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ESSAY TOPIC: IF I COULD INVENT SOMETHING NEW

My Idea: A Sustainable Energy Generator

I live in Awka, Anambra State, and electricity is a constant problem in our neighborhood. If it's not the breakdown of transformer, it will be EEDC (Enugu Electricity Distribution Company) withholding light for several days. Most time we have light for just an hour in four days. Whenever I return from school, I always want to read from 7pm to 10pm before I go to bed. But electricity problem makes me unable to read constantly as I want, and this affects my studies. Fuel-powered generator which is an alternative is no longer an option because of the high cost of fuel.

This constant electricity problem also affects businesses in my street. Also, at the end of every month, EEDC brings electricity bills that are very costly despite that we don't have regular light.

The need to have constant affordable electricity is now a more pressing need than ever. Therefore, if I can invent something new, it will be "Sustainable Energy Generator" (SEG), a device that can collect renewable energy from multiple sources to power homes, schools, and communities, while being affordable and accessible to everyone.

My parents talk much about climate change which affects our weather; and renewable energies like solar, wind, and nuclear. I have also heard these things in television, and learned about them in my school.

The idea behind the SEG is to solve two of the most important challenges of our time: poor electricity supply and climate change. Energy problem affects many communities, particularly in developing nations like Nigeria.

The SEG will be a multi energy source that will combine solar panels, wind turbines, and kinetic energy to increase energy production. Solar panels will capture sunlight, and wind turbines will harness wind energy. The Kinetic energy harvesters will convert everyday movements, such as walking and car movements, ensuring that the device can generate steady power.

It will be designed to be adaptable to different environments. In cities, where there are limited spaces, it can be installed on rooftops and balconies. In rural areas it can be placed on the ground due to available open spaces. It will have lightweight and portable design for easy transportation and installation, making it ideal for temporary setups and easy installation in emergency situations.

To ensure affordability, the SEG will be constructed using local, recyclable materials. Involving local communities in the manufacturing process will also create jobs. It will be designed with a modular structure to allow users customize their systems according to their energy needs and available cash.

It will have an app for users to monitor energy production in real time, check usage patterns, and get maintenance alerts. The app will provide guides on energy conservation and sustainability practices, creating a culture of environmental responsibility. Finally, multiple SEGs can be connected together to create a shared network of bigger energy capacity.