DRAFT APPROACH
FOR STAKEHOLDER INPUT:
Implementation of the EPA Label Program for Low Embodied Carbon Construction Materials (Inflation Reduction Act 60116)

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Notice of Availability: Key Information and Guidance for Stakeholder Input on the Draft Label Program Approach

EPA has developed a Draft Label Program Approach in response to directives received from Section 60116 of the Inflation Reduction Act. EPA's Draft Approach is also informed by input from stakeholders via EPA's Request for Information, learnings from Federal Buy Clean Initiatives in 2022 and 2023, and other sources. EPA is seeking stakeholder input on this proposed approach through a 30-day public comment period via this Notice of Availability (NOA). EPA will hold a public meeting after publishing the NOA to provide an opportunity for stakeholders to ask questions about the NOA, to clarify information in the document, and to allow stakeholders to provide more focused comments to better inform the process of shaping the label program.

Stakeholders are invited to provide input on this NOA for the Draft Label Program Approach via Docket # EPA-HQ-OPPT-2024-0038 by March 15, 2024.

EPA is seeking public input on specific aspects of the Draft Label Program Approach. The following information and topic guidance is intended to inform the feedback provided.

Data Quality Improvement

EPA has begun work to implement Phase I of the label program. Work includes:

- Developing a Vision for Improving Background Data with the Interagency Background Data Team, which will be published in the coming weeks.
- Creating a proposed process for ensuring data sets directed for use in developing life cycle assessments (LCAs) in Product Category Rules (PCRs) are of sufficient quality to be used by PCR Committees. EPA will issue a Data Set Quality Assessment methodology in the coming weeks.
- Developing PCR Criteria to be utilized under the label program. These criteria will help ensure that any environmental product declarations (EPDs) used to both develop global warming potential (GWP) thresholds for the label program or to identify lower embodied carbon materials qualifying for the label are sufficiently robust. EPA will be releasing the draft PCR Criteria for public comment in the coming weeks.

To inform development of these documents and build upon input already received via the 2022 RFI, EPA welcomes additional input on ways to improve background data, enhance publicly available data sets in the LCA Data Commons, and facilitate PCR improvements.

Material Threshold Setting

EPA is considering several options for addressing regional differences specific to sourcing materials and products in the GWP threshold-setting process as part of Phase II of the label program. EPA welcomes specific input on what methods would be effective, feasible, and time- and cost-effective for specifying regions where necessary (e.g., American Association of State Highway and Transportation Officials climate zones, groupings of states, market share or geological breakdowns).

EPA is interested in ensuring GWP thresholds are based on sufficiently representative data, recognizing that what constitutes "representative" will vary by material. EPA plans to conduct proper statistical analysis on EPD availability; however, EPA is aware of the time constraints in doing so. EPA welcomes specific input on how to effectively define "representative" data for a specific material type when setting thresholds (e.g., at least 30–50 EPDs for each material type in each region, or a certain percentage of all EPDs for a material type in each region).

Certifying and Labeling Materials and Products

EPA recognizes the need for credible conformity assessments to ensure stakeholders trust the label program. EPA welcomes specific input on what qualifications or accreditations should be considered by or required of EPD verifiers to demonstrate sufficient knowledge and experience of LCA and EPA development practice. EPA is interested in stakeholder feedback on whether the conformity criteria and processes used by EPA programs (e.g., ENERGY STAR, WaterSense), recommended in the EPA Framework for the Assessment of Environmental Performance Standards and Ecolabels for Federal Purchasing, and/or used for EPDs in the market today should be applied to this label program.

Additionally, EPA is interested in hearing from EPD verifiers and Conformity Assessment Bodies that would like to provide conformity assessment or verification services under this label program. Please indicate your interest in commenting or send an email to embodiedcarbon@epa.gov.

Overall Approach

EPA recognizes the importance of transparency and stakeholder input as we develop this program. Other feedback is welcome in the form of questions, comments, or additional information for consideration as the project moves forward.

Summary

An increasing number of U.S. federal, state, and local government procurement policies, as well as large institutional procurement policies, are aimed at driving down greenhouse gas (GHG) emissions related to construction materials. These policies often require manufacturers to disclose the embodied carbon of the materials and products they produce in order for these materials and products to be eligible for procurement. Embodied carbon refers to the GHG emissions released during the life cycle of construction materials and products, including extraction, production, transport, and manufacturing impacts.[1]

The Inflation Reduction Act, passed by Congress and signed into law in August 2022, leverages federal procurement and funding of buildings and infrastructure to catalyze markets for American-made construction materials and products with lower embodied carbon (also known as lower embodied greenhouse gas emissions). Inflation Reduction Act Section 60116 provided EPA $100 million dollars "to develop and carry out a program… to identify and label construction materials and products that have substantially lower levels of embodied greenhouse gas emissions associated with all relevant stages of production, use, and disposal, as compared to estimated industry averages of similar materials or products." EPA is committed to developing a label program that creates an easy and reliable way for purchasers to identify and procure such lower embodied carbon construction materials and products.

The General Services Administration (GSA), the Department of Transportation's Federal Highways Administration (FHWA), and other federal agencies can use this label program to set specifications and requirements for federal procurement and federally funded construction projects or to make direct purchases of construction materials or products consistent with the requirements of Inflation Reduction Action Section 60503, 60506, and 70002, and any other relevant low embodied carbon provisions. Additionally, the label program may provide information that is useful for setting specifications and requirements for construction or making direct purchases of construction materials and products covered by this label program. The program may also be useful in implementing the Buy Clean efforts of other institutional purchasers, including state, tribal, and local governments; universities; and other private sector purchasers.

The success and efficacy of any such label program depends on the ability to access and use representative, accurate, and verifiable data to set thresholds for specific materials and products. As such, EPA's label program will build on the Agency's work under Inflation Reduction Act Section 60112 to support the development, enhanced standardization and transparency, and reporting criteria of environmental product declarations (EPDs) in the marketplace. EPDs provide quantified environmental data related to the life cycle stages declared. They are developed using Product Category Rules (PCRs), which provide a set of specific rules, requirements, and guidelines for developing EPDs for one or more product categories.[2]

[1] Per the Inflation Reduction Act, EPA is also considering how to address embodied carbon associated with the use and disposal stages of a construction material or product's life, where relevant. See Appendix A for additional definitions of terms used in this document.

[2] Note that PCRs are not "rules" in the EPA regulatory sense.

EPA's efforts under Inflation Reduction Act Section 60112 will support manufacturers in quantifying and disclosing information about the materials and products they are producing, which will in turn inform their ability to qualify for the label program. These efforts will also support the many decision-makers involved in designing and building infrastructure projects, including architects, engineers, planners, contractors, suppliers, and construction and demolition firms.

