

According to the United Nations, the key to solving the climate challenge and powering a safer future lies in energy. We need to stop relying on fossil fuels and invest in cleaner, more affordable, more sustainable, and more reliable energy alternatives.

Solar, wind, water, waste, and earth's own heat are all renewable energy sources, readily available from nature and emitting little greenhouse gas. Renewable energy is all around us. It's cheaper, healthier and creates jobs.

Read how some countries have moved to using significantly more renewable energy, while reaping the economic, societal, and environmental benefits.

Costa Rica produced 98% of its electricity from renewable sources for over 8 years in a row using a combination of hydro, geothermal, wind, biomass and solar power.

A combination of hydropower and geothermal power provide almost 100% of Iceland's electricity needs. In fact, geothermal power heats 9 of 10 homes.

98% of all the electricity in Uruguay comes from renewable sources mostly from hydropower, complemented by wind, solar and biofuels. The country generates so much renewable energy it exports to Argentina and Brazil.

Morocco has harnessed the huge sun supply of its deserts to become a world leader in solar energy and has the world's biggest concentrated solar farm in the Sahara desert.



- Biomass produced from algae can generate energy much faster and more efficiently than normal land biomass.
- Products such as ethanol (can replace gasoline) and plastics from plant and food waste.
- Penn State University researchers have produced a human waste-powered generator. from the waste of 100,000 people.



- Solar is the most abundant energy source on Earth.
- An hour and a half of sunlight that reaches the planet's surface can generate enough power to meet all of humanity's energy consumption for an entire year.



- One wind turbine can produce enough electricity to light up almost 600 homes.
- Wind turbines are very complicated machines that can have as many as 8,000 different components.

