AN6004 Data Management & Visualization

Final Project

CO2 Emission

Team 2

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Introduction

Carbon dioxide (CO_2) is the primary greenhouse gas

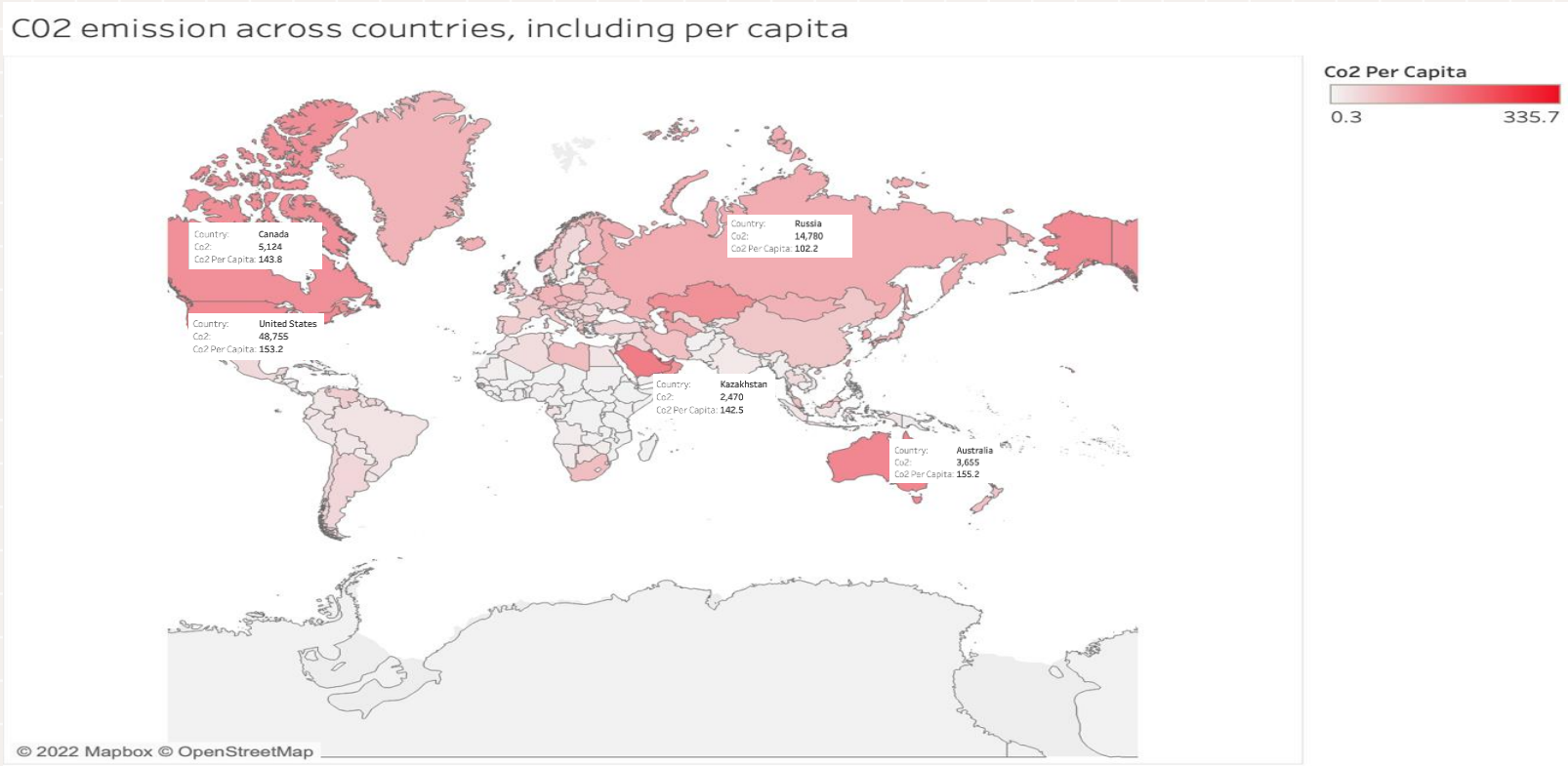
Dataset: owid-co2-data
Year: 2010-2018

01

Visualization 1

GLOBAL LEVEL ANALYSIS FOR CO2 EMISSIONS

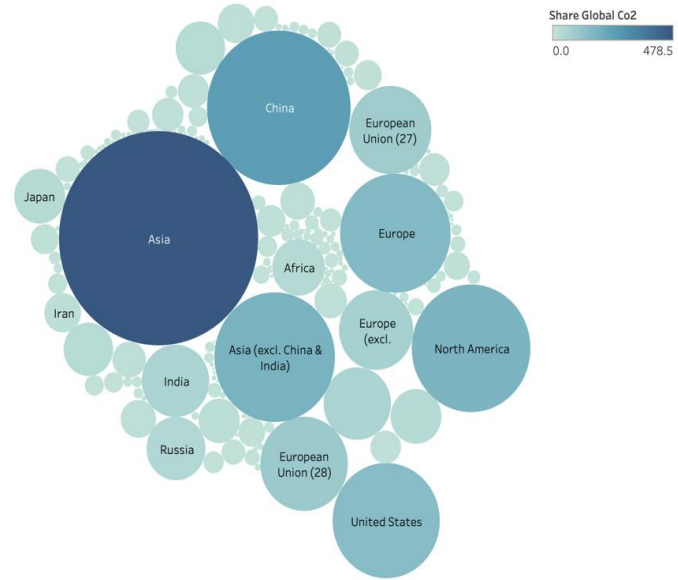
C02 emission across countries, including per capita



Map based on Longitude (generated) and Latitude (generated). Color shows Co2 Per Capita. Details are shown for Country, Co2 and Co2 Per Capita. The data is filtered on Year, which ranges from 2010 to 2018. The view is filtered on Latitude (generated) and Longitude (generated). The Latitude (generated) filter keeps non-Null values only. The Longitude (generated) filter keeps non-Null values only.

Global share of CO2 emission

Country Specific



Country. Color shows sum of Share Global Co2. Size shows sum of Share Global Co2. The marks are labeled by Country. The data is filtered on Year, which ranges from 2010 to 2018. The view is filtered on Country and sum of Share Global Co2. The Country filter excludes 6 members. The sum of Share Global Co2 filter keeps non-Null values only.