EPA has already begun work to improve life cycle assessment (LCA), PCR, and EPD data quality to bridge the gap between current PCR and EPD development practices and the level of credibility necessary for an effective label program. EPA's work on these issues includes:

- Developing and beginning implementation of a plan to improve public LCA data sets and the Federal LCA Commons via an interagency team.
- Participating on PCR Committees updating or developing key PCRs.
- Drafting PCR Criteria (to be released for public comment in the coming weeks) for identifying PCRs sufficiently robust[3] for use by the label program.
- Launching a new grant and technical assistance program for PCR updates, data collection and verification efforts, LCA development, and production of new, verified EPDs, among other activities.
- Providing contractor-supported technical assistance for manufacturers to help develop new EPDs per Federal Buy Clean demand.
- Carrying out other activities that assist in measuring, reporting, and catalyzing reduction of embodied carbon in construction materials and products.

For more information, visit EPA's Low Embodied Carbon Construction Materials Program website.

The label program will initially focus on the Global Warming Potential (GWP)—the main environmental impact category used on EPDs to represent embodied carbon[4]—from the production stage for construction materials and products. It will also focus initially on a subset of the materials prioritized in EPA's Interim Determination and in the Federal Buy Clean Initiative: steel, glass, asphalt, and concrete. Each construction material is unique and at varying stages of maturity with respect to both the availability of robust EPDs and availability of lower embodied carbon products. This variation will impact the timing of when each material may be ready for inclusion under the label program.

[3] In reference to data, PCRs, EPDs, and associated tools and resources, robust refers to the following characteristics: conformance with international, voluntary consensus standards, and/or other standards that are effective and otherwise suitable for the U.S. market; third-party verification; data specific to a facility and supply chain; inclusion of relevant stages of production, use, and disposal; inclusion of additional environmental and human health impact categories beyond GWPs; interoperability via digitization; transparency via disclosure of background data sets, upstream data sources, and uncertainty/assumptions; readily and publicly available (i.e.,. free of charge) via an open data platform or platforms; and potentially other characteristics as the market develops.

[4] Throughout the label program and this document, "embodied carbon" is used as synonymous with "embodied greenhouse gas emission." The "carbon" referred to in the phrase "embodied carbon" is shorthand for "carbon dioxide equivalent," which is a means of calculating and describing GHG emissions by converting them to carbon dioxide equivalent values.

To ensure longevity and replicability of the label program, and to allow other materials to be included over time, EPA is proposing a phased approach that all material categories will be able to follow at a cadence that aligns with the material's market maturity and data availability. These phases are:

- **Phase I: Data Quality Improvement.** Standardizing and improving the quality of data provided via EPDs.
- **Phase II: Threshold Setting.** Using robust EPDs, data, and other credible and representative industry benchmarks to determine GWP thresholds for each specific material categories and types.
- **Phase III: Certifying and Labeling Materials and Products.** Certifying materials and products that meet label criteria.

EPA is proposing to label specific construction materials and products under this label program based on the GWP value provided on robust EPDs.[5] Certified materials and products will meet or fall under specified GWP thresholds. EPA will manage an online registry of certified materials and products, which will be publicly accessible. The label program will offer a tiered rating system of certification (e.g., substantially lower than, lower than, and better than average embodied carbon) for materials and products, according to each material/product's compliance with EPA's eligibility criteria. The label program will utilize a conformity assessment and verification approach aligned with the existing EPD verification system, and consistent with standards and best practices within the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) 17000 series and those required by EPA's Framework for Assessing Environmental Performance for Specifications, Standards, and Ecolabels for Federal Purchasing.

Background

Overview

Construction materials and products are critical to maintaining and improving the nation's infrastructure, but are also associated with substantial social, economic, and environmental costs. For example, the U.S. industrial sector is linked to nearly a third of annual U.S. GHG emissions,[6] and the manufacturing of construction materials and products accounts for 11 percent of annual global GHG emissions.[7]

An increasing number of U.S. federal, state, and local government procurement policies, as well as large institutional procurement policies, are aimed at addressing GHG emissions related to construction materials. These policies often require manufacturers to disclose the embodied carbon of the materials and products they produce in order for these materials and products to be eligible for procurement. Embodied carbon refers to the amount of GHG emissions released during the life cycle of construction

[5] See Footnote 3.

[6] U.S. Environmental Protection Agency, "Sources of Greenhouse Gas Emissions 2021."

[7] International Energy Agency, "Global Status Report for Buildings and Construction 2019."

materials and products, including extraction, production, transport and manufacturing of materials and products.[8]

The U.S. federal government is the world's largest buyer of goods and services, with more than $694 billion spent on procurement in fiscal year (FY) 2022.[9] More than 30 percent of construction-related embodied GHG emissions in the United States are estimated to result from government-funded projects.[10] With historic investments funded by the Bipartisan Infrastructure Law and the Inflation Reduction Act, there is more demand than ever to purchase materials that are both American-made and lower in embodied carbon.

Inflation Reduction Act

Directed by provisions in the Inflation Reduction Act, EPA is developing a label program that seeks to make it easier to identify and purchase lower embodied carbon construction materials. Section 60116 of the Inflation Reduction Act directs EPA (in consultation with GSA and FHWA) "to develop and carry out a program…to identify and label construction materials and products that have substantially lower levels of embodied greenhouse gas emissions associated with all relevant stages of production, use, and disposal as compared to estimated industry averages of similar materials or products, as determined by [EPA], based on—

(1) environmental product declarations; or

(2) determinations by State agencies, as verified by [EPA]."

Section 60116 appropriated $100 million to EPA, which remains available until September 30, 2026, for this program.

Federal Buy Clean Initiative

To help achieve net-zero emissions procurement for the federal government by 2050, as directed by Executive Order 14057, and to reduce climate change impacts, the Federal Buy Clean Initiative leverages federal procurement and funding to catalyze markets for American-made, lower embodied carbon construction materials and products used to upgrade and invest in U.S. infrastructure, including transportation, buildings, and energy. Through the Inflation Reduction Act, GSA has announced plans to spend $2.15 billion on substantially lower embodied carbon materials to upgrade federal infrastructure and DOT's FHWA will offer $2 billion in funding for transportation authorities to do the same. EPA serves as the Data & Technical Assistance Center of Excellence for lower embodied carbon construction materials and products as part of the Federal Buy Clean Initiative, collaborating with 12 other agencies representing 90 percent of all federally financed and purchased construction materials and products.

[8] Per the Inflation Reduction Act, EPA is also considering how to address GHG emissions associated with other relevant stages, including use and disposal stages of a construction material or product's life, where relevant.

[9] U.S. Government Accountability Office, "A Snapshot of Government-Side Contracting for FY 2022."

[10] U.S. General Services Administration, "GSA Green Building Advisory Committee Advice Letter: Policy Recommendations for Procurement of Low Embodied Energy and Carbon Materials by Federal Agencies 2021."

EPA plans to incorporate this label program under Inflation Reduction Act Section 60116 as one element of EPA's role as the Data & Technical Assistance Center of Excellence. This work is part of a much broader set of actions being taken in the federal government to decarbonize the U.S. construction sector. In addition to this label program's material-centric approach that looks at production stage emissions for newly manufactured materials, the federal government is implementing and supporting whole construction project approaches, including renovating and reusing existing building stock, creating whole-project carbon budgets, optimizing material volumes, and encouraging the use of salvaged materials through deconstruction and reuse. Furthermore, the Department of Energy is making historic investments into industrial decarbonization to accelerate emissions reductions and position the U.S. industrial sector as a global leader in innovation.

