

From: Industrial Innovation Initiative, I³ Contact: Ankita Gangotra, and Gabrielle Habeeb Date: April 28, 2023

Re: RFI on Inflation Reduction Act Programs to Reduce Embodied Greenhouse Gas Emissions Associated with Construction Materials and Products (<u>EPA-HQ-OPPT-2022-0924</u>)

Background

The Environmental Protection Agency (EPA) has a crucial role to play in ensuring the responsible advancement of the technology and market solutions needed to significantly decarbonize the industrial sector. We are supportive of the Agency's efforts to provide assistance for environmental product declarations (EPDs), validate emissions reductions with data, and support low emissions labeling for construction materials. We appreciate this opportunity to provide comment. In response to the Request for Information (RFI) to Support Programs to Lower Embodied Greenhouse Gas Emissions Associated with Construction Materials and Products, the Industrial Innovation Initiative (I³) has prepared the following document.

About I³

The Industrial Innovation Initiative (I³) is an ambitious coalition that aims to advance solutions key to decarbonizing the industrial sector through policy development and implementation, technology demonstration and adoption, and demand-side market development. The Initiative builds on years of stakeholder engagement and extensive work by its co-conveners, Great Plains Institute and World Resources Institute, to collaborate with government officials and advance decarbonization solutions important to the industrial sector. I³ values a stable climate, a safe and healthy environment, thriving livelihoods for American workers, and a strong US economy.

The Initiative convenes industry leaders, environmental organizations, organized labor, and other stakeholders, to advance cross-cutting strategies, policies, and programs for achieving industrial decarbonization by midcentury.

Material Prioritization and Data Improvement

A. What construction materials/products should EPA prioritize in implementation of IRA Sections 60112 and 60116?

1. Newly Manufactured Materials: How should EPA prioritize construction materials and products to focus on for its EPD assistance program? How should EPA prioritize construction materials and products for its carbon labeling program?

EPA should align their prioritization for EPD assistance and carbon labeling with Federal Buy Clean efforts, including programs led by the General Services Administration, Federal Highway Administration, and Department of Transportation, as applicable.

Both programs should prioritize materials based on **1**) their embodied carbon emissions intensity, **2**) amount of production and procurement by federal and state governments, and **3**) the level of data availability for these materials.

Most critically, the priority for both programs should be on materials with the highest embodied carbon emissions intensity. These should be ranked in order of importance to decarbonize within the tiers. This ranking system could also showcase alternative and novel products with the lowest emissions intensity. A particular focus should be on increasing data availability and on materials that are most procured by federal and state governments.

Additionally, for both programs, the EPA should consider additional materials such as bricks in Tier 2. The global production of this material emits ~0.5 Gt CO2-eq emissions annually. Materials such as plastics—namely PVC for which construction comprises 70 percent of its market— and copper should also be considered under insulation materials.

2. Minimally Processed, Salvaged and Reused Materials: How might EPA's programs incentivize, measure, and standardize the salvage and reuse of building/infrastructure materials as a key part of the Federal embodied greenhouse gas reduction strategy given the current lack of labels or EPDs and other challenges for some of these materials? What salvaged and reused materials should be prioritized and why?

To account for salvaged and reused materials through circular economy, the EPA should first encourage a complete cradle-to-grave accounting of emissions of materials used in construction projects through whole-building life cycle assessments (WBLCA) in construction projects and incentivize reporting on Stage D i.e., reuse, recycle and recovery of materials after the end-of-life stage in Environmental Product Declarations (EPDs). Such reporting can then be used to label and create EPDs for salvaged and reused materials and act as a provenance for future use of these materials in other projects.

Measuring, standardizing, and incentivizing salvaged and reused materials from hard-to-abate sectors with high emissions intensities such as recycled concrete and scrap steel should be a priority for the EPA in the development of EPDs. Materials to also consider for prioritizing when it comes to salvage and reuse are other metals (such as aluminum and copper) and plastics (such as PVC).

3. Biobased Materials: How might EPA's programs incentivize biobased construction materials, given the captured greenhouse gas emission advantages of some of these materials, while also ensuring sustainable forestry and agricultural practices are considered as part of EPD assistance and carbon labeling, where relevant? Similarly, how might EPA measure impacts associated with the feedstock for biobased materials potentially displacing crops that might otherwise be used for food or biofuel? What are the opportunities to use agricultural waste in construction materials to substantially lower embodied greenhouse gas emissions?

