

# GRADUATE SUCCESS ATTRIBUTES (UHMT1112-SECTION 9)

### TASK 2

## ESSAY ENERGY CRISIS

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### **Energy Crisis**

Energy is the ability to be active that exists and drives everywhere on our Earth. It can be many forms such as chemical, kinetic, nuclear, thermal and electrical. In our lives, we always need, or in other words, we cannot sustain our lives without energy because it is essential to support and continue our daily activities. As the energy comes from the environment, its supply is limited to us and this is the reason why we should use energy wisely. However, the energy crisis occurs in many countries around the world. An energy crisis is thought to occur when the muscle energy consumption exceeds its energy supply (Amir Minerbi and Simon Vulfsons, 2018). This issue has attracted attention and being spotted by the government in most of countries nowadays.

First and foremost, the cause of the energy crisis is energy overconsumption. This happens because the population growth of people in the world has increased gradually which is the main reason for the higher demand of people for energy resources. People will require various energy resources to maintain their lives in many aspects. For instance, people need to consume energy for food, transportation, and farming. Almost all food system activities depend on energy, which is currently mainly provided in the form of fossil fuels (Henk Westhoek, John Ingram, Siemen van Berkum, Leyla Ozay, Maarten Hajer, 2016). Once the demands of energy resources go up, definitely the people will consume more natural resources to fulfill their daily needs. The energy resources will be drained if the consumption of human keeps increasing over time.

The second cause of the energy crisis is the increase in energy waste. Most people nowadays are not emphasizing the importance of energy-saving as they always consume energy more than their needs. Take for example, people always switch on the lights in their house despite it is not necessary for them. They always bear in mind that their consumption of energy is light so they will think that their actions will not contribute too much to energy consumption. It is also a fact that they do not realize the importance and get not enough knowledge for energy conservation because they are less concerned about this issue. Residential, industrial and business areas produce solid wastes such as waste developed during construction work, biowastes from farming, horticulture cultivation lands, deforestation, forest-related activities, hazardous wastes from battery sources, paints, tints, chemical solvents, bleaching agents and pesticides

used in the agriculture lands (Charles Rajesh Kumar. J, Mary Arunsi. B, Jenova. R and M. A. Majid, 2019). Thus, the ignorance of people about energy preservation can make the problem of energy wastage additional serious.

Thirdly, aging and poor infrastructure for energy generating is a cause of the energy crisis. It is due to the old equipment usually make the production of energy insufficient as the infrastructure has breakdown regularly. The outdated infrastructure that using by energy production companies will limit the energy production too. According to Energy News, as power generation technology continues to evolve, it is crucial that the energy distribution and generating facilities stay suitable fit for purpose and planned upgrades provide a prime opportunity to attain this (Energy News, 2020). The problem of energy shortage will be confronted if the situation still not improving by energy production firms through upgrading or replacing the aging equipment. In addition, resource mismanagement also gives impacts to the energy crisis. This can be shown in the attitudes of humans in managing natural resources like land, water, petroleum and ores. There are many firms that neglect their responsibilities to consume energy resources in developing certain projects because they will regard the company revenue as an important element in order to achieve their business targets, which is intended to get maximum profits.

Besides, wars between countries is a factor of the energy crisis. When the wars or skirmishes break out among some countries, for sure the shortage of energy supplies will occur because many energy resources will be consumed during the battles. As a result, huge energy nuclear and oil will be required to produce powerful nuclear weapons, military vehicles, aircrafts and vessels that can give higher possibilities in a war victory. This event has happened in some countries which are Vietnam, Rwanda, the USA and Japan. The destruction of the wars also affects the energy generating as the facilities and environment are damaged widely. Thus, the energy crisis can be said inevitably in case the wars among countries happen frequently. Let us reaffirm our commitment to protect the environment from the impacts of war, and to avoid future conflicts over natural resources (Karl Mathiesen, 2014).

Next, natural disasters that are happened will create an interruption for energy supplies. There are critical accidents that we cannot avoid from happening like floods, tsunamis, the eruption of volcanoes and earthquakes that will lead to happen the

reduction of energy supplies. Natural disasters bring the difference between demand and supply of energy in society. So, this situation will make a huge disparity in energy demand and supply as energy production is inadequate. "The central argument to be created is that vulnerability is, or should be, the key thought for disaster scholarship and reduction" (McENTIRE, 2001).

