pay for equal work. The sector's widespread use of contract workers, often with differing terms of employment, can also be conducive to discrimination.

The oil and gas sector is characterized by a significant gender imbalance. In many countries, the percentage of women working in this sector is significantly lower than the percentage of women working overall nationwide. Women are also significantly underrepresented in senior management positions. One cause of this imbalance may be that fewer women graduate with degrees pertinent to the sector, such as in science, technology, engineering, and mathematics. Other barriers for women and primary caregivers include fly-in fly-out (FIFO) work arrangements, long hours, and limited parental leave. Social or cultural customs and beliefs and biases can also limit women's access to jobs in this sector or prevent them from taking on specific roles. In addition, some resource-rich countries have laws that prevent women from working in hazardous or arduous occupations.

Understanding how specific groups may be subject to discrimination across different locations where organizations in the oil and gas sector operate can help organizations effectively address discriminatory practices. Other measures, such as providing specific training to workers on how to prevent discrimination, can help address impacts related to discrimination and create a respectful workplace.

What to report

If the organization has determined non-discrimination and equal opportunity to be a material topic, this sub-section lists the disclosures that have been identified as relevant for reporting on the topic by the oil and gas sector.

<table>
<thead>
<tr>
<th>GRI Standard</th>
<th>Disclosure</th>
<th>Additional sector recommendations</th>
<th>GRI Sector ref. no.</th>
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<tr>
<td>GRI 3: Material Topics 2021</td>
<td>Disclosure 3-3 Management of material topics</td>
<td>S11.11.1</td>
<td></td>
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<tr>
<td>Topic Standards disclosures</td>
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<tr>
<td>GRI 202: Market Presence 2016</td>
<td>Disclosure 202-2 Proportion of senior management hired from the local community</td>
<td>S11.11.2</td>
<td></td>
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<tr>
<td>GRI 401: Employment 2016</td>
<td>Disclosure 401-3 Parental leave</td>
<td>S11.11.3</td>
<td></td>
</tr>
<tr>
<td>GRI 405: Diversity and Equal Opportunity 2016</td>
<td>Disclosure 405-1 Diversity of governance bodies and employees</td>
<td>S11.11.4</td>
<td></td>
</tr>
<tr>
<td>Disclosure 405-2 Ratio of basic salary and remuneration of women to men</td>
<td>S11.11.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRI 406: Non-discrimination 2016</td>
<td>Disclosure 406-1 Incidents of discrimination and corrective actions taken</td>
<td>S11.11.6</td>
<td></td>
</tr>
<tr>
<td>GRI 404: Training and Education 2016</td>
<td>Disclosure 404-1 Average hours of training per year per employee</td>
<td>S11.11.7</td>
<td></td>
</tr>
</tbody>
</table>

**References and resources**


The additional authoritative instruments and references used in developing this topic, as well as resources that may be helpful for reporting on the topic by the oil and gas sector are listed in the Bibliography.
S11.12 Forced labor and modern slavery

Forced labor is defined as all work or service which is exacted from any person under the menace of penalty and for which a person has not offered themselves voluntarily. Freedom from forced labor is a human right and a fundamental right at work. This topic covers an organization’s approach to identifying and addressing forced labor and modern slavery.

As part of a global effort, several governments have issued legislation requiring public reporting on addressing traditional and emerging practices of forced labor, including modern slavery. Such legislation applies to many organizations in the oil and gas sector.

The large number of suppliers that organizations in the oil and gas sector interact with may include those operating in countries with low rates of enforcement of human rights and those lacking the capacity to prevent and mitigate negative human rights impacts within their own supply chains. Through their supply chains, oil and gas organizations may therefore be involved with violations of human rights and other instances of exploitation. Oil and gas organizations may also be involved with incidences of forced labor and modern slavery as a result of their joint ventures and other business relationships, including those with state-owned enterprises in countries where international human rights violations are documented. Conducting due diligence within the large and complex supply chains that commonly exist in the sector may also pose difficulties for detecting and addressing incidents of forced labor and modern slavery.

Documented cases have shown forced labor and modern slavery in the supply of services to oil fields and offshore platforms, such as in catering, cleaning, construction, maintenance, and waste management, as well as in marine and land transportation activities. For example, a higher risk of human rights violations may be found aboard ships that are registered in countries other than the country of the ship’s beneficial owner. In such cases, layers of management and the use of external crewing companies can obscure accountability for ensuring respect of human rights. In other situations, inadequate arrangements by the employer to cover flight costs or facilitate border-crossing requirements at the end of a contract period have left ship workers stranded onboard and vulnerable to exploitation. Offshore oil and gas workers can also be at higher risk of forced labor due to the isolation of extraction sites, which makes it challenging for organizations in the sector to reinforce measures countering exploitation. Low-skilled migrant workers can also face higher risks of modern slavery when dealing with third-party employment agencies, such as those who have been found to overcharge workers for visas and flights or to demand recruitment costs be paid by employees rather than employers.

Box 5. Impacts on children’s rights

Child labor may occur in activities that service an oil and gas project or its workers (e.g., child labor in hospitality services or in specific sector activities, such as the construction of facilities).

Other impacts on children’s rights and well-being can result from the proximity of an oil or gas project to local communities. These impacts can include sexual violence, environmental impacts, or impacts resulting from land use and resettlement. Parents’ working conditions, including irregular working hours, long shifts, and fly-in fly-out (FIFO) arrangements, can also have impacts on children (see also Employment practices).

The risk of child labor in the oil and gas sector arises mainly through an organization’s business relationships and complex supply chains. Suppliers may operate in countries with minimum working ages that are below the minimum age set by the International Labour Organization.

Child labor is addressed in GRI 408: Child Labor 2016.
What to report

If the organization has determined forced labor and modern slavery to be a material topic, this subsection lists the disclosures that have been identified as relevant for reporting on the topic by the oil and gas sector.

<table>
<thead>
<tr>
<th>GRI Standard</th>
<th>Disclosure</th>
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<td>Disclosure 3-3 Management of material topics</td>
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<td>Topic Standards disclosures</td>
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<tr>
<td>GRI 409: Forced or Compulsory Labor 2016</td>
<td>Disclosure 409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor</td>
<td></td>
<td>S11.12.2</td>
</tr>
<tr>
<td>GRI 414: Supplier Social Assessment 2016</td>
<td>Disclosure 414-1: New suppliers that were screened using social criteria</td>
<td></td>
<td>S11.12.3</td>
</tr>
</tbody>
</table>

References and resources

GRI 409: Forced or Compulsory labor 2016 and GRI 414: Supplier Social Assessment 2016 list authoritative intergovernmental instruments and additional references relevant to reporting on this topic.

The additional authoritative instruments and references used in developing this topic, as well as resources that may be helpful for reporting on the topic by the oil and gas sector are listed in the Bibliography.
Freedom of association and collective bargaining are human rights and fundamental rights at work. They include the rights of employers and workers to form, join, and run their own organizations without prior authorization or interference, and to collectively negotiate working conditions and terms of employment. This topic covers an organization’s approach and impacts related to freedom of association and collective bargaining.

Workers’ rights to organize and to take collective action are critical for supporting and improving working conditions in the oil and gas sector, including conditions relating to occupational health and safety, wages, and job security. These rights can also enable public debate about the sector’s governance and practices as well as aid in reducing social inequality.

