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DAIRY METHANE DISCLOSURE

A guide for publicly disclosing dairy methane emissions

Environmental Defense Fund
Pure Strategies Inc.



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Authors

Environmental Defense Fund

Vrashabh Kapate

Katie Anderson

Pure Strategies Inc.

Ariella Sela

Natalie Kaner

Environmental Defense Fund

One of the world's leading international nonprofit organizations, [Environmental Defense Fund](#) (EDF), creates transformational solutions to the most serious environmental problems. To do so, EDF links science, economics, law, and innovative private-sector partnerships. With more than 3 million members and offices in the United States, China, Mexico, Indonesia, and the European Union, EDF's scientists, economists, attorneys, and policy experts are working in 28 countries to turn our solutions into action.



Dairy Methane Action Alliance

The [Dairy Methane Action Alliance](#) (DMAA) is a global initiative to accelerate action and transparency on methane across the dairy sector. By joining this groundbreaking initiative, signatory companies commit to account for and publicly disclose methane emissions within their dairy supply chains and to publish and implement a comprehensive methane action plan. Environmental Defense Fund and the sustainability nonprofit Ceres will help to ensure companies are making progress against key milestones.



At the time of printing this guide in the fall of 2024, DMAA signatories include: Bel Group, Clover Sonoma, Danone, General Mills, Kraft Heinz, Lactalis USA, Nestlé, and Starbucks.



Pure Strategies Inc.

[Pure Strategies](#) is a sustainability consulting firm that empowers brands, retailers, and NGOs to realize meaningful environmental and social improvement. Founded in 1998, Pure Strategies helps companies on their sustainability journey with a focus on goal setting, effective management strategies, and redesigning products and supply chains that deliver value to the business and society.



Acknowledgments

EDF would like to thank the following organizations for contributing to this guide: Bel Group, Clover Sonoma, Danone, General Mills, Kraft Heinz, Lactalis USA, Nestlé, and Starbucks.

Report design: C.G. Coleman

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The complete report is available online at <https://business.edf.org/dairy-methane-disclosure>.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	6
INTRODUCTION	9
Background	9
Purpose of the guide	10
DAIRY METHANE DISCLOSURE METRICS	12
METHANE DISCLOSURE RECOMMENDATIONS	15
CONCLUSION	19
APPENDICES	21
Appendix 1: Assessing the landscape of methane disclosures	21
Appendix 2: Additional disclosure methods	23
REFERENCES	29

EXECUTIVE SUMMARY

Methane emissions from agriculture, in particular from dairy cattle, need to be a major focus for emissions-reduction activities globally, given methane's high potency and short-lived nature in the atmosphere. Dairy sector companies leading on climate are increasingly aware of the critical role they must play in driving methane reductions, and as a result, are prioritizing methane mitigation by measuring and disclosing their methane emissions, setting emissions reduction targets, assessing their impacts, and engaging on farm to drive reductions. The Dairy Methane Action Alliance (DMAA) and Environmental Defense Fund (EDF) are developing guidance to help companies eager to take a leadership position on dairy methane work through every stage of this process.

Building on separate guidance on [dairy methane accounting](#), this guide aims to help companies determine which dairy methane emissions metrics to disclose and how to publicly disclose them in alignment with dairy methane disclosure best practices and leading environmental, social, and governance (ESG) reporting frameworks.

Dairy methane disclosure overview

WHY disclose methane emissions

- ✓ **Ensure accountability and transparently communicate** methane emissions impacts and activities publicly to stakeholders, including investors, regulatory bodies, customers, civil society, and others
- ✓ **Track progress** over time and **identify opportunities** to target reduction efforts
- ✓ Be an **industry leader** on climate disclosure and **catalyze other companies to follow** suit

WHAT to disclose

- ✓ Reporting year
- ✓ Total scope 1, 2 and 3 emissions
- ✓ Scope 1 methane emissions by source (e.g., enteric, manure management, etc.)
- ✓ Scope 3 methane emissions by source (e.g., enteric, manure management, etc.)
- ✓ Scope 1, 2 and 3 greenhouse gas (GHG) reduction targets
- ✓ Methane-specific targets, if any
- ✓ Annual actions and progress from previous year

HOW to disclose

Frequency: Annual






























Availability: Must be publicly available

WHERE to disclose

Essential public reporting	Additional private reporting
<ul style="list-style-type: none">✓ Public web-based CSR/ESG/impact report	<ul style="list-style-type: none">✓ Financial disclosures, as required by applicable regulations✓ Reporting platforms and frameworks: CDP (platform), ISSB, SASB, TCFD, GRI (frameworks)✓ Customer reporting platforms: Walmart Project Gigaton, THESIS, others

FIGURE 1

Methane-emissions disclosure opportunities within key reporting platforms, frameworks and standards.

