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Journal of Science and Geosciences

Editorial

Vol. 9 (4), pp. 5-6, December, 2021 ©Prime Scholars Library

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# Importance and sources of Sustainable energy resources

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## DESCRIPTION

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.

Sustainable energy does not harm the environment and can help improve public health. Renewable energy resources emit little to no greenhouse gases, which is better for the environment and our health.

All renewable energy resources like solar, wind, geothermal, hydropower and ocean energy are sustainable as they're strong and to be had in plenty.

#### Sources

**Solar energy:** Solar power is the radiation from the Sun able to generating heat, inflicting chemical reactions, or producing electricity. The overall quantity of sun power acquired on Earth is hugely greater than the world's modern and estimated power requirements.

**Wind energy:** Wind energy is one of the fastestdeveloping renewable power technologies. Wind is used to provide power the use of the kinetic power created through air in motion. This is converted into electric power the use of wind generators or wind power conversion systems.

**Geothermal energy:** Geothermal energy is heat in the earth. The phrase geothermal comes from the Greek phrases geo (earth) and therme (heat). Geothermal energy is a renewable energy supply due to the fact warmness is constantly produced within the earth. People use geothermal heat for bathing, to heat buildings, and to generate electricity.

**Tidal energy:** Tidal energy is a form of hydropower that converts electricity received from tides into useful forms of power, together with energy. Tides are created through the gravitational impact of the moon and the solar on this planet inflicting cyclical motion of the seas. One of the energy sources of harnessing energy from tidal stages and tidal streams over different kinds of renewable energy.

Most definitions of sustainable energy consist of environmental elements which include greenhouse gas emissions and social and financial elements which include strength poverty. Renewable energy resources which include wind, hydroelectric energy, solar, and geothermal strength are commonly a ways extra sustainable than fossil gasoline resources. However, a few renewable energy projects, which include the clearing of forests to provide biofuels, can reason excessive environmental damage. The function of nonrenewable energy resources in sustainable strength has been controversial. Nuclear energy is a low-carbon supply are corresponding to wind and solar, however its sustainability has been reduced to radioactive waste, nuclear proliferation, and accidents. Switching from coal to natural gas has environmental benefits, consisting of a decrease weather impact, however may also result in a put off in switching to extra sustainable options.

#### IMPORTANCE

The development and use of sustainable energy will improve the energy security, environment, economy, mechanical manufacturing, construction, transportation and industry and also help to create new jobs. Energies of solar, wind and biomass can meet local energy demands and assist to improve the environmental protection. Renewable sources additionally produce green energy, which means much less pollutants and greenhouse gas emissions, which make a contribution to climate change.