Many jobs associated with the oil and gas sector have traditionally been represented by trade unions and covered by collective bargaining agreements. However, some oil and gas resources are located in countries where these rights are restricted. Workers in such locations face risks when seeking to join trade unions and engage in collective bargaining. Even in countries where unions are legal, existing restrictions might prevent effective worker representation, and workers who join unions may face intimidation or unfair treatment. In cases where freedom of association and collective bargaining are restricted, organizations in the oil and gas sector may employ alternative means of worker representation and engagement.

Documented cases of interference with freedom of association and collective bargaining in the sector include detention of managers and other employees, invasion of privacy, not adhering to collective agreements, and prevention of trade union access to workplaces to assist workers. Other documented cases include refusal to bargain in good faith with workers’ chosen trade unions, unfair dismissal of trade union members and leaders, and unilateral cancellation of collective bargaining agreements.

Widely used in the oil and gas sector, contract workers are often excluded from the scope of collective bargaining agreements. As a result, contract workers commonly have less favorable employment conditions and lower remuneration compared to employees (see also Employment practices).

**Box 6. Freedom of association and civic space**

Freedom of association and peaceful assembly are fundamental human rights. These rights give workers, through their trade unions, and citizens, through independent civil society, the freedom to speak about the oil and gas sector’s policies and organizations’ practices without interference.

Restrictions imposed on civic space, which is the environment that enables civil society to contribute to decisions that affect individual lives, can limit citizens’ ability to engage in public debate about the sector’s policies and organizations’ practices.

### What to report

If the organization has determined freedom of association and collective bargaining to be a material topic, this sub-section lists the disclosures that have been identified as relevant for reporting on the topic by the oil and gas sector.

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<thead>
<tr>
<th>GRI Standard</th>
<th>Disclosure</th>
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<td>GRI 3: Material Topics 2021</td>
<td>Disclosure 3-3 Management of material topics</td>
<td></td>
<td>S11.13.1</td>
</tr>
</tbody>
</table>
### References and resources

1072

GRI 407: Freedom of Association and Collective Bargaining 2016 lists authoritative intergovernmental instruments and additional references relevant to reporting on this topic.

1075 The additional authoritative instruments and references used in developing this topic, as well as resources that may be helpful for reporting on the topic by the oil and gas sector are listed in the Bibliography.
S11.14 Economic impacts

An organization’s impacts on the economy refers to how the value it generates affects economic systems. For example, as a result of its procurement practices and employment of workers. Infrastructure investments and services supported by an organization can also have impacts on a community’s well-being and long-term development. This topic covers economic impacts at local, national, and global levels.

Oil and gas activities can be an important source of investment and income for local communities, countries, and regions. Impacts can vary according to the scale of operations and the importance of the activity in the economic context. In some resource-rich countries, revenues from the oil and gas sector are a significant source of income. However, mismanagement of these revenues can harm economic performance and lead to macroeconomic instability and distortions (see Payments to governments and Anti-corruption). Economies dependent on oil and gas can also be vulnerable to commodity price and production fluctuations.

The oil and gas sector can have positive impacts by providing revenues, derived from paying taxes and royalties, as well as investing in infrastructure, such as power utilities that improve access to energy, or public services. The sector can also have positive impacts through local employment and local procurement. Skills development of local communities through education and training can help increase access to jobs in the sector. Local employment, in turn, can lead to increased purchasing power and positive impacts on local businesses. Local procurement of products and services can also help supplier development.

The extent to which local communities stand to benefit from the presence of oil and gas activities depends on the existing development and industrialization levels of the communities, the community’s capacity to offer qualified workers for the new employment opportunities, and the commitment of organizations in the oil and gas sector to train local workers. The net employment impacts also depend on how employment by the oil and gas sector affects existing employment in other sectors and on organizations’ employment practices. For example, a fly-in fly-out (FIFO) work arrangement can offset pressures associated with influxes of people to small communities while still supplying the necessary workers (see also Local communities). However, this arrangement reduces the employment opportunities available to local communities, detracting from the potential economic benefits.

The introduction of new oil and gas activities can generate negative impacts on local communities, such as economic disparity, with vulnerable groups often being disproportionately affected (see also Rights of indigenous peoples). Small local suppliers that depend on larger oil and gas organizations for their income generation may face challenges in cases of extended payment delays or pressures to deliver services and products at decreased rates. An influx of external workers can increase pressure on housing, infrastructure, and public services. Local communities may also have to deal with environmental legacy costs or ineffective rehabilitation after closure (see also Asset integrity and critical incident management and Closure and rehabilitation).

The transition to a low-carbon economy is expected to lead to decreased activity in the oil and gas sector (see also Climate adaptation, resilience, and transition), making communities and countries that depend on the sector for revenues or employment more vulnerable to the resulting economic downturn. In these cases, collaboration between local and national governments and organizations in the sector is essential to ensure a just transition.
What to report

If the organization has determined economic impacts to be a material topic, this sub-section lists the disclosures that have been identified as relevant for reporting on the topic by the oil and gas sector.

<table>
<thead>
<tr>
<th>GRI Standard</th>
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<tr>
<td>GRI 3: Material Topics 2021</td>
<td>Disclosure 3-3 Management of material topics</td>
<td>Describe the community development programs in place that are intended to enhance positive impacts for local communities, including the approach to providing employment, procurement, and training opportunities</td>
<td>S11.14.1</td>
</tr>
<tr>
<td></td>
<td>Topic Standards disclosures</td>
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</tr>
<tr>
<td>GRI 203: Indirect Economic Impacts 2016</td>
<td>Disclosure 203-1 Infrastructure investments and services supported</td>
<td></td>
<td>S11.14.4</td>
</tr>
<tr>
<td></td>
<td>Disclosure 203-2 Significant indirect economic impacts</td>
<td></td>
<td>S11.14.5</td>
</tr>
<tr>
<td>GRI 204: Procurement Practices 2016</td>
<td>Disclosure 204-1 Proportion of spending on local suppliers</td>
<td></td>
<td>S11.14.6</td>
</tr>
</tbody>
</table>

References and resources

GRI 201: Economic Performance 2016 and GRI 202: Market Presence 2016 list authoritative intergovernmental instruments and additional references relevant to reporting on this topic.

The additional authoritative instruments and references used in developing this topic, as well as resources that may be helpful for reporting on the topic by the oil and gas sector are listed in the Bibliography.
S11.15 Local communities

Local communities comprise individuals living or working in areas that are affected or that could be affected by an organization’s activities. An organization is expected to conduct community engagement to understand the vulnerabilities of local communities and how they may be affected by the organization’s activities. This topic covers socioeconomic, cultural, health, and human rights impacts on local communities.

Organizations in the oil and gas sector can have positive economic impacts on local communities through employment and local procurement, taxes, or other payments to local governments, as well as through community development programs and investments in infrastructure or public services (see also Economic impacts, Employment practices, and Payments to governments).

Activities of the oil and gas sector can also lead to negative impacts on local communities. Negative impacts can result from, for example, land use requirements for the sector’s activities, an influx of people seeking employment and economic opportunities, environmental degradation, exposure to hazardous substances, and use of natural resources. When operating in areas of pre-existing conflict or where negative impacts from oil and gas activities are not addressed, conflicts can arise or become exacerbated (see also Conflict and security). Vulnerable groups, including women and indigenous peoples, may be disproportionately affected by these impacts.

