

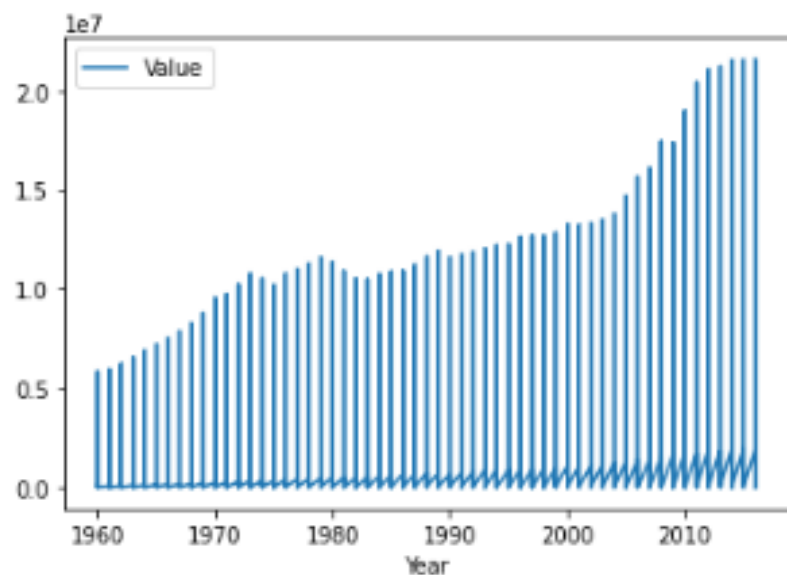
## ANALYSIS OF CO2 EMISSION AND BREAKDOWN

### INTRODUCTION

The Co2 emission in developing countries is substantially higher compared to others and it will remain the same for a while. The only way to reduce the co2 emission is to understand what causesthe emission and educate everyone to find ways to reduce it. This report aims to bring to light the various kinds of emissions and the effect they have.

For Analysis purposes following indicators were taken:

- CO2 emissions (kt)
- CO2 emissions from solid fuel Consumption (kt)
- CO2 emissions from liquid fuel consumption (kt)
- CO2 emissions from gaseous fuel consumption (kt)



A separate dataframe is created for each one of these indicators and the statistical functions were applied to check the correctness of the data. Population variance is checked for "Values" column from all the dataframes for consistency. The mean() and stdev() is derived for all the dataframes as shown below:

```
data1: mean=727933.885 stdv=2347607.462
data2: mean=315957.303 stdv=1145064.042
data3: mean=259748.724 stdv=806008.165
data4: mean=315957.303 stdv=431771.337
```

Also, the pearson correlation function is applied to check the value: Pearsons correlation: 0.088

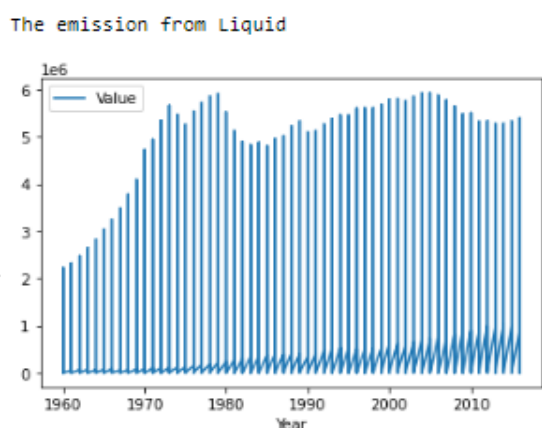
Countries "ARB", "EAS" were chosen for comparison with the world data and all the statistical values are calculated for both Countries and the World Separately.

The Data for these two countries is merged into a single dataframe based on the year and again the correlation was checked against the world data to see the change across years.

