**1.2.1 Energy Sources (Assignment)**

Energy is the ability to do work. From the human body to airplanes, everything that is living or does work uses energy. According to the United States Department of Energy, Americans spend 500 billion dollars each year on **energy**. The world faces the challenge of significantly increasing energy needs.

Many unique energy sources are available. To meet future energy needs, engineers need to design technology to contribute new ways to harness energy, increase **efficiency**, and better transport and store energy.

Energy sources are divided into categories: **nonrenewable**, **renewable**, and **inexhaustible**.

|  |  |
| --- | --- |
| Nonrenewable energy | Sources that cannot be replaced once used |
| Renewable energy | Sources that can be replaced when needed |
| Inexhaustible | An energy source that will never run out |
|  |  |
|  |  |

EQUIPMENT

* Books, articles, and available energy resources

Instructions

In this activity your team of two or three will choose an energy source that interests you. Your team will create an engaging presentation about your energy source. Some presentation types are: skits, whiteboard animations, and videos. If you have another idea, talk to your teacher and add it to this list. Each team will have three to four minutes for their presentation.

Presentation Checklist

1. Before you create your presentation, preview the checklist below. Then check off each item as you prepare.
   *  Have you planned to enhance written statements by what you say, rather than to read from visuals?
   *  Did you practice your presentation?
   *  Are you prepared to maintain eye contact while you are presenting?
   *  Did you make sure that your chosen fonts are easy to read?
   *  Is all of your text large, bold, and easy to read?
   *  Are your visuals easy to read from the back of the room?
   *  Does your presentation stand out and seem creative?
   *  Do you have pictures, graphics, or animations that enhance your presentation?
   *  Did you include reference notes to indicate from where you retrieved information and images?
   *  Are you happy with your presentation?
   *  Have you discussed any questions you have with the instructor?

Presentation Content

1. Create a presentation that answers the questions listed below. Insert any unique information or concerns related to the questions.
   * Is the energy source classified as **nonrenewable**, **renewable**, or **inexhaustible**?
   * How is the energy source made usable?
   * What are the infrastructure requirements for using this energy source?
   * What emerging technologies will make this energy source safer, more usable, more efficient, cleaner?
2. Under each image used, cite the domain name, creator, or author to appropriately give credit for that image. The image below identifies the domain name portion of the URL. You will use the entire URL for the references page.
3. Create a reference sheet with APA citations for all information gathered.
4. Each team should prepare for and deliver their presentation to the class.