

## Understanding Pollution: The Advantages and Disadvantages of Fossil Fuels

When people talk about pollution, invariably the topic of fossil fuels will come up. This shouldn't be surprising to anyone considering the fact that 60% of the world's energy consumption is fueled by fossil fuels, but what exactly are fossil fuels? Despite the fact that fossil fuels are one of the leading causes of pollution there are benefits that are associated with their use. There are also many disadvantages and problems that arise from their use. It is impossible to have a discussion about pollution, or green energy, climate change, or the demands that society places on the energy sector without discussing fossil fuels. They are a huge issue, and they are one that everyone should seek to have at least a basic understanding of.



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Fossil fuels are “a fuel (such as coal, oil, or natural gas) that is formed in the earth from dead plants and animals.”<sup>i</sup> That sounds pretty simple, and you're probably thinking something along the lines of how are we running out of fossil fuels with plants and animals dying all the time throughout history? The problem lies in how long it takes fossil fuels to form. The coal, oil, and natural gas that we use today wasn't formed a century, or even a millennia ago. They weren't even formed from dead dinosaurs as is a common belief. In fact, they were formed hundreds of millions of years ago, and millions of years before the first dinosaur was even alive!<sup>iii</sup> It is difficult to estimate how much oil, coal, and natural gas are left in the world, because technology is constantly advancing and granting access to heretofore inaccessible sources. Until about a decade ago oil and

natural gas in tar sands was impossible to access. What we do know is the places that are already running out of fossil fuels. Great Britain is set to run out of its own supply of fossil fuels within the next five years.<sup>iii</sup> That means that the UK will have no choice but to import ever increasing amounts of fossil fuels as their population expands unless an alternative energy source is utilized. France and Italy are two more countries that are finding themselves running out of their own supply of fossil fuels.<sup>iv</sup>

There are several advantages to the use of fossil fuels for energy consumption. To begin with, the technology required to utilize fossil fuels is already in existence, and is in fact advancing quite rapidly.<sup>v</sup> There is a reason for that however, and that reason is that we have been using fossil fuels for centuries, with coal being discovered as a fuel source sometime in the 1700s.<sup>vi</sup> We know these fuel sources. We know how to mine them, transport them, and utilize them, and familiarity breeds comfort. That's not necessarily a good thing as a sense of familiarity often hides disaster. Another advantage to fossil fuels is that they are cheap and reliable.<sup>vii</sup> Again, we know how to mine and utilize these energy sources, and we have had a great deal of time to perfect the processes associated with them. Ultimately, the advantages of fossil fuels come down to convenience. If we continue to use what we have used for centuries we don't have to change. We can blame the problems of fossil fuels on those who came before us for sticking us with this situation. The problem with that is that there is no sense of personal responsibility. By using the energy and enjoying the conveniences of fossil fuels you are responsible for the consequences.



The disadvantages of fossil fuels are fairly well known, and often much talked about. That being the case, I won't go too in depth here, especially as many of these issues are covered in other articles on the site. To begin with fossil fuels all contribute to global warming specifically, and pollution in general.<sup>viii</sup> There is then the fact that fossil fuels have been linked as one of the main causes of the increase of acid rain which causes immense damage to manmade structures, ecosystems, animals, plants, and humans.<sup>ix</sup> As mentioned before, fossil fuels are a finite resource. They will one day run out. When that day comes humanity is going to find itself in a bit of an awkward predicament unless we have made a change to a more sustainable, hopefully renewable source of energy. Another major problem is that when that day comes we will have an outdated and useless energy infrastructure.<sup>x</sup> Think about it. How much of what we use today is run from fossil fuels? From cars and trains to planes, and satellite launches, electricity generation to manufacturing in general. Almost everything runs on fossil fuels, and again it is a *finite* resource. There's an old saying about putting all your eggs in one basket, and I'm afraid to say that seems like what we are doing.

Fossil fuels are used to power our world today, and have done so for decades if not centuries. As technology has advanced we have focused on improving our current tried and true methods for energy creation and use, and called it innovation. True innovation lies in seeing the challenges that face us and finding new and better ways of doing something. True innovation is in finding a way to power our ever expanding society in such a way that allows us to continue to dominate the world around us, but also preserve it so that we can continue to be the dominant species of Earth for centuries. If we do not innovate, and move away from fossil fuels, we run the risk of our society breaking down when the day comes that we run out of them.

### About the Author



**Dominick Principe** is a graduate of Rowan University with dual Bachelor Degrees in Elementary Education and Writing Arts. He is a prolific reader who devours any book put before him, and feels that life is one great long book without an end. He fills his hours constantly exploring new information, and seeking to educate himself in the ways of the world. He puts all of that knowledge and his passion for learning to good use teaching English as a second language to students of all ages. When his nose isn't buried in a book, or in class teaching, then he can generally be found typing away at his computer working on some random piece of writing that he was inspired to do.

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<sup>i</sup> "Fossil Fuel." *Merriam-Webster*. Merriam-Webster. Web. 22 Nov. 2014. <[http://www.merriam-webster.com/dictionary/fossil fuel](http://www.merriam-webster.com/dictionary/fossil%20fuel)>.

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- ii "DOE - Fossil Energy: How Fossil Fuels Were Formed." *DOE - Fossil Energy: How Fossil Fuels Were Formed*. Department of Energy. Web. 22 Nov. 2014.  
<[http://www.fe.doe.gov/education/energylessons/coal/gen\\_howformed.html](http://www.fe.doe.gov/education/energylessons/coal/gen_howformed.html)>.
- iii "Fossil Fuels: UK to 'run out of Oil, Gas and Coal' in Five Years." *The Independent*. Independent Digital News and Media. Web. 22 Nov. 2014. <<http://www.independent.co.uk/news/uk/uk-to-run-out-of-fossil-fuels-in-five-years-9385415.html>>.
- iv "Fossil Fuels: UK to 'run out of Oil, Gas and Coal' in Five Years." *The Independent*. Independent Digital News and Media. Web. 22 Nov. 2014. <<http://www.independent.co.uk/news/uk/uk-to-run-out-of-fossil-fuels-in-five-years-9385415.html>>.
- v "Fossil Fuels Pros and Cons - Energy Informative." *Energy Informative*. Web. 22 Nov. 2014.  
<<http://energyinformative.org/fossil-fuels-pros-and-cons/>>.
- vi "DOE - Fossil Energy: A Brief History of Coal Use in the United States." *DOE - Fossil Energy: A Brief History of Coal Use in the United States*. Department of Energy. Web. 22 Nov. 2014.  
<[http://www.fe.doe.gov/education/energylessons/coal/coal\\_history.html](http://www.fe.doe.gov/education/energylessons/coal/coal_history.html)>.
- vii "Fossil Fuels Pros and Cons - Energy Informative." *Energy Informative*. Web. 22 Nov. 2014.  
<<http://energyinformative.org/fossil-fuels-pros-and-cons/>>.
- viii "Fossil Fuels Pros and Cons - Energy Informative." *Energy Informative*. Web. 22 Nov. 2014.  
<<http://energyinformative.org/fossil-fuels-pros-and-cons/>>.
- ix "Disadvantages Of Fossil Fuels." *ConserveEnergyFuture*. Web. 22 Nov. 2014.  
<[http://www.conserve-energy-future.com/Disadvantages\\_FossilFuels.php](http://www.conserve-energy-future.com/Disadvantages_FossilFuels.php)>.
- x <https://www.udemy.com/blog/disadvantages-of-fossil-fuels/>