



SUSTAINABILITY ACCOUNTING STANDARD
NON-RENEWABLE RESOURCES SECTOR

OIL & GAS – MIDSTREAM

Sustainability Accounting Standard

Sustainable Industry Classification System™ (SICS™) #NR0102

Prepared by the
Sustainability Accounting Standards Board®

June 2014
Provisional Standard

OIL & GAS – MIDSTREAM

Sustainability Accounting Standard

About SASB

The Sustainability Accounting Standards Board (SASB) provides sustainability accounting standards for use by publicly-listed corporations in the U.S. in disclosing material sustainability information for the benefit of investors and the public. SASB standards are designed for disclosure in mandatory filings to the Securities and Exchange Commission (SEC), such as the Form 10-K and 20-F. SASB is an independent 501(c)3 non-profit organization. Through 2016, SASB is developing standards for more than 80 industries in 10 sectors.

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INTRODUCTION

Purpose & Structure

This document contains the SASB Sustainability Accounting Standard (SASB Standard) for Oil & Gas-Midstream.

SASB Standards are comprised of **(1) disclosure guidance and (2) accounting standards on sustainability topics** for use by U.S. and foreign public companies in their annual filings (Form 10-K or 20-F) with the U.S. Securities and Exchange Commission (SEC). To the extent relevant, SASB Standards may also be applicable to other periodic mandatory filings with the SEC, such as the Form 10-Q, Form S-1, and Form 8-K.

SASB's disclosure guidance identifies sustainability topics at an industry level, which may be material— depending on a company's specific operating context— to a company within that industry.

Each company is ultimately responsible for determining which information is material and is therefore required to be included in its Form 10-K or 20-F and other periodic SEC filings.

SASB's accounting standards provide companies with standardized accounting metrics to account for performance on industry-level sustainability topics. When making disclosure on sustainability topics, companies adopting SASB's accounting standards will help to ensure that disclosure is standardized and therefore useful, relevant, comparable and auditable.

Industry Description

The Oil and Gas - Midstream industry consists of companies involved in the transportation or storage of natural gas, crude oil, and refined petroleum products. Midstream natural gas activities involve gathering, transport, and processing of natural gas from the wellhead, as well as the removal of impurities, production of natural gas liquids, storage, pipeline transport, and shipping, liquefaction, or regasification of liquefied natural gas. Midstream oil activities mainly involve transport of crude oil and refined products over land, using a network of pipes and pumping stations, as well as trucks and rail cars, and over seas and rivers via tanker ships or barges. Companies that operate bulk stations and terminals, as well as those that manufacture and install storage tanks and pipelines, are also part of this industry. Publicly-listed midstream companies in the U.S. generally operate within North America.

Note: The standards discussed below are for “pure-play” midstream activities or independent midstream companies. Integrated oil and gas companies may own or operate midstream operations, but are also involved in the upstream operations of the oil and gas value chain and in the refining or marketing of products. SASB has separate standards for the Oil and Gas Exploration & Production (NR0101) and Refining & Marketing industries (NR0103). As such, integrated companies should also consider the disclosure topics and metrics from these standards.

Guidance for Disclosure of Material Sustainability Topics in SEC filings

1. Industry-Level Material Sustainability Topics

For the Oil & Gas - Midstream industry, SASB has identified the following material sustainability topics:

- **Greenhouse Gas & Other Air Emissions**
- **Ecological Impacts**
- **Competitive Behavior**
- **Operational Safety, Emergency Preparedness, and Response**

2. Company-Level Determination and Disclosure of Material Sustainability Topics

Sustainability disclosures are governed by the same laws and regulations that govern disclosures by securities issuers generally. According to the U.S. Supreme Court, a fact is material if, in the event such fact is omitted from a particular disclosure, there is "a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the 'total mix' of the information made available".^{1,2}

SASB has attempted to identify those sustainability topics that it believes may be material for all companies within each SICS industry. SASB recognizes, however, that each company is ultimately responsible for determining what is material to it.

Regulation S-K, which sets forth certain disclosure requirements associated with Form 10-K and other SEC filings, requires companies, among other things, to describe in the Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) section of Form 10-K "any known trends or uncertainties that have had or that the registrant reasonably expects will have a material favorable or unfavorable impact on net sales or revenues or income from continuing operations. If the registrant knows of events that will cause a material change in the relationship between costs and revenues (such as known future increases in costs of labor or materials or price increases or inventory adjustments), the change in the relationship shall be disclosed."²

Furthermore, Instructions to Item 303 state that the MD&A "shall focus specifically on material events and uncertainties known to management that would cause reported financial information not to be necessarily indicative of future operating results or of future financial condition."²

In determining whether a trend or uncertainty should be disclosed, the SEC has stated that management should use a two-part assessment based on probability and magnitude:

- First, a company is not required to make disclosure about a known trend or uncertainty if its management determines that such trend or uncertainty is not reasonably likely to occur.

¹ TSC Industries v. Northway, Inc., 426 U.S. 438 (1976).

² C.F.R. 229.303(Item 303)(a)(3)(ii).

- If a company's management cannot make a reasonable determination of the likelihood of an event or uncertainty, then disclosure is required unless management determines that a material effect on the registrant's financial condition or results of operation is not reasonably likely to occur.

