Mateo Gomez
Professor Hanson
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The World's Dwindling Energy Supply

It is safe to say that we couldn't live without electricity. Yet we are in danger of losing all our current methods to create energy within the next 50 years. Earth is mainly powered by fossil fuels like oil, natural gas, and coal, while other methods like nuclear and renewable energy are used more sparingly. Yet oil is predicted to run out by 2051, gas in 2061, and coal around the turn of the century (per MAHB Stanford). To quickly address coal usage; however, the reason there is more shelf life for coal on our earth is because we have; as a society, moved away from mining coal due to the health risks involved for those who travel down to the coal mines.

There are a couple things we can point to when pondering the question of why our natural resources are running low. It took over 200,000 years for the world population to reach 1 billion, and only 200 years after that to reach 7 billion (per World Population Clock). In addition to advances in technology and medicine, life expectancy has risen as well as fertility rates. There are no limits to the needs of a growing population that is increasingly being more urbanized and living in more concentrated areas, as well as people being inefficient with their energy usage (leaving a light on when they leave a room/aren't home).

Moving on to the potential solutions we can use in favor of fossil fuels, the two main options are nuclear energy and renewable energy, like solar or wind power. The debate over nuclear energy is one that has long been controversial. Holding enough energy to power a house for 31 years just off of one reaction, nuclear energy also generates relatively low pollution and is a stable energy source. However, due to safety hazards, nuclear power plants need to be at least 10 km away from the nearest civilians (TedED), and the amount of power plants that would be needed to provide power to the globe would be too difficult logistically to plan out and construct. On the flip side, the waste products of these nuclear reactors are *highly* radioactive, and most waste products; needed to be stored somewhere, are just dumped underground beneath the reactors. Uranium-235, the element used in these reactors, has a half life of about 700 million years (TedED). In the event of a reactor failure; like Chernobyl or Three Mile Island, many fatalities could arise and repairs/cleanup would be extremely dangerous, as well as expensive.

One of the more popular options, solar power, is highly efficient. The earth absorbs up to 10x the energy from the sun needed to power the human population. In addition, solar panels only need to be replaced every 15 years (The Guardian), and energy from raindrops can be captured from new technology. While the main concern regarding solar power is the initial investment required to install the equipment, if you use the solar panels for a long period of time (>3 years), your electric costs would drop down to next to nothing, making the investment worthwhile. And the best part of this form of energy is the fact that it has zero pollution, therefore helping slow the effects of climate change as well.

After taking all things into consideration, it is clear that not enough of an emphasis has been placed upon this issue, and civilians can help by taking matters into their own hands. Speaking with their public representatives, media, and government officials all can make a huge impact. The more people who are aware of this issue, the quicker a change can be made that will help everyone for the better.