

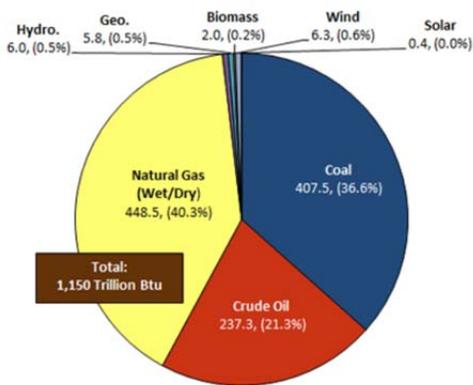
# Heat Exchangers: Heating and Cooling a Home.

Names \_\_\_\_\_

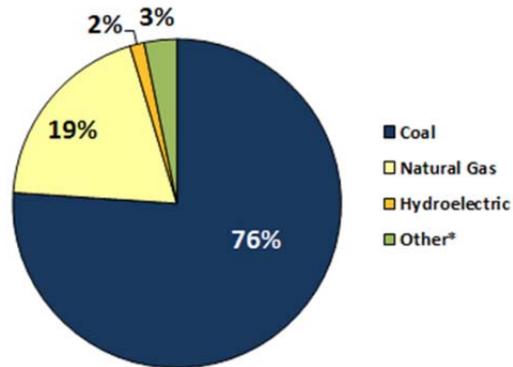
What is your challenge?

**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