

U.S. DEPARTMENT OF  
**ENERGY**

Office of ENERGY EFFICIENCY  
& RENEWABLE ENERGY

SOLAR ENERGY TECHNOLOGIES OFFICE

# Streamlining Solar Permitting with SolarAPP+

April 29, 2021

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Becca Jones-Albertus, Director, Solar Energy Technologies Office

Jeff Cook, SolarAPP+ Project Lead, National Renewable Energy Laboratory

Abigail Ross Hopper, President & CEO, Solar Energy Industries Association

[energy.gov/solar-office](https://energy.gov/solar-office)

# Housekeeping and Logistics

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- This session is being recorded and will be made available on [energy.gov/seto-webinars](https://energy.gov/seto-webinars)
- We will take questions at the end – please put these in the chat

# Solar Energy Technologies Office (SETO) Overview

## MISSION

We accelerate the **advancement** and **deployment of solar technology** in support of an **equitable** transition to a **decarbonized energy system by 2050**, starting with a decarbonized power sector by 2035

## WHAT WE DO

**Advance solar technology** and drive soft cost reduction to make solar **affordable** and **accessible** for all Americans

Enable solar to **support grid reliability** and pair with storage to provide new options for **community resilience**

Support **job growth**, **manufacturing**, and the **circular economy** in a wide range of applications



# SETO Program Areas

## PHOTOVOLTAICS



## CONCENTRATING SOLAR-THERMAL POWER



## SOFT COST REDUCTION



## SYSTEMS INTEGRATION



## MANUFACTURING AND COMPETITIVENESS



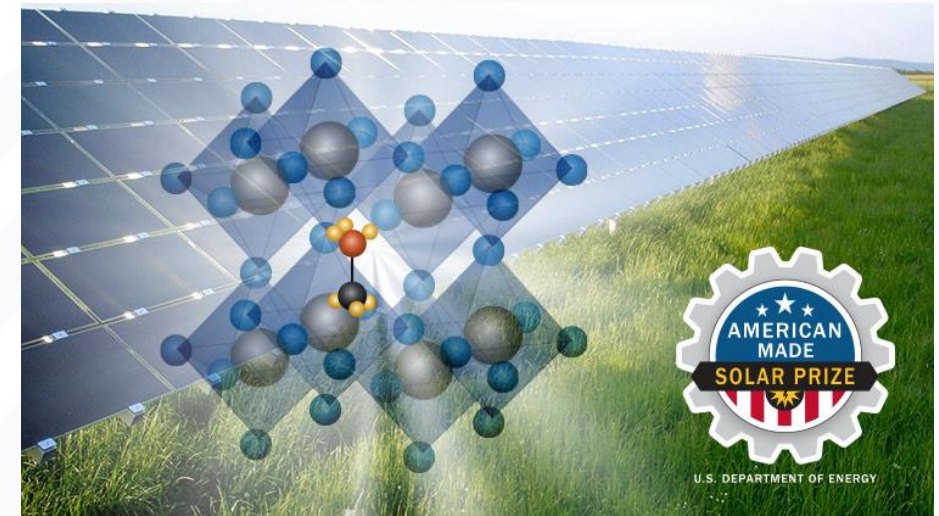


# Driving Toward Administration Decarbonization Goals

- ▶ **Accelerate solar deployment and associated job growth** by opening new markets, providing workforce training, and growing U.S. manufacturing.
- ▶ Enable inverter-based technologies to provide essential grid services and black start capabilities while demonstrating the **reliable, resilient and secure operation of a 100% clean energy grid**.
- ▶ **Reduce hardware and soft costs** of solar electricity for **all Americans** to enable an affordable carbon-free power sector by 2035.
- ▶ **Support a decarbonized industrial sector** with advanced concentrating solar-thermal technologies and develop affordable renewable fuels produced by solar energy.
- ▶ **Center energy justice** by reducing environmental impacts, removing barriers to equitable solar access, and supporting a diverse and inclusive workforce.

