

## National Commission on Innovation and Competitiveness Frontiers

### Working Group on Accelerating Innovation in Clean Energy Technology

#### Session 2 Discussion Guide

Tuesday, October 17<sup>th</sup>, 2023

11:00 a.m. to 12:30 p.m.

#### Agenda

- 11:00-11:15 – Welcome & Recap
- 11:15-12:15 – Discussion
- 12:15-12:30 – Conclusion & Next Steps

#### Background & Recap

The Future of Sustainability: Accelerating Innovation in Clean Energy Technology charter identifies four broad issue areas for the Commission and its Working Groups to explore:

- 1) Boosting investment in development and deployment of promising clean energy technologies.
- 2) Modernizing the U.S. power grid to enable the clean energy transition.
- 3) Establishing a supportive domestic policy ecosystem to foster clean energy innovation.
- 4) Engaging proactively on the international stage to address trade issues and reinforce global competitiveness in clean energy.

When this Working Group met in September 2023, discussion focused on the policy and regulatory environment surrounding clean energy technology. Specifically, the group identified six key themes:

- Emphasizing flexibility as a guiding principle for policy design and implementation
- Catalyzing sufficient and consistent funding for key technologies
- Recognizing the unique role of state and local government
- Building a strong clean energy workforce
- Creating a robust market of end users for emerging technologies
- Incentivizing supply chain transformation

The goal of this and future Working Group sessions is to drive toward concrete policy recommendations.

The priority topic for today's session is securing the supply chains for clean energy technology.

*The questions below are intended to guide discussion and provide food for thought. Not all questions need to be directly addressed during the Working Group session. Moderators and Working Group participants will collaboratively shape discussion around priority issues.*

## Discussion: Securing Critical Supply Chains

Critical minerals continue to be a large vulnerability, and will only grow in importance in the coming years. Meanwhile, the United States relies on foreign countries for many critical technology inputs, such as batteries and semiconductors. **What can policymakers, the private sector, and other stakeholders do to boost resiliency of supply chains that underpin clean energy technologies?**

### Priorities for Re-Shoring

- It is unlikely that the U.S. can feasibly create domestic supply chains for all key clean energy inputs. Are there particular supply chains to focus re-shoring efforts on?
  - Are there certain supply chains more suitable for “friend-shoring”?
  - Will these priorities change in the coming years and decades? How can we anticipate future supply chain vulnerabilities?

### Workforce Gaps

- What workforce gaps need to be filled to re-shore key supply chains (e.g., battery manufacturing, semiconductor fabrication)?
  - What policies or partnerships could help to fill these gaps at scale and speed? Are there existing models to inform future policy design?
  - How can industry engage the existing workforce to build competencies in these areas?

### Competition with China

- How can the United States compete with China as a global supplier of clean energy technologies?
  - Should our focus be on regaining a position in areas dominated by China (e.g., solar PV manufacturing) or on dominating new high-technology areas (e.g., advanced semiconductors)?

### Innovations to Obfuscate Vulnerabilities

- What role does innovation play in obfuscating supply chain vulnerabilities? Are there promising new technologies or processes that could strengthen clean energy supply chains?
  - How can industry, academia, and national labs collaborate to identify and capitalize on these opportunities?

## Conclusion & Next Steps

- The Council will present initial findings from this group and our three other Working Groups at our annual National Competitiveness Forum on December 14<sup>th</sup> and 15<sup>th</sup>. A short summary, akin to last session, will be sent to Working Group participants shortly.