K-2

- 1. Sun Prints: Use sunlight and special paper to create sun prints.
- 2. Windmill Craft: Create a simple paper windmill to understand wind energy.
- 3. Solar Oven S'mores: Build a simple solar oven using a pizza box.
- **4.** Nature Walk: Identify natural energy sources like sunlight, wind, and water.
- 5. Leaf Rubbing Art: Use leaves to make rubbings, discussing energy in plants.
- 6. Windsock: Create a windsock to observe wind direction.
- 7. Story Time: Read books about the sun and wind energy.
- 8. Simple Water Wheel: Create a water wheel using plastic cups.
- 9. Plant Growth: Plant seeds to learn about solar energy for growth.
- **10. Energy Songs:** Sing songs about the sun, wind, and water.



3-5

- 1. Build a Solar Car: Construct a simple solar-powered car.
- 2. Wind Turbine Model: Create a model wind turbine using a small motor.
- **3. Energy Scavenger Hunt**: Find renewable energy sources around the neighborhood.
- 4. Solar Water Heater: Make a basic solar water heater with plastic bottles.
- 5. Renewable Energy Poster: Design posters highlighting different energy sources.
- 6. DIY Anemometer: Build an anemometer to measure wind speed.
- 7. Energy Comic Book: Create a comic book about renewable energy heroes.
- **8. Solar Panel Experiment:** Use small solar panels to power tiny devices.
- 9. Water Cycle Model: Build a model to demonstrate the water cycle and energy.
- **10. Energy Debate:** Discuss the pros and cons of various energy sources.

6-8

- 1. Design a Wind Farm: Plan a mini wind farm using paper and fans.
- 2. Solar Cooker Competition: Create solar cookers and test their effectiveness.
- 3. Hydroelectric Generator: Build a simple generator using magnets and coils. 🔌
- 4. Energy Audit: Conduct an energy audit of the school or home.
- 5. Biomass Experiment: Create a small compost bin to understand biomass.
- 6. Wind Power Math: Calculate energy output from a model wind turbine.
- 7. Renewable Energy Timeline: Create a timeline of energy technology advancements.
- 8. Build a Water Wheel: Construct a small water wheel to understand hydropower.
- 9. Energy Infographic: Design an infographic on energy consumption and conservation.
- 10. Solar Art Project: Use solar power to create art with light-sensitive materials.

55 Renewable Energy Ideas

9-12

- 1. Advanced Solar Car: Build and race solar-powered cars or boats.
- 2. Wind Turbine Efficiency: Investigate factors affecting turbine efficiency.
- **3. Renewable Energy Research**: Write a paper on a specific renewable energy technology.
- 4. Energy Policy Debate: Hold debates on energy policies and sustainability.
- 5. Design a Sustainable City: Plan a city using renewable energy sources.
- 6. Solar Panel Installation: Learn about and simulate solar panel installation.
- 7. Energy Simulation Software: Use software to simulate renewable energy scenarios.
- 8. Biogas Production: Create a small biogas generator using organic waste.
- 9. Wind Farm Economics: Analyze the cost and benefits of wind farms.
- **10. Renewable Energy Careers:** Research careers in the renewable energy sector.

Activities for All Grades

- 1. Energy Fair: Organize a fair showcasing renewable energy projects.
- 2. Virtual Field Trip: Take a virtual tour of a renewable energy facility.
- 3. Guest Speaker: Invite an expert in renewable energy to speak.
- 4. Energy Pledge: Create pledges to reduce energy consumption at home and school.
- **5. DIY Solar Light**: Build a solar-powered lantern or flashlight.
- **6. Greenhouse Effect Experiment**: Demonstrate the greenhouse effect with jars and thermometers.
- **7. Wind Power Experiment:** Test different blade designs for efficiency.
- 8. Community Project: Partner with local organizations to promote renewable energy.
- 9. Energy Quiz Bowl: Host a quiz competition on energy facts.
- **10. Renewable Energy Brochure**: Design informative brochures for public distribution.
- **11. DIY Solar Fountain**: Construct a solar-powered water fountain.
- 12. Documentary Film: Watch and discuss a documentary on renewable energy.
- **13. Energy Consumption Diary**: Track personal energy use and propose reductions.
- 14. Collaborative Mural: Paint a mural depicting a sustainable future.
- **15. Energy Jeopardy**: Create a game-style quiz to test renewable energy knowledge.