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## Introduction

Abraham Lincoln once stated that whoever eats sausage and abides the law should avoid seeing how the two was made. Similarly, the same principle can be applied to several scientific principles that constitute environmental debates on policy today. The discussion encompasses the need to see the evolution of environmental knowledge being part of political conundrums that deserves a more substantial debate. It is not too late yet in re-evaluating the political basis of environmental policies and explanations pertaining to the possible elimination of harmful practices that have severe environmental implications towards preservation and protection of natural resources. The scientific community is undeniably on a continuous quest of finding the best alternative means of harvesting energy, but the political discourse often finds its way to regulate and conceal the substantial findings that are likely to improve the current environmental conditions. For whatever political reason, it is still uncertain, but one thing is clear that there are alternatives to conventional practices that will promote environmental protection. Solar energy is an example of alternative energy source that is both viable and profitable for preserving the earth’s natural resources and reducing negative effects on the environment.

## Culture and Political Ecology Overview

The field of political ecology encompasses an exploration of relations of power between nature and society (Walker 73) that are embedded in the myriad of social interests, knowledge, and institutions. In this field, power strategies are deployed to distract the unsustainable contemporary rationality and mobilize social actions to construct a more sustainable future intertwined with symbolic culture and material culture. The theoretical underpinnings of political ecology constitute political ethics and emancipatory thinking in renewing the meaning of sustainability. The underlying principles of political ecology were forged from the concepts of cultural ecology, ethno biology, and human geography that refer to the power relations between the environment and human intervention. In the advent of environmental revolution calling for an immediate intervention on the perceived environmental degradation caused by misappropriation of natural resources, the question of whether alternative such as solar power is indeed viable enough to sustain the society’s need for power sources and less harmful to the environment and be profitable at the same time.