3. Sustainability Accounting Standard Disclosures in Form 10-K.

a. Management's Discussion and Analysis

Companies should consider making disclosure on sustainability topics as a complete set in the MD&A, in a sub-section titled "**Sustainability Accounting Standards Disclosures.**"³

b. Other Relevant Sections of Form 10-K

In addition to the MD&A section, companies should consider disclosing sustainability information in other sections of Form 10-K, as relevant, including:

- **Description of business**—Item 101 of Regulation S-K requires a company to provide a description of its business and its subsidiaries. Specifically Item 101(c)(1)(xii) expressly requires disclosure regarding certain costs of complying with environmental laws:

Appropriate disclosure also shall be made as to the material effects that compliance with Federal, State and local provisions which have been enacted or adopted regulating the discharge of materials into the environment, or otherwise relating to the protection of the environment, may have upon the capital expenditures, earnings and competitive position of the registrant and its subsidiaries.

- **Legal proceedings**—Item 103 of Regulation S-K requires companies to describe briefly any material pending or contemplated legal proceedings. Instructions to Item 103 provide specific disclosure requirements for administrative or judicial proceedings arising from laws and regulations targeting discharge of materials into the environment or primarily for the purpose of protecting the environment.
- **Risk factors**—Item 503(c) of Regulation S-K requires filing companies to provide a discussion of the most significant factors that make an investment in the registrant speculative or risky, clearly stating the risk and specifying how a particular risk affects the particular filing company.

c. Rule 12b-20

Securities Act Rule 408 and Exchange Act Rule 12b-20 require a registrant to disclose, in addition to the information expressly required by law or regulation, "such further material information, if any, as may be necessary to make the required statements, in light of the circumstances under which they are made, not misleading."

More detailed guidance on disclosure of material sustainability topics can be found in the **SASB Conceptual Framework**, available for download via <http://www.sasb.org/approach/conceptual-framework/>.

³ SEC [Release Nos. 33-8056; 34-45321; FR-61] Commission Statement about Management's Discussion and Analysis of Financial Condition and Results of Operations: "We also want to remind registrants that disclosure must be both useful and understandable. That is, management should provide the most relevant information and provide it using language and formats that investors can be expected to understand. Registrants should be aware also that investors will often find information relating to a particular matter more meaningful if it is disclosed in a single location, rather than presented in a fragmented manner throughout the filing."

Guidance on Accounting of Material Sustainability Topics

For material sustainability topics in the Oil & Gas - Midstream industry, SASB identifies accounting metrics.

SASB recommends that each company consider using these sustainability accounting metrics when disclosing its performance with respect to each of the sustainability topics it has identified as material.

As appropriate—and consistent with Rule 12b-20⁴—for each sustainability topic, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy and comparability of the data reported. Where not addressed by the specific accounting metrics, but relevant, the registrant should discuss the following related to the topic:

- the registrant's **strategic approach** to managing performance on material sustainability issues;
- the registrant's **competitive positioning**;
- the **degree of control** the registrant has;
- any **measures the registrant has undertaken** or **plans to undertake** to improve performance; and
- data for registrant's **last three completed fiscal years** (when available).

SASB recommends that registrants use SASB Standards specific to their primary industry as identified in the [Sustainable Industry Classification System \(SICS™\)](#). If a registrant generates significant revenue from multiple industries, SASB recommends that it consider the materiality of the sustainability issues that SASB has identified for those industries and disclose the associated SASB accounting metrics.

Users of the SASB Standards

The SASB Standards are intended for companies that engage in public offerings of securities registered under the Securities Act of 1933 (the Securities Act) and those that issue securities registered under the Securities Exchange Act of 1934 (the Exchange Act),⁵ for use in SEC filings, including, without limitation, annual reports on Form 10-K (Form 20-F for foreign issuers), quarterly reports on Form 10-Q, current reports on Form 8-K, and registration statements on Forms S-1 and S-3. Nevertheless, disclosure with respect to the SASB Standards is not required or endorsed by the SEC or other entities governing financial reporting, such as FASB, GASB, or IASB.

⁴ SEC Rule 12b-20: "In addition to the information expressly required to be included in a statement or report, there shall be added such further material information, if any, as may be necessary to make the required statements, in the light of the circumstances under which they are made not misleading."

⁵ Registration under the Securities Exchange Act of 1934 is required (1) for securities to be listed on a national securities exchange such as the New York Stock Exchange, the NYSE Amex and the NASDAQ Stock Market or (2) if (A) the securities are equity securities and are held by more than 2,000 persons (or 500 persons who are not accredited investors) and (B) the company has more than \$10 million in assets.

Scope of Disclosure

Unless otherwise specified, SASB recommends:

- That a registrant disclose on sustainability issues and metrics for itself and for entities in which the registrant has a controlling interest and therefore are consolidated for financial reporting purposes (controlling interest is generally defined as ownership of 50% or more of voting shares)⁶
- That for consolidated entities, disclosures be made, and accounting metrics calculated, for the whole entity, regardless of the size of the minority interest; and
- That information from unconsolidated entities not be included in the computation of SASB accounting metrics. A registrant should disclose, however, information about unconsolidated entities to the extent that such registrant considers the information necessary for investors to understand its performance with respect to sustainability issues (typically this disclosure would be limited to risks and opportunities associated with these entities).