State, Local Government, and Institutional Buy Clean Initiatives

Increasingly, states, local governments, and large public and private-sector institutions have also adopted their own Buy Clean Initiatives and policies to reduce GHG emissions—including embodied carbon—from their construction and infrastructure investments. EPA's approach is informed by and builds from these innovative efforts, consistent with the Inflation Reduction Act IRA Section 60116(a)(2). Through the Federal-State Buy Clean Partnership, 13 states have committed to collaborate with the federal government and one another to send a harmonized demand signal to the marketplace.

EPA Low Embodied Carbon Construction Materials Program

To carry out its responsibilities under the Inflation Reduction Act, EPA is designing two programs that will promote efforts to measure, disclose, and reduce embodied carbon of construction materials and products and help federal agencies identify and use lower embodied carbon construction materials and products. These two programs are:

- EPA's EPD Assistance Program, per Inflation Reduction Act Section 60112.
- EPA's Label Program for Substantially Lower Embodied Carbon Construction Materials, per Inflation Reduction Act Section 60116.

Additional information about EPA's EPD Assistance Program can be found on EPA's Low Embodied Carbon Construction Materials Program website. This document describes EPA's approach to implementing Inflation Reduction Act Section 60116.

See Figure 1 below for a diagram of the relationships and interconnections between the various parts of EPA's Low Embodied Carbon Construction Materials Program.

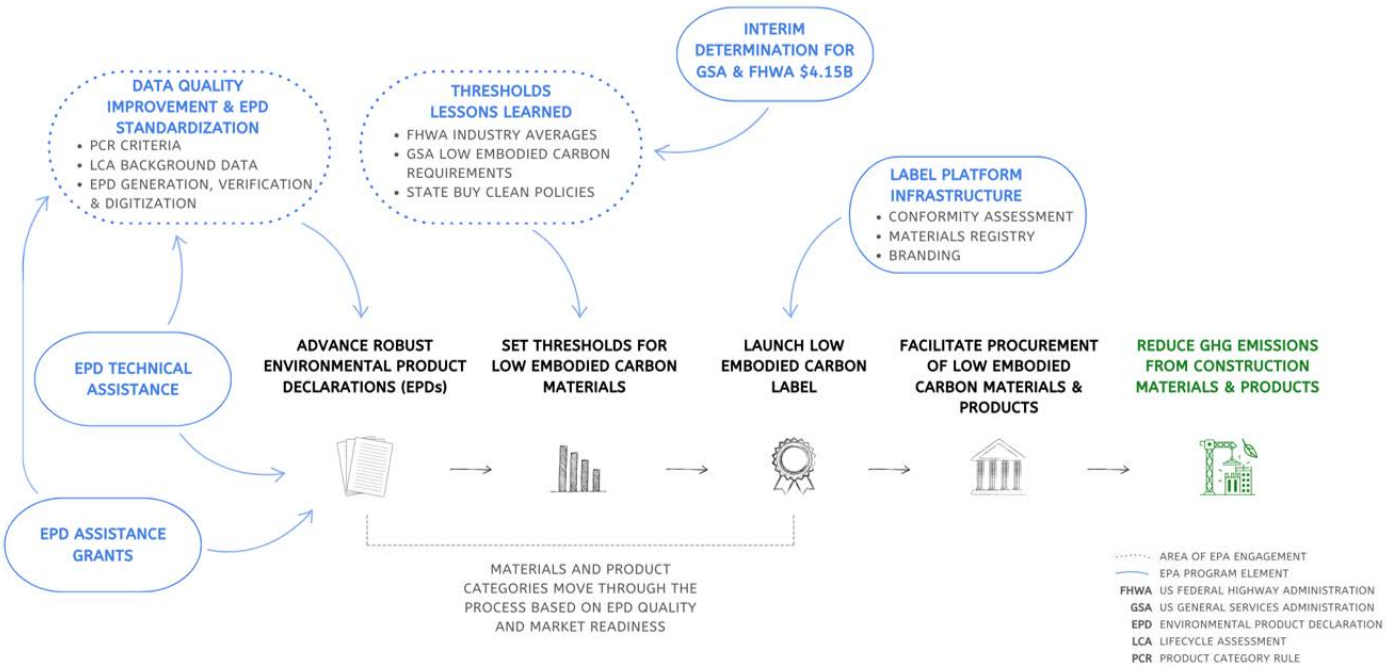

Figure 1. Connections between parts of EPA's Low Embodied Carbon Construction Materials Program.

EPA's Interim Determination and Related Federal Actions to Date

On December 2022, EPA issued an Interim Determination to GSA (under Inflation Reduction Act Section 60503) and DOT's FHWA (under Inflation Reduction Act Section 60563) on qualifying construction materials and products with substantially lower embodied GHG emissions. EPA's Interim Determination focused on four construction materials: concrete, glass, asphalt, and steel. The Federal Buy Clean Initiative has also prioritized these four materials because they have high embodied GHG emissions and significant government procurement.

In May 2023, GSA subsequently issued pilot requirements that provided GWP thresholds for the materials covered in the Interim Determination and launched a six-month pilot to test the approach. In November 2023, GSA announced over 150 federal government building projects for which they will prioritize procuring lower embodied carbon construction materials. In December 2023, GSA issued further information about their material requirements and FAQs. Currently, DOT's FHWA Sustainable Pavements Program is engaging relevant stakeholders in an industry average study to build on GSA's efforts and to inform the GWP setting process for their grant program.

Label Program Stakeholder Engagement and Development

Request for Information to Inform the Label Program

In January 2023, EPA issued a Request for Information (RFI) to invite stakeholder feedback, which included several questions related to the Inflation Reduction Act Section 60116 label program. A list of questions that relate directly to the label program can be found at the conclusion of this document in Appendix C.

EPA also hosted a stakeholder webinar on April 19, 2023, providing context for the questions in the RFI related to the label program and inviting additional stakeholder feedback. Recurring themes and areas of general agreement from RFI responses include those in Table 1 below. Input received and lessons learned from more than 200 stakeholders via this RFI has been invaluable to developing the proposed Label Program Approach.

Table 1. Recurring Themes and Areas of Agreement in RFI Responses

Programmatic Element	RFI Responses (Aggregated by Theme)
Scope	• Support for the label program scope covering the initial first four material types (steel, glass, asphalt, and concrete). • Support for expanding the scope to additional materials, products, and life cycle stages as soon as possible.
Data Quality and Consistency	• Support for improved data quality and more robust EPDs. • Support for consistent standards and guidelines for modeling and accounting for GHG emissions of materials.
Threshold Setting	• Support for considering the many performance characteristics and regionality of relevant materials and products. • General support for a tiered system approach for thresholds.
Conformity Assessment	• General support for using the current EPD conformance system with an added accreditation requirement for verifiers.
General	• No mention of an existing label/sustainability standard to consider using in lieu of or as part of developing the EPA label program for the first four materials.