The oil and gas sector’s land use can compete with other land use demands, such as for farming, fishing, or recreation. In addition, it can disrupt traditional livelihoods and increase the risk of impoverishment. It can eventually lead to displacement, which results in additional impacts such as restrictions on access to essential services, and impacts on human rights (see Land and resource rights). The activities of the sector can also result in damage to cultural heritage sites, potentially leading to loss of tradition, culture, or cultural identity, especially among indigenous peoples (see also Rights of indigenous peoples).

The influx of workers from the surrounding areas or as a result of use of fly-in fly-out (FIFO) arrangements, particularly during the construction, maintenance, and closure and rehabilitation phases of oil and gas projects might lead to greater economic inequality within the local community. A large-scale influx of workers can place local services and resources under pressure, induce inflation, and introduce new communicable diseases. Higher housing costs may lead to an increase in homelessness, especially among vulnerable groups. There may be an increase in activities that compromise social order, such as substance abuse, gambling, and prostitution, especially affecting vulnerable groups. The influx of predominantly male workers can change the gender balance of local communities. This can impact women in particular, as it can lead to a rise in sexual violence and trafficking as well as sexually transmitted diseases. Documented cases have also shown domestic and gender-based violence, both on operational sites and in local communities.

Oil and gas activities can generate air, soil, and water pollution; increased levels of traffic, noise, light, and odors; waste streams and leaks; and dust. They may cause incidents such as explosions, fires, spills, and tailings dam or pipeline failures (see also Asset integrity and critical incident management).

Documented cases have also shown that seismic activity induced by hydraulic fracturing can affect local communities.

Effective local community engagement, grievance mechanisms, and other remediation processes can help organizations in the oil and gas sector prevent and mitigate the impacts of their activities. In their absence, the concerns of the community might not be understood or addressed, which can create negative impacts or exacerbate existing problems, such as gender inequality. Establishing or participating in grievance mechanisms and other remediation processes that are tailored to the specific needs of local communities can also help organizations address actual or potential negative impacts.
What to report

If the organization has determined local communities to be a material topic, this sub-section lists the disclosures that have been identified as relevant for reporting on the topic by the oil and gas sector.

<table>
<thead>
<tr>
<th>GRI Standard</th>
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<td>Management of the topic</td>
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</table>
| GRI 3: Material Topics 2021 | Disclosure 3-3 Management of material topics | - Describe the approach to identifying stakeholders within local communities and to engaging with them.  
- List the vulnerable groups that the organization has identified within local communities.  
- List any collective or individual rights that the organization has identified that are of particular concern for local communities.\(^{10}\)  
- Describe the approach to engaging with vulnerable groups, including:  
  o how it seeks to ensure meaningful engagement; and  
  o how it seeks to ensure safe and equitable gender participation. | S11.15.1 |

| Topic Standards disclosures | | | |
|-----------------------------|-----------------------------------|-----------------------------|
| GRI 413: Local Communities 2016 | Disclosure 413-1 Operations with local community engagement, impact assessments, and development programs | Describe impacts on the health of local communities as a result of exposure to pollution caused by operations or use of hazardous substances. | S11.15.2 |
| | Disclosure 413-2 Operations with significant actual and potential negative impacts on local communities | | S11.15.3 |

\(^{10}\) These additional sector recommendations are based on the guidance to clause 1.1 in *GRI 413: Local Communities 2016.*
**Additional sector disclosures**

<table>
<thead>
<tr>
<th>Report the number and type of grievances from local communities identified, including:</th>
<th>S11.15.4</th>
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<tr>
<td>o percentage of the grievances that were addressed and resolved;</td>
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<td>o percentage of the grievances that were resolved through remediation.</td>
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</table>

**References and resources**

1180 **References and resources**

1181 *GRI 413: Local Communities 2016* lists authoritative intergovernmental instruments and additional references relevant to reporting on this topic.

1182 The additional authoritative instruments and references used in developing this topic, as well as resources that may be helpful for reporting on the topic by the oil and gas sector are listed in the **Bibliography**.
S11.16 Land and resource rights

Land and resource rights encompass the rights to use, manage and control land, fisheries, forests, and other natural resources. An organization's impacts on the availability and accessibility of these can affect local communities and other users. This topic covers impacts from an organization's use of land and natural resources on human rights and tenure rights, including from resettlement of local communities.

Oil and gas activities require access to land for prospecting, exploration, extraction, construction, waste storage and disposal, processing, transportation, and distribution of products. This can sometimes lead to displacement of other land users, restricted access to resources, and resettlement of local communities, including involuntary resettlement. Impacts from land use vary according to methods of extraction, resource location, the processing required, and transportation methods. For example, onshore oil and gas pipelines can have a large footprint due to their length and safety buffer zones.

Unclear rules regarding tenure rights to access, use, and control land, often lead to disputes, economic and social tensions, and conflict. Insufficient consultation with, and inadequate compensation to affected communities can also exacerbate tensions and conflict. For example, the relationship between mineral rights and land rights might be unclear; formal statutory tenure rules might overlap or conflict with traditional customary rules; legitimate rights may not be recognized or enforced; or people may lack formal documentation of their rights to land.

Involuntary resettlement of local communities can involve physical displacement (e.g., relocation or shelter loss) and economic displacement (e.g., loss or access to assets), having impacts on people's livelihoods and human rights. In such cases, organizations in the oil and gas sector may provide local communities with monetary compensation or land that is equivalent to the lost assets. However, determining the value of local communities' lost access to the natural environment is complex and includes consideration of income-generating activities, human health, and non-material aspects of quality of life, such as the loss of cultural or recreational opportunities. The amount of compensation provided may therefore not be equivalent to the loss borne. In some cases, individuals who are customary titleholders to the land may not be compensated at all or only for crops that they were cultivating on the land but not for the land itself.

Community members resisting resettlement may also face threats and intimidation, or violent, repressive, or life-threatening removal from lands (see also Conflict and security).

Addressing impacts on land and resource rights typically requires extensive and meaningful engagement between organizations in the oil and gas sector and local communities, including vulnerable groups. In cases of ineffective community consultation or in the absence of free, prior, and informed consent (FPIC), impacts on resettling communities or existing problems within a community can be exacerbated by an inadequate resettlement process or lack of transparency (see also Local communities and Rights of indigenous peoples). Community consultations may also fail to include all affected members. Women, for example, are often excluded from decision-making processes related to the development a new project.

What to report

If the organization has determined land and resource rights to be a material topic, this sub-section lists the disclosures that have been identified as relevant for reporting on the topic by the oil and gas sector.

<table>
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<tr>
<td>GRI 3: Material Topics 2021</td>
<td>Disclosure 3-3 Management of material topics</td>
<td>Describe the approach of engaging with affected vulnerable groups, including</td>
<td>S11.16.1</td>
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|.o how the organization seeks to ensure engagement is meaningful;  
o how the organization seeks to ensure safe and equitable gender participation. |
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<tr>
<td>Describe the approach of to providing remediation to local communities or individuals subject to involuntary resettlement, such as the process for establishing compensation for loss of assets or other assistance to improve or restore standards of living or livelihoods.</td>
</tr>
</tbody>
</table>

### Additional sector disclosures

List the locations of operations that caused or contributed to involuntary resettlement or where such resettlement is ongoing. For each location, describe how peoples’ livelihoods and human rights were affected and restored.  

|  
|---|
| S11.16.2 |

#### References and resources

The authoritative instruments and references used in developing this topic, as well as resources that may be helpful for reporting on the topic by the oil and gas sector are listed in the Bibliography.
S11.17 Rights of indigenous peoples

Indigenous peoples are considered a vulnerable group and are at higher risk of experiencing negative impacts more severely as a result of an organization’s activities. Indigenous peoples have both collective and individual rights, as set out in the United Nations Declaration on the Rights of Indigenous Peoples and other authoritative international human rights instruments. This topic covers impacts on the rights of indigenous peoples.

