EXTRACTIVES & MINERALS PROCESSING SECTOR

# OIL & GAS – SERVICES

## Sustainability Accounting Standard

Sustainable Industry Classification System® (SICS®) EM-SV

Prepared by the
Sustainability Accounting Standards Board

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# OIL & GAS – SERVICES

## Sustainability Accounting Standard

### About SASB

The SASB Foundation was founded in 2011 as a not-for-profit, independent standards-setting organization. The SASB Foundation's mission is to establish and maintain industry-specific standards that assist companies in disclosing financially material, decision-useful sustainability information to investors.

The SASB Foundation operates in a governance structure similar to the structure adopted by other internationally recognized bodies that set standards for disclosure to investors, including the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB). This structure includes a board of directors ("the Foundation Board") and a standards-setting board ("the Standards Board" or "the SASB"). The Standards Board develops, issues, and maintains the SASB standards. The Foundation Board oversees the strategy, finances and operations of the entire organization, and appoints the members of the Standards Board.

The Foundation Board is not involved in setting standards, but is responsible for overseeing the Standards Board's compliance with the organization's due process requirements. As set out in the SASB *Rules of Procedure,* the SASB's standards-setting activities are transparent and follow careful due process, including extensive consultation with companies, investors, and relevant experts.

The SASB Foundation is funded by a range of sources, including contributions from philanthropies, companies, and individuals, as well as through the sale and licensing of publications, educational materials, and other products. The SASB Foundation receives no government financing and is not affiliated with any governmental body, the FASB, the IASB, or any other financial accounting standards-setting body.

**SUSTAINABILITY ACCOUNTING STANDARDS BOARD**

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## INTRODUCTION

# Purpose of SASB Standards

The SASB's use of the term "sustainability" refers to corporate activities that maintain or enhance the ability of the company to create value over the long term. Sustainability accounting reflects the governance and management of a company's environmental and social impacts arising from production of goods and services, as well as its governance and management of the environmental and social capitals necessary to create long-term value. The SASB also refers to sustainability as "ESG" (environmental, social, and governance), though traditional corporate governance issues such as board composition are not included within the scope of the SASB's standards-setting activities.

SASB standards are designed to identify a minimum set of sustainability issues most likely to impact the operating performance or financial condition of the typical company in an industry, regardless of location. SASB standards are designed to enable communications on corporate performance on industry-level sustainability issues in a cost-effective and decision-useful manner using existing disclosure and reporting mechanisms.

Businesses can use the SASB standards to better identify, manage, and communicate to investors sustainability information that is financially material. Use of the standards can benefit businesses by improving transparency, risk management, and performance. SASB standards can help investors by encouraging reporting that is comparable, consistent, and financially material, thereby enabling investors to make better investment and voting decisions.

# Overview of SASB Standards

The SASB has developed a set of 77 industry-specific sustainability accounting standards ("SASB standards" or "industry standards"), categorized pursuant to SASB's Sustainable Industry Classification System® (SICS®). Each SASB standard describes the industry that is the subject of the standard, including any assumptions about the predominant business model and industry segments that are included. SASB standards include:

1. **Disclosure topics** – A minimum set of industry-specific disclosure topics reasonably likely to constitute material information, and a brief description of how management or mismanagement of each topic may affect value creation.

2. **Accounting metrics** – A set of quantitative and/or qualitative accounting metrics intended to measure performance on each topic.

3. **Technical protocols** – Each accounting metric is accompanied by a technical protocol that provides guidance on definitions, scope, implementation, compilation, and presentation, all of which are intended to constitute suitable criteria for third-party assurance.

4. **Activity metrics** – A set of metrics that quantify the scale of a company's business and are intended for use in conjunction with accounting metrics to normalize data and facilitate comparison.

Furthermore, the *SASB Standards Application Guidance* establishes guidance applicable to the use of all industry standards and is considered part of the standards. Unless otherwise specified in the technical protocols contained in the industry standards, the guidance in the SASB Standards Application Guidance applies to the definitions, scope, implementation, compilation, and presentation of the metrics in the industry standards.

The *SASB Conceptual Framework* sets out the basic concepts, principles, definitions, and objectives that guide the Standards Board in its approach to setting standards for sustainability accounting. The *SASB Rules of Procedure* is focused on the governance processes and practices for standards setting.

# Use of the Standards

SASB standards are intended for use in communications to investors regarding sustainability issues that are likely to impact corporate ability to create value over the long term. Use of SASB standards is voluntary. A company determines which standard(s) is relevant to the company, which disclosure topics are financially material to its business, and which associated metrics to report, taking relevant legal requirements into account[1]. In general, a company would use the SASB standard specific to its primary industry as identified in SICS®. However, companies with substantial business in multiple SICS® industries can consider reporting on these additional SASB industry standards.

It is up to a company to determine the means by which it reports SASB information to investors. One benefit of using SASB standards may be achieving regulatory compliance in some markets. Other investor communications using SASB information could be sustainability reports, integrated reports, websites, or annual reports to shareholders. There is no guarantee that SASB standards address all financially material sustainability risks or opportunities unique to a company's business model.