Key			
Directly applicable question or standard			
No explicit requirement, but can still be disclosed			
			
Reporting year			
Total Scope 1 emissions			
Scope 1 methane emissions			
Total Scope 3 emissions			
Scope 3 methane emissions			
GHG reduction targets			
Methane-specific targets			
Annual actions and progress			



INTRODUCTION

INTRODUCTION

Background

Methane emissions from agriculture are a critical hotspot to focus emissions-reduction activities. This is due to methane's high greenhouse gas (GHG) potency and relatively short lifespan in the atmosphere, as compared to carbon dioxide. Dairy cattle represent approximately 10% of global methane emissions, with key sources of methane being enteric fermentation and manure management.¹

Because of methane's short-lived nature and high potency compared to carbon dioxide, reducing it can help drive immediate reductions in the rate of warming in the next few decades. At the same time, we can work to curb carbon dioxide emissions to meet the 1.5C target, per the Paris Agreement.

Increasingly more dairy sector companies understand their critical role in driving methane reductions across their operations and value chains. With this, we see companies making progress on assessing their impacts, setting science-based GHG emissions reduction targets, and implementing meaningful on-farm action.

As the first step in the Dairy Methane Action Alliance (DMAA), Environmental Defense Fund (EDF) published [Dairy Methane Accounting: A guide for disaggregating dairy methane emissions from existing corporate greenhouse gas inventories](#), which is aimed at helping dairy sector companies disaggregate and track their dairy methane emissions using their existing GHG inventories.

As the next step, leaders across the dairy industry recognize that publicly disclosing these dairy methane emissions represents a crucial opportunity to increase transparency and accountability to external stakeholders, including investors, regulatory bodies, customers, civil society, and others. Methane-specific disclosure can help inform where to target reduction efforts and track how dairy companies and the sector as a whole are progressing toward goals. Public disclosure is also key to ensuring accountability within a landscape of growing investor focus on sustainability, new sustainability-disclosure regulations, and consumer demands for transparency.

While both voluntary and regulatory environmental, social, and governance (ESG) reporting continue to evolve to meet the needs of different stakeholder groups, key reporting frameworks and regulations still lack guidance on separately reporting on agricultural (dairy) methane impacts. The United Nations [Integrity Matters: Net Zero Commitments By Businesses, Financial Institutions, Cities and Regions](#) report, however, recommends companies set separate GHG reduction targets by gas, including setting separate targets for reducing fossil methane and biogenic methane.

As companies in the dairy industry work to drive progress on methane reductions and differentiate themselves in the marketplace, there is a clear need for streamlined guidance for reporting on agricultural dairy methane. In alignment with recommendations from the [Integrity Matters](#) report, this DMAA guide outlines best practices for how dairy sector companies can publicly disclose their dairy methane emissions.

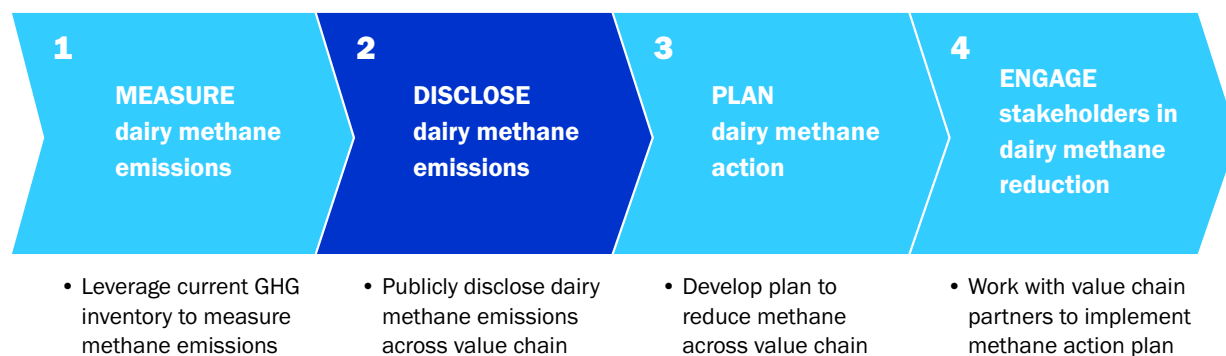
Purpose of the guide

This guide aims to assist companies in the dairy industry to publicly disclose their agricultural dairy methane impacts in a way that addresses the most critical metrics for demonstrating progress and aligns with leading disclosure platforms and frameworks and industry best practice guidance. This methane disclosure guide includes:

- **Dairy methane disclosure metrics**, which are a set of key indicators to guide corporate public disclosure on dairy methane. These metrics can be used in conjunction with existing climate disclosure schemes and/or as part of corporate ESG reports.
- **Methane disclosure recommendations** for how and where companies can best report on dairy methane climate impacts in alignment with leading disclosure platforms and frameworks as well as, at a minimum, embedding methane disclosure into sustainability or ESG reports.

Using this guidance, companies will be able to identify what information related to dairy methane is most important to publicly disclose. Companies can then disclose these impacts within their sustainability or ESG reports or to public disclosure platforms or frameworks. Doing so will showcase leadership and support improved trust and transparency. In alignment with the DMAA initiative trajectory summarized in Figure 2, this disclosure guide (stage 2) will be followed by a guide for developing dairy methane action plans (stage 3) and a guide outlining best practices for engaging stakeholders on dairy methane reduction efforts (stage 4).