The presence of the oil and gas sector in proximity to indigenous communities can present economic opportunities and benefits for indigenous peoples through employment, training, and community development programs (see also Economic impacts). However, it can also disrupt indigenous peoples’ cultural, spiritual, and economic ties to their lands or natural environments, compromise their rights and well-being, and cause displacement (see also Land and resource rights). It can also have an impact on availability of and access to water, which is a key concern for many indigenous communities.

The collective and individual rights of indigenous peoples are recognized in authoritative international instruments. Indigenous peoples also often have a special legal status in national legislation and can be customary or legal owners of lands to which organizations in the oil and gas sector are granted use rights by governments. Before initiating development or other activities that could have potential impacts on lands or resources that indigenous peoples use or own, organizations are expected to seek free, prior, and informed consent (FPIC) from indigenous peoples. This right is recognized in the United Nations Declaration on the Rights of Indigenous Peoples and allows indigenous peoples to give or withhold consent to a project that may affect them or their territories and to negotiate project conditions [310]. However, some national governments may not recognize or enforce indigenous land rights or indigenous peoples’ rights to consent. Documented cases show an absence of good faith consultations as well as undue pressure on indigenous peoples to accept projects, with opposition to such projects sometimes leading to violence or death (see also Conflict and security). Organizations in the sector and indigenous peoples regularly have disputes and conflicts over land ownership and rights.

An influx of workers from other areas can result in discrimination toward indigenous peoples in terms of access to jobs. It can further undermine their social cohesion, well-being, and safety. Impacts that may affect indigenous women more severely than men include risks of prostitution, forced labor, violence, and increased exposure to communicable diseases (see also Local communities).

The contribution of the oil and gas sector to climate change can also exacerbate negative impacts on indigenous peoples, given their distinct relationship with and, at times, dependence on the natural environment.
### What to report

If the organization has determined rights of indigenous peoples to be a material topic, this sub-section lists the disclosures that have been identified as relevant for reporting on the topic by the oil and gas sector.

<table>
<thead>
<tr>
<th>GRI Standard</th>
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</thead>
</table>
| GRI 3: Material Topics 2021    | Disclosure 3-3 Management of material topics                              | - Describe the community development programs in place that are intended to enhance positive impacts for indigenous peoples, including the approach to providing employment, procurement, and training opportunities.  
  - Describe the approach of engaging with indigenous peoples, including:  
    o how the organization seeks to ensure engagement is meaningful;  
    o how the organization seeks to ensure indigenous women are able to participate safely and equitably. | S11.17.1                     |
| Topic Standards disclosures    |                                                                           |                                                                                                      |                              |
| GRI 411: Rights of Indigenous Peoples 2016 | Disclosure 411-1 Incidents of violations involving rights of indigenous peoples | Describe the identified incidents of violations involving the rights of indigenous peoples. | S11.17.2                     |
| Additional sector disclosures  |                                                                           |                                                                                                      |                              |
| List the locations of operations where indigenous peoples are present or affected by oil and gas activities of the organization. | |                                                                                                      | S11.17.3                     |
| Report if the organization has been involved in a process of seeking free, prior and informed consent from indigenous peoples for any of the organization’s activities, including, in each case:  
  o whether the process has been mutually accepted by the organization and the affected indigenous peoples;  
  o whether an agreement has been reached, and if so, if the agreement is publicly available. | |                                                                                                      | S11.17.4                     |

### References and resources

- **GRI 411: Rights of Indigenous Peoples 2016** lists authoritative intergovernmental instruments and additional references relevant to reporting on this topic.
- The additional authoritative instruments and references used in developing this topic, as well as resources that may be helpful for reporting on the topic by the oil and gas sector are listed in the Bibliography.
S11.18 Conflict and security

An organization’s activities may trigger conflict or, in cases of existing conflict, intensify it. The use of security personnel to manage conflict can play an essential role in allowing an organization to operate safely and productively but also has the potential to impact on people’s human rights. This topic covers the organization’s security practices and its approach to operating in areas of conflict.

Many organizations in the oil and gas sector operate in locations and situations of conflict including, for example, countries characterized by political and social instability.

Conflict can also be caused by the presence of oil and gas activities. It can be triggered by negative environmental impacts; inadequate engagement of stakeholders and indigenous peoples in decision-making processes; uneven distribution of economic benefits or provision of benefits deemed disproportionate to impacts created; and disputes over use of land and resources (see also Land and resource rights). Conflict can also be triggered by the perceived mismanagement of funds at the expense of local interests (see also Anti-corruption). Such conflict can heighten the need to use security personnel, but also the potential for violations of human rights.

Security personnel engaged by organizations in the oil and gas sector or public security directed by the host government may be present to protect organizations’ assets or ensure workers’ safety and security. Actions taken by security personnel against local community members, including during protest activities against development of oil and gas resources or to protect land and resources, can violate human rights, such as the rights to freedom of association and freedom of speech, as well as lead to violence, injuries, or deaths.

When oil and gas activities are endorsed by the government but remain disagreeable to local communities, the presence of public security forces can increase tensions between communities, government, and organizations in the sector. This can in turn exacerbate local power imbalances and, potentially, use of force.

In cases where public or other third-party security forces, such as paramilitary groups, are active, organizations in the oil and gas sector still have a responsibility to take steps to ensure security practices are consistent with the protection of human rights. This involves assessing security-related risks, identifying situations in which impacts on human rights are likely to occur, and working with security providers to ensure human rights are respected.

Organizations in the oil and gas sector may also contribute more broadly to the safety and security of local communities, for example, by facilitating communication between communities and public security forces or supporting efforts to address other sources of conflict.

What to report

If the organization has determined conflict and security to be a material topic, this sub-section lists the disclosures that have been identified as relevant for reporting on the topic by the oil and gas sector.

<table>
<thead>
<tr>
<th>GRI Standard</th>
<th>Disclosure</th>
<th>Additional sector recommendations</th>
<th>GRI Sector Standard ref. no</th>
</tr>
</thead>
</table>
| GRI 3: Material Topics 2021 | Disclosure 3-3 Management of material topics | - List the locations of operations in areas of conflict.  
- Describe the approach to ensuring respect for human rights by public and private security providers. | S11.18.1 |
1312 **References and resources**

1313 *GRI 410: Security Practices 2016* lists authoritative intergovernmental instruments and additional references relevant to reporting on this topic.

1314 The additional authoritative instruments and references used in developing this topic, as well as resources that may be helpful for reporting on the topic by the oil and gas sector are listed in the **Bibliography**.
Anti-competitive behavior refers to actions by an organization that can result in collusion with potential competitors, abuse of dominant market position or exclusion of potential competitors, thereby limiting the effects of market competition. This can include fixing prices or coordinating bids, creating market or output restrictions, imposing geographic quotas, and allocating customers, suppliers, geographic areas, or product lines. This topic covers impacts as a result of anti-competitive behavior.

