

< NEWS FEED



Advantages and disadvantages of renewable energy

Reading Time: 4 minutes

Wind, geothermal, solar, hydro, and other renewable technologies are a widely popular source of energy throughout the world today. Countries, corporations, and individuals are adopting renewables for a number of great benefits. In this article, we'll dive into some of the advantages and disadvantages of renewable energy.

Advantages of renewable energy

Using renewable energy over fossil fuels has a number of advantages. Here are some of the top benefits to going green:

1. Renewable energy won't run out

Renewable energy technologies use resources straight from the environment to generate power. These energy sources include sunshine, wind, tides, and biomass, to name some of the more popular options. Renewable resources won't run out, which cannot be said for many types of fossil fuels – as we use fossil fuel resources, they will be increasingly difficult to obtain, likely driving up both the cost and environmental impact of extraction.

2. Maintenance requirements are lower

In most cases, renewable energy technologies require less overall maintenance than generators that use traditional fuel sources. This is because generating technology like solar panels and wind turbines either have few or no moving parts and don't rely on flammable, combustible fuel sources to operate. Fewer maintenance requirements translate to more time and money saved.

3. Renewables save money

Using renewable energy can help you save money long term. Not only will you save on maintenance costs, but on operating costs as well. When you're using a technology that generates power from the sun, wind, steam, or natural processes, you don't have to pay to refuel. The amount of money you will save using renewable energy can vary depending on a number of factors, including the technology itself. In most cases, transitioning to renewable energy means anywhere from hundreds to thousands of dollars in savings.

4. Renewable energy has numerous health and environmental benefits

Renewable energy generation sources emit little to no greenhouse gases or pollutants into the air. This means a smaller carbon footprint and an overall **positive impact on the natural environment**. During the combustion process, fossil fuels emit high amounts of greenhouse gases, which have been proven to exacerbate the rise of global temperatures and frequency of extreme weather events.

The use of fossil fuels not only emits greenhouse gases but other harmful pollutants as well that lead to **respiratory and cardiac health issues**. With renewable energy, you're helping decrease the prevalence of these pollutants and contributing to an overall healthier atmosphere.

5. Renewables lower reliance on foreign energy sources

With renewable energy technologies, you can produce energy locally. The more renewable energy you're using for your power needs, the less you'll rely on imported energy, and the more you'll contribute to U.S. energy independence as a whole.

Disadvantages of renewable energy

Renewable energy has many benefits, but it's not always sunny when it comes to renewable energy. Here are some disadvantages to using renewables over traditional fuel sources.

1. Higher upfront cost

While you can save money by using renewable energy, the technologies are typically more expensive upfront than traditional energy generators. To combat this, there are often **financial incentives**, such as tax credits and rebates, available to help alleviate your initial costs of renewable technology.

2. Intermittency

Though renewable energy resources are available around the world, many of these resources aren't available 24/7, year-round. Some days may be windier than others, the sun doesn't shine at night, and droughts may occur for periods of time. There can be unpredictable weather events that disrupt these technologies. Fossil fuels are not intermittent and can be turned on or off at any given time.

3. Storage capabilities

Because of the intermittency of some renewable energy sources, there's a high need for energy storage. While there are **storage technologies available today**, they can be expensive, especially for large-scale renewable energy plants. It's worth noting that energy storage capacity is growing as the technology progresses, and batteries are becoming more affordable as time goes on.

4. Geographic limitations

The United States has a diverse geography with varying climates, topographies, vegetation, and more. This creates a beautiful melting pot of landscapes but also means that there are some geographies that are more suitable for renewable technologies than others. For example, a large farm with open space may be a great place for a residential wind turbine or a solar energy system, while a townhome in a city covered in shade from taller buildings wouldn't be able to reap the benefits of either technology on their property. If your property isn't suitable for a personal renewable energy technology, there are other options. If you're interested in solar but don't have a sunny property, you can often still benefit from renewable energy by purchasing green power or enrolling in a **community solar option**.

Renewable energy has more benefits than drawbacks

When it comes to renewable energy, the positives outweigh the negatives. Transitioning to renewables on a personal, corporate, or governmental level will not only help you save money but also promote a cleaner, healthier environment for the future.

Installing solar panels is one of the easiest ways to go green. By signing up on the **EnergySage Solar Marketplace**, you can compare multiple quotes from local, pre-screened installers to see what solar costs and savings for your property. The quotes will also include estimates of the amount of carbon dioxide emissions you will offset over 20 years, and what this equates to in both trees planted and gallons of gasoline burned.

Get an instant estimate of your solar savings potential!

Based on your roof + actual offers in your area

Try Solar Calculator



Posted on **OCTOBER 25, 2018** [[HTTPS://NEWS.ENERGYSAGE.COM/ADVANTAGES-AND-DISADVANTAGES-OF-RENEWABLE-ENERGY/](https://news.energysage.com/advantages-and-disadvantages-of-renewable-energy/)] by **KERRY THOUBBORON**.

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Kerry is a Content & Email Marketing Specialist at EnergySage. She graduated from Boston University with a degree in Environmental Analysis and Policy. Outside of work, you can find Kerry snowboarding, watching The Office, or having passionate debates about which New England state is best (spoiler: it's Vermont).

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14 thoughts on “Advantages and disadvantages of renewable energy”



Ayush

April 3, 2019 at 8:29 am

very good



Amani

April 4, 2019 at 12:46 pm

This is amazing and it helped me a lot thank you and have a good rest of your day.



bob

April 8, 2019 at 2:57 pm

this content was very helpful. thank you to all at energy sage!!!!!!❤



John

April 11, 2019 at 8:05 pm

this is a great help thank you