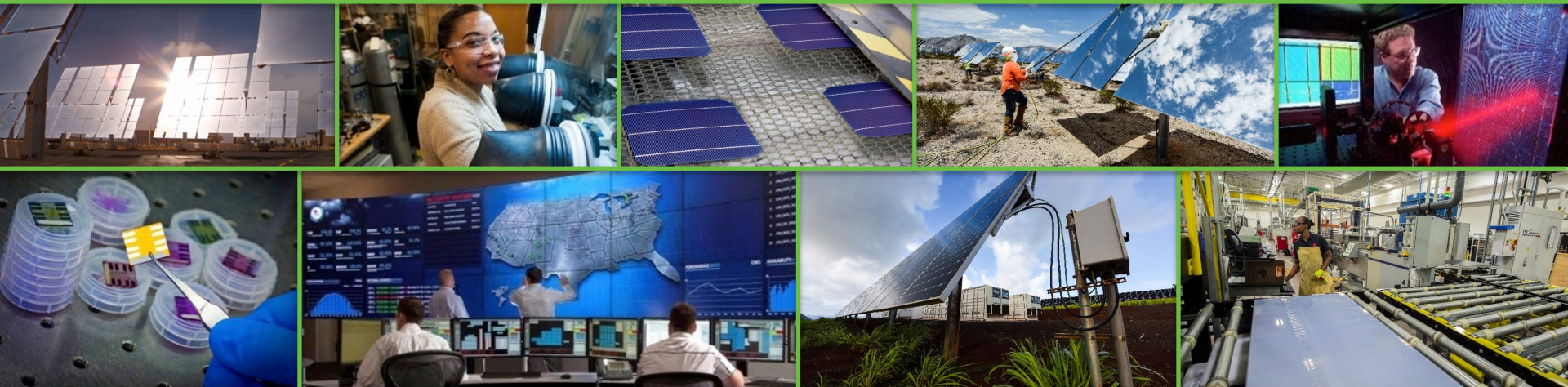


# Solar Energy Technologies Office (SETO) Perspective on PV Cabling and Connector Safety, Performance and Durability

*Dr. Allan Ward*

July 17, 2024



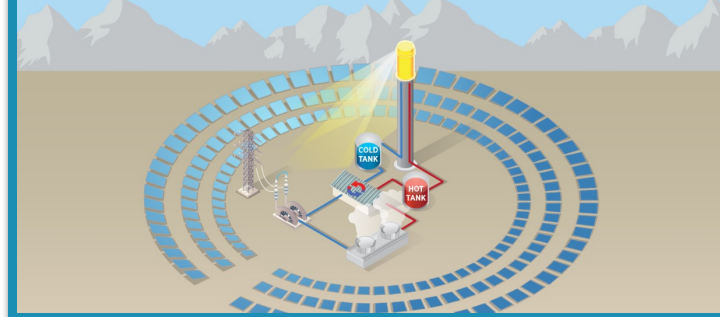
# SETO and the Photovoltaics Team Goals

# SETO Research Areas

## PHOTOVOLTAICS



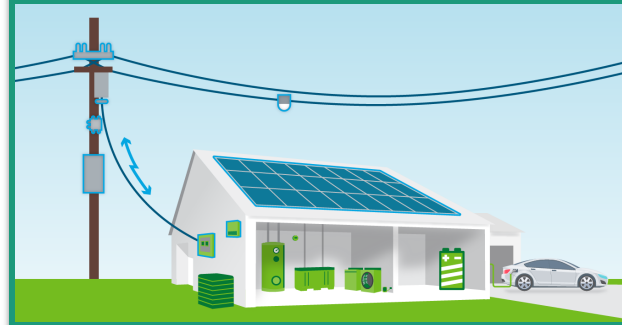
## CONCENTRATING SOLAR-THERMAL POWER



## BALANCE OF SYSTEMS/ SOFT COST REDUCTION



## SYSTEMS