FIGURE 2
Dairy Methane Action Alliance (DMAA) initiative trajectory





DAIRY METHANE DISCLOSURE METRICS

DAIRY METHANE DISCLOSURE METRICS

Table 1 below outlines the key disclosure metrics that support transparent reporting and tracking of progress on dairy methane impacts. While reporting against the “essential” metrics below provides adequate transparency to understand a company’s methane impacts, this list also includes “additional” disclosures, which represent an opportunity to demonstrate further climate leadership. Additionally, metric 15 in the table below asks companies to report on actions and progress taken toward dairy methane reduction. While this is an “additional” disclosure for a company’s first year of methane tracking, reporting on metric 15 is important to disclose progress in subsequent years. More detail on dairy methane action planning and how to report on progress is provided in the DMAA [dairy methane action plan \(DMAP\) guide](#).

The metrics presented in Table 1 were selected as relevant indicators after assessing the landscape of evolving ESG reporting regulations, frameworks, and guidelines. See [Appendix 1](#) for additional details. These dairy methane disclosure metrics were selected because they:

- Fill current gaps in existing reporting regulations and frameworks
- Define the scope of corporate dairy methane emissions
- Highlight dairy methane hotspots
- Allow for emissions tracking over time
- Provide enough detail to understand how mitigation actions would impact methane emissions

TABLE 1
Key dairy methane disclosure metrics

Metric number	Essential or additional disclosures	Metric	Description	Unit of measurement
Metric 1	Essential	Reporting year and year of last methane disclosure report	Year for which data is applicable and previous reporting year	Start date to end date (totaling one year)
Metric 2	Essential	Total Scope 1 GHG emissions	Total Scope 1 GHG emissions in reporting year	Metric tons of CO ₂ e; GWP source used (e.g., IPCC Sixth Assessment Report – AR6 – 100 year)
Metric 3	Essential	Scope 1 agricultural dairy methane emissions	Total Scope 1 cradle-to-farm gate dairy methane emissions in reporting year broken out by source: enteric fermentation, manure management, feed production, other (if applicable)	Metric tons of CO ₂ e; GWP source used; metric tons methane (CH ₄); percent each source represents of total
Metric 4	Essential	Percentage of Scope 1 emissions from agricultural dairy methane	Scope 1 agricultural dairy methane emissions divided by total Scope 1 GHG emissions in reporting year (using CO ₂ e)	Percentage
Metric 5	Additional	Total Scope 1 methane emissions	Total Scope 1 methane emissions in reporting year broken out by source: e.g., agriculture, fossil fuels, waste (landfilling), biofuels, biomass burning, etc.	Metric tons of CO ₂ e; GWP source used; metric tons methane (CH ₄); percent each source represents of total

Metric number	Essential or additional disclosures	Metric	Description	Unit of measurement
Metric 6	Essential	Total Scope 3 GHG emissions	Total Scope 3 GHG emissions in reporting year	Metric tons of CO ₂ e; GWP source used
Metric 7	Essential	Scope 3 agricultural dairy methane emissions	Total Scope 3 cradle-to-farm gate dairy methane emissions in reporting year broken out by source: enteric fermentation, manure management, feed production, other (if applicable)	Metric tons of CO ₂ e; GWP source used; metric tons methane (CH ₄); percent each source represents of total
Metric 8	Essential	Percentage of Scope 3 emissions from agricultural dairy methane	Scope 3 agricultural dairy methane emissions divided by total Scope 3 GHG emissions in reporting year (using CO ₂ e)	Percentage
Metric 9	Additional	Total Scope 3 methane emissions	Total Scope 3 methane emissions in reporting year broken out by source: e.g., agriculture, fossil fuels, waste (landfilling), biofuels, biomass burning, etc.	Metric tons of CO ₂ e; GWP source used; metric tons methane (CH ₄); percent each source represents of total
Metric 10	Essential	Total Scope 1, 2, and 3 GHG emissions	Total Scope 1, 2, and 3 GHG emissions in reporting year	Metric tons of CO ₂ e; GWP source used
Metric 11	Essential	Percentage of Scope 1 and 3 emissions from agricultural dairy methane	Scope 1 and 3 agricultural dairy methane emissions divided by total Scope 1, 2, and 3 GHG emissions in reporting year (using CO ₂ e)	Percentage
Metric 12	Additional during first year of disclosure, essential after first year of methane tracking (see DMAP guide for more information)	Comparison of metrics above from previous reporting year	Quantitative comparison of changes in dairy methane metrics outlined above from previous year, and qualitative explanation of why metrics changed	% change = (value from current year – value from previous year) / value from previous year
Metric 13	Essential	Scope 1, 2, and 3 GHG reduction target(s)	GHG reduction target(s) by scope, including: target (% reduction), target type (absolute/intensity/other), target year, base year, scope(s) covered, alignment with external framework (e.g., SBTi)	Target (% reduction), target type (absolute/intensity/other), target year, base year, scope(s) covered, alignment with external framework (e.g., SBTi)
Metric 14	Additional	Scope 1 and/or 3 methane reduction target(s)	Methane reduction target(s) by scope, including: target (% reduction), target type (absolute/intensity/other), target year, base year, scope(s) covered, alignment with external framework (e.g., SBTi)	Target (% reduction), target type (absolute/intensity/other), target year, base year, scope(s) covered, alignment with external framework (e.g., SBTi)
Metric 15	Additional during first year of disclosure, essential after first year of methane tracking (see DMAP guide for more information)	Actions and progress on methane reduction	Qualitative and quantitative descriptions of methane reduction initiatives	See forthcoming DMAP guide for more information



METHANE DISCLOSURE RECOMMENDATIONS

METHANE DISCLOSURE RECOMMENDATIONS




The section above outlines the most critical methane disclosure metrics for companies in the dairy sector. This section provides recommendations on how a company should disclose the metrics identified in Table 1.