For biobased materials it is important to look at the complete life cycle of the products through WBLCA and to also account for biogenic carbon emissions and land use and land use change through targeted LCAs and EPDs. While LCAs can consider land use change, they are limited in their scope and focus mostly on environmental impacts. Beyond environmental indicators, EPA should collaborate with other federal agencies and research organizations for holistic studies of the socioeconomic factors of the production and use of biobased materials.

B. What data accessibility and improvement approaches should EPA consider?

5. Public Accessibility of Data: What role can EPA play to support greater public access to product and facility specific environmental data? What background datasets need to be generated, made publicly accessible, and/or updated and enhanced to reflect embodied greenhouse gas emissions of the final product more accurately? What role should the Federal LCA Commons (https://www.lcacommons.gov/) have, if any?

High-quality and freely accessible data and methodologies are key to the success of any EPD or carbon labeling program. To carry out LCAs for EPDs manufacturers need access to background industry datasets which are often proprietary or not easily accessible/visible. LCA toolkits and methodologies are also proprietarily creating an onerous burden on manufacturers, particularly small and medium-sized enterprises.

The EPA should consider hosting a common open-source database making background datasets and LCA methodologies and templates freely available for manufacturers to use. The Federal LCA Commons is a platform that can be used to store such data and information. However, for such a tool to be useful it would need to be kept up-to-date and made as user-friendly as possible. Some examples of datasets that could be incorporated into the Federal LCA Commons are:

- EPA's Facility Level Information on Greenhouse gases Tool (FLIGHT) captures facilityspecific data. It already covers emissions data from cement, steel, and glass facilities and also data from some Tier 2 production facilities. While expanding such a tool to concrete and asphalt facilities could be challenging because of the large number and varied types of facilities, it would nonetheless be very useful. Additionally, while FLIGHT discloses whether a facility captures its CO2, it does not consistently disclose the volume of captured CO2 (if any), the source of captured emissions, or the CO2's destination. Publishing these volumes would allow better transparency for facility-level emission reductions.
- <u>Building Transparency's EC3</u> is a database of construction material EPDs. Productspecific datasets can be incorporated from EC3 which is currently the most useful, opensource resource for product-specific data in the US. EC3 should be supported and expanded to include EPDs on upstream materials such as aggregates and additives.

6. Moving More EPDs From Averages Towards Actuals: How can EPA support the development of product-specific EPDs that use more actual, facility-specific data for greenhouse gas emissions along a product's "upstream" supply chain? What type of/approach to verification is needed to ensure reported data is accurate?

The EPD assistance program can be used to help encourage and incentivize and encourage producers to measure and report EPDs using facility-specific data. Such data should be used to fill in data gaps in facility-specific databases such as the FLIGHT database so that accurate data is made more readily available to producers along the supply chain to bolster their products' EPDs.

Some manufacturers have already started accounting for emissions at a granular level using facility-specific and product-specific data – such industry stakeholders should be encouraged and incentivized by the EPA, with ranked incentives based on the level of granularity in the reported data. Reported EPDs should contain information on the type and level of accounting and the background datasets used.

EPDs must always be independent third-party verified through an accredited verification body or approved individual verifiers. There should be a uniform and harmonized method of

verification to avoid inaccurate data being reported. This <u>article</u> published in 2022 discusses the various methods and levels of stringency for EPD verification.

7. Life Cycle Stages: How should EPA consider the environmental impacts/contributions of the use and disposal stages of materials/products when those stages are not often addressed in EPDs and depend heavily on decisions by future owners of the materials/products?

While EPDs in the US mostly report A1-A3 in the production phase of a product, EPDs must move towards capturing data from the transport stage (A4-A5), use stage (B), end-of-life stage (C), and also circular economy i.e. reuse, recycling, and recovery stage (D) as well.

