U.S. DEPARTMENT OF ENERGY | Office of ENERGY EFFICIENCY & RENEWABLE ENERGY
SOLAR ENERGY TECHNOLOGIES OFFICE

Streamlining Solar Permitting with SolarAPP+

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energy.gov/solar-office

Housekeeping and Logistics

- This session is being recorded and will be made available on 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

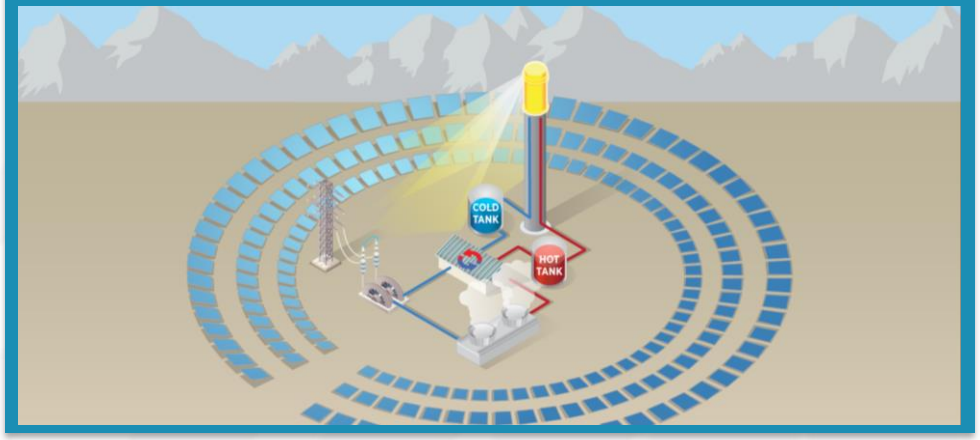
Enable solar to **support grid reliability** and pair with storage to provide new options for **community resilience**

