Environment – energy resources



Part 1 Introduction What is your first thought of energy resources? Is it something that got to do with electricity? First of all, I would say that the energy system is not very sustainable because it can either be sustainable, or not sustainable. The energy resources used by mankind have grown dramatically and it is affecting the environment by leaving negative impact to the environment. Not only the government sector, but also the private sectors that are aware of the environment are trying to find alternatives to sustainable development to prevent the environment from being destroyed.

Fossil FuelsThe energy resources that are most commonly use by mankind is fossil fuels, which consist of oil, coal, and natural gas. Fossil fuels are the remains of organisms that were preserved and altered as a result of geologic forces. It is also clearly seen that industrialized countries depend on fossil fuels a lot. What we human beings do not really care of is that fossil fuels will exhaust one day. Even though we know that fossil fuels are non-renewable energy, we are still using it widely.

Such examples are leaving the air-conditioner and lights on when no one's at home, and leave the car running while waiting. Fossil fuels are providing energy via combustion, however, it releases emission that are toxic which would lead to change in climate and pollution in the air. Elliott D. In his 2003 book Energy, Society and Environment, says: Burning these fuels in power stations to generate electricity, or in homes to provide heat, or in car engines to provide transport, generates a range of harmful gases and others wastes, and also, inevitably, generates carbon dioxide, a gas which is thought to play a key role in the green house 'global warming' effect.

Possible Effects on Hospitality and Tourism in MalaysiaThe widely usage of

fossil fuels all over the world which affect the environment would affect the hospitality and tourism industry. One of the causes is by burning fossil fuels that would release acid emissions will affect the air quality in the particular country.

According to David Elliott, 2003, the air quality in many countries is getting worst and it will affect human beings health. It is no doubt that human beings will remain as human beings, and they will be very concern about their health. Therefore, the air quality would affect the percentage of tourist travelling around. For example, every year, Peninsular Malaysia and Sumatera, Indonesia will face the same problem, which is haze.

During this period, everyone is advised to stay at home, and lessen their outdoor activities. In the year 1997 and 2005, Malaysia experienced the worst haze where government implement the usage of mask, and some schools are even closed. This is because the air is harmful to our eyes, lungs, skin, and even throat. If the haze continues, tourists wouldn't visit the particular country, such as Malaysia because they will expose themselves to sickness, and they wouldn't enjoy any trip because everywhere is hazy.

As the wide usage of fossil fuels trend continues, it would change the world's climate and resulting in floods, droughts and storm, and melting of ice caps would eventually affect the ecosystem and human life too. According to Mark Jaccard, 2005, a report by the UK Meteorological Office Hadley Centre, published in 1999, by the 2080s, northern South America and central southern Africa will lose their tropical forest and 290 million people will be infected by malaria, and 80 million people will be flooded each year due to

rising sea levels, which is an impact of no action were taken to tackle climate change. The impact of climate change is very huge as it could change the whole world. Sea-level would rise where flood would be everywhere, and temperatures would increase. Small island such as Maldives, a popular tourist destination, will be expose to sea-level rise. As the temperatures are increasing, winter tourism will be affected because snowfall would be less and skiing activities are limited, and could be dangerous too.

In Malaysia, climate change will result in higher temperature which will cause diseases, drought, and even floods in the city centre. The hospitality and tourism industry in Malaysia will be affected by natural disaster as results of fossil fuels burning. Three Ways of Malaysian Tourism Industry to Counter Effects of Fossil Fuels Burning To tackle the impacts of fossil fuels towards the environment and the hospitality and tourism industry, the usage of biofuels should be practice widely. Biofuels is much more environmentally friendly and it would preserve the environment because biofuels would not release any harmful gas such as sulphur and acid emissions.

Biofuels are fuels that are made from plant materials. Most biofuels now are obtained from fermentation of food products, such as corn kernels and sugar cane, and vegetable oils, such as soy and oil palm. However, there was a protest in using food products to produce biofuels. It was fully supported when a kind of plant named jatropha came in.

Jatropha is resistant to drought and pests, and it produces seeds that contain up to 40% oil, which can be used in a standard diesel engine and also processed into biomass to power electricity plants. The usage of biofuels is

environmentally friendly because biofuels are renewable, and they can offer environmental benefits such as lower emissions of carbon and sulphur compared with petroleum-based fuels. If lower emissions are to be released by biofuels, then the environment would be protected and no one will encounter any sickness because the air is not polluted by the fossil fuels toxic emissions. Although biofuels are more expensive than fossil fuels, it is better to spend money to protect our health, especially if we have families rather than spending money on fossil fuels which will pollute the environment.

