

Environmental sustainability is a composite measure of final energy intensity (the energy used to produce a particular output), low carbon energy generation and CO<sub>2</sub> emissions per capita. Thermal generation capacity now has a higher share of the energy mix but its fuel sources have improved, shifting from heavy fuel oils to gas. However, there has also been less room for low-carbon energy generation. The target for renewable energy generation was 10% by 2020, and has now been extended to 2030.

Finally, power in Ghana is expensive, compared with some neighbouring West African countries. For example, Ghana's tariff averages 15.5 cents per kilowatt versus 10.5 cents per kilowatt in neighbouring Côte d'Ivoire. This can reduce the country's competitiveness, given that cheaper power attracts both domestic capital and foreign investment.

It's also important in meeting Sustainable Development Goals (SDG) 7 and 13 which, respectively, aim to increase access to modern energy and combat climate change. Currently, about 70% of Ghana's population lack access to clean cooking fuels. This has severe implications for health, gender, and the environment.

#### **A better balance**

Addressing inefficiencies in Ghana's electricity sector will reduce the need to price in distribution losses, thereby enhancing affordability. This could promote industrialisation and clean cooking with electricity. Balancing the often-competing dimensions of the energy trilemma remains the central challenge of energy governance and not just about reducing carbon intensity as the sole mandate.

*This article was co-authored with Doris Agbevivi who is an Energy Economist working with the Energy Commission of Ghana.*

*Country's changing power mix affects energy security, energy equity and environmental sustainability. The three are referred to as the energy trilemma.*



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