Leading dairy companies have agreed to publicly disclose the essential metrics in their web-based CSR and ESG reports, at least on an annual basis. However, companies can opt to go a step further and disclose using industry-leading reporting platforms and frameworks such as CDP, International Sustainability Standards Board (ISSB), and Global Reporting Initiative (GRI).^a [Appendix 1](#) of this report recommends how to disclose methane metrics in alignment with evolving regulations and using other optional frameworks.

It is important to underscore that publicly reporting dairy methane metrics promotes industry-wide accountability. Since CSR/ESG reports are public-facing and published to communicate corporate progress on sustainability issues, they are a natural place to include methane disclosures. Though many companies also report on sustainability metrics using external frameworks, these reports (e.g., CDP and others) are often private, which is why methane disclosure using these common frameworks is included as additional.

Table 2 below outlines specific recommendations for how and where to disclose each metric. Recommendations are specific to dairy methane disclosure and include methane as part of a company’s Scope 1 and Scope 3 GHG emissions, where applicable. Note that in some cases the disclosure frameworks may not have explicit questions or requests for a given methane-specific metric. The table identifies how and where a company could still disclose this metric within the existing framework.

TABLE 2
Recommendations for “essential” and “additional” disclosure of dairy methane metrics

Metric number	Metric	Essential annual disclosure location	Additional disclosure to CDP	Additional disclosure to ISSB	Additional disclosure to GRI
Metric 1	Reporting year	Publicly disclose in annual CSR/ESG Report	CDP 1.3	—	—
Metric 2	Total Scope 1 GHG emissions	Publicly disclose in annual CSR/ESG Report	CDP 7.6	ISSB IFRS S2 “Climate-related metrics” (reference paragraph 29.a.i.1)	GRI 305-1 Direct (Scope 1) GHG emissions
Metric 3	Scope 1 agricultural dairy methane emissions	Publicly disclose in annual CSR/ESG Report	CDP 7.15 and 7.15.1	No explicit disclosure request; can be reported in ISSB IFRS S2 “Climate-related metrics”	No explicit requirement; can be reported in GRI 305-1

^a This guide represents the reporting landscape as of November 2024. DMAA will update this guide as necessary.



Metric number	Metric	Essential annual disclosure location	Additional disclosure to CDP	Additional disclosure to ISSB	Additional disclosure to GRI
Metric 4	Percentage of Scope 1 emissions from agricultural dairy methane	Publicly disclose in annual CSR/ESG Report	No explicit question; can be reported in the open text field of CDP 7.53.1 – “Plan for achieving target, and progress made to the end of the reporting year”	No explicit disclosure request; can be reported in ISSB IFRS S2 “Climate-related metrics”	No explicit requirement; can be reported in GRI 305-1
Metric 5	Total Scope 1 methane emissions	Additional disclosure	CDP 7.15 and 7.15.1	No explicit disclosure request; can be reported in ISSB IFRS S2 “Climate-related metrics”	No explicit requirement; can be reported in GRI 305-1
Metric 6	Total Scope 3 GHG emissions	Publicly disclose in annual CSR/ESG Report	CDP 7.8	ISSB IFRS S2 “Climate-related metrics” (reference paragraph 29.a.i.3)	GRI 305-3 Other indirect (Scope 3) GHG emissions
Metric 7	Scope 3 agricultural dairy methane emissions	Publicly disclose in annual CSR/ESG Report	No explicit question; can be reported in the open text field of CDP 7.8	No explicit disclosure request; can be reported in ISSB IFRS S2 “Climate-related metrics”	No explicit requirement; can be reported in GRI 305-3
Metric 8	Percentage of Scope 3 emissions from agricultural dairy methane	Publicly disclose in annual CSR/ESG Report	No explicit question; can be reported in the open text field of CDP 7.8	No explicit disclosure request; can be reported in ISSB IFRS S2 “Climate-related metrics”	No explicit requirement; can be reported in GRI 305-3
Metric 9	Total Scope 3 methane emissions	Additional disclosure	No explicit question; can be reported in the open text field of CDP 7.8	No explicit disclosure request; can be reported in ISSB IFRS S2 “Climate-related metrics”	No explicit requirement; can be reported in GRI 305-3
Metric 10	Total Scope 1, 2, and 3 GHG emissions	Publicly disclose in annual CSR/ESG Report	CDP 7.53.1	ISSB IFRS S2 “Climate-related metrics” (reference paragraph 29.a.i.)	Can be reported in separate sections: 305-1 (Scope 1) 305-2 (Scope 2) 305-3 (Scope 3)
Metric 11	Percentage of Scope 1 and 3 emissions from agricultural dairy methane	Publicly disclose in annual CSR/ESG Report	No explicit question; can be reported in the open text field of CDP 7.53.1 – “Plan for achieving target, and progress made to the end of the reporting year”	No explicit disclosure request; can be reported in ISSB IFRS S2 “Climate-related metrics”	No explicit requirement; can be reported in GRI 305-1 (Scope 1) and 305-3 (Scope 3)
Metric 12	Comparison of metrics above from previous reporting year	Additional during first year of disclosure, essential after first year of methane tracking (see DMAP guide for more information)	CDP 7.10	No explicit disclosure request; can be reported in ISSB IFRS S2 “Climate-related metrics”	No explicit requirement; can be reported in 305-5 Reduction of GHG emissions