The transportation stage is particularly important (such as in cross-laminated timber) in procurement programs like Buy Clean and the effects of long-distance transport are non-trivial and, in some cases, outweigh the emissions from the previous stages. This is also a reason why locally sourced raw materials and upstream materials are important to prioritize. The other stages of an LCA need a harmonized methodology with clear policies for Stages C and D, particularly for materials that are incinerated after use.

8. Improving Background Datasets: *EPDs rely on background datasets in cases where primary data is not available. What is the best way to ensure the quality of these datasets (maintenance, assurance processes, etc.)? What types of uncertainty data should be reported in an EPD and how should this data be used in benchmarking?*

Background datasets that are important include electricity mix, transportation, upstream process data, and data on raw materials and aggregates. The type of background datasets that are required to generate EPDs for each Product Category Rule (PCR) should be clearly defined for consistency. These datasets should also be regularly maintained and constantly updated as more data becomes available.

While some manufacturers have started use product-specific and facility-specific data to report their environmental footprint, due to a lack of resources and data unavailability, some still use industry averages to report their data. This introduces uncertainty when comparing EPDs. In order to report data transparently, EPDs should record the type of background dataset used to report that data and the EPA should provide uncertainty adjustments for data generated from industry averages.

Industry-specific EPDs could be used to set the benchmarks for PCRs but these should be disaggregated based on production volumes so that the benchmarks are truly representative of the most relevant products in the market.

9. Whole Building Life Cycle Assessment (WBLCA) and similar whole project approaches:

WBLCA may be able to inform low greenhouse gas emission design and the selection of substantially lower embodied emissions materials and products. Should EPA consider WBLCA and similar whole project approaches in EPD development and labeling of substantially lower embodied greenhouse gas emission materials/products, and if so, how?

WBLCA and similar whole project approaches have the ability to holistically capture the carbon footprint of a material. Therefore, WBLCA approaches will be important for implementation in EPDs and carbon labeling programs in order to account for embodied carbon from beyond the production phase in a construction project.

There should ideally be reciprocity between project-specific approaches like WBLCA and product-specific approaches like EPDs. WBLCAs methodologies should be encouraged to incorporate product-specific data in their accounting. And project-specific learnings should be used to inform EPDs, particularly when accounting for emissions beyond Stages A1-A3 of a material.

10. Other Environmental Impacts: Existing PCRs/EPDs cover additional environmental impacts categories related to air and water quality, resource depletion and human and ecological health. To what extent should EPA's efforts on EPDs consider/address these other impact categories? Are there concurrent data/model improvements needed to improve the characterization/quantification of other impacts for the purposes of improving the quality of EPDs?

C. What PCR and EPD standardization, measurement, verification, and reporting approaches for use in procurement decision-making should EPA consider?

12. Standardizing and Verifying Product Category Rules: How might EPA grants/cooperative agreements improve and harmonize Product Category Rules (PCRs) and support the development of a conformity assessment/verification program for PCRs?

The following are key considerations for EPA when harmonizing PCRs

• Currently, a wide range of PCRs exists for construction materials without a single body that has governance oversight in maintaining, updating, and harmonizing PCRs. EPA should consider managing US-based PCRs itself or appointing a single entity to manage PCRs and maintain standardized templates for EPDs.

- Coherence is needed in criteria such as the scope (i.e., the boundary of emissions accounting) and type of greenhouse gas (GHG) emissions and other indicators accounted for by the PCRs (e.g., only carbon dioxide, or other GHGs as well). Producers supplying low-emission products to government contractors and private companies need to be able to use the same methodologies to account for and report their emissions intensities. In order to create clarity for manufacturers from the very beginning, EPA should also publish a basic set of requirements for acceptable PCRs and expected EPDs.
- Alignment in data collection and reporting mechanisms with a common methodology for PCRs is needed to allow different EPDs to be directly compared. For data reliability and interoperability, the background datasets used in data reporting must be transparently declared.
- Differences exist between how different entities account for the emissions from manufacturing construction materials, for example, through product-level, project-level, facility-level, or industry-level accounting (whether the emissions benchmark is specific to the product, such as concrete; specific to a project that can include many materials; specific to individual facilities or an industry average). PCRs should be rigorous and transparent in reporting the type of accounting used in measuring the different indicators such as GWP so that uncertainties in the data can be accounted for.
- Harmonization of PCRs will require engaging and working with multiple organizations that have already developed or are in the process of developing PCRs for construction materials so that existing PCRs can be aligned for interoperability. Along with taking ISO and American Centre for Life Cycle Assessment (ACLCA) PCRs into consideration, EPA should liaise with US industry associations and standards-setting bodies such as National Ready Mix Concrete Association, American Iron and Steel Institute, Portland Cement Association, National Asphalt Pavement Association, ASTM International, and NSF International.