Therefore, the Malaysian tourism industry should promote and encourage the government of Malaysia to use biofuels rather than the present fossil fuels such as petroleum based fuels. And by doing the promoting and encouragement, Malaysia will attract more tourists because Malaysia is practising to be environmentally sustainable to protect the environment, human beings life, and health as well. Besides that, the Malaysian tourism industry should provide and encourage more public transport that are using biofuels so that global warming can be prevented by lessening the amount of carbon monoxide released by vehicles. Another way to encounter the negative impact of fossil fuels is to promote renewable energy.

Renewable energy is naturally replenished and cannot be used up because renewable energy relies on the free flow of nature, especially sun. The renewable energies that can be use are hydroelectric power, geothermal power, wind power, tidal power, solar energy, and biomass. Renewable energies can be use over and over again, and no matter how much we use it,

it would still be around us. Jaccard M, in his 2005 book Sustainable Fossil Fuels.

The Unusual Suspect in the Quest for Clean and Enduring Energy, says: An energy supply that protects the climate and the environment must necessarily be based on renewable, not fossil or nuclear energy, which means replacing the current system with more efficient energy technology using renewable resources. Therefore, if renewable energies are to be use, we will have sufficient fuels throughout the whole life because it is sustainable. The usage of renewable energy will reduce the usage of fossil fuels to provide energy. Therefore, it would reduce our dependence on oil sources and nuclear energy where no harmful carbon dioxide or sulphur emissions are produces where it would improve air quality and visibility due to decreased burning of fossil fuels. When air quality is maintained, human beings health would not be affected, and even the environment would not be affected. This would result in better tourism industry in every country as it is safe and comfortable to stay out.

In Malaysia, we should get involve with renewable energy organization such as World Renewable Energy Network (WREN) to get involved in any renewable energy updates and apply using renewable energy for all hotel establishment. This step will promote Malaysia as an environmentally friendly country and concern about having safe environment. Besides that, reducing the consumption of energy by using it efficiently will be able to protect the environment. Jaccard M, in his 2005 book Sustainable Fossil Fuels. The Unusual Suspect in the Quest for Clean and Enduring Energy, says: Fossil fuels are a finite resource that we are using up. They cannot be https://assignbuster.com/environment-energy-resources/

part of a sustainable energy system, or can they? Should we conserve or generate more fossil fuels? If we conserve the consumption of energy resources, then it would reduce, but if we generate more, the mankind would just use more and more and would hurt the environment.

There are pros and cons for conserving and generating more fossil fuels, but in my opinion, we should conserve it rather than generating more so that people would realise and be aware of the environment. Not all the energy in the fuels is used into useful energy because heat is produced when burning occurs. If energy resources is to be generate more than what is used to be generated now, then the amount of heat released into the environment would increase. The result of this is global warming. Therefore, if consumption of energy resources is used efficiently and reduced, global warming will not occur and climate change would not have an impact on the tourism industry.

Tourists can still go for their winter holiday and enjoy their skiing. Besides that, the ice in the North Pole would not melt, and result in the sea-level to rise. In Malaysia, the weather will be as hot as past few years, which is moderate which is about 28? C-30? C, rather that 35? C that we are experiencing now, which is very hot because even if we walk under the hot sun for 200 metres, we can be sweating a lot. Therefore, the Malaysian tourism industry should encourage all hotel establishments to have limited consumption of energy resources.

Besides that, the Malaysian tourism industry should also promote short-haul holiday rather that long-haul holidays. Part 2 Impact of Putrajaya Marriott

Hotel on the EnvironmentThe establishment that I chose is Putrajaya Marriott Hotel which is located in Putrajaya. Building a hotel would definitely have an impact towards the environment unless if the hotel takes specific measurements to reduce pollution from the beginning to the end, which is from the first step of designing and building the hotel until the furniture placed in the hotel, and even the decorations in the hotel. Hotel is known for providing accommodation and food and beverages, and other facilities and services such as spa and fitness centre. That means all hotels are not necessary to be equipped with air-conditioner. Air-conditioner, heavenly bed, and individual temperature control is consider as luxury in the guest's room.