Reporting Format

Activity Metrics and Normalization

SASB recognizes that normalizing accounting metrics is important for the analysis of SASB disclosures.

SASB recommends that a registrant disclose any basic business data that may assist in the accurate evaluation and comparability of disclosure, to the extent that they are not already disclosed in the Form 10-K (e.g., revenue, EBITDA, etc.).

Such data – termed “activity metrics” – may include high-level business data such as total number of employees, quantity of products produced or services provided, number of facilities, or number of customers. It may also include industry-specific data such as plant capacity utilization (e.g., for specialty chemical companies), number of transactions (e.g., for internet media and services companies), hospital bed days (e.g., for health care delivery companies), or proven and probable reserves (e.g., for oil and gas exploration and production companies).

Activity metrics disclosed should:

- Convey contextual information that would not otherwise be apparent from SASB accounting metrics.
- Be deemed generally useful for users of SASB accounting metrics (e.g., investors) in performing their own calculations and creating their own ratios.
- Be explained and consistently disclosed from period to period to the extent they continue to be relevant – however, a decision to make a voluntary disclosure in one period does not obligate a continuation of that disclosure if it is no longer relevant or if a better metric becomes available.

⁶ See US GAAP consolidation rules (Section 810).

Where relevant, SASB recommends specific activity metrics that – at a minimum – should accompany SASB accounting metric disclosures.

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Total metric ton-kilometers of (1) natural gas, (2) crude oil, and (3) refined petroleum products transported, by mode of transport (e.g., pipelines, rail, tanker, truck, etc.) ⁷ .	Quantitative	Metric ton-kilometers	NR0102-A

Units of Measure

Unless specified, disclosures should be reported in International System of Units (SI units).

Uncertainty

SASB recognizes that there may be inherent uncertainty when disclosing certain sustainability data and information. This may be related to variables like the imperfectness of third-party reporting systems or the unpredictable nature of climate events. Where uncertainty around a particular disclosure exists, SASB recommends that the registrant should consider discussing its nature and likelihood.

Estimates

SASB recognizes that scientifically-based estimates, such as the reliance on certain conversion factors or the exclusion of *de minimis* values, may be necessary for certain quantitative disclosures. Where appropriate, SASB does not discourage the use of such estimates. When using an estimate for a particular disclosure, SASB expects that the registrant discuss its nature and substantiate its basis.

Timing

Unless otherwise specified, disclosure shall be for the registrant's fiscal year.

Limitations

There is no guarantee that SASB Standards address all sustainability impacts or opportunities associated with a sector, industry, or company and, therefore, a company must determine for itself the topics—sustainability-related or otherwise—that warrant discussion in its SEC filings.

⁷Note to **NR0102-A** - Relevant modes of transport include: pipeline, tanker, truck, etc.

Disclosure under SASB Standards is voluntary. It is not intended to replace any legal or regulatory requirements that may be applicable to user operations. Where such laws or regulations address legal or regulatory topics, disclosure under SASB Standards is not meant to supersede those requirements. Disclosure according to SASB Standards shall not be construed as demonstration of compliance with any law, regulation, or other requirement.

SASB Standards are intended to be aligned with the principles of materiality enforced by the SEC. However, SASB is not affiliated with or endorsed by the SEC or other entities governing financial reporting, such as FASB, GASB, or IASB.

Forward Looking Statements

Disclosures on sustainability topics can involve discussion of future trends and uncertainties related to the registrant's operations and financial condition, including those influenced by external variables (e.g., environmental, social, regulatory and political). Companies making such disclosures should familiarize themselves with the safe harbor provisions of Section 27A of the Securities Act and Section 21E of the Exchange Act, which preclude civil liability for material misstatements or omissions in such statements if the registrant takes certain steps, including, among other things, identifying the disclosure as forward looking and accompanying such disclosure with "meaningful cautionary statements identifying important factors that could cause actual results to differ materially from those in the forward-looking statements."

Assurance

In disclosing to SASB Standards, it is expected that registrants disclose with the same level of rigor, accuracy, and responsibility as all other information contained in their SEC filings.

SASB encourages registrants to use independent assurance (attestation), for example, an Examination Engagement to AT Section 101.

Table 1. Material Sustainability Topics & Accounting Metrics

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Greenhouse Gas & Other Air Emissions	Gross global Scope 1 emissions, percentage covered under a regulatory program	Quantitative	Metric tons CO ₂ -e, Percentage (%)	NR0102-01
	Description of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	NR0102-02
	Air emissions for the following pollutants: NO _x (excluding N ₂ O), SO _x , volatile organic compounds (VOCs), and particulate matter (PM)	Quantitative	Metric tons (t)	NR0102-03
Ecological Impacts	Description of environmental management policies and practices for active operations	Discussion and Analysis	n/a	NR0102-04
	Percentage of land owned, leased, and/or operated within areas of protected conservation status or endangered species habitat	Quantitative	Percentage (%) by acreage	NR0102-05
	Terrestrial acreage disturbed, percentage of impacted area restored	Quantitative	Acres, Percentage (%)	NR0102-06
	Number and aggregate volume of hydrocarbon spills, volume in Arctic, volume in Unusually Sensitive Areas (USAs), and volume recovered	Quantitative	Number, Barrels (bbls)	NR0102-07
Competitive Behavior	Amount of legal and regulatory fines and settlements associated with federal pipeline and storage regulations ⁸	Quantitative	U.S. Dollars (\$)	NR0102-08
Operational Safety, Emergency Preparedness, and Response	Number of reportable pipeline incidents, percentage significant	Quantitative	Number, Percentage (%)	NR0102-09
	Number of (1) accident releases and (2) non-accident releases (NARs) from rail transportation ⁹	Quantitative	Number	NR0102-10
	Discussion of management systems used to integrate a culture of safety and emergency preparedness throughout the value chain and throughout project lifecycles	Discussion and Analysis	n/a	NR0102-11

⁸ Note to **NR0102-08** – Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

⁹ Note to NR0102-10 – Disclosure shall include a discussion of processes, procedures, and strategies to manage non-accident and accident releases.