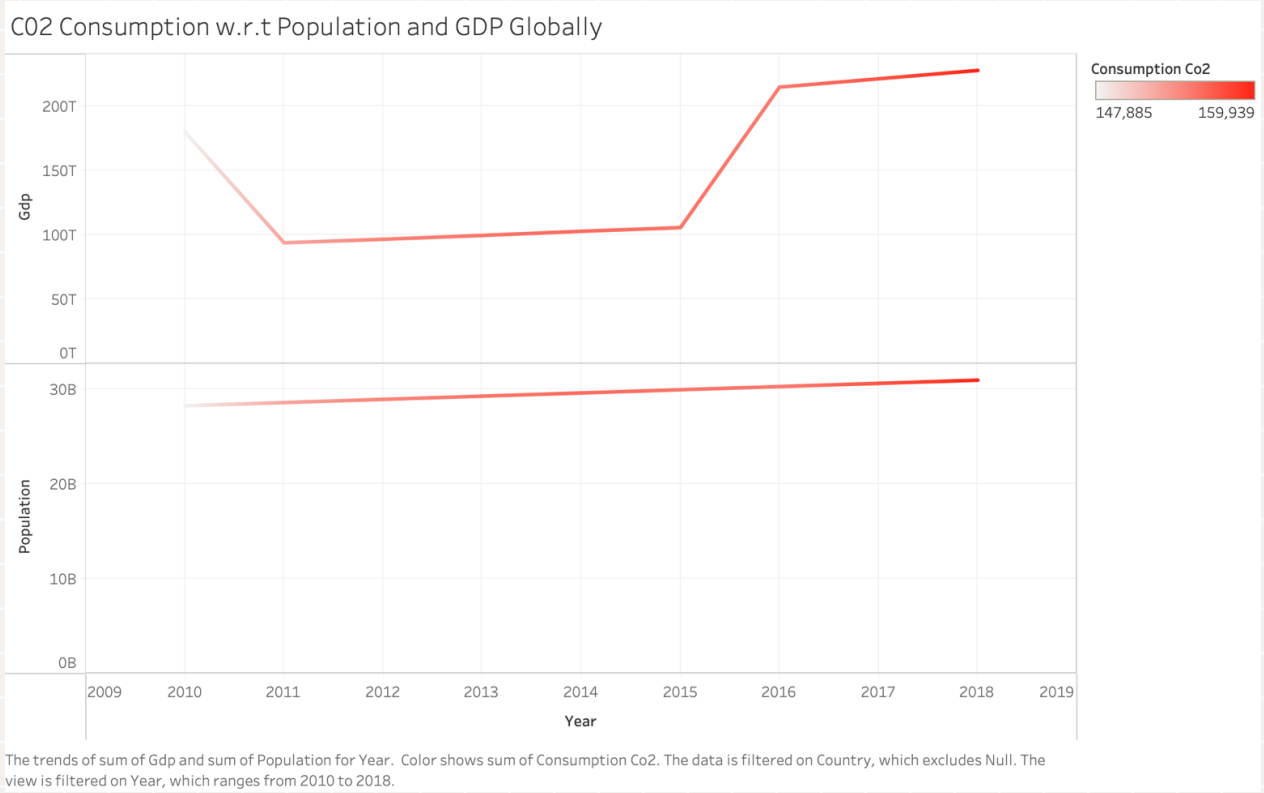
Income Level Specific

Country. Color shows sum of Share Global Co2. Size shows sum of Share Global Co2. The marks are labeled by Country. The data is filtered on Year, which ranges from 2010 to 