The usage of air-conditioner is through burning fossil fuels to generate electricity and cooling. In Selangor, energy is obtained by burning of coals. Enger and Smith, in their 2004 book, Environmental Science. A Study of Interrelationship, s, says: Coal is the world's most abundant fossil fuel, but it supplies only about 24% of the energy used in the world.

Coals are classified into three categories which are lignite, bituminous, and anthracite. Coals are formed when plant material are being buried under layers of sediment, and to get it, mining is required. The impact of mining is huge as it destroys the land because mining remove the topsoil and overburden. Besides just destroying the land, coal mining is harmful to health and safety because it is one of the most dangerous jobs in the world. Miners would suffer black lung disease which results in bad respiratory condition.

Coal mining and transport generate large amounts of dust which causes air pollution. Besides just coal mining and transport, as I have mentioned above, coal burning will be responsible for air pollution as well, and, Enger and Smith, in their 2004 book, Environmental Science. A Study of Interrelationship, s, says: The burning of coal for electric generation is the prime source of this type of pollution. This is because sulphur emissions are produce when coal burning is practiced. Besides just air pollution, coal burning will cause acid pollution as well where when sulphur oxides that are released by coal burning to the atmosphere causes acid-forming particles to accumulate.

Other than polluting the air, the release of carbon dioxide from the burning of coal is increasing in a fast pace. The increasing amounts of carbon dioxide in the atmosphere will have an impact in global warming. Burning of coal do not only release sulphur emissions and acid emissions, but it also release heat and carbon dioxide. Burning uses up oxygen and flames, and it releases carbon dioxide and heat.

Not only coal burning release carbon dioxide to the atmosphere, but also oil and natural gas are all burned to provide heat and electricity for industrial processes, home heating, and cooking. We all know that plantations use carbon dioxide for photosynthesis process and produces oxygen for human beings to breathe. However, cutting down of trees in this modern society is increasing and it results in lesser ability to remove carbon dioxide from the atmosphere. Therefore, the combination of fossil fuels burning and deforestation has increase the amount of carbon dioxide in the atmosphere, which causes global warming and climate change. Besides that,

chlorofluorocarbons (CFCs) which are widely used as refrigerant gases in refrigerators and air conditioners, as propellants in aerosol containers, as expanders in foam products, and as cleaning solvents are harmful to the earth's atmosphere.

Almost every inch of the hotel, including the toilet, except the outdoor seating of the restaurant in Putrajaya Marriott Hotel is using air conditioners. Air conditioners are releasing CFCs to the air and would lead to global warming. Three Suggestions for Putrajaya Marriott Hotel to be Environmental Friendly ImmediatelyThe first step that Putrajaya Marriott Hotel can do to make them more environmentally friendly is plant more trees around the hotel, and increase the number of pot plants in the public area and guest rooms. By practising planting green in the establishment, it shows that the establishment is trying to save the environment because they are planting and preserving the nature. When more plants are planted around the hotel and also in the hotel, it will suck up carbon dioxide and release more oxygen which is needed for human beings.

Although buying the plants, and gardening inside and outside of the hotel will need a huge investment and maintenance, it is worth it because the hotel is conserving nature and being environmentally friendly. Therefore, by implementing this conservation, the hotel will be respected and environmentally friendly guests would rather stay in Putrajaya Marriott Hotel rather than other hotels because Putrajaya Marriott Hotel are aware of the impact of emissions of carbon dioxide through burning of fossil fuels to the environment. The more plants that are grown and maintained by Putrajaya Marriott Hotel, the lesser carbon dioxide will be in the atmosphere, and more

oxygen are produce to the atmosphere, and therefore result in positive impact to the environment, which are avoiding global warming to take place on earth. Another step that Putrajaya Marriott Hotel can practise to make them more environmentally friendly is installing fans around the hotel, including guests' rooms.

By installing fans, customer will be able to choose whether he or she wants to use the air conditioner or the fan. If the guest is environmentally friendly, he or she would use the fan instead of air conditioner because air conditioner releases CFCs which are harmful to the air, and causes global warming. Besides just installing fans, the hotel should produce a card or notice in every room informing guests about fossil fuels and environment, and if they want to reduce the burning of fossil fuels and reduce the emissions of carbon dioxide and CFCs into the air, they are advised and encouraged to turn on the fan instead of the air conditioner. The management of Putrajaya Marriott Hotel should also inform guests that it is not advisable to leave the lights, television, air conditioner and any other electrical appliance on when there is nobody in the room because this would waste electricity which results in burning more fossil fuels to generate electricity. Therefore, by installing fans and providing information to the guests will make the hotel well known for their environmentally friendly intention.