For the possible constructive proposals, people can do the decision to use energy-sufficient products instead of the aging products which are consuming more energy. People can prefer to replace traditional bulbs or lights with LED lights that can contribute to saving energy. As compared to incandescent light bulbs, fluorescent and LED technologies can reduce life-cycle Green House Gas (GHG) emissions by 60-85% along with environmental and resource co-benefits in all impact categories considered (Sangwon Suh, Joseph D. Bergesen, Thomas Gibon, Edgar G. Hertwich, Michael Taptich, 2017). The energy infrastructure and transport vehicles should be improving to encourage less energy consumption in the society like form the smart grid solutions for residential and commercial purposes. Some countries have policies to promote electric vehicles as an alternative to reduce and limit fossil fuel consumption (Cruz-Lovera, Carmen de la, Alberto-Jesús Perea-Moreno, José-Luis de la Cruz-Fernández, José Antonio Alvarez-Bermejo and Francisco Manzano-Agugliaro, 2017). Through this, the consumption of energy will be alleviated and the shortage of energy can be avoidable.

Furthermore, the way to apply renewable power resources in life can reduce the high usage of energy. This is because renewable resources are convenient and sustainable compared to the natural resources that are non-renewable. The renewable energy resources include solar energy, wind energy, biomass, hydropower and steam will not run out and they can generate and operate continuously without the source like fuel which creates more energy consumption. Engineers and labourers are working within the desert under the scorching sun to complete the boundary wall, with authorities keen to start generating solar electricity by November (NDTV, 2014). Some renewable technologies, such as wind and ocean thermal, use solar energy after it has been absorbed on the earth and converted to the other forms (Phebe Asantewaa Owusu and Samuel Asumadu-Sarkodie, 2016). Once the renewable energy technologies being used, the demand for natural resources definitely will be dropped which can help to save more energy, especially for industrials.

Moreover, government policies can assist to prevent the energy crisis by spreading information about the importance of energy preservation and promoting the public to use green energy which is more efficient in energy-consuming. The government can also do more investments to advance environmental research. For example, the government can focus on better and innovative research for the development of buildings and infrastructures to minimise energy consumption. The method to advocate the public in emphasizing the 3R (Reduce, Reuse and Recycle) program and reducing dependence on non-biodegradable items like plastic bags, polystyrene and industrial toxic chemicals can aid to reduce energy consumption. For example, the Kawasaki Eco-Town "aims primarily for effective utilization of residential, commercial and industrial wastes generated in the city and recycling these into raw materials that can be utilized by industries situated in the city (for example, cement and iron and steelworks)" (Van Berkel, R., Fujita, T., Hashimoto, S. and Geng, Y., 2009).

Other than that, energy audits should be implemented by the people either residential homes or commercial buildings through professionals. According to Energy Commission, energy audit was defined as a process which is very much central for conducting an energy management project or in general an energy audit is a study conducted to identify where, when and how much energy is being used in the business and how to reduce the cost of energy for the business (Electrical Energy Audit Guidelines for Building, 2016). The result of carrying out the energy audit can assist us to realize and identify which parts or areas of our home or business building have more energy waste. From this, we can know and try to take some effective actions to reduce energy usage to avoid energy overconsumption. The clear energy audit done by professionals may bring security to our energy supplies as it can control the energy flow well. Consequently, the problem of excessive energy loss is prevented and energy efficiency can be attained.

The purpose of choosing this topic is to intend to disseminate the information on energy resources that include the factors of the energy crisis and the feasible solutions which might alleviate this issue. I feel there are most people these days have not concern about the environmental crisis extremely and still have many people unable to spend the energy resources wisely. If those people still consuming energy without awareness, our environment even our planet will definitely overcome with destruction

in the future. Also, this topic can remind the public to take priority and encourage them to be more responsible to "look after" our environment by avoiding the actions of squandering our natural resources, which are limited.

A further purpose to prefer this topic is to encourage the public to be grateful and appreciate the energy resources they are having. This is due to the natural resources that exist on our Earth are valuable and everyone should not take granted when using energy. There are some natural resources such as petroleum and ores need to utilize a lot of money and manpower in carrying on the collecting process. As a result, many mining trucks, tools and workers are required in the mining process. Through this, we should use the energy resources rationally as we are unable to get them easily.

In conclusion, the energy crisis is a major issue that the public should conscious of. This bad circumstance will bring huge impacts to each of us as we cannot survive without energy. The alternatives to prevent an energy crisis are crucial so the government and other agencies like NGO must pay more effort to deal with this situation. Everyone needs to play their roles and implement their duties in caring for the environment too in order to create a safe and healthy environment.

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