My Daily Energy Flow

by sustainovators

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Activity

For this challenge, I created an "energy circle" to visually map and understand the flow of energy in my daily life. The goal was to trace energy from its source, through its various forms as personal "fuel," to its ultimate use in my everyday activities. This exercise also involved researching and connecting my personal consumption to the larger energy infrastructure within Ghana.

Personal Energy Inputs

My daily life is powered by several key energy inputs such as:

Physical (Food): This is the most fundamental energy source. The food I eat provides the caloric energy my body needs to function, to think, to study, and to move. This biological energy powers my concentration and physical stamina.

Electrical Energy: This is the primary utility that powers my modern life. It runs the lights in my home, charges my laptop for studying and creative work, keeps my phone active for connecting with others, and powers essential home appliances.

Fuel: This includes energy for transportation, such as the fuel used in cars or local tro-tros, which allows me to move around, and potentially fuel for backup generators, which is common.

Daily Activities and Outputs

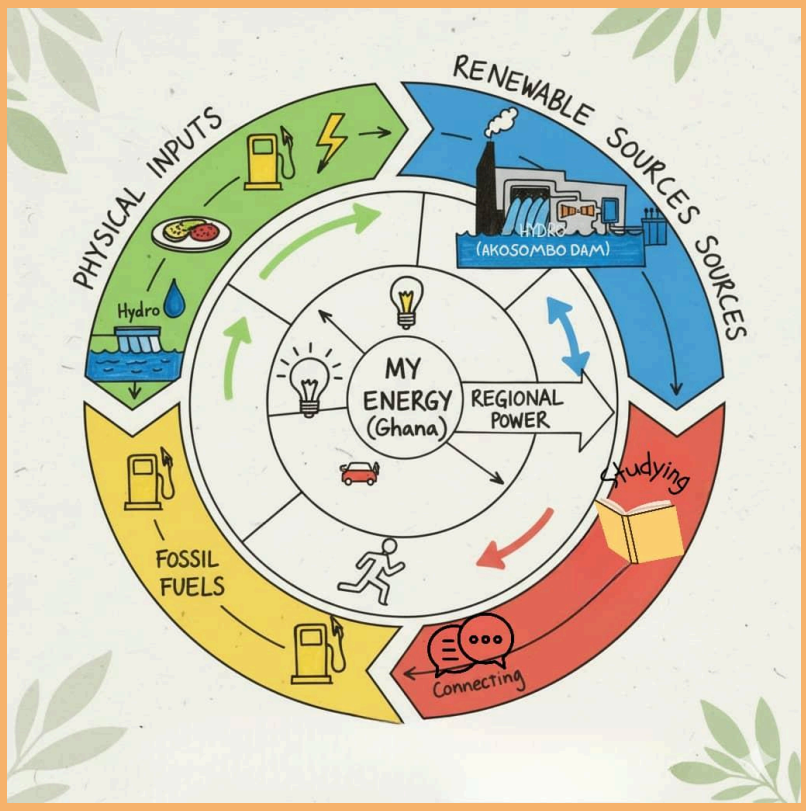
I mapped how these inputs are converted into my daily actions and outputs:

Studying and Creating: This is a major energy expense. It is directly powered by the food I eat (for brain function) and the electricity that runs my computer, lights, and internet router.

Moving: This is powered by the biological energy from food for walking and by fossil fuels for any vehicle-based transportation.

Connecting: This output, which includes talking to friends and family or networking online, is powered by electricity (for my phone and internet) and the personal energy I get from food.

MY ENERGY CIRCLE



Regional Energy Source

A key part of this challenge was researching a main energy source that powers my region. In Ghana, the most significant source of renewable energy is hydropower, primarily from the Akosombo Dam on the Volta River.

Image sourced from google images.

This was the most reflective part of the project. My energy circle now includes a direct line from "Electricity" back to this massive national resource. Every time I plug in my laptop to study or turn on a light, I am drawing power directly from this dam.

Reflection

What surprised me most was the profound and tangible connection between my small, everyday actions and this enormous piece of national infrastructure. It's very

easy to think of electricity as something abstract that just comes from the wall socket.

Visualizing it this way was eye-opening. I realized that my ability to complete my schoolwork, connect with people, or even just have light at night is directly tied to the flow of the Volta River and the complex engineering that harnesses its power. It's not an infinite, impersonal resource; it's a shared, national system.

This reflection has made me far more conscious of my own energy footprint. Seeing this direct link makes me want to be more mindful of waste. It's a clear motivator to do simple things like turning off lights when I leave a room or unplugging chargers that aren't in use. It’s no longer just about saving money on a bill, but about showing respect for a critical, shared resource that powers our entire nation.

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