# Open Prize Competitions

- **American-Made Challenges: Perovskite Start-Up Prize**
  - \$3M to accelerate commercialization of perovskite solar cells
  - [Info Webinar Recording](#)
  - Applications due June 30, 2021
- **American-Made Challenges: Solar Desalination Prize Round 2**
  - \$5M to develop systems that use solar-thermal energy to purify water
  - [Info webinar](#) on May 4 at 2 p.m. ET
  - Applications due July 15, 2021



# Upcoming Events and Webinars

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- **May 4, 11 a.m. ET:** [A Force for Change](#): Justice, Equity, Diversity, and Inclusion (JEDI) in the Solar Industry
- **May 4, 2 p.m. ET:** Solar Desalination Prize Round 2 [Info Webinar](#)
- All upcoming events and webinars can be found at [energy.gov/seto-events](https://energy.gov/seto-events)

WEBINAR | **May 4** from 11 a.m. to 12 p.m. ET

# A FORCE FOR CHANGE

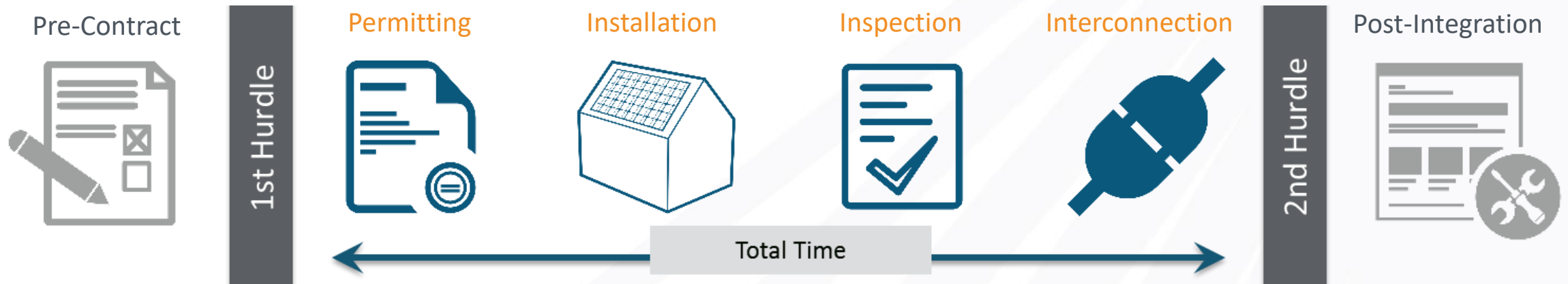
Justice, Equity, Diversity, and Inclusion (JEDI) in the Solar Industry

Join the Energy Department for a virtual roundtable to hear from stakeholders about how to increase equity in the solar workforce and community solar efforts.

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**Register:** [energy.gov/seto-webinars](https://energy.gov/seto-webinars)

