Photovoltaic Solar Electricity

THE BEST RENEWABLE ENERGY ALTERNATIVE FOR THE UNITED STATES.

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Abstract

Every hour the sun provides the Earth with more energy than the whole world uses in one year. Solar energy is an abundant renewable energy source that can be converted into electricity using photovoltaic solar cells (PV). Rising costs of oil, coal, natural gas and the threat of global warming is causing the United States to change its energy dependence from non-renewable to renewable energy sources. Hydroelectric dams, wind turbines, and photovoltaic solar cells are all renewable energy sources that are currently being used by the United States. Of these three sources, I believe that electricity produced by photovoltaic solar cells (PV) has the ability to provide the greatest benefits to the United States environment, economy, and society.

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WIND

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SOLAR

Results

Electricity produced by methods of hydroelectric, wind, and solar carried many benefits to the United States environment, economy, and society. During electricity production, all methods are capable of having little to no impact on the **environment**. Construction, production, and maintenance of these energy sources provides many employment and educational opportunities which benefit the **economy.** The reliability of these energy sources allowed them to be beneficial to both the economy and society. However, their ability to provide energy that is free of pollution is their greatest benefit to **society.**

Conclusion

Of the three renewable energy sources that were analyzed, electricity produced by photovoltaic solar cells (PV) was able to provide the greatest benefits to the United States environment, economy, and society. The ways in which PV cells are **manufactured** and **located** allows them to have the least environmental impact. Solar energy's ability to be captured wherever it shines allows PV cells to be **flexible** in size and area of application. This unlimited growth potential gives PV the ability to provide the most employment and educational opportunity. Because PV cells have no moving parts they have the lowest **maintenance** and are most **reliable**. PVs reliability is its greatest benefit to society. Each of these renewable energy sources will need to be used by the United States to combat climate change. However, PV cells have the greatest ability to provide the most benefits to the United States environment, economy, and society.

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HYDRO