## Solar power

Literature, Russian Literature



Solar Power The amount of solar energy that hits the earth is equal to the electrical output of million Hoover Dams. The solar power from the sun powers our planet, warms the oceans, and is converted to food and fuel. In the face of the dwindling oil supplies that are locked in political debate, solar is a viable alternative. The trick is to capture a small amount of the solar energy and convert it to a form that we can use, such as electricity, that can be used to power our automobiles, factories, and homes. Recent political events and technological breakthroughs have made solar power more attractive as the price of oil rises in the hands of OPEC. The next 10 years will produce several economic advantages for the use of solar energy as an alternative energy source.

The solar energy that is used directly by plants to drive chemical reactions needs to be converted to heat or electricity to meet man's needs. Solar energy can be used as a source of heat by heating a liquid that is exposed to the sun and pumping it through a house for heating, or as a source for heat in a steam turbine electrical generator. Solar energy can also be converted to electricity by the use of photovoltaic cells. These cells are plates made of material that emit electrons when contacted by the sun's rays. The electricity is then stored in batteries for future use or used to charge the batteries on an electric car. While it is a fairly simple task to directly heat a home by direct solar heat, the future of solar power lies in developing low cost photovoltaic cells and batteries.

The new politics of 'Green Power' have given solar energy more support throughout society and its widespread application could fundamentally change how we work and live. Currently, solar energy costs about \$12 per

watt or \$20, 000 for a system adequate enough to power a typical home, which equates to 30 cents per kilowatt hour or 2-5 times the average residential electricity rate (Solar Energy Costs/Prices, 2006). However, social and political forces have shown a willingness to invest government money into the development of solar cells that is designed to drive costs down. As the costs are reduced the application will become more widespread. Demographics may change as people move to climates where there is more sun to take advantage of.

The widespread use of solar cells will shift the employment that is currently in the fossil fuel sector into the solar energy market. The eventual cost savings could eventually be utilized in areas other than energy such as health care and education. When the University of North Carolina installed a small solar electrical system, it was said that solar energy was a " part of a comprehensive plan for institutional change that would ultimately raise the quality of education the school could offer" (Baptiste, 2007). In addition, solar energy will be cleaner than fossil fuels and will change the way that we view our ecological environment. The technology could be exported to some of the most polluted countries, such as China and India, and give rise to the United States as a major energy exporter rather than importer.

The development of solar energy would also remove our society from the tensions of the politics of oil. Currently the US is dependent on foreign oil, primarily from the Mideast, and our foreign policy needs to reflect our need for this source of energy. The nations that comprise OPEC control 40 percent of the world's oil and can place enormous economic and political pressure on countries around the world (Kwiatkowski, 2008). Removing this political

aspect of energy would alter our policy and change our image around the world. In addition, it would allow the US to craft a policy around the world that removes the power that the oil producing countries now hold. This would lead to a significant change in the goals and interactions of nations around the world, as their focus becomes social change, and not energy survival.

In conclusion, solar energy is the most abundant form of energy on earth and simply needs harnessed to effect large social change in the US and around the world. Though it is currently expensive, the current political will could devote the resources needed to develop solar cells and drive the cost down. As the cost comes down, the US can begin to divert their resources from oil energy into needed social programs such as health and education. In addition, countries around the world will benefit as the US can export the technology and become a world leader in solar energy. It would provide jobs as employment shifts from the oil industry and into solar. With the oil producing countries left powerless, our foreign policy could direct its efforts to implementing much needed social and environmental change around the world.

## References

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