

## UNI – Intro. to Environmental Earth Science , DIY Energy Audit

### What to do/think about before starting this assignment...

1. Work with your family, parents, roommates... Whomever you are living with...
2. Be safe, do not do anything that would harm yourself or those in the residence.
3. Be smart, when looking for energy consumption do not change anything without consulting a professional trades person carpenter, electrician, plumber, etc.
4. Feel free to use any resource you can find to learn more about how energy helps power your home or apartment. If the place you live has recently had an energy audit, feel free to use it.

### Learning Objectives

1. Learn about energy production and use.
2. Learn about energy conservation

### Starter resources

- 1a. <https://www.energy.gov/energysaver/energy-saver-mission>
- 1b. <https://www.energy.gov/energysaver/home-energy-audits/do-it-yourself-home-energy-audits>
2. <https://www.energystar.gov/>
3. <https://www.energy.gov/eere/femp/home-energy-checklist>
4. <https://www.energysage.com/energy-efficiency/101/ways-to-save-energy/>
5. <https://iub.iowa.gov/regulated-industries/electric/renewable-energy-tax-credits>
6. <https://ourworldindata.org/renewable-energy>
7. <https://www.duke-energy.com/energy-education/energy-savings-and-efficiency/energy-vampires>

### What to do...

1. Watch the presentation for this week.
2. Sit down with the people you live with, if they want to, and discuss how energy efficient they think your apartment/house/farm is... Either write a summary paragraph of this discussion or make a list of the important points, start your questions by adding this information... If you live by yourself, still take some time to describe your thoughts.
3. Use the provided worksheet to conduct a home energy audit. If there are, other energy aspects that are relevant to your home/farm/business think add those too if you have time
4. Answer the questions
5. Turn in your work by Sunday March 29.

### Questions...

1. What is the difference between energy efficiency and conservation?
2. What are the energy sources used where you live?
3. Why does the energy audit ask if your home has south or west facing windows and not north or east facing windows?
4. What is an energy vampire, are there examples of this at your home?
5. Are there any negative, environmental or energy, aspects to the rise of entertainment streaming services? Amazon, Hulu, Netflix, Spotify etc. <https://phys.org/news/2019-10-chill-netflix-habit-climate-experts.html>
6. What are five things you could do in your house to conserve more energy? Are there any barriers that might keep you from making these changes?
7. Using our presentation, the internet resources provided and/or others that you can find what type of alternative energy would make the most sense to add to your home? Make a list/justify your alternative energy choice.