Greenhouse Gas & Other Air Emissions

Description

The Midstream industry generates significant quantities of greenhouse gases and other air emissions from compressor engine exhausts, oil and condensate tank vents, natural gas processing, and fugitive emissions, in addition to emissions from mobile sources. Air pollutants can have significant, localized human health and environmental impacts. At the same time, the management of fugitive emissions of methane, a potent greenhouse gas, has emerged as a major operational, reputational, and regulatory risk. Financial impacts on companies will vary depending on the specific location of operations and the prevailing emissions regulations, and include higher operating or capital expenditures and regulatory or legal penalties. Companies that capture and monetize, or cost-effectively reduce emissions by implementing innovative monitoring and mitigation efforts and fuel efficiency measures could enjoy several benefits. These companies have the opportunity to reduce regulatory risks and to realize operational efficiencies in an environment of increasing regulatory and public concerns about air quality and climate change, both in the U.S. and globally.

Accounting Metrics

NR0102-01. Gross global Scope 1 emissions, percentage covered under a regulatory program

- .01 The registrant shall disclose gross global Scope 1 greenhouse gas (GHG) emissions to the atmosphere of the six greenhouse gases covered under the Kyoto Protocol: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.
- Emissions of all gases shall be disclosed in metric tons of carbon dioxide equivalent (CO₂-e), calculated in accordance with published global warming potential (GWP) factors. To date, the preferred source for global warming potential factors is the Intergovernmental Panel on Climate Change's (IPCC) Fourth Assessment Report (2007).
 - Gross emissions are GHGs emitted to the atmosphere before accounting for any GHG reduction activities, offsets, or other adjustments for activities in the reporting period that have reduced or compensated for emissions.
- .02 Scope 1 emissions are defined by the World Resources Institute and the World Business Council on Sustainable Development (WRI/WBCSD) [The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard](#), Revised Edition, March 2004 (hereafter, the "GHG Protocol").
- These emissions include direct emissions of GHGs from stationary or mobile sources; these sources include but are not limited to: equipment at well sites, production facilities, refineries, chemical plants, terminals, fixed site drilling rigs, office buildings, marine vessels transporting products, tank truck fleets, mobile drilling rigs, and moveable equipment at drilling and production facilities.
- .03 GHG emission data shall be consolidated according to the approach with which the registrant consolidates its financial reporting data, which is generally aligned with:

- The Financial Control approach defined by the GHG Protocol and referenced by the [CDP Guidance for companies reporting on climate change on behalf of investors & supply chain members 2014](#) (hereafter, the “CDP Guidance”).¹⁰
 - The financial approach detailed in Chapter 3 of the IPIECA/API/OGP Petroleum Industry Guidelines for Reporting Greenhouse Gas Emissions, Second Edition, 2011 (hereafter, the “IPIECA GHG Guidelines”).
 - The approach detailed in Section 4.23 “Organizational boundary setting for GHG emissions reporting” of Climate Disclosure Standards Board (CDSB) Climate Change Reporting Framework (CCRF)¹¹.
- .04 The underlying technical approach to data collection, analysis, and disclosure shall be consistent with the IPIECA GHG Guidelines and the CDP Guidance.
- The registrant shall consider the CDP Guidance as a normative reference; thus, any updates made year-on-year shall be considered updates to this guidance.
- .05 The registrant shall disclose the percentage of its emissions that are covered under a regulatory program, such as the European Union Emissions Trading Scheme (EU ETS), Western Climate Initiative (WCI), California Cap-and-Trade (California Global Warming Solutions Act), or other regulatory programs.
- Regulatory programs include cap-and-trade schemes and carbon tax/fee systems.
 - Disclosure shall exclude emissions covered under voluntary trading systems and disclosure-based regulations (e.g., the U.S. Environmental Protection Agency (EPA) mandatory reporting rule).
- .06 The registrant should discuss any change in its emissions from the previous fiscal year, such as if the change was due to emissions reductions, divestment, acquisition, mergers, changes in output, and/or changes in calculation methodology.
- .07 In the case that current reporting of GHG emissions to the CDP or other entity (e.g., a national regulatory disclosure program) differs in terms of the scope and consolidation approach used, the registrant may disclose those emissions. However, primary disclosure shall be according to the guidelines previously mentioned.
- .08 The registrant should discuss the calculation methodology for its emission disclosure, such as if data are from continuous emissions monitoring systems (CEMS), engineering calculations, mass balance calculations, etc.
- .09 This accounting metric corresponds to section CC8.2 of the Carbon Disclosure Project (CDP) Questionnaire and section 4.25 of the Climate Disclosure Standards Board (CDSB) Climate Change Reporting Framework (CCRF).

