

Benefits of renewable energy

Each source of renewable energy has unique benefits and costs and they provide a substantial benefits for our environment and economy.

Human activity is overloading our atmosphere with carbon dioxide and other global warming emissions, which trap heat, steadily drive up the planet's temperature, and create significant and harmful impacts on our health, our environment, and our climate.



Figure 1: Smog
<http://grist.org/climate-energy/why-is-the-national-black-chamber-of-commerce-fighting-epas-new-clean-air-rules/>

Global warming emissions associated with renewable energy—including manufacturing, installation, operation and maintenance, and dismantling and decommissioning—are minimal

Increasing the supply of renewable energy would allow us to replace carbon-intensive energy sources and significantly reduce global warming emissions.

Generating electricity from renewable energy rather than fossil fuels offers significant public health benefits. The air and water pollution emitted by coal and natural gas plants is linked to breathing problems, neurological damage, heart attacks, and cancer. Replacing fossil fuels with renewable energy has been found to reduce premature mortality and lost workdays, and it reduces overall healthcare costs.

Wind, solar, and hydroelectric systems generate electricity with no associated air pollution emissions nor do they pollute water resources. Although hydroelectric power plants impact river ecosystems.



Figure 2: renewable energy.
<https://ec.europa.eu/energy/en/topics/renewable-energy>

Biomass and geothermal power plants, like coal- and natural gas-fired power plants, require water for cooling, yet their air pollution emissions are close to zero.

Every part of our world has at least one of the following. Strong winds, sunny skies, plant residues, heat from the earth, or fast-moving water where can each provide a vast and constantly replenished energy resource supply. These diverse sources of renewable energy have the technical potential to provide all the electricity the nations need and many times over.

Today, renewable energy provides only a tiny fraction of its potential electricity output worldwide. But numerous studies have repeatedly shown that renewable energy can be rapidly deployed to provide a significant share of future electricity needs, even after accounting for potential constraints.

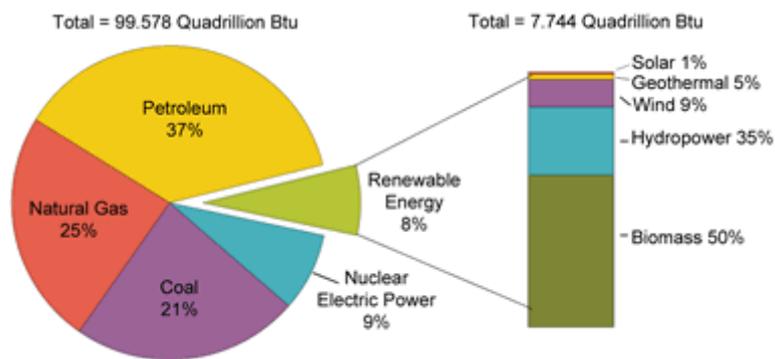


Figure 3: renewable energy comparison.
<http://geology.com/articles/renewable-energy-trends/>