2018. The view is filtered on Country, which keeps High-income countries, Low-income countries, Lower-middle-income countries and Upper-middle-income countries.

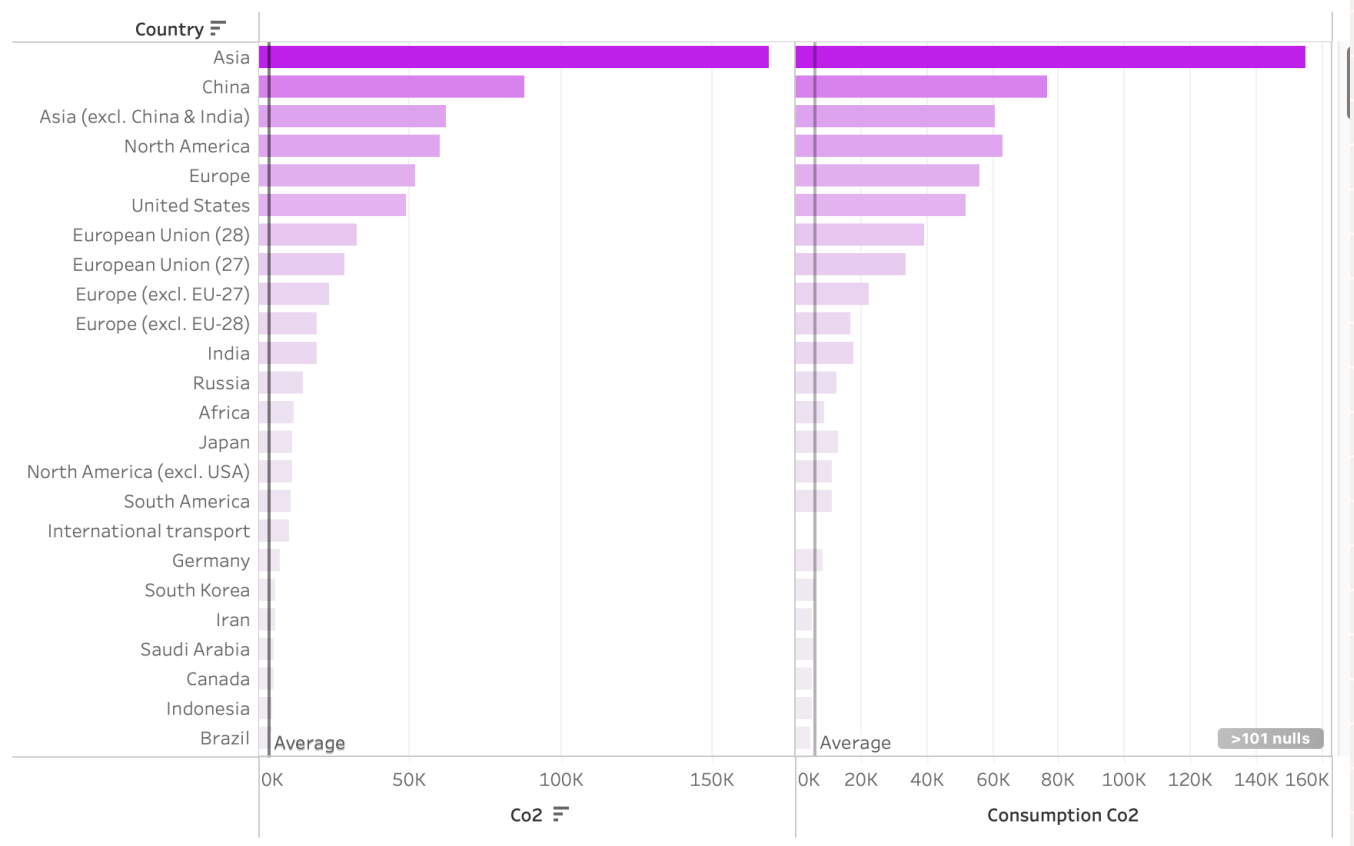
CO2 Consumption w.r.t Population and GDP