Putrajaya Marriott Hotel can be more environmentally friendly immediately by encouraging their guests to use the public transports, which are buses and trains to travel to places such as shopping complexes, city centre, and other tourist spot. Instead of providing limousine from airport to hotel and vice versa, Putrajaya Marriott Hotel should encourage their guests to take

the KLIA Transit, or even the LCCT bus. The cost of taking public transport is cheaper than taking a limousine and it protect the environment especially the air quality because the amount of carbon monoxide released to the air would be lesser. Putrajaya Marriott Hotel should organise a daily or weekly scheduled trips to some tourist spot and limit the minimum number of participants, such as 20 or 30.

The trips to the tourist spot will only work out if the minimum number of participants is reached because Putrajaya Marriott Hotel will be using buses to transport their guests to the tourist spot instead of transporting them in smaller amount by using limousine or cab. The implementation of bus trips and the minimum number of participants is not only more environmentally friendly, but it saves cost, energy and ime as well. Besides providing public transportation to encourage guests to travel with public transport, Putrajaya Marriott Hotel should increase the price of rental for their limousine. By practising this, guests would rather take public transport because it is cheaper, and therefore result in lesser emissions of toxic gas, and burning of fossil fuels.

Three Suggestions for Putrajaya Marriott Hotel to be more Environmentally Sustainable On 29th of August, 2008, a new budgetary plan was announced in Malaysia. One of the main highlights is that there will be tax exemptions for renewable energy and energy efficient items including hybrid cars. Yap L. K.

in his article A People, Business Friendly Budget, says According to Dato' Seri Abdullah bin Haji Ahmad Badawi, our Prime Minister, "The Government was formulating a national energy plan to ensure long-term sustainability of energy supply. Tax incentives were offered for solar heating equipment and energy efficient electrical appliances. "Therefore, with this plan, Putrajaya Marriott Hotel should take the initiative to install photovoltaic (PV) cell, which is a bimetallic unit that allows conversion of sunlight to electricity for the hotel operations. Especially for the water heater, the hotel should have use solar system to generate heat to heat up the water instead of using electricity. Solar power in Malaysia can always be obtain because the sun shines 365 days a year in Malaysia.

However, the sun does not necessarily be shining always because at some days because at some days, it would be raining. Therefore, fossil fuels can be use as backup energy, but the hotel should use solar power as the main electricity generator. The street lights on the way up to Genting Highlands are using solar power to generate electricity for the street lights although Genting Highlands does not get sun shine 365 days a year. Besides that, the government in Malaysia is offering tax incentives for solar heating equipment, so, why shouldn't Putrajaya Marriott Hotel install photovoltaic cell to use solar power to generate electricity? If Putrajaya Marriott Hotel uses solar power, they would be more environmentally sustainable because they are using renewable energy which will not exhaust one day. Jaccard M, in his 2005 book Sustainable Fossil Fuels.

The Unusual Suspect in the Quest for Clean and Enduring Energy, says:

There was a saying in 1980, 'The oil companies cannot get between us and the sun's rays, but they will keep trying. Besides just using solar power,

Putrajaya Marriott Hotel should use more, and promote using renewable

energy to be more environmentally sustainable. This can be done by being part of such environmentally friendly and environmentally concerned society or organizations, such as International Geothermal Association, World Renewable Energy Network (WREN), Asian and Pacific Centre for Transfer of Technology (APCTT), Asian Institution of Technology, and Asian Institute of Technology. Besides being a member in these organizations, Putrajaya Marriott Hotel should organise events or any meetings and conventions that are to be held by the renewable energy organization, whether they are one of a member of the particular organization or not. By this, Putrajaya Marriott Hotel will get updates from all the organization and will be one of the establishments that are concern of the sustainability of energy system.