Metric number	Metric	Essential annual disclosure location	Additional disclosure to CDP	Additional disclosure to ISSB	Additional disclosure to GRI
Metric 13	Scope 1, 2, and 3 GHG reduction target(s)	Publicly disclose in annual CSR/ESG Report	<p>CDP 7.53.1 (absolute emissions targets)</p> <p>CDP 7.53.2 (emissions intensity targets)</p>	ISSB IFRS S2 “Climate-related targets” (reference paragraphs 33 - 36)	GRI 305-5 Reduction of GHG emissions
Metric 14	Scope 1 and/or 3 methane reduction target(s)	Additional disclosure	CDP 7.54 and 7.54.2	ISSB IFRS S2 “Climate Related Targets (reference paragraph 33)	No explicit requirement; can be reported in 305-5
Metric 15	Actions and progress on methane reduction	Additional during first year of disclosure, essential after first year of methane tracking (see DMAP guide for more information)	<p>CDP 7.55.1</p> <p>CDP 7.55.2</p> <p>CDP 7.55.3</p>	ISSB IFRS S2 “Strategy and Decision Making” (reference paragraphs 14a - 14.c)	GRI 305-5 Reduction of GHG Emissions



CONCLUSION

CONCLUSION

Public disclosure of methane-specific impacts, targets, and emissions reduction activities is increasingly important to ensure the dairy industry tracks progress on this critical area of climate action, demonstrates industry leadership, and maintains company-level accountability.

Though few sustainability-related disclosure regulations, voluntary reporting standards and frameworks, or industry guidelines currently require methane-specific disclosure, many have opportunities to share methane-related metrics and narratives within their existing structures. Additionally, stakeholder interest in methane-specific disclosure is growing, as demonstrated by the United Nations [Integrity Matters: Net Zero Commitments By Businesses, Financial Institutions, Cities and Regions](#) report.

Companies can utilize the methane disclosure metrics presented in this guide to inform their quantitative and qualitative dairy methane reporting. These key metrics also fill current disclosure gaps in existing reporting requirements and help standardize reporting across the industry.

Companies can then utilize their responses to the methane disclosure metrics to implement the methane disclosure recommendations, which define how and where to report methane metrics. To start, companies can disclose essential metrics and narratives within their web-based ESG/CSR/impact reports. Going a step further, companies in the dairy industry can lead the way by disclosing more detailed information and narratives within voluntary frameworks like CDP and ISSB.

Ultimately, disclosing agricultural dairy methane sends the market signal that methane reduction is a priority, thereby defining industry leadership and catalyzing other dairy sector companies to do the same.

The next step of this work is for companies to develop methane action plans for their dairy value chains. Dairy methane action plans (DMAPs) are critical in providing transparency to external stakeholders on how companies are addressing the business risks associated with climate change and how they intend to achieve their climate and/or methane targets. Methane action planning also signals the importance of the work in the marketplace and demonstrates industry-wide leadership on climate.



APPENDICES

APPENDICES

Appendix 1: Assessing the landscape of methane disclosures

The landscape of ESG and sustainability disclosures is rapidly evolving. Between new regulations, updated GHG inventory accounting guidance, consolidation in ESG frameworks, and downstream customers (i.e., retailers) requesting more transparency from upstream suppliers, it can be difficult for a dairy sector company to determine what to disclose and where. Although there is currently limited disclosure guidance geared specifically toward agricultural methane, there are many opportunities to share disaggregated methane targets, actions, and emissions impacts within existing frameworks and approaches.

This appendix provides a snapshot of existing climate-related disclosures, as well as potential areas where methane disclosures could fit into existing frameworks.

Multiple takeaways and themes emerged from the landscape assessment:

- Large public companies will be most impacted by new mandatory regulatory disclosure requirements. Private companies would not be required to report under the proposed SEC rule but would under CA SB 253 and EU CSRD, under certain circumstances.
- Many frameworks and regulations are targeted toward investor disclosures and financial impacts. CDP, EU CSRD, and GRI take a broader approach, considering financial impacts for investors as well as environmental and social impacts relevant to other stakeholders. Given this, companies will likely need to use both a single- and double-materiality lens.
- Almost all frameworks and standards expect overall disclosure of GHG-related targets and Scope 1 and 2 emissions. Increasingly, many will also expect disclosure of Scope 3 emissions (outside of the US SEC rule).
- Few currently have specific standards or response options for methane targets and emissions inventory disclosures. CDP is the only one with responses specific to methane.
- That said, multiple have open text, narrative response formats within which methane-specific disclosures on targets and actions (e.g., projects, initiatives, strategies) could be shared.
- Almost all expect GHG inventories to be conducted in alignment with the Greenhouse Gas Protocol (GHGP) Corporate Accounting and Reporting Standard.
- **Despite the lack of explicit requirements to disclose methane emissions, high methane-emitting sectors, such as dairy and others, can get ahead of future regulations and stakeholder requirements by transparently disclosing their methane emissions using the metrics provided in this guide.**

