Energy transition jamaica

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This January, a group of SPIA students traveled to Jamaica on an experiential learning trip. The motivation for the trip was to study how a Small Island Developing State is confronting the energy transition, climate adaptation, waste management, environmental impact of mineral extraction, and conservation. The following is a synthesis outlining key challenges to Jamaica"s energy transition.

In meetings with officials from the Ministry of Transport and Mining, the Ministry of Economic Growth and Job Creation, and the Ministry of Science, Energy, and Technology, we were told about a yet-to-be-released-and-ratified update to the Integrated Resource Plan. The new policy will set an ambitious, 50% renewable energy generation target by 2030. As of 2023, only approximately 12% of total energy generation came from renewable energy sources. Setting aside that it is now 2024, and 2030 is six years away, Jamaica"s journey toward sustainable energy is fraught with complex challenges.

However, despite its negligible contributions to carbon emissions and scarce support from the countries most responsible for climate change, Jamaica remains committed to the energy transition, in part, because it offers the promise of lower costs in the long run.

Transmission and distribution losses are normal features of any grid. But again, Jamaica is an outlier. Distribution losses are relatively high, not because Jamaica"s grid is less developed, but because electricity theft is a common practice.

Put simply, paying for electricity is costly. According to JPS officials, the household cost to connect to the grid is roughly USD 1,000, or one-fifth of the average annual income. The government sponsors a universal lifeline rate policy- a household"s first 100 kWh per month is free. However, in a country where the average household uses 165 kWh per month, this subsidy may not be enough for the most vulnerable populations.

These recommendations are drawn from our short experience in Jamaica and should only be considered in conjunction with the country"s complex socio-political dynamics in terms of feasibility. With that in mind, the government should consider:

Jamaica"s energy transition presents a unique set of challenges, rooted in economic disparities, infrastructural limitations, and socio-cultural norms. Overcoming these obstacles demands innovative policy solutions, stakeholder engagement, and a commitment to equity and sustainability. By addressing the immediate challenges of cost, infrastructure, and social norms, Jamaica can pave the way for a more sustainable and equitable energy future.

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