# Industry Description

Oil and gas services companies provide support services, manufacture equipment, or are contract drillers for oil and natural gas exploration and production (E&P) companies. The drilling and drilling-support segment comprises companies that drill for oil and natural gas on-shore and off-shore on a contract basis. Companies in this segment may also manufacture jack-up rigs, semisubmersible rigs, and drill ships. Companies in the oilfield services segment manufacture equipment that is used in the extraction, storage, and transportation of oil and natural gas. They also provide support services such as seismic surveying, equipment rental, well cementing, and well monitoring. These services are commonly provided on a contractual basis, and the customer will purchase or lease the materials and equipment from the service provider. Service companies may also provide personnel or subject matter expertise as part of their scope of service. The contractual relationship between oil and gas services companies and their customers plays a significant role in determining the material impacts of their sustainability performance. Besides the rates charged, companies compete on the basis of their operational and safety performance, technology and process offerings, and reputation.

[1] **Legal Note**: SASB standards are not intended to, and indeed cannot, replace any legal or regulatory requirements that may be applicable to a reporting entity's operations.

## SUSTAINABILITY DISCLOSURE TOPICS & ACCOUNTING METRICS

***Table 1. Sustainability Disclosure Topics & Accounting Metrics***

| TOPIC | ACCOUNTING METRIC | CATEGORY | UNIT OF MEASURE | CODE |
|---|---|---|---|---|
| Emissions Reduction Services & Fuels Management | Total fuel consumed, percentage renewable, percentage used in: (1) on-road equipment and vehicles and (2) off-road equipment | Quantitative | Gigajoules (GJ), Percentage (%) | EM-SV-110a.1 |
| | Discussion of strategy or plans to address air emissions-related risks, opportunities, and impacts | Discussion and Analysis | n/a | EM-SV-110a.2 |
| | Percentage of engines in service that meet Tier 4 compliance for non-road diesel engine emissions | Quantitative | Percentage (%) | EM-SV-110a.3 |
| Water Management Services | (1) Total volume of fresh water handled in operations, (2) percentage recycled | Quantitative | Thousand cubic meters ($m^3$), Percentage (%) | EM-SV-140a.1 |
| | Discussion of strategy or plans to address water consumption and disposal-related risks, opportunities, and impacts | Discussion and Analysis | n/a | EM-SV-140a.2 |
| Chemicals Management | Volume of hydraulic fracturing fluid used, percentage hazardous | Quantitative | Thousand cubic meters ($m^3$), Percentage (%) | EM-SV-150a.1 |
| | Discussion of strategy or plans to address chemical-related risks, opportunities, and impacts | Discussion and Analysis | n/a | EM-SV-150a.2 |
| Ecological Impact Management | Average disturbed acreage per (1) oil and (2) gas well site | Quantitative | Acres (ac) | EM-SV-160a.1 |
| | Discussion of strategy or plan to address risks and opportunities related to ecological impacts from core activities | Discussion and Analysis | n/a | EM-SV-160a.2 |
| Workforce Health & Safety | (1) Total recordable incident rate (TRIR), (2) fatality rate, (3) near miss frequency rate (NMFR), (4) total vehicle incident rate (TVIR), and (5) average hours of health, safety, and emergency response training for (a) full-time employees, (b) contract employees, and (c) short-service employees | Quantitative | Rate | EM-SV-320a.1 |
| | Description of management systems used to integrate a culture of safety throughout the value chain and project lifecycle | Discussion and Analysis | n/a | EM-SV-320a.2 |
| Business Ethics & Payments Transparency | Amount of net revenue in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index | Quantitative | Reporting currency | EM-SV-510a.1 |

| TOPIC | ACCOUNTING METRIC | CATEGORY | UNIT OF MEASURE | CODE |
|---|---|---|---|---|
| | Description of the management system for prevention of corruption and bribery throughout the value chain | Discussion and Analysis | n/a | EM-SV-510a.2 |
| Management of the Legal & Regulatory Environment | Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry | Discussion and Analysis | n/a | EM-SV-530a.1 |
| Critical Incident Risk Management | Description of management systems used to identify and mitigate catastrophic and tail-end risks | Discussion and Analysis | n/a | EM-SV-540a.1 |

***Table 2. Activity Metrics***

| ACTIVITY METRIC | CATEGORY | UNIT OF MEASURE | CODE |
|---|---|---|---|
| Number of active rig sites[2] | Quantitative | Number | EM-SV-000.A |
| Number of active well sites[3] | Quantitative | Number | EM-SV-000.B |
| Total amount of drilling performed | Quantitative | Meters (m) | EM-SV-000.C |
| Total number of hours worked by all employees | Quantitative | Hours | EM-SV-000.D |

[2] Note to **EM-SV-000.A** – Rigs that are on location and involved in drilling, completions, cementing, fracturing, decommissioning etc., are considered active. Rigs that are in transit from one location to another, or are otherwise idled, are inactive.

[3] Note to **EM-SV-000.B** – The number of well sites for which the entity has provided or is providing (on an ongoing basis) drilling, completion, fracturing, and/or decommissioning services.

# Emissions Reduction Services & Fuels Management

## Topic Summary

While direct greenhouse gas (GHG) emissions and associated regulatory risks are relatively low for oil and gas services providers relative to other industries, emissions from the operations of their customers—the oil and gas exploration and production (E&P) companies—can be significant. Emissions include GHGs that can contribute to climate change as well as other air pollutants that can have significant localized human health and environmental impacts. Increasing regulation and high costs of fuels associated with these emissions present substantial risk to E&P companies. This is driving companies to seek ways to lower their emissions, including converting pumps and engines to run on natural gas instead of diesel fuel. Oil and gas services companies compete for contracts with E&P companies partly on the basis of providing cutting-edge, efficient technologies that can help customers reduce costs and improve process efficiencies. Services companies can gain a competitive advantage and protect their revenues and market share by providing customers with services and equipment that reduce the emissions and fuel consumption of E&P activities, and by capturing saleable gas that may otherwise be flared or escape through leaks.

