

At a Glance:

2024 Federal Policy Blueprint



**Industrial
Innovation
Initiative**

a partnership between Great Plains Institute and
World Resources Institute



Industry underpins the country's economy, producing the chemicals, steel, cement, paper, and other daily goods that people and businesses use. The industrial sector is also a critical source of jobs. At the same time, industry is responsible for roughly 30 percent of US emissions on an end-use basis. There are several reasons why decarbonizing industry is a daunting task, namely the variety and complexity of processes and emission sources across industries

By passing the Bipartisan Infrastructure Law of 2021 and the Inflation Reduction Act of 2022, the federal government has taken important steps toward decarbonizing industrial production. But there is more work for Congress and the administration to do. I³'s 2024 Federal Policy Blueprint identifies additional policy measures required to fully capitalize on the investments made in these landmark pieces of legislation.

Supportive infrastructure, including for transport and storage of CO₂ and hydrogen, is needed for industry to transition to a low carbon future. The blueprint includes recommendations to enable the construction of this critical infrastructure. Prioritizing the safety of communities and ensuring the availability of a trained workforce will help ensure the construction of vital infrastructure.

Decarbonizing **industrial energy demand** will be critical for reducing emissions from the sector. For low- and medium-temperature heat applications, electrification is a core strategy. To address process heat, innovative technologies will need to be scaled up. The blueprint makes several recommendations intended to ensure a reliable, affordable, and clean supply of electricity.

The blueprint also recommends improvements to **standards and data for low-carbon products**. Standardizing methods and carbon labeling programs for low-carbon products will allow manufacturers to report their emissions consistently and will

give governments, corporations, and other large purchasers confidence that their procurement decisions are helping reduce industrial emissions.

Finally, the blueprint recognizes the need for **market innovation**. It recommends several strategies for nurturing the transformational technologies required to slash industrial emissions. Technological innovation will be essential to ensuring that the industrial sector can maintain its competitiveness as it pursues mid-century climate goals.

The blueprint reflects the input of industrial, labor, and nonprofit partners. Participants across these sectors came together in support of practical recommendations that will catalyze industrial decarbonization.

I³ makes the following policy recommendations to enable key decarbonization solutions:

SUPPORTIVE INFRASTRUCTURE FOR CARBON MANAGEMENT AND HYDROGEN

- Identify or establish a federal authority to improve national planning around the siting of CO₂ and hydrogen pipelines.
- Provide technical and capacity-building support to states with or seeking Class VI primacy through the Environmental Protection Agency's Underground Injection Control Program.
- Develop and expand a skilled labor force equipped to construct and maintain carbon management and hydrogen projects.
- Prioritize community and environmental safety and health by requiring transparency and information sharing with communities, increased pipeline inspection capacity, and access to and training for emergency response.

INDUSTRIAL ENERGY DEMAND

Industrial Electrification:

- Support grid balancing with dispatchable load.
- Enhance affordability with robust planning.
- Develop industrial rates for subsectors that are fully electrified to pilot affordable power purchase agreements as the rest of the industrial sector electrifies.

Process Heat:

- Support research, development, and deployment (RD&D) for innovative technologies and alternative fuels for industrial heat applications.
- Provide deployment incentives for decarbonizing process heat.

The United States is the world's largest and most dynamic economy. Its strong industrial base is a critical pillar of American prosperity, providing well-paying jobs and the metals, chemicals, fiber, and fuels that businesses and households require. The industrial sector faces a massive challenge: to maintain and, in some cases, increase production levels while sharply reducing emissions.

Achieving net-zero industrial emissions by midcentury is an ambitious but achievable goal. The support for the recommendations outlined in this I³ Federal Policy Blueprint among leading industrial companies, labor unions, and environmental organizations demonstrates the commitment of key actors to reducing industrial emissions.

For more information, find the full Blueprint at [industrialinnovation.org](https://www.industrialinnovation.org)

STANDARDS AND DATA FOR EMBODIED CARBON

- Work toward standardized reporting frameworks.
- Harmonize domestic and international standards for reporting and benchmarking.
- Build capacity to provide technical support and incentives to manufacturers on standards.
- Support development of EPA's environmental product declarations assistance program.
- Support development of EPA's carbon labeling program.

MARKET INNOVATION

Research and development:

- Drive market innovation with the potential for transformational, not marginal, change through R&D funding, incentives, and competition and prizes.

Demonstration:

- Continue funding for innovative solutions with a higher technology readiness level to enable scaling from first-of-a-kind demonstrations to 2nd-, 3rd-, and Nth-of-a-kind project deployment.

Deployment:

- Advance demand-side market incentives for low-carbon products.
- Accelerate testing and validation for low-carbon products for use in construction and infrastructure projects at the federal and state levels.



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