Personal Energy Use Audit

FDSCI 200, BYU-Idaho

One of the objectives of this course is to help you gain an understanding and appreciation for how much energy you personally consume and what that energy costs. This worksheet will help fulfill that objective by providing a place to record a few things about your personal energy consumption, which has been divided into three categories: gasoline use, electricity consumption, and natural gas consumption. It is important to note that these are not the only three sources of energy you consume. There's also the food you eat, the sunlight you absorb, the energy used to produce the consumer products you buy, and so on. The three areas of consumption included in this audit are fairly easy to quantify – which is not the case with some of the others listed.

All of the items marked with a asterisk should be completed early in the semester. The other items will be completed at the end of the semester. **Do not lose this worksheet!**

Gasoline Purchases:

Record your odometer reading at the beginning of the term and at the end of the term. Record all gasoline purchases throughout the term. If you do not have a car, you may leave this section blank.

| 1. Number of vehicles gasoline purchased for* | | |
|---|---------|-----------|
| 2. Number of people regularly using those vehicles* | | |
| 3. Odometer reading(s) at the beginning of the term* | Date: | Reading: |
| 4. Odometer reading(s) at the end of the term | Date: | Reading: |
| 5. Gasoline purchases (continue on a separate sheet of paper if necessary) | Gallons | Cost (\$) |
| | | |
| | | |
| | | |
| | | |
| 6. Total gallons purchased during term | | |
| 7. Total spent on gasoline during term | | |
| 8. Total number of miles driven (item 4b minus item 3b) | | |
| 9. Number of days in audit | | |
| 10. Average gallons per person per day (item 6 divided by item 2, then divided by item 9) | | |
| 11. Average spent per person per day (item 7 divided by item 2, then divided by item 9) | | |
| 12. Average miles per person per day (item 8 divided by item 2, then divided by item 9) | | |

Electricity Consumption:

To complete this portion of the audit, you will need to locate your electric meter. (For pictures of typical electric meters and instructions on reading them, please see http://www.energyright.com/savingenergy/meter.htm). If you cannot locate your electric meter, there are several things you should do:

- If you own your home, contact your local electric company.
- If you are renting, contact your apartment manager and ask if they know where the electric meter for your apartment is (make sure you tell them it is for a class project). At some apartment complexes, individual apartments are not metered, but there is a meter for the whole complex. This meter can be used, provided you know the total number of people living in the complex.
- If you are still unable to locate a meter, you may use readings from the meter of someone you are related to (parents, siblings, cousins, etc...). You might need to get the information by telephone.

| 1. Location of Electric Meter (Home, Apartment, Parents, etc)* | | |
|--|-------|----------|
| 2. Number of people living in household* | | |
| 3. Meter reading at the beginning of the term (kWh)* | Date: | Reading: |
| 4. Meter reading at the end of the term (kWh) | Date: | Reading: |
| 5. Total consumption for the audit (item 4b minus item 3b) | | |
| 6. Number of days in audit | | |
| 7. Electricity consumption per person per day (item 5 divided by item 2, then divided by item 6) | | |
| 8. Average cost per kWh (can be obtained from power company) | | |
| 9. Electricity cost per person per day (item 7 times item 8) | | |

Natural Gas Consumption:

To complete this portion of the audit, you will need to locate your natural gas meter. (For a picture of a typical gas meter and instructions on reading them, please see http://www.csu.org/customer/meter/page2513.html). If you cannot locate your gas meter, follow the same guidelines as for your electric meter.

| 1. Location of Gas Meter (Home, Apartment, Parents, etc)* | | | |
|--|-------|----------|--|
| 2. Number of people living in household* | | | |
| 3. Meter reading at the beginning of the term (therms)* | Date: | Reading: | |
| 4. Meter reading at the end of the term (therms) | Date: | Reading: | |
| 5. Total consumption for the audit (item 4b minus item 3b) | | | |
| 6. Number of days in audit | | | |
| 7. Gas consumption per person per day (item 5 divided by item 2, then divided by item 6) | | | |
| 8. Average cost per therm (can be obtained from gas company) | | | |
| 9. Natural gas cost per person per day (item 7 times item 8) | | | |