

SMART AGRICULTURE



MAURITIUS INSTITUTE OF EDUCATION under the aegis of



MINISTRY OF EDUCATION AND HUMAN RESOURCE



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GREEN FARMS: A MODERN NECESSITY

Lesson 18:
Green Farms: A Modern Necessity



Duration:
35 minutes



Grade:
7





Green Farms: A Modern Necessity

Lesson Aim

In this lesson, students will understand why renewable energy is important for farms and how it helps farmers, the environment, and sustain future agriculture.

Lesson Overview



In the previous lesson, we learned that renewable energy comes from the sun, wind, and water. Renewable energy is clean and is a natural way to make energy. In this lesson, students will learn the importance of renewable energy on the farm.

Using renewable energy helps farmers:

- Save money on electricity.
- Protect the environment.
- Grow food in a better way.

It also means farms do not have to use energy that can harm the Earth; like coal or oil.

Let's discover how this clean energy helps farms to be smarter, greener, and better for the future!

Learning Objectives

At the end of the lesson, learners will be able to:

1. Recall the three sources of renewable energy: sun, wind, and water.
2. Describe at least two ways these energy sources help farms.
3. Explain how renewable energy helps protect the Earth.



Green Farms: A Modern Necessity

Materials Required

- A4 or A3 sheets / poster boards
- Markers, coloring pencils
- Printed pictures (optional: wind turbines, solar panels, dams)
- Glue, scissors, old magazines (optional for collage)
- Projector or images for demonstration

Lesson Procedure

Part of Lesson	Time	What's Happening
Introduction	8 minutes	Review of the previous lesson. Brief discussion on the importance of electricity in farming. Reflection on the benefits of using clean energy compared to using fossil fuels such as oil and coal.
Collaborative Poster Activity	15 minutes	Learners create a poster by drawing or using pictures of solar panels, windmills, or water turbines.
Sharing and Awareness	6 minutes	Learners exchange ideas with their peers.
Assessment	6 minutes	Learners share their poster ideas with other groups, and the teacher checks how everyone is joining in and learning.



Step-by-step guide

1. Introduction

Engage learners with a quick discussion:

Reflective Questions:

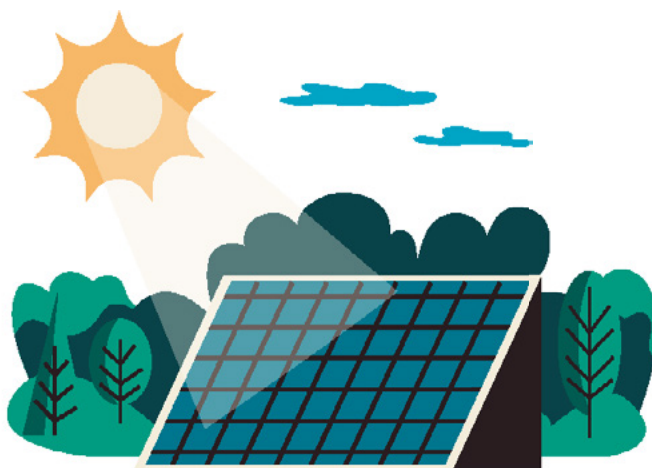
Ask: *"What do we use electricity for every day?"*

Show pictures as shown below of **solar panels, wind turbines, and dams.**

Write their answers on the board (e.g., no pollution, saves the Earth, renewable).

- Save money on electricity
- Protect the environment
- Grow food in a better way

Engage the students in a class discussion



SOLAR ENERGY

Sun provides solar energy.



WIND ENERGY

Wind produces wind energy.



Step-by-step guide



WATER?

Questions:

1. What about **Water** as a source of energy?

Water produces energy

Explain briefly:

- Solar energy comes from the sun.
- Wind energy comes from the moving air.
- Water (hydropower) comes from rivers or dams.

Ask:

“Why is it important to use these clean energy sources instead of oil or coal?”

Write their answers on the board (e.g., no pollution, saves the Earth, renewable).



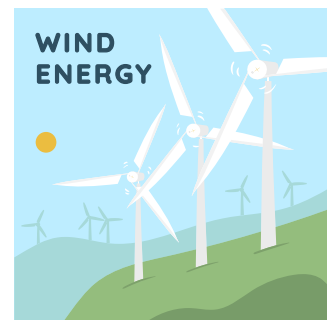
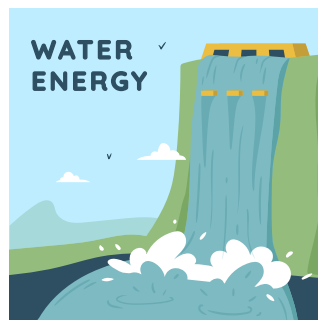
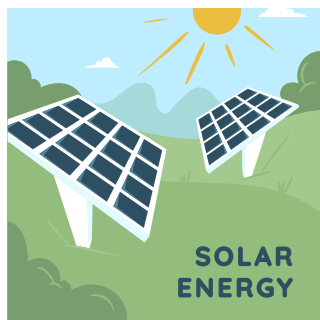
Step-by-step guide

2. Collaborative Poster Activity

Task: Each student or group will create a poster that promotes renewable energy.

