

# Mitigation strategies and solutions



The mere mentioning of an Energy Conservation Plan may seem like a project that is too big for many. What needs recognition, immediately, is the fact that there is a dire need for energy conservation, it will save lives, and eventually may even save the entire human race. The one thing that I think all will be in agreement with is how much money it will save households and businesses. “ Today's human way of life works around consuming energy in many aspects of daily life because we use an enormous amount of transportation, heat, and electricity. ” (Mitigation Strategies and Solutions - Energy Conservation, Robert Gill III, August 20, 2009).

If Governmental and Human efforts are put forth, in large amounts, it will bring down energy costs as well as allow humans to become healthier in various ways. Over the last eight weeks I have come to the conclusion that almost all living creatures, be them big or small, have some sort of energy usage associated with them. Energy comes in all different forms and is converted from one form to another. Non-renewable energy sources are becoming more complicated to find, because of this, resources are getting more and more expensive. Some types of non renewable energy resources are oil, coal, natural gas and nuclear.

These forms of energy come from the ground. There are several forms living and non-living factors that contribute to the excessive use of energy. The easiest way to describe them would be to break them down into descriptive groups or categories. These types are not all different; the use of energy can be done in many of these categories at once. The first category is the use of Kinetic Energy; this type of energy is used when something is moving. For example, a car in drive and rolling produces a large amount of Kinetic

Energy, another form of Kinetic Energy use is an animal jumping, a cat leaping or pouncing from one area to another.

Often in combination with Kinetic Energy, one can find Gravitational Potential Energy, when things are high in the air, or sky for that matter, Gravitational Potential Energy is in effect. The drop of a ball from your hand, is a great example of Gravitational Potential Energy, however, Kinetic Energy comes into play when the ball is on the way down. Another example of when Gravitational Potential Energy is in use is when a bird is in the act of flight, once again Kinetic Energy is increased too.

Chemical Potential Energy is another form of energy, this type of energy is effective when chemical reactions happen. Gasoline has a lot of Chemical Potential Energy stored in it and this is what helps make automobiles go. Chemical Potential Energy is the make up of electrical and magnetic and Kinetic Energy of the electrons, molecules and atoms. Another form of energy is Thermal Energy, this type energy is present when something is heated up and it has more energy then when it is cold. All living things have thermal energy; a lot of them make Thermal Energy because they cause chemical reactions to take place.

One of the most important or greatly used forms of energy is Electrical Energy, it can be found in all power lines, above or below ground. When currents flow through an object Electrical Energy is active, voltage deposits or takes it away. For example, the use of an iron, energy is deposited, when something needs a battery for operation energy is taken away. Then there is Magnetic Energy, if two magnets are forced together, they repel each other,

energy has to be present in order for this to happen, the energy is stored in what is called a magnet field.

Energy is produced by the magnetic field when the two magnets are brought together. Lastly, Nuclear Energy, the energy that is known for being extremely unkind to man; energy is released when the sun works by fusing light atoms together to make heavier ones. Atoms that have become heavy will decay or split which causes energy to release; this process is called fission (UIUC Department of Physics, Living and Non-Living Things with Energy July 25, 2006). There are many non-living things that contribute to excessive energy use; however, they are used by living factors, humans.

For example, a major portion of energy consumption is used right in our very own households. The following is a list of items, but is not limited to, “ space conditioning at 44%, water heating at 13%, Lighting at 12%, Refrigeration at 8%, Home electronics at 6%, Laundry Appliances at 5%, Kitchen Appliances at 4% and other uses at 8%” (Earth getting overcrowded-November 2nd, 2008-Sheree Bega). These percentages are all based on one household’s usage; imagine the numbers when all of our world’s usage is calculated.

Energy is greatly taken for granted by many, most don’t even think or imagine that there is a possibility that we can run out of energy. Humans are responsible for the damage being done to our planet, and for the non-renewable energy depletion. We are in an energy crisis, which is a very big problem. People need to become more aware of this problem and try to do their part to help preserve the non renewable resources that we still have

left and to also help the environment by recycling and watching the energy use at home and in the car.

One person can only do so much, and we may never see a difference from one person making that change. But if several people started making changes to their life styles, then there is a big possibility that we could start to see a big difference. This is an issue that everyone needs to know about and take seriously. If we do nothing, what will happen to mankind as we know it? What will we allow are children's futures to be like if we do not take action now?