

# **Gas Utilities & Distributors**

Sustainability Accounting Standard

INFRASTRUCTURE SECTOR

## Sustainable Industry Classification System® (SICS®) IF-GU

Under Stewardship of the International Sustainability Standards Board

INDUSTRY STANDARD | VERSION 2023-12





### **ABOUT THE SASB STANDARDS**

As of August 2022, the International Sustainability Standards Board (ISSB) of the IFRS Foundation assumed responsibility for the SASB Standards. The ISSB has committed to maintain, enhance and evolve the SASB Standards and encourages preparers and investors to continue to use the SASB Standards.

IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information (IFRS S1) requires entities to refer to and consider the applicability of disclosure topics in the SASB Standards when identifying sustainability-related risks and opportunities that could reasonably be expected to affect an entity's prospects. Similarly, IFRS S1 requires entities to refer to and consider the applicability of metrics in the SASB Standards when determining what information to disclose regarding sustainability-related risks and opportunities.

In June 2023, the ISSB amended climate-related topics and metrics in the SASB Standards to align them with the industry-based guidance accompanying IFRS S2 *Climate-related Disclosures*. In December 2023, the ISSB amended the non-climate-related topics and metrics in connection with the International Applicability of SASB Standards project.

#### **Effective Date**

This version 2023-12 of the Standard is effective for all entities for annual periods beginning or after January 1, 2025. Early adoption is permitted for all entities.

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### INTRODUCTION

## Overview of SASB Standards

The SASB Standards are a set of 77 industry-specific sustainability accounting standards ("SASB Standards" or "Industry Standards"), categorised pursuant to the Sustainable Industry Classification System (SICS).

#### SASB Standards include:

- 1. **Industry descriptions** which are intended to help entities identify applicable industry guidance by describing the business models, associated activities and other common features that characterise participation in the industry.
- 2. **Disclosure topics** which describe specific sustainability-related risks or opportunities associated with the activities conducted by entities within a particular industry.
- 3. **Metrics** which accompany disclosure topics and are designed to, either individually or as part of a set, provide useful information regarding an entity's performance for a specific disclosure topic.
- 4. **Technical protocols** which provide guidance on definitions, scope, implementation and presentation of associated metrics.
- 5. **Activity metrics** which quantify the scale of specific activities or operations by an entity and are intended for use in conjunction with the metrics referred to in point 3 to normalise data and facilitate comparison.

Entities using the SASB Standards as part of their implementation of ISSB Standards should consider the relevant ISSB application guidance.

For entities using the SASB Standards independently from ISSB Standards, 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.

Historically, the *SASB Conceptual Framework* set out the basic concepts, principles, definitions and objectives that guided the SASB Standards Board in its approach to setting standards for sustainability accounting.

### Use of the Standards

SASB Standards are intended to aid entities in disclosing information about sustainability-related risks and opportunities that could reasonably be expected to affect the entity's cash flows, its access to finance or cost of capital over the short, medium or long term. An entity determines which Industry Standard(s) and which disclosure topics are relevant to its business, and which associated metrics to report. In general, an entity should use the SASB Standard specific to its primary industry as identified in SICS®. However, companies with substantial business in multiple SICS® industries should refer to and consider the applicability of the disclosure topics and associated metrics in additional SASB Standards.

The disclosure topics and associated metrics contained in this Standard have been identified as those that are likely to be useful to investors. However, the responsibility for making materiality judgements and determinations rests with the reporting entity.

## **Industry Description**

The Gas Utilities & Distributors industry consists of gas distribution and marketing entities. Gas distribution involves operating local, low-pressure pipes to transfer natural gas from larger transmission pipes to end users. Gas marketing entities are gas brokers that aggregate and deliver natural gas in quantities that meet the needs of various customers, generally through other entities' transmission and distribution lines. A relatively smaller portion of this industry is involved in propane gas distribution; therefore, this standard is focused on natural gas distribution. Both types of gas are used for heating and cooking by residential, commercial and industrial customers. In regulated markets, the utility is granted a full monopoly over the distribution and sale of natural gas. A regulator must approve the rates utilities charge to prevent the abuse of their monopoly position. In deregulated markets, distribution and marketing are separated legally, and customers have a choice of which entity from which to buy their gas. In this case, a common carrier utility is guaranteed a monopoly only over distribution and is required legally to transmit all gas equitably along its pipes for a fixed fee. Overall, entities must provide safe, reliable, low-cost gas, while effectively managing their social and environmental impacts, such as community safety and methane emissions.

