

CHART 1: Caribbean Energy Price Index

Index Value (right axis), Caribbean Average = 1.00; RE Share of Electricity Production, Percent of Total in 2023 (right axis)

Source: Various Electricity Providers across the Caribbean, IRENA, Marla Dukharan

Global Av. where Caribbean Av.=1.00
Caribbean Av.=1.00
RE Share of Electricity Production

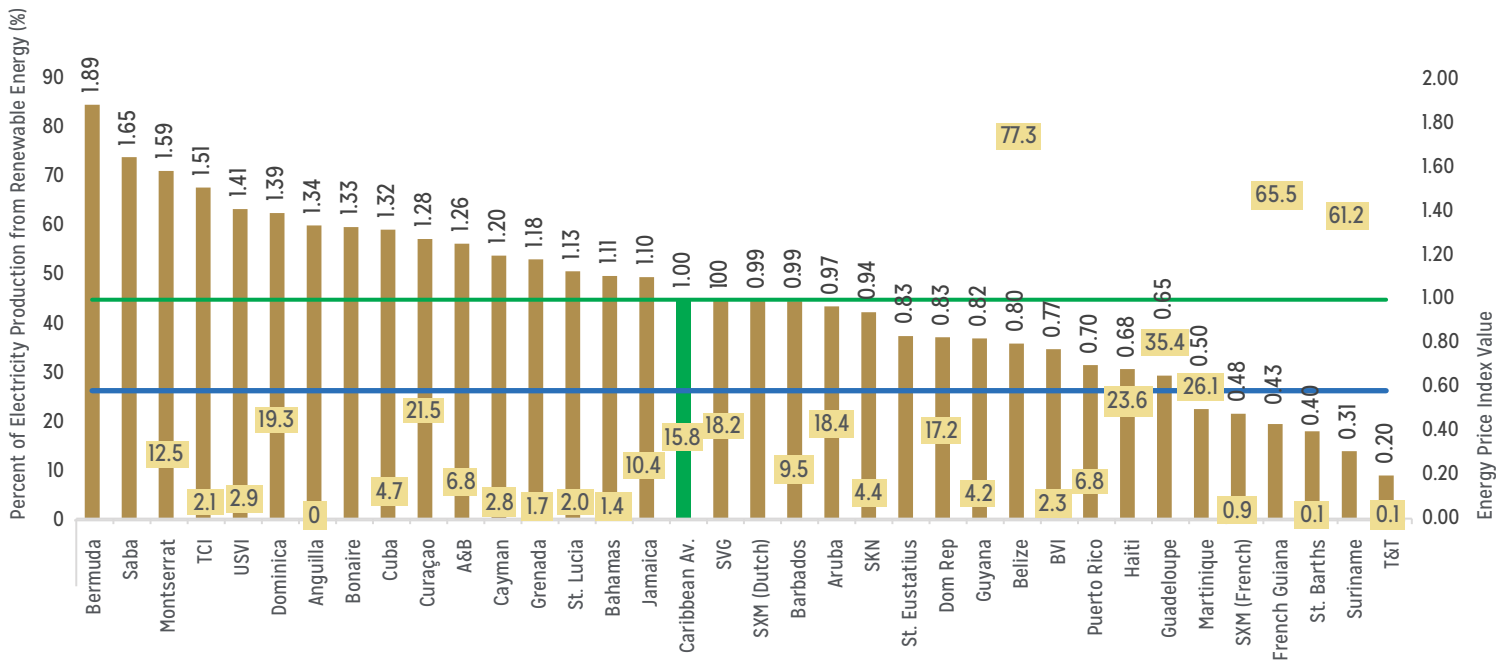


CHART 1: Caribbean Energy Price Index

This chart compares 2025 average nominal electricity prices as well as 2023 renewable electricity production as a percentage of total electricity production, across the Caribbean.

For each country, we collected the 2023 (latest available data) level of Renewable Electricity production as a proportion of total electricity production. We calculated the Caribbean simple average, as a benchmark.

For each country, we collected the latest nominal electricity rates available from domestic providers across user categories (residential at highest rate, commercial, and industrial where available) and calculated the simple average of available rates. Where applicable, the latest fuel charge per kWh was also included.

This data for each country is then indexed against the Caribbean (simple) Average = 1.00.

