



Center on Inclusive Trade and Development
GEORGETOWN LAW

August 2024

MANDATORY GREENHOUSE GAS REPORTING REGULATIONS

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INTRODUCTION

As of August 2024, the United States (U.S.) and European Union (EU) have implemented Mandatory Greenhouse Gas Reporting Regulations (MRRs). This brief evaluates the MRRs' relevance for government procurement purposes and their potential utility in defining what constitutes an environmental good.

First, an overview of major MRRs will be provided, outlining their scope, objectives, and key features and reporting requirements. Second, requirements regarding product-level information within these MRRs will be analyzed, with a particular emphasis on Scope 3 emissions. This analysis will explore if MRRs address the embedded emissions in products and the implications of MRRs for product-specific assessments. While greenhouse gas (GHG) emissions accounting and reporting at various levels serve distinct purposes, product-level accounting is especially critical for ensuring trade practices are aligned with the climate agenda. The granularity of product-level data is essential for formulating policies at the intersection of trade and climate change, such as green procurement strategies, where understanding the embedded emissions in products enables purchasers to make informed decisions, thereby enhancing the contribution of trade to reducing emissions.

Finally, the brief will investigate the connection between MRRs and environmental goods, and the applicability of MRRs to government procurement processes. This section will discuss how MRRs can inform procurement criteria and contribute to the development of more sustainable procurement strategies.

SURVEYING MRRS

MRRs are regulations that require companies to measure, track, and disclose their GHG emissions. MRRs can establish reporting requirements at the corporate, facility, or product level. The ultimate goal may vary: governments can establish regulations to collect data on emissions, establish cap-and-trade regimes, or increase transparency.

This brief studies MRRs in force at both federal and state levels in the US, as well as those in the EU. It analyzes the jurisdiction of these regulations, their objectives, applicability, the scope of emissions that must be reported, and the accounting methodologies used.

In terms of scope, the terminology used by the Greenhouse Gas Protocol developed by the World Resources Institute and the World Business Council for Sustainable Business Development (GHG Protocol) is used throughout this brief. In this sense, "Scope 1" refers to direct GHG emissions from sources that a company directly controls (e.g., from burning fossil fuels in the production). "Scope 2" refers to GHG emissions from the purchase of energy (e.g., when generating electricity). "Scope 3" refers to GHG emissions that are not directly produced by the company itself but are included in the company's value chain (either upstream or downstream).

i. Facility level MRRs

Collecting data at the facility level is essential for obtaining detailed information on specific geographic locations, industries, or stages of industrial processes. As indicated by the U.S. Environmental Protection Agency (EPA), governments can leverage this data to pinpoint high-emitting facilities within their

jurisdictions, compare emissions among similar establishments, and formulate informed climate policies.¹

Below is a summary of MRRs that require reporting at the facility level:

	EPA GHGRP	CALIFORNIA MRR	WASHINGTON GHG PROGRAM
Jurisdiction	US: Federal	US: State	US: State
Purpose	Data collection	Cap-and-trade/ data collection	Cap-and-trade/ data collection
Applicability	Facilities with emissions above 25,000 MT CO₂e/year	Facilities with emissions above 10,000 MT CO₂e/year Certain facilities (e.g. cement) must report regardless of emissions	Facilities with emissions above 10,000 MT CO₂e/year
Report scope	Scope 1, 3	Scope 1, 3	Scope 1, 3
Methodology	EPA's GHGRP	EPA's GHGRP	EPA's GHGRP

a. U.S. Environmental Protection Agency's Greenhouse Gas Reporting Program (EPA GHGRP)²

The EPA GHGRP was launched in 2009. It operates at the U.S. federal level, with the primary purpose of collecting data on GHG emissions at the facility level. Facilities and suppliers are required to report if they meet any of the criteria: emitting over 25,000 MT of CO₂e annually from covered sources; supplying products that would result in the release of more than 25,000 MT of CO₂e/year when the products are used; or receiving 25,000 metric tons or more of CO₂ for underground injection.