## Accounting Metrics

### EM-SV-110a.1. Total fuel consumed, percentage renewable, percentage used in: (1) on-road equipment and vehicles and (2) off-road equipment

1 The entity shall disclose total fuel consumed from all sources as an aggregate figure, in gigajoules (GJ).

1.1 The calculation methodology for fuel consumed shall be based on actual fuel consumed as opposed to design parameters.

1.2 Acceptable calculation methodologies for fuel consumed include, but are not limited to, methodologies based on:

1.2.1 Adding fuel purchases made during the reporting period to beginning inventory at the start of the reporting period, less any fuel inventory at the end of the reporting period

1.2.2 Tracking fuel consumed by vehicles

1.2.3 Tracking fuel expenses

2 The entity shall disclose the percentage of the total amount of fuel consumed from all sources that is renewable.

2.1 Renewable fuel is defined by the U.S. Renewable Fuel Standard (U.S. 40 CFR 80.1401), as fuel that meets all of the following requirements:

2.1.1 Produced from renewable biomass;

2.1.2 Used to replace or reduce the quantity of fossil fuel present in a transportation fuel, heating oil, or jet fuel; and

2.1.3 Has lifecycle greenhouse gas (GHG) emissions that are at least 20 percent less than baseline lifecycle GHG emissions, unless the fuel is exempt from this requirement pursuant to U.S. 40 CFR 80.1403.

2.2 The scope of renewable fuel includes fuel that qualifies for Renewable Identification Numbers (RINs) under the U.S. Renewable Fuel Standard.

2.3 The percentage shall be calculated as the amount of renewable fuel consumed by the entity's fleet vehicles (in GJ) divided by the total amount of fuel consumed by the entity's fleet vehicles (in GJ).

3 The entity shall disclose the percentage of total fuel consumed by (1) on-road, mobile equipment and vehicles and (2) off-road equipment, including stationary rigs, generators, and mounted equipment.

4 The scope of disclosure includes only fuel consumed by entities owned or controlled by the organization.

4.1 The scope excludes non-fuel energy sources such as purchased electricity and purchased steam.

4.2 The scope of disclosure includes combustion sources owned and/or operated by the entity, regardless of which entity bears the cost of fuel and/or considers greenhouse gas (GHG) emissions from these sources to be part of its Scope 1 inventory.

5 In calculating energy consumption from fuels and biofuels, the entity shall use higher heating values (HHV), also known as gross calorific values (GCV), which are directly measured or taken from the Intergovernmental Panel on Climate Change, the U.S. Department of Energy, or the U.S. Energy Information Agency.

6 The entity shall apply conversion factors consistently for all data reported under this disclosure, such as the use of HHVs for fuel usage (including biofuels).

## EM-SV-110a.2. Discussion of strategy or plans to address air emissions-related risks, opportunities, and impacts

1 The entity shall discuss its strategies or plans to address air-emissions related risks, opportunities, and impacts.

1.1 The scope of disclosure includes the entity's strategies, plans, and/or emissions reduction activities, such as whether they pertain differently to different business units, geographies, or emissions sources.

1.2 The scope of disclosure includes activities and investments required to achieve the plans and any risks or limiting factors that might affect achievement of the plans and/or targets.

1.3 The scope of disclosure includes the discussion of the demand for specific products, services, and technologies that reduce well and field operator's fuel consumption, emissions, and/or create other efficiencies, and its ability to meet this demand.

2 The entity shall discuss its short-term and long- term plans related to air quality management, where:

2.1 Short-term strategies may include fuel substitution (e.g., drop-in biodiesel), use of dual fuel equipment, or engine maintenance.

2.2 Long-term strategies may include alternative fuel equipment, process, or equipment redesigns and innovations, carbon capture, and storage.

3 The scope of disclosure shall include, but is not limited to emissions from the following specific sources:

3.1 Combustion emissions (e.g., fuel use in gas compression, power generation).

3.2 Flaring of hydrocarbons (e.g., in depressurizing, start-up/shut-down, well testing and well work-over).

3.3 Process emissions (e.g., vessel loading, tank storage, and flushing).

3.4 Venting of hydrocarbons, defined as the intentional (or designed), controlled release of gas to the atmosphere during normal operations.

3.5 Fugitive emissions of greenhouse gases (including equipment leaks).

3.6 Other non-routine events (e.g., gas releases or equipment maintenance).

4 The entity shall discuss risks and opportunities it may face relating to its ability to offer its customers services, technologies, or solutions that enhance energy efficiency and reduce air emissions, including of greenhouse gases.

## EM-SV-110a.3. Percentage of engines in service that meet Tier 4 compliance for non-road diesel engine emissions

1 The entity shall disclose the percentage of its non-road diesel engines that are in compliance with the U.S. Environmental Protection Agency's (EPA) Tier 4 emissions standards for non-road diesel engines.

1.1 The scope of disclosure shall include new and in-use non-road diesel engines, including, but not limited to, those used in equipment, pumps, compressors, and generators.

