Feasibility Report for a Green Power System

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Problem

- Crude Oil Systems have downtimes and greatly pollute our environment
- Price of Crude oil went up 100% within 40 years
- Non-Renewable resources
- World: fossil fuels 16.92 TW power
- Replacing fossil fuels WWS: 11.47 TW power

Crude Oil Price Chart

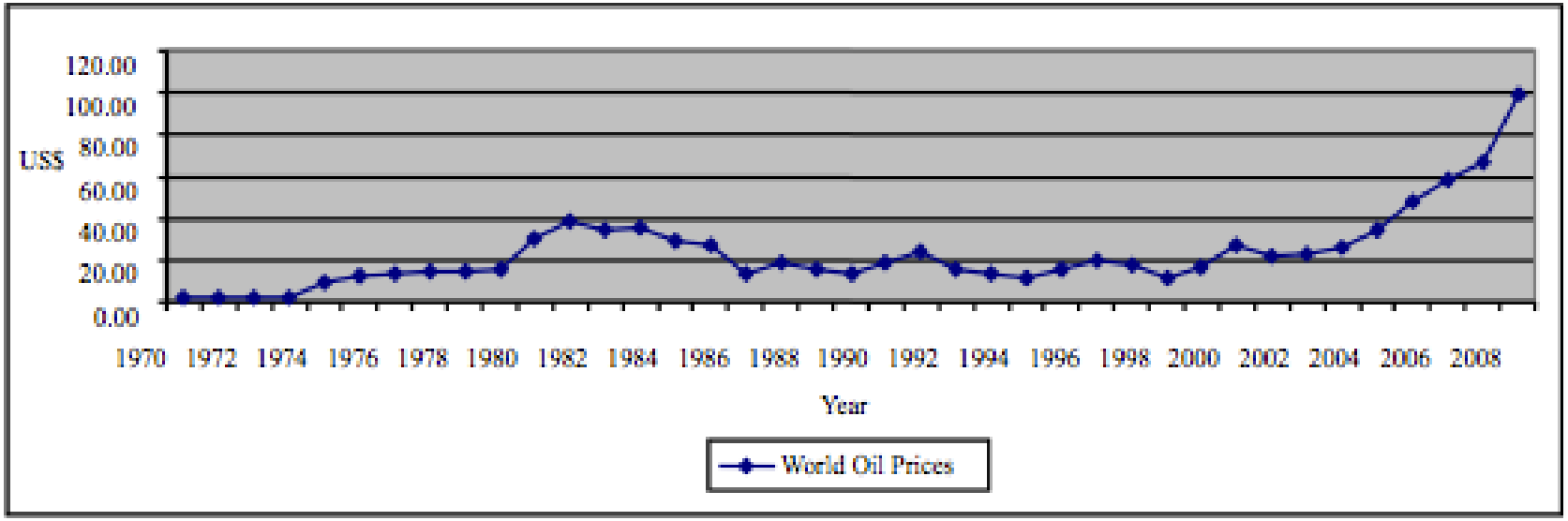

Figure 1 Price of world crude oil for year 1970 to 2008

Source: International monetary fund (IFS) 2008.

Alternatives

- Wind Power
- Solar Power
- Hydroelectric Power

Criteria

- Efficiency
- Cost
- Geographically Dispersible

Solutions & Criteria

	Cost (per kW-h)	**Geographically Dispersible**	**Efficiency**
Wind	5 (4-6 cents)	3	3
Solar	1 (15-30 cents)	4	4
Hydroelectric	4 (5.1-11.3 cents)	5	5

*Predicted costs based on prototypes and currently used systems

Recommendation

- Hydroelectric Power is the most reliable, cost-efficient, and renewable option in all locations suited for utilization.
- Investment costs may be high, but long-term used is much less than using fossil fuels.

Resources

- Abdul Rahim, A. S., Zariyawati, M. A., & Mohd Shahwahid, H. O. (2010). Short run and long run effects of the world crude oil prices on the Malaysian natural rubber and palm oil export prices. *Journal of US-China Public Administration, 7(1), 34-41. Retrieved from EBSCOhost.*

- http://ga.water.usgs.gov/edu/wuhy.html

- http://peswiki.com/index.php/Directory:Cents_Per_Kilowatt-Hour