

Solar Judging Rubric

The judging sheet may be amended and/or modified up to the week before the competition

Modified from KidWind [solar structure rules](#)

Projects are due at noon on April 21st. Submit [here](#)

Criteria	Max score requirements	How judged
Circuit design & functionality (20%)	Structure works as intended, Clear and accurate circuit design	Circuit drawing and video of structure
Inspiration and Creativity (20%)	Unique, solves a problem, interesting to you	Presentation and description to judges
Aesthetics & Materials (20%)	Project shows detail and care; uses recycled/found materials	Photos and explanations in submission
Documentation & Presentation (20%)	Clearly presents design process, data, and final project	Presentation and description to judges
Solar Knowledge (20%)	The more answers correct, the higher the score	Google form quiz with access from April 20-21 (24-36 hour answer period)
Total	100	

Knowledge topics:

- Causes of climate change
- Solutions for climate change
- Energy sources for electricity production in Alaska (percent that comes from natural gas, wind, etc)
- Energy use in Alaska (heat, transportation, electricity, etc)
- Pros and cons of solar generation
- Types of solar use in Alaska (PV, passive, thermal)

Resources:

- [Solar presentation template](#) (feel free to make your own, this is just to give you an idea of what judges would like you to cover)
- [Renewable Energy Atlas of Alaska](#)
- [US Energy Information Association Alaska profile](#)
- [Solar Design Manual for Alaska](#)
- [PhET Electricity Simulations](#)
 - [Simple DC Circuit](#)
- [Connecting solar panels](#)
- [Department of Energy Solar PV Basics](#)

- [How does solar work?](#)
- [Drawdown: carbon sources and climate solutions](#)
- [Climate change evidence](#)