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ARE ELECTRIC CARS A SOLUTION IN RWANDA?

Numerous studies have been conducted that demonstrate how environmentally friendly electric vehicles are. They produce fewer greenhouse gases, which makes them an effective way to reduce both air pollution and greenhouse emissions. In order to combat rising air pollution and support a green city initiative, Rwanda considered introducing more electric vehicles. The Global Electric Mobility Program, run by the United Nations Environment Program (UNEP), aims to assist low- and middle-income nations in switching from conventional (gas) to electric vehicles. Rwanda has joined this program. Due to the high cost of switching to electric vehicles in poor nations like Rwanda and the inefficient distribution of electricity, I do not fully support the proposal.

Rwanda continues to purchase electricity from nations like Zambia and Kenya. 2019 saw Rwanda import 0.09 billion kilowatts, although this is insufficient given that some areas are still without energy. The introduction of electric vehicles would lead to an imbalance in the country of Rwanda's 13 million people's use of electricity. It will be extremely difficult to persuade consumers to purchase electric automobiles if they are worried about the rising cost of electricity. A lot of people in Rwanda consume 1 USD per day for energy, and half of the population makes less than 2 USD per day, according to the country's kWh consumption rate of 0.245 USD.

Who gains from electric cars?

The government, electric companies, and owner operators stand to benefit from electric vehicles. The government will succeed in reducing emissions and improving air quality. Greenhouse gas reduction will be lessened because electric automobiles don't release carbon. Since they would be the ones supplying the electricity, electric firms will likewise benefit more from the adoption of electric vehicles. The demand for electricity will rise, which will encourage Rwanda to invest more in hydroelectric power and renewable energy sources like solar and wind energy, both of which are good things. Owner operators will make more money with this program if the nation invests in electric vehicles with the full UNEP support that it receives. This will little benefits the passengers that need to travel from point A to point B.

What is the elephant in the room?

Let's first examine whether people will be able to purchase or maintain electric cars in addition to the energy issue. High-skilled workers typically make roughly 563.74 USD each month, and according to Kelley Blue Book, the average electric car will cost 66,876 USD in 2022. It will be difficult to afford the new electric cars because fewer people can even afford to buy them. Yes, the government has implemented some measures to make it simpler to purchase electric vehicles, but the costs remain expensive and only a small number of people can afford them.

Transport in a country of 13 million people is not easy. Many people use Paratransit and motorbikes. There is fewer private transports in Rwanda. For the

government to shift to electric vehicles in the first place they will bring buses because that it is what many people use. This might bring a big problem on the market to companies who invested in paratransit using gas and it may be hard to remove them from the business.

There are frequently blackouts where we can go up to three days without electricity since the power grid is unreliable and insufficient. Am trying to picture a person who purchased an electric automobile and went three days without using it. Let's consider the charging stations that we currently have. The lone station in Rwanda is situated near the Volkswagen plant that assembles automobiles there. Think about how many people will be in line as you wait for your car to charge. For an electric car to be successful, the electrical system must first be created, which will take time and is still not sufficiently developed.

To sum up, despite the obstacles like a lack of funding and electrical issues, Rwanda would benefit greatly from having electric vehicles. Is now, though the perfect moment for Rwanda to switch to electric cars? There is still much to be done. Instead of rushing to adopt electric vehicles now, the government should first offer power to every individual and make energy industry strong.

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