

# Introduction to Biomass

Re-Energy

Activity

Grade Level 7-12



## Main Objective

In this activity, learners will learn about biomass energy and take a biogas plant virtual tour.

## Learning Outcomes

By the end of this activity, learners will:

- Understand what bioenergy is, its sources and what the different kinds are used for
- Understand the different technologies and equipment used at a biogas plant

**Length of Activity: 30-45 minutes**

**Step 1:** Introduction to biomass

**Step 2:** Biogas plant tour

### Materials List

- Internet-enabled device
- Biomass Energy Backgrounder

## Activity

### Step 1: Read the Backgrounder

Distribute the Biomass Energy Backgrounder and have the learners read the information. As a class brainstorm answers to the questions in the backgrounder.

#### Backgrounder Discussion Questions

1. Why is wood considered a form of renewable energy?
2. What are two kinds of bioenergy that can be used as fuels for cars and trucks?
3. Can you think of two environmental problems created by burning wood for heating and cooking?
4. What is the main ingredient in biogas?
5. Methane from landfills is often allowed to escape directly to the atmosphere. Can you think of two reasons why this is bad?

### Step 2: Virtually Tour a Biogas Plant

Take a virtual tour using this link:

 [Biogas Plan Virtual Tour](#) (9:53 minutes)

#### Extension Activity

View a 3D model of a biogas generator plant created by a learner in Tinkercad:

 [3D Biogas Generator Model](#)

Take it one step further by building your very own!