

NSF Workshop on Advanced Manufacturing for Industrial Decarbonization



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Workshop Objectives

- Identifying gaps and challenges in advanced manufacturing for industrial decarbonization, including thorough techno-economic assessments
- Sharing perspectives from federal agencies
- Formulating recommendations for research initiatives on economically viable decarbonization technologies



NSF: Who We Are and What We Do

NSF's Mission:
to promote the
progress of science; to
advance the national
health, prosperity, and
welfare; to secure the
national defense



NSF and ENG Perspective: Partnerships for Climate Solutions

NSF's directorate for Engineering has continued interest in

- emerging industries
- solutions for climate change mitigation and adaptation
- expanding and broadening participation
- building partnerships to address science and engineering challenges



BUDGET REQUEST

TO CONGRESS

FY2024



STRENGTHENING ESTABLISHED NSF

Continues NSF's central focus to accelerate discovery and enhance state-of-the-art research capabilities.



INSPIRING MISSING MILLIONS

Continues NSF's commitment to provide STEM opportunities to every demographic and socioeconomic group in every geographic region of the country.



ACCELERATING TECHNOLOGY AND INNOVATION

Continues NSF's investments in breakthrough technologies and innovation, fostering partnerships and nurturing talent so the U.S. can remain a global leader in STEM.

Manufacturing Research at NSF

- Advanced Manufacturing core program (ENG/CMMI)
- Future Manufacturing (Eco, Bio and Cyber)
- Emerging and expanding areas of focus

- Discussion tomorrow (Federal Agency Perspectives)



Partnerships: Government, Academia, Industry

- NSF's newest Directorate: Technology, Innovation and Partnerships (TIP)
- Strong focus on building partnerships and leveraging a diversity of strengths
- Example: TIP Regional Innovation Engines Finalists (announced August 2, 2023)

<https://new.nsf.gov/tip/updates/nsf-regional-innovation-engines-program-selects-16>

Advanced Manufacturing, Advanced Materials, Circular Economy, Climate and Resilience,
Sustainable Energy...



Over the next day and a half...

- Listen and learn: emerging areas and innovative ideas
- Networking and partnering, leveraging strengths
- Asking questions
- Let's use this time to find ways we can work together towards solutions



Ways to Participate



Serve on a panel



Respond to NSF calls for
information and input



Organize a Workshop
in an emerging area



Participate in NSF
workshops and Webinars



Become an NSF
Program Director





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