13. Standardizing EPDs: How might EPA grants/cooperative agreements improve and harmonize EPDs so as to provide comparable results and meet other needs?

The following are some considerations for EPA when standardizing EPDs

- As stated previously, EPA should consider managing standardized and open source LCA templates for EPDs as a program operator or appoint another single entity to operate the standards.
- In order to learn from other programs and their standards, EPA should liaise with existing Buy Clean programs implemented in different states such as California and Oregon.

• It is important to move away from the PDF format and digitize EPDs to make them accessible as possible.

14. Verifying EPDs: When an EPD is verified by a third-party, what requirements should that verifier/Conformity Assessment Bodies (CABs) meet or accreditations should that CAB have to ensure credibility? Does the ISO 14025 verification scope and verifier competencies sufficiently satisfy expectations for third-party verification of an EPD used for public procurement? How should EPA support better verification practices?

EPA can consider providing a reliable and rigorous EPDs verification process through: 1) developing verification checklists for users, 2) establishing EPD training and accreditation programs for third-party verifiers, 3) publishing lists of accredited third-party verifiers, 4) becoming the centralized program operator to manage the process of verification, and 5) through random audits of reported EPDs to check of compliance.

15. Digitizing EPDs: What are issues to consider when transitioning to machine-readable reporting? How can EPA help advance digitization of EPDs for both producers and users of the data? What parameters should EPA be considering when establishing criteria for digitizing EPDs (e.g., interoperability, data security)?

EPDs must move away from the current static PDF format to a digitized, machine-readable format. This would allow the data from EPDs to be extracted and directly compared with other EPDs. As multiple formats are currently being developed, including <u>openEPD</u> and <u>ILCD+EPD</u>, EPA should make a decision on adopting a format that is versatile and also the most likely to be adopted in international markets to maximize interoperability.

16. PCR and EPD Repositories/Data Platforms: How might EPA grants/cooperative agreements help foster the development of national and/or international PCR and EPD repositories? What existing platforms have the greatest potential to support the goals of IRA Sections 60112 and 60116? What additional functionality and features are needed?

The EPA should harmonize PCRs and EPD methodologies with countries/regions in the process of developing their own repositories such as Canada and the EU. Key among international collaborative efforts is the Industrial Deep Decarbonization Initiative's (IDDI) Green Public Procurement (GPP), which the US also joined in late 2022. IDDI encourages governments to create markets for low-emission cement, concrete, and steel through public purchasing of lowcarbon alternatives. Over the past year, IDDI working groups composed of national governments, companies, and other stakeholders have been working on developing data collection and reporting frameworks and repositories, setting standards for low-carbon products, and establishing international targets for the GPP Pledge. EPA should collaborate with UNIDO's secretariat on IDDI to develop aligned PCR and EDP methodologies and adopt/develop repositories that are internationally harmonized and comparable.

As mentioned previously, Building Transparency's EC3 tool is the most expansive EPD repository for construction materials in the US and has the greatest potential to support IRA Sections 60112 and 60116. However, EC3 is currently limited to EPDs reporting Stages A1-A3 in the production phase of the materials for the US. There is also a wide range of uncertainty (20-40%) in the performance of the materials reported. EC3 should be expanded to house EPD reporting Stages B-D as they develop and also compare and contrast the sources of uncertainty between multiple EPDs.

17. Unique Approaches Needed for Salvage and Reuse: 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?

At present, there no major policies that incentivize the reuse of salvaged construction materials over new materials. This along with a lack of specific standards and the complexity involved in salvaging materials from demolition projects are the main barriers to circular economy within the construction sector.

Valorizing waste through effective waste management and extraction is the key to the salvage and reuse of materials. EPA should provide assistance to develop PCRs and EPDs for salvaged materials and create carbon labels for such materials. Once these materials start being appropriately labeled, policies should be developed to incentivize the use of salvaged materials in construction projects.