TABLE 3

Snapshot summary of key elements of disclosure standards and frameworks

	Voluntary or mandatory?	Target stakeholders?	Disclose emissions? (Scopes)	Methane-specific disclosure?	Recommended alignment with GHG Protocol?	Disclose targets?	Disclose actions?	Interoperable with other standards?
Regulations								
California Senate Bill 253, Climate Corporate Data Accountability Act (CA SB 253)	Mandatory (large companies)	All stakeholders	Yes (1, 2, & 3)	No	Yes	No	No	Unknown
California Senate Bill 261, Greenhouse gases: climate-related financial risk (CA SB 261)	Mandatory (large companies)	All stakeholders	Yes (1 & 2, 3 if appropriate)	No	Yes	Yes	No	Yes (ISSB, TCFD)
EU Corporate Sustainability Reporting Directive (CSRD)	Mandatory (all large companies)	All stakeholders	Yes (1, 2, & 3)	No	Yes	Yes	Yes	In progress (CDP, GRI, TBD others?)
India Business Responsibility and Sustainability Reporting (BRSR)	Mandatory (top 1,000 companies in India)	Investor focused	Yes (1, 2)	No	Not explicit	Yes	Yes	Yes (GRI, SASB, TCFD, Integrated Reporting)
US Securities and Exchange Commission Enhancement and Standardization of Climate-Related Disclosures for Investors (SEC Rule)	Mandatory if material to business (large public companies)	Investor focused	Yes (1, 2)	No	Yes	Yes	Yes	Unknown
UK Transition Plan Taskforce (TPT) Disclosure Framework	Voluntary (leading transition plan framework)	All stakeholders	Yes (1, 2, & 3)	No	Yes	Yes	Yes	Yes (ISSB)
Disclosure frameworks and standards								
CDP (formerly Carbon Disclosure Project)	Voluntary	All stakeholders	Yes (1, 2 & 3)	Yes (targets, actions)	No	Yes	Yes	Yes (ISSB, GRI)
Global Reporting Initiative (GRI)	Voluntary	All stakeholders	Yes (1, 2 & 3)	Possible (actions)	Yes	No	Yes	Yes (CDP, SASB, CSRD in process)
Task Force on Climate-Related Financial Disclosures (TCFD)	Voluntary (Now part of ISSB)	Investor focused	Yes (1 & 2, 3 if appropriate)	No	Yes	Yes	No	Yes (ISSB, GRI)
International Sustainability Standards Board (ISSB)	Currently voluntary, intended to be implemented as regulatory	Investor focused	Yes (1, 2 & 3)	Possible (actions)	Yes	Yes	Yes	Yes (SASB, CDP)
Sustainability Accounting Standards Board Standards (SASB)	Voluntary (Now part of ISSB)	Investor focused	Yes (1)	Possible (actions)	Yes	Yes	Yes	Yes (GRI)
Other Industry Guidance								
Sustainable Agriculture Initiative (SAI) Sustainable Dairy Partnership (SDP)	Voluntary	All stakeholders	Yes (1, 2 & 3)	Recommended (follows IDF guidance)	Yes	No	No	Yes
Walmart Gigaton	Voluntary	Customer focused	Yes (1 & 2)	Possible (targets, actions)	Yes	Yes	Yes	Yes (CDP, THESIS)
The Sustainability Consortium (TSC) THESIS	Voluntary	Investor focused	Yes (1 & 2)	Possible (actions)	No	No	Yes	No

Appendix 2: Additional disclosure methods

Below are additional disclosure methods to align with emerging regulations, other disclosure frameworks and standards, and other industry guidance. Most of these are optional; regulations are mandatory for companies that qualify under that given rule. Note that in some cases, the regulation, framework, or guidance may not have explicit questions or requests for a given methane-specific metric. The table identifies how and where a company could still disclose this metric within the existing structure.

TABLE 4
Additional disclosure of dairy methane metrics



Metric number	Metric	Regulations	Other disclosure frameworks and standards	Other industry guidance
Metric 1	Reporting year	—	—	—
Metric 2	Total Scope 1 GHG emissions	<ul style="list-style-type: none"> • EU CSRD Disclosure Requirement E1-6 – Gross Scopes 1, 2, 3 and Total GHG emissions • India BRSR Principle 6 question E6: Details of GHG emissions – S1 & 2 intensity • SEC Rule: Scope 1 & 2 Emissions Disclosure • CA SB 253 Section 2 Climate Corporate Data Accountability Act: Scope 1 Emissions • CA SB 261: Climate-related financial risk report aligning with TCFD • UK Transition Plan Taskforce Disclosure Framework: Disclosure Element 4.3 GHG emissions metrics & targets 	<ul style="list-style-type: none"> • SASB FB-MP-110a.1. Gross global Scope 1 emissions (Meat, Poultry and Dairy Standard) • TCFD Metrics & Targets 	<ul style="list-style-type: none"> • Walmart Project Gigaton: Scope 1 and 2 Carbon Footprint • THESIS Greenhouse Gas Emissions Intensity – Animal Farm Operations • THESIS Greenhouse Gas Emissions Intensity - Manufacturing