Note: The Gas Utilities & Distributors industry does not include gas transmission entities that transport high pressure natural gas over long distances from the wellhead. Gas transmission entities are included in the Oil & Gas—Midstream (EM-MD) industry. Furthermore, the Gas Utilities & Distributors industry covers activities related only to gas provision and not to electricity provision. Some utilities may operate in both gas and electricity markets. Entities undertaking activities related to electricity generation or distribution also should consider the topics and metrics in the Electric Utilities & Power Generators (IF-EU) industry.

### SUSTAINABILITY DISCLOSURE TOPICS & METRICS

Table 1. Sustainability Disclosure Topics & Metrics

TOPIC	METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy Affordability	Average retail gas rate for (1) residential, (2) commercial, (3) industrial customers, and (4) transportation services only	Quantitative	Rate	IF-GU-240a.1
	<ul> <li>(1) Number of residential customer gas disconnections for non-payment,</li> <li>(2) percentage reconnected within 30 days <sup>1</sup></li> </ul>	Quantitative	Number, Percentage (%)	IF-GU-240a.3
	Discussion of impact of external factors on customer affordability of gas, including the economic conditions of the service territory	Discussion and Analysis	n/a	IF-GU-240a.4
End-Use Efficiency	Customer gas savings from efficiency measures, by market <sup>2</sup>	Quantitative	Million British Thermal Units (MMBtu)	IF-GU-420a.2
Integrity of Gas Delivery Infrastructure	Number of (1) reportable pipeline incidents, (2) corrective actions received and (3) violations of pipeline safety statutes <sup>3</sup>	Quantitative	Number	IF-GU-540a.1
	Percentage of distribution pipeline that is (1) cast or wrought iron and (2) unprotected steel	Quantitative	Percentage (%) by length	IF-GU-540a.2
	Percentage of gas (1) transmission and (2) distribution pipelines inspected	Quantitative	Percentage (%) by length	IF-GU-540a.3
	Description of efforts to manage the integrity of gas delivery infrastructure, including risks related to safety and emissions	Discussion and Analysis	n/a	IF-GU-540a.4

Table 2. Activity Metrics

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Number of: (1) residential, (2) commercial, and (3) industrial customers served <sup>4</sup>	Quantitative	Number	IF-GU-000.A

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Note to IF-GU-240a.3 - The entity shall discuss how policies, programmes and regulations affect the number and duration of residential customer disconnections.

Note to IF-GU-420a.2 – The entity shall discuss customer efficiency measures that are required by regulations for each of its relevant

<sup>&</sup>lt;sup>3</sup> Note to **IF-GU-540a.1** – The entity shall discuss notable incidents such as those that affected a significant number of customers, created extended disruptions to service, or resulted in serious injury or death.

<sup>&</sup>lt;sup>4</sup> Note to **IF-GU-000.A** – The number of customers served for each category shall be the number of meters billed for residential, commercial and industrial customers.

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ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Amount of natural gas delivered to: (1) residential customers, (2) commercial customers, (3) industrial customers, and (4) transferred to a third party <sup>5</sup>	Quantitative	Million British Thermal Units (MMBtu)	IF-GU-000.B
Length of gas (1) transmission and (2) distribution pipelines <sup>6</sup>	Quantitative	Kilometres (km)	IF-GU-000.C

Note to IF-GU-000.B – The quantity of natural gas delivered to residential, commercial and industrial customers shall be disclosed by bundled gas and transportation service only.

Note to IF-GU-000.C – Transmission pipeline is defined as a pipeline, other than a gathering line, that: transports gas from a gathering line or storage facility to a distribution centre, storage facility or large volume customer that is not downstream from a distribution centre; (2) operates at a hoop stress of 20% or more of specified minimum yield strength (SMYS); or (3) transports gas within a storage field. A distribution pipeline is defined as a pipeline other than a gathering or transmission line.

