

KID POWER: EARTH DAY 2023

**INSPIRING
THE NEXT
GENERATION
OF
CLIMATE
CHANGE
SUPERHEROES**

NEW ACTIVITIES



Welcome to another Earth Day Celebration!

While trees remain Climate Change Superheroes, I want to focus this year on renewable energy.

Why?

Due to the global impact of climate change, trees alone will not be enough to fix our climate problems. *We humans must change the way we power our lives.* That's where renewable energy comes in.

Renewable energy, by definition, is energy derived from natural sources that replenish at a faster rate than they are consumed. Most of these renewable energies also happen to be clean, which means they don't release any greenhouse gasses like CO2 and are better for our environment and our planet.

The United Nations supports renewable energy sources as key to fighting climate change:

“Renewable energy sources – which are available in abundance all around us, provided by the sun, wind, water, waste, and heat from the Earth – are replenished by nature and emit little to no greenhouse gases or pollutants into the air.”

Join me in learning about, and discussing, the variety of renewable energy sources with these Earth Day 2023 activities and by visiting the Renewable Energy page on my website, trees4humans.com.

Know that everyone can help fight climate change. Just by learning and sharing what you know about climate change can help raise awareness with others.

Share what you do and what you learn for Earth Day 2023 with me via my email and I will send you a personalized certificate to download. I also will add your first name/last initial and age to our Heroes Forest on the website.

Jackson

PROJECT 1:

Design your own town or community using renewable energy sources. Using renewable energy resources can help save consumers money on electric bills, while reducing stress on the electric grid and demand for energy from fossil fuels which pollute the air by releasing CO₂ into the atmosphere.

Here are some things to consider that apply to the town or community you make.

1. This is your project, so download and print out one of our sample maps to use or look at them to get ideas about designing your own hand drawn map. Decide which type of buildings or places you want to include. Your town or community can be as large or small as you like. Be sure to choose a name for your town or community.
2. Try to use a few different kinds of renewable energy sources, if you can. You get to decide what works for your town/community. Remember: One of the purposes of this project is to learn more about renewable energy sources and how they can be used in our daily lives.
3. Go to my Renewable Energy page on trees4humans.com to get started learning about the basics of renewable energy sources.
4. Be sure to think about the limitations of certain renewable energy sources, e.g. solar energy and wind energy which each work best in an area that gets lots of sun or wind.
5. Discover how you can use renewable energy sources combined with the energy from the electric grid. There's a lot of information about adapting the electric grid to the variety of renewable energy that can be added into our electricity mix. Think about connecting your buildings to the grid, so that when the renewable energy source doesn't provide enough energy, your building can connect to the grid for electricity. Can you 'buy' more electricity from a company that's not in your local area?
6. Think about including some recreational areas in your town or community. What kind of things would be good to have for families with children? A community swimming pool, lake, park, soccer or ball fields, tennis courts, pickle courts?
7. Consider using open spaces or a building roof, parking lot, library or school with empty land where you can create some renewable energy or even produce renewable energy at the site to share with, or sell to, the town or community. This adds a site that creates a renewable energy source which will help lessen reliance on the electric grid and reduce the cost of electricity for your town or community.

PROJECT 2:

Take a video tour of your own home or a local building to learn how you can help increase the use of renewable energy or support renewable energy sources and rely less on the electric grid for electricity.

Things to consider:

1. Review the various renewable energy sources on my website to learn more about renewable energy and to learn why and how it's important to reduce our reliance on electricity from the grid.
2. Then, make a video touring your home or a local building, such as your school, church, shopping center, public library, athletic field or grocery store while looking for ways you can start to utilize renewable energy sources.

Make notes to go along with your video of changes you can make so you might even talk to your family about what could be done that would support renewable energy sources and/or lessen your family's reliance on the electric grid.

3. Here's another idea to consider, when making your video:
Would your home or any of the buildings in your town or community make a good place to generate a new source of renewable energy, such as having solar panels installed or a wind turbine which would allow you to sell that energy?
4. Every simple change you can make to lessen reliance on the electric grid can help fight climate change, even something as simple as changing to more energy efficient light bulbs and recycling some of your household's trash. Keep in mind that some of the changes you would like to make may not be practical for your family or household.

Don't be discouraged, if some changes don't fit your family's budget or a too large a project to have done. Raising awareness about renewable energy sources is a valuable tool in the fight against the negative impact of climate change. So, you still are playing an important role to help protect our environment, nature and every living thing on this planet.

5. Sharing this information with your family or other children and adults (including your local town leaders like City or County Council members or State elected representatives) can help educate others as to why renewable energy sources are a critical tool to help fight the negative impact of climate change on our planet, Earth. There are many ways that you can be a Climate Change Superhero!

PROJECT 3:

Learn about recycling and how it can help fight the effects of climate change AND then help educate others.

Many people are aware of problems related to climate change. Many people think they know about recycling, yet they don't understand how the two are connected. And many still don't understand how recycling really can help offset the negative impact of climate change. Here's where you can play an important role and become a Climate Change Superhero!