¹⁰ “An organization has financial control over an operation if it has the ability to direct the financial and operating policies of the operation with a view to gaining economic benefits from its activities. Generally an organization has financial control over an operation for GHG accounting purposes if the operation is treated as a group company or subsidiary for the purposes of financial consolidation.” *Guidance for companies reporting on climate change on behalf of investors & supply chain members 2014* (p. 94).

¹¹ This approach is based on the requirements of the International Accounting Standards/International Financial Reporting Standards (IAS/IFRS) on consolidation and equity accounting. It is consistent with the way in which information relating to entities within a group, or interest in joint ventures/associates, would be included in consolidated financial statements. *Climate Change Reporting Framework*, CDSB

NR0102-02. Description of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets

.10 The registrant shall discuss the following where relevant:

- The scope, including if strategies, plans, and/or reduction targets pertain differently to different business units, geographies, or emissions sources.
- If strategies, plans, and/or reduction targets are related to or associated with an emissions disclosure (reporting) or reduction program (e.g., EU ETS, Regional Greenhouse Gas Initiative (RGGI), WCI, etc.), including regional, national, international or sectoral programs.
- 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.

.11 For emission reduction targets, the registrant shall disclose:

- The percentage of emissions within the scope of the reduction plan.
- The percentage reduction from the base year.
 - The base year is the first year against which emissions are evaluated towards the achievement of the target.
- Whether the target is absolute or intensity-based, and the metric denominator, if it is an intensity-based target.
- The timelines for the reduction activity, including the start year, the target year, and the base year. Disclosure shall be limited to activities that were ongoing (active) or that reached completion during the fiscal year.
- The mechanism(s) for achieving the target, such as energy efficiency efforts, energy source diversification, carbon capture and storage, etc.

.12 Where necessary, the registrant shall discuss any circumstances in which the target base year emissions have been or may be re-calculated retrospectively, or in which the target base year has been reset.

.13 This accounting metric corresponds with:

- CDSB Section 4, "Management Actions"¹²
- CDP questionnaire "CC3. Targets and Initiatives"

¹² 4.12, "Disclosure shall include a description of the organization's long-term and short-term strategy or plan to address climate change-related risks, opportunities and impacts, including targets to reduce GHG emissions and an analysis of performance against those targets." *Climate Change Reporting Framework – Edition 1.1*, October 2012, CDSB.

NR0102-03. Air emissions for the following pollutants: NO_x (excluding N₂O), SO_x, volatile organic compounds (VOCs), and particulate matter (PM)

- .14 The registrant shall disclose its emissions of air pollutants associated with midstream operations released to the atmosphere, such as:
- Direct air emissions from stationary or mobile sources, which include, but are not limited to: equipment at well sites, production facilities, terminals, office buildings, marine vessels transporting products, tank truck fleets, and moveable equipment at drilling and production facilities.
- .15 The registrant shall disclose emissions consistent with IPIECA's Oil and Gas Industry Guidance on Voluntary Sustainability Reporting, as noted below.
- .16 The registrant shall disclose the following emissions released to the atmosphere from oil and natural gas operations by emissions type:
- Oxides of nitrogen (including NO and NO₂ and excluding N₂O), reported as NO₂.
 - Oxides of sulfur (SO₂ and SO₃), reported as SO₂.
 - Non-methane volatile organic compounds (VOCs), defined as any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and methane, which participates in atmospheric photochemical reactions, except those designated by the EPA as having negligible photochemical reactivity.
 - Particulate matter (PM), reported as the sum of PM₁₀ and PM_{2.5}, or all particulates less than 10 micrometers in diameter.
- .17 This scope does not include CO₂, methane, and nitrous oxide, which are disclosed in NR0102-01, as Scope 1 GHG emissions.
- .18 Air emissions data shall be consolidated according to the approach with which the registrant consolidates its financial reporting data, which is aligned with the consolidation approach used for NR0102-01.
- .19 The registrant should discuss the calculation methodology for its emissions disclosure, such as whether data are from continuous emissions monitoring systems (CEMS), engineering calculations, mass balance calculations, etc.

Ecological Impacts

Description

The storage and transport of crude oil, natural gas, and related products through a vast system of maritime transportation vehicles, pipelines, trains, and trucks presents considerable risk to the environment and to local communities. Leaks, accidental discharges, pipeline rights-of-way, and open easements over ecologically sensitive land could impact ecosystems in several ways, including natural habitat loss and changes in species movement. Regulatory agencies, supported by legislation that protects endangered species and ecologically sensitive areas, require plans to mitigate or remediate negative ecological impacts prior to project approval. Together with regulatory compliance costs, these can require significant capital and operational expenditures. As concerns over ecological impacts grow, companies could face the risk that additional areas are designated as protected areas under new or existing laws. Companies that prevent and proactively manage ecological impacts can avoid project delays, remediation, and litigation liabilities, and gain easier access to new projects and sources of revenue.