## **Energy Affordability**

### **Topic Summary**

An objective of gas utilities is to deliver natural gas to customers in a safe, reliable and environmentally responsible manner. Entities in the industry manage these potentially competing priorities while maintaining favourable relations with customers and regulators—and ultimately to earn appropriate shareholder returns. From the utility customer perspective, the affordability of energy is challenging to balance, because it often conflicts with other core objectives. Utility energy bills generally are perceived to be increasingly more expensive for low-income customers (affordability is determined by both the net cost of energy bills and the underlying economics of customers). Ensuring utility bills remain affordable is crucial for utilities in building trust (intangible asset value) with regulators and customers. The quality of regulatory relations is an important value driver for utilities, and one of the issues analysed closely by investment analysts. Regulators' willingness, or lack thereof, to grant rate requests, rate structure modifications, cost recovery and allowed returns is a primary determinant of financial performance and investment risk. Effectively managing affordability may provide opportunities to grow capital investment, revise rate structures favourably and increase allowed returns. Furthermore, utilities that ineffectively manage affordability increasingly face customers reducing their reliance upon natural gas (or reducing energy needs) and pursuing alternative energy sources (for example, industrial customers' use of combined heat and power). Managing affordability involves operating an efficient business with a comprehensive, long-term strategy, as well as working closely with regulators and public policymakers on rate structures and, potentially, bill-assistance programmes. Although utility business models and rate structures largely determine the precise nature of the financial effects, affordability is a critical business issue for utilities managing, maintaining and growing their customer bases, building intangible asset value, creating investment and return opportunities, and ultimately delivering shareholder returns.

#### **Metrics**

# IF-GU-240a.1. Average retail gas rate for (1) residential, (2) commercial, (3) industrial customers, and (4) transportation services only

- 1 The entity shall disclose its average bundled gas rate per million British thermal units (MMBtu) of bundled gas delivered to retail customers.
  - 1.1 Bundled gas is defined as gas delivered to retail customers where the entity provides all services to the customer from procurement to retail distribution, which may include transmission, storage, distribution and retail services (customers that receive such services may be referenced as core customers).
  - 1.2 The entity shall calculate its average bundled retail gas rate as the total revenue directly resulting from bundled gas delivered to retail customers divided by the corresponding amount of gas delivered (in MMBtu).
- 2 The entity shall disclose its average retail gas rate separately for each type of customer, classified as (1) residential, (2) commercial and (3) industrial.
  - 2.1 The scope of each customer type shall be consistent with the entity's financial reporting.

- 2.2 Each customer type shall be disclosed as an aggregate for all customers within that respective customer type.
- 2.3 If the entity's financial reporting combines commercial and industrial customers into one category, then the entity may combine the commercial and industrial customer types.
- 2.4 The entity may disclose sub-classifications of customer types. For example, in addition to the average bundled gas rate for commercial customers, the entity may provide further disclosures by small commercial, large commercial, firm or interruptible customers.
- 3 The entity shall disclose its average gas rate for (4) transportation services only per MMBtu of gas delivered to retail customers.
  - 3.1 Transportation services only is defined as gas moved through the entity's system for a fee for the benefit of an outside supplier selling to a customer inside the utility's distribution grid (customers that receive such services may be considered to be participating in customer choice programmes).
  - 3.2 The entity shall calculate its average gas rate for transportation services only as the total revenue directly resulting from gas transportation services only, provided to retail customers divided by the corresponding amount of gas delivered (in MMBtu).
- 4 The entity may disclose additional customer types if such customer types exist outside the scope of the customer types described above.

# IF-GU-240a.3. (1) Number of residential customer gas disconnections for non-payment, (2) percentage reconnected within 30 days

- 1 The entity shall disclose (1) the total number of gas disconnections among residential customers during the reporting period that resulted from non-payment.
  - 1.1 A disconnection is defined as the entity, or its service provider, intentionally terminating a customer's access to gas.
  - 1.2 Disconnections occurring for more than one reason shall be included if non-payment (or under-payment) is a contributing cause of the disconnection.
- 2 The entity shall disclose (2) the percentage of disconnections reconnected within 30 days.
  - 2.1 The percentage shall be calculated as the number of residential customers previously disconnected, which were reconnected within 30 days of the date of the disconnection, divided by the total number of residential customers disconnected during the reporting period as a result of non-payment.
  - 2.2 A reconnection is defined as the entity, or its service provider, intentionally reinstating a customer's access to gas, which was previously disconnected.
    - 2.2.1 Reconnections may occur for reasons including bill payment, the establishment of a bill payment plan, or the use of a bill-assistance programme.