Metric number	Metric	Regulations	Other disclosure frameworks and standards	Other industry guidance
Metric 3	Scope 1 agricultural dairy methane emissions	<p>No explicit disclosure requirements; can be included in:</p> <ul style="list-style-type: none"> • EU CSRD Disclosure Requirement E1-6 – Gross Scopes 1, 2, 3 and Total GHG emissions • India BRSR Principle 6 question E6: Details of GHG emissions – S1 & 2 intensity • SEC Rule: Scope 1 & 2 Emissions Disclosure • CA SB 261: Climate-related financial risk report aligning with TCFD • UK Transition Plan Taskforce Disclosure Framework: Disclosure Element 4.3 GHG emissions metrics & targets 	<p>No explicit disclosure requirements; can be included in:</p> <ul style="list-style-type: none"> • SASB FB-MP-110a.1. Gross global Scope 1 emissions (Meat, Poultry and Dairy Standard) • TCFD Metrics & Targets 	
Metric 4	Percentage of Scope 1 emissions from agricultural dairy methane	<p>No explicit disclosure requirements; can be included in:</p> <ul style="list-style-type: none"> • EU CSRD Disclosure Requirement E1-6 – Gross Scopes 1, 2, 3 and Total GHG emissions • India BRSR Principle 6 question E6: Details of GHG emissions – S1 & 2 intensity • SEC Rule: Scope 1 & 2 Emissions Disclosure • CA SB 261: Climate-related financial risk report aligning with TCFD • UK Transition Plan Taskforce Disclosure Framework: Disclosure Element 4.3 GHG emissions metrics & targets 	<p>No explicit disclosure requirements; can be included in:</p> <ul style="list-style-type: none"> • SASB FB-MP-110a.1. Gross global Scope 1 emissions (Meat, Poultry and Dairy Standard) • TCFD Metrics & Targets 	



Metric number	Metric	Regulations	Other disclosure frameworks and standards	Other industry guidance
Metric 5	Total Scope 1 methane emissions	<p>No explicit disclosure requirements; can be included in:</p> <ul style="list-style-type: none"> • EU CSRD Disclosure Requirement E1-6 – Gross Scopes 1, 2, 3 and Total GHG emissions • India BRSR Principle 6 question E6: Details of GHG emissions – S1 & 2 intensity • SEC Rule: Scope 1 & 2 Emissions Disclosure • CA SB 261: Climate-related financial risk report aligning with TCFD • UK Transition Plan Taskforce Disclosure Framework: Disclosure Element 4.3 GHG emissions metrics & targets 	<p>No explicit disclosure requirements; can be included in:</p> <ul style="list-style-type: none"> • SASB FB-MP-110a.1. Gross global Scope 1 emissions (Meat, Poultry and Dairy Standard) • TCFD Metrics & Targets 	
Metric 6	Total Scope 3 GHG emissions	<ul style="list-style-type: none"> • EU CSRD Disclosure Requirements E1-6 – Gross Scopes 1, 2, 3 and Total GHG emissions, AR39 (B) • India BRSR Principle 6 question L4: Details of Scope 3 emissions and intensity • CA SB-253 Section 2 Climate Corporate Data Accountability Act: Scope 3 Emissions • CA SB 261: Climate-related financial risk report aligning with TCFD • UK Transition Plan Taskforce Disclosure Framework: Disclosure Element 4.3 GHG emissions metrics & targets 	<ul style="list-style-type: none"> • TCFD Metrics & Targets 	
Metric 7	Scope 3 agricultural dairy methane emissions	<p>No explicit disclosure requirements; can be included in:</p> <ul style="list-style-type: none"> • EU CSRD Disclosure Requirement E1-6 – Gross Scopes 1, 2, 3 and Total GHG emissions • CA SB 261: Climate-related financial risk report aligning with TCFD • UK Transition Plan Taskforce Disclosure Framework: Disclosure Element 4.3 GHG emissions metrics & targets 	<p>No explicit disclosure requirements; can be included in:</p> <ul style="list-style-type: none"> • TCFD Metrics & Targets 	



