

Worldwide Renewable Energy Expansion

Many people are unaware of the different types of energy used around the world. With the focus on energy consumption and the environmental impact, it is important to note countries' current use and expansion of renewable energy. As technology continues to advance, a shift in energy consumption can be seen over the span of 24 years.

Audience

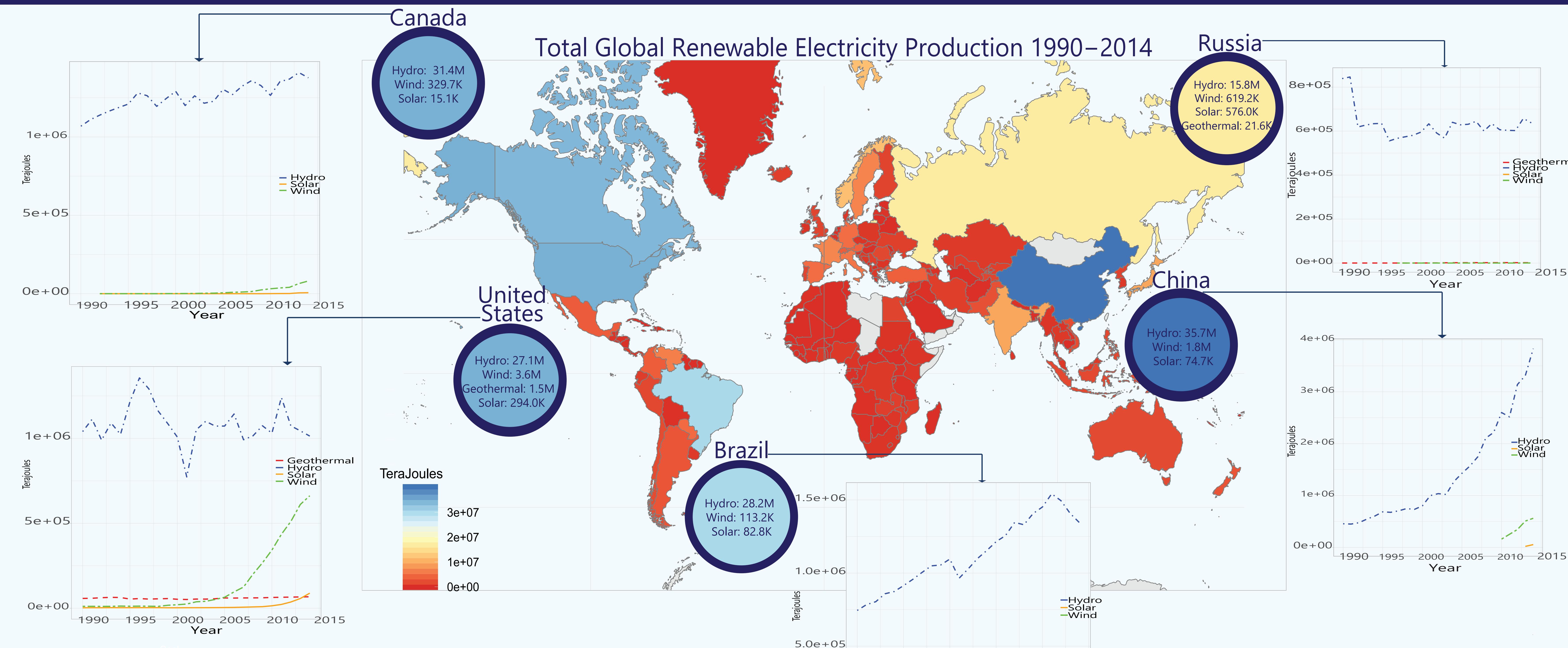
The audience for this visualization is primarily the general public who wish to understand the global energy usage and how renewable energy plays a role in overall global usage.

Questions

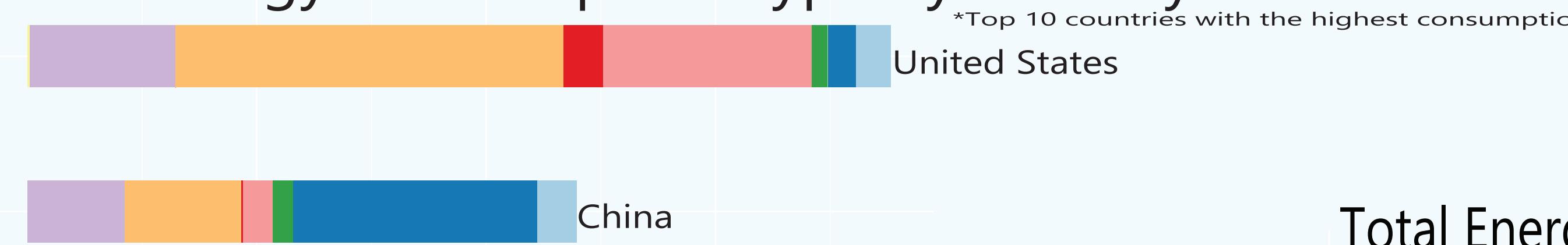
What are the most common types of energy used by country?
What is the assortment of renewable energy of the countries with the highest renewable production?
Over time how has renewable energy changed?