2 The entity shall calculate the percentage as the new and in-use number of non-road diesel engines that are in full compliance with the Tier 4 emissions standards during the reporting period, divided by the total number of non-road diesel engines active during the reporting period, where:

2.1 An engine is considered in compliance with the Tier 4 emission standards if (1) it belongs to an engine family which has test results showing official emission results and deteriorated emission levels at or below these standards, and (2) the engine family has received a certificate of conformity from the EPA for that model year.

2.2 Engine families are defined as engine product lines that are expected to have similar emissions characteristics, as defined by U.S. CFR§1039.230.

3 Engines that are exempt from the EPA rules, such as certain marine engines, shall be exempt for the purposes of this disclosure.

4 The scope of disclosure includes both U.S. and non-U.S. operations, regardless of whether they are under EPA jurisdiction.

5 The scope of disclosure includes non-road diesel engines manufactured, owned, and/or operated by the entity, regardless of which entity bears the EPA compliance obligation.

# Water Management Services

## Topic Summary

Oil and gas development often requires large quantities of water, exposing producers to the risk of reduced water availability, regulations limiting usage, or related cost increases, particularly in water-stressed regions. Producers also face risks and costs associated with wastewater disposal. As such, companies that provide these oil and gas producers with services have developed technologies and processes such as closed-loop water recycling systems to reduce customers' water consumption and disposal costs. These offerings provide service companies the potential to gain market share and increase revenues, as management of drilling and wastewater can be a significant competitive factor for their customers.

## Accounting Metrics

### EM-SV-140a.1. (1) Total volume of fresh water handled in operations, (2) percentage recycled

1 The entity shall disclose the volume of fresh water, in thousands of cubic meters, handled in operations.

1.1 Handled water includes that which is transferred to the entity from a third party for the purpose of providing the entity's contractual scope of service as well as that which is directly obtained and used by the entity in its operations.

1.2 Fresh water may be defined according to the local statutes and regulations where the entity operates. Where there is no regulatory definition, fresh water shall be considered to be water that has less than 1000 parts per million of dissolved solids per the U.S. Geological Survey.

1.3 Water obtained from a water utility in compliance with U.S. National Primary Drinking Water Regulations can be assumed to meet the definition of fresh water.

2 The entity shall disclose the percentage of water recycled as the volume recycled divided by the volume of fresh water handled.

3 Recycled water shall include the amount recycled in closed-loop and open-loop systems as well as recycled produced water or flowback.

3.1 Any volume of water reused multiple times shall be counted as recycled each time it is recycled and reused.

4 Produced water is defined according to the U.S. Environmental Protection Agency (EPA) according to U.S. 40 CFR 435.41 as water (brine) brought up from the hydrocarbon bearing formation strata during the extraction of oil and gas and can include formation water, injection water, and any chemicals added downhole or during the oil/water separation process.

5 Flowback is defined according to U.S. 40 CFR 60.5430a as the process of allowing fluids (including water) and entrained solids to flow from a well following a treatment, either in preparation for a subsequent phase of treatment or in preparation for cleanup and returning the well to production.

5.1 The term flowback also means the fluids and entrained solids that emerge from a well during the flowback process. The flowback period begins when material introduced into the well during the treatment returns to the surface following hydraulic fracturing or refracturing.

5.2 The flowback period ends when either the well is shut in and permanently disconnected from the flowback equipment or at the startup of production.

5.3 The flowback period includes the initial flowback stage and the separation flowback stage.

6 The scope is limited to operations for which the entity provides hydraulic fracturing, completion, drilling, and/or water management services [e.g., injection of produced water or flowback into a Class II injection well under the EPA's Underground Injection Control (UIC) program or equivalent, water treatment for reuse in drilling or hydraulic fracturing, reduction of unwanted water in subsurface areas].

6.1 The scope includes, but is not limited to, water that is used in hydraulic fracturing fluids, drilling fluids, dust control, and drilling cement production.

## EM-SV-140a.2. Discussion of strategy or plans to address water consumption and disposal-related risks, opportunities, and impacts

1 The entity shall discuss its strategy or plans to address water consumption and disposal-related risks, opportunities, and impacts.

1.1 The scope of disclosure shall include the entity's strategies, plans, and/or reduction activities, including whether they pertain differently to different business units, geographies, or water sources.

1.2 The scope of disclosure includes the activities and investments by the entity that are required to achieve the plans and any risks or limiting factors that might affect achievement of the plans and/or targets.

2 The entity shall discuss demand for specific products, services, and technologies that offer well and field operators reduced water consumption, water recycling, and/or other water impact reductions, and its ability to meet this demand.

3 The entity shall discuss its short-term and long-term plans related to water management, where:

3.1 Short-term strategies may include adopting best practices in water recycling or water efficiency initiatives.

3.2 Long-term strategies may include process redesigns or technological innovations that lower withdrawal of fresh water in constrained regions, reduce excess water production from wells, provide new water treatment or recycling systems.

4 The scope of impact reductions may relate to the following specific areas of water consumption or disposal:

4.1 Hydraulic fracturing fluids

4.2 Drilling fluids

4.3 Dust control

4.4 Cement production

4.5 Produced water or flowback

5 The entity shall discuss risks and opportunities it may face relating to: being able to offer its customers services, technologies, or solutions that enhance water use efficiency, treatment and reuse, and reduce water consumption or wastewater production.

