

Economics of climate change released in 2007 insists

[Environment](#), [Climate Change](#)



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There is overwhelming evidence that global warming is actually occurring and is no longer just an academic concern. The Stern Review: the Economics of Climate Change released in 2007 insists that there is still time to make an impact and change the effects of global warming. Failure to do so would result in “climate change (that) will affect the basic elements of life for people around the world – access to water, food production, health, and the environment. Hundreds of millions of people could suffer hunger, water shortages and coastal floodings as the world warms” (“The Stern Review”).

Fossil fuels are the number one contributor to carbon dioxide emissions in the United States alone. The use of fossil fuels for transportation contributes to a host of environmental problems, from urban ozone to global warming. Carbon dioxide makes up about 85 percent of the United States' total anthropogenic emissions of greenhouse gases that lead to global warming. Methane, nitrous oxide, carbon monoxide, nitrogen oxide, halocarbons, per fluorocarbons, and other gases make up the remaining 15 percent. More than 98 percent of U. S. carbon dioxide emissions are caused by the combustion of fossil fuels for energy consumption (Rubin, 1998).

There are many alternative energy sources that could slow the process of global warming. Alternative energy is energy that is renewable or is not harmful to the environment, such as wind, water, or geothermal powered energy. Reviewing several sources of alternative energy including alternative fuel for vehicles, solar energy, and geothermal energy and evaluating their impact on the public and viewing public opinion of alternative energy will

help us have a better understanding of the concept of alternative energy and how we can benefit from using it.

The effects of global warming are being felt worldwide. “ Global warming and the melting of polar ice cover is predicted to raise ocean levels worldwide, directly impacting on island nations who plead most strongly for restraint of fossil fuel consumption by industrialized nations” (Mayer). Some alternative fuel methods have been tried and found to be very successful. “ Another strategy for reducing fossil fuel emissions from vehicles is to shift to alternate fueled vehicles. Various choices include electric, natural gas, methane, and fuel cell vehicles” (Mayer).

In the United States there are some environmentally conscious states have started to support energy efficient vehicles. “ The federal government has provided some limited support for the development of alternate fueled vehicles, while California has mandated that companies selling vehicles there market a certain percentage of zero emission vehicles, or ZEVs”(Mayer). Solar energy is an alternative energy method that has been in practice for many years. “ On June 20, 1979, President Jimmy Carter dedicated the solar hot water heating system newly installed in the West Wing of the White House”(Laird, 2001, p.

1). Solar energy is obtained through solar panels that take the light from the sun and convert into energy, such as electricity. Solar power has proven to be a great source of energy and many people in the United States and Europe are switching to solar power, both for moral reasons and cash incentives from governments. In the United States, the citizens of California

are taking it upon themselves to invest in alternative sources of energy. They have concentrated their investments in solar power but have also experimented with wind, water, and geothermal power.

Californians find solar power advantageous not only because of its insurance against blackouts and skyrocketing electricity fees but also because it produces no pollution. As the government gives consumers cash incentives, such as tax breaks when they use these alternative sources of energy, local power companies are able to use alternative sources for energy production (Woloski, 2006). Solar energy is a cost effective and product way to utilize natural energy. Geothermal energy is the energy that is held within the core of the earth. " Geothermal energy is released naturally in geysers and volcanoes" (" Energy, Sources Of," 2004).

Geothermal energy is an effect way to heat homes or businesses because " Even where there are not naturally occurring geothermal aquifers, heat can be usefully extracted from the ground" (Derektaylor, 2000, p. 57). " In California, some of the state's electricity is generated by the geothermal plant complex known as the Geysers, which has been in production since 1960, and in Iceland, which is geologically very active, roughly 70% of the homes are heated by geothermal energy"(" Energy, Sources Of," 2004). Although using alternative energy is a great concept and idea there are some negative consequences to using alternative energy.

Alternative energy is often difficult to obtain and very costly to initiate (Woloski, 2006). For the change to occur governments and citizens will have first have to invest a great deal of money in the initial set up of alternative

energy. This can be very costly both for the people and the government. “ Why are so few environmentally conscious customers signing up, despite the positive outlook? New research suggests that consumers simply do not trust their utilities' green credentials”(Bloemers, Magnomi & Peters, 2001, p. 15).

People are uneasy trying new things such as alternative energy, especially if it is costly in comparative to other available energy sources. There are also harmful effects on the environment by using some types of alternative energy. For example “ geothermal energy sources have minimal environmental impacts that while limited, include air pollution and noise. Photovoltaic solar energy systems exhibit limited negative environmental impacts because they necessitate manufacture of photovoltaic cells, use of large land areas, and a negative aesthetic impact”(Ferrey, 2003).

And then of course " Biomass energy facilities, depending on the fuel source, emit a variety of criteria air pollutants resulting from the combustion of organic materials"(Ferrey, 2003). The energy consumption of the people of the United States is of great concern to the world's environmental health. The United States Congress is well aware of their countries contributions to global warming. In 2002 the Senate passed legislation that “ would raise average fuel efficiency standards to 36 mpg by 2015, a standard that would classify minivans and SUV's as passenger vehicles rather than light trucks” (Mayer).