Index Value = (Electricity Price in Country X) ÷ (Caribbean Average Electricity Price)

Interpretation: For example, an index value of 0.99 for Barbados means electricity prices in Barbados are 99% of the Caribbean average, or 1% lower than the Caribbean average, on a nominal basis. Also, an index value of 1.2 for the Cayman Islands means that electricity prices in the Cayman Islands are 20% higher than the Caribbean average, on a nominal basis. In Belize, electricity prices are 80% of the Caribbean average, or 20% lower than the Caribbean average.

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MarlaDukharan.com/Caribbean-Energy-Price-Index



CHART 2: Caribbean Energy Price Index vs Renewable Energy Production

Caribbean Energy Price Index Value, RE Share of Electricity Production (%)

Source: Caribbean Energy Price Index; IRENA, Marla Dukharan

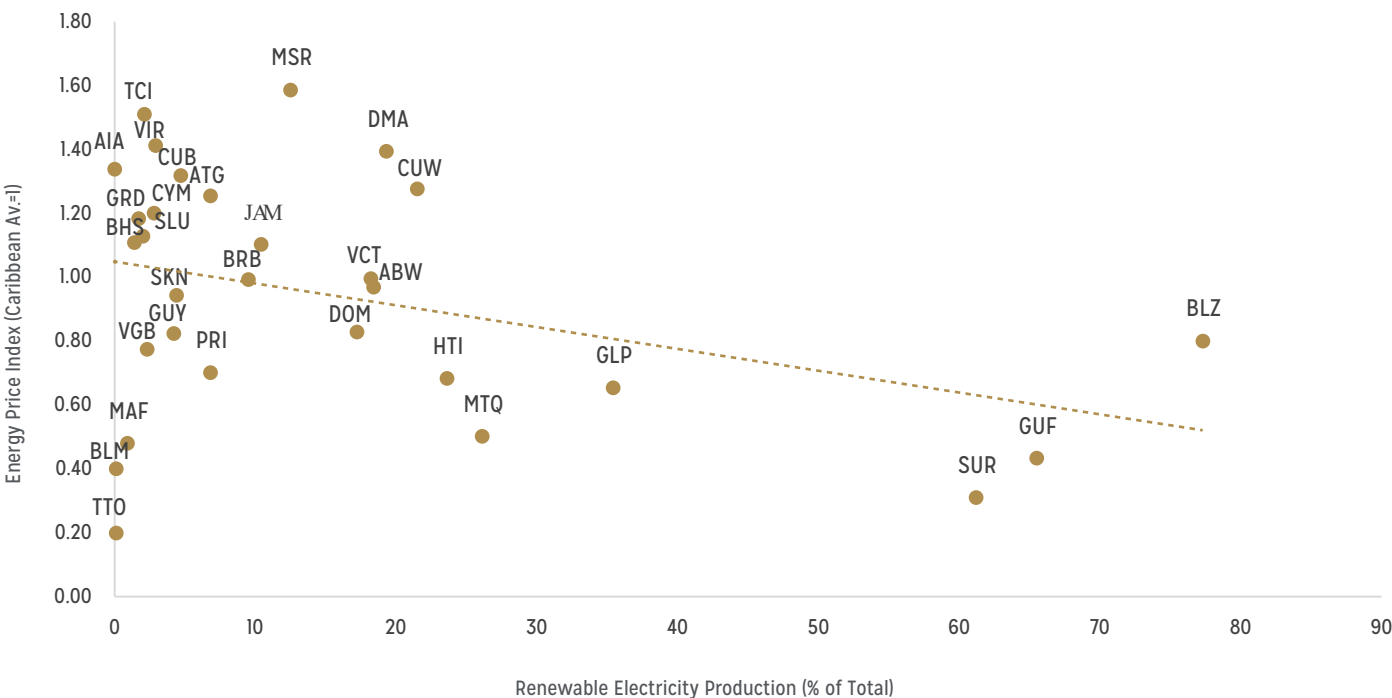


Chart 2: Caribbean Energy Price Index vs Renewable Energy Production

This chart compares the Renewable Electricity production level as a percentage of total electricity production, against the nominal energy price index calculated in Chart 1. This chart clearly depicts a pattern where, in general, the countries with higher Renewable Energy Production tend to have lower energy prices and vice versa, the countries with the lowest levels of Renewable Energy production tend to have higher prices (with the obvious exception of Trinidad and Tobago which uses its own natural gas to generate electricity, which is then subsidized).