Accounting Metrics

NR0102-04. Description of environmental management policies and practices for active operations

- .20 The registrant shall provide a brief description of its environmental management plan(s) implemented at active operations, including where relevant:
- Lifecycle stages to which the plan(s) apply, such as: land acquisition and surveying, development and pipeline construction, revegetation, pipeline operations, closure, decommissioning and removal, and restoration.
 - The topics addressed by the plan(s), such as: ecological and biodiversity impacts, waste generation, noise impacts, emissions to air, discharges to water, natural resource consumption, and hazardous chemical usage.
 - The underlying references for its plan(s), including whether they are codes, guidelines, standards, or regulations; whether they were developed by the registrant, an industry organization, a third-party organization (e.g., a non-governmental organization), a governmental agency, or some combination of these groups.
- .21 The scope of disclosure includes all terrestrial and offshore operations in which the registrant is involved as an operator, partner, or contractor and which are in the exploration, development, production, or decommissioning phase.
- .22 Where applicable and relevant, the registrant shall describe differences between policies and practices in terrestrial areas and in marine areas.
- .23 Where environmental management plans differ significantly by activity (e.g., natural gas pipeline as compared to oil pipelines), the registrant shall describe for each the relevant differences.

- .24 Where applicable and relevant, the registrant shall describe specific policies and practices that apply to areas with protected conservation status and/or areas of critical habitat, which are [defined](#) by the International Finance Corporation (IFC) as:
- Areas with high biodiversity value, including (i) habitat of significant importance to Critically Endangered and/or Endangered species; (ii) habitat of significant importance to endemic and/or restricted-range species; (iii) habitat supporting globally significant concentrations of migratory species and/or congregatory species; (iv) highly threatened and/or unique ecosystems; and/or (v) areas associated with key evolutionary processes.¹³
- .25 If the management policies and practices do not apply to all of the registrant's sites or operations, it shall indicate the percentage of sites to which they were applied.
- .26 The registrant shall disclose the degree to which its policies and practices are aligned with the International Finance Corporation's (IFC) [Performance Standards on Environmental and Social Sustainability](#), January 1, 2012, including specifically:
- Performance Standard 1 – Assessment and Management of Environmental and Social Risks and Impacts.
 - Performance Standard 3 – Resource Efficiency and Pollution Prevention.
 - Performance Standard 4 – Community Health, Safety, and Security.
 - Performance Standard 6 – Biodiversity Conservation and Sustainable Management of Living Natural Resources.
- .27 Additional relevant references may include:
- [“Environmental management in oil and gas exploration and production – An overview of issue and management approaches,”](#) Joint E&P Forum/UNEP Technical Publication 1997.
 - [“Towards Sustainable Decommissioning and Closure of Oil Fields and Mines: A Toolkit to Assist Government Agencies,”](#) DRAFT Version 2.0, November 2009, World Bank Multistakeholder Initiative.

NR0102-05. Percentage of land owned, leased, and/or operated within areas of protected conservation status or endangered species habitat

- .28 The registrant shall calculate percentage as the acreage of land (owned, leased, and/or operated) in sites with protected conservation status, plus the acreage of land in areas of endangered species habitat divided by the registrant's total acreage of land (owned, leased, and/or operated).
- .29 Land is considered to be in areas of protected conservation status if it is located within:
- International Union for Conservation of Nature (IUCN) Protected Areas (categories I-VI).
 - Ramsar Wetlands of International Importance.
 - UNESCO World Heritage Sites.

¹³ International Finance Corporation (IFC), Performance Standard 6, *Biodiversity Conservation and Sustainable Management of Living Natural Resources*, January 1, 2012.

- Biosphere Reserves recognized within the framework of UNESCO's Man and the Biosphere (MAB) Programme.
 - Natura 2000 sites.
 - 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."¹⁴
 - These sites may be listed in the World Database of Protected Areas (WDPA) and mapped on ProtectedPlanet.net.
- .30 Land is considered to be endangered species habitat if it is in or near areas where IUCN Red List of Threatened Species that are classified as Critically Endangered (CR) or Endangered (EN) are extant.
- 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.
- .31 For the purposes of this disclosure, "near" is defined as within 5 kilometers (km) of the boundary of an area of protected conservation status or an endangered species habitat.
- .32 The scope of land for which the registrant shall provide disclosure includes that which is owned, leased, and/or operated (e.g., rights-of-way, easements, and land concessions).
- .33 The registrant may choose to separately identify land in areas with additional ecological, biodiversity, or conservation designations such as those listed by the [A-Z Guide of Areas of Biodiversity Importance](#) prepared by the United Nations Environment Programme's World Conservation Monitoring Centre (UNEP-WCMC).
- .34 The registrant may choose to provide discussion around land that is located in protected areas or endangered species habitat but that presents low risk to biodiversity or ecosystem services; the registrant may choose to provide similar discussion for land located in areas with no official designation of high biodiversity value but that present high biodiversity or ecosystem services risks.

NR0102-06. Terrestrial acreage disturbed, percentage of impacted area restored

- .35 The registrant shall disclose the total acreage of disturbed land, where the scope includes land that is owned, leased, and/or operated (e.g., rights-of-way, easements, and land concessions).
- This disclosure shall be a cumulative total of all currently active sites, recently decommissioned sites, or sites being restored, and is not limited to land newly disturbed during the fiscal year.
 - Land shall no longer be considered disturbed once post-closure restoration and remediation efforts are substantially complete (even if monitoring is ongoing).
- .36 The registrant shall disclose the acreage of land impacted by operations that was restored during the fiscal year, where, at a minimum, restoration meets the Society for Ecological Restoration's [definition](#): "the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed."

