## **ESSAY**

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## IF I COULD INVENT SOMETHING NEW

If I could invent something new I will create a modified hydropower electric generator.

A hydropower electric generator is a machine that converts the mechanical energy produced by a hydraulic turbine into electricity. This hydraulic turbine converts the energy of flowing water into mechanical energy. The hydropower electric generator serves as a renewable source of energy. The energy generated through this machine relies on the water cycle, which is driven by the sun, making it renewable. This generator is fueled by water, making it a clean source of energy.

It is said that the future of our planet depends on clean sources of energy which benefit human health (physical and mental) and safety. Clean energy technologies like bioenergy (organic matter burned as a fuel) and hydroelectric produce almost no harmful emissions-known as greenhouse gases, such as carbon dioxide-that are linked to numerous health problems. Hence, the hydropower electric generator is a good source of clean energy which will help in securing the future of our planet.

The hydropower electric generator is a unique device with a number of important parts which include: The alternator, a voltage regulator, Cooling and exhaust system and a power breaker.

Some of these parts are composed of aluminum, copper alloys, metallic pan etc., which enables them to function effectively and as well withstanding heat.

Hydropower electric generator provides benefits beyond electricity generation by providing flood control, irrigation support and clean drinking water. It is affordable, in the sense that it provides low cost electricity and durability over time compared to other sources of energy. The hydropower electric generator also provides essential backup power during major electricity outrages. It is a domestic source of energy allowing each state to produce its own energy without being dependent on international fuel sources.

It is a fascinating fact that humans have been harnessing water to perform work for thousands of years. The Greeks used water wheels for grinding wheat into flour more than 2000 years ago, while the Egyptians used Archimedes water screws for irrigation during the third century B.C The evolution of the modern hydropower generator (turbine) began in the mid-1700s, when a French hydraulic and military engineer, Bernad forested Belidor, wrote the groundbreaking Architecture Hydraulique.

Hydropower will be an important energy resource in the world. Most available sites for large-scale hydroelectric power production in the world have already been developed. Hydropower can provide large amount of low-carbon electricity on demand, making it a key element for creating secure and clean electricity supply systems. Hydropower stabilizes the power grid by preventing discontinuity of the flow of water.

Manufacturing a hydropower electric generator will be beneficial and helpful to the planet because it will harness the power of water in motion such as water flowing over a waterfall to generate electricity. It is a reliable, versatile and low cost source of clean electricity generation and responsible water management. Indeed hydropower is tremendous.