INTEGRATION



## MANUFACTURING AND COMPETITIVENESS

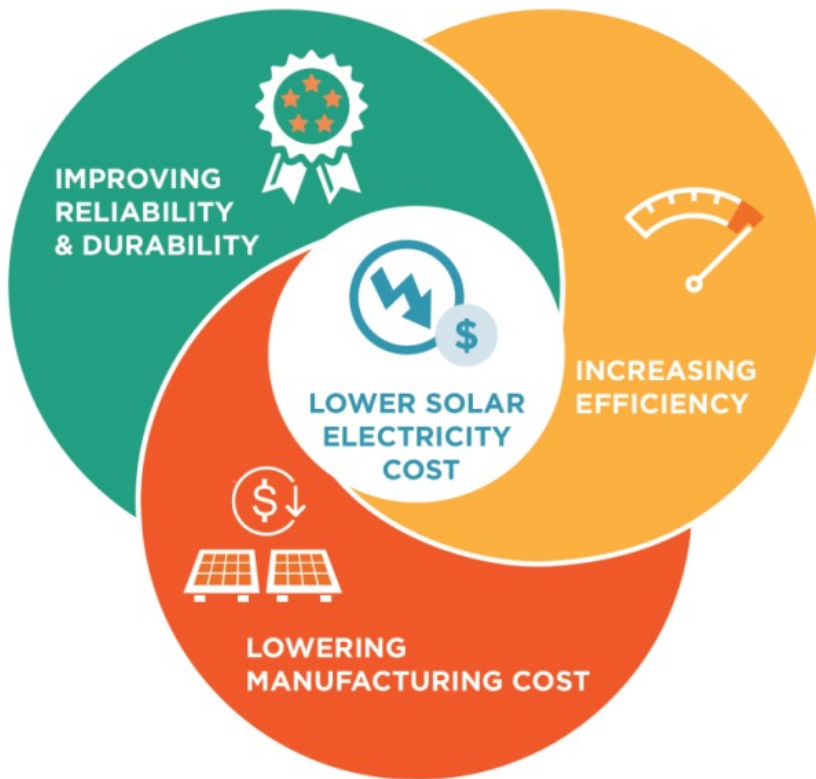


# Photovoltaics Research Area

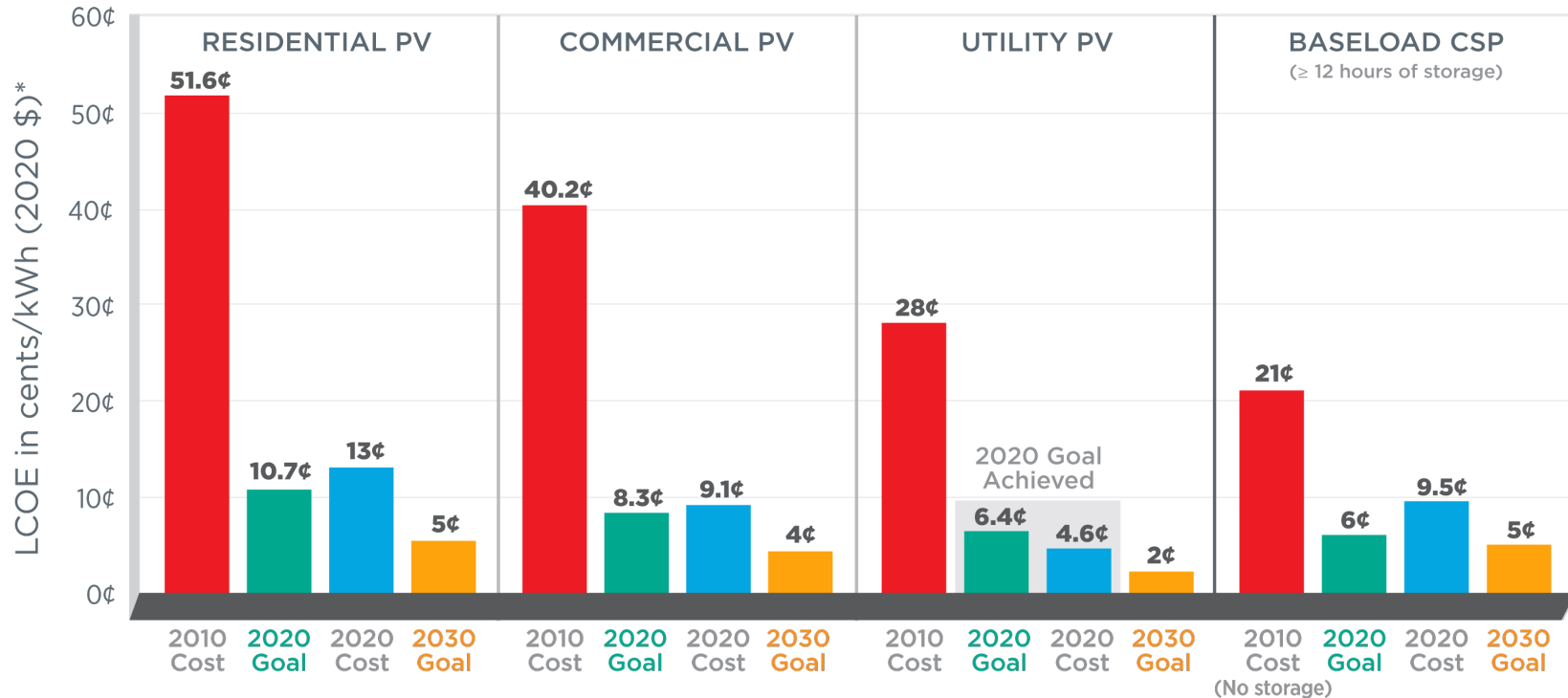
Funds research with a 10–15-year horizon, which is beyond industry focus or capabilities

Supports an innovation ecosystem that includes universities, students, professors, and the private sector

Current Focus: Improving reliability and efficiency of new and existing PV technology

