

# Free essay on energy use

[Environment](#), [Electricity](#)



Currently, I believe that my energy use is comparable to that of anyone else living in middle-class America; I require electricity from AC outlets to power my electronic devices. These include (but are not limited to) my television, DVD players, gaming consoles, laptop, iPad, lamps, printer, and smartphone. It also powers other essentials to my home, such as my refrigerator and central air conditioning system. This electricity is provided by my electric company, which supplies it through various forms of electricity generation by power plants located throughout my area. These power plants contain generators that spin electromagnets that are covered by copper coils, permitting the electrons in that wire to shift between atoms, thus generating electrical energy. I would say, considering the plethora of devices I use it for, it is the primary means of energy I use to go about my daily life.

I also rely on gas energy for many things, including my water heater, my oven, and my central heating system. Here, this is powered by natural gas, which is burned cleanly from methane deposits mined and operated by my gas company. As far as my car, I power the vehicle with unleaded gasoline, which comes from oil deposits in the earth that are extracted and refined for various purposes, including fuel for automobiles. For my total energy use, I tend to use more energy in the summer than in the winter; electricity use is high, between my AC cooling my home and other uses, and I use a lot of gas as I tend to travel places and take road trips on occasion during the summer. In the winter, I hole up quite a bit more; I travel less, so I use less fuel, and slightly less electricity due to the AC, but I use more natural gas as I heat my home. All of these energy methods are nonrenewable, but for the electricity; however, my current electric company uses non-renewable methods of

power generation, as they have not converted to more renewable sources of energy.

There are many different kinds of renewable energy that can be used to replace these limited resources, and provide more consistent power generation that is longer-lasting. One of these is solar power; Muller (2008) explains that the sun provides 1 kilowatt per square meter of the sun, which also totals up to 400 watts of electricity, provided it is captured accurately via solar cells. The perspective of most environmentalists, according to the book is that " the best source of energy for the long-term future is sunlight" (p. 19). The appeal of solar power comes from its renewable nature, as the solar energy will be around for at least the entirety of human history. Silicon solar cells are used to collect this solar energy and convert it into electricity. The impracticality of solar power at the time is also brought up, making it far from completely feasible as a complete replacement; solar cells can only convert approximately 15% of the power it receives, the rest just getting reflected (Muller, p. 15). The only way that solar power is going to be a viable alternative to fossil fuels is when the ratio of collected energy can be increased. The high expense of solar panels at this time is also an incredibly cost-prohibitive measure; it must become more cost-effective to produce these photovoltaic panels (or more durable ones) in order to create a successful solar power initiative (Muller, 2008).

Another source for renewable energy is bioenergy; this is created from organic material, anything from straw to wood and sugarcane. One crude example of bioenergy is burning wood in order to generate heat energy; writ large, that process can be used to generate electricity and other forms of

power. It has a strong advantage in that it is just a byproduct of existing waste, so nothing is sacrificed by consuming it; however, we are not at the point yet where we can make it a cost-effective measure to swap it out for normal energy consumption.

Nuclear power is another possible source for renewable energy; through the use of nuclear fission and nuclear decay, powerful amounts of heat and electricity can be generated. While it is not strictly a renewable resource, its ability to generate substantial energy from relatively small power sources is what makes it an incredibly attractive option. That being said, there are dangers to using nuclear power; in the past, nuclear power plants such as Chernobyl and the Fukushima power plant have melted down, resulting in widespread destruction and loss of life. To that end, people are nervous about the applicability of nuclear power.

In terms of reducing power consumption, there are ways in which I can lower my footprint. For one, I can reduce the length of my showers; I often linger in there because I enjoy it, but restricting my water and heat usage to five-minute showers gives me enough time to get ready and save power. I also could do better about turning lights off when I am not in the room; that will severely reduce my power consumption. Finally, I can have my windows and doors regularly checked to make sure there is a good seal, to make sure my AC and heat are being used as efficiently as possible.

## **References**

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