



IN PARTNERSHIP WITH



MINNESOTA STATE  
Engineering Center of Excellence

## SOLAR SUITCASE PROGRAM

AN **ENGINEERING** FOCUSED HANDS-ON STEM PROGRAM FOR YOUR STUDENTS

Two day teacher workshop at  
**Minnesota State University, Mankato MN**

**Monday August 11th and  
Tuesday August 12th 2025**

An innovative opportunity for **solar STEM** education  
Hands-on learning with **real world impact**  
Ideal for students in **grades 7-10**

For STEM teachers who want to learn more about  
integrating the **Engineering Design Process** into  
their curriculum



### GAIN SOLAR LITERACY...

... by following our comprehensive curriculum covering concepts such as voltage, current, power and energy flow

### PRACTICE STEM SKILLS...

... with set of Solar Suitcase Learning Kit equipment with everything you need for hands-on STEM activities

### BE A SOLAR SOLUTIONARY™ ...

... by exploring solar in your own community and sponsoring a Solar Suitcase installation in an energy-scarce school in East Africa



## PROGRAM OPPORTUNITY FOR MIDDLE SCHOOLS AND HIGH SCHOOLS IN MINNESOTA

### SOLAR SUITCASE PROGRAM 2025-2026

#### WE SHARE SOLAR®

Equipping teachers to **educate and inspire** the next generation of **Solar Solutionaries™**.

Our program offers a Project-based Learning experience with engaging hands-on lessons and optional extension activities, cultivating student interest in clean energy and real-world challenges, inspiring them to become effective global change-makers.

#### THE OPPORTUNITY

We Share Solar is inviting middle school and high school science educators in Minnesota to join the Solar Suitcase program. Learning will focus on the engineering design process and solar electricity. Each school will receive a set of 10 Solar Suitcase Learning Kits.

By participating in the We Share Solar program, you contribute to the delivery of a Solar Suitcase to a community in East Africa providing reliable light and power. There are opportunities within the equipment to learn more about global energy access.

A two day in person training will be held at  
**Minnesota State University, Mankato MN**  
**Monday August 11th and Tuesday August 12th 2025**  
**8am - 5pm each day**

An **equipment fee of \$400 per school** covers all resources and spots for up to two teachers on the training.

Individual teachers will receive a **\$200 stipend** on completion of the in-class program and a teacher feedback survey.

Sixteen **Continuing Education Units (CEUs)** are available from the Minnesota State Engineering Center of Excellence. Contact Jason Bruns [jason.bruns@mnsu.edu](mailto:jason.bruns@mnsu.edu)

#### INTERESTED?

Submit an **interest form**. We will be accepting teachers on a rolling basis. If accessing school or district funds to cover the equipment fee is not possible, please complete **this form** to be considered for financial aid after completing the interest form

#### MORE INFORMATION

Watch this video about the **We Share Solar Program**

Find out about the impact of deployed Solar Suitcases in **Samburu, Kenya**

Contact Anna Gomberg (Senior Program Manager for Solar Education) with any questions: [anna@wecaresolar.org](mailto:anna@wecaresolar.org)

*Incorporate the core We Share Solar lesson sequence (outlined below) into the **Engineering Design Process** to deliver a **solar STEM unit** that teaches **Engineering skills and principles***

<b>Lesson 1</b> <i>minimum 45 minutes</i>	<b>Solar Exploration</b> Students learn how to identify the variables that affect the amount of electricity you get from a solar panel using mini solar cells and motors
<b>Lesson 2</b> <i>minimum 2 hours</i>	<b>Stand-Alone Solar Electric Systems</b> Students learn how a stand-alone solar electric system works and what the different components do by building the SLK
<b>Lesson 3</b> <i>minimum 45 minutes</i>	<b>Voltage and Current</b> Students learn how to measure voltage and current on the SLK using a digital multimeter
<b>Lesson 4</b> <i>minimum 45 minutes</i>	<b>Power and Energy</b> Students learn how to calculate amounts of power and energy
<b>Lesson 5</b> <i>minimum 45 minutes</i>	<b>Design a Solar-Electric System</b> Students learn the basics of solar-electric system design and begin the process of designing their own

To Submit an Interest Form [Click Here](#)