Other Experience and Expertise That Informed the Draft Label Program Approach

In addition to the RFI responses and EPA's EPD Assistance Program, the Draft Label Program Approach described in this document was also informed by:

- Consultation with GSA and DOT's FHWA, including on GSA and DOT's FHWA pilot programs, consistent with Inflation Reduction Act Section 60116(a).

- State and other Buy Clean Programs, consistent with Inflation Reduction Act Section 60116(a)(2).
- Expert guidance provided by staff of other EPA ecolabel programs (e.g., ENERGY STAR, WaterSense, Safer Choice).
- The Standards Coordination Office at the Department of Commerce's National Institute for Standards and Technology and its guidance on conformity assessment.
- Guidelines for Designing EPA Partnership Programs.
- Engagement with LCA, PCR, and EPD development efforts.
- Input and guidance from the Interagency Label Program Development Team.

EPA appreciates the significant and detailed input provided by these experts and stakeholders to inform this work.

Guiding Questions That Informed the Draft Label Program Approach

EPA used the following guiding questions to inform development of the Draft Label Program Approach:

- How might EPA develop a label program that best implements Inflation Reduction Act Section 60116?
- How might EPA maximize data quality while also expediently meeting the needs of federal purchasers, including GSA under Inflation Reduction Act section 60503 and DOT's FHWA under Inflation Reduction Act Section 60603?
- How might EPA develop a label program that can operate within the current data quality landscape, and that is adaptable as that data landscape changes and improves over time?
- How might EPA build a label program mechanism applicable to all categories of construction materials and products?
- Are there ways to allow EPA's label program to be relevant to and usable by agencies that are procuring lower embodied carbon construction materials and products with funding sources other than the Inflation Reduction Act?

Objectives of the Label Program

The label program aims to:

- **Facilitate federal procurement of substantially lower embodied carbon construction materials and products.**
  - Provide federal agencies and federal construction contractors with a simple and reliable way to identify and source these materials and products.
  - Simplify the process for specifiers and contractors to track compliance with directives to procure and use these materials and products.

- **Identify early adopters and market movers.**
  - Ensure manufacturers that invest in disclosing and reducing the embodied carbon of their construction materials and products are identified and engaged in federally funded construction projects.
- **Unify the market.**
  - Standardize market signals among Buy Clean Programs to avoid market confusion, amplify the label program's impact, and increase its efficiencies.
  - Improve quality and consistency of data and process used to quantify embodied carbon emissions.

The label program is not intended to facilitate direct comparison *between* different material types, or to be used for project-level design decisions. Instead, the label program will help specifiers and procurement officials identify materials and products with substantially lower embodied carbon within an already-determined material type and performance needs. However, EPA expects that the embodied carbon data improvements and the thresholds set through these efforts will facilitate improvements in whole-building and whole-construction project approaches to further reduce embodied carbon of federal infrastructure projects.

Intended Label Use Cases and End Users

The label program is intended to be used in the ways shown in Table 2, thereby serving the associated end users.

Table 2. Intended Use Cases and End Users of the Label Program

Use Case	End Users
Procurement of Lower Embodied Carbon Construction Materials and Products	Construction contractors and specifiers for federal agencies making direct purchases of construction materials and products.
Development of Buy Clean Programs	Federal Entities setting specifications and/or requirements for federal construction and others implementing Buy Clean efforts.
Provision of Lower Embodied Carbon Construction Materials and Products	Manufacturers of lower embodied carbon construction materials and products covered by this label program looking to have their materials and products used in federally funded construction projects.
Development of Procurement-Related Grants/Funding Programs	Federal entities setting criteria for programs that provide funding for materials and products procured as part of transportation infrastructure and/or building construction projects.
Lower Embodied Carbon Design and Construction	Architects, engineers, and other procurement-adjacent professionals and organizations aiming to use lower embodied carbon construction materials and products in their federally funded projects, rating systems, and construction planning tools.

Scope of the Label Program

The below categories constitute the scope of the draft label program. EPA will consider expanding the program to cover additional materials and products with significant embodied carbon reduction potential in the future as resources allow.

Life Cycle Stages

The Inflation Reduction Act directed EPA to develop a label program to address embodied carbon at all "relevant stages of production, use, and disposal." Due to the current data landscape, the label will initially address embodied carbon only from the production stage of materials/products (LCA Modules A1–A3). EPA will consider adding other life cycle stages and other key environmental impacts as the label program evolves over time, dependent on data quality and resource availability.

Tiering

EPA plans to use a tiered threshold format for the label program in response to input from RFI respondents and learning from the EPA Interim Determination. EPA is considering using three tiers, corresponding to different levels of lower embodied carbon of specific materials and products. EPA expects to set specific thresholds for each tier of the label whenever feasible and use a consistent methodology across material categories and types. Each material category and related type will include specific GWP thresholds. (Potential label tiers are further described in subsequent sections of this document.)

Material and Product Categories

The label program will focus initially on steel construction products, asphalt mixtures, concrete mixtures, and glass products, consistent with EPA's 2022 Interim Determination and the Federal Buy Clean Initiative. EPA selected these material categories based on their high embodied carbon levels, availability of data and reporting frameworks (such as EPDs), and because they represent the vast majority of construction materials and products purchased with federal funds.

The Label Program Phased Approach

The Label Program Approach includes three phases, which are material agnostic, applicable to any material or product, and allow materials or products to move through them at their own pace:

- **Phase I: Data Quality Improvement.** Standardizing and improving the quality of data provided via EPDs.
- **Phase II: Threshold Setting.** Using robust EPDs, data, and other credible and representative industry benchmarks to determine GWP thresholds for each specific material categories and types.
- **Phase III: Certifying and Labeling Materials and Products.** Certifying materials and products that meet label criteria.

See Figure 2 below for a diagram showing phases of the Label Program Approach. As each material category meets the minimum requirements of each phase, it will then move to the next phase and associated processes.