GDP

Population



Comparision with Global Average



Emission

Consumption

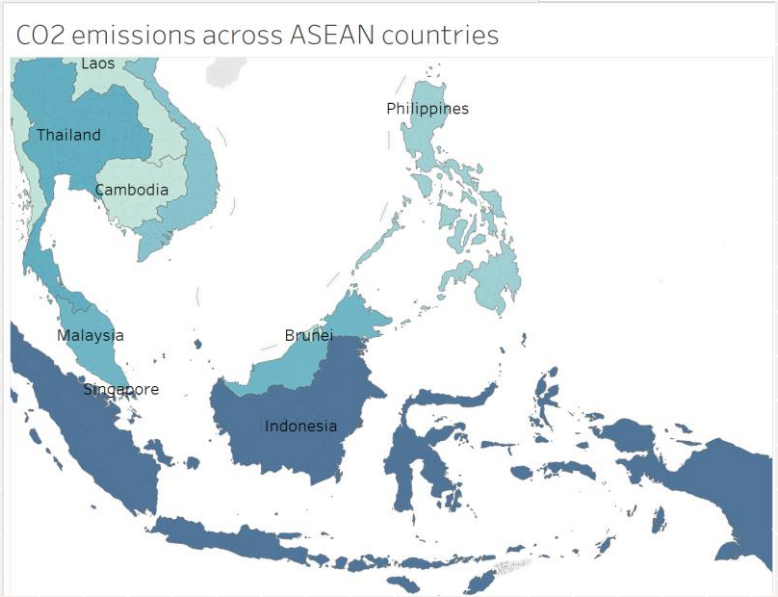
02

Visualization 2

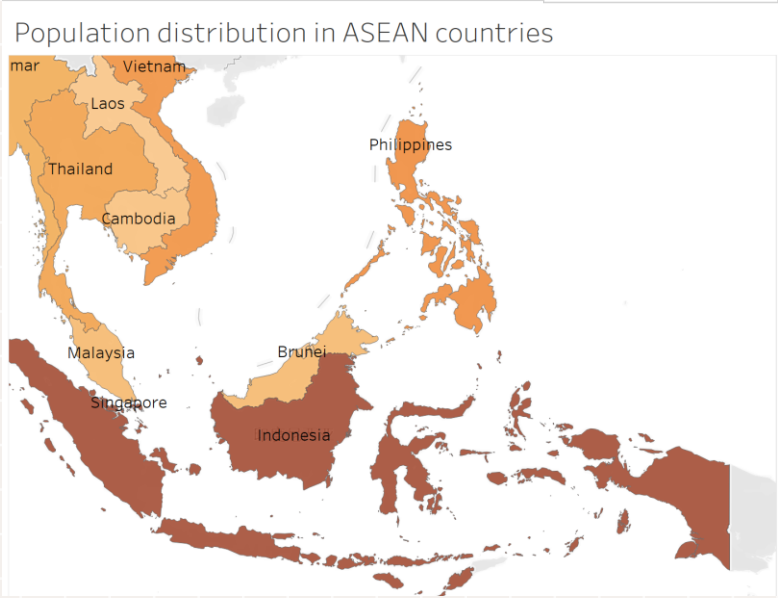
CO2 emission in ASEAN countries

CO2 emission vs Population

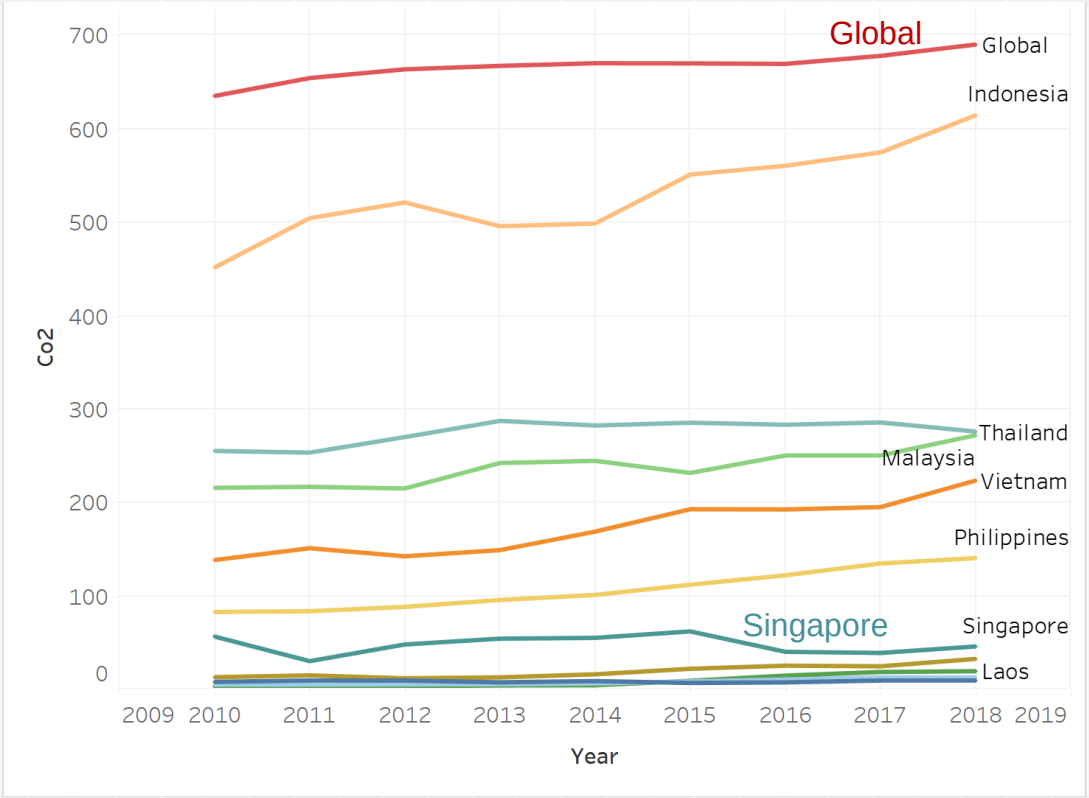
CO2

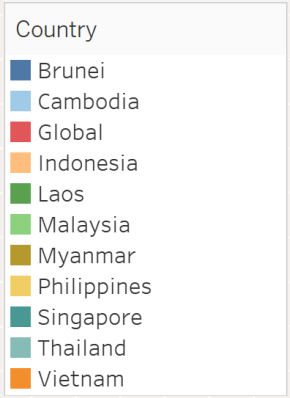


