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Nuclear Power Option

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The world today is growing rapidly, not only in the sheer numbers of people, but the needs of those people who are already here. Countries around the world are catching up to America in quality of life, unfortunately some of these countries are going about this the same way the USA did when it was industrializing, by burning huge amounts of fossil fuels. We need to help these countries understand that they cannot attain the complexity we did using the same methods as in the past. Climate change IS coming, that is now for certain, now we must just find ways to mitigate how dramatic the changes are. Coal and oil should no longer be viable options to countries trying to build energy and complexity, instead we must help them, and the public's opinion in general, to understand that nuclear is the best option available for producing clean and reliable electricity.

Nuclear power has two giant black eyes when looked at from the popular opinion because of how the media portrays the industry and people's lack of understanding when it comes to the technology and how it works along with the safeguards put in place. It is really a shame how much of a bad taste people get in their mouth when they talk about using uranium or any other fissionable material to provide a part of their daily needs.

Every major nuclear accident (less than a handful may I remind you) has been either caused by human error or simply did not result in a threat to people in the surrounding area. Each of these accidents had been brought on by carelessness and lack of knowledge from those running the plant or a failure to realize the faults in procedures to shut down. We can look back at the history of each incident and point at a few key elements that if they had been changed, history would never have seen them.

Even if we cannot look past the slightly blemished history, it is imperative that we look at the capabilities and current technologies that are rapidly becoming available and the contrast between what we have now and what we thought we knew 50 years ago. The magazine Scientific America produced an article (Nuclear Energy Innovation – Getting off the Bench) in March of 2012 gave examples of research being done now around the world that has produced several different variations of nuclear power. Today's advancement of computers has allowed us to more intuitively examine the way that nuclear fission happens and the potential changes that can be made to make it even more safe, reliable, and efficient.

We now know that there are more options out there than just uranium for fuel sources, some of which can reduced the radioactivity duration of spent fuel by exponential amounts while still being able to be more efficient at producing energy. These fuels have very few of the same concerns as uranium, including worries about proliferation of spent fuel.

Nuclear power is one of the safest, cleanest, and most reliable sources for electricity that has ever been invented. If the public's opinion could simply be more open and willing to allow nuclear to really play a role in providing future power, the USA would be able to drastically cut its carbon dioxide emissions. If the citizens of America gave nuclear another look, and encouraged it's advancement and implementation, we could help solve some of the problems around the world while creating jobs around the country and taking huge steps for our future.