

tricity in 2020. This makes Ghana one of the African countries that are most likely to achieve 100% universal access by 2030.

Despite the improvement in electricity access, we also found that changes to the energy mix, and the resulting electricity tariff structure, have been masking inefficiencies in the distribution system.

The tariff structure places a burden on some consumer categories. These include commercial and industrial users. This creates unintended consequences of unpaid bills and electricity theft, hampering full cost recovery. Ultimately, this negatively impacts on further investments that could improve electricity supply.

Energy security is not just about increased power generation and availability. It is about the entire value chain, from generation to transmission and through to distribution. Our analysis shows a lack of investment in the country's distribution infrastructure.

The result is that a persistent 25% of electricity generated in Ghana is lost at the retail end. These are caused by dilapidated infrastructure (technical losses) as well as electricity theft or commercial losses. Ghana's losses are more than double the sub-Saharan Africa average of 12%.

The state of distribution infrastructure has implications for integrating other variable renewable energy sources into the grid by making them even more expensive to connect. For consumers, such losses mean power outages are likely to continue.

25%

Percentage of
electricity generated
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at the retail end.

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