On January 10, 2023, the Aspen Institute Energy & Environment Program convened a roundtable of experts to identify the elements needed to swiftly implement the new clean energy programs in the Inflation Reduction Act (IRA), the Infrastructure Investment and Jobs Act (IIJA, the bipartisan infrastructure law), and the CHIPS and Science Act. Key takeaways included the following:

- Implementation must be swift to maximize impact for energy security, climate change, and domestic jobs and supply chain. However, active engagement, collaboration, and partnership amongst public and private stakeholders are necessary to balance speed with meeting complementary objectives (e.g., emission reductions, developing a strong workforce, strengthening supply chains, advancing environmental justice), all of which are important to accelerate clean energy deployment efforts in the near and long term.

- Tax credit guidance from the Treasury Department is needed as soon as possible.
  - To spur near-term investments, immediate guidance is needed on cross-cutting elements, including: definitions of what counts as an “energy community” and a “disadvantaged” or “overburdened” community; the requirements for the prevailing wage, apprenticeship, and domestic content elements of some credits; and clarity on how the direct pay and transferability provisions will work.
  - Guidance on domestic content requirements should be durable and pragmatic, providing a glide path for companies, which need time to ramp up capacity.
  - With respect to guidance on particular credits, the 45Y tech-neutral clean power credit should be among the priorities for guidance issuance, even though it does not start until 2025, given its oversized impact on emissions reductions and deployment of new technologies. Guidance is needed on the advanced manufacturing credit as well.
Treasury and/or the markets will also need to address a range of issues to enable transferability, including establishing a system so the government can be informed that a credit is being transferred, instituting some sort of vetting and verification, and developing market elements such as bridge loans, indemnification for buyers related to adder conditions over which they have no control, and perhaps an auction clearinghouse.

Given the alignment between the public and private sectors on the success of the IRA, collaboration and partnership can help ensure the guidance is developed in a way that is both ambitious and pragmatic to ensure the strongest near- and long-term success.

- Education for numerous stakeholders — particularly small businesses, local governments, and underserved communities — is needed regarding the range of tax credits, grants, and other programs that could be brought together on projects. Capacity building and technical support are likewise needed to enable stakeholders to access the federal programs. It is worth exploring whether there are ways for public-private partnerships to better systematize the provision of technical assistance and outreach (e.g., some sort of navigator service, multi-year capacity-building grants) to make it less ad hoc and more feasible at scale.

- It is critical to address the “ecosystem” within which projects will be built. The White House, the Federal Energy Regulatory Commission, and Congress should work together with stakeholders to address transmission interconnection queues and permitting and siting challenges, which currently delay new clean energy projects, sometimes for up to ten years. There is strong willingness among diverse stakeholders to collaborate to improve these regimes.

- Efforts to increase domestic clean energy manufacturing should also support smaller and more regional clean energy manufacturing, as well as investment in innovation to circumvent supply chain constraints (e.g., recycling or replacing critical minerals).

- To the extent information is not already on Apprenticeship.gov, it would be helpful to clean energy businesses to have a website that consolidates all the different state labor and apprenticeship requirements, programs, and contact information.

- It is important to create forums and opportunities to bring labor, workforce, and job training stakeholders together with climate and clean energy audiences, as the two worlds do not know each other, and it takes time and trust-building to understand the pipelines and the industries.

- Unions should encourage more hiring from under-represented groups in clean energy labor agreements. Clean energy companies should consciously work to site facilities and hire workers from the places most in need. A heat map of which communities are most in need would be helpful.

- Thought is needed on how to execute a good public finance transition for state and local governments that have been dependent on revenues related to fossil fuels.
Government, business, workers, and communities need to collaborate on community transition plans that consider what happens to everyone in the community.

- Clean energy companies should get involved in designing and executing workforce training programs at community colleges, and a collective community college strategy could have even more impact than individual company partnerships.

- The Department of Energy, the Department of Labor, and others should try to map out longer-term (i.e., after immediate implementation) needs for clean energy workers with highly advanced skills and address them through expansion of existing programs, investments in university programs, or increases in high-skilled immigration programs.

- It would be helpful to map out what the various dynamics related to the value of existing emitting assets (e.g., asset lifespan, capital repayment, the pace of depreciation, worker retirement) look like across the country to reveal where the pace of the energy transition is outstripping the pace of turnover — and where the search for solutions could focus. This could help illuminate the merit order of asset retirement across the economy and, if paired with a map of what has to get built, could enable a planned transition that includes considerations related to workers and communities.
  
  - It is important to come to agreement on the basic financial metrics of concern in terms of minimizing value destruction in existing assets (e.g., net book value, undepreciated value, resale value).

- The hydrogen hub concept notes submitted to the Department of Energy contain valuable project development information that should be reviewed and distilled so it can be applied to other energy projects — including with respect to repurposing of energy assets, creation of new markets, inclusion of communities, and more.

- Support under IIJA of high-risk demonstration projects inherently means that some will not succeed. It is important to preemptively communicate that reality and emphasize the value of federal investments in higher-risk projects to ensure transformational technologies can make it to market.

- Efforts are needed to help the public understand that the clean energy efforts under the IIJA, IRA, and other recent laws will create jobs, lower costs, and result in less pollution. It will be essential to ensure that benefits to local communities are communicated broadly. The private sector, civil society, the White House, and others need to trumpet and amplify every clean energy win.
  
  - Identifying the local clean energy workers and small businesses whose stories should be told should be a major focus of communications efforts. It will also be imperative to share the actual lived experiences of the clean energy transition, with messengers from communities that have benefitted going to other places and explaining how they turned things around. That is a communications exercise that can be supported by philanthropy and civil society.

  - The key may be for people to tie the benefits back to federal clean energy incentives in general, not necessarily the IRA per se.
• There should be coordination and information-sharing among those pursuing clean energy communications efforts.

• It may be worth thinking about creating permanent place-based groups around the country focused squarely on facilitating the energy transition — similar to the effort in the 1990s to spur the growth of renewables, with small teams of analysts, lawyers, advocates, and communications specialists showing up in every relevant proceeding, making the case every day, building local relationships, and elevating local messages.

This document attempts to capture key themes, ideas, and perspectives raised during the roundtable. Participants were not asked to agree to the wording of this document and, therefore, neither participants, speakers, sponsors, discussants, nor their organizations are responsible for the contents. Not all views captured in this document were unanimous and the contents of the document cannot be attributed to any one individual or group of individuals in attendance. The report does not necessarily represent the views of the Aspen Institute nor the Energy and Environment Program, nor any of their respective staff nor scholars.