

# EDUCATOR RESOURCE

#ReEnergyEngineer



**Educators!** We hope you enjoy this activity with your class through your home learning program! We would love to see the results of your students' activities.

Send us a summary of what you did including your school name and location, grade, subject, Twitter handle, number of students in your class as well as any pictures then we would be happy to provide you with:

- a downloadable certificate to share with your students
- highlight your school's achievement in our newsletter and on our social media

Send submissions to [programs@greenlearning.ca](mailto:programs@greenlearning.ca)  
We will be accepting submissions until the end of 2021 school year!

## Curriculum Connections

**Grade 5-12** Science

**Grade 5-12** Math

**Grade 5-12** Social Studies

## Step 1: Introducing Concepts

Want to learn a little more about how awesome renewable energy is? Check out this great video and/or review this renewable energy backgrounder!

Renewable Energy 101 | National Geographic  
<https://www.youtube.com/watch?v=1kUEOBZtTRc>

Re-Energy - Renewable Energy Basics Backgrounder  
<http://www.re-energy.ca/docs/renewable-energy-basics-bg.pdf>

## Step 2: Understanding Sustainable Energy Development

Explain how renewable energy is a big part of sustainability and what it means. Briefly summarize the infamous **"Brundtland Report"** of 1987 and how it established a new definition of sustainability that most people have adopted ever since. It states that:

*"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."*

<https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>

In other words, in order to ensure that our children's children have access to all of the same resources and high quality of life that we enjoy today, we need to make sure that we are not consuming more than what can be naturally replenished by the Earth.



Want to learn more about sustainability? Check out this short video below:

What is sustainable development?

<https://www.youtube.com/watch?v=7V8oFI4GYMY>

### Step 3: Review the Activity Sheet

Introduce the Build a Renewable Energy Model Activity Sheet. Students are challenged to design their own working model of a renewable energy project. The Activity can be found as part of the Re-Energy Challenge download. We encourage students to be as creative as possible in designing their projects.

### Step 4: The Big Reveal

Before they start their renewable energy project, encourage your students to document your investigations with a slideshow, Prezi, YouTube video or any other medium that they'd like to use!

Ask them to review the activity worksheet and research the potential projects in the links provided in the student resource but remind students that they shouldn't limit themselves to these suggestions, we encourage them to be creative!

### Step 5: Sharing

Ask students to share their photos, presentations, videos, etc. about their renewable energy project by using #ReEnergyEngineer and don't forget to tag @GreenLearning!

### Step 6: Take Action!

Take action and spread awareness about the renewable energy technology in your community or school.

Here are some ideas of inspiration:

- Write to your mayor about how renewable energy could benefit your community!
- Recommend an electric vehicle charging station at your school or community and explain why it is important.
- Make a case for how your community or school could use food waste to create biomass energy. The possibilities are endless!