

# SOLAR ENERGY DEMONSTRATION



## KEYWORDS

solar energy

renewable energy

solar technician

clean energy

sustainability

**Solar energy workers, called solar technicians and engineers, build and install panels that capture sunlight and turn it into electricity. Solar energy is a type of renewable energy because it comes from the Sun, which shines every day and doesn't run out. These workers help design, maintain, and improve solar power systems for homes, schools, and businesses. Solar panels, like the one in our demonstration, turn sunlight into electricity to power lights, fans, computers, and more. Solar energy helps reduce pollution and greenhouse gases because it replaces the need for burning coal, gas, or oil. By using solar power, we help fight climate change and make cleaner air for everyone. Many countries and cities are training more people for these green jobs to help us move toward a cleaner energy future.**

## AGE RANGE

6-8 years

## LARGE GROUP DEMONSTRATION

(20+ participants)

## DURATION

20 minutes

## CONNECTION TO SDG



## MATERIALS

- Solar panel
- Small motor with fan
- Small mirror (optional)
- Multimeter
- Large display board

# SOLAR ENERGY DEMONSTRATION



## PROCEDURE

1. Show solar panel to audience and explain its purpose
2. Connect solar panel to small motor with fan blade
3. Position solar panel in direct sunlight (or use mirror to reflect sunlight onto panel)
4. Watch fan spin as solar panel generates electricity
5. Create shade over panel with hand or book - fan stops spinning
6. Ask children to predict what happens with different light levels or angles

## INSTRUCTIONAL GUIDELINES FOR FACILITATOR

- Conduct activity outdoors or near a sunny window for best results
- Use large, visible components for demonstration
- Encourage audience participation and predictions
- If sunlight is weak, use mirror to concentrate light on solar panel
- Ask simple questions: "What makes the fan spin?"
- Connect to solar energy workers and green jobs



## LEARNING OUTCOMES

- Understand basic solar energy principles
- Connect renewable energy to green jobs
- Practice observation and prediction skills

## EXTENSION SUGGESTIONS

- Visit a local solar installation
- Look for solar panels around your community
- Draw pictures of solar-powered devices

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