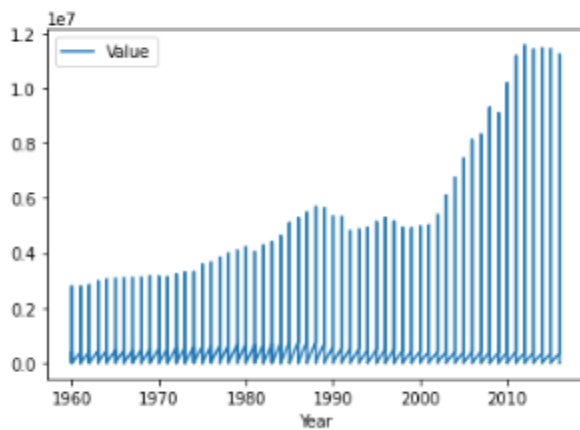
Value\_x and Value\_y represent the correlation between countries (EAR and ARB). There is 99% change across years.

### KINDS OF EMISSION

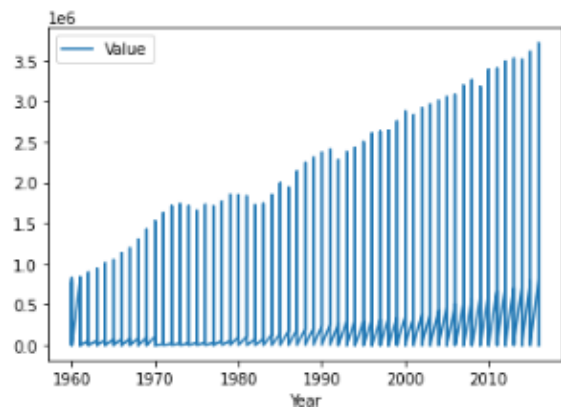
There are 3 abstract kinds of emissions, solid emission, liquid emission and gaseous emissions. Understanding the effect of each kind will help reduce/control the total emission through proactive initiatives.



The emission from Solid

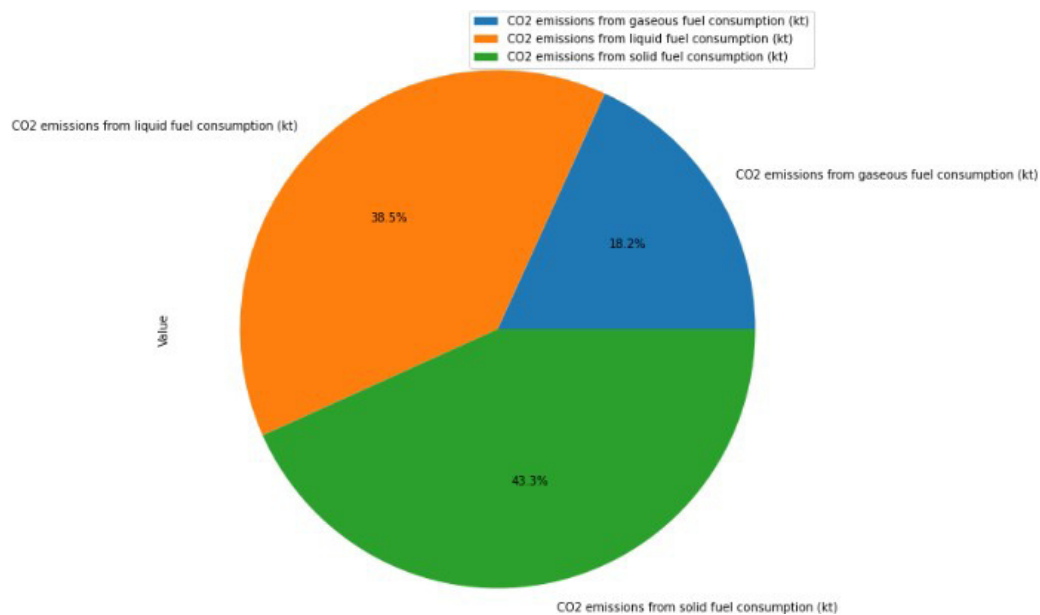


The emission from Gas



## THE DISTRIBUTION

The distribution of emission as shown in the figure shows that the emission from solid materials is really followed by liquids and a little amount contributed by gaseous emissions.



## CONCLUSION

Visualization is the easiest method to understand when it comes to understand the model. Here in this visualization assignment once can is how Co2 Emissions from different sources are spread across. Highest (43.3%) CO2 emissions are from Solid Fuel Consumptions and Liquid Fuel consumption contributed to about 38.5% emissions where as CO2 emissions from gaseous fuel contributed the least at 18.2%.