# Chemicals Management

## Topic Summary

Oil and Gas - Services companies produce oilfield chemicals as well as drilling and hydraulic fracturing fluids based on demand from Exploration & Production (E&P) companies. While the risk of leaks from a properly drilled and completed well is low, contamination of local water resources can result from contact with hydraulic fracturing fluids and produced water, and may arise from issues related to well integrity. Concerns about certain chemicals used in hydraulic fracturing fluids have led to fracturing bans, regulation, and legislative proposals to mandate disclosure of chemicals used in some regions, both in the U.S. and abroad. The exact chemical composition of hydraulic fracturing fluids is often proprietary information, and companies compete to create the most effective formulas. In the U.S., some companies are voluntarily disclosing information about the hydraulic fracturing chemicals they use through an industry registry, FracFocus. Due to public and regulatory attention to the potential hazards of drilling fluids, companies that are able to manage issues related to well development and integrity, the production and use of produce effective non-hazardous fracking fluids, and the reduction of the volumes of drilling fluids used per well, may increase their market share and revenues and lower the risk that regulations affect demand for their products.

## Accounting Metrics

### EM-SV-150a.1. Volume of hydraulic fracturing fluid used, percentage hazardous

1 The entity shall disclose the total volume of hydraulic fracturing fluid, in $m^3$, including water and chemical additives used to open and enlarge fractures within the rock formation.

2 The entity shall calculate the percentage of hydraulic fracturing fluid used that is hazardous as the volume of hazardous hydraulic fracturing fluid used divided by the total volume of hydraulic fracturing fluid used.

2.1 Hydraulic fracturing fluid shall be considered as hazardous if it is subject to classification as hazardous per the Globally Harmonized System of Classification and Labelling of Chemicals for Health and/or Environmental Hazards (GHS).

2.2 The entity shall refer to the GHS Parts 1-4 and Annexes 1-10 for the classification of hydraulic fluids as hazardous or non-hazardous.

3 The scope of disclosure includes wells for which the entity supplies hydraulic fracturing fluids and proppant, regardless of whether it conducts the hydraulic fracturing.

4 The entity may discuss how the amount of hydraulic fracturing fluid and use of hazardous fluids may be influenced by the fracturing techniques implemented as well as the identification of factors related to the hydraulic fracturing operation which may be outside of the entity's control.

## EM-SV-150a.2. Discussion of strategy or plans to address chemical-related risks, opportunities, and impacts

1 The entity shall discuss its strategy or plans to address chemical-related risks, opportunities, and impacts.

1.1 The scope of disclosure includes the entity's strategies, activities, and/or management plans, including whether they pertain differently to different business units, geographies, or types of service.

1.2 The scope of disclosure includes, but is not limited to, the entity's use of chemicals in drilling activities, well completion, well stimulation, flow assurance, and production and processing activities.

1.3 The scope of disclosure includes the demand from well operators for the entity's specific products, services, and technologies that are related to the amount, type, legal status and/or hazard profile of chemicals used or sold by the entity, and its ability to meet this demand.

2 The entity shall discuss its short-term and long-term plans related to chemicals management, where:

2.1 Short-term strategies may include, but are not limited to, adopting best practices in chemicals re-use, recycling, or efficiency initiatives, ensuring compliance with local chemicals regulation, providing public disclosure of chemicals used, and participating in initiatives such as Responsible Care and the Global Product Strategy (GPS).

2.2 Long-term strategies may include, but are not limited to, process redesigns or technological innovations that reduce or eliminate the needs for certain chemicals, replacement of certain chemicals with benign alternatives, or implementation of green chemistry principles in the development of new products and services.

3 The entity shall discuss the activities and investments required to achieve the plans and any risks or limiting factors that might affect achievement of the plans and/or targets.

# Ecological Impact Management

## Topic Summary

Oil and gas exploration and development activities, and associated services and support activities, can have significant impacts on biodiversity and ecosystems, particularly when companies operate in ecologically sensitive areas or are characterized by highly resource-intensive operations. These can occur through disposal of drilling and associated wastes, well decommissioning, land use, and fuel spills. Producers face regulatory risks from legislation and permitting to protect ecosystems in the U.S. and abroad, and from regulations specifically related to well decommissioning or underground waste injection. Oil and gas services companies that are able to offer cost-effective and efficient production and decommissioning technologies that mitigate impacts on biodiversity by reducing land use, drilling wastes, and spills can lower associated risks for their customers and gain a competitive advantage.

## Accounting Metrics

### EM-SV-160a.1. Average disturbed acreage per (1) oil and (2) gas well site

1 The entity shall disclose the acreage of disturbed land per well site, broken down by (1) oil well sites and (2) gas well sites.

1.1 The disturbed acreage shall include that which is associated with the scope of service provided by the entity.

1.2 If multiple companies are present at a given well site, the share of disturbed acreage assigned to the entity shall be that which is associated with the citing of equipment or facilities owned by or leased directly to the entity as well as associated access roads, impoundments, or other supporting infrastructure provided by and directly associated with the scope of service provided by the entity.

2 The scope includes land in the exploration, development, production, or decommissioning project phases, but is limited to those sites where the entity is providing drilling, completion, fracturing, and/or decommissioning services.

2.1 This disclosure shall be a cumulative total of all currently active sites, recently decommissioned sites, or sites being restored; it is not limited to land newly disturbed during the reporting period.

