**{Your Project Name Here}**

Project for Schools

{List team member names here}

# 1. Introduction: Why This Project is Important to Us

{In 3 or 4 sentences, write about

* why you chose this type of project for studying the energy usage in your school
* what you feel about why this topic important
* in two sentences summarize what this report says about what you learned}

# 2 The Problem: Is Energy Conserved or Wasted in Your School? (Survey/Interview)

{In one to three pages, answer the following questions. Write in paragraphs, not just answers to the questions.

Examine energy usage practices of your school by collecting information from the following sources.

* Interview: Work closely with a school employee to analyze his/her practices and devise a plan to implement more sustainable practices.
* Survey 10 people in your school of various age ranges. Calculate an average school day and average school year for a certain group of people

1. What are the major sources of wasted energy in your school? Consider areas such as heating and cooling, lighting, cleaning, and other areas.
2. What are areas where students might be wasting energy and not realize it?
3. What are particular problems in energy usage before school, after school, over the weekend might not be as much of a problem during school?
4. How much money does a typical school spend on energy? What percentage is this of typical school expenditures? }

# 3 How to fix the Problem: “Green schools”

{In three to five pages, answer the following questions. Write in paragraphs, not just answers to the questions.

1. How can school staffs or students be more efficient in their use of energy?
2. How can they reduce costs for heating and cooling?
   1. What are some expensive upgrades that could be made to the school that will pay back benefits over a longer time? How long would it take?
   2. What are some not-so-expensive upgrades to the school that could be made that would start saving energy right away?
3. What are different ways that school employees could heat their schools? How do they compare in terms of costs?
4. What are different ways that school employees could cool their schools? How do they compare in terms of costs?
5. How do you suggest they measure and compare their actual energy use with that of similar schools?
6. How can solar panels be used for a school? Where would they be placed?
7. Implement a “Green Schools.” plan for your school with the goal of reducing energy consumption (www.greenschools.org).}

# 4 How to fix the Problem: People’s Behavior

{In two to three pages, answer the following questions.

1. What are ways people waste energy in their schools just by bad habits. Examples might be leaving lights on or leaving doors open. What are other examples?
2. Which bad habits waste the most energy? How much money in energy costs are wasted with these habits?
3. Why do people have these bad habits? What bad habits are the most common for people your age? Why?
4. What can be done to help people change their habits? }

# 5 Conclusion: What are We Going to Do?

{In this section, in one or two pages discuss what you learned in this project. How are your own behaviors going to change? How can you motivate other people your age to do the same thing? How can you help suggest ways your school admin can upgrade your school to save energy? What artistic output can you create to teach and inspire people for what you learned?}

**References**

* A Research Guide for. Students and Teachers. [www.esf.edu/outreach/sciencecorps/documents/ResearchGuide\_NSFGK12.pdf](http://www.esf.edu/outreach/sciencecorps/documents/ResearchGuide_NSFGK12.pdf)
* International Energy Agency http://www.iea.org/Textbase/stats/index.asp

The database includes global energy production, import, export, and consumption statistics for different sectors by country.

* U.S. Energy Information Administration http://www.eia.doe.gov/

Official energy statistics from the US government on energy production from different types

* School energy efficiency [www.energystar.gov/ia/business/challenge/learn\_more/Schools.pdf](http://www.energystar.gov/ia/business/challenge/learn_more/Schools.pdf)
* Green Schools www.greenschools.org