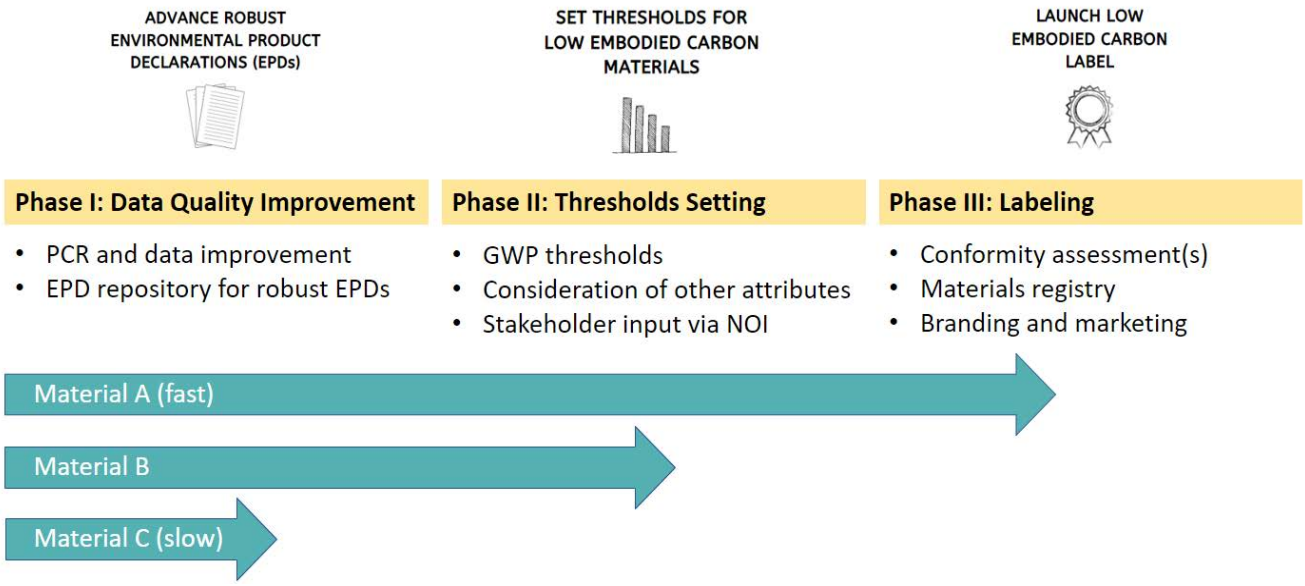

Figure 2. The three phases of the Label Program Approach.

Phase I: Data Quality Improvement

The success and efficacy of any label program depends on the ability to access and use representative, accurate, and verifiable data to set thresholds used to determine which materials and products qualify for the label. As such, this label program will build on EPA's work related to Inflation Reduction Act Section 60112 to improve the quantity and quality of EPDs in the marketplace. EPDs provide quantified environmental data related to the life cycle stages of specific products or materials. They are developed using PCRs, which provide a set of specific rules, requirements, and guidelines for developing EPDs for one or more product categories.

The objective of Phase I is to improve the quality of PCRs and EPDs and ensure proper LCA practice is being followed to enable effective assessments of label program eligibility. Phase I aligns with the many RFI comments that pointed to the need to improve the existing EPDs and PCRs before labeling materials and products. Phase I will help alleviate this data quality concern and facilitate effective threshold setting.

EPA has already begun work to improve LCA, PCR, and EPD data quality to bridge the gap between the current PCR and EPD development practices and the level of credibility necessary for an effective label program. EPA's work on these issues includes:

- Developing and beginning implementation of a plan to improve public LCA data sets and the Federal LCA Commons via an interagency team.

- Participating on PCR Committees updating or developing key PCRs.
- Drafting PCR Criteria (to be released for public comment in the coming weeks) for identifying PCRs sufficiently robust[11] for use by the label program.
- Launching a new grant and technical assistance program for PCR updates, data collection and verification efforts, LCA development, and production of new, verified EPDs, among other activities.
- Providing contractor-supported technical assistance for manufacturers to help develop new EPDs per Federal Buy Clean demand.
- Carrying out other activities that assist in measuring, reporting, and catalyzing reduction of embodied carbon in construction materials and products.

Please visit EPA's Low Embodied Carbon Construction Materials Program website for more information on EPA's activities under Inflation Reduction Act Section 60112. Enhancing EPD standardization and the specificity of data in PCRs will help improve the data used to set thresholds under EPA's label program.

Using PCRs

PCRs are specific rules and guidelines for developing standardized, uniform EPDs for specific materials and products, and therefore are the first focus of Phase I. Any material included in the label program will be required to have an existing PCR. EPA will develop and maintain on its website a list of PCRs for use in EPD development that align with EPA's forthcoming PCR Criteria. No actions will be required on the part of individual manufacturers to initiate Phase I—EPA will review publicly available PCRs against the PCR criteria to determine alignment.

EPA's PCR Criteria

The PCR Criteria will build on existing work to improve PCRs. EPA is developing the criteria in partnership with other key federal agencies. There will be opportunity for stakeholder input prior to finalization. The criteria will include standard expectations for the content covered in PCRs, including providing the underlying LCAs that support the assumptions and claims in EPDs developed under the PCR, specifying data sets (with a transition period for specifying publicly accessible data sets), and connecting to relevant standards. The resulting criteria will enable consistent expectations of PCRs, their justifications, and assumptions made. They will also align with standard development practices so procurement decisions can be informed by the resulting PCRs within the construction materials and products sector.

EPA's PCR Criteria will establish priorities for enhancing the transparency and standardization of PCRs. The PCR Criteria will draw from and align with criteria developed by other entities but will provide a more prescriptive process for ensuring the criteria are met. The PCR Criteria will be informed by public comments from EPA's January 2023 RFI, in addition to the requirements from the Inflation Reduction Act Section 60112, which instructs EPA "to develop and carry out a program to support the development, enhanced standardization and transparency, and reporting criteria for environmental product declarations..." The label program will use EPDs built under PCRs aligned with EPA's PCR Criteria. EPA recognizes it will take time for some PCRs and EPDs to fully align with the PCR Criteria. For

[11] See footnote 3.

that reason, EPA is carefully considering which criteria PCRs will be required to meet right away (i.e., baseline criteria) and which could be met over time (i.e., leadership criteria). EPA expects to update the PCR Criteria at regular intervals to improve data quality; it also expects give stakeholders an opportunity to provide feedback before adoption.

ENERGY STAR Energy Performance Score and PCR Criteria

Energy used to manufacture construction materials is often a significant contributor of GHG emissions. Therefore, increasing energy efficiency at the manufacturing plant can be a key embodied carbon reduction strategy. The ENERGY STAR Industrial Program Energy Performance Score helps manufacturers benchmark the energy performance of their industrial plants and ensure they optimize energy efficiency. EPA is therefore exploring including in the PCR Criteria that PCRs should include direction to disclose these scores.

Requirements for EPDs Used by EPA for the Label Program

EPDs that EPA will use to determine potential thresholds (see Phase II) must:

- Be developed under a PCR aligned with EPA's PCR Criteria (still under development and to be made available for public comment in the coming weeks).
- Be a Type III Product-Specific EPD coming from a singular production or manufacturing facility.
- Be publicly available.
- Be verified by a third party against the PCR.
- Be submitted (along with a URL specifically for the EPD) to either:
  - An open data platform managed by EPA or an EPA-designated federal agency or
  - A nonfederal, EPA-designated open data platform.

Minimum Requirements to Complete Phase I

Once a material category has a PCR that aligns with EPA's PCR Criteria, and a representative number of robust EPDs developed in accordance with that PCR are publicly available, the next step (Phase II) is for EPA to develop GWP thresholds for the material.

Phase I Estimated Timeline

Individual materials and products may need different amounts of time to meet minimum data quality requirements before moving to Phase II. EPA estimates that most materials and products will progress through Phase I within six to 12 months.[12] However, material sectors with PCRs already in the process of being updated or with more experience in this area may take less time. Conversely, materials and products with less robust PCRs and fewer robust EPDs are likely to take longer.

[12] Start dates for the timelines are based on the date of publication of this document, or the date at which the given material category or material type completes the previous phase. Timelines are not reflective of all phases for a material, or the label program as a whole, and are subject to change.