In less than ten years the classification will have an effect on the people on the United States. This amount of time is crucial when we consider the state of ozone layer and the steady increase of global warming. Becoming aware

of the staggering usage of gasoline may help sway some Americans to switch to alternative methods of transportation; with the creation of the KYOTO treaty the hope was the all nations of the world could work together and make the right choice and consciously choose to support the health of the environment, the very source that sustains us.

To make changes we need to specifically " explore the complex interactions and mutual influences of philosophy, evolutionary biology, ethics--conceptual enterprises all--and our primary interactions and encounters with humans and nature in everyday life"(Donnelley). By switching to hybrid vehicles or alternative energy vehicles, making sure all vehicles on the road pass emissions tests, and discontinue driving oversized vehicles that take more fossil fuel and because more emissions to be released Americans can contribute to slowing global warming... There are people all over the world who have taken measures to switch to alternative energy.

" Green energy would seem to have a rosy future. Technological advances have helped to lower the cost of renewable power sources such as wind turbine generators, solar cells, small hydroelectric plants, and geothermal energy"(Bloemers, Magnomi & Peters, 2001, p. 15). Growing trends of alternative energy are popping up all over the world. In response to these suggestive trends, European utilities such as Eastern Group and Powergen, in the United Kingdom, and RWE and EON, in Germany, now offer green energy to distributors or direct to interested consumers.

Typically, the utility commits itself to produce with, or to buy from, renewable sources all of the energy that it sells through green contracts.

Customers thus know that they are paying for green production even if they are not directly connected to the source. Price premiums, often depending on the source, range from 2 percent to more than 30 percent above the utilities' normal tariffs. Yet in the United Kingdom and Germany, for example, less than 1 percent of electricity customers have chosen the green option.

(Bloemers, Magnomi & Peters, 2001, p. 15) In the United States “ Consumers in several states have the option of selecting their choice of generation companies. Although the contract path of electricity does not remotely match the actual electron path from generators to consumers, it is possible to “ select” alternate generation technologies such as biomass, solar, or wind. (Allenby & Unger, 2001, p. 22) In California, the Sacramento Municipal Utility District runs a solar power program and “ has enjoyed exceptional popularity.

This program equips the roofs of houses with solar cells that essentially turn these homes into " mini power-plants" by converting sunlight into electricity. The system does have several disadvantages, such as the high expenses of building a solar power station and the unreliable nature of sunlight” (Woloski, 2006). Some speculate that “ American conservatives tend not to take global warming seriously and fail to see why those who do find the U. S. unwillingness to tax energy infuriating. This perhaps more than any other act cemented in the mind of many Europeans the image of George Bush as a self-serving unilateralist” (Fukuyama 143).

Although the environment has not been a factor regularly addressed by the Bush administration there are huge American corporations, such as “ Boeing,

IBM, John Hancock and Whirlpool — (who) have publicly endorsed the notion that climate change is real by joining a business council organized by the Pew Center on Global Climate Change”(Lynch). The Pew Center is an international organization that brings together business leaders, scientists, policy makers and other experts to address controversial issues (“ Working together because”).

The idea behind this thinking can in fact be construed as a financial investment. “ A clear sign that climate concerns have moved into the financial mainstream is the growing activism of institutional shareholders. Over the past few years, investors have become increasingly worried about insufficient disclosure about the risks companies face from global warming. Under existing regulations, publicly traded companies are required to disclose to investors any information that could have a " material" impact on their financial results.

There are no additional requirements governing climate-change issues. A changing climate threatens companies throughout the economy with costs from future regulations, the physical effects of a changing landscape, even the danger of massive lawsuits”(Lynch). Although the reasons for supporting the fight against global warming by American corporations are may be financially based, these corporations are large enough that collectively they can make a huge impact and ideally smaller companies will follow in their footsteps.

Using alternative energy is a growing trend, however, “ alternative sources of energy are more expensive than traditional energy production; after all,

traditional energy production is so popular because such methods currently allow the least amount of fuel to produce the most energy at the cheapest prices. It is for this reason that the industry of alternative energy sources has not yet boomed" (Woloski, 2006). With the state of global warming increasing at a danger rate all people should make an effort to use less fossil fuel and create less pollution by switching to alternative energy sources.

Many people have the view that one person can not make a difference, this is not true. a fine balance needs to be found between human beings and nature. " Humans and nature" problems press in upon us from all sides. We are all becoming--or should be becoming--more cognizant of global warming; ecologically unsustainable cities and agricultural practices; the overuse of antibiotics in our health care systems and on our factory farms; the global crash of ocean fisheries; a human population and use of natural resources that is squeezing out other forms of life; the pollution and degradation of our air, soil, and water" (Donnelley).

Now all of these points need to be taken into consideration and changed as a whole, but the first step is for all people of the world, to accept theirresponsibilityto the environment and create a process that will improve the way they effect global warming, even if it begins with only one small change. References Allenby, B. , & Unger, D. (2001). InformationTechnologyImpacts on the U. S. Energy Demand Profile. In E-Vision 2000: Key Issues That Will Shape Our Energy Future: Analyses and Papers Prepared for the E-Vision 2000 Conference (pp. 7-27). Santa Monica, CA: Rand. Retrieved April 4, 2007, from Questia database: [http://www.](http://www.https://assignbuster.com/economics-of-climate-change-released-in-2007-insists/)

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