Facilities are required to report their emissions to the EPA annually, using the electronic Greenhouse Gas Reporting Tool (e-GGRT). After the submission of the reports, the EPA verifies the data and follows up with facilities to ensure the information is accurate. The reported data is made public on the EPA website, unless the data qualifies for confidential treatment under the Clean Air Act. A violation of reporting requirements set under the EPA GHGRP can lead to a penalty of up to \$25,000 per day.

The report covers Scope 1 emissions at the individual facility level, and Scope

¹ U.S. Environmental Protection Agency. What is the Greenhouse Gas Reporting Program (GHGRP)? U.S. Environmental Protection Agency. Retrieved, <https://www.epa.gov/ghgreporting/what-ghgrp#Scope-Emissions>

² U.S. Government. Title 40: Protection of environment, chapter I, subchapter C, part 98 - Mandatory greenhouse gas reporting. Electronic Code of Federal Regulations. <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-98?toc=1>; For more on the Greenhouse Gas Reporting Program (GHGRP), see <https://www.epa.gov/ghgreporting/learn-about-greenhouse-gas-reporting-program-ghgrp>

3 emissions at the corporate level for suppliers. However, certain emissions are excluded from reporting, such as Scope 2 emissions, agriculture emissions, direct emissions sources with less than 25,000 MT of CO₂e per year, and GHG sinks. The GHGs covered in the report include carbon dioxide, nitrous oxide, methane, fluorinated GHGs, and fluorinated heat transfer fluids.

The EPA developed its own methodology for GHG accounting, and the program covers approximately 85–90% of all GHG emissions in the United States.³

b. California Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (California MRR)⁴

The California MRR went into effect in 2009. It operates at the state level in the United States, with the primary purpose of supporting cap-and-trade and data collection efforts in California. Reporting is conducted at the facility level.

Facilities are required to report their emissions through the California Electronic Greenhouse Gas Reporting Tool. All reports must be verified by independent verification bodies accredited by the California Air Resources Board (CARB). The reports are also reviewed by CARB. The data is subsequently used in California's Cap-and-Trade Program and made publicly available through the California Greenhouse Gas Inventory. Reports must be submitted annually, and any non-compliance with the MRR can result in penalties determined by CARB based on the relevant circumstances.

Operators of specific facilities in California, including those in electricity generation, cement production, lime manufacturing, nitric acid production, petroleum refining, and carbon dioxide sequestration, must report regardless of their emissions level. Facilities within certain categories, such as stationary fuel combustion, glass production, hydrogen production, and iron and steel production, must report if their emissions equal or exceed 10,000 MT of CO₂e annually. The regulation also applies to fuel suppliers, carbon dioxide suppliers, importers and exporters of CO₂, electric power entities, and other specific reporting entities that emit over 10,000 MT of CO₂e.

The report covers Scope 1 and Scope 3 emissions. However, certain emissions are excluded, such as those from electricity generating facilities powered solely by nuclear, hydroelectric, wind, or solar energy (unless emissions exceed 10,000 MT of CO₂e), emergency generators, fire suppression systems, portable equipment, primary and secondary schools, and certain agricultural and landfill emissions.

The GHGs included in the reporting are carbon dioxide, nitrous oxide, and methane. The regulation relies on the methodology developed by the EPA GHGRP and covers approximately 80% of emissions in California.⁵

c. Washington Greenhouse Gas Reporting Program (Washington GHG Program)⁶

The Washington GHG Program went into effect in 2012. It operates at the state

3 U.S. Environmental Protection Agency. (May 15, 2024). GHGRP and U.S. inventory of greenhouse gas emissions and sinks. <https://www.epa.gov/ghgreporting/ghgrp-and-us-inventory-greenhouse-gas-emissions-and-sinks#:~:text=Over%208%2C000%20facilities%20and%20suppliers,to%20U.S.%20greenhouse%20gas%20emissions>.

