SUMMARY

The text is devoted to «Importance of Electricity in our Daily lives and its impact on Modern Society».

Energy is the most important thing in the life of modern people. Without electricity, there is no Internet, mobile communication, water supply, heat supply, factories will stop, shops will close and the whole world will stop. Energy affects all aspects of human life, therefore the more per capita energy consumption in a country, the higher is the standard of living of its people.

Energy can be electrical, (electromagnetic), thermal, kinetic, potential, nuclear, etc. But the most important thing is electrical energy. So that electrical energy can be converted into heat, light, motion, etc.

The author gives an example of the superiority of electric energy.

* **Convenient form**: Electrical energy can be stored using rechargeable batteries, converted into light, heat, and drives electric motors.
* **Easy control**: Any electric machine can be controlled, switched on/off, changed the speed of rotation of the rotor, etc.
* **Flexibility**: Electrical energy can be easily transferred from one location to other location with the help of conductors.
* **Less expensive**: Electrical energy can be widespread use for a domestic, industrial and commercial purpose.
* **Higher transmission efficiency**: Electrical energy can be transferred from the plant to consumers using overhead power lines and transformers.

What are the possible and available energy sources for the production of electrical energy?

Electrical energy is produced from a different form of energy available in nature. It is important to overview the sources of energy.

* **The sun**: The sun radiates its energy in the form of light and heat. This heat can be used to raise steam and electrical energy can be produced by the turbine and alternator combination. It cannot be used on cloudy days or at night. Solar energy is popular in developed hot countries.
* **The wind**: This source of energy can be used where only the wind flows for a considerable length of time. The wind energy is used to run a small generator.
* **Water**: When water is stored in a suitable location. It possesses some potential energy due to the head created. Now if we want to use this water head, we need to convert this potential energy into mechanical energy and then into electrical energy with the help of turbine, alternator combination. During the operation of hydroelectric power plants, there are no produces waste in the environment
* **Fuels**: Minerals are the most important sources of energy production worldwide. Coal, oil and gas are sources of heat energy. This thermal energy is converted into mechanical energy by a steam engine and a steam turbine. Then it is converted into electrical energy. The use of fuel produces waste in a result which can pollute the environment in different shapes.
* **Nuclear energy**: Nuclear fuel can release a large amount of heat energy when fusing uranium and fissionable materials. Heat energy is converted into mechanical and electrical energy by a steam turbine and an alternating current generator. The biggest problem of disposal of the waste produced from the nuclear fuel.
* **Hydrogen energy** - the energy of the future. "Green hydrogen" is pure electrical energy produced from water by electrolysis. Source - water, waste-oxygen. The main biggest is that the building of hydrogen stations is expensive and there are few standard so.