

Soft path energy vs. hard path energy



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Soft Path Energy versus Hard Path Energy Lecturer Soft Path Energy versus Hard Path Energy The soft path energy versus the hard path energy debate is largely based on the provision of quality energy instead of focusing on the quantity of energy produced and provided. Proponents of soft path energy argue that hard path energy policies are focused on the quantity of energy delivered without considering the negative impacts of hard energy on the environment, as well as the sustainability of hard energy (Botkin and Keller, 2010). Accordingly, policies supporting hard energy aim at increasing energy production, such as building of larger power plants and investing in massive nuclear power plants. On the contrary, champions of soft path argue that soft path energy ensures quality energy in that the energy is environmentally friendly (Botkin and Keller, 2010). More so, soft path policy leads to production and delivery of flexible and sustainable energy (Parkins, 2001). Such sources of energy, therefore, include, wind, sunlight and biomass. Unfortunately, many nations, including developed nations, such as the United States, have energy policies that are more oriented to hard path than the soft path. Therefore, an understanding of the advantages and disadvantages of soft path energy, as compared to the hard path energy, is crucial in deciding whether to exploit soft path energy.

Soft path energy alternatives are more environmentally friendly than their hard path counterparts. In particular, they have less harm to their environs than hard path energy (Parkins, 2001). For example, the electricity used to light houses and drive air conditioning systems can be produced from hydroelectric power plants comprised of large dams, which pose a risk to people living around them. Electricity can also be produced from nuclear power plants, which are health hazards and consume large amounts of water

for cooling purposes. Sunlight can be used for lighting purposes, in its raw form through opening windows or using transparent iron sheets, or electrically using solar panels that convert sunlight to electric energy. Wind turbines can also be used to harness wind energy and convert it to electric energy for lighting purposes. These lighting methods do not pose as much harm to the environment or risk animal, plant and human life as is the case with hard energy. Moreover, they contribute less to global warming because they emit fewer gases and carbon (if any) to the atmosphere.

Soft path energy alternatives are also renewable in that their sources cannot be exhausted, which is not the case with hard path energy sources. For example, oil wells used to produce fossil fuels are expected to be exhausted sometimes in the future. Soft path energy sources, such as biomass, are replaced after use. Moreover, soft energy path reduces reliance on some few countries for energy source. For example, Middle East seems to be the main source of oil for use in many parts of the country (Parkins, 2001). Soft path energy sources are readily available in all parts of the world, which not only reduces over dependence on a few regions, but also reduces transportation needs to deliver energy to place of use. Such transport leads to energy waste, which means that soft energy is associated with high energy efficiency.

However, it is not possible to use soft energy throughout, which makes them unreliable. For example, lack of sunlight or wind makes these systems unusable. Moreover, utilizing soft energy alternatives sometimes requires changes, which might be expensive. For example, in order to harness and store electric solar energy for later use, I need to purchase solar panels and batteries or capacitors. These require high initial costs, which prevents

people from utilizing soft energy path. Similarly, harnessing wind energy and converting it for house lighting requires building a wind turbine and a dynamo, which might be uneconomical considering the amount of energy I require.

References

Botkin, D. B. & Keller, E. A. (2010). *Environmental Science: Earth as a Living Planet*, 7th Edition. Hoboken: John Wiley & Sons.

Parkins, K. (2001). *Soft Energy Paths*. Accessed March 1, 2013 from <http://www.heureka.clara.net/gaia/energy.htm>