4 California Air Resources Board. (2019). Mandatory greenhouse gas reporting regulation (April 3, 2019). <https://ww2.arb.ca.gov/sites/default/files/classic/cc/reporting/ghg-rep/regulation/mrr-2018-unofficial-2019-4-3.pdf>

5 California Air Resources Board. (2023, November 6). 2022 Mandatory GHG Reporting Regulation: Frequently asked questions. <https://ww2.arb.ca.gov/sites/default/files/classic/cc/reporting/ghg-rep/reported-data/2022mrrfaqs.pdf>

6 Washington State Department of Ecology. Mandatory greenhouse gas reports. <https://ecology.wa.gov/air-climate/reducing-greenhouse-gas-emissions/tracking-greenhouse-gases/mandatory-greenhouse-gas-reports>

level in the United States, primarily to support Washington's cap-and-trade program and data collection efforts. The reporting is conducted at the facility level. This program applies to facilities that emit at least 10,000 MT of CO₂e annually, fuel suppliers that produce, import, or deliver products contributing to 10,000 MT of CO₂e per year within Washington, and electric power entities that import or deliver electricity equivalent to 10,000 MT of CO₂e annually.

Facilities are required to report their emissions through the Washington Electronic Database for Greenhouse Gas Emissions (WEDGE). All reports must be verified by verification bodies that are either actively accredited in California or can demonstrate sufficient knowledge of Washington's regulations. The reports are also reviewed by Washington's emissions verification team. The data is subsequently used in Washington's Cap-and-Invest Program and made publicly available through the Washington State Greenhouse Gas Emissions Inventory. Reports must be submitted annually, and any non-compliance with the MRR can result in penalties that consider the nature of the violation, the prior behavior of the violator, and the actions taken by the violator to correct the problem.

The report covers Scope 1 and Scope 3 emissions. The GHGs covered under the program include carbon dioxide, nitrous oxide, methane, fluorinated GHGs, and fluorinated heat transfer fluids. The program follows the EPA's GHGRP methodology for calculating emissions. The data collected covers approximately 75% of all emissions in Washington.⁷

ii. Corporate-level MRRs

Corporate-level data is relevant for evaluating companies' emissions, enabling the accountability of high-emitting firms while recognizing those that successfully reduce their emissions. This data allows investors, governments, and consumers to make informed business decisions and product choices based on a company's environmental performance. Furthermore, corporate-level accounting includes emissions related to the broader operations of the corporation, such as those related to its investments or the business travel of its personnel.

Below is a summary of MRRs that require reporting at the corporate level:

⁷ Washington State Department of Ecology. *Cap and invest*. Available at <https://ecology.wa.gov/air-climate/climate-commitment-act/cap-and-invest>

	SEC'S CLIMATE-RELATED DISCLOSURES RULE	CALIFORNIA CCDA	EU CSRD
Jurisdiction	US: Federal	US: State	EU
Purpose	Financial disclosure	Financial disclosure	Financial disclosure
Applicability	Large accelerated filers and accelerated filers	U.S. companies with annual revenues above USD 1 billion that do business in California	<ul style="list-style-type: none"> • Large companies (€50+ million in net turnover; €25+ million in assets; or 250+ employees), • Listed companies • Non-EU companies that generate over €150 million in EU market
Report scope	Material Scope 1, 2	Scope 1, 2, 3	Scope 1, 2, 3
Methodology	Registrants may choose methodology	GHG Protocol	<ul style="list-style-type: none"> • GHG Protocol • EU Commission Recommendation (EU) 2021/2279 • ISO standard 14064-1:2018

a. U.S. Securities and Exchange Commission (SEC)'s Final Rule on Climate-Related Disclosures⁸

The SEC's Final Rule on Climate-Related Disclosures was adopted on March 6, 2024. On March 15, however, the U.S. Fifth Circuit Court of Appeals granted a temporary stay of the rules pending judicial review, and, therefore, they are not yet in force.

The SEC rule focuses on financial disclosure at the corporate level. It applies to all domestic and foreign registrants, excluding asset-backed issuers. The rule requires large accelerated filers (LAFs) and accelerated filers (AFs) to disclose material Scope 1 and/or Scope 2 emissions. Facilities are required to include an attestation report from a "GHG emissions attestation provider" covering the disclosure of its Scope 1 and/or Scope 2 emissions. The data would be filed in the annual reports and registration statements with the SEC.

