

Energy Resources and Stewardship

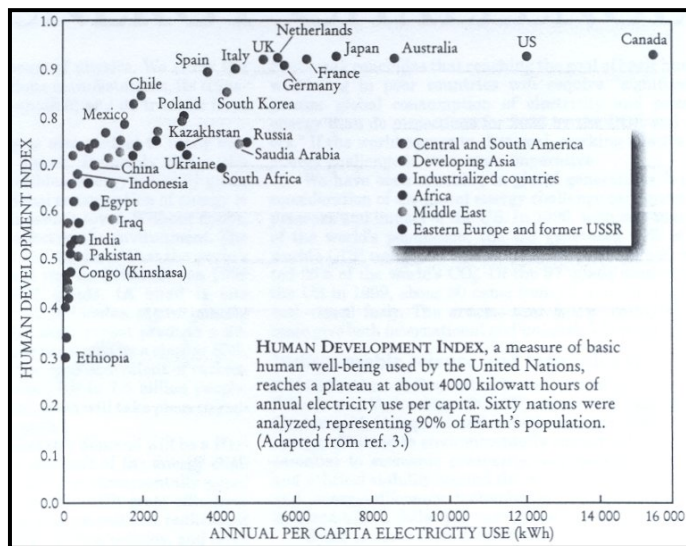
Our economy and technology have thrived due to the availability of cheap energy. Historically that has come through the use of coal and more recently oil and natural gas. With discussions of climate change and concern about the amount of carbon dioxide emitted by developing and developed nations, there is reevaluation of what sources of energy we should use and in what proportion we should use them.

There are a number of energy sources available in the world. Some have been known for years, while others are only available through recent technological developments. The following is just a sampling of energy sources in use or in development.

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|-------------|-----------------|------------------|
| Oil | Nuclear Fission | Tidal |
| Coal | Nuclear Fusion | Solar |
| Natural Gas | Biomass | Geothermal |
| Syngas | Wind | Methane Hydrates |
| Hydrogen | Hydroelectric | Ethanol |

Each of these energy sources have advantages and disadvantages. Some are actually derived from other energy sources and are, therefore, not independent on their own right. Others result in pollution or detrimental by-products. When considering an energy source, all these factors must be taken into account.

The other side of the energy problem is wise use of energy. The Human Development Index tries to capture the well being of people by considering their education, standard of living, and longevity of life. The chart to the right, published in Physics Today (April 2002), relates the HDI to the use of electricity. The natural question that arise from this chart is “what amount of energy useage is reasonable when there are limited energy resources?”



As Christians we recognize that God’s Word has significant input on how we view and interact with our world. The issues of dominion and stewardship are established in the first two chapters of Genesis and places man in a central role of responsibility.

Description of the Assignment

I want you to research one particular energy resource and identify its advantages and disadvantages. You should then evaluate whether use of this energy source should be expanded, reduced, or maintained in this country. If the energy resource you study is not currently available, you should evaluate whether continued funding of this research should be expanded, reduced, or maintained at its current level. A useful starting point is the DOE's Energy and Efficiency and Renewable Energy web site located at <http://www.eere.energy.gov/>.

No single energy source will answer a nation's total need for energy. Multiple sources of energy allow a country to balance between factors of cost, social and environmental impact, and convenience. Public perception also has an influence on which sources of energy are acceptable and unacceptable. Too often, perception drives decisions more than basic facts. I want you to browse through the document *Reliable, Affordable, and Environmentally Sound Energy for America's Future*, to get a feel for our nation's energy policy under the Bush administration. You can find this at <https://www.nrc.gov/docs/ML0428/ML042800056.pdf>. You can also get a sense of the Obama's policy at <https://obamawhitehouse.archives.gov/the-record/climate>. The Trump presidency has yet to issue a policy with regard to energy use.

If you were the advisor to President Trump, what general recommendations would you make with regard to energy use in this country. Include with this recommendation at least one biblical principle you feel guides your recommendation. Include a scripture reference that provides the basis for your biblical principle.

Details of the Assignment

Write a two page paper containing the following information. Completeness of your response will be considered in the grading of your paper.

- Description of an energy resource including its advantages and disadvantages.
- Your evaluation of this resource and a judgment whether it should be implemented more, less, or the same.
- General recommendations on energy policy for the Trump presidency.
- At least one biblical principle that guides your recommendation including a scripture reference.
- You have my notes, your text, and the nation's energy policy as a starting point. Include references to at least 2 other sources (web pages, periodicals, or books) that provided useful information for this paper. **(Include a final bibliography of your references in either MLA or APA format. Not just embedded references!)**

The completed paper should be submitted to Canvas. The name of the attachment should begin with your last name followed by your first initial and the number 1. This should make everybody's filename unique. For me the file would be named gollmers1.doc.