2.3 The scope of the disclosure may include reconnections that occur after the end of the reporting period, but the entity shall not double-count reconnections for more than one discrete reporting period.

#### Note to IF-GU-240a.3

- The entity shall discuss how policies, programmes and regulations affect the number and duration of residential customer disconnections.
  - 1.1 Policies include entity-level policies that govern the conditions under which the entity may (or may not) disconnect residential customers.
  - 1.2 Programmes include those administered by jurisdictions, utility commissions or entities designed to improve the affordability of gas among residential customers or reduce the number or duration of residential customer disconnections.
  - 1.3 Regulations include those enforced by jurisdictions, utility commissions or entities designed to improve the affordability of gas among residential customers or reduce the number or duration of residential customer disconnections.

# IF-GU-240a.4. Discussion of impact of external factors on customer affordability of gas, including the economic conditions of the service territory

- 1 The entity shall describe the external factors that cause, or are reasonably likely to cause, a significant change in the affordability of gas among the entity's retail customers.
  - 1.1 External factors are defined as influences outside the entity's direct control.
  - 1.2 The scope of external factors includes factors that directly affect current or future gas rates, or factors that may impact customers' current or future ability to pay gas bills (with no direct effect on gas rates).
  - 1.3 External factors may include geography, climate, weather, regulations, public policy and public purpose programmes, regardless of whether such factors directly relate to affordability.
  - 1.4 At a minimum, external factors shall include the prevailing economic conditions in the service territory.
    - 1.4.1 The entity may disclose the median household income, poverty rates, employment rates, or other quantitative or qualitative data describing the economic conditions of the service territory.
- 2 For each external factor, in addition to a description, the entity shall briefly describe:
  - 2.1 the frequency and magnitude with which the factor affects gas affordability for the entity's customers; and
  - 2.2 the trend in how the factor affects gas affordability for the entity's customers.
- 3 The entity shall describe the risks and opportunities that may arise from the external factors.

- 3.1 Risks may include customer non-payment of gas bills, cost recovery uncertainty, reputational value, and regulations, public policy or public purpose programmes that may generate adverse financial consequences.
- 3.2 Opportunities may include customer growth, capital investment opportunities, reputational value, and regulations, public policy or public purpose programmes that may generate positive financial consequences.
- 4 The scope of the disclosure includes the affordability of gas for all retail customers within the entity's service territory, which may include residential, commercial, industrial and agricultural customers.
  - 4.1 The entity may prioritise low-income residential customers in its disclosures.
- 5 The entity may describe how its average rates, average bills or customer disconnections compare to other utilities in the industry.

## **End-Use Efficiency**

### **Topic Summary**

Natural gas produces fewer greenhouse gas (GHG) emissions than other fossil fuels. Expanding its use in the economy may be an important strategy for many governments and regulators striving to reduce GHG emissions. However, despite the relatively lower emissions, the natural gas value chain still produces meaningful levels of GHG emissions overall. As policymakers and regulators seek to mitigate climate change, the efficient consumption of natural gas will be an important long-term theme. Energy efficiency is a low-lifecycle-cost method to reduce greenhouse gas (GHG) emissions. Utilities can offer customers a wide range of options to promote energy efficiency, including providing rebates for energy-efficient appliances, weatherising customers' homes and educating customers on energy saving methods. Overall, entities that sponsor efficiency initiatives may reduce the downside risks from demand fluctuations, gain returns on needed investments, decrease operating costs and earn higher risk-adjusted returns over the long term.