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

SETO Program Areas

PHOTOVOLTAICS

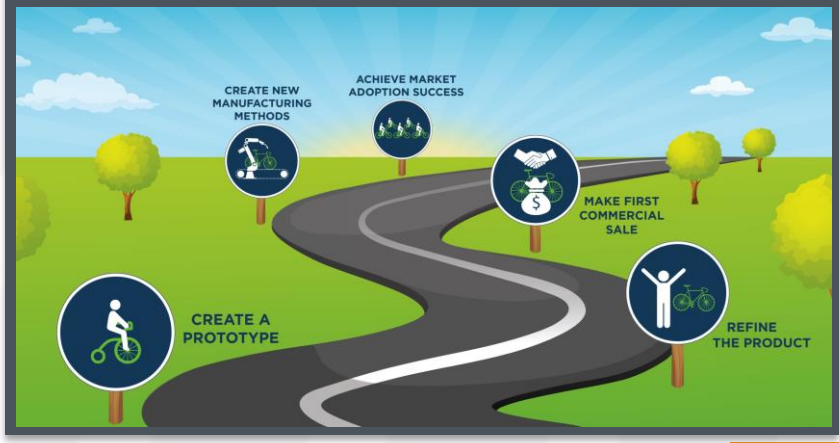
CONCENTRATING SOLAR-THERMAL POWER



SOFT COST REDUCTION

SYSTEMS INTEGRATION

MANUFACTURING AND COMPETITIVENESS

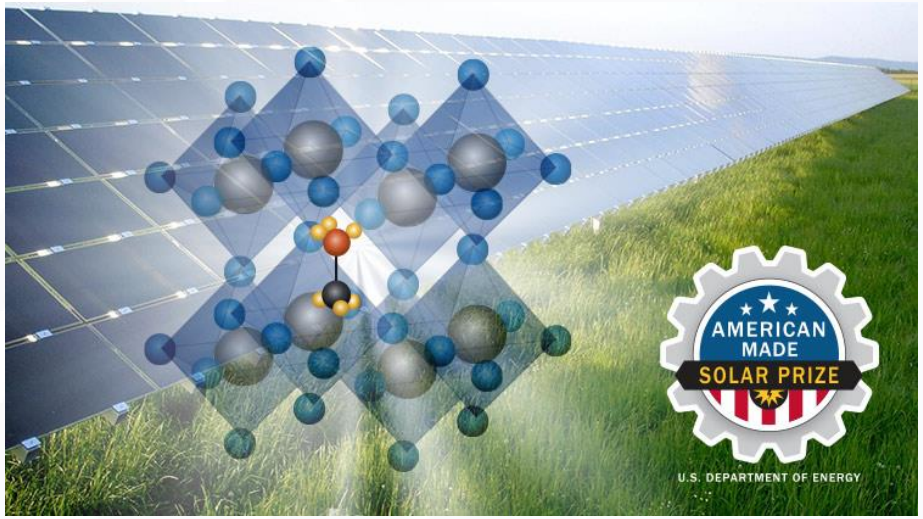


Driving Toward Administration Decarbonization Goals

- **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

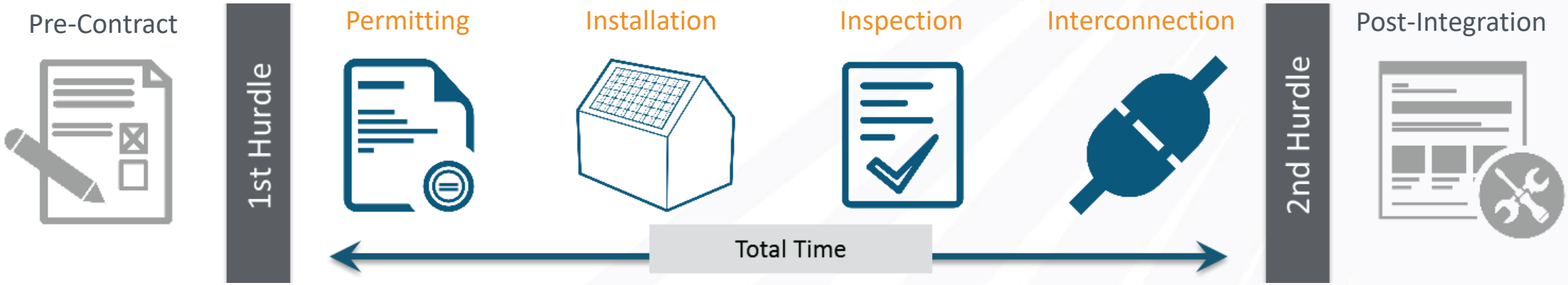


- **American-Made Challenges: Solar Desalination Prize Round 2**
  - $5M to develop systems that use solar-thermal energy to purify water
  - Info webinar on May 4 at 2 p.m. ET
  - Applications due July 15, 2021

Upcoming Events and Webinars

- **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

Time Wasted is Costly to Consumers and Market

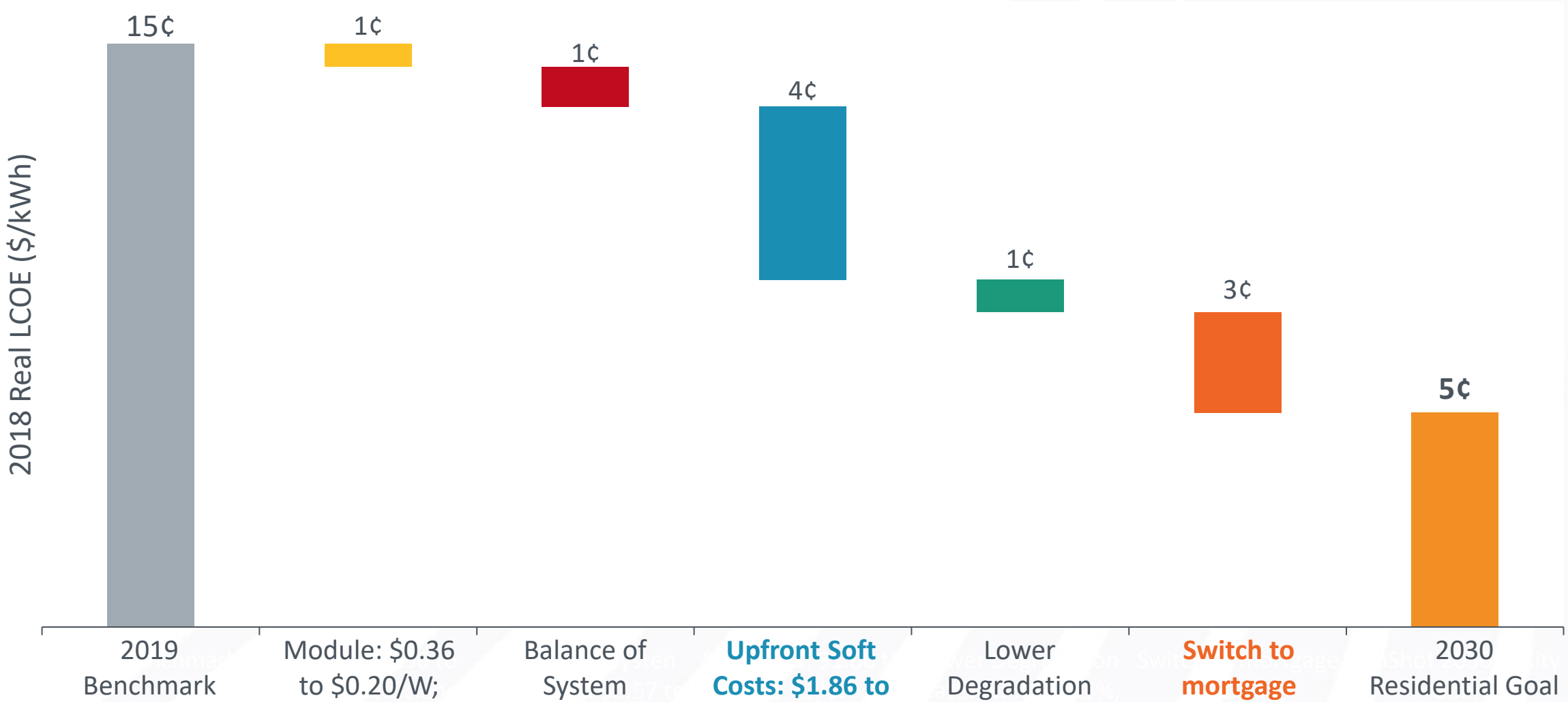


If every system installed is delayed unnecessarily by just one day, the cost to the market will be approximately

$4.7 M/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+?

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

Stay Connected

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

SIGN UP NOW:
energy.gov/solar-newsletter