Population



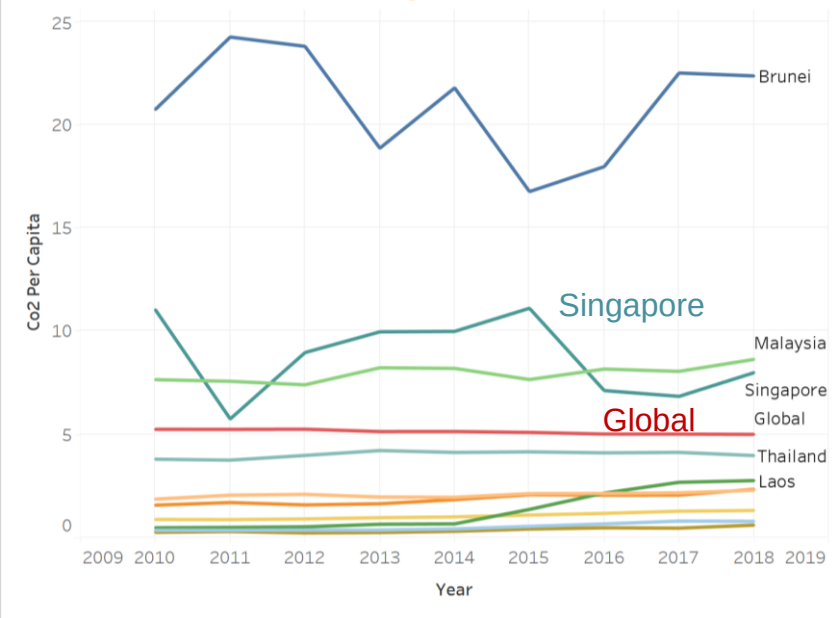
Yearly CO2 emission in ASEAN countries



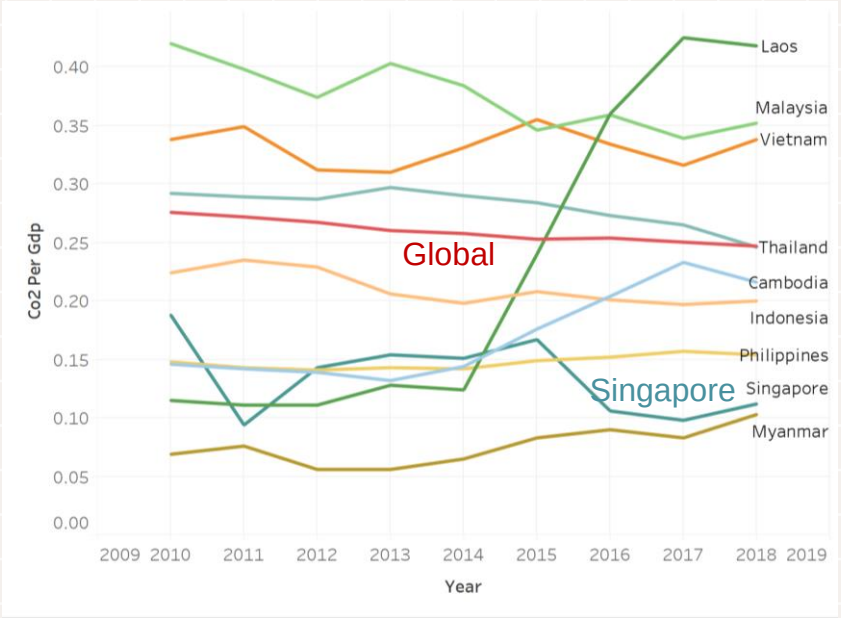


CO2 emission Per Capita & Per GDP

Capita



GDP



03

Visualization 3

CO2 emission in Singapore

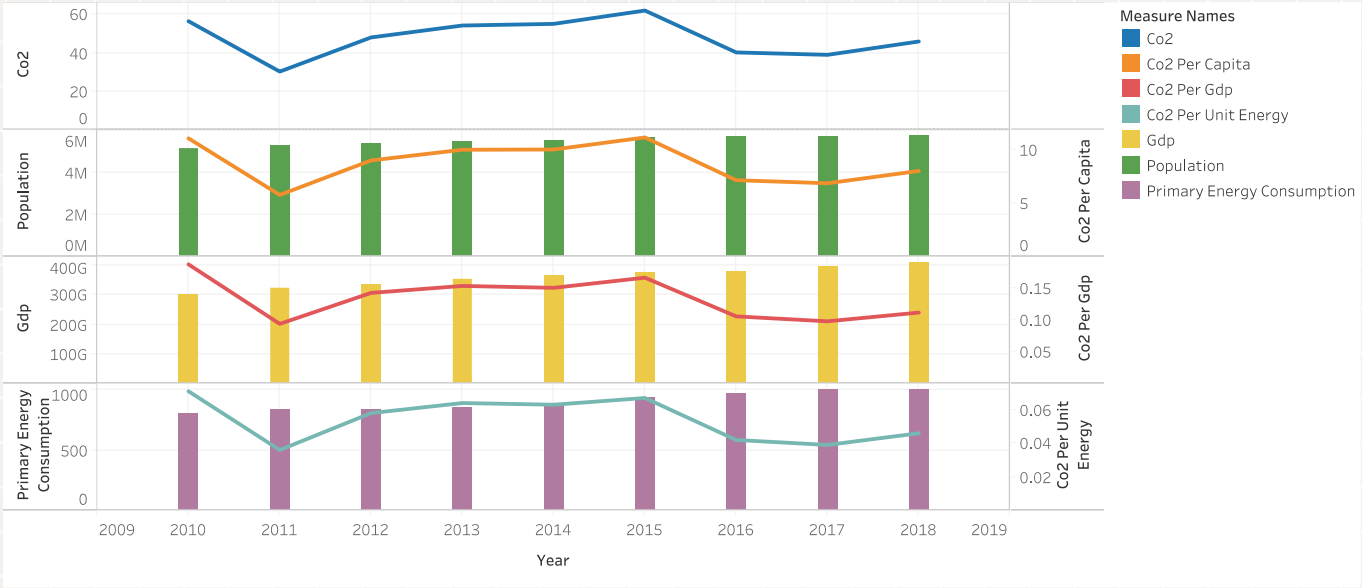
CO2 with Population/GDP/Energy

