Without Solar Market Pathways, this project wouldn't exist. This has helped San Francisco learn what other partners are doing and how to do it, so we don't have to spend weeks spinning our wheels."

– Russ Carr, Electrical Engineer, ARUP

#### SOLAR ENERGY **TECHNOLOGIES OFFICE** U.S. Department Of Energy

# **Solar Market Pathways**

#### **Overview**

Deployment of reliable and affordable renewable energy has long been seen as a key to tackling our climate challenge, and in the last decade we've made remarkable progress on developing and deploying the technology. Since 2014, solar has been the fastest-growing source of new electricity in the U.S. This advancement has driven down costs and created jobs, making solar cost competitive to fossil fuels. There are now more jobs in solar energy than in coal, and between 2010 and 2017, the cost of utility-scale solar dropped by more than 78%.

These market changes were accelerated by national initiatives like Solar Market Pathways. From 2015 to 2018, 14 Solar Market Pathways awardees from across the country advanced solutions to technical, economic, and social barriers to solar deployment. The result: model approaches that reduce regulatory barriers and costs - speeding adoption in communities and institutions across the U.S.

#### The Network

As the Solar Market Pathways national coordinator, the Institute for Sustainable Communities (ISC) created and ran a peer-learning network that supported the development of innovative approaches to solar deployment by bringing together the awardee teams - often nationally acknowledged leaders in solar - and technical experts. By elevating broader lessons learned and emergent best practices from the awardees, ISC helped communities bypass years of the solar learning curve accelerating replication and adoption through a very cost-effective approach.

ISC, in partnership with the Interstate Renewable Energy Council, the National Renewable Energy Lab, and the Regulatory Assistance Project, also provided tailored technical assistance to awardees, leading to advancements in individual projects that, through the network, advanced peer projects, and will benefit the market as a whole for years to come via the program's curated resource website.

> *ISC brought together solar stakeholders to find ways* to reduce barriers and expand solar.



### Sustainable Communities

#### **Project Overview**



### **Areas of Impact**

- Energy
- Urban Systems
- Adaptation & Resilience
- Network Development
- Multi-Stakeholder Engagement





#### Partners



RAP

**Energy solutions** or a changing world

### $\Rightarrow$ About ISC

The Institute for Sustainable Communities' mission is to help communities around the world address environmental, economic, and social challenges to build shared by all. Since our founding in 1991 by former Vermont Governor Madeleine M. Kunin transformative community-driven projects in 30 countries including the United States, China, India, and

www.sustain.org

#### Funder

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### **Innovation Areas**

The 14 Solar Market Pathways projects tackled obstacles and made significant advancements toward reducing the soft costs of solar in many areas of innovation:

- Building resilience with solar+storage: Combining solar with battery storage to improve disaster preparedness and emergency operations is a cuttingedge approach that protects communities and drives adoption in key markets. Projects worked to mainstream this technology.
- Catalyzing community solar: Community solar increases demand for solar electricity — driving down both utility bills and the cost of solar installation. Projects created new community solar programs, expanded the reach of existing ones, and standardized models to make development and implementation easier.
- Expanding engagement and participation: Energy strategies that serve all members of a community—and are therefore more efficient and effective require more inclusive, transparent, and accountable planning processes. Projects created new business and engagement strategies to better serve lowincome households.
- Growing nascent markets: To increase solar adoption in communities, states, and regions where solar is still new, project teams overcame market barriers to bring solar to scale.
- · Increasing higher education investment potential: U.S. colleges and universities are well positioned to invest in solar given their unique combination of power consumption, land ownership, finance capacity, and commitment to education. Projects helped spur solar investment by pooling institutional purchasing power and engaging students in development.
- Working with utilities: Recognizing the crucial role utilities play in the acceleration of distributed solar generation, project teams developed comprehensive strategies to integrate solar into utility electricity supply.

ISC created a curated website that features the best tools and resources developed through Solar Market Pathways, as well as top resources from others in the field. The website shares case studies that carefully document each project's three-year journey - lessons learned, key takeaways, and tools to help others replicate these successes in their own communities.

#### Learn more at solarmarketpathways.org.

### About the Solar Energy Technologies Office Initiative

The U.S. Department of Energy's Solar Energy Technologies Office created this collaborative national effort to aggressively drive innovation to make solar energy fully cost-competitive with traditional energy sources before the end of the decade. Through SETO, the department supports efforts by private companies, universities, and national laboratories to drive down the cost of solar electricity to \$0.06 per kilowatt-hour. Learn more at www.energy.gov/eere/solar/solar-energy-technologies-