The oil and gas sector faces high barriers to entry due to the sizable investments needed. Consequently, established organizations in the sector are often large and can dominate national or local markets. Mergers and acquisitions can intensify this concentration. Some segments of the sector depend on extensive infrastructure investments, such as investments in pipelines and liquefied natural gas (LNG) terminals, usually operated by a single organization or a small number of them.

The global market for oil and gas is large and well-integrated, making it secure against collusion or market dominance from individual producers. However, specific segments of the oil and gas sector can be subject to anti-competitive behavior. Instances of cartels, monopolistic practices, and related abuse of such positions have been documented in some jurisdictions in which oil and gas organizations are active. Agreements between producers and energy distributors, as well as mergers between organizations in the sector, can diminish competition by affecting output volume, and can create monopolies over transportation, distribution, and supply to consumers. Collusion can also take place when submitting bids for the rights to extract oil and gas. Organizations may coordinate their bids in connivance with competitors so as to obtain lower prices, depriving resource owners of fair compensation.

Anti-competitive behavior can result in higher prices for oil, gas, and raw materials derived from oil and gas. Given the key role of oil and gas in the world economy, even a small increase in price can have sizeable negative impacts.

What to report

If the organization has determined anti-competitive behavior to be a material topic, this sub-section lists the disclosures that have been identified as relevant for reporting on the topic by the oil and gas sector.

<table>
<thead>
<tr>
<th>GRI Standard</th>
<th>Disclosure</th>
<th>Additional sector recommendations</th>
<th>GRI Sector Standard ref. no</th>
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<tr>
<td>Management of the topic</td>
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<tr>
<td>GRI 3: Material Topics 2021</td>
<td>Disclosure 3-3 Management of material topics</td>
<td></td>
<td>S11.19.1</td>
</tr>
<tr>
<td>Topic Standards disclosures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRI 206: Anti-competitive Behavior 2016</td>
<td>Disclosure 206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices</td>
<td></td>
<td>S11.19.2</td>
</tr>
</tbody>
</table>

References and resources

GRI 206: Anti-competitive Behavior 2016 lists authoritative intergovernmental instruments and additional references relevant to reporting on this topic.

The additional authoritative instruments and references used in developing this topic, as well as resources that may be helpful for reporting on the topic by the oil and gas sector are listed in the Bibliography.
S11.20 Anti-corruption

Anti-corruption refers to how an organization manages the potential of being involved with corruption. Corruption is practices such as bribery, facilitation payments, fraud, extortion, collusion, and money laundering, and the offer or receipt of an inducement to do something that is dishonest or illegal. This topic covers impacts related to corruption and an organization’s approach related to contract and ownership transparency.

Corruption in the oil and gas sector can occur throughout the value chain and has been linked to various negative impacts, such as misallocation of resources revenues, damage to the environment, abuse of democracy and human rights, and political instability. Corruption can lead to diversion of public revenues to private beneficiaries, at the expense of, for example, investments in infrastructure or services. This can be particularly critical in countries with high levels of poverty, and can lead to increased inequalities and conflicts over oil and gas resources (see Conflict and security).

The oil and gas sector faces higher risks of corruption in comparison with other sectors. Characteristics of the sector that contribute to the potential for corruption include frequent interaction between oil and gas organizations and politically exposed persons11, such as government officials for licenses and other regulatory approvals. Other relevant sector characteristics include the complex financial transactions and the international reach of the sector.

State-owned enterprises (SOEs) face specific challenges in relation to corruption because they may have less effective internal controls and be subject to partial independent oversight. In addition to driving profit, SOEs may also pursue broader objectives such as local development. However, without adequate oversight, measures for local development may be abused for corrupt purposes.

Organizations in the oil and gas sector partnering with SOEs in joint ventures may face additional risks related to corruption as a result of this business relationship.

Cases of corruption during bidding processes for exploration and production licenses have been documented in the oil and gas sector. Organizations in the sector have used corrupt practices to obtain confidential information, influence decision-making, and avoid environmental or other requirements. Such cases may result in licenses being awarded to less qualified organizations, jeopardize public investments, or negatively impact the environment and local communities. Opaque licensing procedures may also obstruct public scrutiny of oil and gas investments and transactions that could result in reduced public revenue.

In other cases, corrupt practices have aimed to block or shape policies and regulations or to influence their enforcement. This might include regulations concerning land and resource rights, taxes and other government levies, or environmental protection.

Across the value chain, a lack of transparency in procurement procedures in the oil and gas sector can also create a risk of corruption or fraud. Examples of this can include paying bribes to get regulations or quality requirements waived, receiving kickbacks for securing contracts at inflated prices, or profiting from inflated prices charged by an entity established as a front organization.

To combat corruption and prevent the negative impacts that stem from it, organizations in the oil and gas sector are expected by the marketplace, international norms, and stakeholders to demonstrate their adherence to integrity, governance, and responsible business practices.

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11 Politically exposed person is defined by the Financial Action Taskforce as “an individual who is or has been entrusted with a prominent public function” [364].
Box 7. Transparency about contracts and ownership structures

Publication of government contracts is a growing practice. It is endorsed by organizations such as the United Nations, the International Monetary Fund (IMF), the International Finance Corporation (IFC), the International Bar Association, and the Organisation for Economic Co-operation and Development (OECD).

Contracts governing the extraction of oil and gas resources are commonly devised by organizations in the sector and governments on behalf of citizens or local communities without public oversight. Fair terms for sharing risks and rewarding benefits, including those related to a just transition, are particularly relevant because of the long-term time horizons and widespread impacts of projects.

Contract transparency helps local communities hold governments and organizations accountable for their negotiated terms and obligations. It also reduces information asymmetries between governments and oil and gas organizations and helps level the playing field in negotiations.

Lack of transparency about ownership structures can make it difficult to determine who benefits from financial transactions in the oil and gas sector. Beneficial ownership transparency has been identified as a significant opportunity to deter conflicts of interest, corruption, and tax avoidance and evasion.

See references [362] and [366] in the Bibliography.

What to report

If the organization has determined anti-corruption to be a material topic, this sub-section lists the disclosures that have been identified as relevant for reporting on the topic by the oil and gas sector.

<table>
<thead>
<tr>
<th>GRI Standard</th>
<th>Disclosure</th>
<th>Additional sector recommendations</th>
<th>GRI Sector Standard ref. no</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management of the topic</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
| GRI 3: Material Topics 2021 | Disclosure 3-3 Management of material topics | - Describe how potential impacts of corruption or risks of corruption are managed, including in the organization’s supply chain.  
- Describe the whistleblowing and other mechanisms in place for individuals to raise concerns about corruption. | S11.20.1 |

Topic Standards disclosures

| GRI 205: Anti-corruption 2016 | Disclosure 205-1 Operations assessed for risks related to corruption | | S11.20.2 |
| | Disclosure 205-2 Communication and training about anti-corruption policies and procedures | | S11.20.3 |
| | Disclosure 205-3 Confirmed incidents of corruption and actions taken | | S11.20.4 |
### Additional sector disclosures

<table>
<thead>
<tr>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe the approach to contract transparency, including:</td>
<td>S11.20.5</td>
</tr>
<tr>
<td>- whether contracts and licenses are made publicly available and, if so, where they are published;</td>
<td></td>
</tr>
<tr>
<td>- if contracts or licenses are not publicly available, the reason for this and actions taken to make them public in the future.</td>
<td></td>
</tr>
<tr>
<td>List the organization’s beneficial owners and explain how the organization identifies the beneficial owners of business partners, including joint ventures and suppliers.</td>
<td>S11.20.6</td>
</tr>
</tbody>
</table>

#### References and resources

12. **GRI 205: Anti-corruption 2016** lists authoritative intergovernmental instruments and additional references relevant to reporting on this topic.

