

It is imperative to mention that the role of renewable energy has been increasing over the years because scholars have recognized that other sources have numerous weaknesses. Additionally, the government may promote a use of solar modules by citizens if it provides subsidies or other significant benefits. Additionally, the approximate lifespan of a solar module is close to 25 years, and their efficiency is reduced every year. Statistics indicate that the UAE consumed 11,49% liquids, 10,44% gas, and 16,78% of the primary electricity it produced in 2008 (International Atomic Energy Agency (IAEA) par. For example, trough systems operate with a use of parabolic reflectors that are tilted, and power towers utilize flat mirrors (Palenzuela, Alarcon–Padilla, and Zaragoza 41). Qatar's energy consumption in 2012 consisted of 32,5% oil, 24% natural gas, 30% coal, 7% renewable, 7,1% hydroelectricity, and 4,9 percents were made up of nuclear power (QNB Group: Natural Gas to Outpace All Other Energy Sources Until 2035 par. Cooperation between Gulf countries is of utmost importance, and it should help to address the areas that are the most problematic at the moment (Atalay, Biermann, and Kalfagianni 206) It will be possible to develop a list of recommendations that may be considered by governments in Saudi Arabia, the United Arab Emirates (UAE), and Qatar. Total Energy Consumption It is noted that Saudi Arabia needed 231.6 bn kWh in 2012, but the number is always growing because the country is developing at rapid rates and the situation is not expected to change anytime soon. Gulf countries may invest in renewable energy sources to reduce CO<sub>2</sub> emission and address expected shortages, but a full transition is not reasonable at the moment. Electrical accessories are of utmost importance, and the need to have sufficient amounts of cables should not be disregarded. All three Gulf countries have access to these types of generators and have established long–term relationships with foreign enterprises that develop solar energy technologies. Jobs Dependant on Traditional Sources One of the problems that should be highlighted is that many companies are reliant on traditional sources of energy, and it is one of the primary factors that have facilitated the growth of the economy. The weakness is that these countries are consuming a statistically significant portion of the resources they extract, but they are not going to replenish. Moreover, relatively small modules that require less space are rather expensive, and it would be much more appropriate to utilize the ones that are cheaper because of such factors as overall lifespan. For instance, the average annual sum is close to 2027 kWh per square meter in the UAE and 1873 in Saudi Arabia (Aydemir 9). Similarly, the figure is close to 2008 in Qatar, but it will be nearly impossible to calculate the overall amount of solar power because of various factors (Assessment of Solar Power Potential in Qatar 6). Adoption of solar power technologies would be extremely beneficial to Gulf countries, and it will help to address most of the issues related to resource shortages. For example, Dubai is determined to invest in the largest solar power program, and the estimated cost is close to three billion (Chow par. Photovoltaic (PV) generators are capable of converting solar energy into electric charge thanks to semiconducting materials. Conclusion In summary, it is possible to state that numerous limitations that prevent the adoption of solar energy in Gulf countries are currently present. We will write a custom essay on your topic 809 writers online Technology and Investment The strategy related to the adoption of solar energy should be quite similar in all three countries. Types of Generators Concentrating solar power devices use mirrors to focus the available sun energy and transfer into steam that would help to move a turbine. Oil is one of the fastest growing industries in the UAE, and the situation is quite