#### **Metrics**

### IF-GU-420a.2. Customer gas savings from efficiency measures, by market

- The entity shall disclose the total amount of gas savings delivered to customers, in million British thermal units (MMBtu), from energy efficiency measures during the reporting period for each of its markets.
  - 1.1 Markets are defined as operations that are subject to distinct public utility regulatory oversight.
  - 1.2 Gas savings are defined according to the gross savings approach as the changes in energy consumption or demand that result from programme-related actions taken by participants in an efficiency programme, regardless of why they participated.
    - 1.2.1 The entity may list those markets where it reports gas savings on a net savings basis, and thus may be different from the figures disclosed here.
    - 1.2.2 Net gas savings are defined as changes in consumption specifically attributable to an energy efficiency programme and would not have happened otherwise in the absence of the programme.
- Gas savings shall be calculated on a gross basis but consistent with the methodology set forth in jurisdictional evaluation, measurement and verification (EM&V) regulations in which such savings occur.
- 3 The scope of gas savings from efficiency measures includes savings delivered directly by the entity and, when regulations provide, savings substantiated by purchases of efficiency savings credits.
  - 3.1 For any savings from efficiency measures delivered directly by the entity, any efficiency savings credits shall be retained (not sold) and retired on behalf of the entity for the entity to claim them as delivered gas savings.
  - 3.2 For efficiency savings credits that are purchased, the agreement shall explicitly include and convey that credits be retained and retired on behalf of the entity for the entity to claim them.

The entity shall consider guidance on regulations as a normative reference, thus any updates made year-on-year shall be considered updates to this guidance.

#### Note to IF-GU-420a.2

- The entity shall discuss customer efficiency measures required by regulations for each of its relevant markets, including a discussion of:
  - The amount or percentage of gas savings from efficiency measures required by regulations for each market 1.1
  - Instances of noncompliance with gas savings obligations 1.2
    - In such instances, the entity shall disclose the difference between the gas savings delivered and the 1.2.1 amount required by the regulation.
  - Gas savings delivered that exceed those required by regulations and that resulted in the entity receiving energy efficiency performance incentives, including the value of any such incentives
- The entity shall discuss the policy mechanisms in place for each market that allows for or incentivises energy efficiency, including a discussion of the benefits, challenges and financial effects associated with such mechanisms.
- Relevant policy mechanisms to discuss may include:
  - 3.1 Deferral decoupling
  - 3.2 Current period decoupling
  - 3.3 Single fixed variable rates
  - 3.4 Lost revenue adjustments
  - 3.5 Energy efficiency feebates
- The entity may discuss incentives developed for its customers that promote end-use efficiency, which may include energy efficiency rebates and other measures to subsidise customer energy efficiency.

## Integrity of Gas Delivery Infrastructure

### **Topic Summary**

Operating a vast network of gas pipelines, equipment and storage facilities requires a multifaceted, long-term approach to ensuring infrastructure integrity and managing related risks. Although customers depend on reliable gas supplies, entities manage substantial risks-including those related to human health, property and greenhouse gas (GHG) emissions—that result from operating gas distribution networks and related infrastructure. Ageing infrastructure, inadequate monitoring and maintenance, and other operational factors may result in gas leaks. Gas leak safety-related risks, such as losses of containment, may result in fires or explosions that can be particularly dangerous in urban areas where entities often operate. Furthermore, gas leaks also result in fugitive emissions (methane), causing adverse environmental impacts. Regulated gas utilities generally incur no direct costs for gas leaks, because the cost of gas typically is passed on to customers (though this may vary by region). However, gas leaks that result in safety-related risks or fugitive emissions may affect entities financially through a variety of regulatory, legal and product demand channels. Accidents, particularly fatal accidents, may result in negligence claims against entities, leading to costly court battles and fines. GHG emissions may result in increased regulatory scrutiny a critical element directly connected to financial performance, given the importance of regulatory relations—and potential fines and penalties. Importantly, regulated gas utilities can financially benefit from capital investment opportunities to improve performance and mitigate risks related to safety and emissions, which can be factored into their rate base. Entities manage such risks through pipeline replacements, regular inspections and monitoring, employee training and emergency preparedness, investments in technology, and other strategies such as working closely with regulators. In response to concerns about ageing infrastructure, many entities are seeking ways to expedite the replacement permitting and approval process, especially in cases where pipelines are located near densely populated areas.