Additionally, the rule requires registrants to disclose climate-related risks that have had or are likely to have a material impact on their business strategy, as well as information on financial impacts associated with mitigating or adapting to these risks. The rule also requires the disclosure of costs and financial impacts from severe weather events, carbon offsets, renewable energy credits,

⁸ U.S. Securities and Exchange Commission. Final Rule: Amendments to Rules for Reporting and Disclosure. U.S. Securities and Exchange Commission, 2024. <https://www.sec.gov/files/rules/final/2024/33-11275.pdf>.

and any significant effects on financial estimates and assumptions due to climate risks or plans.

The report excludes Scope 3 emissions. The GHGs to be reported are not specified, and registrants have the flexibility to choose the methodology that best suits their reporting needs, but they must indicate the selected methodology.

b. California Climate Corporate Data Accountability Act (California CCDA)⁹

The California CCDA was signed in October 2023, but reporting will start in 2026. It applies at the state level in the United States and is focused on financial disclosure. The reporting is required at the corporate level. The regulation mandates that U.S.-based companies with total annual revenues exceeding \$1 billion, which conduct business in California, must disclose their emissions data.

The CCDA requires reporting companies to obtain independent third-party assurance of their reports. Reports must be submitted annually, and any non-compliance of the Act authorizes CARB to seek administrative penalties up to \$500,000 in a reporting year. However, as for Scope 3, between 2027 and 2030, penalties may occur only for non-filing. Reports will be made publicly available on a digital platform and they must be drafted as to maximize access for consumers, investors, and other stakeholders.

The scope of the report includes Scope 1 and 2 emissions data starting in 2026, with Scope 3 data required annually beginning in 2027. The GHGs to be reported are not specified, and the reporting methodology follows the GHG Protocol Guidance (to be reviewed in 2033).

c. EU Corporate Sustainability Reporting Directive (CSRD)¹⁰

The EU CSRD entered into force in January 2023. It establishes a financial disclosure regulation at the corporate level and targets large companies and all listed companies, excluding listed micro-enterprises. Large companies are defined as those meeting at least two of the following three conditions: having a net turnover of over €50 million, assets exceeding €25 million, or employing more than 250 people. Additionally, non-EU companies that generate more than €150 million in revenue from the EU market are also required to report.

The CSRD requires companies to obtain independent third-party assurance for their data. Sustainability reporting must be included in companies' annual financial reports, which are publicly disclosed. As the Directive is enforced at the national level in each EU member state, penalties for noncompliance vary across jurisdictions. In France, for instance, penalties include monetary fines of up to €18,750 and may also extend to criminal sanctions, such as fines of up to €375,000 and a maximum of five years in prison for obstructing the audit of the report.

The report covers Scope 1, 2, and 3 GHG emissions, as well as total GHG emissions. Companies must also disclose their GHG emission reduction targets and outline a transition plan to achieve climate neutrality by 2050. It also requires additional information on the risks and opportunities arising from social and environmental issues, and on the impact of the company's activities. The GHGs covered under this regulation include carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorochemicals, sulfur hexafluoride, and nitrogen trifluoride.

9 California Legislative Information. (2023). Bill 253: California Climate Corporate Accountability Act. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202320240SB253

10 European Commission. Corporate sustainability reporting. Finance. https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en

The CSRD allows for reporting companies to choose from the GHG Protocol Guidance, or the Commission Recommendation (EU) 2021/2279, or the EN ISO 14064-1:2018 standard as the applicable methodologies to their reports.

iii. Product-level MRRs

Product-level data is essential for the development of effective trade and climate policies, such as green procurement policies, which require precise data on the embedded emissions in products. This level of reporting informs purchasers of emissions within products and allows for more informed decisions. It also drives innovation within companies, enabling them to improve product design, enhance efficiencies, reduce costs, and mitigate risks over time.¹¹

a. EU Carbon Border Adjustment Mechanism (CBAM)¹²

The EU Carbon Border Adjustment Mechanism (CBAM) is implemented across the EU and is applied at the product level. Reporting obligations fall on importers of specific goods, including cement, iron and steel, aluminum, fertilizers, electricity, and hydrogen.