2.2 Land shall no longer be considered disturbed once:

2.2.1 The entity's scope of service has been completed and all personnel and equipment owned by or leased to the entity have been removed from the site

2.2.2 Any post-closure restoration and remediation efforts required by the service contract are substantially complete (even if monitoring is ongoing)

3 Disturbed acreage may result from facilities that include, but are not limited to: well pads, drilling and production facilities, pipelines, access roads, equipment storage, reserve pits, tailings, produced water impoundments, waste management facilities, and aggregate pits.

## EM-SV-160a.2. Discussion of strategy or plan to address risks and opportunities related to ecological impacts from core activities

1 The entity shall discuss its strategies or plans to address risks and opportunities related to ecological impacts from core activities.

1.1 The scope of disclosure includes the entity's strategies, plans, and/or reduction activities, including whether they pertain differently to different business units, geographies, or impact sources.

1.2 The scope of disclosure includes the activities and investments required by the entity to achieve the plans and any risks or limiting factors that might affect achievement of the plans and/or targets.

2 The scope of core activities and associated impact reductions may relate to the following specific areas of service provision:

2.1 Drilling or completion

2.2 Hydraulic fracturing

2.3 Water management

2.4 Decommissioning

2.5 Chemicals management

3 The entity shall discuss its short-term and long-term plans related to management of ecological impacts, where:

3.1 Short-term strategies may include but are not limited to efficient use of materials or equipment, use of multi-well pads, and increased production efficiencies that reduce drilling and associated wastes.

3.2 Long-term strategies may include, but are not limited to, process redesigns, new rig and equipment designs, advances in geological engineering, and further advances in directional and multilateral drilling that require lower land use and reduce noise and waste generation, natural resource consumption, hazardous chemical usage, or ecological and biodiversity impacts.

4 The entity may discuss technologies and innovations used to reduce ecological impacts that allow their customers access to sites that would not normally be accessible due to their ecological sensitivity.

5 The entity may discuss specific plans or strategies to reduce ecological impacts in areas with protected conservation status, endangered species habitat, or in areas of unique ecological sensitivity such as the Arctic. Relevant areas in this regard include:

5.1 International Union for Conservation of Nature (IUCN) Protected Areas (categories I-VI).

5.2 Ramsar Wetlands of International Importance.

5.3 UNESCO World Heritage Sites.

5.4 Biosphere Reserves recognized within the framework of UNESCO's Man and the Biosphere (MAB) Programme.

5.5 Natura 2000 sites.

5.6 Sites that meet the IUCN's definition of a protected area: "A protected area is a clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values."

5.6.1 These sites may be listed in the World Database of Protected Areas (WDPA) and mapped on ProtectedPlanet.

5.7 Areas where IUCN Red List of Threatened Species that are classified as Critically Endangered (CR) or Endangered (EN) are extant.

5.8 A species is considered extant in an area if it is a resident, present during breeding or non-breeding season, or if it makes use of the area for passage.

6 The entity shall discuss risks and opportunities it may face related to its ability to offer its customers services, technologies, or solutions that lower ecological impacts, including land use and biodiversity impacts.

# Workforce Health & Safety

## Topic Summary

Workers in the Oil & Gas – Services industry face significant health and safety risks due to the harsh working environments and hazards of handling oil and gas. In addition to acute impacts resulting from accidents, workers may develop chronic health conditions, including those caused by silica or dust inhalation, as well as mental health problems. A significant proportion of the workforce at oil and gas drilling sites consists of temporary workers and employees of oil and gas services companies. Health impacts on, and the safety performance of, such workers can affect Services companies directly by influencing worker productivity and costs. Services companies compete on the basis of their reputation and ability to perform activities on a consistently safe basis. Customers evaluate instances of accidents, spills, injuries, and fatalities when considering awarding contracts to services companies.

## Accounting Metrics

### EM-SV-320a.1. (1) Total recordable incident rate (TRIR), (2) fatality rate, (3) near miss frequency rate (NMFR), (4) total vehicle incident rate (TVIR), and (5) average hours of health, safety, and emergency response training for (a) full-time employees, (b) contract employees, and (c) short-service employees

1 The entity shall disclose its total recordable incident rate (TRIR) for work-related injuries and illnesses.

1.1 An injury or illness is considered a recordable incident if it results in any of the following: death, days away from work, restricted work or transfer to another job, medical treatment beyond first aid, or loss of consciousness. Additionally, a significant injury or illness diagnosed by a physician or other licensed health care professional is considered a recordable incident, even if it does not result in death, days away from work, restricted work or job transfer, medical treatment beyond first aid, or loss of consciousness. This definition is derived from U.S. 29 CFR 1904.7.

1.2 The U.S. Occupational Safety and Health Administration (OSHA) provides additional resources for determining if injuries or illnesses are considered recordable incidents in its guidance for OSHA Forms 300, 300A, and 301.

2 The entity shall disclose its fatality rate for work-related fatalities.

3 The entity shall disclose its near miss frequency rate (NMFR) for work-related near misses.

3.1 A near miss is defined as an unplanned or uncontrolled event or chain of events that has not resulted in a recordable injury, illness, or physical damage or environmental damage, but had the potential to do so in other circumstances.

3.2 The U.S. National Safety Council (NSC) provides guidance on implementing near miss reporting, including in, "Near Miss Reporting Systems."