13. The additional authoritative instruments and references used in developing this topic, as well as resources that may be helpful for reporting on the topic by the oil and gas sector are listed in the **Bibliography**.

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12 This additional sector disclosure is based on Requirement 2.4. Contracts in the EITI Standard 2019. Definitions for contracts and licenses can be found in the EITI Standard 2019 [363].

13 This additional sector disclosure is based on Requirement 2.5. Beneficial ownership c., d., and f. in the EITI Standard 2019 [363].
S11.21 Payments to governments

Lack of transparency about payments to governments can contribute to inefficient management of public funds, illicit financial flows, and corruption. This topic covers impacts from an organization’s practices related to payments to governments and the organization’s approach to transparency of such payments.

Organizations in the oil and gas sector deal with a large number of complex financial transactions and make a variety of payments to governments. These include commodity trading revenues, exploration and production licensing fees, taxes and royalties, signature, discovery and production bonuses.

Transparency of payments to governments can help distinguish the economic importance of the oil and gas sector to countries, enable public debate, and inform government decision-making. It can also provide insights into the terms of contracts, increase government accountability and strengthen revenue collection and management. Insufficient transparency of these payments, on the other hand, can impede detection of misallocation of revenues and corruption.

Taxes, royalties, and other payments from organizations in the oil and gas sector are an important source of investment and revenue for local communities, countries, and regions (see Economic impacts). However, opportunistic tax practices or tax non-compliance can lead to diminished tax revenues in countries where the organizations operate. This can be particularly damaging for developing countries who may lack or have high needs of public revenue. The sector also receives substantial subsidies from governments in many countries, which are of great interest to stakeholders, such as investors or civil society.

When disclosing information on payments to governments, organizations in the oil and gas sector often report aggregate payments at an organizational level. However, this can provide limited insight into payments made in each country or related to a project. Reporting country-level and project-level payments enables comparison of the payments made to those stipulated in fiscal, legal, and contractual terms, as well as to assess the financial contribution of oil and gas activities to host countries and communities. It can also enable governments to address tax avoidance and evasion, correct information asymmetry and level the playing field for governments when negotiating contracts.

Box 8. State-owned enterprises

A state-owned enterprise (SOE) is, according to the Extractives Industries Transparency Initiative (EITI), ‘a wholly or majority government-owned company that is engaged in extractive activities on behalf of the government’ (see reference [384] in the Bibliography). SOEs often have special status, which can involve financial advantages and preferential treatment.

SOEs often sell shares of the produced resource to buyers, including commodity trading companies. This first trade[14] is an important revenue stream for countries and can involve a high volume of financial transactions. However, data on these transactions is often scarce or inaccessible. The first trade can be subject to trade mispricing in the form of under-invoicing of exports or over-invoicing of imports to obtain financial gain. Other risks may result from the selection of buyers and allocation of sales contracts (which can involve bribery and conflicts of interest) and moving income to a state treasury, potentially causing misallocation of revenues or generating public mistrust of revenue management (see also Anti-corruption).

Transparency in the operations and objectives of SOEs is crucial for monitoring their performance and maximizing their economic and social contributions.

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[14] First trade is defined by the Extractive Industries Transparency Initiative as “the sale of the state’s share of production by government and state-owned enterprises” [381].
## What to report

If the organization has determined payments to governments to be a **material topic**, this sub-section lists the disclosures that have been identified as relevant for reporting on the topic by the oil and gas sector.

<table>
<thead>
<tr>
<th>GRI Standard</th>
<th>Disclosure</th>
<th>Additional sector recommendations</th>
<th>GRI Sector Standard ref. no</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management of the topic</td>
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</tr>
<tr>
<td>GRI 3: Material Topics 2021</td>
<td>Disclosure 3-3 Management of material topics</td>
<td></td>
<td>S11.21.1</td>
</tr>
</tbody>
</table>

### Topic Standards disclosures

<table>
<thead>
<tr>
<th>GRI Standard</th>
<th>Disclosure</th>
<th>Additional sector recommendations</th>
<th>GRI Sector Standard ref. no</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Disclosure 201-4 Financial assistance received from government</td>
<td></td>
<td>S11.21.3</td>
</tr>
<tr>
<td>GRI 207: Tax 2019</td>
<td>Disclosure 207-1 Approach to tax</td>
<td></td>
<td>S11.21.4</td>
</tr>
<tr>
<td></td>
<td>Disclosure 207-2 Tax governance, control, and risk management</td>
<td></td>
<td>S11.21.5</td>
</tr>
<tr>
<td></td>
<td>Disclosure 207-3 Stakeholder engagement and management of concerns related to tax</td>
<td></td>
<td>S11.21.6</td>
</tr>
<tr>
<td></td>
<td>Disclosure 207-4 Country-by-country reporting</td>
<td>Report a breakdown of the payments to governments levied at the project-level, by project and the following revenue streams, if applicable:</td>
<td>S11.21.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o The host government’s production entitlement;</td>
<td></td>
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<td></td>
<td></td>
<td>o National state-owned company production entitlement;</td>
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<td></td>
<td></td>
<td>o Royalties;</td>
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<tr>
<td></td>
<td></td>
<td>o Dividends;</td>
<td></td>
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</tbody>
</table>

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15 This additional sector disclosure is based on Requirement 2.6 State participation in the EITI Standard 2019 [384].
### Additional sector disclosures

<table>
<thead>
<tr>
<th>For oil and gas purchased from the state, or from third parties appointed by the state to sell on their behalf, report:</th>
</tr>
</thead>
<tbody>
<tr>
<td>o volumes and types of oil and gas purchased;</td>
</tr>
<tr>
<td>o full names of the buying entity and of the recipient of the payment;</td>
</tr>
<tr>
<td>o payments made for the purchase.</td>
</tr>
</tbody>
</table>

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**References and resources**

- **GRI 201: Economic Performance 2016** and **GRI 207: Tax 2019** list authoritative intergovernmental instruments and additional references relevant to reporting on this topic.
- The additional authoritative instruments and references used in developing this topic, as well as resources that may be helpful for reporting on the topic by the oil and gas sector are listed in the **Bibliography**.

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16. This additional sector disclosure is based on Requirement 4.1 Comprehensive disclosure of taxes and revenues and Requirement 4.7. Level of disaggregation in the EITI Standard 2019. A definition for project can be found in the EITI Standard 2019 [384].

17. The EITI Standard 2019 specifies that in countries implementing the EITI, the multi-stakeholder group for the country agree which payments and revenues are material, including appropriate thresholds [384]. The organization can use the relevant threshold set by the EITI multi-stakeholder group. If there is no relevant threshold set, the organization can use a threshold equivalent to that established for the European Union, which specifies that ‘Payments, whether a single payment or a series of related payments, below EUR 100,000 within the reporting period can be excluded’ [377].