Environmental Product Declaration Assistance per Section 60112

D. What factors should EPA consider for the EPD Assistance program?

19. Manufacturer Needs: What types of incentives and/or financial and technical support would help construction material and product manufacturers, including small businesses, to develop high quality, digital/machine-readable, third-party verified EPDs for the materials and products they produce?

The following are examples of assistance EPA should provide per Section 60112:

Technical support

- Access to open-source databases for background datasets.
- Access to PCR requirement, open source LCA tools, and EPD template.
- List of available technical experts for LCAs and EPDs.
- Training to allow manufacturers, particularly small businesses, to understand PCR requirement and EPD methodologies and report data accurately.

Financial and/or structural incentives

- Funding and reimbursements made available as soon as possible (preferably starting in 2023) to manufacturers accurately reporting data with EPDs.
- Tiered financial incentives and EPA accredited labels to manufacturers based on the quality of EPDs reported.
- Awards recognizing manufacturers committed to reducing the carbon footprint of their products and awards for the best environmentally performing products.

20. Fair, Equitable Distribution of Resources: *How should EPA shape grant programs providing technical assistance or funding for developing EPDs to reach a wide array of entities and to ensure equitable, fair distribution of resources?*

EPA could consider the following to ensure fair and equitable distribution of resources:

- Establish a separate funding pool for targeted financial grants to small and medium sized enterprises ensuring the administrative burned is equitable.
- Provide women and minority owned businesses additional funding for access to LCA and EPD experts and access to databases.
- Provide targeted training, education, and access to background datasets for manufacturers in regions with low availability of data and/or high industrial activity.

Substantially Lower Embodied Carbon Labeling per Section 60116

E. What should be considered for setting thresholds for "substantially lower levels" of embodied greenhouse gas emission for qualifying materials/products under a labeling program?

23. Performance Characteristics and Other Variables: For each of the four initially prioritized construction materials/products (concrete, asphalt, steel and flat glass) what performance characteristics and other variables (e.g., strength class, recycled content) that can impact the

product's embodied greenhouse gas emissions should EPA consider when developing or selecting criteria for the labeling program? Are there private sector standards/ecolabels that EPA should consider?

Global warming potential (GWP) is the key indicator to rank materials in a carbon labeling program. For Tier 1 materials GWP should account for cradle-to-gate emissions (A1-A3 of the life cycle) to begin with and in the medium-term should include other life cycle stages for cradle-to-grave accounting of emissions to also capture the ability to recycle and reuse the materials. The main performance characteristics that GWP should be disaggregated for are:

- Concrete compressive strength class and type (high early strength, lightweight and standard mix); cement clinker content (see <u>IEA methodology</u>).
- Steel percentage scarp (see <u>IEA methodology</u>).
- Additionally, EPA could also look at the materials diet of a construction project and class the GWP of products based on application.

In the long-term, a carbon labeling program should also include other environmental indicators including air and water pollution and other toxicants.

A carbon labeling program could be based on EPA's Energy Star certification for industrial facilities which is an example of an energy efficiency program with considerable uptake from industry.

24. 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?

EPA's Interim Determination is a good start in defining what 'substantially lower levels of embodied GHG emissions' could mean for a construction material using the quintile system of being either the best 20% in class, best 40% in class, or being better than average. This methodology is approachable as a first step as long as there is good data based on production quantities, size of facility, and geographical region for industry averages. To help drive continuous improvement in these sectors, the benchmarks will need to be frequently evaluated and updated to stay relevant as more data becomes available and the sectors continue to innovate and decarbonize.

Private sector standards can play a pivotal role in this space as there are already some initiatives such as the First Movers' Coalition, SteelZero, and ConcreteZero with ambitious standards defining low-emissions and near-zero emissions steel, concrete, and cement. For

example, ConcreteZero defines low-emissions concrete as emitting 100-270 kg CO2/m3 depending on the strength class.

There are indeed regional differences in how construction materials are manufactured and used. For this, regionally variable products such as ready-mix concrete will require benchmarks based on specific regions and states. A degree of flexibility is also needed in GWP thresholds which can be achieved by setting ranges and bands for GWP thresholds instead of single values for emissions reduction.