#### Metrics

# IF-GU-540a.1. Number of (1) reportable pipeline incidents, (2) corrective actions received and (3) violations of pipeline safety statutes

- 1 The entity shall disclose the number of reportable pipeline incidents, where:
  - 1.1 Reportable incidents are defined as events that involve a release of gas from a pipeline and result in one or more of the following consequences: a death or personal injury necessitating in-patient hospitalisation; estimated property damage equivalent to US\$50,000 or more or the equivalent in the entity's presentation currency, including losses to the operator, losses to others, or both, but excluding the cost of gas lost; an unintentional estimated gas loss of three million cubic feet or more; or an event that is significant in the judgement of the operator.
- 2 The entity shall disclose the number of violations of pipeline safety statutes where:
  - 2.1 A corrective action is issued when a particular pipeline facility is found to be hazardous to life, property or the environment. A corrective action may include suspended or restricted use of the facility, physical inspection, testing, repair, replacement or other appropriate action.

- 2.2 If corrective actions are not issued by applicable jurisdictional legal or regulatory authorities, the entity shall disclose the number that contain a statement of the provisions of the laws, regulations, or orders the entity is alleged to have violated and a statement of the evidence upon which the allegations are based.
- 3 The entity shall disclose the number of violations of pipeline safety statutes where:
  - 3.1 A violation of pipeline safety statute is defined as a violation of jurisdictional pipeline safety protocol considered to be hazardous to life, property or the environment and that results in the receipt of a notice or warning.
- 4 The entity shall disclose the applicable jurisdictional law or regulation used to define reportable pipeline incidents, corrective actions and pipeline safety violations.

#### Note to IF-GU-540a.1

- 1 The entity shall discuss notable incidents such as those that affected a significant number of customers, created extended disruptions to service or resulted in a 'serious incident'.
  - 1.1 Serious incidents are defined as incidents that resulted in a fatality or an injury requiring in-patient hospitalisation.
- 2 For such incidents, the entity may provide:
  - 2.1 A description and cause of the incident
  - 2.2 The total population affected by the incident
  - 2.3 The costs associated with the incident
  - 2.4 Actions taken to mitigate the potential for future service interruptions
  - 2.5 Any other significant outcomes (for example, legal proceedings, serious injuries or fatalities)

# IF-GU-540a.2. Percentage of distribution pipeline that is (1) cast or wrought iron and (2) unprotected steel

- The entity shall disclose the percentage, by length, in kilometres, of its natural gas pipelines that are (1) cast or wrought iron, and separately, (2) unprotected steel.
  - 1.1 A distribution pipeline is defined as a pipeline other than a gathering or transmission line, where:
    - 1.1.1 A gathering line is defined as a pipeline that transports gas from a production facility to a transmission line or main line
    - 1.1.2 A transmission line is defined as a pipeline, other than a gathering line, that (1) transports gas from a gathering line or storage facility to a distribution centre, storage facility or large-volume customer that is not downstream from a distribution centre; (2) operates at a hoop stress of 20% or more of the specified minimum yield strength (SMYS); or (3) transports gas within a storage field

- 1.2 Cast or wrought iron is defined as iron heated to its melting point and poured into moulds and cannot be moulded further or screwed.
- 1.3 Unprotected steel is defined as steel without corrosion protection.
- 2 The percentage of (1) cast or wrought iron distribution pipelines shall be calculated as the total length of cast or wrought iron pipelines the entity owns or operates divided by the total length of distribution pipelines the entity owns or operates.
- 3 The percentage of (2) unprotected steel distribution pipelines shall be calculated as the total length of unprotected steel pipelines the entity owns or operates divided by the total length of distribution pipelines the entity owns or operates.
- 4 The entity may discuss its pipeline replacement rates, its use of polyethylene pipes, or other efforts to reduce fugitive emissions and leaks and improve the safety of its distribution pipelines.

