

# Public Assistance Funding: Low-Carbon Materials

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## Overview

The [Inflation Reduction Act \(IRA\)](https://www.congress.gov/117/plaws/publ169/PLAW-117publ169.pdf)<sup>1</sup> marks a historic commitment to build a new clean energy economy and tackle the climate crisis by authorizing FEMA to incentivize investments in greenhouse-gas reduction strategies through the Public Assistance (PA), Building Resilient Infrastructure and Communities (BRIC), and Hazard Mitigation Grant (HMGP) programs. In March 2023, FEMA issued the [IRA Implementation Memo](https://www.fema.gov/sites/default/files/documents/fema_inflation-reduction-act-implementation-memo_032023.pdf)<sup>2</sup> for the above programs. FEMA may fund the use of certain low-carbon materials (concrete, asphalt, glass, and steel) in disasters declared between May 22, 2023, and September 30, 2026.

## Low-Carbon Materials

The Environmental Protection Agency (EPA) defines low-carbon materials as 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."<sup>3</sup> These include concrete, asphalt, glass, and steel which have Global Warming Potential (GWP) lower than the estimated industry average for similar products in North America as demonstrated by their Environmental Product Declaration (EPD). Although the cost for low-carbon materials is traditionally higher than conventional materials, the IRA authorizes FEMA to reimburse costs associated with low-carbon building or construction materials in recovery projects.

If an Applicant decides to use low-carbon materials as part of their restoration, and claim reimbursement under the PA Program, they must adhere to FEMA's definition of low-carbon materials. The [Embodied Carbon in Construction Calculator \(EC3\)](https://www.buildingtransparency.org/)<sup>4</sup> is a free database of construction EPDs and a matching building impact calculator for use in design and material procurement and may be helpful in project design. Using this tool may also help in determining if the low-carbon materials used in a project meet the definition.

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<sup>1</sup> <https://www.congress.gov/117/plaws/publ169/PLAW-117publ169.pdf>

<sup>2</sup> [https://www.fema.gov/sites/default/files/documents/fema\\_inflation-reduction-act-implementation-memo\\_032023.pdf](https://www.fema.gov/sites/default/files/documents/fema_inflation-reduction-act-implementation-memo_032023.pdf)

<sup>3</sup> [https://www.fema.gov/sites/default/files/documents/fema\\_inflation-reduction-act-implementation-memo\\_032023.pdf](https://www.fema.gov/sites/default/files/documents/fema_inflation-reduction-act-implementation-memo_032023.pdf)

<sup>4</sup> <https://www.buildingtransparency.org/>



**FEMA**

### **Additional definitions and descriptions:**

- **Greenhouse Gas:** Include the air pollutants: carbon dioxide, hydrofluorocarbons, methane, nitrous oxide, perfluorocarbons, and sulfur hexafluoride.
- **Environmental Product Declaration (EPD):** EPDs are third party verified documents written in conformance with international standards that report the environmental impacts of a product, including its global warming potential, based on life cycle assessment models.
- **Global Warming Potential (GWP):** The potential climate change impact of a product or process as measured by a life cycle assessment.
- **Substantially Lower:** Having a GWP that is at least less than the estimated North American industry average as demonstrated by their EPD.

Applicants should work with the assigned Program Delivery Manager to maximize the inclusion of low-carbon materials in PA project applications.

## **Other Resources**

- [Inflation Reduction Act of 2022](#)<sup>5</sup>
- [IRA Implementation Memo for Section 70006](#)<sup>6</sup>
- [Inflation Reduction Act IRA 70006 For SLTT - YouTube](#)<sup>7</sup>
- [Building Resilient Infrastructure and Communities | FEMA A.gov](#)<sup>8</sup>
- [Hazard Mitigation Grant Program \(HMGP\) | FEMA.gov](#)<sup>9</sup>
- [Carbon Leadership Forum \(CLF\)](#)<sup>10</sup>: An independent non-profit organization that develops model embodied carbon policy, acts as technical advisor to inform the development of effective and just policies, provides technical support to agencies implementing embodied carbon policy, and collaborates with NGOs to align and advance embodied carbon policies. They have resources such as tools for measuring embodied carbon, case studies of effective policy implementation, and embodied carbon toolkits.
- [Federal Buy Clean Initiative](#)<sup>11</sup>: To support low-carbon, made in America materials, President Biden charged his Administration through his December 2021 Federal Sustainability Plan<sup>12</sup> and Executive

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<sup>5</sup> <https://www.congress.gov/117/plaws/publ169/PLAW-117publ169.pdf>

<sup>6</sup> [https://www.fema.gov/sites/default/files/documents/fema\\_inflation-reduction-act-implementation-memo\\_032023.pdf](https://www.fema.gov/sites/default/files/documents/fema_inflation-reduction-act-implementation-memo_032023.pdf)

<sup>7</sup> <https://www.youtube.com/watch?v=d9PP2AUJqtQ&t=5s>

<sup>8</sup> <http://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities>

<sup>9</sup> <http://www.fema.gov/grants/mitigation/hazard-mitigation>

<sup>10</sup> <http://carbonleadershipforum.org/>

<sup>11</sup> <http://www.sustainability.gov/buyclean/>

<sup>12</sup> <https://www.sustainability.gov/federaalsustainabilityplan/index.html>

Order 14057<sup>13</sup> to launch a Buy Clean Task Force and initiative to promote use of low-carbon, made in America construction materials.

## Learn More

For more information, please reach out to your state, territorial, or tribal emergency management agency or FEMA Regional PA point of contact.

If you suspect corruption, waste, fraud, abuse, mismanagement or misconduct contact the [Department of Homeland Security Office of Inspector General](#)<sup>14</sup> hotline (1-800-323-8603 or TTY: 1-844-889-4357) or [submit a concern online](#)<sup>15</sup>.

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<sup>13</sup> <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/12/08/executive-order-on-catalyzing-clean-energy-industries-and-jobs-through-federal-sustainability/>

<sup>14</sup> <https://www.oig.dhs.gov/hotline>

<sup>15</sup> <https://hotline.oig.dhs.gov/#step-1>