# Time Wasted is Costly to Consumers and Market



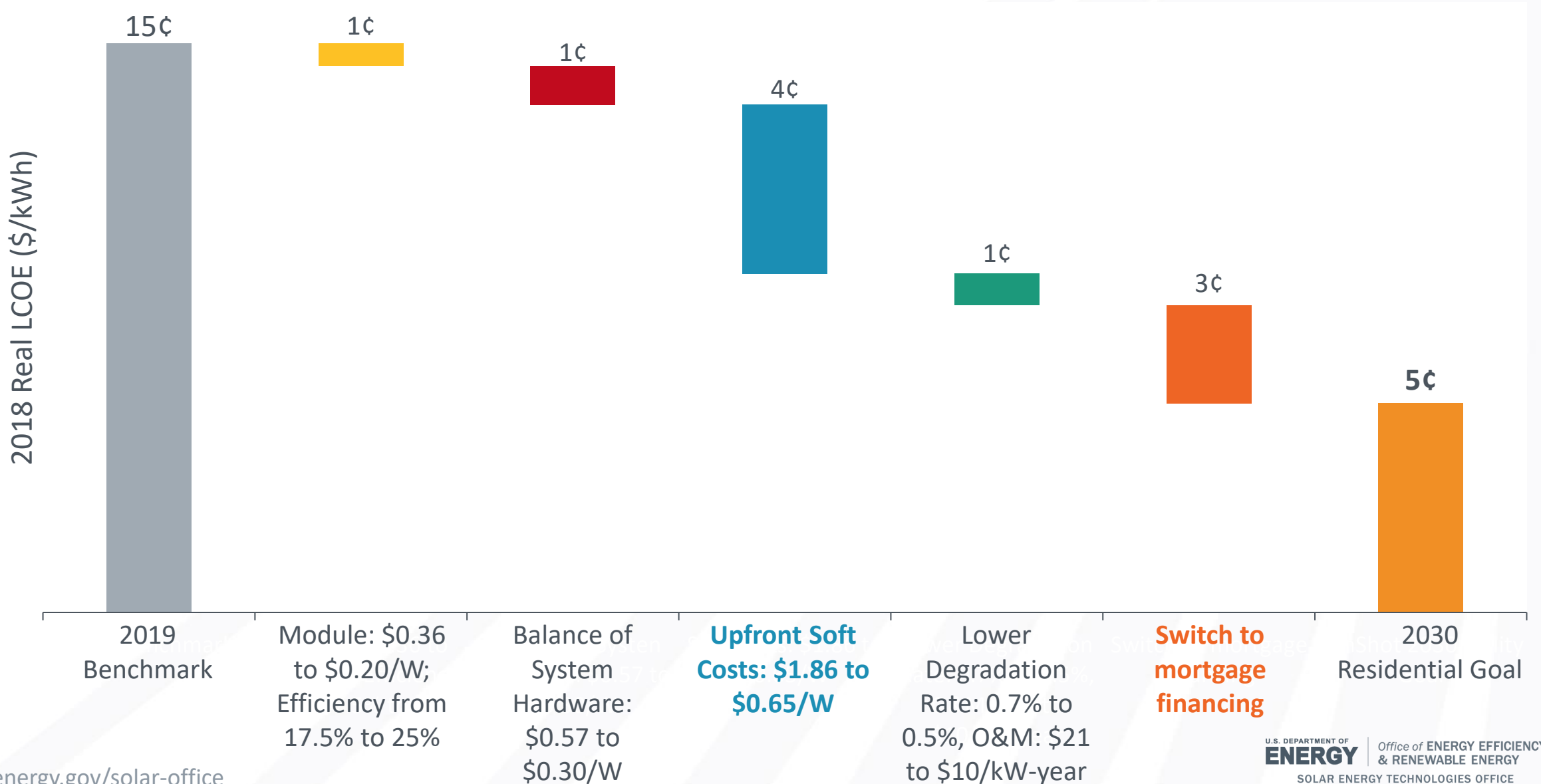
If every system installed is delayed unnecessarily by just one day, the cost to the market will be approximately

**\$4.7M/day\***

\*Lost revenue from electricity sales. Calculations based on 2020 deployment level, assuming historic average irradiance of electricity generation a day and at weighted average retail price of \$0.06 per kWh.



# A Pathway To \$0.05 per kWh for Residential PV



# Reducing Barriers to Going Solar with SolSmart



152

Gold Designees



96

Silver Designees



154

Bronze Designees

402

Designees  
(as of April 2021)



## BACKGROUND

- Launched in April 2016, SolSmart designates communities that have cut red tape by increasing transparency, training staff, and reducing permitting, zoning and other barriers to solar.
- At no-cost to the community, SolSmart TA providers work with elected officials, local government staff, and community members to help communities update processes using established best practices.

## SUCCESS

- 99 million people, or **30% of the U.S. population**, live in SolSmart communities across 41 states, DC., and V.I.
- The number of solar installations in a community **increased by an average of 62%** following designation.
- West Palm Beach, FL (Gold, 2018) - first city in Florida to offer a one-day permitting for PV systems of 10 kW or less.
- Anchorage, AK (Bronze, 2019), first community designated in Alaska, created online permitting checklist.

# What is SolarAPP+?



- Online platform that streamlines and automates residential solar permitting
- Developed by NREL and broad group of coalition partners
- Pilot started in winter 2020
- Other communities can join after pilot stage later in 2021
- Stay updated at [solarapp.nrel.gov](https://solarapp.nrel.gov)



# Stay Connected

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- Sign up for SolarAPP+ updates at [solarapp.nrel.gov](https://solarapp.nrel.gov)
- Find all SETO events & webinars at [energy.gov/seto-events](https://energy.gov/seto-events)
- Email questions to [solar@ee.doe.gov](mailto:solar@ee.doe.gov)



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