25. 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?

The US has seen a recent flurry of activity around green procurement, including the recently passed Inflation Reduction Act and the Federal Buy Clean Initiative. Momentum has also been building overseas, through initiatives like the UN Industrial Development Organization's IDDI, the World Economic Forum's First Movers' Coalition, and the Climate Group's ConcreteZero and SteelZero partnerships. The United States announced its participation in IDDI in September 2022 but its commitments are yet to be determined.

The EPA could play an important role in the green procurement space by being the bridge that connects Buy Clean domestic policies to public/private initiatives and standards overseas such as IDDI. Green procurement initiatives and policies have similar aims but are using different definitions for what classes as "green". There is a need to harmonize standards and benchmarks for measuring and setting limits on GHG emissions for green procurement between the U.S. and international initiatives. The EPA could help in this alignment and ensure that the United States is able to sets an ambitious target within IDDI's framework. This is particularly crucial for the United States to continue to innovate on par with the international community and help retain its competitiveness on the global stage for products that are internationally traded.

F. What should EPA consider in meeting the goals of IRA Section 60116, which directs EPA to develop a program to identify and label construction materials/products with substantially lower levels of embodied greenhouse gas emissions? What would be the key elements of an effective carbon labeling program?

27. Role of Private Sector Labels: What role(s) could private sector ecolabels play? How could EPA work to ensure consistency of approaches between ecolabels addressing different construction materials?

Carbon labeling can take EPDs to the next level by providing information on the climate and environmental performance of a product based on set definition of what 'green' means.

Countries like Japan (Eco Mark) and Korea (Korean Ecolabel) have started operating ecolabels to promote green procurement within the public and private sectors. At present, however, there is no harmonized methodology or integrated registry of carbon label for construction materials in the US. Private sector ecolabels, that have buy-in from industry stakeholders, have an important role to play in this space by ensuring that manufacturers can meet the standards of an eco/carbon labeling system.

EPA could ensure consistency by developing an integrated ecolabeling system for construction materials based on consistent PCR and EPD standards. Such an ecolabel should report on GWP and other environmental indicators, decide on consistent benchmarks for each material, and be updated frequently as the sector improves.

28. Label Characteristics: What label characteristics would be most helpful for purchasers and specifiers in identifying construction materials/products with substantially lower embodied greenhouse gas emissions? 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?

Ecolabel can be beneficial to manufacturers by communicating the environmental performance of a product to consumers and helping build trust. However, key to the success of an ecolabel will be a user-friendly and transparent system of labeling. While EPDs are technical reports, ecolabels should play the role of translating these EPDs into simple information that purchasers can interface with easily. For this, EPA could consider adopting a model with tiered labels with ranges of benchmarks for simplicity and flexibility.

29. Verification/Conformity Assessment: 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?

As reported above for the verification of EPDs, ecolabels could use a range of options for verification such as third-party verifiers, accreditation bodies, verification checklists, and random spot checks and audits.

30. Certified Product Registry: Should there be one central product registry of all materials/products covered by this program to help purchasers more easily find and procure construction materials/products with substantially lower embodied greenhouse gas emissions? If so, what would the key components of that registry be? Who should manage/maintain the registry?

An integrated certified product registry is needed to ensure consistency, transparency, and eventually the success of any national ecolabeling system. Along with environmental indicators, the key components that the registry could include are standards used for emissions accounting, data from upstream emissions, uncertainty calculations, and methodologies applied for benchmarking and labeling. At the scale that is being targeted, EPA is the body best suited to manage or at least be involved in developing such a registry.

I³'s coalition of industry stakeholders is here to connect

The information contained within this document represents a small fraction of the collective knowledge and expertise of our participants. This document was prepared with the input and feedback of I³ participants but does not reflect the expressed opinion of each participating organization. Members of I³ are ready and willing to connect with the Environmental Protection Agency to provide key industry, labor, environmental, and business perspectives from our stakeholder group. If you would like to connect with us directly, please reach out to I³ Project Manager, Gabrielle Habeeb, at ghabeeb@gpisd.net, and we will gladly arrange a meeting.