18. This additional sector disclosure is based on Requirement 4.2 Sale of the state’s share of production or other revenues collected in kind in the EITI Standard 2019 [384] and EITI Reporting Guidelines for companies buying oil, gas and minerals from governments [382].
S11.22 Public policy

An organization can participate in public policy development, directly or through an intermediary organization, by means of lobbying or making financial or in-kind contributions to political parties, politicians, or causes. While an organization can encourage the development of public policy that benefits society, participation can also be associated with corruption, bribery, undue influence or an imbalanced representation of the organization’s interests. This topic covers an organization’s approach to public policy advocacy, and the impacts that can result from the influence an organization exerts.

The oil and gas sector can exert significant influence on government policies and is among the sectors with the largest lobbying expenditure. Documented cases have shown that lobbying by the oil and gas sector can obstruct progress toward the Sustainable Development Goals, or lead to policy and regulation that are inconsistent with the transition to a low-carbon economy. In regions where oil and gas generate significant revenue for governments, organizations in the sector may get better access to, and representation in meetings with, government representatives, which may lead to increased influence over public policy decisions. Organizations in the sector have made donations to political parties whose policies favor corporate agendas or to gain special access to politicians.

Advocacy and lobbying by the oil and gas sector have contributed to hindering environmental policies; blocking or amending legislation on environmental and social assessments of projects or fair participation of all stakeholders; overturning restrictions on resource development; acquiring permits for pipelines; and lowering labor standards, corporate taxes, and resource royalties. These activities have also been used to gain or retain government subsidies, which can result in commodity prices that do not reflect the full environmental costs of oil and gas products.

The oil and gas sector has actively advocated against ambitious climate policies as well as for ensuring continued subsidies to the sector, through individual organizations in the sector and industry bodies. These activities have often been targeted against enforcing meaningful carbon pricing, carbon budgets, or other measures to reduce GHG emissions that could leave oil and gas assets and resources stranded. Sometimes, efforts have contradicted publicly stated corporate strategies and positions that support policies addressing climate change. Excessive subsidies for the sector can impede the transition to a low-carbon economy, and consequently hinder sustainable development, in numerous ways, including by reducing or inefficiently allocating available national resources, increasing dependence on fossil fuels, and discouraging investment in renewable energy and energy efficiency (see Climate adaptation, resilience, and transition).

What to report

If an organization in the oil and gas sector has identified public policy to be a material topic, this section helps it determine what to report on this topic.

<table>
<thead>
<tr>
<th>GRI Standard</th>
<th>Disclosure</th>
<th>Additional sector recommendations</th>
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<tbody>
<tr>
<td>Management of the topic</td>
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<tr>
<td>GRI 3: Material Topics 2021</td>
<td>Disclosure 3-3 Management of material topics</td>
<td>- Describe the organization’s stance on significant issues that are the focus of its participation in public policy development and lobbying; and any differences between these positions and its stated policies, goals, or other public positions. - Report whether the organization is a member of, or contributes to, any representative associations or committees that participate that</td>
<td>S11.22.1</td>
</tr>
</tbody>
</table>
| Topic Standards disclosures | participant in public policy development and lobbying, including:  
|                          | o the nature of this contribution;  
|                          | o any differences between the organization’s stated policies, goals, or other public positions on significant issues related to climate change, and the positions of the representative associations or committees.\(^\text{19}\) |

| GRI 415: Public Policy 2016 | Disclosure 415-1 Political contributions | S11.22.2 |

### References and resources

**GRI 415: Public Policy 2016** lists authoritative intergovernmental instruments and additional references relevant to reporting on this topic. The additional authoritative instruments and references used in developing this topic, as well as resources that may be helpful for reporting on the topic by the oil and gas sector are listed in the Bibliography.

\(^{19}\) These additional sector recommendations are based on reporting recommendations 1.2.1 and 1.2.2 in *GRI 415: Public Policy 2016.*
Glossary

This glossary provides definitions for terms used in this Standard. The organization is required to apply these definitions when using the GRI Standards.

The definitions included in this glossary may contain terms that are further defined in the complete GRI Standards Glossary. All defined terms are underlined. If a term is not defined in this glossary or in the complete GRI Standards Glossary, definitions that are commonly used and understood apply.

Note to GSSB: no new terms have been added as a result of the development GRI 11: Oil and Gas Sector 2021. The following terms from the GRI Standards Glossary are used in GR 11 and will be added at the time of publication.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-competitive behavior</td>
<td>Governance body</td>
</tr>
<tr>
<td>Area of high biodiversity value</td>
<td>Greenhouse gas (GHG)</td>
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<td>Baseline</td>
<td>Grievance</td>
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<td>Basic salary</td>
<td>Grievance mechanism</td>
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<tr>
<td>Benefit</td>
<td>Groundwater</td>
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<td>Business partner</td>
<td>Hazardous waste</td>
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<td>Business relationships</td>
<td>High-consequence work-related injury</td>
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<td>Child</td>
<td>Highest governance body</td>
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<td>Circularity measures</td>
<td>Human rights</td>
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<td>Collective bargaining</td>
<td>Impact</td>
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<td>Community development program</td>
<td>Indigenous peoples</td>
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<tr>
<td>Conflict of interest</td>
<td>Infrastructure</td>
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<tr>
<td>Corruption</td>
<td>Local community</td>
</tr>
<tr>
<td>Direct (Scope 1) GHG emissions</td>
<td>Local supplier</td>
</tr>
<tr>
<td>Discrimination</td>
<td>Material topic</td>
</tr>
<tr>
<td>Disposal</td>
<td>Occupational health and safety management system</td>
</tr>
<tr>
<td>Due diligence</td>
<td>Occupational health services</td>
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<td>Effluent</td>
<td>Other indirect (Scope 3) GHG emissions</td>
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<td>Employee turnover</td>
<td>Political contribution</td>
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<td>Energy indirect (Scope 2) GHG emissions</td>
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<td>Remuneration</td>
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<td>Renewable energy source</td>
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<td>Sustainable development</td>
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<td>Value chain</td>
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<td>Vulnerable group</td>
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<td>Services supported</td>
<td>Waste</td>
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<td>Severity (of impact)</td>
<td>Water consumption</td>
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<td>Significant air emission</td>
<td>Water discharge</td>
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<td>Significant operational change</td>
<td>Water stress</td>
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<td>Significant spill</td>
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<td>Spill</td>
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</tbody>
</table>
Bibliography

This section lists authoritative intergovernmental instruments and additional references used in developing this Standard, as well as resources that can be consulted by the organization.

Introduction

5. Sustainable Accounting Standards Boards (SASB), Sustainable Industry Classification System® (SICS®), sasb.org/find-your-industry/, accessed on 27 May 2021.

Sector profile

Authoritative instruments:


Additional references:

19. World Economic Forum (WEF), Which economies are most reliant on oil?, weforum.org/agenda/2016/05/which-economies-are-most-reliant-on-oil/, accessed 03 May 2021.

Resources:

20. GRI, Linking the SDGs and the GRI Standards, updated regularly.
S11.1 GHG emissions

Authoritative instruments:


Additional references:


37. International Petroleum Industry Environmental Conservation Association (IPIECA), American Petroleum Institute (API), and International Association of Oil & Gas Producers (IOGP), *Oil and gas industry guidance on voluntary sustainability reporting*, 3rd ed., 2015.