Dataset

The data set is from Kaggle.com and contains energy production and consumption from 1990–2014. The data had to be transformed, normalized and the energy standardized to terajoules. There are 80,293 rows and 10 columns. Additional datasets were merged to include population, industrial index, continents and regions.



Total Energy Consumption Type by Country



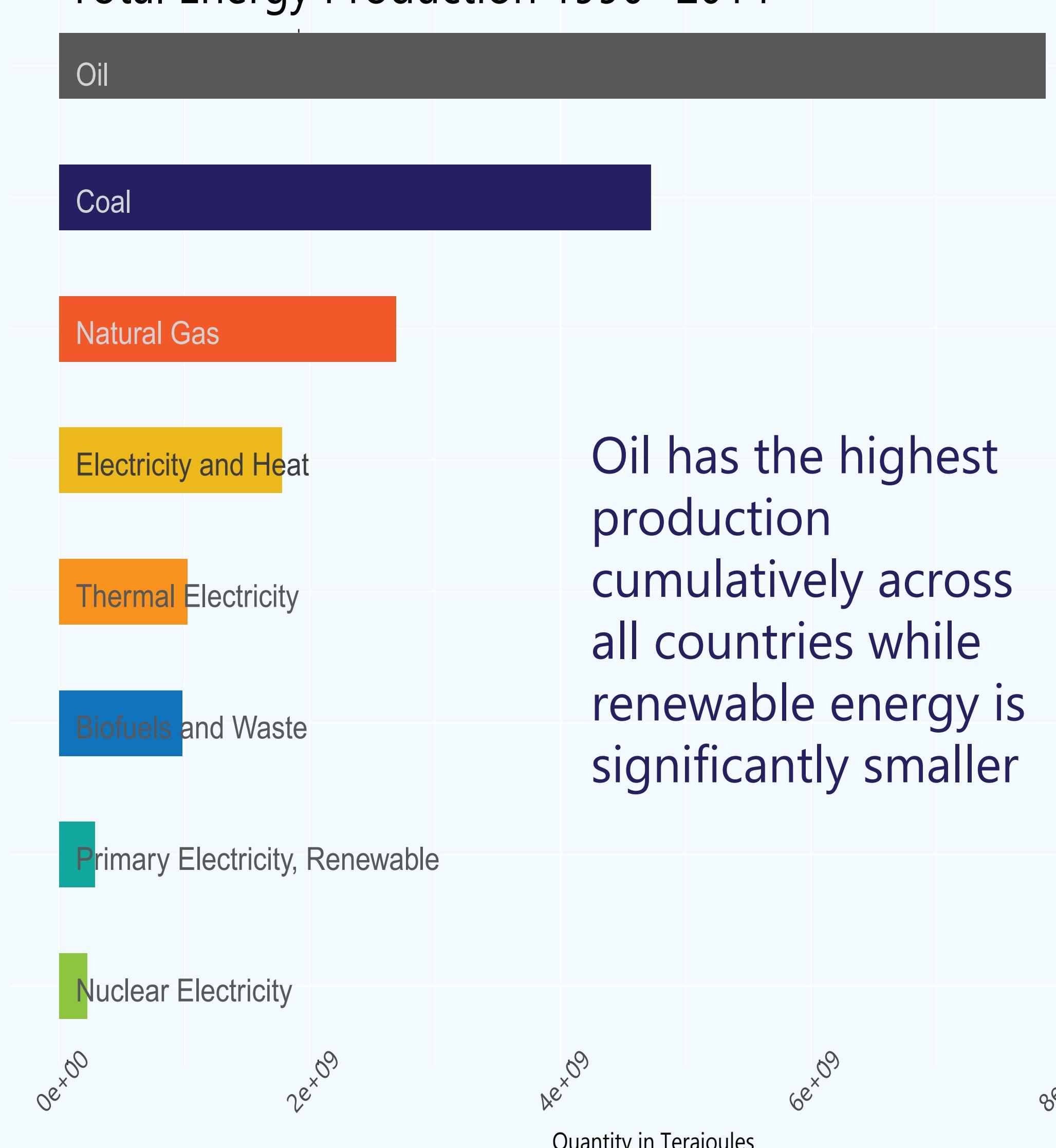
The United States has the highest collective total consumption with large amounts of oil while China is a large consumer of coal