Besides just promoting the usage of renewable energy and besides just using solar power as one of the renewable energy, Putrajaya Marriott Hotel should consider other renewable energy as well such as wind power, hydroelectric power, and geothermal power. Jaccard M, in his 2005 book Sustainable Fossil Fuels. The Unusual Suspect in the Quest for Clean and Enduring Energy, says: Initial cost of renewable energy might be high; its operating costs would be stable and predictable, reflecting the continuous and free energy from the sun and other natural sources. Another way that Putrajaya Marriott hotel can put into practice to be more environmentally sustainable in the future is reduce the amount of energy consumption by being efficient in using energy. By reducing the energy consumption, it will reduce the burning of fossil fuels and therefore, global warming and climate change will not occur.

To reduce energy consumption, Putrajaya Marriott Hotel should focus on the usage of air conditioners, lights, and detergent. Like many other hotels are practising, they are putting up notices on cards in every room that detergent is one of the cause of global warming, therefore, if guest wants to protect the environment, they can choose not to wash their towels by hanging over the bar. Besides informing the guest about detergent, the hotel should inform about the usage of air conditioners in the hotel, where guest should not leave their key card in the room and not turning off the air conditioners and lights. Instead, they should switch off all the lights and air conditioner whenever they leave the room because it will result in zero number of fossil fuels being burn when no one is in the guest room, and no CFCs are release to the air because the air conditioner is not operating. Besides just informing the guest to be environmentally friendly and environmentally sustainable, the hotel should as well install fans in their coffee house or even consider it to be open air.

By then, the usage of air conditioner will be reduced and energy consumption in the hotel will decrease. Part 3 Based on the suggestions that were proposed to Putrajaya Marriott Hotel to be more environmentally sustainable, it would likely to counter Malaysian tourism industry that was caused by the usage of fossil fuels. The more active Putrajaya Marriott Hotel in being environmentally friendly, the more environmentally sustainable they would be. The suggestion of reducing the energy consumption of energy in the establishment by practising the method of providing information to guests will be useful because we are conserving the burning of fossil fuels then. Putrajaya Marriott Hotel will not only inform the guest about ways to

conserve energy by switching off the air conditioners and lights when they are not in the room, but the hotel will also practise to be environmentally sustainable by installing fans in every guests' rooms and even some of their public areas. By these practises, the hotel will therefore does not need energy to be generated by the burning of fossil fuels, and lesser heat would be produced because fossil fuels are not burnt at a big amount.

As I had mentioned above, the heat generated from the burning of fossil fuels will cause global warming and climate change. And if these problems were to be avoided, then we still can travel for our winter holidays and enjoy our skiing because snowfalls are sufficient and it is cold enough and safer for skiing. Besides that, Maldives will not be submerged by the sea because the ice in the North Pole will stay as it is where sea-level will not rise. And not forgetting, Malaysia's climate would be something like in the 1990s, and not as hot as what we are experiencing now, where temperature can reach up to 35? C. Therefore, tourists who travel to Malaysia will not feel reluctant to walk under the bright hot sun where their cheeks will turn bright pink. Besides that, it will reduce the percentage of sickness, drought and floods due to hot weather.

On the other hand, the proposal to use renewable energy in the establishment will benefit humans' health because using renewable energy will not pollute the air. The proposal for Putrajaya Marriott Hotel to make use of the solar energy in Malaysia is sufficient to be environmentally sustainable. It will prove to other countries that Malaysia is being environmentally friendly and environmentally sustainable in order to protect the environment. Jaccard M, in his 2005 book Sustainable Fossil Fuels. The

Unusual Suspect in the Quest for Clean and Enduring Energy, says: An energy supply that protects the climate and the environment must necessarily be based on renewable, not fossil fuels or nuclear energy, which means replacing the current system with more efficient energy technology using renewable resources.

Therefore, by making use of the solar power that is available in Malaysia is able to promote Malaysia as an environmentally friendly country. This is because by using solar energy instead of fossil fuels, harmful gases such as carbon dioxide and sulphur emissions will not be produced, and this will result in better air quality. In addition, by using solar power as one of our main renewable energy, it will make Malaysia more environmentally sustainable. Moreover, by using renewable energy it will improve the image of Putrajaya Marriott Hotel, and also Malaysia because it would add points towards a high Green Building rating.

And by improving our image, it will attract more tourists to travel to Malaysia and have a stay in Putrajaya Marriott Hotel because tourists can be part of environmentally friendly because the hotel that they are staying in is one of the Green Buildings. Therefore, it will result not only towards the tourism industry, but also environment in terms of benefits. Bibliography: World Wide Web Page: Darvill, A. (30 August 2008). Energy Resources, [Online], England, Wester-super-Mare, Available from:

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