Phase II: Threshold Setting

In Phase II, EPA will establish thresholds for GWPs related to the production stage (Life Cycle Informational Modules A1–A3) for each material/product category and its relevant types. This process will involve identifying material/product types within material/product categories, determining that material types have sufficient representative data to set GWP thresholds, developing draft thresholds, publishing and seeking stakeholder input on the proposed thresholds, refining the thresholds based on stakeholder input and any additional data provided, and publishing GWP thresholds. To inform this work, EPA will consider:

- Previous GWP threshold approaches undertaken by federal, state, and local agencies and/or other entities.
- Any additional, credible, and applicable sources of data for the given individual material/product category and type.
- Assessments of published EPDs for the material/product categories and types.

No actions will be required on the part of individual manufacturers to initiate Phase II—EPA will review publicly available EPDs to inform the development of draft GWP thresholds for stakeholder input.

Developing Draft GWP Thresholds

EPA will begin to develop thresholds considering the following:

- **Identifying material types.** Construction materials/products within the same category have varying performance requirements determined in the design/construction specifications. Therefore, where a category has multiple material/product types due to different performance needs, EPA will seek to establish unique GWP thresholds for these specific types. The number of material/product types EPA sets thresholds for is subject to the variations inherent to each material/product category. The selection of the performance-based material types for the construction materials and products covered under the label program will be informed by EPDs, as well as the work of the Interagency Team on PCR Coordination, the Interagency Team on Background Data for EPDs,[13] DOT's FHWA, GSA, relevant industries, non-governmental organizations, academics, internal EPA knowledge of materials and products, and feedback from the RFI responses.
- **Identifying representation.** EPA will determine what constitutes sufficiently representative data for setting thresholds based on review of previously used definitions, including previously outlined requirements by DOT's FHWA regarding geography, time period coverage, market coverage, and technology used to collect data, as well as potential analysis by statisticians. EPA

[13] The LCA Commons Data Interagency Team is comprised of staff from approximately 15 experienced LCA project leaders and practitioners from EPA, DOT's FHWA, the Department of Agriculture, the Department of Energy, the National Institute of Standards and Technology, and designated external experts. The group works to improve the Federal LCA Commons and its associated data sets. Opportunity for stakeholder engagement on these topics is forthcoming. Please sign up for the EPA Greener Products and Services email list to stay up to date on such opportunities.

will determine whether sufficient representation exists by reviewing the distribution of the EPDs in the Agency's EPD Repository and other data sources.

- **The utility of industry benchmark reports.** Various material industries have started publishing industrywide benchmark reports. DOT's FHWA is actively working with the four material industries outlined in EPA's December 2022 Interim Determination (asphalt, concrete, glass, and steel) to develop industrywide benchmark reports to inform the GWP-setting process for their grant program. As such, it is possible EPA may determine that the resulting industrywide benchmark reports are fit for use in the label program as an alternative to using EPDs. Until such updated reports are released, EPA will not presume an outcome.
- **Identifying regionality considerations.** EPA plans to use industry average benchmarking studies, EPD availability, and material/product availability to inform the assessment of how significant regionality is within the individual construction material/product category, as well as how to best address regionality within the United States in the threshold-setting process. Regionality approaches could leverage existing regional definitions developed by other entities (e.g., existing industry benchmarks, American Association of State Highway and Transportation Officials climate zones, groupings of states or geological regions).

Seeking Stakeholder Input on Draft Material GWP Thresholds

In Phase II, EPA will seek stakeholder input on and provide insight into the label program's proposed GWP thresholds for a specific material/product category and its respective types by issuing a Notice of Intent. The notice will:

- Share the summary of the material/product category data, research, EPDs, and GWP threshold-setting process.
- Outline the draft GWP thresholds for each specific material/product category and its respective types.
- Provide an opportunity for stakeholder response to the draft GWP thresholds.

Each Notice of Intent is expected to be a focused document outlining the means, methods, and draft results of EPA's effort to develop GWP thresholds for specific material/product types. The draft specification process is intended to provide transparency into how EPA determined material/product types and set GWP thresholds, as well as which data EPA used, with the intent of being relevant and replicable throughout the label program and market.

After reviewing of stakeholder input, EPA will refine and finalize the GWP thresholds for each material and /product category that is part of the label program. The published thresholds will reflect the tiered approach outlined in this document.

EPA anticipates GWP thresholds for each material/product category will be updated and redefined at regular intervals and informed by market conditions, data, and available resources. It is a common practice of ecolabel criteria to be regularly updated and become stricter over time in response to changes in the market and to help label users meet sustainability objectives. EPA will repeat Phase II in the future for each material category to assess potential changes in the embodied carbon of materials and products and to update thresholds as needed.

EPA expects that once it has published GWP thresholds for various construction materials and products, federal agencies and other institutional purchasers may begin to use them to specify and identify lower embodied carbon construction materials and products in procurement prior to completing Phase III: Certifying and Labeling Materials and Products.

Minimum Requirements to Complete Phase II

For a material/product category to move to Phase III, it must have published GWP thresholds by EPA.

Phase II Estimated Timeline

EPA expects that developing thresholds for use by its label program will take four to eight months for any material from the time that EPA initiates the threshold development process.[14] Draft thresholds for materials will move through the established process on a rolling basis. This timeline could shift in either direction depending on the time needed to address relevant stakeholder comments and concerns and make appropriate threshold revisions. The timeline also depends on the ability of material sectors to meet the outlined minimum data requirements in Phase I.

Considering Collaboration with Private-Sector Standards and Ecolabels

To leverage other successful multi-attribute ecolabels and/or standards in the marketplace today, and to conserve EPA resources, the Agency will consider engaging in standards development and/or update efforts to promote inclusion of GWP thresholds set by EPA into these standards and ecolabels for materials and products. This approach could help improve harmonization of GWP thresholds (making it easier for manufacturers to respond to customer demand for low embodied carbon construction materials and increasing their return on low embodied carbon investments) and ensure other environmental and/or social hotspots are addressed when relevant to a particular material or product.

Phase III: Certifying and Labeling Materials and Products

The objective of Phase III is to develop a simple and reliable way to identify, specify, and purchase lower embodied carbon construction materials and products that meet or are below the GWP thresholds set by EPA. For a material/product type to be considered for Phase III, it must have a PCR deemed to be aligned with EPA PCR Criteria and representative data per Phase I and have a threshold published by EPA per Phase II.

During Phase III, EPA and its partners will do the following:

- EPA-approved Conformity Assessment Bodies will conduct conformity assessments to ensure materials and products meet the label program's thresholds and other eligibility criteria based on information provided via EPDs (see the Conformity Assessment section below for details).

[14] Start dates for the timelines are based on the date of publication of this document, or the date at which the given material category or material type completes the previous Phase. Timelines are not reflective of all phases for a material, or the label program as a whole, and are subject to change.

