Advanced Manufacturing Office
Industrial Technology Validation Pilot Phase 2
Stakeholder Toolkit

The U.S. Department of Energy's (DOE) Industrial Technology Validation (ITV) pilot is accepting applications on a rolling basis until June 30, 2022, and we welcome your participation and help to spread the word to your network.

The ITV pilot seeks pre- or early-commercial technologies that will lead to substantial reductions in GHG emissions, energy, water, and/or waste creation and have broad deployment applicability in the manufacturing, wastewater treatment, agricultural, clean rooms, and/or mining sectors. There are two ways to participate in the ITV pilot: As a **technology provider** or as an **industrial host site**. Technology developers that are interested in teaming up with industrial sites to validate their emerging technology can apply individually or jointly with a host site. Industrial facilities that are considering adopting an emerging technology and would like to serve as a field testbed site can apply with a technology in mind.

Join us for an upcoming webinar on April 20, 2022 at 1:00PM ET to learn more about Phase 2 of the ITV Pilot and have your questions answered. More information about the pilot can also be found on the ITV website, including the ITV Phase 2 RFP, which includes information on the application process and instructions for submitting your proposal.

Key Points for Our Stakeholders:

- **Technology Developers** will have the opportunity to gain industry exposure by deploying their technologies in a real-world industrial environment. Performance will be verified by a full-scale measurement and verification (M&V) process led by DOE National Lab experts. A publicly available M&V report will be produced for each validation that can help developers tap into new and existing markets.
- **Host Sites** can gain a competitive edge by becoming an early adopter of emerging technology and optimizing plant performance and production targets. The expert-led field testing will reduce the risks associated with incorporating new technologies. Host sites will work towards their own decarbonization goals while also creating new opportunities for industry to join in the broader integration of GHG-, energy-, water-, and waste-reducing technologies in the industrial space.
- This new effort is Phase 2 of the ITV Pilot. In Phase 1, five private-sector partners were selected as testbeds. Innovative energy and water-treatment technologies are currently being validated in facilities operated by these DOE Better Plants Partners: Nissan North America (Canton, MS), Toyota North America (Blue Spring, MS), Ahlstrom-Munksjo (Mosinee, WI), and Cleveland Cliffs (Cleveland, OH). While ITV Phase 1 was only open to Better Plants partners, Phase 2 is open to any technology developer or industrial site.
- Please use the sample email and social media language below (page 3) to help us amplify this opportunity to technology manufacturers and potential host site companies.

Program Description:

Emerging technologies will play a critical role in achieving our nation's sustainability and carbon reduction goals, but the risks associated with installing and objectively validating technology performance in industrial environments can often impede adoption. The ITV pilot, administered by the DOE's Advanced Manufacturing Office (AMO), aims to reduce these risks by harnessing the expertise of the DOE National Labs to validate performance of emerging decarbonization technologies in field testbed sites at manufacturing facilities. Validation of technology performance can help inform public- and private-sector investment decisions and accelerate commercialization. Therefore, ITV provides an opportunity to accelerate the commercialization of AMO-supported technologies while complementing AMO's existing efforts on technology demonstration and deployment.

The ITV pilot Request for Proposals (RFP) seeks pre- or early-commercial technologies that will lead to substantial reductions in greenhouse gas (GHG) emissions, energy use, water use, and/or waste production at manufacturing or water treatment facilities. The pilot is designed to identify and prioritize cost-effective, emerging, and underutilized technologies with significant performance improvement and adoption potential.

Specifically, the Pilot seeks technologies that can cost-effectively advance decarbonization of American industry and meet the following criteria:

- Advances industrial decarbonization by reducing GHG emissions. Technologies that reduce water use, wastewater effluent, and waste creation will also be considered.
- Qualifies as pre- or early-commercial technology or commercial technology in a new use case.
- Has broad deployment potential, but not yet widely used or accepted.

For each selected technology, a team of experts led by AMO, Lawrence Berkeley National Laboratory (LBNL) and Oak Ridge National Laboratory (ORNL) will design a measurement and verification (M&V) plan, conduct on-site data collection and testing at the host site, analyze performance, and draft a field validation report. ITV pilot funding supports the DOE National Laboratories in carrying out the activities described above; no funding is provided to the technology vendor or host site. Results from the pilot will be shared broadly through publicly available M&V reports to accelerate the adoption of successful technologies.

Contact Information:

If you have any questions about the ITV pilot or about the application process, please contact ITV-Support@lbl.gov

Sample Email to Send to Your Network (feel free to attach this stakeholder toolkit to your email):

Dear Friends,

I invite you to review the U.S. Department of Energy's (DOE) Industrial Technology Validation pilot, which is currently accepting applications on a rolling basis through June 30, 2022. The program will validate innovative GHG-, energy-, water-, and waste-reducing technologies in industrial testbed sites with support from DOE National Lab experts. Results from the pilot will be shared broadly to accelerate the widespread deployment of high-impact technologies that will advance decarbonization of the industrial sector.

There are two ways to participate in the ITV pilot: As a technology developer or as an industrial validation host site. **Technology developers** will have the opportunity to gain industry exposure by validating their technologies in a real-world industrial environment. Companies that serve as **host sites** can gain a competitive edge by becoming an early adopter of emerging technology and optimizing plant performance and production targets.

Join DOE for an upcoming webinar on April 20, 2022 at 1:00PM ET to learn more about Phase 2 of the ITV Pilot and have your questions answered. More information about the pilot can also be found on the ITV website, including the ITV Phase 2 RFP, which provides more information on the application process and instructions for submitting your proposal.

Sample Social Media Post to Share With Your Network:

The Industrial Technology Validation pilot from @ENERGY is accepting applications! It's open to technology developers & industrial sites interested in validating decarbonization technologies with support from DOE National Lab experts. Learn more and apply: https://betterbuildingssolutioncenter.energy.gov/better-plants/industrial-technology-validation-pilot

Sample Image to Use With Your Social Media Posts: