



December 1, 2022

David Crane
Director, Office of Clean Energy Demonstrations
1000 Independence Ave. SW
Washington DC 20585

Dear Director Crane,

We write to thank you for the leading role your office and the Department of Energy (DOE) have played in elevating the importance of decarbonizing the U.S. industrial sector. Action to decarbonize heavy industry is critical to meeting the Biden Administration's climate goals and is now buoyed by billions in funding from Congress in the Inflation Reduction Act (IRA), including \$5.8 billion for the Advanced Industrial Facilities Deployment Program. This funding will allow the DOE to help American companies both reduce their emissions and pollution and create and retain jobs, thereby helping them continue to compete in an increasingly carbon constrained global economy. In designing and implementing this competitive program, we urge you to establish a focus on truly transformational measures that will help accelerate innovation and build a cleaner, stronger, and more resilient and equitable industrial base for the clean economy.

We urge your office to do so in four critical ways:

First, in making awards under the Advanced Industrial Facilities Deployment Program, DOE should adopt selection criteria that emphasize technologies consistent with the approach to net-zero greenhouse gas

(GHG) manufacturing and dramatic, sector-wide reductions in industrial pollutants. DOE's awards under the Advanced Industrial Facilities Deployment Program should reflect the comparative advantage of the program – relative to other sources of funding for industrial decarbonization – as part of a holistic industrial strategy. Other federal investments are available for more incremental emissions reductions at individual industrial facilities, such as via the expanded 48C tax credit. The Advanced Industrial Facilities Deployment Program uniquely offers federal funding for investments in first-at-scale industrial technology that has the potential for deep emissions and pollution reductions and sector-wide adoption. Establishing selection criteria that align with this end goal will require appropriately matching funding timelines and technological barriers to entry and establishing clarity on the level of project maturity required by 2026.

Second, the agency should focus on industrial processes and technologies that do not receive sufficient, targeted funding via other federal programs. Examples that should be considered under the Advanced Industrial Facilities Deployment Program include, but are not limited to, technologies such as direct reduction of iron (for steel making) with clean hydrogen (H₂-DRI); transformative process technologies,¹ such as electrified and other non-combustion heat sourced kilns for calcination in cement manufacturing and electrified steam crackers in the chemicals sector; and other underfunded technologies. These examples are intended to be illustrative of the types of technologies that should be up for consideration by DOE and are not meant to be prescriptive.

Third, under the program, DOE should prioritize investments that support the construction or installation of first- through third-of-a-kind commercial scale demonstration projects that can achieve game-changing emissions and pollution reductions across critical industrial subsectors.

Fourth, consistent with the administration's Justice40 Initiative,² DOE should allocate at least 40% of the resources made available under the Advanced Industrial Facilities Deployment Program to facilities in communities that face harmful impacts from both environmental and social factors, with the goal of providing direct benefits, including pollution reductions and opportunities for high-quality careers, to these communities. Metrics for identifying communities that are marginalized, underserved, and overburdened by pollution and other environmental harms caused by the siting of industrial facilities can build on the ongoing work of the White House Council on Environmental Quality³ and the Environmental Protection Agency.⁴ Successful distribution of funds under this framework would help remediate land, air, and water pollution while ensuring inclusion and prioritization of previously disenfranchised communities in the economic benefits of the new clean economy. Achieving this outcome will require early, direct, and frequent conversations with impacted communities and stakeholders representing them in local, state, and Tribal governments.

In addition, we note the opportunity for DOE to invest in sectors of focus for the White House Buy Clean Task Force, which is leading federal action on clean procurement of industrial materials. In September, the Task Force announced its focus on four major materials categories: steel, concrete, asphalt, and glass, which together account for the bulk of GHG emissions associated with construction projects. Coupling

¹ Process technologies can involve new ways to make products. They are directly involved in the manufacture of products where inputs are converted (using heat, chemical reactions, pressure) into products that are often assembled into consumer goods (e.g., electronics, cars, buildings).

² Justice40; A Whole of Government Initiative, <https://www.whitehouse.gov/environmentaljustice/justice40/>

³ Climate and Economic Justice Screening Tool, <https://screeningtool.geoplatform.gov/en/methodology>

⁴ U.S. Environmental Protection Agency, EJScreen: Environmental Justice Screening and Mapping Tool, <https://www.epa.gov/ejscreen>

retrofits of industrial facilities in these sectors with federal procurement policies that create demand for their decarbonized outputs would enhance the leverage of projects funded under the Advanced Industrial Facilities Deployment Program. Such synergy will also enhance DOE's ability to engage with additional member of key supply chains, leveraging interactions already underway; create opportunities to quantify the carbon intensity reduction in these four materials on a project-specific basis; and maximize the likelihood that manufacturers take advantage of available incentives to cut emissions and toxic pollution in some of our economy's most emissions-intensive, yet critical manufacturing sectors, and that Buy Clean supports the retention and creation of high-quality U.S. manufacturing jobs.

The IRA contains potentially game-changing incentives for the U.S. industrial sector. DOE's leadership in ensuring high-impact implementation will be invaluable in the coming years. By funding "first three" demonstration projects with sector-wide emissions reduction potential, the agency can maximize the comparative advantage of the Advanced Industrial Facilities Deployment Program and achieve the Biden administration's emissions reduction and industrial transformation goals, cut harmful local pollution, create and retain high-quality manufacturing jobs, and revitalize industrial communities. Our groups are ready to work with you and DOE staff to realize this ambitious vision.

Sincerely,

American Council for an Energy-Efficient Economy
Center for American Progress
Environmental Defense Fund
Good Energy Collective
Information Technology & Innovation Foundation
League of Conservation Voters
National Wildlife Federation
Natural Resources Defense Council
Rocky Mountain Institute
Sierra Club
Third Way