Things to consider:

1. Start by going to my Reimagining Recycling page on my website Read how recycling trash can help reduce the CO₂ emissions and how re-using recycled items to produce something new can save energy rather than by using raw materials to produce something new. For example, recycling aluminum cans can save up to 95% of the energy that would be required to make aluminum cans from raw materials.

The less energy used to produce an item means less greenhouse gases (dangerous pollutants) are emitted into our air.

2. Recycling items saves them from being treated as waste in a landfill. When items decompose as waste in a landfill, they produce methane which is much stronger and much more harmful than CO₂ released into the atmosphere.
3. Share what you've learned with children and adults so more people better understand what can and cannot be recycled and why it's important to help fight climate change.
4. Use a sorting game by setting up different 'trash' boxes – paper, glass, plastic and 'things that cannot be recycled'.

Use index cards or cut up pieces of paper and give everyone several cards with items written on them. Explain that people should look for the triangle mark on plastic that can be recycled. Research things to include, such as

- Junk mail – cardboard – paper plates – paper towels
- Plastic water bottle or plastic bottles of food like ketchup
- Glass jar of baby food, pickles, applesauce or glass cups or vases
- Soda can – can of corn – can of tomatoes
- Styrofoam cup – Styrofoam or plastic packing materials

How many of the 'items' you wrote on the card/paper' got into the right pile of trash? Take pictures of the different piles.

5. Make up the 'game' as a display at your own school, public library or shopping center where you put the correct items in each labeled box as examples of what can and cannot be recycled. This is a wonderful way to help educate more children and adults about reimagining recycling.

Suggested Resources for all 2023 Renewable Energy Projects

1. Go to my website page on renewable energy to discover valuable information that will help you plan your project.
<https://www.trees4humans.com/renewable-energy>
2. United Nations and Climate Change:
Solar superpowers, wind warriors and hydro heroes: How communities are embracing renewable energy
<https://www.un.org/en/climatechange/how-communities-are-embracing-renewable-energy>
3. Check out my Powering the Future NOW with some interesting info about the latest efforts transitioning to us more renewable energy sources by countries around the world.
4. Earth.org offers info about renewable energy specially written for kids.
<https://kids.earth.org/climate-change/renewable-energy-2/>
5. The Climate Council (Australia) has a lot of useful information about renewable energy.
<https://www.climatecouncil.org.au/?s=RENEWABLE+ENERGY&button=>
6. NASA Climate for Kids has lots of information for children to learn about renewable energy, including the story of fossil fuels, urban heat islands, a renewable energy scientist, 10 interesting things about energy and more.
<https://climatekids.nasa.gov/search/renewable/energy/>
7. Science Journal for Kids and Teens has FREE articles written by scientists.
<https://www.sciencejournalforkids.org/? sf s=renewable%20energy>
8. Lots of information for parents and teachers/homeschool parents by CLEAN, a group 'committed to climate and energy education.
<https://cleanet.org/clean/literacy/energy4.html>

Parental Resources:

How we think about, and use, energy is in transition. And countries around the world are paying attention.

Students of all ages have been hearing about climate change and pollution and protecting our environment. There is a great deal of information available to use for discussions on these topics with children as young as kindergarten through positive life lessons with scaring children. That's one of the messages that Jackson wants to share with parents.

Jackson also wants to spread this message to people of all ages:

- **Do what you can, with where you are, and what you have.**
- **You can start with learning about climate change and how our energy use and sources need to change.**
- **If the only thing you can do is talk to, and help educate, other kids and students about the climate change challenge...then that still is taking action to help protect Earth and our future.**
- **Share what action your children/students or your family take to reduce our reliance on the energy grid; reuse items; and recycle so that Jackson can add them to his Honors Forest and send them FREE personalize certificates recognizing them as Climate Change Superheroes and Earth Day Champions.**

Here are some suggested topics to begin talking about the renaissance of energy technology.

1. Start with helping children understand the difference between renewable energy and on-renewable energy.

Renewable energy comes in several forms and all renewable energy comes from natural sources. So, a good place to start is where energy comes from.

2. Show children the impact of non-renewable energy sources.

Use videos of how things like pollution and global warming negatively impact animals, insects, ocean creatures, birds and nature itself to inspire children to start learning about renewable energy and how to help prevent the damage to our climate and environment from non-renewable energy sources.

3. Sustainability plays a role in renewable energy.

As defined by Johns Hopkins University, “Sustainable energy is derived from resources that can maintain current operations without jeopardizing the energy needs or climate of future generations. The most popular sources of sustainable energy, including wind, solar and hydropower, are also renewable.”

3. Kids learn better with good role models.

Start with small home improvement projects such as changing out your current light bulbs for more energy-efficient ones. Add a recycle bin to help your family start recycling appropriate trash instead of helping fill up more landfills. Minor changes can help your children feel they are involved in helping fight the impact of climate change on our planet.