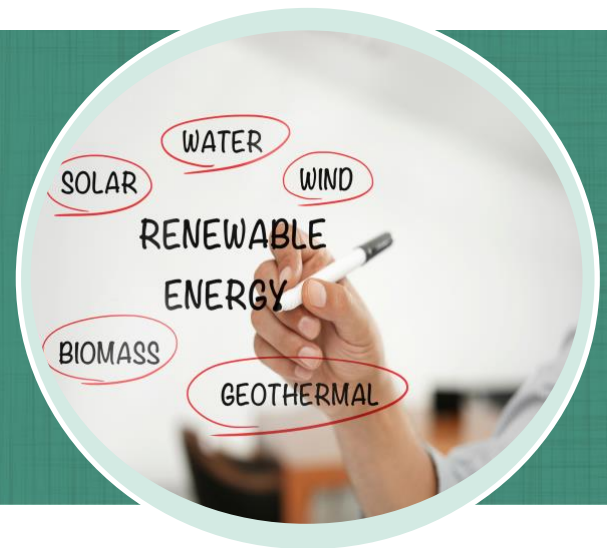


What is Renewable Energy?

**Re-Energy
Activity**
Grade Level 8-12



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 (D1.1)

Length of Activity

1 hour

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 \(45 Minutes\)](#)