similar in Saudi Arabia (Markus 152). This is just a sample You can get your custom paper by one of our expert writers Required Land The need to find unpopulated areas to introduce such plants is a tremendous problem. Overall, it is reasonable to keep track of latest developments and invest into research because new models are introduced quite often, and it is appropriate to consider all available options when implementing such projects. However, such techniques are still not as efficient as they should be. It is hard to argue with the fact that solar power has enormous potential that is not yet fully realized, but the current level of efficiency needs to be improved dramatically. The concentration of the sunlight allows generating enormous amounts of power. One of the limitations of this type of generators is that large areas are necessary, and several alternatives are currently available. Solar towers utilize the structure of buildings to collect the focused sunlight. Various types of mirrors are used to ensure that sun rays reach the target and increase the concentration. It is paramount to note that these generators have enormous potential because they do not take too much space, and the price of modules is frequently lowered. ESolar is a firm that focuses primarily on this type of generators and has been incredibly profitable over the years. The minimum time our certified writers need to deliver a 100% original paper Such companies as Google are interested in this approach and are willing to invest enormous funds into research. Moreover, the use of such strategies is justified because of the unique climate (Oxford Business Group 110). It is evident that other sources were also used, but percentages were rather insignificant and not listed. Such findings are not surprising and suggest that the region has suffered because of the lack of solar power technologies. Governments will have to provide citizens with many job spots to avoid stagnation or depression. These industries make up close to half of gross domestic product (GDP), and the country would not be able to function without such resources because of dependency on export. It is suggested that the yearly output will be lower because of various factors, and it is expected to be close to 211,5 kWh every year. It is reasonable to analyze the literature and reliable websites on this subject matter to get a better understanding of the current situation. It would be appropriate to collaborate with Talesun because it produces devices that are extremely cost-effective. Additionally, a monitoring system will be required to avoid possible complications and criminal activities. Therefore, a photovoltaic plant requires enormous investments and will be nearly impossible to build without the support of other organizations. The adoption of solar power is expected to be much easier in Saudi Arabia and the UAE because many companies on the territory are already experienced in this area. A lot of attention should be devoted to cables because shadowing may have a significant impact (Sick and Erge 27). On the other hand, Qatar required only 30.53 bn kWh in 2012 (Central Intelligence Agency (CIA) par. Energy Sources Saudi Arabia consumed the most oil in 2008 according to available data, and it was close to 56%. Solar plants do not require much labor, maintenance, and monitoring. Furthermore, the focus on solar power seems rather questionable at the moment because a country does not have other alternatives for development. The damage done to the workforce will be enormous, and it will be hard to recover if Qatar is determined to adopt solar power as the only source of energy. For instance, TP660P-235 is a model that requires 2519,4 square inches, and its power rating is 235W. Such figures are truly astounding, and it will be nearly impossible to make a transition from standard energy sources to solar power at the moment. Therefore, it would not be an easy task to come

up with an effective strategy because numerous internal and external factors must be taken into account. Many companies are willing to invest in solar energy because they acknowledge the importance of social responsibility. Nevertheless, the problem may be addressed with the introduction of new technologies in the future. However, such factors as the climate and shipment costs must be taken into account. It is necessary to mention that a photovoltaic farm is already present in Abu Dhabi. Therefore, it would be appropriate to analyze the way it utilizes latest technologies to produce energy. The approach is quite fascinating because it minimizes the weaknesses of each technique. A new factory would also require solar inverters. It is reasonable to utilize only the latest technologies in this case because their efficiency is much higher, and it will be easier to access required parts if it is necessary. The dissimilarity in numbers can be explained by the difference in the population and size of the territories. Natural gas made up 44% of required energy (Saudi Arabia Energy Report par. The situation has changed over the years because the country has focused on renewable energy due to the crisis and instability of oil prices. Therefore, unemployment rates are expected to be extremely high in case such firms are forced to go out of business. Therefore, Saudi Arabia will require 1.812.283.687 square kilometers. Currently, it uses two types of modules. A module with a capacity of 235W is worth around 183 dollars. It is also necessary to hire trained professionals that will mount the parts and monitor the whole process. Qatar is also determined to promote this approach, but it does not have access to such enormous resources. UAE used close to 93.28 bn in the same year. However, such figures are intriguing and should be analyzed. UAE will need 716.690.307, and 234.568.557 square m of free space will be necessary for Qatar. Also, it is necessary to understand that the amount of sunlight is dependent on the region. The level of inconsistency is the area that is the most problematic. The fact that many jobs are extremely dependent on standard sources of energy also should not be overlooked, and has an enormous impact on decision-making. However, limitations of this approach also should be considered. However, it is possible to state that these modules are quite expensive, and other options must be considered. Therefore, many jobs are dependent on these markets. It is necessary to mention that Qatar is also dependent on oil and gas. On the other hand, it is entirely possible that a different combination of modules would produce better results. 1). (Marcus 70). 1 hour! 1). 4). 25). 4). Remember!