

## **Electricity Journal Project**

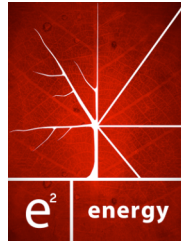
### **Reference e<sup>2</sup> energy episode “Energy for the Developing World”**

- 1) Read the background essay and discussion questions for e<sup>2</sup> energy episode “Energy for the Developing World”. Watch the episode and discuss the post-viewing questions.
- 2) Keep a journal of each time you use electricity for one day.
- 3) Bring your list to class and brainstorm in small groups to think of ways to reduce your use of electricity.
- 4) See if you can change your behavior to reduce your electricity use and keep a journal of your changes throughout the day.
- 5) Write a reflection on the experience. Things to include:
  - Did you find it hard to reduce your consumption of electricity? Why or why not? Did it make you more aware of how much you may or may not rely on electricity?
  - Which of these changes will you make to help reduce your energy consumption permanently? If you will not make changes please explain why.
  - Are there any substitute energy resources that you can use to reduce your use of electricity (e.g., study earlier in a room with natural light, play board games instead of watching TV, use long life light bulbs instead of regular light bulbs)?
  - What was the reaction of people who saw you making these changes? Were they encouraged to make changes as well?
  - Why is it important to conserve energy? What are some renewable forms of energy?
- 6) Share your written work with your peers and community through the school newspaper, local paper, and blogs!

#### Online Resources/Links:

National Resources Defense Council - <http://nrdc.org/air/energy/genenergy.asp>

National Renewable Energy Laboratory – <http://www.nrel.gov/learning/>



## **e<sup>2</sup> energy “Energy for a Developing World”**

### Background Essay

Since 1976 Muhammad Yunus has been dedicated to fighting poverty and empowering women in Bangladesh and the world over. After earning his Ph.D. in Economics from Vanderbilt University in 1969 and working for a few years in the United States, he returned to Bangladesh to accept a chair in economics at the University of Chittagong in 1972. He was shocked by the poverty and famine in his home country and decided that economic theories alone were not going to pull the people of Bangladesh out of poverty. But what would?

He recognized that because many people were too poor to qualify for traditional bank loans, they were not being given the opportunity to improve their own economic situation. He decided that he would give them that opportunity and in doing so invented the concept of micro-credit. He started by giving a small loan of 27 dollars to a group of craftsmen to help them grow their business. After several years, several loans and a near-perfect repayment rate, he decided to make it official and founded Grameen Bank in 1983. Since then, micro-credit has spread to several countries and has pulled countless people out of desperate poverty. Not only has he created a bank that is self-financing, makes a profit and has almost 7 million borrowers, but over 95% of those borrowers are women. In this way, he has empowered women to start their own businesses in countries with traditionally repressive social and economic conditions for women.

In 2006 Muhammad Yunus and Grameen Bank were awarded the Nobel Peace Prize for their work towards creating economic and social development from the bottom up. But Muhammad Yunus did not stop with micro-credit. He has since recognized the importance of energy as a factor in economic growth for the poor people of Bangladesh. With over 100 million people without access to electricity, rural Bangladeshis are literally energy-starved. The few who do have access to energy use kupa or hurricane lamps fueled by kerosene, the fumes from which present significant health hazards. Since 1996, Muhammad Yunus started Grameen Shakti, a not-for-profit company, to promote, develop and popularize renewable energy technologies in remote areas of Bangladesh. By focusing on solar, biogas and other forms of renewable energy, Grameen Shakti sees a future where rural households of Bangladesh will have access to environmentally friendly and pollution-free energy at affordable costs.

Muhammad Yunus' long-term vision is to eliminate poverty in the world. Whether it's through micro-credit or renewable energy, he continues to find new ways to empower poor people, giving them the opportunities they need to improve their own situations.



For more information about Muhammad Yunus and the Grameen Family of Enterprises, visit [www.muhammadyunus.org](http://www.muhammadyunus.org) or [www.grameen-info.org](http://www.grameen-info.org)

To find out more about renewable energy, visit [www.nrel.gov](http://www.nrel.gov) or [www.nrdc.org/energy](http://www.nrdc.org/energy)

To find out more about the Nobel Peace Prize and Muhammad Yunus, visit [http://nobelprize.org/nobel\\_prizes/peace/laureates/2006/yunus-interview.html](http://nobelprize.org/nobel_prizes/peace/laureates/2006/yunus-interview.html)



## **e<sup>2</sup> energy “Energy for a Developing World”**

### **PRE-VIEWING QUESTIONS**

1. What is micro-credit? What are the benefits and challenges?
  2. How is the importance of energy a factor in economic growth?
  3. What are some renewable, alternative forms of energy to create electricity and heat?
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### **POST-VIEWING QUESTIONS**

1. What is the problem with using kerosene to fuel lamps? What are the alternatives for Bangladeshis?
2. How did access to renewable energy help the economic growth of the poorer communities of Bangladesh?
3. The United Nations stated that sustainable development “implies meeting the needs of the present without compromising the ability of future generations to meet their own needs”. Given this definition do you think the programs of Grameen Bank and Grameen Shakti (the non-profit organization) are promoting sustainable development? Why or why not? Use specific examples.