

## Project Title: *Build a Renewable Energy Town*

**Lesson:** Renewable and Nonrenewable Resources

**Florida Benchmark:** SC.5.E.7.4 – Distinguish between renewable and nonrenewable resources.

**NGSS Standard:** ESS3.A – Natural Resources: All materials and energy resources are obtained from Earth and have limits based on how they form and are used.

**Objective:** You will design and build a model town that uses mostly **renewable energy** (like solar or wind) to power homes, schools, and vehicles. You'll show how your town can help protect the planet and save energy!

### Materials (You May Use):

- A shoebox or cardboard base
- Construction paper, cardboard, popsicle sticks
- Bottle caps, straws, foil, cotton balls
- Glue, scissors, tape
- Markers, crayons
- Optional: small solar lights or toy cars
- Labels to mark where energy is used

### Safety Rules:

- Be careful when using scissors and glue.
- Keep your workspace clean and organized.
- Work as a team and be kind to others.
- Ask your teacher before using anything electrical or sharp.

### Steps to Follow:

1. **Think & Plan:** Talk with your group. What things in a town use energy? (Homes, lights, schools, cars, etc.)  
Decide where to place things like solar panels and windmills. Draw a map of your town on paper first.
2. **Build Your Town:** Use your materials to make buildings, roads, and power sources. Add labels to show where energy comes from—*renewable* or *nonrenewable*.
3. **Share Your Ideas:** Present your model to the class. Tell everyone:
  - What parts of your town use renewable energy
  - Why you chose those energy sources
  - What was hard or fun about your project
4. **Reflect and Write:** In your notebook, answer:
  - What did I learn about energy from this project?
  - How can we use more renewable energy in real life?

### **Clean-Up Time:**

- Throw away any scraps.
- Put away scissors, glue, and other tools.
- Help your group tidy your table.
- Make sure your model is ready for display or storage.