

# Nuclear Energy

With coal and oil running low, the world is in search for a new renewable resource that is also the most sufficient and sustainable way to produce energy. The solution: Nuclear energy.

Through the lens of a geographer I will be looking at how nuclear energy is more superior to other renewable energies. The main focuses will be on the comparison of location and resources between nuclear and the other popular energies (such as wind and solar).

Location is a major advantage for nuclear energy, as it does not need specific location to produce energy. Nuclear energy power plants are easy to locate in almost any open spaced area (National Geographic). They don't need to be near areas with certain weather such as wind and solar energy. Because of this nuclear energy has a much more abundant amount of space for location. "They can be built in urban or rural areas, and do not radically alter the environment around them." says national geographic. Because they can be built anywhere, countries could construct them in poverty stricken cities in order to help create new jobs. Nuclear is much more efficient while taking up less space. Triplepundit.com says that nuclear energy is about 4 times more efficient in producing energy while taking up less than one tenth of space that wind and solar require. Wind and solar depend entirely on earths weather to power them, and since weather is constantly fluctuating these energies are not consistent enough to be the worlds top energy producer. Another point is that wind and solar have inconvenient locations. Windmills

are often very noisy and many people don't want them near their houses. Solar energy is usually built in farmland, which takes up space for farming as the panels cover the ground.

However, because of the space that nuclear power plants take up, nuclear energy is at a disadvantage. Nuclear plants are very large and costly. Construction can take from months to years, but wind and solar are very small and cost little. Wind can be easily put into open fields that are far away from civilization and still produce energy. Solar energy is now being used almost anywhere whether it's in rural plains or on the roofs of buildings.

Another reason nuclear is better is because of the resources required to make the structures and the energy. Nuclear energy has been in use for the past 75 years says Nuclear Energy Institute. While other sources like wind has only existed since the 1970s (wind energy foundation) and solar has existed for around 50 years, (enowenergy.com). Because of this large gap in experience, nuclear energy is much more reliable. While solar and wind are still vastly improving to work out their possible problems, they are still not as reliable as nuclear energy. One misconception about nuclear energy is that nuclear plants are very harmful to earth's eco-system, because of the main resources used to power nuclear energy, such as uranium.

However, uranium actually produces little to no pollution and less radiation than a bunch of bananas ([www.idigumining.com](http://www.idigumining.com)). The main resource used for construction of nuclear energy is uranium says national geographic. Uranium is a very abundant resource that can sustain nuclear power plants for hundreds of years. Uranium is typically mined in Australia, Canada, or Kazakhstan. Uranium can be used in its raw state to conduct energy, which allows nuclear energy to be very efficient in its process. While solar panels require pure silicon, which is not pure in natural form and because of this it hinders the process of making solar energy,

[madehow.com](https://www.madehow.com). And the resources for solar is only given to them during clear daylight and wind only gets there resources when there is just the right amount of wind, not too slow as it could not power the turbines enough or not too fast as this can snap the propellers, [energyinformative.org](https://www.energyinformative.org). Also some argue that nuclear plants could be converted into possible nuclear weapons, however the Nuclear Non Proliferation treaty was made to prevent nations from doing such things. National geographic says, "The treaty promotes the peaceful use of nuclear fuel, as well as limiting the spread of nuclear weapons." This is a big reason that the main producers of nuclear energy are well-developed, neutral countries such as, Canada or Australia.

On the other hand wind and solar only need two of the most basic elements to produce energy. Because wind and solar energy will continue for as long as the earth exists, they will never have to be considered as a dying resource. And not many countries want nuclear energy because they are frightened of the possible harmful effects on the ecosystem.

Overall nuclear energy is the superior renewable energy for the world. Through the lens of a geographer we can see that wind and solar are no match for nuclear energy. Nuclear energy is much more efficient by having better opportunity of location and resources. This new energy should be the one that the world will use for the long run.

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## Reflection

Looking back on my research project I now have a different perspective from my original beliefs. My methods for approaching my research have significantly changed. This project has made me look for deeper and more reliable sources in order to help support my research. That being said I had to try and focus on more specific and unbiased sources to use, because this is such a controversial topic, not all sources depict the issue in a fair light. In order to achieve a strong understanding of alternative energies I had to research the main pros and cons of nuclear, wind, and solar energies. This also allowed me to gain a better understanding of the differences between the energies, and allowed me to have more evidence to support my claims, while still appearing balanced.

Also, my understanding of the issue of alternative energies in the world changed greatly. Before this project, the only alternative energies that came to my mind were wind and solar. In fact I did not know that nuclear energy was even considered an alternative energy. I had always grown up believing that nuclear energy was very dangerous and was mainly negative. However, upon further research I learned just how profoundly wrong I was. I learned that nuclear energy is not as dangerous as the media portrays it and that it is relatively popular. I also learned just how easy it is for nuclear energy to be conducted, and many more

positive aspects. I now know that the views of nuclear energy, although they are very serious, are often misconcepted as the world looks at the rare catastrophes instead of the overall benefits. On the other hand, I knew most of the basics for nuclear, wind and solar energies, such as the resources to convert energy.

Working with a group significantly deepened my thinking and writing in this topic. My group members brought a lot of different perspectives which overall benefited or individual and team research. It is very helpful to use peoples different views on our project in order to see how peoples line of thinking can differ from your own. Everyone had differing views on alternative energies which helped us research a greater surrounding of the topic, and helped us overall determine which energy is the best.