- Conformity Assessment Bodies will deliver to EPA the list of materials/products verified to meet the program's thresholds and other eligibility criteria.
- EPA will add the newly certified materials/products to its publicly accessible online registry of certified materials and products.
- EPA will advertise the label program and engage stakeholders to maximize use of the label program and standardize market signals.
- EPA will provide technical assistance for federal purchasers in utilizing the label program.

Conformity Assessment

The label program will use the existing conformity assessment system (i.e., EPDs verified by EPD verifiers) to inform label program determinations of conformity.

During Phase I, EPA will work to increase the quality of conformity assessment provided for EPDs by engaging in PCR update and development processes and supporting capacity building for the EPD verifier community via the grant program. To ensure consistency and credibility of conformity assessment approaches, EPA will encourage PCR Committees to include, at minimum, requirements in PCRs for EPD verifiers to:

- Be accredited to quality conformity assessment standards from the ISO 17000 series of standards, as appropriate.
- Ensure their scope of accreditation includes verification services for the PCRs they are providing services under.
- Have documented LCA expertise.

In Phase I and Phase II, EPA will use Type III, Product-Specific, third party–verified EPDs' reported environmental data to inform GWP thresholds. If EPA elects to include additional criteria not covered in EPDs in the future (e.g., other federal environmental and human health priorities, regulatory compliance) as part of the label program eligibility criteria, a separate conformity assurance process may need to be employed.

In Phase III, EPA may also consider developing other procedures to maximize consistency of conformity approaches and provide ongoing confirmation of the label's integrity. These procedures can include audits of the various levels of conformance practices and organizations, data reviews, and convening of calibration summits, where verifiers and Conformity Assessment Bodies can share and agree on best practices to address challenges and integrate new technologies. EPA will develop the conformity assessment approach in collaboration with the Interagency Label Team and will ensure the approach supports quality assurance processes and needs of key federal agencies.

Material Registry

The materials and products registry will offer a central source for all lower embodied carbon construction materials certified by the EPA label program. The registry will be a regularly updated list of certified materials and products for each tier of each material category covered by the label program. The materials and products registry will align with best practices in the marketplace used by other

ecolabels and offer links to relevant EPDs housed in EPA's EPD repository and used as the basis of conformity for each material. EPA intends to design the registry to be sortable by a range of factors, including by material category, material type, tier, region, and EPD verifier. The registry will also provide information on the date of certification and the date that certification expires to help specifiers ensure and confirm compliance with low embodied carbon procurement requirements at the time of contract award.

EPA plans to explore options to allow federal and nonfederal enterprises to integrate the label program's materials registry database into their information technology systems, tools, and applications, possibly through an application program interface, if feasible. Prior to launch, the registry will be beta tested with manufacturers, federal specifiers, federal contractors, and other key users to ensure optimal user experience and satisfaction.

Tiered Label System

Under Inflation Reduction Act Section 60116(a), EPA is charged with identifying and labeling materials and products with "substantially lower levels" of embodied carbon when compared with "estimated industry averages of similar materials and products."

Many RFI respondents encouraged EPA to develop a tiered label program that identified more than just those materials and products with "substantially lower levels" of embodied carbon**.** In implementing the Inflation Reduction Act Section 60116 label program, a tiered approach could offer several benefits, including:

- Allowing participation from material manufacturers at different stages in their journey in disclosing GHG emissions and decarbonizing their manufacturing processes.
- Increasing the opportunity to align the Inflation Reduction Act Section 60116 label program with a wide range of Buy Clean Initiatives by federal, state, and local governments as well as private sector enterprises.
- Potentially incentivizing progressively larger shifts toward lower embodied carbon construction materials and products.

In response to RFI input, EPA plans to develop a tiered approach to the qualifying criteria as data and resources permit. EPA believes that it is consistent with the goals of Inflation Reduction Act Section 60116 for the label program to, when conducting its reviews, also identify materials or products that do not qualify as "substantially lower" but still have lower than industry average embodied carbon emissions. Table 3 presents an example of possible label program eligibility criteria under a tiered label format.

Table 3. Possible Label Program Eligibility Criteria Under a Tiered Format

Tier	Eligibility Criteria
Substantially Lower	GWP must be under a Substantially Lower value as determined in Phase II. Materials and products bearing this label would also be eligible as substantially lower under Inflation Reduction Act Sections 60503 and 60506.
Lower	GWP must be under a Lower value as determined in Phase II.
Better than Average	GWP must be under a Better Than Average value as determined in Phase II.

Note: See Phase II for more information about how these thresholds will be set. Tier names may change following completion of the label program branding and market strategy.

Criteria for the "lower" and "better than average" tiers will be crafted to find the right balance between rigor and product availability to meet purchaser needs and ensure usability of the label program.

Label Implementation and Market Uptake Strategy

EPA will develop a strategy for marketing, outreach, and trademark protection for the label program to maximize and ensure its proper use in the market, help harmonize market signals, and maximize embodied carbon reductions in the construction material sector.

The marketing and outreach strategy will include:

- Developing and trademarking a label program name and logo/mark to facilitate identification of certified materials in online registries and procurement tools.
- Developing logo use guidelines for how the label program's name and logo/mark may be used in the market.
- Creating and implementing a market monitoring plan to ensure appropriate application of logo use guidelines.
- Developing partnerships and partner agreements with interested purchasers and stakeholder groups to maximize and ensure proper use of the label program.
- Engaging state and local government Buy Clean Programs and other institutional purchasers to utilize the label program to create a stronger market signal, save resources, and facilitate speedier impact.

EPA will utilize focus groups and engage key potential label users such as federal contractors, federal contracting officers, and others to test messaging, ensure effective communication of the brand promise, and demonstrate brand value.

Phase III Estimated Timeline

EPA anticipates that it will take approximately four to six months for a material or product to complete Phase III and obtain certification with the label program.[15]

Program Evaluation and Measures of Success

EPA plans to use a variety of metrics to track program progress, ensure goals are met, and ensure continuous improvement of the program. This plan also includes ensuring user satisfaction with various components of the label program. EPA will provide details on program performance measurement and evaluation either in other documents or in future versions of this document.

Estimated Program Timeline

Table 4 presents estimated timing of materials moving through phases I, II, and III of the Label Program.

Table 4. Estimated Timing of Materials Moving through Phases I, II, and III

Label Program Phase	Indication of Successful Completion of Phase	Anticipated Timing
PHASE I: Data Quality Improvement	• A material category/type has a PCR that aligns with EPA's PCR Criteria. **AND** • The same material category/type has a representative number of robust, publicly available EPDs developed in accordance with that PCR.	• EPA estimates that most materials and products will each take six to 12 months to progress through Phase I.[15] • Individual materials and products may need different amounts of time to meet minimum data quality requirements, and they can move through Phase I concurrently.
PHASE II: Threshold Setting	• A material category and its respective types have successfully completed Phase I and Phase II processes and have GWP thresholds published by EPA.	• EPA estimates that it will take four to eight months to develop GWP thresholds for any material from the time that EPA initiates the threshold development process for that specific material.[15] • Draft thresholds for materials will move through the established process on a rolling basis, and it is expected that regular updates will take less time.

