Science

Business

There are different forms in which energy can be found. It could be kinetic, potential, or electrical energy, among others.

An example of kinetic energy is when a baseball is moving in the air. Since the ball is moving relative to the ground, it possesses kinetic energy. However, the law of energy conversation states that energy cannot be created or destroyed but only transformed and transferred (Wengenmayr & Buhrke, 2011). Numerous examples can explain the conversation of energy. For instance, when a pen is placed on the table, it has potential energy because it can fall-off when pushed. Therefore, when it falls off the table, the potential energy is converted into kinetic energy that is accelerated by the force of gravity.

Another example of energy conversion would be in a bow and arrow. When the string is retracted with an arrow, it possesses elastic potential energy. When the arrow is released, potential energy is transformed into kinetic energy that allows the arrow to travel over a distance. In summary, energy can only be transformed from one form to another. There are many sources of energy.

One such source is fossil fuel. According to Morris (2006), fossil fuels refer to hydrocarbons formed by decomposed remains of dead plants and animals. The main forms of fossil fuels are coal, natural gas and crude fuel. In some instances, fossil fuels also include natural resources, that are ot plants or animals, which contain hydrocarbons. Sometimes these are known as the mineral fuels. Essentially, fossil fuels are ancient organic remains and are

primarily the main source of energy for humanity ever since the industrial revolution.

Most people prefer to use fossil fuel because it is the most powerful source of energy. Most industries and human societies need strong energies to run machines and turbines. Fossil fuels such as coal, oil and gas are the best sources of energy for heavy duty machines. Other sources of energy such as solar, wind, and hydroelectric power are expensive to generate and unreliable because their availability is affected by weather conditions. However, fossil fuels produce carbon dioxide after combustion which is one of the green house gases which contribute to global warming and environmental pollution (Morris, 2006).

Additionally, they take quite a long time to reproduce and it is feared that their sources could be depleted. In summary, fossil fuels are formed from decomposing organic matter. They are the most reliable but they are sources of greenhouse gases that cause climate change. Nonetheless, there exist alternative sources of energy that is renewable and environmental friendly. Two best examples are solar energy and geothermal energy (Wengenmayr & Buhrke, 2011). Solar radiation energy is generated when rays from the sun hit solar panels thhat convert light into electrical energy.

Older solar panels use silicon crystals that convert sun light into electric energy. However, it is expensive to use big silicon crystal. This is why new solar technology uses smaller and much cheaper crystals made from selenide-copper- gallium-indium. However, these crystals are not as effective as big silicon crystals in converting sunlight to electricity. Therefore, there is

need to develop soar technology that will produce electricity that is worth the investment. Although solar energy is not as powerful as fossil fuel, it is a renewable and cleaner source of energy.

Nonetheless, producing substantial amounts of solar energy requires that solar panels are installed over a large space. Similarly, it can only be generated when there is sunlight. The second alternative, geothermal energy, can be termed as the energy found within the earth. There is extreme heat in the earth’s crust that comes from molten rocks. Because of the intense heat, cracks develop in the rocks and release heat or hot water.

To trap the heat, cold water is pumped into the cracks. The water returns as steam that is trapped to drive electric generators. Wengenmayr & Buhrke (2011) allege that the amount of geothermal energy in the earth is 50, 000 times more than fossil fuel. In additional, it is clean and renewable unlike fossil fuel. However, it is rare and can only be found in specific regions.