Metric number	Metric	Regulations	Other disclosure frameworks and standards	Other industry guidance
Metric 8	Percentage of Scope 3 emissions from agricultural dairy methane	<p>No explicit disclosure requirements; can be included in:</p> <ul style="list-style-type: none"> • EU CSRD Disclosure Requirement E1-6 – Gross Scopes 1, 2, 3 and Total GHG emissions • CA SB 261: Climate-related financial risk report aligning with TCFD • UK Transition Plan Taskforce Disclosure Framework: Disclosure Element 4.3 GHG emissions metrics & targets 	<p>No explicit disclosure requirements; can be included in:</p> <ul style="list-style-type: none"> • TCFD Metrics & Targets 	
Metric 9	Total Scope 3 methane emissions	<p>No explicit disclosure requirements; can be included in:</p> <ul style="list-style-type: none"> • EU CSRD Disclosure Requirement E1-6 – Gross Scopes 1, 2, 3 and Total GHG emissions • CA SB 261: Climate-related financial risk report aligning with TCFD • UK Transition Plan Taskforce Disclosure Framework: Disclosure Element 4.3 GHG emissions metrics & targets 	<p>No explicit disclosure requirements; can be included in:</p> <ul style="list-style-type: none"> • TCFD Metrics & Targets 	
Metric 10	Total Scope 1, 2, and 3 GHG emissions	<ul style="list-style-type: none"> • EU CSRD Disclosure Requirement E1-6 – Gross Scopes 1, 2, 3 and Total GHG emissions • CA SB-253 Section 2 Climate Corporate Data Accountability Act: Scope 1, 2, and 3 Emissions • UK Transition Plan Taskforce Disclosure Framework: Disclosure Element 4.3 GHG emissions metrics & targets 		
Metric 11	Percentage of Scope 1 and 3 emissions from agricultural dairy methane	<p>No explicit disclosure requirements; can be included in:</p> <ul style="list-style-type: none"> • EU CSRD Disclosure Requirement E1-6 – Gross Scopes 1, 2, 3 and Total GHG emissions 		
Metric 12	Comparison of metrics above from previous reporting year		<ul style="list-style-type: none"> • SASB FB-MP-110a.1. Gross global Scope 1 emissions (Meat, Poultry and Dairy Standard) 	



Metric number	Metric	Regulations	Other disclosure frameworks and standards	Other industry guidance
Metric 13	Scope 1, 2, and 3 GHG reduction target(s)	<ul style="list-style-type: none"> EU CSRD Disclosure Requirement E1-4 Targets related to climate change mitigation and adaptation CA SB 261: Climate-related financial risk report aligning with TCFD UK Transition Plan Taskforce Disclosure Framework: Disclosure Element 4.3 GHG emissions metrics & targets 	<ul style="list-style-type: none"> SASB FB-MP-110a.2. (Meat, Poultry, and Dairy Standard) TCFD Metrics & Targets 	
Metric 14	Scope 1 and/or 3 methane reduction target(s)	<ul style="list-style-type: none"> EU CSRD Disclosure Requirement E1-4 Targets related to climate change mitigation and adaptation UK Transition Plan Taskforce Disclosure Framework: Disclosure Element 4.3 GHG emissions metrics & targets 	<p>No explicit disclosure requirements; can be included in:</p> <ul style="list-style-type: none"> SASB FB-MP-110a.2. (Meat, Poultry, and Dairy Standard) TCFD Metrics & Targets 	<ul style="list-style-type: none"> Walmart Project Gigaton: Enterprise Level Goals
Metric 15	Actions and progress on methane reduction	<ul style="list-style-type: none"> EU CSRD Disclosure Requirement E1-3 – Actions and resources in relation to climate change policies India BRSR Principle E6 question E7: Project related to reducing GHG emissions UK Transition Plan Taskforce Disclosure Framework: Disclosure Element 2 implementation Strategy, Element 3 Engagement Strategy 	<ul style="list-style-type: none"> SASB FB-MP-110a.2 (Meat, Poultry, and Dairy Standard) 	<ul style="list-style-type: none"> Walmart Project Gigaton: Energy Activities (Agriculture methane capture) and Nature Activities (manure management)



REFERENCES

REFERENCES

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Headquarters

257 Park Avenue South
New York, NY 10010
T 212 505 2100
F 212 505 2375

Austin, TX

301 Congress Avenue
Austin, TX 78701
T 512 478 5161
F 512 478 8140

Boston, MA

18 Tremont Street
Boston, MA 02108
T 617 723 2996
F 617 723 2999

Boulder, CO

2060 Broadway
Boulder, CO 80302
T 303 440 4901
F 303 440 8052

Raleigh, NC

4000 Westchase Boulevard
Raleigh, NC 27607
T 919 881 2601
F 919 881 2607

San Francisco, CA

123 Mission Street
San Francisco, CA 94105
T 415 293 6050
F 415 293 6051

Washington, DC

555 12th St., N.W.
Suite 400
Washington, D.C. 20004
T 202 387 3500
F 202 234 6049

Amsterdam, Netherlands

Barbara Strozilaan 101-201
1083 HN Amsterdam
The Netherlands

Beijing, China

C-501, Yonghe Plaza
28 East Andingmen East Road
Dongcheng District
Beijing 100007, China
T +86 10 6409 7088
F +86 10 6409 7097

Brussels, Belgium

Avenue des Arts 47-49
Floor: + 05
1000 Brussels, Belgium

Jakarta, Indonesia

Jl. RS Fatmawati Raya No. 15
Komplek Perkantoran Golden Plaza
Blok E No. 12 Jakarta Selatan 12420

La Paz, Mexico

A. Revolución 325
Zona Central
23000 La Paz, B.C.S., Mexico
T +52 612 123 2029

London, UK

3rd Floor, 41 Eastcheap,
London EC3M 1DT
T +44 203 310 5909

Tokyo, Japan

8F, KS Building
4-5-20 Kojimachi
Chiyoda-ku, Tokyo 102-0083, Japan