Individual observations:

## About Brazil's production from renewable sources
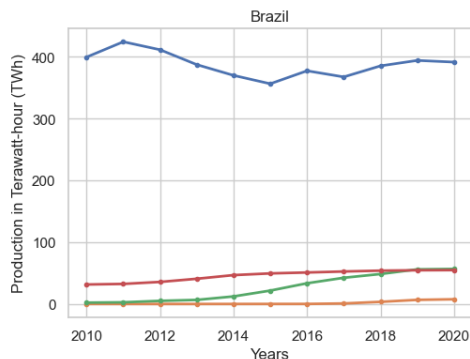
Hydro: From the renewable sources being used in Brazil, Hydro is the one who produces the greatest amount of Terawatts-Hour (TWh), by far. In 2010, the electricity production with hydro generated approximately 399 TWh, however, by the end of 2020, the production reached little over 391 TWh. One decade after, the production is less than the starting point of the analysis, which highlights the fact that the efforts to produce hydroelectric power have been enough to maintain the level, but not to increase it. This source, as well as any other renewable source producing energy in Brazil, lacks investment.

Solar: Efforts to produce electricity using solar energy have only recently began to present results, as up to 2016, there wasn't any. As efforts take place, the production shows signs of promising progress for the future. In 2020 a little over 7 TWh were produced, although shy, it is still progress.

Wind: Wind is one of the two sources to continuously increase its production. In the last decade, number went from little over 2 TWh (2010) to over 56 TWh (2020). The stability in its growth proves the country's capability to sustain the efforts towards a renewable-sources only country.
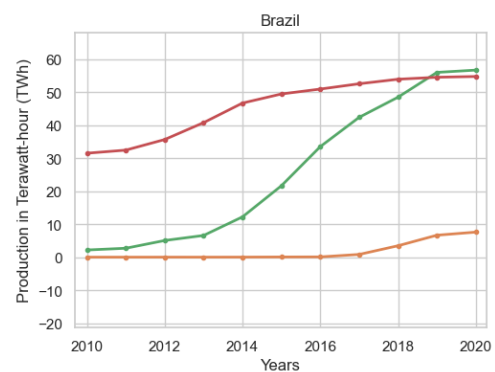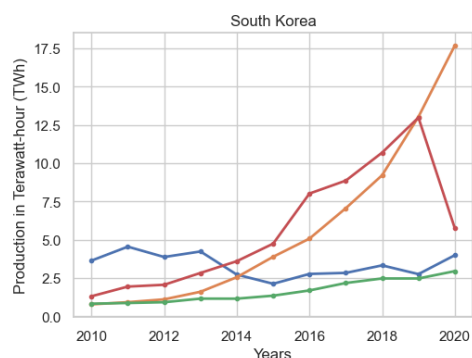
Other sources:

The other sources are not specified in the dataset; however, they do count for a good share of the amount of TWh produced in Brazil. Starting out the analysis with little over 30 TWh, it ended the year close to 55 TWh.

Comparison between Brazil's and the other countries from the sample

Russia

Russia's interest in renewable sources seems to lie mainly in hydroelectric energy (which produced almost 210 TWh in 2020), as the other sources from this analysis haven't reached 5 TWh in the last decade. The difference is significant. Only in 2013 have investments in solar and wind began to show results. Regarding solar, Russia started producing results 3 years before Brazil and yet, by the end of 2020, was still around 5 TWh less than Brazil.

South Korea

Although none of the renewable sources in South Korea have significant productions, solar energy appears to be receiving constant attention throughout the decade as its level increases significantly compared to the others. The data, at first glance, doesn't seem to support much interest in other sources other than solar. Apart from solar production, Brazil has produced more energy than South Korea in every other source analysed in the last decade.
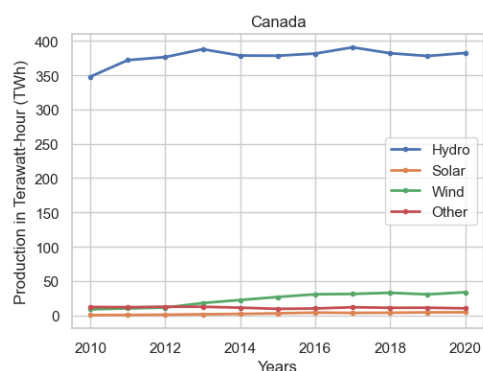

Canada

Similar to Brazil (and Russia), the main interest lies on hydroelectric production. However, Canada's production is the only similar to Brazil's level. Even though it hasn't reached 400 TWh, the amount is impressive and presents more stability than Brazil's, as shown on figures 6 and 7.

When considering the average production in each source it becomes clear that Brazil, apart from solar, produces more in every other source, specially when considering other sources of renewable energy. However, when it comes to renewable energy, localization is a key factor (among others). A tropical country like Brazil has more potential to produce solar energy than Russia for example. This is a significant factor why Russia's solar production started three years before Brazil's and didn't achieve the same results. Each country will have more favourable sources to choose from.
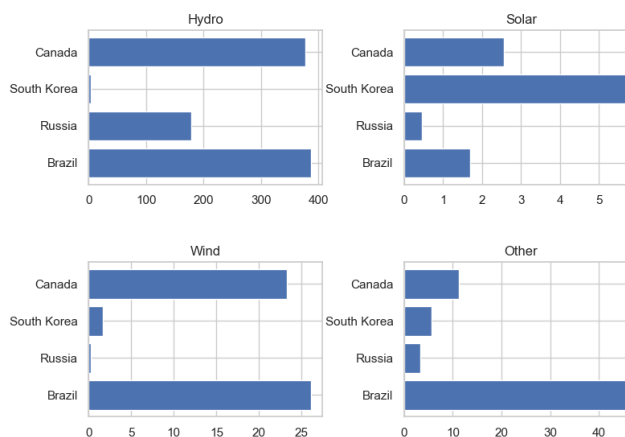
Conclusion

Considering that there are articles linking energy consumption with a country's GDP (Growth Domestic Product), the consumption of energy provided by renewable sources should affect, to some extent, the position on IMF's rank. It is reasonable to presume that Brazil could increase its rank position (or at the very least help maintain it), provided that the efforts towards renewable energy are increased as well. Overall, Brazil has a good production, specially from hydroelectric, and most certainly has the potential to increase the solar production.