3.3 The entity may disclose its process for classifying, identifying, and reporting near misses.

4 The entity shall disclose its total vehicle incident rate (TVIR) according to definitions and guidance from the American Petroleum Institute (API).

5 The entity shall disclose the average number of training hours provided to its workforce for health, safety, and emergency management training.

5.1 Training shall relate to topics listed under Regulation U.S. 29 CFR Part 1910 Occupational Health and Safety Standards

5.1.1 The entity may include training hours related to topics not listed under Regulation U.S. 29 CFR Part 1910 so long as: (1) the training relates to the health, safety, or emergency preparedness of employees with respect to occupational risks or hazards to which employees are reasonably likely to be exposed and (2) the entity discloses the subject of the training and the specific occupational risks or hazards the training is intended to address.

6 Rates shall be calculated as: (statistic count × 200,000) / hours worked

6.1 The U.S. Bureau of Labor Statistics (BLS) provides additional guidance for the calculation of rates in, "How to Compute a Firm's Incidence Rate for Safety Management" and "Incidence Rate Calculator and Comparison Tool."

7 The average number of hours of health, safety, and emergency response training shall be calculated as: (total qualifying training hours provided by the entity) / (total number of employees).

8 The scope of disclosure includes work-related incidents only.

8.1 OSHA guidance for Forms 300, 300A, and 301 provides guidance on determining whether an incident is work-related, as well as definitions for exemptions for incidents that occur in the work environment but are not work-related.

9 The entity shall disclose its TRIR, Fatality Rate, NMFR, and average hours of health, safety, and emergency response training per employee for each of the following categories of employee:

9.1 Direct, full-time employees, defined as a person legally contracted and paid directly by a company to undertake work associated with its business activities

9.2 Contract employees, defined as a person not employed directly by the company who performs services under contract for the company, especially at one of its worksites

9.3 Short-service employees (full-time and contract), defined as a newly placed full-time or temporary employee or subcontractor with less than six months' experience in the assigned job

10 The scope includes all employees regardless of employee location.

## EM-SV-320a.2. Description of management systems used to integrate a culture of safety throughout the value chain and project lifecycle

1 The entity shall describe its management system used to integrate a culture of safety throughout the value chain and project lifecycle.

1.1 The scope of disclosure includes how the entity integrates a culture of safety throughout its value chain, such as through training, joint management by the workforce and leadership, rules and guidelines, and use of technology.

1.2 Disclosure may focus broadly on safety systems but shall specifically address the systems to maintain a safe working environment, including the prevention of incidents, accidents, fatalities, and illness.

2 The scope of disclosure includes a description of how workforce safety management is coordinated amongst business partners (e.g., contractors and sub-contractors).

3 The value chain and project life cycle include, but are not limited to: geological and seismic surveys, site surveys, exploratory drilling, appraisal drilling, site development, production, and decommissioning.

# Business Ethics & Payments Transparency

## Topic Summary

With operations across the globe, oil and gas services companies interact with many government and local officials, either directly or through agents, in order to secure contracts with state-owned oil companies and multinational corporations. Bribery and corruption are common in some regions, and in others, to the transparency of payments to governments may be a significant issue. The emergence of several anti-corruption, anti-bribery, and payments-transparency laws and initiatives create regulatory mechanisms to reduce certain risks. Violations of these could lead to significant one-time costs or higher ongoing compliance costs, whereas successful compliance with such regulations could provide risk mitigation opportunities and avoid adverse outcomes. Oil and gas services companies are under pressure to ensure that their governance structures and practices can address corruption, willful or unintentional participation in illegal or unethical payments and gifts to government officials or private persons, or the risk of otherwise unfairly influencing these individuals, especially in areas of heightened risk.

## Accounting Metrics

### EM-SV-510a.1. Amount of net revenue in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index

1 The entity shall disclose its net revenue from activities located in the countries with the 20 lowest rankings in Transparency International's Corruption Perception Index (CPI).

1.1 The 20 lowest numerical ranks shall be used to generate the scope of countries; therefore, due to the fact that multiple countries share many ranks, the scope may include more than 20 countries.

2 The entity shall use the most current version of the CPI.

3 The entity may discuss its operations that are located in countries with low rankings in the index but present low business ethics risks; the entity may provide similar discussion for operations located in countries that do not have one of the 20 lowest rankings in the index but that present unique or high business ethics risks.

### EM-SV-510a.2. Description of the management system for prevention of corruption and bribery throughout the value chain

1 The entity shall describe its management system and due diligence procedures for assessing and managing corruption and bribery risks internally and associated with business partners in its value chain.

1.1 Business partners include, but are not limited to customers, suppliers, contractors, subcontractors, and joint venture (JV) partners

1.2 Relevant aspects of a management system include, where relevant:

1.2.1 Employee awareness programs

1.2.2 Internal mechanisms for reporting and following up on suspected violations

1.2.3 Anti-corruption policies

1.2.4 Application of the Extractive Industry Transparency Initiative (EITI) Standard, including, but not limited to, provisions related to beneficial ownership and politically-exposed persons, licenses and contracts, social expenditures, project-level payments, subnational payments, data accessibility, and multi-stakeholder engagement

