

Question: What is the long-term trend of gas and oil price?

Target audience: General public, producer of oil and refinery.

It contains the people that need to store or people plan to sell oil in the future, they need to have the plan of price changes.

Chart type: Line Chart.

Line chart is the clearest showing the trend in a period of time. A Line Graph is most frequently used to show trends and analyse how the data has changed over time.

Design Features: Line chart should be the most common and most clear chart when showing the trend graph, and there are three different data in three different colours for a better sight. Long-term trend of oil and gas prices should be the main feature of the graph that shows. Users can also select a time to see the price in a specific day.

Evaluation: Line graph is plotted by plotting the points of main data in the Cartesian coordinate grid. The main advantage of choosing line chart to show the price trend in the gradient, while gradient is negative, the price decrease, when gradient goes smaller, the price decreases faster.

But line graph also has its disadvantages, for two data's comparison, it can only show which is larger for a given time, the data cannot be compared over period of time.

Weigh the pros and cons, line graph is suitable for looking for price change over a period of time, which is a great choice that clearly shows trends in the data.

Question: Is there any correlations for oil and gas prices?

Target audience: General public, economist.

Target audience need to find out the relations between oil and gas price to find the supply and demand quantity change to these two kinds of resources, and price relationship between two substitutes.

Chart type: Bar chart

Bar chart is a plot that shows three data together and it will be the clearest in the price comparison.

Design Features:

Put three data into different colours, and through looking is there any obvious trend in bar charts, we can get the relations between price of oil and gas. And bar charts also consisted with three colours, better distinguish price level, user can also choose only active only one or two bars in the chart.

Evaluation:

Bar chart more cares about comparison between different data, rather than specific fluctuation in the data set.

Although there still some disadvantages, the trend for a single data will be not so continues, and the single value in the chart always not so clear because it mostly showing the comparison not the real value.

Weight up pros and cons, the target audience want find the correlations between oil and gas price, use Scattered plot will be a good choice for them to find general trend.

Question: Are the price of oil and gas price shows periodical trend?

Target audience: General public, Economist and financial analyst.

Through finding the periodical price change, economist can get the relationship between different time with price of oil and gas to analyse reasons for price level change.

Chart type: Small multiple line charts

This kind of chart shows trend for different period of time, and those time period is controllable.

Design Features:

This the chart usually consists with 2s line graph, people can choose show the data in monthly or yearly to find the general trend. Away from some special cases directly leading to change of price change (such as government intervention), target audience will be glad to looking for general rules in oil market. Users can use this two charts to compare two time period which is quite apart in the common line chart.

Evaluation:

The small multiple line charts are designed for audience that looking for the general rules at oil market and gas market. In the single graph, people are hard to watch chart separately into weeks and months, all data are putted in the same graph with same scale. When the data putting into smaller scale line charts, the characteristics of each piece of data can be displayed clearly, which will be easier to get their answer.

People can also chooses two different period of time and find the general trend in price.