

Fossil fuels are changing the environment, and not in a good way. Since fossil fuels such as oil and coal were implemented on a wide scale as a source of energy for the world, the climate and environment have begun to change. The earth is getting warmer and we need to do something about it quickly. However, it's disputed how we should go about this multiple solutions are there but which one should we try to move to? To this, I say we already have a solution that is clean and provides a ton of power, and is completely clean to the environment, nuclear energy. We need an energy source that's clean now and also one that produces a lot of power because as the population of the world grows we will not have enough energy to sustain those people. Alvin Weinberg, a scientist that writes in the *Bulletin of Atomic Scientists* agrees with me, saying that governments should view nuclear energy as the solution to getting energy to countries with rapidly growing populations. Now I know there is a negative stigma on nuclear energy that says that nuclear energy is dangerous, but I want to draw your attention to those specific incidents and why they happened.

Let's start off strong with Chornobyl, the worst of the disasters. This was the fault of extreme incompetence and circumstances in a poorly run nuclear plant. This should not be used as a deterrent to nuclear energy in fact none should. Fukushima was placed in the worst spot possible for a nuclear power plant and the three-mile island incident was overblown by the media. These events did affect people negatively and I realize that, but incompetence by officials to place these power plants correctly and smartly is not the fault of the energy itself. The only thing to worry about when it comes to energy is the fact that it isn't an infinite resource, we will run out of uranium eventually and that is something that we will have to deal with. But consider this, it will extend the time we have to figure out what to do about finding another energy source

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and will allow us to find the best infinite option possible. So yeah there are some drawbacks but now let me tell you how many benefits there are to going down this route.

Nuclear energy, let me make this very clear, is a clean source of energy, nothing gets released into the air at all. The steam you see coming out of the top of those power plant towers? It's all water, it has no radiation in it at all and if there's any radiation it's unnoticeable. Suffice it to say it is extremely clean and won't produce the thing that is currently killing our climate, Co2. Nothing that comes out the top of a nuclear facility is dangerous to the environment and is not even close to as harmful as coal when it comes to Co2 emissions. One site called Freeingenergy.com lays out just how much coal wastes and how many greenhouse gasses it releases into the air, saying that 800 pounds of coal will produce when burned "3 pounds of sulfur dioxide pollution" this is bad as this can cause acid rain in areas where coal is dominantly used for energy and in the areas surrounding it. This isn't to say that Nuclear Energy doesn't have a waste problem, it does with all of the waste having to be stored away for hundreds of years as it's too radioactive to expose to people. But this is surprising "easy" to do. Nuclearenergy.net says that low to medium levels of radioactive waste are easily stored in natural and artificial barriers until they are no longer dangerous or radioactive. Waste with higher levels of radiation which is anything where the ions have a half-life over 30 will be stored safely underground for a very long time and in this way, we will never have to worry about it until its no longer radioactive, and at that point its no longer a problem and we can just get rid of it then. Now the cost of nuclear energy is very high up there when it comes to arguments against the implementation of nuclear energy and yes those individual plants are more expensive than other

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clean energy solutions and more expensive than coal. But they are far more efficient and productive than any other energy source, Which means while they are more expensive to build you don't have to build nearly as many plants to get that energy, meaning it is cheaper to go with nuclear energy than other types of clean energy as you can build far less to get far more energy. This fallacy is disproved in an article by atlanticsentinel.com which states the logical fallacy of nuclear energy costing trillions of dollars to reduce greenhouse gasses just doesn't make sense and goes into more detail in the article. It says "Building a nuclear power plant costs more than building a wind farm or a collection of solar panels, but the ratio of wattage output of a plant isn't comparable on a per watt basis. Where did they get "trillions of dollars"?". So yeah it seems like trillions of dollars to make an impact is quite the stretch.

While nuclear energy is not a permanent solution as I stated earlier it is in general a fairly long-term solution that can be used for over 200 years at the current efficiency and use of nuclear power plants. This time can be used to improve our emissions in other areas as well as for us to develop entirely new methods of energy that are both clean and usable for what can be considered an infinite amount of time. By no means is nuclear energy the final solution, it won't be possible to sustain it without an infinite supply of attainable uranium. But It is the start of moving to clean and renewable energy, it isn't perfect and that's ok because it is not meant to be. If it lasts us 200 years, we as a species will have plenty of time to find a gigantic store of uranium that can be used to maintain these power plants or move on to even better energies. But as far as the modern-day species should be concerned, the future is nuclear energy and it should be if we want to be able to sustain the world's growing populations as it is not going to go down any time soon. So yes I believe nuclear energy is the solution to the world's growing emissions

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problem as well as the growing energy crisis that is only going to continue to grow if we do nothing about it and we have the solution right in front of us. Nuclear Energy.

Sources and Citations

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This paper has been my favorite one so far. Mostly because it's the one that has piqued my interest the most and one that I wanted to write about a lot. Arguing for nuclear energy is something I try to do whenever the topic comes up so being able to sit down and write about it was a good experience for me and I feel like this assignment taught me quite a bit about how to write an argumentative essay. Energy arguments are some of my favorite types of arguments because I get to bring up what is in my opinion the best source of energy available.