# IF-GU-540a.3. Percentage of gas (1) transmission and (2) distribution pipelines inspected

- 1 The entity shall disclose the percentage, by length, of gas (1) transmission pipelines, and separately, (2) distribution pipelines inspected during the reporting period.
  - 1.1 A transmission pipeline is defined as a pipeline, other than a gathering line, that (1) transports gas from a gathering line or storage facility to a distribution centre, storage facility or large-volume customer that is not downstream from a distribution centre; (2) operates at a hoop stress of 20% or more of the specified minimum yield strength (SMYS); or (3) transports gas within a storage field.
  - 1.2 A distribution pipeline is defined as a pipeline other than a gathering or transmission line.
- 2 Inspection activities include:
  - 2.1 Internal inspection tool(s) capable of detecting corrosion and any other threats to which the covered segment is susceptible
  - 2.2 Pressure test(s)
  - 2.3 Direct assessment to address threats of external corrosion, internal corrosion or stress corrosion cracking
  - 2.4 Other technology that an operator demonstrates can provide an equivalent understanding of pipeline condition
    - 2.4.1 If other technologies were used by the entity to conduct inspections, the entity shall disclose which technology was used.
- 3 The percentage is calculated as the length of gas pipelines inspected divided by the total length of gas pipelines.

# IF-GU-540a.4. Description of efforts to manage the integrity of gas delivery infrastructure, including risks related to safety and emissions

- 1 The entity shall describe its efforts to manage the integrity of gas delivery infrastructure.
  - 1.1 Gas delivery infrastructure may include transmission pipelines, distribution pipelines, storage facilities, compressor stations, metering and regulation stations, and liquid natural gas facilities.
  - 1.2 Efforts may include those related to employee training, emergency preparedness, process safety and asset integrity management.
  - 1.3 Relevant information to provide may include the use of standards, industry best practices, benchmarking and participation in third-party initiatives.
- 2 The entity shall describe how it integrates a culture of safety and emergency preparedness throughout its project lifecycles, such as through training, oversight of workforce, rules and guidelines for communicating risks, and use of technology.
  - 2.1 The project lifecycle includes, at a minimum, pipeline design, construction, commissioning, operation, maintenance and decommissioning.
- 3 The entity shall describe its approach to ensuring pipeline operators are qualified or supervised when performing a covered task, including ongoing reviews of operator qualifications, assurance that unqualified workers are properly supervised, and efforts to maintain enough qualified pipeline operators, where:
  - 3.1 Pipeline operators are defined as those people who engage in the transportation of gas.
  - 3.2 A pipeline operator is considered qualified to perform covered tasks when the individual has been evaluated, can perform the assigned covered task, and can recognise and react to abnormal operating conditions.
    - 3.2.1 A covered task is defined as an activity, identified by the operator, that is performed on a pipeline facility, is an operations or maintenance task, is performed as a requirement of maintaining regulatory compliance, and affects the operation or integrity of a pipeline.
- 4 The entity shall describe its efforts to mitigate risks and promote emergency preparedness, such as coordinating with third parties (for example, sewer line and buried power line developers), performing timely pipeline inspections, repairing ageing infrastructure and maintaining current pipeline operator certifications.
- 5 The entity shall describe its efforts to manage risks related to human health and safety, and emissions, including fugitive emissions and process emissions, that arise from the integrity of gas delivery infrastructure.
  - 5.1 Fugitive emissions are defined as natural gas (primarily methane) emissions resulting from leaks or other types of unintended or irregular releases.
  - 5.2 Process emissions are defined as natural gas emissions resulting from intentional releases.

- 5.3 Disclosure shall include relevant strategies, plans or targets related to reductions in fugitive emissions and process emissions, the entity's ability to measure such emissions, the activities and investments required to achieve the plans, and any risks or limiting factors that might affect achievement of the plans or targets.
- Disclosure may focus broadly on safety and emergency management systems, but it specifically shall address operations in high consequence areas and the systems to avoid and manage emergencies, accidents and incidents that could have catastrophic impacts on human health, the local community and the environment.
- The entity shall discuss direct or indirect financial opportunities related to the integrity of gas delivery infrastructure, which may include improvements to stakeholder relations, opportunities for capital investments, reduction in customer rates through improved operational efficiency, and reduced risks of regulatory or civil fines or settlements.
- The entity may disclose the following:
  - 8.1 Pipeline replacement rates
  - 8.2 Average response time for gas emergencies
  - 8.3 Open Grade 2 and 2+ leaks
  - 8.4 Fugitive emissions, including the technique(s) employed to measure leakage, the amount of leakage calculated according to each technique it employs, and the regulations to which its gas leakage is subject.
  - 8.5 Process emissions
  - 8.6 Other efforts designed to reduce emissions or improve the safety of its gas delivery infrastructure

