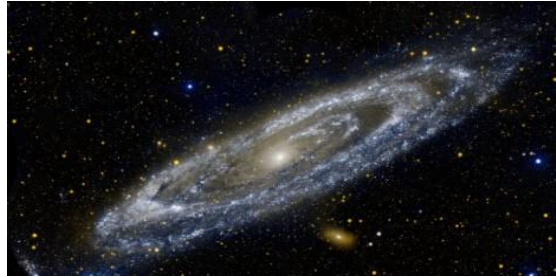


WHAT IS ENERGY?



What is energy? What types of energy are available for humans? What are the challenges of energy for mankind?

Energy is the cause of the changes occurring in the universe. The term “energy” comes from the Greek word “energeia” which means activity or operation.

Energy is generally understood as the capacity, virtue or power to apply work on matter, such as changing the physical properties of a body or apply motion in space.



Energy can be understood in two terms, as “moving energy” (kinetic) and “stored energy” (potential).

Energy can not be created or destroyed, only transformed, hence the sum of all energy in the universe is constant.

Some transformations are 100% energy efficient, while others involve the loss of energy of the material is transformed to other parts of the system.



Energy is measured in many ways. One of the most common is in terms of heat energy needed to raise the temperature of a particular material, or as the force needed to move a given object in space.

Humans get energy for their body through the chemical energy that food provides. This energy is used by their animal body which then can become work through the use of his conscience. If such energy is not burned, then the energy is stored in fat cells.

There are many sources of energy available for mankind which come in several forms that man seeks to use for work, which usually are classified as:

Fossil fuels: a form of energy continuously generated and stored at rates of millions of years, which basically consist in the use of:

- Coal
- Oil
- Natural gas

Sustainable energy: which consist in harnessing the energy that is constantly released by the interaction of the Earth with the Sun and formed in such an amount that appears to be unlimited for humanity:

- Biomass Energy
- Geothermal Energy
- Maritime Energy
- Hydropower
- Nuclear energy
- Solar energy
- Wind Power
- Gravitational energy

- Elastic energy (based on the properties of the material)

Mankind use these forms of energy

- To store it as chemical energy in batteries
- To convert it through electricity generators so it can be used in this work by means of an electrical circuit or equipment motors to manipulate matter.
- Or convert light energy to heat manipulation.

Considering the size of humanity, one of the biggest challenges that mankind faces today to ensure access to energy humans through an efficient supply network is combined with the development of energy storage technologies.



Furthermore, energy must be suitable for use in work that benefits humans in their daily tasks and help them achieve their goals.

Source: <http://www.artinaid.com/2013/04/what-is-energy/>