41. United Nations Environment Programme (UNEP) and Climate and Clean Air Coalition (CCAC) *Oil and Gas Methane Partnership (OGMP) 2.0 Framework*, 2020.


S11.2 Climate, adaptation, resilience, and transition

Authoritative instruments:

57. Intergovernmental Panel on Climate Change (IPCC), Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty, 2018.

Additional references:

67. Intergovernmental Panel on Climate Change (IPCC), Special Report on Carbon Dioxide Capture and Storage, 2005.
68. International Petroleum Industry Environmental Conservation Association (IPIECA), Addressing adaptation in the oil and gas industry, 2013.

70. L. Fletcher, T. Crocker, et al., *Beyond the cycle: Which oil and gas companies are ready for the low-carbon transition? Executive summary*, 2018.


76. Stockholm Environment Institute (SEI), International Institute for Sustainable Development (IISD), Overseas Development Institute (ODI), Climate Analytics, CICERO, and United Nations Environment Programme (UNEP), *The Production Gap: The discrepancy between countries’ planned fossil fuel production and global production levels consistent with limiting warming to 1.5°C or 2°C*, 2019.


Resources:


### S11.3 Air emissions

Additional references:


90. World Health Organization (WHO), *Air pollution*, [who.int/health-topics/air-pollution#tab=tab_1](who.int/health-topics/air-pollution#tab=tab_1), accessed on 31 May 2020.

**Resources:**

**S11.4 Biodiversity**

**Authoritative instruments:**
99. Intergovernmental Panel on Climate Change (IPCC), *Climate Change and Biodiversity*, 2002.

**Additional references:**
Resources:
118. International Petroleum Industry Environmental Conservation Association (IPIECA), International Association of Oil & Gas Producers (IOGP), Biodiversity and ecosystem services fundamentals, 2016.

S11.5 Waste

Additional references:
127. International Association of Oil & Gas Producers (IOGP), Guidelines for waste management with special focus on areas with limited infrastructure, 2008.

Resources:
143. International Association of Oil & Gas Producers (IOGP), *Drilling waste management technology review*, 2016.
144. International Association of Oil & Gas Producers (IOGP), *Guidelines for waste management with special focus on areas with limited infrastructure*, 2008.

### S11.6 Water and effluents

Additional references:

Resources:

### S11.7 Closure and rehabilitation

Authoritative instruments:
Additional references:

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<td>1893</td>
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<td>1895</td>
<td>164. Environmental Protection Authority (EPA Western Australia), <em>Environmental Factor Guideline: Benthic Communities and Habitats</em>, 2016.</td>
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<td>1903</td>
<td>Resources:</td>
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<td>S11.8 Asset integrity and critical incident management</td>
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<tr>
<td>1907</td>
<td>Additional references:</td>
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<tr>
<td>1911</td>
<td>177. Australian National University (ANU) and Investor Group on Climate Change (IGCC), <em>Assessing Climate Change Risks and Opportunities, Oil and Gas Sector</em>, 2013.</td>
</tr>
</tbody>
</table>
S11.9 Occupational health and safety

Additional references:


207. International Petroleum Industry Environmental Conservation Association (IPIECA) and International Association of Oil & Gas Producers (IOGP), Managing psychosocial risks on expatriation in the oil and gas industry, 2013.

208. Occupational Safety and Health Administration (OSHA), Health and Safety Risks for Workers Involved in Manual Tank Gauging and Sampling at Oil and Gas Extraction Sites, 2016.
S11.10 Employment practices

Authoritative instruments:


Additional references:


220. C. Hidalgo, K. Peterson, et al., Extracting with Purpose: Creating Shared Value in the Oil and Gas and Mining Sectors’ Companies and Communities, 2015.


227. International Labour Organization (ILO), Social dialogue and industrial relations issues in the oil industry: Report for discussion at the Tripartite Meeting on Promoting Social Dialogue and Good Industrial Relations from Oil and Gas Exploration and Production to Oil and Gas Distribution, 2009.


2057

S11.11 Non-discrimination and equal opportunity

2059 Additional references:

2065 236. Institute for Human Rights and Business (IHRB) and Shift, Oil and Gas Sector Guide on Implementing the UN Guiding Principles on Business and Human Rights, 2017.
2066 237. International Labour Organization (ILO), Current and future skills, human resources development and safety training for contractors in the oil and gas industry, 2012.
2067 238. International Labour Organization (ILO), Social dialogue and industrial relations issues in the oil industry, 2009.

S11.12 Forced labor and modern slavery

2091 Authoritative instruments:


2093 Additional references:

2097 246. GRI, Responsible Labor Initiative, Advancing modern slavery reporting to meet stakeholder expectations, 2019.


2113 Resources:

2114 252. GRI, Responsible Labor Initiative, Advancing modern slavery reporting to meet stakeholder expectations, 2019.

2116 S11.13 Freedom of association and collective bargaining

2117 Authoritative instruments:


2120 Additional references:


2135 S11.14 Economic impacts

2136 Authoritative instruments:


2139 Additional references:


2158 Resources:
S11.15 Local communities

Authoritative instruments:

Additional references:
274. Institute for Human Rights and Business (IHRB) and Shift, Oil and Gas Sector Guide on Implementing the UN Guiding Principles on Business and Human Rights, 2017.

Resources:
283. Institute for Human Rights and Business (IHRB) and Shift, Oil and Gas Sector Guide on Implementing the UN Guiding Principles on Business and Human Rights, 2017.
286. International Petroleum Industry Environmental Conservation Association (IPIECA), American Petroleum Institute (API), and International Association of Oil & Gas Producers (IOGP), Sustainability reporting guidelines for the oil and gas industry, 2020.

S11.16 Land and resource rights

Authoritative instruments:
Additional references:


238. International Petroleum Industry Environmental Conservation Association (IPIECA) and International Association of Oil & Gas Producers (IOGP), Key questions in managing social issues in oil & gas projects, 2002.

239. Pensamiento y Acción Social (PAS) and L. Turrriago, 'Caso El Hatillo: El re-asentamiento como la legalización del despojo y el acaparamiento de las tierras por el modelo extractivista', pas.org.co/hatillo-despojo-extractivista, accessed on 1 June 2020.


Resources:


S11.17 Rights of indigenous peoples

Authoritative instruments:


Additional references:


Resources:


S11.18 Conflict and security

Authoritative instruments:


Additional references:
344. International Association of Oil & Gas Producers (IOGP), Conducting security risk assessments (SRA) in dynamic threat environments, 2016.

Resources:

S11.19 Anti-competitive behavior

Additional references:
S11.20 Anti-corruption

Authoritative instruments:

Additional references:
- 361. Ernst & Young (EY), Managing bribery and corruption risks in the oil and gas industry, 2014.
- 367. M. Martini and Transparency International, Local content policies and corruption in the oil and gas industry, 2014.

Resources:

S11.21 Payments to governments

Authoritative instruments:

Additional references:
S11.22 Public policy

Additional references:
- 402. J. Levin, We stopped the oil and gas industry from gutting Canada’s environmental laws!, environmentaldefence.ca/2019/06/27/we-stopped-the-oil-gas-industry-from-gutting-canadas-environmental-laws/, accessed on 2 June 2021.