¹⁴ Dudley, N. (ed.) (2008) Guidelines for Applying Protected Areas Management Categories. IUCN: Gland, Switzerland. p.8-9.

- Restoration may be further defined by local, state, or national laws, industry standards, or the registrant's own guidelines.
- The registrant shall disclose the definition of restoration and accompanying practices it follows in its description of its best practice environmental management plan.

.37 Relevant references may include:

- "[Environmental management in oil and gas exploration and production – An overview of issue and management approaches](#)", Joint E&P Forum/UNEP Technical Publication 1997.
- "[Towards Sustainable Decommissioning and Closure of Oil Fields and Mines: A Toolkit to Assist Government Agencies](#)", DRAFT Version 2.0, November 2009, World Bank Multistakeholder Initiative.

NR0102-07. Number and aggregate volume of hydrocarbon spills, volume in Arctic, volume in Unusually Sensitive Areas (USAs), and volume recovered

.38 The registrant shall disclose the total number and volume (in barrels) of hydrocarbon spills where:

- A spill is defined as greater than 1bbl (42 U.S. gallons or 159 liters).
- Spills include those that reached the environment and exclude spills that were contained within impermeable secondary containment.

.39 Consistent with IPIECA's Oil and Gas Industry Guidance on Voluntary Sustainability Reporting (hereafter, "IPIECA Guidance"), the volume reported shall represent the total estimated amount spilled that reached the environment and not be reduced by the amount of such hydrocarbon subsequently recovered, evaporated, or otherwise lost.

.40 Consistent with IPIECA Guidance, the scope of releases from operations and events includes:

- Above-ground and below-ground facilities.
- Sabotage, earthquakes, or other events outside operational control.
- Company-owned and operated transport.
- Leakage over time, which is counted once at the time that it is identified.

.41 The registrant may choose to disclose spills to soil and water separately. A spill that qualifies as a spill to both soil and water should be reported as a single spill to water, with the volume properly apportioned to soil and water.

.42 The registrant shall disclose the volume of spills (in bbls) that occurred in the Arctic, which is considered to be the area north of the Arctic Circle, or north of the parallel of latitude at 66° 33' north.

.43 The registrant shall disclose the volume of spills in Unusually Sensitive Areas (USAs) as identified by the National Pipeline Mapping System of the Office of Pipeline Safety.

- .44 The registrant shall calculate the volume of spills recovered as the amount of spilled hydrocarbons (in bbls) removed from the environment through short-term spill response activities, excluding:
- Amounts that were recovered during longer-term remediation at spill sites.
 - Amounts that evaporated, burned, or were dispersed.
- .45 The registrant shall calculate recovery rates using an accepted standard or guideline, such as [California Code of Regulations, Title 14, Division 1, Subdivision 4, Chapter 7, Subchapter 2, Determining Amount of Petroleum Hydrocarbons Recovered, Sections 877-880, Effective June 13, 2009](#).

Competitive Behavior

Description

Companies that own natural gas pipelines and storage facilities face numerous and constantly changing regulations from the Federal Energy Regulatory Commission (FERC) in all aspects of their operations, including rates charged, access offered to pipelines, and siting and construction of new facilities. Pipeline companies enjoy a natural monopoly, and FERC regulations ensure that companies do not abuse this position through unfair pricing, discriminatory service, or by other means. Due to concerns about the impacts of oil and gas market distortions on American consumers and businesses, new market manipulation regulations issued by the Federal Trade Commission or the Commodity Futures Trading Commission could also affect the Midstream industry. Companies could be affected by prospective rate changes, compensation payments, or regulatory penalties for violating regulations governing competitive behavior. Midstream companies face uncertainty in relation to their ability to change the rates charged, which could affect their ability to recover higher costs.

Accounting Metrics

NR0102-08. Amount of legal and regulatory fines and settlements associated with federal pipeline and storage regulations

- .46 The registrant shall disclose the amount (excluding legal fees) of all fines or settlements associated with federal pipeline and storage regulations, including, but not limited to, those related to rates, pipeline access, price gouging, or price fixing.
- Disclosure includes enforcements from the Federal Energy Regulatory Commission (FERC), the U.S. Commodities Futures Trade Commission, and the U.S. Federal Trade Commission.
- .47 Disclosure shall include civil actions (e.g., civil judgment, settlements, or regulatory penalties) and criminal actions (e.g., criminal judgment, penalties, or restitutions) taken by any entity (government, businesses, or individuals).

Note to NR0102-08

- .48 The registrant shall briefly describe the nature (e.g., guilty plea, deferred agreement, or non-prosecution agreement) and context (e.g., price-fixing, pipeline access, etc.) of fines and settlements.
- .49 The registrant shall describe any corrective actions it has implemented as a result of each incident. This may include, but is not limited to, specific changes in operations, management, processes, products, business partners, training, or technology.

