



4-H Energy Project



Step It Up!

Pass it on! Now that you know how, share it with others. Here are ideas to get you started

Citizenship/ Leadership

- Offer to conduct an energy audit for your friends, neighbors or relatives' homes
- Create an energy conservation team to help teach others about how to conserve energy
- Create a recycling campaign for old sources of energy, like batteries

Communication

- Create a video about energy conservation in the home
- Make a poster about different types of renewable energy
- Give a speech about the pros and cons of renewable versus non-renewable energy

Are you Into It?

Join the journey to learn about energy and how it impacts our everyday lives.

Energy is all around us, and as our world's population grows, so does the demand for safe and sustainable energy. Through the 4-H Energy Project, youth explore a variety of topics and skills related to the science of energy, including:

- Different forms of energy and where they come from/how they are made
- Use engineering and technology skills to conduct experiments to learn about energy
- Use tools to measure energy and learn, practice and promote energy conservation
- Build and test your renewable energy devices
- Develop an understanding of energy production and the social, political, and economic costs of different forms of energy

Here's what you can do all year!

Starting Out Basic

- Learn about forms of energy and how one form can transfer into another form
- Explore how much energy is needed to run common household appliances
- Understand the production, selection, use, conservation, and safe handling of energy
- Understand the differences between renewable and non-renewable energy

Learning More Intermediate

- Explore the different ways humans have generated and used energy over time
- Build and test a model of a renewable energy generator (such as a solar panel or wind turbine)
- Learn how to determine how much energy is being used by your classroom or extension office
- Design, build, and test objects that use renewable energy (such as a solar oven, solar car, or a wind powered boat)

Expanding Horizons Advanced

- Explore the benefits and costs of generating different forms of energy
- Investigate the impact of energy production on climate change
- Explore how sustainable practices can help reduce energy costs or requirements
- Conduct a school or community energy assessment and develop a service learning plan to save energy

Healthy Living

- Learn how your body uses and transforms energy
- Explore the caloric unit of energy and how it affects your body's health
- Assess how energy production and use impacts your community

Science

- Organize a field trip to an electrical generation plant or a bio-energy plant
- Conduct an experiment to determine how much energy different types of light bulbs require
- Build an object that converts one type of energy into another type



Expand Your Experiences in Energy!

- Organize a club field trip to your local power plant or energy cooperative
- Explore fields of study and careers related to energy. Schedule a visit with the University of Florida: ufl.edu
- Register for 4-H University to attend workshops, participate in community service events, hear keynotes, compete in contests, have fun, and meet other youth from across Florida who may share common interests: florida4h.org
- Contact your county IFAS Extension Office for workshops, activities, and events related to community service
- Participate in program planning, development, and implementation for new electric programs in your 4-H Club
- Facilitate the 4-H National Youth Science Day Experiment, Wired for Wind, to design, build, and test a wind turbine 4h.org/nysd

Project Sharing Ideas

- Build an electronic game board to help youth learn about the different forms and sources of energy
- Make a display showing where our energy comes from and how we use energy
- Give a presentation on practical tips for home energy conservation
- Build and demonstrate a solar oven or car
- Teach Power of Wind or SAVE to a younger group of youth

Resources

4-H Project Resources

Project materials to assist youth in learning may be available through your county 4-H office or you can order directly.

Available at National 4-H:

4-hmall.org

- Power of Wind
- Power of Wind Leader's Guide
- Grab and Go Wind Activities

4-h.org/4-h-national-youth-science-day/

- Wired for Wind, 2011 4-H National Youth Science Day Experiment
- Biofuel Blast, 2009 4-H National Youth Science Day

- SAVE: Steps to Achieving Viable Energy
edis.ifas.ufl.edu/topic_4h_save.

Connections and Events

Attending events and taking advantage of opportunities that will expand your project learning will help you become the best you can be. Contact your county 4-H office.

Take part in:

- Local workshops
- 4-H County Events Day

Experience

- 4-H Summer Day and Residential Camps
- 4-H University

Attend other statewide events.

Check them out at florida4-h.org

Record Keeping

Learning to take good records of what you do and what you spend for your project is a 4-H life skill.

The following record keeping forms can help you keep a record of your activities.

Project Report Forms can be found at florida4h.org

- Junior (grades 4-6)
- Intermediate (grades 7-8)
- Senior (grades 9-12)
- Financial Summary
- Member Portfolio (ages 8-13)

Awards and Recognition

Florida's Recognition Program involves feedback through:

Participation
Setting Goals
Meeting Standards
Peer Competition
Cooperation

Certificates, pins, ribbons, trophies, trips and/or scholarships are awarded based on quality of performance at the county, district, state and national levels.

To learn more about current recognition opportunities visit the Florida 4-H website at florida4h.org or contact your county 4-H agent.

Learn more at florida4h.org
or contact your local UF/IFAS Extension County Office

4-H You
GROWING TOGETHER