Sources

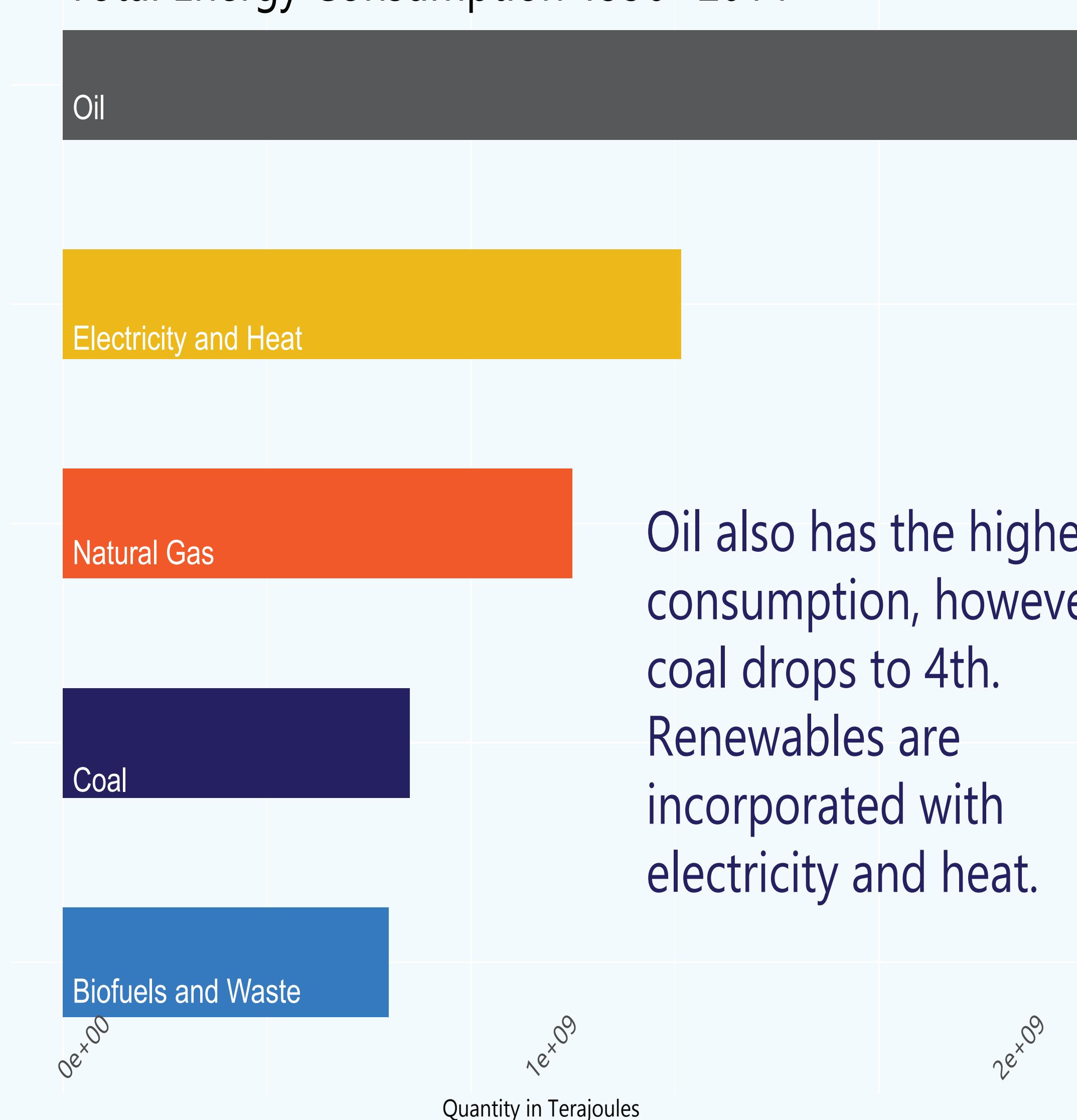
<https://www.kaggle.com/unitednations/international-energy-statistics> • <http://data.un.org/Explorer.aspx> • <https://unstats.un.org/unsd/energystats/data/> • <http://data.un.org/Data.aspx?d=POP&f=tableCode%3a1> • <http://hdr.undp.org/en/data#>

Total Energy Production 1990–2014



Oil has the highest production cumulatively across all countries while renewable energy is significantly smaller

Total Energy Consumption 1990–2014



Oil also has the highest consumption, however coal drops to 4th. Renewables are incorporated with electricity and heat.

