

FRAUNHOFER TECHBRIDGE



1 *Your company wants to gain an edge in its innovation efforts by quickly and easily identifying and influencing new, relevant technologies. TechBridge accelerates this process.*

Fraunhofer Center for Sustainable Energy Systems CSE

Massachusetts Laboratory
5 Channel Center Street
Boston, MA 02210

New Mexico Laboratory
5600 University Boulevard SE, Suite A
Albuquerque, NM 87106

Contact



Nick Rancis
TechBridge Program,
Lead
Phone: 617-379-5701
nrancis@cse.fraunhofer.org
cse.fraunhofer.org/techbridge

About Fraunhofer CSE

Fraunhofer CSE is an applied research and development laboratory dedicated to building tomorrow's energy future today. Our staff's expertise in solar photovoltaics (PV), smart energy-efficient buildings, and grid technologies provides a platform for deeply integrating distributed energy resources through collaborative R&D with private companies, government entities, and academic institutions.

Fraunhofer TechBridge™

The Fraunhofer TechBridge™ Program works with corporations and startup companies to identify and de-risk promising energy-related technologies to mitigate the 'industry-readiness barrier,' primarily through a combination of:

- Optimizing and testing prototypes according to industry-standard protocols
- Providing third-party validation of economic viability and performance
- Fielding demonstrations of prototypes in real-world conditions
- Integrating components into a system-level environment
- Evaluating for manufacturability

A Proven Industry-Driven Model for Energy Innovation

Commercializing early-stage, yet high-potential technologies will always pose particular challenges, especially technologies found in the emerging energy or infrastructure sectors. Unlike typical accelerators or incubators, the TechBridge Program gives startups access to a team of industry-savvy engineers to test, validate, and design their product to attract follow-on funding, partnerships and customers.

Direct TechBridge benefits to the innovation community include:

- 21 Partnerships formed, 27 products launched
- 17 TechBridge companies with a survival rate of 100%
- \$154M follow-on funding + \$19.9M in revenue generated

DESIGN

We work with investor, industry, or foundation sponsors to define an area of current or future innovation need.

SEARCH

We search for relevant, innovative technologies via our global network of 1000+ channels.

SELECT

We perform an assessment of all applicants based on technical merit, and conduct an in-depth analysis of each technology's potential.

ACCELERATE

We incorporate Fraunhofer expertise and resources to execute a validation or demonstration project answering key technical and market questions.

THE TECHBRIDGE PROCESS

The TechBridge Challenge

The Fraunhofer TechBridge™ Program runs several “TechBridge Challenges” per year for our partners to perform technical validation projects that enable growth and provide the sponsor with actionable information about the latest innovations in relevant areas. Our process includes the following:

- **Define - Prep and Launch:** We work with program sponsors to define an area of current or future innovation need. The TechBridge team refines the topic, performs background research, formulates Request for Proposals, and launches the ‘Challenge.’
- **Search - Invite Applicants:** TechBridge invites applications from university and startup communities via its global network of 1000+ channels. TechBridge also performs targeted outreach based on the specific problem statement and technical specifications.
- **Select - Evaluate Submissions:** The TechBridge team and Fraunhofer engineers perform a detailed, and comprehensive assessment of all applicants based upon their technical merit, business strategy, team and fit.
- **Accelerate - Demo and Test:** TechBridge incorporates Fraunhofer's vast industry expertise to design a test, validation or demonstration project that answers the sponsor's key market and technical questions(s) with those of the selected startup(s).

Sponsor Benefits

Uniquely positioned in the commercialization continuum, the TechBridge Program maximizes exposure to emerging technologies aligned with industry interests, while eliminating the IP and contracting barriers that can prevent meaningful engagement with startups.

Direct Sponsor Benefits:

- Gain sole access to technical overviews of the technology or market of interest
- Influence the development of technologies of strategic interest
- Obtain actionable data and project results from an independent third party to guide decision-making on investment, partnership etc.

Additional Strategic Gains:

- Engage in a low-risk corporate open innovation strategy
- Identify opportunities for disruptive growth
- Strategic sponsor branding and marketing

Selected Challenge Sponsors

SunRISE TechBridge Challenge: Presented in partnership with DSM, a global, science-based company active in health, nutrition and materials which is building a young and fast-growing business in solar, and Greentown Labs, the largest cleantech incubator in the United States, Fraunhofer TechBridge™ sought innovative solutions and new materials that would lower the Levelized Cost of Energy (LCOE) for PV systems.

SunRISE TechBridge Challenge II: The SunRISE TechBridge Challenge II sought further innovative solutions to reduce the LCOE for photovoltaic systems. The specific areas of interest included: 1) Novel PV cell and module materials; 2) Data analytics software and/or advanced sensors; and 3) Retrofit technologies that boost solar PV output/reduce O&M costs.

TechBridge Challenge on Advanced Industrial Surfaces: Working in collaboration with ExxonMobil Research and Engineering Company, Fraunhofer TechBridge™ sought advanced surface technologies—or technologies that enabled the scalable, cost-effective deployment of advanced surfaces—to improve energy efficiency in the petroleum and chemical processing industries.

TechBridge Microgrid Challenge: Recognizing the enormous potential of microgrids, we worked with Shell to build a program around microgrid innovations. We launched the Shell-sponsored TechBridge Microgrid Challenge, attracting 75 applications from innovators poised to disrupt microgrids and distributed generation.

For more information on **TechBridge Challenges**, please contact us at: techbridge@cse.fraunhofer.org or visit our website at: cse.fraunhofer.org/techbridge