The reporting requirements under CBAM cover direct and indirect embedded emissions in the imported products, as well as embedded emissions in precursor goods, which include both direct and indirect emissions. However, downstream emissions of the products and emissions from the transport of materials between sites or from processes further upstream are excluded from the reporting scope.

The GHGs covered by CBAM include carbon dioxide, nitrous oxide, and perfluorocarbons.

	EU CBAM
Jurisdiction	EU
Purpose	CBAM
Reporting level	Product
Applicability	Importers of: <ul style="list-style-type: none"> • Cement • Iron and steel • Aluminium • Fertilisers • Electricity • Hydrogen
Report scope	<ul style="list-style-type: none"> • Direct and indirect embedded emissions • Direct and indirect embedded emissions in precursor goods
Methodology	CBAM

¹¹ Greenhouse Gas Protocol. Product Life Cycle Accounting and Reporting Standard. Greenhouse Gas Protocol. Available at <https://ghgprotocol.org/product-standard>

¹² European Commission. Carbon border adjustment mechanism. Taxation and Customs Union. https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism_en

Until December 31, 2024, companies can select one of three reporting methods under the CBAM:

- Complete reporting using the new methodology (EU method). The EU method allows companies to choose one of two approaches: (a) determining emissions on the basis of activity data obtained through measurement systems and calculation factors from laboratory analyses or standard values; or (b) determining emissions by continuously measuring the concentration of the relevant GHG in the flue gas and of the flue gas flow.
- Reporting based on one of three equivalent methods (i.e., a carbon pricing scheme, a compulsory emissions monitoring scheme, or an emission monitoring scheme at the installation).
- If the declarant lacks the required information, reporting using default values, as calculated by the EU's Joint Research Centre (JRC) and published by the EU Commission.

Starting January 1st, 2025, only the EU method will be accepted. Estimates (including default values) will be permissible solely for complex goods, provided these estimates account for less than 20% of the total embedded emissions.

The EU method requires importers to obtain emissions data from their suppliers to accurately calculate the embedded emissions of imported goods. To assist producers in determining these emissions, the EU Commission has provided guidance and templates.

CBAM reports must be submitted annually. While verification by an external independent body will become mandatory in 2026, during the transitional period, the Commission will conduct initial screenings of the reports. Non-compliance with CBAM regulations may result in penalties ranging from EUR 10 to EUR 50 per tonne of unreported emissions.

PRODUCT-LEVEL EMISSIONS DATA IN MRRS

Product-level accounting and reporting are vital for government procurement purposes as they provide a detailed and accurate picture of the embedded emissions in various products. This granularity allows governments to make informed decisions and prioritize purchases that align with sustainability goals. For instance, the Federal Buy Clean Initiative requires product-level data to select low-emissions construction materials such as concrete, steel, asphalt, and flat glass.

However, with the exception of CBAM, none of the other MRRs analyzed demand explicit, product-specific emissions reporting. Some regulations, however, implicitly require disclosure of product-related emissions through the requirement to report Scope 3 emissions.

The MRRs that mandate Scope 3 emissions reporting are the EPA GHGRP, California MRR, Washington GHG Program, California CCDA, and EU CSRD. The EPA GHGRP, along with California MRR and Washington's GHG Program, which incorporate the EPA's methodology, adheres to the GHG Protocol's Scope 3 accounting standards. Similarly, the California CCDA also utilizes the GHG Protocol. While the EU CSRD permits the use of various reporting standards, it also allows companies to adopt the GHG Protocol.

Therefore, the GHG Protocol Scope 3 Guidance is examined next, to determine the specific product-related disclosure requirements that emerge from the MRRs.¹³

¹³ Greenhouse Gas Protocol. Technical guidance for calculating scope 3 emissions (version 2). Available at <https://ghgprotocol.org/scope-3-calculation-guidance-2>

Below is a summary of the Guidance:

OVERVIEW OF GHG PROTOCOL SCOPE 3 ACTIVITIES: PRODUCT-LEVEL INFORMATION ¹⁴		
ACTIVITIES	DESCRIPTION	COVERAGE
UPSTREAM		
Purchased goods and services	Extraction, production, and transportation of goods and services purchased or acquired by the company	All upstream (cradle-to-gate) emissions of purchased goods and services in the reporting year (e.g.: extraction of raw materials, agricultural activities, manufacturing, production, and processing etc.)
Capital goods	Extraction, production, and transportation of capital goods purchased or acquired by the company	All upstream (cradle-to-gate) emissions from the production of capital goods purchased or acquired by the company in the reporting year.
DOWNSTREAM		
Processing of sold products	Processing of intermediate products sold by downstream companies (e.g., manufacturers)	The scope 1 and scope 2 emissions of downstream companies that occur during processing (e.g., from energy use)
Use of sold products	End use of goods and services sold by the company	The direct use emissions of sold products over their expected lifetime (i.e., the scope 1 and scope 2 emissions of end users that occur from the use of: products that directly consume energy (fuels or electricity) during use; fuels and feedstocks; and GHGs and products that contain or form GHGs that are emitted during use)
End-of-life treatment of sold products	Waste disposal and treatment of products sold by the company at the end of their life	The scope 1 and scope 2 emissions of waste management companies that occur during disposal or treatment of sold products

The EPA GHGRP—and consequently California’s and Washington’s programs—only requires suppliers to report the amount of CO₂e that would be emitted if the products they produce, import, or export (such as fossil fuels) were combusted or oxidized. This data falls under Scope 3, Use of Sold Products

¹⁴ Data extracted from the Greenhouse Gas Protocol’s Technical guidance for calculating scope 3 emissions (version 2), with minor edits made to focus exclusively on product-level related requirements, excluding non-relevant data for the purposes of this discussion.

category, and is reported at the corporate level. In contrast, other MRRs do not specify which Scope 3 categories are required, leaving the exact nature of the product-related emission reporting requirements less defined.

MRRS APPLICABILITY TO GOVERNMENT PROCUREMENT PURPOSES

As seen, with the exception of the CBAM, MRRs generally do not explicitly require the disclosure of embedded emissions in products and are instead focused on corporate or facility-level emissions. Therefore, with the exception of the EU's CBAM, turning to MRRs for general guidance on what goods should be prioritized with a view to fighting climate change would be challenging, as it would require (i) accessing and analyzing company or facility reports to estimate potential product-level emissions and (ii) establishing a clear threshold for what qualifies as an environmental good.

Nevertheless, MRRs can still provide insights, particularly for government procurement purposes. Procurement strategies could leverage MRRs to assess Scope 3 emissions related to specific products, such as evaluating the emissions from inputs like limestone used in cement production. Furthermore, MRRs can provide information on the emissions generated during the use of purchased products, such as the complete combustion of petroleum in energy-related procurement. MRRs can also shed light on the emissions associated with intermediate products sold for further processing, enabling the assessment of emissions linked to steel sold to manufacturers and later procured by the government, for instance. All of the information gathered through MRRs could provide governments with a better picture of GHGs embedded in products, eventually facilitating the determination of the desired level of embedded emissions for specific goods.

Additionally, governments may seek to establish criteria that incorporate not only product-specific emissions but also the broader carbon footprint of the producing company or facility. For instance, when procuring steel, a government might set requirements that the steel be low-carbon, but also that the entire production facility and the corporation adhere to low-carbon standards. In such cases, MRRs and associated reports at the facility or corporate level could be instrumental in assessing the overall environmental performance of suppliers.

