Nuclear Power As The Future Of Energy

Environmentalists are totally against the option of generating energy from Nuclear Power, until they realise the alternative is to stick with coal. Humans rely on electricity every day, from running hot water or charging their mobile phone. We can't simply get rid of this, but we can make the supply of electricity a lot more efficient. To be exact, 8,000 times more efficient then fossil fuels like coal.

Nuclear Power obviously is the future for our energy, all of us know roughly how fossil fuels are used today to make energy, I would hope. Large amounts of coal are used to produce a lot less energy then Nuclear energy. Coal needs to be found underground and therefore cannot just be found anywhere. Australia actually benefits from coal, economically anyway. In 2017 Australia made 57 Billion dollars from just coal alone, but let's just stick to the facts of how nuclear energy is superior. If you are not the most scientific person, like myself, I will try and describe this easiest way possible. (Going to show a diagram on how the nuclear power plant actually works) Nuclear energy comes from uranium, this has to be mined like coal and most energy sources. Every 18-24 months a power plant will need to shut down due to its uranium fuel. It later gets turned into radioactive waste. Currently in The United States nuclear power plants generate 20 percent of the country's energy, with only just 60 power plants. This number is expected to rise if we make the decision to abandon coal. Nuclear energy originates from the splitting of uranium atoms, a process called fission. This then generates heat which then turns into steam, that steam is then used to actually make electricity. Because nuclear power plants do not actually burn, they produce nowhere near as much as fossil fuels. One of the many reasons why we need to slowly make our transition from fossil fuels to nuclear energy, it will be for the greater good.

Okay cool, its 8,000 times more efficient than coal but is it healthy for the environment, because I know a certain someone needs this approval "cough Gretta cough". It is a known fact that nuclear energy is one of the most environmentally friendly sources of energy. The power plants that are located around the world produce fewer greenhouse gases than fossil fuelling. Like all energy sources, nuclear power has advantages and disadvantages. What are the benefits of nuclear power? First and foremost, since it provides energy by nuclear fission rather than chemical burning, it creates the villainous component of global warming, baseload power without carbon output. Switching from coal to natural gas is a step towards decarbonization, as burning natural gas produces about half of burning coal's carbon dioxide. Yet moving from coal to nuclear power is dramatically decarbonizing, as nuclear power plants only emit greenhouse gases from ancillary use of fossil fuels through their development, production, fuel storage, servicing, and decommissioning — about as much as solar power, which is about 4 to 5 times as much as a gas-fired power station.

Nearly 450 operable nuclear reactors today supply 10 percent of the world's electricity, avoiding carbon dioxide emissions of around two and a half billion tonnes compared to baseload coal. Since 2012, nuclear generation has grown every year. Fifty-eight plants are under operation. Every year in 2015 and 2016, 10 GW of new nuclear power came on board. For the last 25 years, this is more than twice the median. Four reactors, just above 3 GW, came on board in 2017. Eight reactors were built in China out of the ten reactors that came on line in 2016 and

the four reactors in 2017. Others have been built in India, Pakistan, Russia, South Korea and the U.S. China is now Asia's largest nuclear power generator. We expect to add 15 GW of new nuclear capacity globally in 2020. This includes 14 new reactors, including one newcomer country, UAE, in six different countries. We saw another pioneer nation start building its first project, Bangladesh, in 2017.

Nuclear energy can be seen as something that has a high-risk high reward, there is no doubt that it is more efficient than fossil fuels and is better for the environment. We cannot just expect our environment to magically be free of fossil fuels and other energy sources. Humans can not just stop using coal, more developments will occur to ensure that nuclear power is the safest and cleanest result for our environment. The removal of coal is going to take some time, but a majority of people seem to agree that nuclear power is the future of energy. Hopefully, these facts and statements have made you think twice about the future of our planet