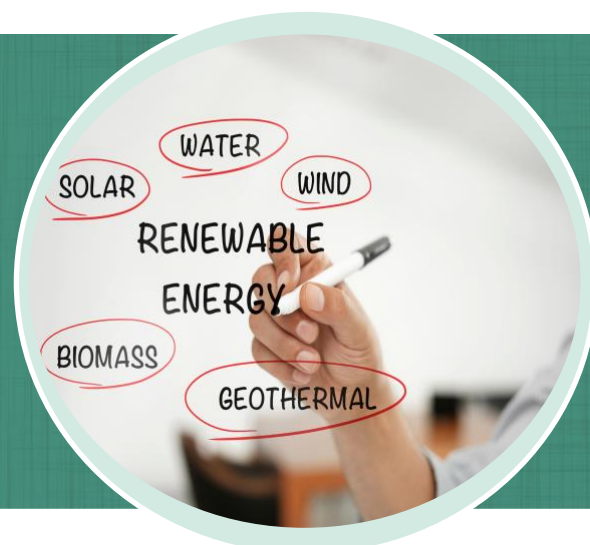


# What is Renewable Energy?

**Re-Energy  
Activity**  
Grade Level 7-12



## Main Objectives

The purpose of this activity is to help learners understand the difference between renewable and non-renewable energy, and explore the benefits of renewable energy.

## Learning Outcomes

By the end of this activity, learners will:

- Describe the difference between renewable and non-renewable energy
- List the co-benefits and trade-offs of renewable energy vs. non-renewable energy

## Curriculum Connections

### Alberta

Science 7: Heat and Temperature

Science 9: Electrical Principles and Technologies

Science 30: Energy and the Environment (D1.4, D1.5k, D1.3s, D2.3k, D2.4k, D2.1sts, D2.3s, D2.4s)

### Ontario

Science & Technology 7: Heat in the Environment (1.2)

Science 9: The Characteristics of Electricity (Academic) (E1.2)

- Electrical Applications (Applied) (E1.1)

Environmental Science 11: Scientific Solutions to Contemporary Environmental Changes (U/C Preparation) (B1.2)

- Conservation of Energy (U/C Preparation) (F1.1)
- Energy Conservation (Workplace Preparation) (D1.2)

Chemistry 12: Energy Changes and Rates of Reaction (University Preparation) (D1.1)

## Length of Activity

1-1.5 hours

## Materials List

Internet- enabled device

What is Renewable Energy Backgrounder

## Activity

### Step 1: Backgrounder Reading

Begin the class by distributing the “What is Renewable Energy?” backgrounder to learners and have them read it.

### Step 2: Watch Video in Class

Continue on to watching this video on future of clean energy: [The Future of Clean Energy](#)

### Step 3: Discussion Questions

After reading the backgrounder and watching the video, have learners answer the following questions in groups:

1. Give some examples of non-renewable energy sources. Describe why they are considered non-renewable.
2. Give examples of renewable energy. Explain why they are considered renewable.
3. What are some of the advantages of renewable energy over non-renewable energy?
4. Can you describe any examples of how renewable energy is being used in your region?

## Extension Activities

Watch this documentary in class on the future of clean energy and sustainable living! Encourage learners to share their thoughts after watching the documentary.

- a. [How Green Energy Will Change Our Future \(45 Minutes\)](#)