[15] Start dates for the timelines are based on the date of publication of this document, or the date at which the given material category or material type completes the previous phase. Timelines are not reflective of all phases for a material, or the label program as a whole, and are subject to change.

Label Program Phase	Indication of Successful Completion of Phase	Anticipated Timing
		• The timeline could shift depending on the time needed to address stakeholder input and revise as/if needed.
PHASE III: Certifying and Labeling Materials and Products	• A material or product category/type has successfully completed Phase I, II, and III processes, and is considered for certification under the label program.	• EPA anticipates that it will take approximately four to six months for a material or product to complete Phase III and certify materials with the label program.[15]

Note: EPA anticipates that initial materials/products could be certified and labeled in FY 2026.

Appendix A: Key Terminology and Definitions

Note: These definitions align with those used in the EPA EPD Assistance Grant Program Notice of Funding Opportunity.

Background data: Includes energy and materials that are delivered to the foreground system as aggregated data sets in which individual plants and operations are not identified. This definition is consistent with the one in EPA's Lifecycle Assessment Principles and Practices Glossary.

Buy Clean: Refers to a procurement policy—federal, state, local, private, or other—that promotes the purchase of construction materials and products with lower embodied GHG emissions, taking into account the life cycle emissions associated with the production of those materials and products.

Deconstruction: Refers to the systematic dismantling of a structure, typically in the opposite order it was constructed, in order to maximize the salvage of materials for reuse, in preference over salvaging materials for recycling, energy recovery, or sending the materials to the landfill. This definition is consistent with the one from the city of Portland, Oregon, City Code 17.106.020.

Construction material: Refers to the supplies used in building. This definition is consistent with the one in EPA's Enterprise Vocabulary.

Embodied carbon: See definition for embodied greenhouse gas emissions.

Embodied greenhouse gas (GHG) emissions: Embodied GHG emissions are synonymous with embodied carbon. Both refer to the amount of GHG emissions associated with extracting, producing, transporting, and manufacturing materials and products. Inflation Reduction Act Section 60112 also directs EPA to consider the use and disposal stages or materials and products, where relevant. This definition is consistent with the one found on EPA's Low Embodied Carbon Construction Materials Program website.

Environmental product declaration (EPD): Refers to an environmental declaration providing quantified environmental data using predetermined parameters and, where relevant, additional environmental information. An EPD also includes additional product and company information. This definition is consistent with the one found in ISO 14025:2006.

Global Warming Potential (GWP): A unit of measurement that refers to the index used to translate the level of emissions of various gases into a common measure in order to compare the relative radiative forcing of different gases without directly calculating the changes in atmospheric concentrations. GWPs are calculated as the ratio of the radiative forcing that would result from the emissions of 1 kilogram of a GHG to that from the emission of 1 kilogram of carbon dioxide over a period of time (usually 100 years). Gases involved in complex atmospheric chemical processes have not been assigned GWPs. This definition is consistent with the one found in EPA's Greenhouse Gas Emissions & Sinks Glossary.

Greenhouse gas (GHG): Refers to the air pollutants carbon dioxide, hydrofluorocarbons, methane, nitrous oxide, perfluorocarbons, and sulfur hexafluoride. This definition is consistent with the one found in the Inflation Reduction Act Section 60112.

Life cycle: Refers to all consecutive and interlinked stages in the life of the object under consideration. This definition is consistent with the one found in ISO 21930:2017.

Life cycle assessment (LCA): Refers to the compilation and evaluation of the inputs, outputs, and the potential environmental impacts of a product system throughout its life cycle. This definition is consistent with the one found in ISO 14044:2006.

Material category: For the purposes of EPA's Low Embodied Carbon Construction Materials Program, please reference the definition of product category below.

Material type: Refers to a specific breakdown within a material category that adds specificity to what subgroup of a material category is being referred to in a given context.

Product Category Rules (PCRs): Refers to a set of specific rules, requirements, and guidelines for developing EPDs for one or more product categories. This definition is consistent with the one found in ISO 14025:2006.

Product category: Refers to a group of construction products, construction elements, or integrated technical systems that can fulfill equivalent functions. This definition is consistent with the one found in ISO 14025:2006.

Reuse: Refers to the utilization of a product or material that was previously installed for the same or a similar function to extend its life cycle.

Salvage: Refers to the deliberate reclamation of reusable materials from the disassembly, deconstruction, or demolition of buildings or structures.

Appendix B: References

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Appendix C: RFI Questions Directly Tied to Label Program and Threshold Setting

Label Program

- How should EPA prioritize construction materials and products to focus on for its carbon label program? (A.1.2)
- What barriers and solutions exist for materials reuse, and what potential opportunities/solutions should EPA support as part of the EPD technical assistance and/or labeling program? Should PCRs and EPDs be developed for salvaged and reused materials/products like salvaged steel beams, wood flooring, bricks, etc.? Should existing PCRs be modified to address these materials/products? How should EPA support other standardized approaches for salvaged materials? (C.17)
- For the first four materials, what performance characteristics and other variables (e.g., strength class, recycled content) should EPA consider when developing or selecting criteria for the labeling program? (E.23.1)
- Are there private sector standards/ecolabels that EPA should consider (to help set thresholds/maximize consistency for the label program)? (E.23.2)
- How could EPA work to ensure consistency of approaches between ecolabels addressing different construction materials and products? (F.27.1)
- What label characteristics would be most helpful for purchasers and specifiers in identifying construction materials and products with substantially lower embodied greenhouse gas emissions? (F.27.2)
- What label model approach would be most effective in this context – tiered levels of recognition (e.g., bronze, silver, gold – as used by the EPEAT ecolabel and others), a variable/rating score (e.g., the Department of Energy's EnergyGuide), pass/fail/binary (e.g., the ENERGY STAR products, building and plant certification and labeling approach), or some other approach? (F.28)
- What kind of conformity assessment approaches are needed to ensure that the label provides reliable and consistent data? What kind of verification requirements should be in place to ensure it is possible for Conformity Assessment Body(ies) (CAB) to determine conformance of a material/product to embodied greenhouse gas emission criteria? (F.29)
- Should there be one central product registry of all materials and products covered by this program If so, what would the key components of that registry be? Who should manage/maintain the registry? (F.30)
- What outreach approaches should EPA consider for the label? What are the purchasing processes, key sales channels, and key market actors for each priority material/product (F.31)
- Other input on the carbon labeling program that EPA should consider? (F.32)

Threshold Setting

- GWP Threshold/Criteria Development and Update Approach: What approaches should EPA use to create market certainty and maximize consistency of definitions of substantially lower levels of embodied greenhouse gas emissions? What role should private sector standards play? How can regional differences be appropriately considered in development of thresholds? (E.24)
- Existing Programs and Lessons Learned: What are lessons learned from State, local, and Tribal governments that are currently setting embodied greenhouse gas emission thresholds for procurement (often known as Buy Clean Programs) as well as international efforts underway? What are the most effective ways for EPA to learn from these programs or otherwise support consistency, where appropriate? (E.25)
- Other input on setting embodied greenhouse gas emission thresholds that EPA should consider? (E.26)