Global warming research papers example

Environment, Disaster



Global warming has been a major climatic concern for a couple of decades.

Many countries suffer from this menace either extremely or mildly. The effects of global warming is evident in agriculture, whereby crops do not thrive well as a result of it, and also affects the human population due to its numerous effects on human beings. This paper is going to focus on the cause as well as the effects of global warming and other fuel use in the UAE.

Causes of Global warming

There are many things that bring about global warming. They include; Emission of carbon dioxide gas by plants that use fossil fuels. Those plants that burn coal to generate energy, have been accountable for producing huge volumes of carbon dioxide gas, in the process of burning coal, to produce electricity (Gorgenländer, 2010). For instance in the united states, 40% of carbon dioxide emission to the atmosphere, is as a result of electricity production whereby, 93% of this emission relates to the burning of coal. Possession of electronic gadgets can also be attributed to be a source of pollution; since, most people having these devices, use energy produced through burning of coal.

Secondly, the use of gasoline in automotive, which brings about the emission of carbon dioxide, also leads to global warming. The latest demand for cars, and the increased desire for globally sourced commodities, accounts for 33% emission of carbon dioxide gas in the US. The increased demand for the manufactured goods means that, more energy will be required in the industrial processes, as well as, in transportation, thereby emitting CO2 gas. Deforestation for wood is another cause of global warming (Scheffran, 2012). The utilization of forests as a source of fuel is the main cause of

deforestation. It is advisable that trees should not be cut since they serve an important role of absorbing carbon dioxide gas in the atmosphere thereby reducing the levels of global warming. Additionally, increased usage of nitrogenous fertilizers in agriculture also leads to global warming. Usage of such compounds releases nitrogen gas that is 300 times more capable of trapping heat as compared to carbon dioxide gas.

Effects of global warming

Prevalence of killer storms

Global warming is attributed to increasing storms worldwide. The maximum speed of wind has been increasing, since 1981 as reported by scientists.

Crop failure

Unfavorable climate change due to global warming, may lead to drought and famine; since the climatic conditions won't favor crop production.

Loss of species

Climate change may threaten the survival of a given species, thereby leading to its extinction.

Coral reefs extinction

Increased temperatures, along with ocean acidification, causes a bleaching effect in corals. This corals serve as a habitat for marine species.

The need for sustainable (and non-polluting) energy sources The Geography and climate of UAE

This country is found at the extreme apex of Arabian Peninsula, on the right side. Towards its east lies Oman and Saudi Arabia to the South. Its size is

approximately, 83, 600 sq km, with Abudhabi occupying 87% of its land mass; in a terrain that is majorly covered by a desert. Sun is the most dominant weather condition apart from the blue skies and minimal rains. . Due to its arid conditions, only 3. 8% of this country is covered with forests. Research shows that UAE is generally hot with temperatures ranging from 25 degrees to 45 degrees.

Nuclear energy

This is that power which is generated from uranium atom. Production of this type of energy usually involves two processes namely; nuclear fusion and fission. Nuclear fusion is whereby several atoms combine to form a larger atom that produces energy. Nuclear fission on the other hand is whereby the atoms are split to produce energy. Solar energy has a lot of advantages that include the fact that it is the most efficient source of energy. Nuclear energy is may lead to the production of a lot toxic waste, but it does not lead to CO2 emissions.

On the other hand, nuclear energy also has some limitations. It is usually risky to use nuclear energy because it may lead to fatal accidents such as the Chernobyl. Nuclear radiation, proliferation, and environmental degradation in the process of mining uranium, are major hazard associated with nuclear energy.

Bio fuels

Plants and other biodegradable matter are usually used in this case to produce energy. This is because; they capture and store sunlight energy in the process of their growth. These plants can; either be burned to generate

electricity, fermented to ethanol that is used in automotives, converted to methane gas, that can be used in turbines; through bacterial digestion or may be gasified through special heating.

The use of biofuels has a number of advantages that include the use of biofuels in auto motives helps reduce pollution that may be attributable to global warming. In addition, if correct procedures are followed in production of biomass energy, there will be negligible or no harmful emissions. The disadvantages, on the other hand include the fact that burning trees with the aim of generating bio fuels, may lead to global warming (Häder, and Lebert, 2005). This is due to the fact that bio fuels burning leads to the emission of carbon dioxide gases and also as a result of deforestation.

Solar energy

A solar heating panel is a black surface that absorbs heat from the sun and further converts it to energy, which is referred to as solar energy. Solar energy has the most advantages compared to the other sources of energy. To start with, it is pollution free. Additionally, solar energy is readily available from the sun, and it is also easy to install (Rifkin, 2011). However, solar energy is fully dependent on weather conditions, which makes it not always available.

Nuclear energy

Argument for its use in UAE.

Currently, there is no use of nuclear energy in UAE until 2017, since the construction of nuclear reactors is still underway. The country expects to be fully powered with this type of energy by 2020.

Arguments against its use.

Since UAE is well endowed with oil, it will not use nuclear power in huge amounts, because of the existence of the fuel oil which tends to be economical.

Bio fuels

Arguments for its use.

UAE burns plastic bags to produce biofuels, given that it is an arid area where its weather conditions don't favor crops to thrive.

Arguments against its use.

The government has put measures in place to ban the use of biofuels since camels end up swallowing the burned plastics, leading to their deaths.

Solar Energy

Arguments for its use.

Since UAE's climate is favorable for use of solar energy. Relevant ministries have decided to take advantage of solar energy, in that, they prefer using solar energy to pump ground water.

Arguments against its use

Conclusion

In conclusion, it is evident that global warming is an issue of major concern due to its adverse effects on agriculture such that; crops may not thrive well and may also lead to extinction of various species. The effect is also evident in human beings, in that, the harsh climatic conditions as a result of this menace may significantly affect their health. Therefore, it is recommended

that people should focus on the use of sustainable sources of energy that are pollution free. Such sources may include; Biofuels, solar panels and nuclear energy.

References

Gorgenländer, V. (2010). A strategic analysis of the construction industry in the United ArabEmirates: Opportunities and threats in the construction business. Hamburg: DiplomicaVerl.

Scheffran, J. (2012). Climate change, human security and violent conflict: Challenges forsocietal stability. Berlin: Springer.

Häder, D.-P., Hemmersbach, R., & Lebert, M. (2005). Gravity and the behavior of unicellularorganisms. New York, NY: Cambridge University Press Rifkin, J. (2011). The third industrial revolution: How lateral power is transforming energy, theeconomy, and the world. New York: Palgrave Macmillan.

Arab Energy Conference, Organization of Arab Petroleum Exporting
Countries., & Arab Fundfor Economic and Social Development.

(1980). Energy in the Arab world: Proceedingsof the First Arab Energy
Conference, March 4-8, 1979, Abu Dhabi, U. A. E. Kuwait: TheOrganization.

Solanki, P. S., & Glasgow Caledonian University, (2011). Demand side
management strategies regulate electricity in Oman.