## Solar Energy and the Scale of Culture and Political Ecology Involve

The current environmental crisis, the changing climate patterns led to the heightened concern on the environmental implications of dumping too much Carbon footprints the atmosphere was believed to be the culprit of problem (Nordhaus). Strong dependency in oil was pointed out as the main contributor to pollution from combustion of fossil fuels. This long cultural practice intensified by the industrial revolution ravaged the earth’s natural landscape due to extraction of the said fuel paired with globalization of industries resulting to a spike in demand for energy a viable source of energy. Oil and the massive energy it produces changed the lifestyle, culture, social organization, and behavior of the general society towards sustainability believing that oil alone is the key to progress (Kutscher). On the other hand, the by-products of the social utilization of conventional energy sources took its toll on the earth’s natural resources, which manifests in several environmental changes, in climate, ecosystem, and increased vulnerability of natural resources and animal species towards extinction.
Alternative models was introduced including social-technological hybrids that will replace the current situation of social dependency on oil and divert such dependency on renewable energy sources such as solar power (Ahmend). The proposed model will have to go a long way to replace the conventional social attitude towards sustainability because of the long established a culture that highly depends on oil despite the perceived the known and scientifically proven knowledge of Carbon footprint’s effect to the environment (Sperling and Cannon). Given the tag-of-war like game that sustainability plays on the society, the need for a balanced power is paramount in ensuring a more positive outcome for all stakeholders and more importantly to the environment. The proposed use of solar energy have not yet reached the mammoth status of fossil fuel as a primary source of energy, but certain political agendas are being considered as a head start in deploying the initiative to encourage viability and profitability of the said option.
In 1975 the Energy Conservation Building Ordinance of ECBO was implemented in Davis, California, which requires that building residential and commercial infrastructure should face the north-south orientation to optimize solar power in lighting establishments and home. In addition, the ordinance also encourages installation of solar space from which domestic water heating can be done (Leonard-Barton). City brochures refer to the project as the first energy conservation building code in the entire United States. The effectiveness of the approach was studied using the City’s neighboring woodlands as a control variable in determining weather effects, changes in social routines, energy price, and social attitude towards sustainability. During the first 41 months of the project, the study reveals a 15% reduction on electricity consumption (Dietz and Vine). The reduction was attributed to the building code features, energy conservation behaviors demonstrated by the residents, and structural features. In comparison to the neighboring cities, Davis poses a significant 60% decrease in electricity consumption after the full implementation of ECBO (Hammond et al.).
Unsurprisingly, the results of the study has revealed that the adoption of the ECBO was a popular move that even conservative legislators unanimously voted for the continued implementation of the ordinance citing all the advantages of an appropriately drawn energy option (Fitch). However, the struggle for nationwide implementation was caused by the question of what appropriately drawn means. This is the dilemma facing the political side of energy conservation initiative that is still being debated today. The lack of political backbone to support the wide implementation of the similar projects pushed the solar energy option to the sides. In addition, the current culture that highly depends on electricity disrupts the possibility for social change where social adjustments are difficult to attain due to insinuation of ideology that the progress of society depends on how much oil one country can afford or produce. There are several factors that involve in the idea of solar power as sustainable source of energy. For one, oil is considered as a global currency, oil has greater implication to global economy, and oil is more economically practical as compared to other energy source.
A study was conducted to determine the economic scale of implementing solar energy. Solar suggests an average cost of $85 per square meter. However, in order to achieve this cost a minimum plant volume of 250, 000 square meter per year in order to achieve the minimum economies of scale requirement (Brito and Rosellon). To address this dilemma, the initiative will require the strong leadership and entrepreneurial capacity, which is likely to come from the private sector. On the other hand, the private sector is driven by short-term profit, which makes solar energy is less attractive as an investment. In addition, there is no definite market that will sustain a potential profit for private investors to put gamble their money in creating the alternative energy industry. Furthermore, geographical factors are also affecting the probabilities of the investing towards production of energy from solar power. Atmospheric conditions and environmental factors also affect implementation of the said initiative.
Cost is the biggest obstacle in terms of realizing profit and viability in producing energy from solar power. There are suggestions to put a power plant in space to enable solar fusion and wirelessly transmit energy back to earth for utilization. The study encompasses 4. 5% advantage of producing greater energy in putting up a solar power plant in space, but its cost is 4. 5 times greater than setting up the same scale of power plant on the ground. In addition, the ground based solar power plant is already too costly and less profitable for private investors, much more for a space stationed power plant. However, the solar is still considered as a promising option for renewable energy, although its advocates are not doing a good job of educating political leaders to push the initiative and consider the possibilities. The political aspect of solar initiative is greatly influenced by economic factors. For example, the federal budget for solar research is averaged at US$70 million while the tariff subsidy on ethanol production is at US$1. 5 billion annually (Brito and Rosellon 6), which justified the reason why solar power is being neglected.

## Conclusion

Having to determine the key factors that make solar power less attractive as a sustainable alternative, it is apparent that it is still yet to become a viable and profitable option that will support preservation of the earth’s natural resources and reduce the negative implications on the environment. The lack of initiative in the political discourse attributed to the lack of educating efforts from the advocate of solar power appears to be the problem that needs prior addressing.

## Works Cited

Ahmend,, K. " Renewable Energy Technologies”, World Bank Technical Paper No. 240." (1994): Print.
Brito, Dagobert, and Juan Rosellon. " The Political Economy of Solar Energy." Munich Personal RePEc Archive No. 22420 (2005): n. pag. Web. 3 Dec. 2013. .
Kutscher, C F. " Tackling climate change in the U. S.: potential U. S. carbon emissions reductions from renewable energy and energy efficiency by 2030." American Solar Energy Society (2007): n. pag. Print.
Leonard-Barton, D. " Voluntary simplicity lifestyles and energy conservation." The Journal of Consumer Research 8. 3 (1981): 243-252. Print.
Nordhaus, W D. " Managing the Global Commons: the Economics of Climate Change." (1994): Print.
Page, Mark, Maria Molina, and Gordon Jones. " The Mobile Economy 2013." ATKearney (2013): 5-6. Print.
Walker, Peter A. " Political ecology: where is the ecology?" Progress in Human Geography 29. 1 (2005): 73–82. Print.