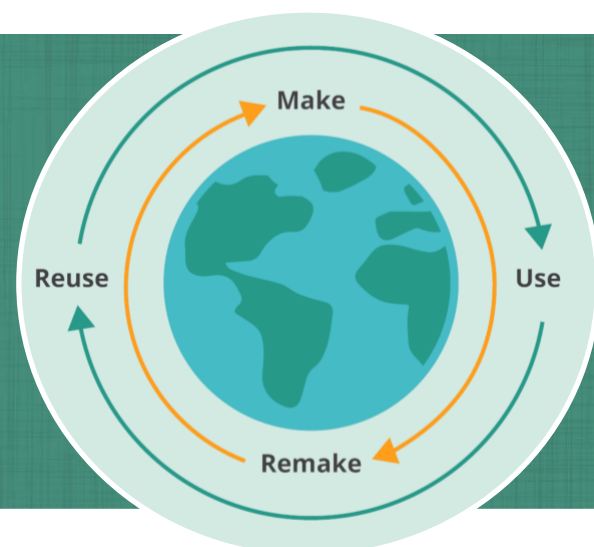


What is a Circular Economy?

#Eco360
Activity
Grade Level: 9-12



Main Objectives

The objective of this activity is to introduce the concept of a circular economy, its inception, application, and future. Reflect on the need for a circular economy, the problem of waste in the world and the flaws of the current linear economic model.

Learning Outcomes

By the end of this activity, learners will:

- Understand circular economy
- Contrast circular economy with our current linear economy
- Understand the problem of waste in our current linear economy and its repercussions
- Understand how a circular economy provides a viable alternative to the problem of waste

Curriculum Connections

Alberta

Chemistry 30 Unit C: Chemical Changes of Organic Compounds

- 30-C2.3sts explain how science and technology have both intended and unintended consequences for humans and the environment

Social 10-1

- 3.2 - recognize and appreciate impacts of globalization on the interdependent relationships among people, the economy and the environment

Grade 9 Unit C: Environmental Chemistry

- 3 - analyze and evaluate mechanisms affecting the distribution of potentially harmful substances within an environment

Ontario

Grade 9 Chem (C1.2)

Grade 9 Bio (B1.2)

Grade 9 Geography

- B1. The Physical Environment and Human Activities: analyse various interactions between physical processes, phenomena, and events and human activities in Canada.
- C1. The Sustainability of Resources: analyse impacts of resource policy, resource management, and consumer choices on resource sustainability in Canada (FOCUS ON: Interrelationships; Geographic Perspective)

Length of Activity

30 - 45 minutes

Materials List

Internet-enabled device

Topic backgrounder

Eco 360 notebook (we recommend asking learners to maintain a notebook for this program to write down reflections as they go through the program)

Circular vs. Linear Economy Worksheet

Step 1: Begin by watching these videos:

- Moving from linear to circular economy: <https://www.youtube.com/watch?v=VqgqiCL-JwU> (6 minutes)
- Explaining the Circular Economy and How Society Can Re-Think Progress: <https://www.youtube.com/watch?v=zCRKvDyyHml> (4 minutes)

Step 2: Compare Circular and Linear Economy

- a. Distribute the Circular vs. Linear Economy Worksheet to learners. As a class brainstorm answers to the questions below. Have learners reflect on the questions individually, recording them in their worksheets. Afterwards, learners can come together as a class and share their reflections with everyone.
 - i. How is a circular economic model different from our current economic model? Provide an example to demonstrate.
 - ii. What are the problems with a linear economic model?

Step 3: Conclusion

Now that the class has explored the problems faced by a linear economic model, invite the learners to think of solutions. Have learners reflect on the questions individually, recording them in their personal notebooks. Afterwards, learners can come together as a class and share their reflections with everyone.

- a. What actions can we take to ensure we produce less waste?
- b. How can the circular economy help solve some of the complex problems of waste that we are faced with today?