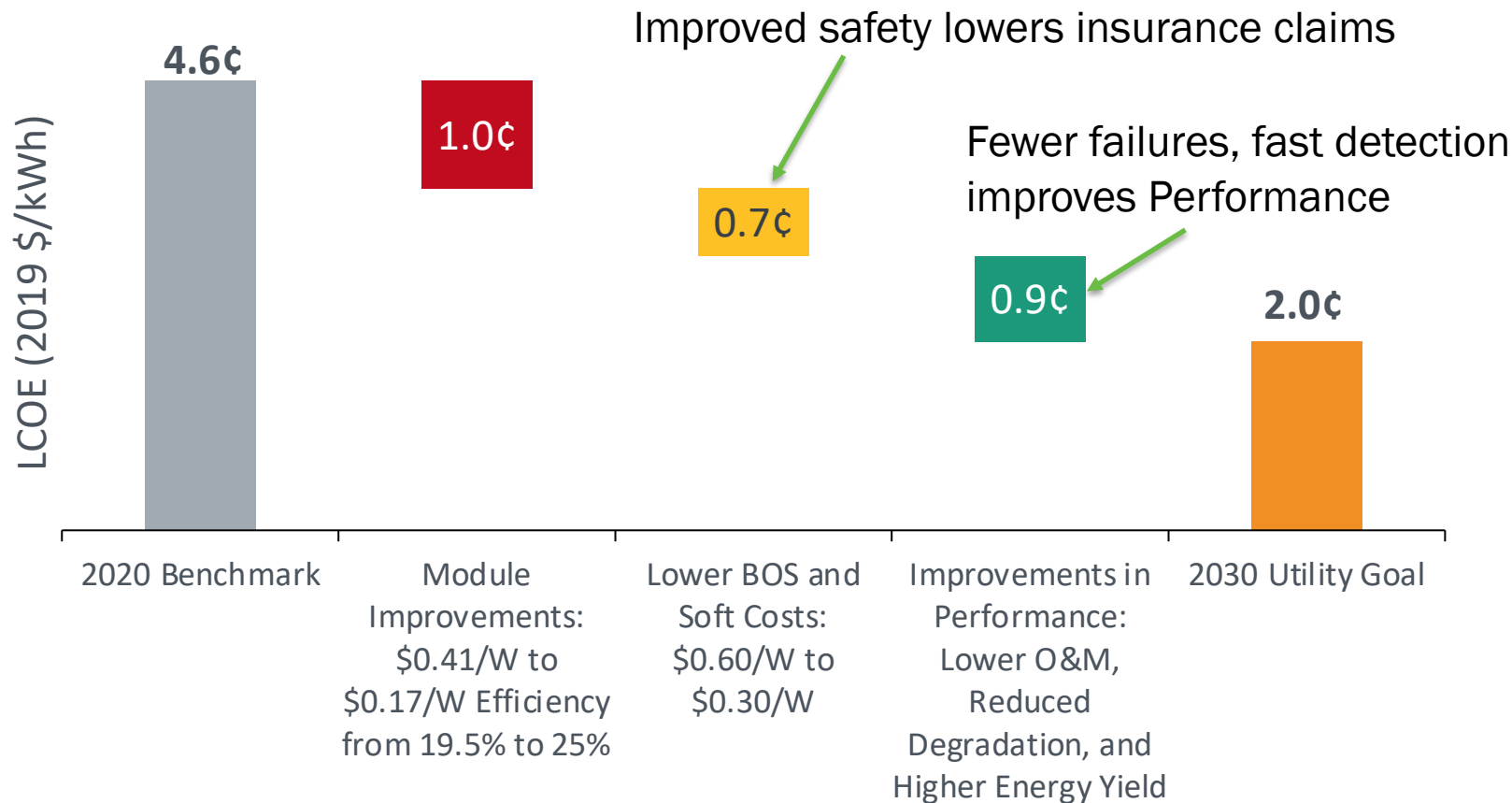


# Status of SunShot Goals



\*Levelized cost of energy (LCOE) PV progress and targets are calculated based on average U.S. climate and without the Investment Tax Credit or state/local incentives.

# A Pathway to \$0.02 per kWh for Utility-Scale PV



# FY 22-27 SETO Funding for Cabling/Connector R&D

SETO has directly and indirectly funded \$13.5M for R&D related to PV cabling and connector safety, performance and durability

- \$6M direct funding (failure identification, site visits, stress testing, etc.)
- \$7.5M indirect funding (AI/ML, metrology and materials test development)
- Average of \$2.25M/year over six years

Opportunities for commercial and academic entities to receive funding in this area will be posted on the EERE website

- Larger projects typically fund around \$1.5M over 3 years
- Small projects under the SIPS program typically fund around \$250k (1 year)

# Learn About Upcoming Funding Opportunities

## EERE Funding Opportunity Updates

Promotes the Office of Energy Efficiency and Renewable Energy's funding programs.



**SIGN UP NOW:**

[energy.gov/eere/funding/eere-funding-opportunities](https://energy.gov/eere/funding/eere-funding-opportunities)

## SETO Newsletter

Highlights the key activities, events, funding opportunities, and publications that the solar program has funded.



**SIGN UP NOW:**

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



# Thank you for your interest and participation!

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