



Solar Power & Renewable Energy Resource Guide

A handy tool for launching or enhancing your school's solar power or renewable energy project!

This guide provides valuable resources to help you design, implement, and maintain solar installations and renewable energy initiatives at your school or in your community, even if you're just starting or aiming to expand your project.

Know of a great resource we're missing?

Share it with the N:OW for Net-Zero team: nowfornetzero@fesplanet.org

Key Concepts for Solar Energy & Renewables

Solar Energy

Photovoltaic Effect

Sunlight to Electricity Conversion

Solar Cells

Inverter Functionality

Solar Panel Efficiency & Installation

Learning Resources

[GreenBMG's Teaching Resources for Grades K-12](#)

A robust collection of lesson plans, training, and solar curricula ideas for educators.

[Solar Energy Professional Development and Training for Teachers](#)

Features training for teachers to acquire hands-on, real-world proficiency in the solar industry - a background they can use to introduce their students to renewable energy. Please note these resources are U.S.-based.

Details dozens of fun ideas that teach kids about solar power, including sample projects to do at home as well as educational resources for parents and teachers.

Learners of all ages can learn about renewable energy, its different sources, and explore the co-benefits and trade-offs of using comparable renewable energy systems.

A lovely blog post by Namaste Solar including plenty of kid-friendly educational resources and activities for different grade levels.

Designed to lay the groundwork for a series of activities that encourage learners to explore solar energy, energy conservation, and the enmeshed topics of climate change and environmental stewardship.

Specializing in the intersection of buildings and the environment, they are registered energy advisors providing building energy consultations using a holistic approach to create buildings that perform better, work smarter, and last longer.

A one-stop hub of information, resources, and data to help municipalities plan and implement climate change mitigation and adaptation solutions. Please note that they are Alberta-based, but their resources are still helpful for everyone!

A collection of resources, including a breakdown of solar energy terms and an energy calculator to see how much energy is generated and reduced at your school.

Is your school shining bright with solar energy? Tell us about your experience and inspire others to follow the renewable path!

Need Funding?

If you haven't already, be sure to check out our N:OW for Net-Zero Grant [here](#) and our additional funding opportunities [here](#)!

Resource Name	Description	Link
Empowering Youth for Climate Action Award	Recognizes student-led action projects contributing to climate action in Canada.	Learn more
EcoSchools Funding Opportunities	Offers funding to youth-led environmental and/or school-based projects.	Learn more
The Green Municipal Fund	Supports sustainability projects that help municipalities adopt climate solutions faster.	Learn more
Samsung Solve for Tomorrow Contest	A global initiative inspiring elementary and high school students to apply STEM learning to real-world challenges impacting their communities.	Learn more
Canada Post Community Foundations Grant	Provides project-based grants to Canadian schools, charities, and community organizations that aim to educate and make a positive difference in the lives of children and youth.	Learn more

Solar power illuminates the path to sustainability, empowering schools to lead the charge in clean energy adoption.



Tips for Starting and Maintaining a Solar Power Project

Budget Constraints

Look for grants, local incentives, or partnerships with nearby schools to reduce costs.

Technical Requirements

Consult experts or guides for help with designing and installing the system.

Space Limitations

If rooftop space is limited, consider ground-mounted panels or other available areas.

Maintenance

Regular cleaning and performance checks will ensure long-term system efficiency. Involve students in the process!

Want to learn about some of our solution stories? Visit
<https://nowfornetzero.org/solution-stories/>