In this context, it is also worth noting Environmental Product Declarations (EPD) requirements used in government procurement. An EPD is a third-party verified document that provides information about the environmental impact of a product, including its global warming potential (GWP).¹⁵ The concept of EPDs is based on the standard ISO 14025:2006, which provides guidelines for developing and using environmental declarations, primarily for business-to-business communication. EPDs are frequently used in public procurement policies to report the embodied carbon of construction materials, helping to promote lower-carbon options in the market. The US Inflation Reductions Act (IRA), for instance, provides \$250 million to the EPA to develop an EPD Assistance Program to “support the development, enhanced standardization and

¹⁵ Lewis, M., Huang, M., Waldman, B., Carlisle, S., and Simonen, K. (2021). Environmental Product Declaration Requirements in Procurement Policies. Carbon Leadership Forum, University of Washington. Seattle, WA. Available at <https://carbonleadershipforum.org/epd-requirements-in-procurement-policies/>.

transparency and reporting criteria for environmental product declarations and reporting criteria for environmental product declarations.”¹⁶

There are different types of EPDs. A facility-specific EPD, for instance, provides detailed environmental impact data for a specific product manufactured at a single facility, attributing the environmental impacts, such as GHG emissions, directly to the processes at that particular manufacturing plant. A supply-chain specific EPD provides data for key upstream inputs and materials.

The U.S. General Services Administration (GSA), when addressing Frequently Asked Questions about an IRA Pilot Program funded under Section 60503 of IRA for select construction projects, notes that: “Actual data from the plant(s) that manufacture inputs within a specific supply chain increases a reported GWP’s certainty. GSA therefore **requests facility-specific, supply chain-specific EPDs where available.**”¹⁷ Specifically, the GSA seeks detailed information on production processes, including the sourcing, transportation, and processing of raw materials, as these factors significantly influence the overall environmental impact of the final products. Similarly, the EPA suggests requiring **facility-specific, product/material-specific, cradle-to-gate, third-party verified EPDs to access IRA funds for concrete/cement, glass, asphalt mix, and steel.**¹⁸ On the other hand, other Buy Clean legislation in the U.S., such as Colorado HB 21-1303, *requires supply-chain specific EPDs.*

In this sense, MRRs can be useful for both facility-specific and supply-chain specific EPDs because they provide data on the broader emissions associated with facility operations and with the upstream inputs and materials used for production, thereby enhancing the environmental impact assessments capabilities in government procurement.

Finally, MRRs can be leveraged to establish national or regional emissions benchmarks for specific industries or economic sectors. These benchmarks could then serve as a basis for defining the thresholds for green production, which, in turn, may inform carbon-adjusted tariff schedules.

CONCLUSION

In summary, MRRs may not provide a comprehensive solution for determining which goods to prioritize with a view to combating climate change, as they do not explicitly mandate comprehensive product-specific emissions disclosures. While each level of GHG emissions reporting serves distinct purposes, product-level accounting is essential for crafting policies aimed at incentivizing the purchase of environmental goods or discouraging the purchase of GHG-intensive ones.

However, MRRs can still be a valuable tool for identifying embodied emissions of products and enhancing government procurement strategies. The analysis shows that some MRRs, such as the EPA GHGRP, include Scope 3 emissions reporting which indirectly provides product-level emissions information. By utilizing Scope 3 data, governments can more accurately assess the environmental

¹⁶ Carlsen, W., & Gangotra, A. (2023, December 5). Key information on the EPA’s Environmental Product Declaration (EPD) assistance program. World Resources Institute. <https://www.wri.org/update/key-information-epas-environmental-product-declaration-epd-assistance-program>

¹⁷ General Services Administration. FAQs on GSA’s IRA LEC material requirements. May 16, 2023. Available at <https://www.gsa.gov/system/files/FAQs-on-GSAs-IRA-LEC-Material-Requirements.pdf>

¹⁸ U.S. Environmental Protection Agency. (2023). Getting to Substantially Lower Embodied Greenhouse Gas Emission Construction Materials. Available at: https://www.epa.gov/system/files/documents/2023-04/March%2022%20-%20OCSPP%20IRA%20Programs%20-%20EPD%20Assistance%20-%20final_ec.pdf

■ , impact of products, including emissions from inputs and usage. Furthermore, since most MRRs focus on facility or corporate-level reporting, this data can help governments establish both product-specific and broader facility or corporate-level requirements. This dual approach allows for a more comprehensive evaluation of the environmental performance of products and their suppliers, ultimately supporting more effective green procurement policies.