Instructions to Learners

Choose one or all of three types: Sun, Wind, Water.



include:

- A creative **title or slogan** (e.g., “Let the Sun Power Your World!”)
- A **drawing or diagram** (solar panels, windmills, water turbines)
- A short **message or fact** about why renewable energy is good

Poster Tips (write on board or print for groups)

- Use **bright colours** and big letters.
- Make your message **clear and positive**.
- Think like an **energy ambassador**—you are teaching others!



Learning Activity

A template is provided below:

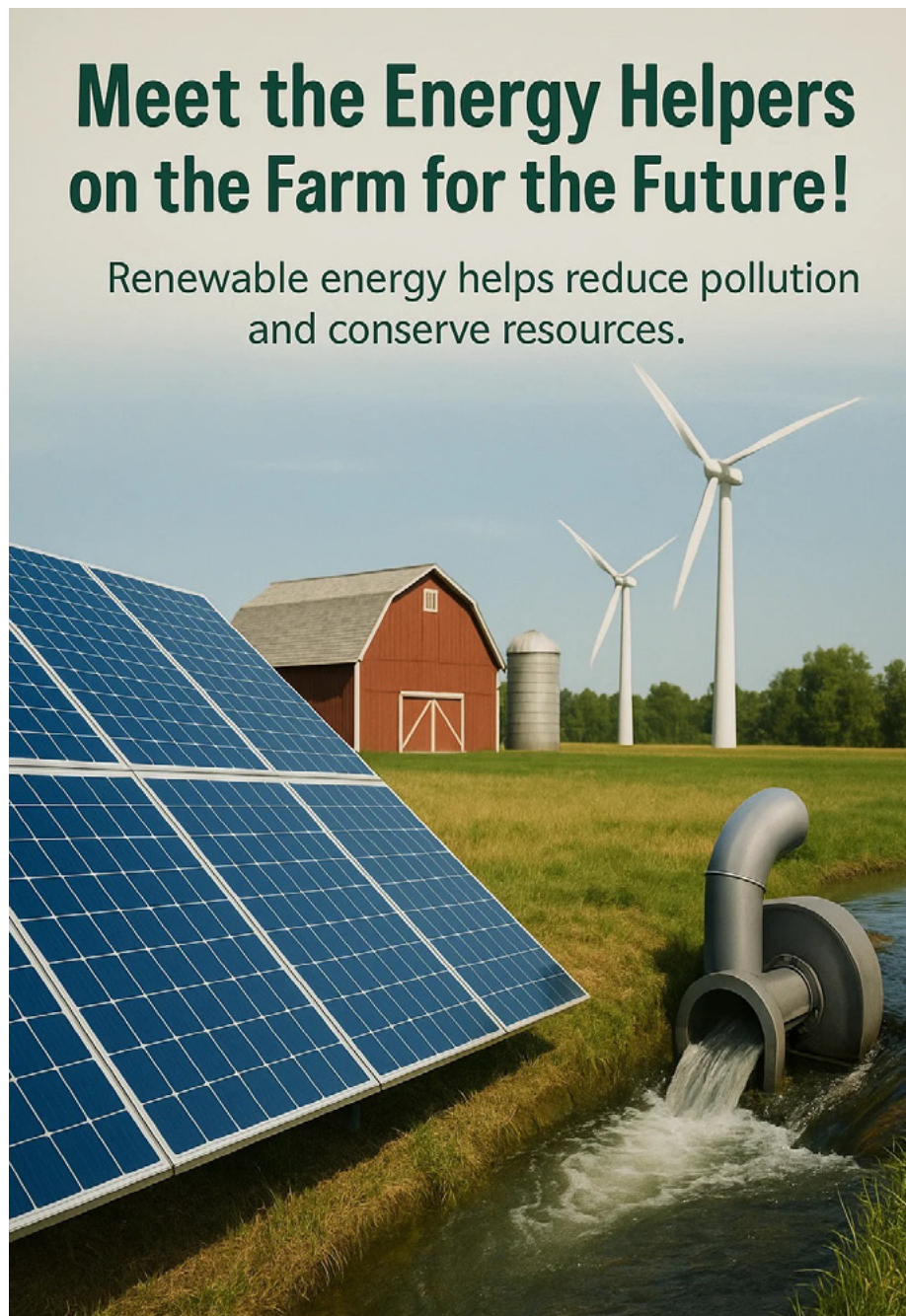


Figure 1: Meet the energy helpers.

Disclaimer: This image is created by Sora, Generative AI.



Learning Activity

3. Sharing and Awareness

Invite students to **present** their posters to the class.

Display the posters in a common area or hallway.

Ask reflective questions:

“What did you learn about solar/wind/water energy today?”

“How can we help others learn about clean energy?”

4. Assessment

Criteria	Achieved (Yes or No)	Remarks
Identifies at least one type of renewable energy source.		
Includes a clear message about clean energy.		
Shows creativity in design.		
Explains the importance of renewable energy in words or pictures.		

Teacher's Responsibilities

- #1** Prepare materials in advance.
- #2** Assign each group to a topic.
- #3** Give step-by-step instructions.
- #4** Close monitoring of each group.
- #5** Guide the students and praise their efforts.

Students' Responsibilities

- #1** I work in teams.
- #2** Sharing tasks.
- #3** Present creative posters.
- #4** Be able to say a sentence on their posters.



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