

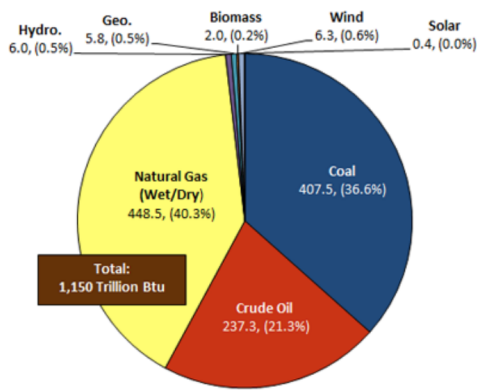
Heat Exchangers: Heating and Cooling a Home.

Names _____

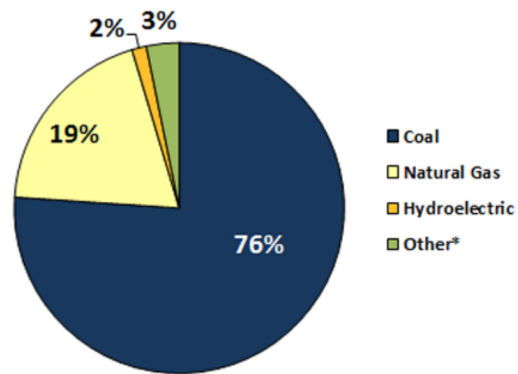
What is your challenge?

Research: Use the information below and the internet to see where Utahns get energy and how usage could be reduced.

Utah Energy Production 2014



Utah Electricity Generation 2015



1. How does your family heat your current home?
2. Where does the energy come from?
3. How does your family cool your current home?
4. Where does the electricity come from?

5. What are ways a home can use less energy?

6. What are the characteristics of passive energy heating or cooling?

Your Challenge: Design an energy-efficient home with passive heating and cooling systems.

- Assume your home is located in a temperate climate (warm summers, cold winters)
- There should be space for a family of four.
- Space for cooking, eating, sleeping, and relaxing should be included.

Peer Review- Include a positive statement and a suggestion for improvement.

Name of Peer:

Name of Peer:

Names of 2 peers you reviewed:

Rubric

Energy worksheet completed with appropriate research (10 points) _____

Rough draft of home designs (5 points) _____

Use of alternative sources of energy (5 Points) _____

Finished floor plan and front view of your home (20 points) _____

Artistic and viable (10 points)_____

Neatness (10 points)_____

Review by 2 other group (5 points each)_____

Review of others project (5 points each) must include name 1 positive and improvement_____

Review of projects

Remember you must have 2 reviews of your project and you must review 2 projects and they **cannot** be the same people

Names of reviewers' (2) _____

Positive thing they liked about your house

Improvements

Changes you will make

Names of reviewers' (2) _____

Positive thing they liked about your house

Improvements

Changes you will make

Names of people that you reviewed_____

Thing you liked

Improvements

Names of people that you reviewed _____

Thing you liked

Improvements