

Natural Gas Data Analysis and Market Research

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Introduction:

Natural Gas is a fuel used for cooking, heating and electricity generation. Also, it can be used as a fuel for vehicles and production of fabrics, glass, steel, plastics, and other products. It is a non-renewable resource.

Approach:

Taking a dataset to understand the trends in the natural gas industry:

I have selected a dataset from Kaggle which contains basic Oil and Natural gas. This dataset is openly available.

About the dataset:

The global dataset of oil and natural gas production, prices, exports, and net exports. Oil production and prices data are for 1932-2014; gas production and prices are for 1955-2014; export and net export data are for 1986-2013. Country codes have been modified from earlier versions to conform to Correlates of War (COW) and Quality of Government (QOG) standards.

Understanding basic concepts:

Very first thing to understand is, Natural gas production by each country. In terms of natural gas production, this is how the countries will be ranked:

- 1. United States
- 2. Russia
- 3. Iran
- 4. Qatar
- 5. Canada

Biggest American competitors based on market value in this industry in the U.S in 2018:

- 1. Exxon Mobil 344.55 (billion U.S dollars)
- 2. Chevron 239.06 (billion U.S dollars)
- 3. ConcoPhillips 79.31 (billion U.S dollars)
- 4. EOG Resources 68.6 (billion U.S dollars)

Creating Tableau dashboard and analyzing data:

My Tableau dashboard can be found here -

https://us-east-

1.online.tableau.com/t/aayushivora/views/NaturalGasDataAnalysis/NaturalGasDa

<u>taAnalysis?iframeSizedToWindow=true&:embed=y&:showAppBanner=false&:disp</u>lay count=no&:showVizHome=no#2



Conclusions:

From this dataset, we can see that United States has the highest gas production, approximately around 26% of the entire gas production by all the countries. In terms of gas exports, Russia, Canada and Norway are leading countries. The cumulative use of natural gas has increased over years. This can be concluded from the graph that shows how gas exports have increased over the years from 1990 to

2014. In terms of gas value prices, United States has been the highest in 2000 and 2014. This is followed by Russia, Iran and Qatar.
References: 1. https://www.indexmundi.com/g/r.aspx?t=10&v=136&l=en