CHART 3: Purchasing Power-Adjusted Energy Price Index

Index Value, Caribbean Average=1.00

— Caribbean Av.=1.00

Source: Various Electricity Providers across the Caribbean, Marla Dukharan

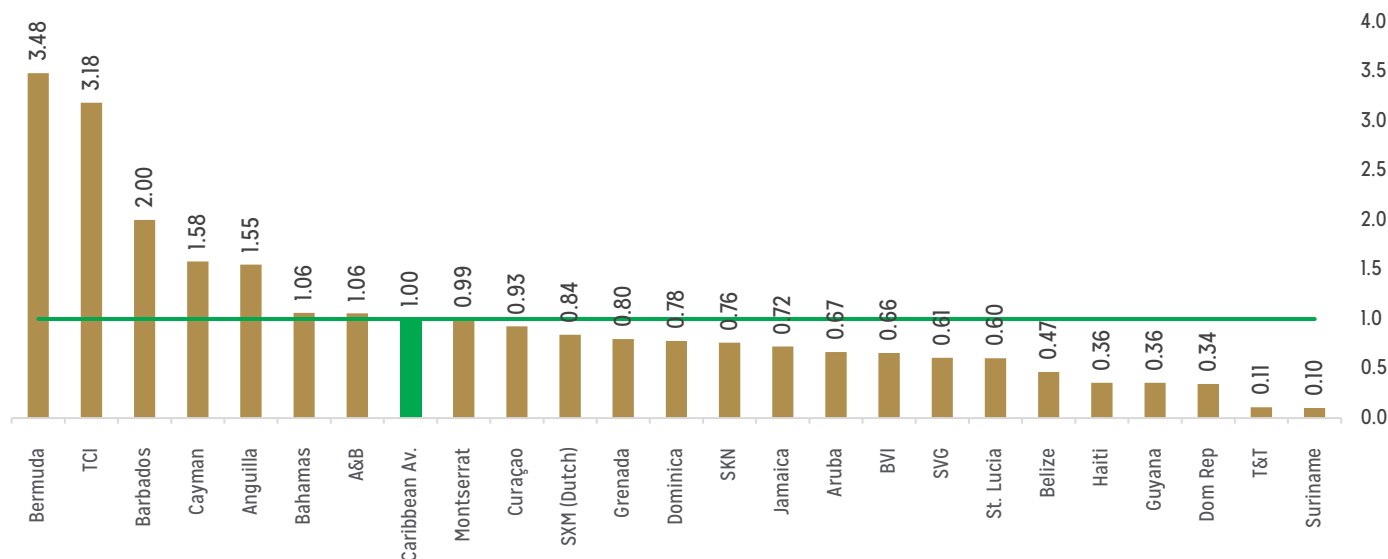


Chart 3: Purchasing Power-Adjusted Energy Price Index

This chart adjusts the nominal electricity prices from Chart 1 for differences in purchasing power (of USD equivalent) across Caribbean countries, similar to the way The Economist's Big Mac Index compares the relative price of a Big Mac in different countries, indicating local price levels and therefore, purchasing power.

We adjusted each country's average nominal electricity price with cross-country purchasing power data from Penn World Table 11.0, which measures the relative cost of goods and services across countries. This calculation reveals how expensive electricity is, relative to purchasing power or what money can buy in each country, essentially showing the real financial burden of electricity costs on consumers.

These adjusted prices are indexed against the Caribbean Average = 1.00 (maintaining the same base as Chart 1 for comparison).

Purchasing Power-Adjusted Index Value = $\frac{[(\text{Electricity Price in Country X}) \times (\text{Price Level in Country X})]}{[(\text{Caribbean Average Electricity Price}) \times (\text{Caribbean Average Price Level})]}$

Interpretation: A LOWER index value indicates electricity is relatively MORE affordable and LESS financially burdensome. For example, an index value of 2.0 for Barbados means that given the domestic cost of living and purchasing power, electricity prices are two times as financially burdensome in Barbados than they are for the Caribbean on average, despite the fact that Barbados' nominal electricity prices are 1% lower than the Caribbean average. Note also that based on this adjustment for purchasing power, Barbados has now moved up to the rank of the 3rd most financially burdensome cost of electricity in the Caribbean, and this is based on other factors which drive the cost of living up and purchasing power down (such as food prices, housing costs, taxes, etc.).

Note Belize, whose nominal electricity costs are 20% lower than the Caribbean average in Chart 1, but based on the cost of living and purchasing power therefore in Belize, the cost of electricity is just 47% of the Caribbean average, or 53% less financially burdensome.

You can also think of this purchasing-power adjusted electricity prices as akin to ambient temperatures, where often the meteorologists would say it is 20 degrees celsius today but it feels like 30, for example, based on other factors such as humidity and wind.