



Significance of green energy

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DESCRIPTION

Renewable energy is also known as called clean energy or green energy because it does not contaminate the air or the water. Renewable energy comes from sources that are constantly and naturally renewed such as wind energy and solar energy. Renewable energy is also called as sustainable energy.

Renewable energy sources are the opposite of fossil fuels like coal and gas, which are a finite energy source. Plus, the burning of fossil fuels to release energy is a cause of global climate change. The terms green energy and renewable energy (Chu, 2017) are frequently used interchangeable, but there's one essential and sometimes confusing difference between them. While most green energy sources are renewable, not all renewable energy sources are considered entirely green. Clean energy is energy that used that does not pollute the atmosphere and these energy sources will not release any greenhouse gases into the atmosphere. Once again, there are clear crossovers between clean energy, green energy and renewable energy. Here is a simple way to differentiate between them as

- Clean energy = clean air
- Green energy = sources from nature
- Renewable energy = recyclable sources

Renewable energy is energy that's collected from renewable resources that are naturally replenished on a human timescale. It includes sources like sun, wind, rain, tides, waves, and geothermal heat. Renewable energy stands in contrast to fossil fuels (Hubbert, 1949) which are getting used more quickly than they are being replenished. Although most renewable energy sources are sustainable, some are not. For example, some biomass sources are considered unsustainable at current rates of exploitation.

SIGNIFICANCE

Green energy is important for the environment because it replaces the negative effects of fossil fuels with more environmentally-friendly alternatives. Derived from natural resources, green energy is also often renewable and clean, meaning that they emit no or few greenhouse gases and are often readily available. Even when the complete life cycle of a green energy source is taken into consideration, they release far less greenhouse gases than fossil fuels, as well as few or low levels of air pollutants. This is not just good for the planet but is also better for the health of humans and animals that have to breathe the air.

Green energy can also cause stable energy prices as these sources are frequently produced locally and are not as affected by geopolitical crisis or supply chain disruptions. The economic benefits also include job creation in building the facilities that frequently serve the communities where the workers are employed. Renewable energy saw the creation of 11 million jobs worldwide in 2018, with this number set to grow as we strive to meet targets such as net zero. Due to the local nature of energy production through sources like solar and wind energy, the energy infrastructure is more flexible and less dependent on centralized sources which will lead to disruption also as being less resilient to weather related global climate change (Karl, 2003).

Green energy also represents a low cost result for the energy needs (Lenzen, 2004) of many parts of the world. This will only improve as costs continue to fall, further increasing the accessibility of green energy, especially within the developing world. Green energy looks set to be a part of the future of the world, offering a cleaner alternative to many of today's energy sources. Readily replenished, these energy sources are not just good for the environment, but are also resulting in job creation and look set to become economically viable as developments continue. The fact is that fossil

fuels need to become a thing of the past as they don't provide a sustainable solution to our energy requirements. By developing a variety of green energy solutions we can produce a completely sustainable future (Annan, 2002) for our energy provision, without damaging the world we all live on.

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