Co2

Population

GDP

Energy



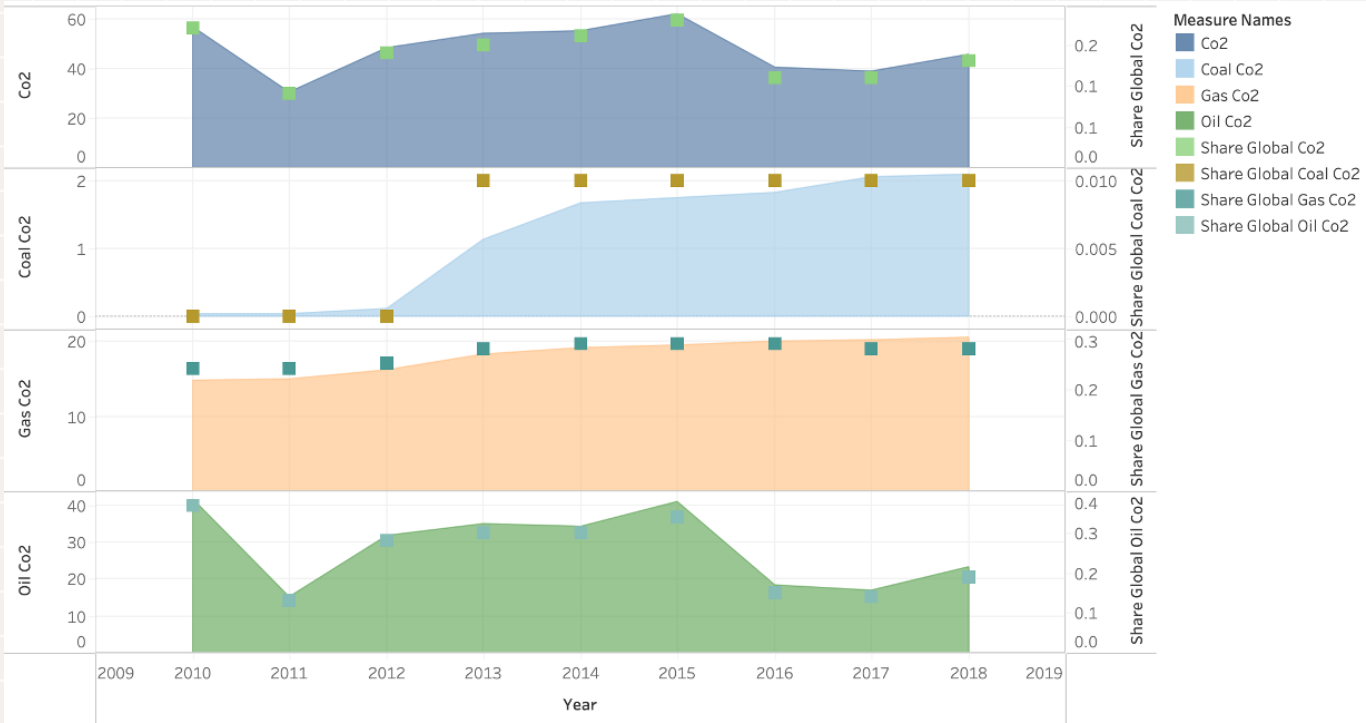
Different Source and Global Share

Co2

Coal Co2

Gas Co2

Oil Co2



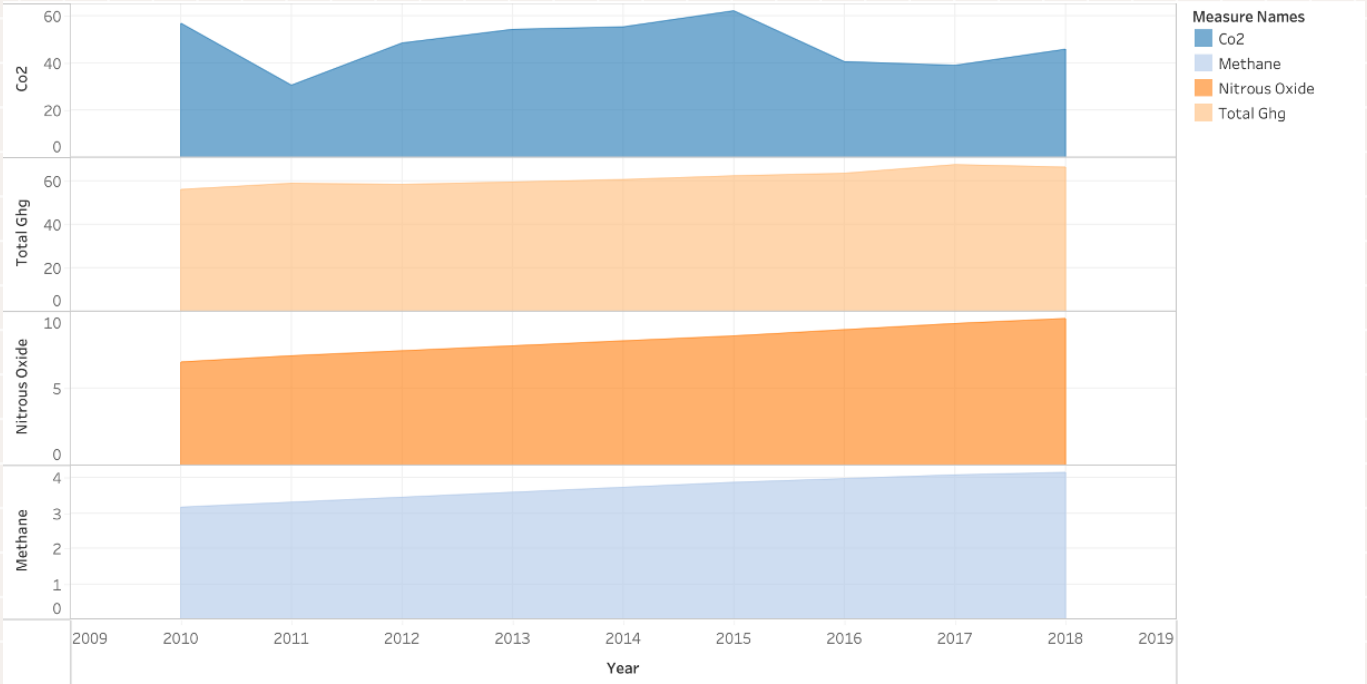
CO2 and Other Greenhouse Gas

Co2

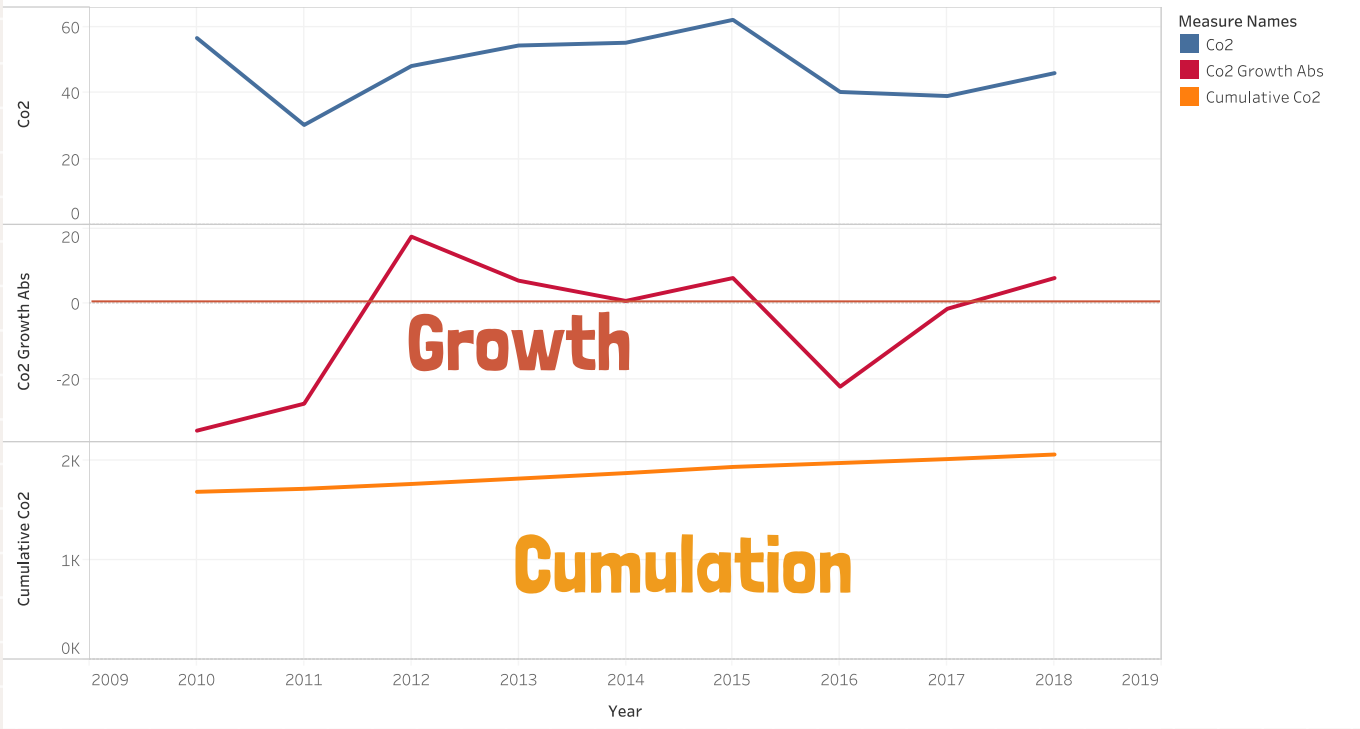
Total

Nitrous Oxide

Methane



Growth & Cumulation



04

Conclusion

Summary

Visualization one	The growth of economy and population accompanied with the increase of CO_2 emission.
Visualization two	ASEAN countries performed significantly role in reducing pollution gases.
Visualization three	Burning coal is the main source of CO_2 generation. Other pollution gases should be noticed as well.

Solution for reducing CO2

- Composting food waste reduces carbon dioxide
- Recycle all glass, plastic or steel cans
- Use green energy source like solar or wind power instead of fossil fuels
- The government should come up with strict policies to maintain the overall air quality of the city.