Operational Safety, Emergency Preparedness, and Response

Description

Midstream companies operate a vast network of assets that face risks of spills and accidents. Any incident that results in the unintended releases of hydrocarbons could have wide-ranging impacts on the environment, employees, and local communities. As a result of these concerns, new safety regulations related to pipeline and rail operations are emerging. Significant events could create one-time costs from fines and corrective actions and contingent liabilities for remediation or damages in lawsuits. These factors could also erode a company's social license to operate. In order to avoid or minimize such risks, investigations of past incidents show that it is extremely important to develop a strong safety culture, and establish a thorough and systematic approach to safety and risk management. This includes emergency preparedness and response and operational integrity across the company and in relationships with contractors.

Accounting Metrics

NR0102-09. Number of reportable pipeline incidents, percentage significant

- .50 The registrant shall disclose the total number of reportable pipeline accidents and incidents, including those associated with transportation of hazardous liquid systems and those associated with gas transmission, gathering, and distribution.
- .51 Reportable accidents associated with hazardous liquid pipeline systems are defined based on 49 CFR Part §195.50 as:
- Failure in a pipeline system in which there is a release of the hazardous liquid or carbon dioxide transported resulting in any of the following:
 - Explosion or fire not intentionally set by the operator.
 - Release of 5 gallons (19 liters) or more of hazardous liquid or carbon dioxide, except for a release of less than 5 barrels (0.8 cubic meters) resulting from a pipeline maintenance activity if the release is:
 - Not otherwise reportable under 49 CFR Part §195;
 - Not one described in §195.52(a)(4);
 - Confined to company property or pipeline right-of-way; and
 - Cleaned up promptly.
 - Death of any person.
 - Personal injury necessitating hospitalization.
 - Estimated property damage, including cost of clean-up and recovery, value of lost product, and damage to the property of the operator or others, or both, exceeding \$50,000.

.52 Incidents associated with gas transmission, gathering, and distribution are defined based on 49 CFR Part §191.3 as any of the following events:

- An event that involves a release of gas from a pipeline, or of liquefied natural gas, liquefied petroleum gas, refrigerant gas, or gas from an LNG facility, and that results in one or more of the following consequences:
 - A death, or personal injury necessitating in-patient hospitalization
 - Estimated property damage of \$50,000 or more, including loss to the operator and others, or both, but excluding cost of gas lost
 - Unintentional estimated gas loss of three million cubic feet or more
- An event that results in an emergency shutdown of an LNG facility. Activation of an emergency shutdown system for reasons other than an actual emergency does not constitute an incident.
- An event that is significant in the judgment of the operator, even though it did not meet the criteria of the above paragraphs of this definition.

.53 The registrant shall disclose the percentage of reportable accidents that were significant, where a significant accident or incident is defined according to the U.S. Pipeline and Hazardous Materials Safety Administration's (PHMSA) pipeline and hazardous materials safety reporting guidelines as those that resulted in:

- Fatality or injury requiring in-patient hospitalization.
- \$50,000 or more in total costs, measured in 1984 dollars.
- Highly volatile liquid releases of 5 bbls or more or other liquid releases of 50 barrels or more.
- Liquid releases resulting in an unintentional fire or explosion.

NR0102-10. Number of (1) accident releases and (2) non-accident releases (NARs) from rail transportation

.54 The registrant shall disclose the total number of accident releases of hazardous material and the total number of non-accident releases (NARs) of hazardous materials from rail transportation activities, where:

- Hazardous material is defined according to Code of Federal Regulations (CFR) Title 49 as: "A substance or material that the Secretary of Transportation has determined is capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and is designated as hazardous under section 5103 of Federal hazardous materials transportation law (49 U.S.C. 5103)."
- An accident release is defined as a release of hazardous materials, reportable to the Pipeline and Hazardous Materials Safety Administration (PHMSA) via DOT 5800.1 report form.
- A non-accident release is defined according to the Association of American Railroads (AAR) as the unintentional release of a hazardous material while in transportation, including loading and unloading while in railroad possession that is not caused by a derailment, collision or other rail-related accident. NARs consist of leaks, splashes, and other releases from improperly secured or defective valves, fittings, and tank shells, and also include venting of non-atmospheric gases from safety relief devices. (Normal safety venting of atmospheric gases, such as carbon dioxide and nitrogen, is not considered a NAR.)

.55 Where relevant, the registrant should provide a breakdown of spills and releases by type, such as hydrocarbons and hazardous substances.

Note to NR0102-10

.56 The registrant shall discuss its processes, procedures, and strategies to manage non-accident and accident releases.

.57 Relevant topics of discussion include, but are not limited to, the use of management systems, such as the American Chemistry Council's Responsible Care Management System, use of safety technologies, employee training, implementation of work shift limits, and safe-arrival pay incentives.

NR0102-11. Discussion of management systems used to integrate a culture of safety and emergency preparedness throughout the value chain and throughout project lifecycles

.58 Discussion shall include how the registrant integrates a culture of safety and emergency preparedness throughout its value chain, such as through training, joint management by the workforce and leadership, rules and guidelines, and use of technology.

.59 The registrant shall include a description of how emergency preparedness is coordinated amongst business partners (e.g., contractors and sub-contractors).

.60 Disclosure may focus broadly on safety and emergency management systems, but shall specifically address the systems to avoid and manage emergencies, accidents, and incidents that could have catastrophic human health, local community, and environmental impacts.

.61 The midstream oil and gas project lifecycle includes, at a minimum, land acquisition (e.g., right-of-way easement negotiations), site surveys, site development and pipeline installation, revegetation, operation, and decommissioning and removal.

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