2 The entity may discuss the implementation of one or more of the following:

2.1 Key Organization for Economic Co-operation and Development (OECD) guidelines

2.2 International Chamber of Commerce (ICC): Rules of Conduct against Extortion and Bribery

2.3 Transparency International: Business Principles for Countering Bribery

2.4 United Nations Global Compact: 10th Principle

2.5 World Economic Forum (WEF): Partnering Against Corruption Initiative (PACI)

# Management of the Legal & Regulatory Environment

## Topic Summary

The Oil & Gas – Services industry is subject to numerous sustainability-related regulations and an often rapidly changing regulatory environment. Changes to the legal and regulatory environment may result in material impacts on shareholder value. Companies in the industry regularly participate in the regulatory and legislative process on a wide variety of environmental and societal issues, and may do so directly or through representation by an industry association. Such engagement can result from companies seeking to ensure industry views are represented in the development of regulations impacting the industry as well as to represent shareholder interests. At the same time, such engagement to influence environmental laws and regulations may adversely affect companies' reputations with stakeholders and ultimately impact the company's social license to operate. Companies that are able to balance these viewpoints may be better positioned to respond to medium- to long-term regulatory developments.

## Accounting Metrics

### EM-SV-530a.1. Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry

1 The entity shall identify risks and opportunities it faces related to legislation, regulation, and/or rulemaking, (hereafter referred to collectively as "legal and regulatory environment") related to environmental and social factors which are relevant to the entity's business.

1.1 The scope shall include existing, emerging, and known future risks and opportunities.

1.2 The scope shall include risks and opportunities that may exist domestically and internationally at the local, state, and national level.

1.3 The regulatory environment related to relevant environmental and social factors includes, but is not limited to, those related to non-greenhouse gas air emissions, greenhouse gas emissions, water withdrawals and effluents, chemical use, ecological impacts, employee health and safety, business ethics and payments transparency, and natural resource governance.

2 Relevant risks include, but are not limited to, risk of increased compliance costs, risk of policy reversal (e.g., risks associated with changes to the U.S. Clean Air Act, EU Emissions Trading Scheme, or the California Global Warming Solutions Act), risk of loss of financial incentives (e.g., reduction or elimination of tax deductions associated with oil and gas exploration and production), risk to reputation due to entity's stance and actions related to the legal and regulatory environment, risk that the legal and regulatory environment may not be aligned with long-term strategy, and risk of misalignment with the expectations of customers, investors, and other stakeholders.

3 Relevant opportunities include, but are not limited to, improved financial conditions (e.g., through policies which incentivize oil and gas exploration and production activities), improved community relations due to the entity's stance and actions related to the legal and regulatory environment, and other benefits due to alignment of the legal and regulatory environment with the entity's long-term strategy.

4 The entity shall discuss its efforts to manage risks and opportunities associated with each aspect of the legal and regulatory environment associated with the topics included in the SASB Oil & Gas – Services standard that are relevant to the entity's business.

5 The entity shall discuss its overall strategy to manage risks and opportunities associated with each aspect of the legal and regulatory environment it has identified, which may include, but is not limited to:

5.1 Any changes it has made or plans to make to its business structure or model

5.2 The development of new technologies or services

5.3 Any changes it has made or plans to make to its operational process, control, or organizational structures

5.4 Influencing the regulatory or legislative process and outcomes, including but not limited to, interactions with regulators, regulatory agencies, legislators, policymakers, and any others involved in the regulatory or legislative process.

6 The entity may describe whether its stance may align with or differ from the official stance of its industry organization(s) and discuss any relevant reasons for alignment or divergence.

# Critical Incident Risk Management

## Topic Summary

Services companies are subject to significant risks associated with low-probability, high-consequence events associated with oil and gas exploration, development, and production activities. Such events may result in multiple fatalities, significant property damage, or a significant adverse impact to the environment. Services companies may be affected indirectly through the impacts that safety incidents or emergencies can have on their Exploration & Production (E&P) customers. Additionally, significant incidents can have wide-ranging negative social and environmental consequences, for which both E&P and service companies may be held liable. Services companies compete on the basis of their reputation and ability to perform activities on a consistently safe basis. In addition to implementing effective process safety management practices, companies frequently prioritize developing a strong culture of safety in order to reduce the probability that accidents and other health and safety incidents will occur. If accidents and other emergencies do occur, companies with a strong safety culture are often able to more effectively detect and respond to such incidents. A culture that engages and empowers employees and contractors to work with management and E&P companies in order to safeguard their own health, safety, and well-being and to prevent accidents is likely to help services companies reduce risks to financial value.

## Accounting Metrics

### EM-SV-540a.1. Description of management systems used to identify and mitigate catastrophic and tail-end risks

1 The entity shall describe its management systems used to identify and mitigate catastrophic and tail-end risks.

1.1 The scope of catastrophic and tail-end risks include low-probability, high-impact accidents and emergencies that could have catastrophic effects on human health, local community, and environmental impacts.

1.2 The scope of disclosure shall include how the entity integrates a culture of safety as well as management systems and technical controls to manage and mitigate catastrophic and tail-end risks.

1.3 The description may include, but is not limited to, employee training, the use of operating procedures, hot work permitting, pre-start up safety reviews, mechanical integrity programs, management of change, incident investigation, emergency planning and response, audits, and other management systems.

2 The entity shall include a description of how critical incident risk management is coordinated amongst business partners (e.g., contractors and sub-contractors).

3 The scope of disclosure may include, but is not limited to, the following stages of a project's lifecycle: geological and seismic surveys, site surveys, exploratory drilling, appraisal drilling, site development, production, and decommissioning.

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