

With the growing viability of negative emissions technology, solar power, wind power, and the advent of fusion technology only a mere fifteen or so years away, (<https://www.theguardian.com/environment/2018/mar/09/nuclear-fusion-on-brink-of-being-realised-say-mit-scientists>) one must ask:

“If we want to go green, what’s the best way to do it?”

This is what my answer would be.



With solar power continually becoming more and more profitable and efficient, I can see it as becoming a viable alternative to even some of the most efficient forms of power generation such as fission, however with the advent of fusion power solar power may very well become obsolete.

The problem with fusion is A: it doesn’t exist yet and B: when it does eventually get invented it will take even more time to construct the reactors.

When it does eventually reach the market it may very well trigger a

new “Energy revolution” referencing to the data revolution of the past where energy suddenly becomes more and more available, however, it will require a transitional period. Wind power is horrendously inefficient and negative emissions technology is even more in its infancy than the tokamak (the name of one the companies that are pioneering fusion technology).

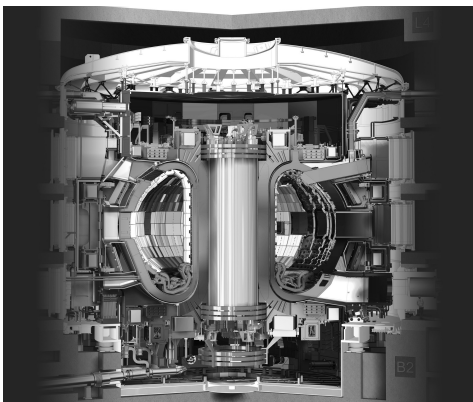
The reason for my abhorrence of wind power is simple: they can only convert 50% of the wind passing through them into power, and the wind is guaranteed to fluctuate. This combination of factors makes wind power quite expensive, hard to build, and limits the possible return on investment. <https://www.environment.nsw.gov.au/resources/households/WindEnergyfactsheet.pdf>

Solar power is better for quite a few reasons:

First and foremost: there is potential for improvement - there remain ways in which power generation via solar panels could become even more efficient than it already is, meaning that already existing solar plants can become better, stronger, faster, and the like.

Secondly, despite the fact that they only convert 22% of their available energy into power, they can be built anywhere and in great quantities, in addition to rarely fluctuating in power output.

This combination of factors makes it perfect for serving as a transitional, green power supply for the world. In addition, helping oust coal and oil power plants, it will help grow the economy outright. <https://news.energysage.com/what-are-the-most-efficient-solar-panels-on-the-market/>



When Fusion power eventually moves from the laboratory in China into the market, the future of power generation will be brighter (and significantly hotter) than ever.

Pictured: ITER Tokamak concept