

# LAOS

Curbing Emissions  
through Energy Transition

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Youth Delegation from Laos  
(Group 7)



# CO2 EMISSIONS

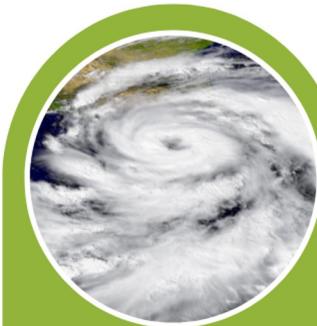
EFFECTS OF INCREASED CO2 EMISSIONS TO OUR PLANET



TEMPERATURE  
INCREASE



RISING OF  
SEA LEVELS



INCREASED  
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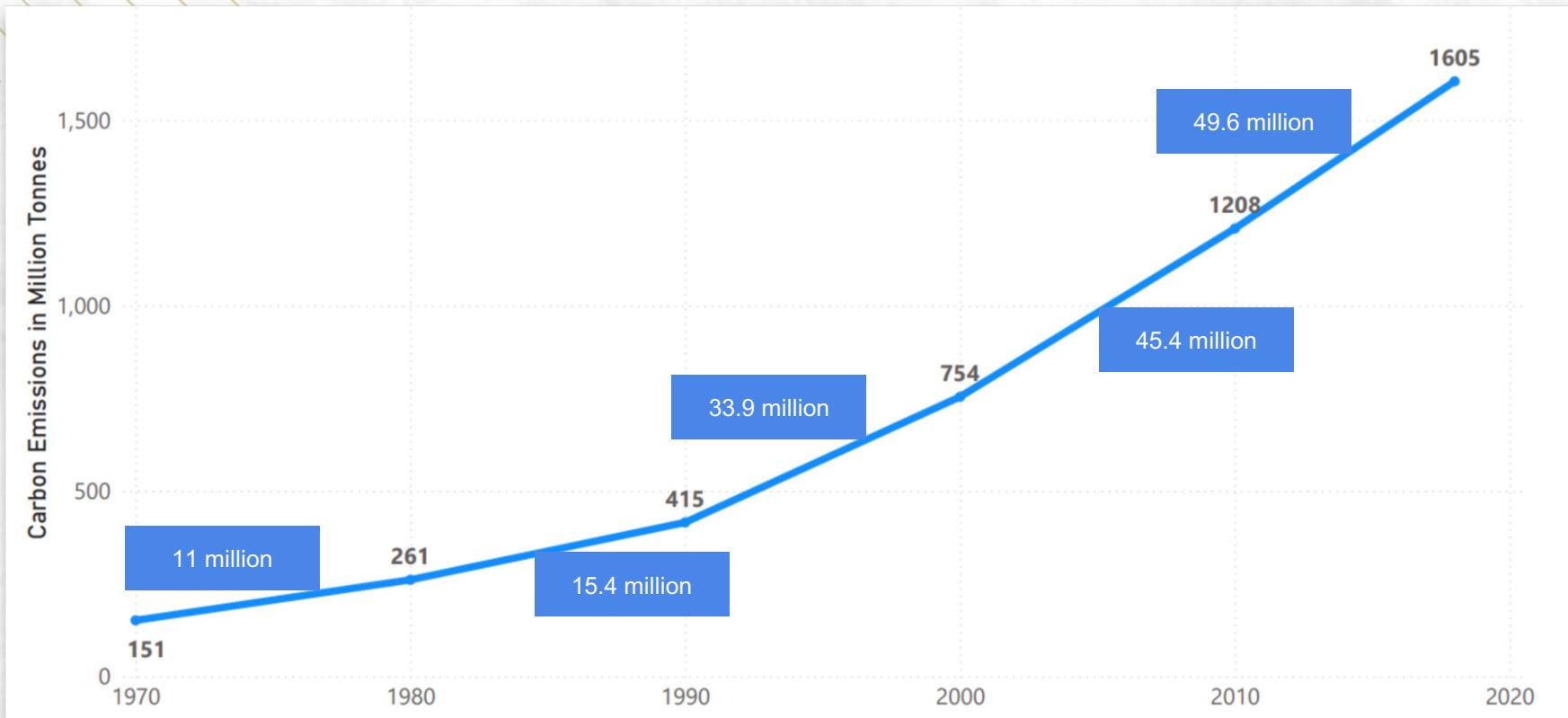
# **TOWARDS A SUSTAINABLE FUTURE: REDUCING CARBON FOOTPRINT OF LAOS**



# Questions

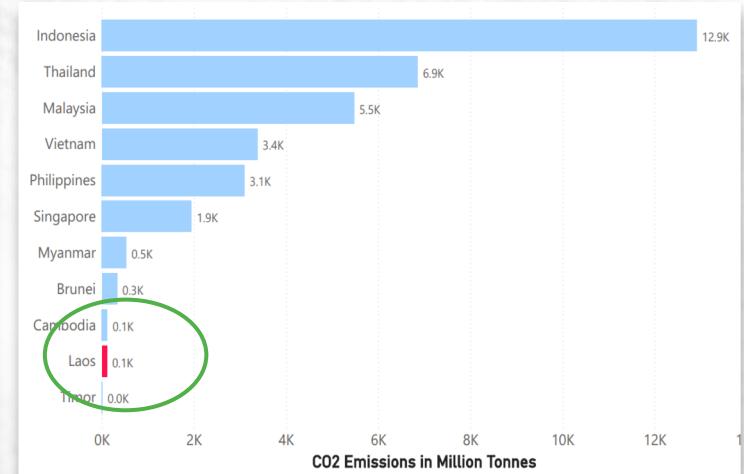
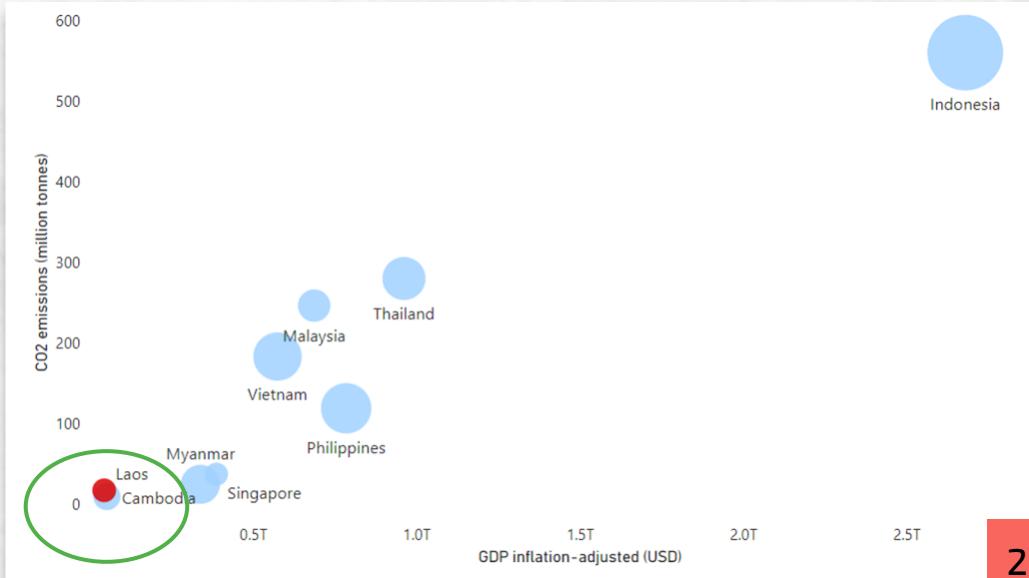
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# CO2 Emissions: An overview of Southeast Asia



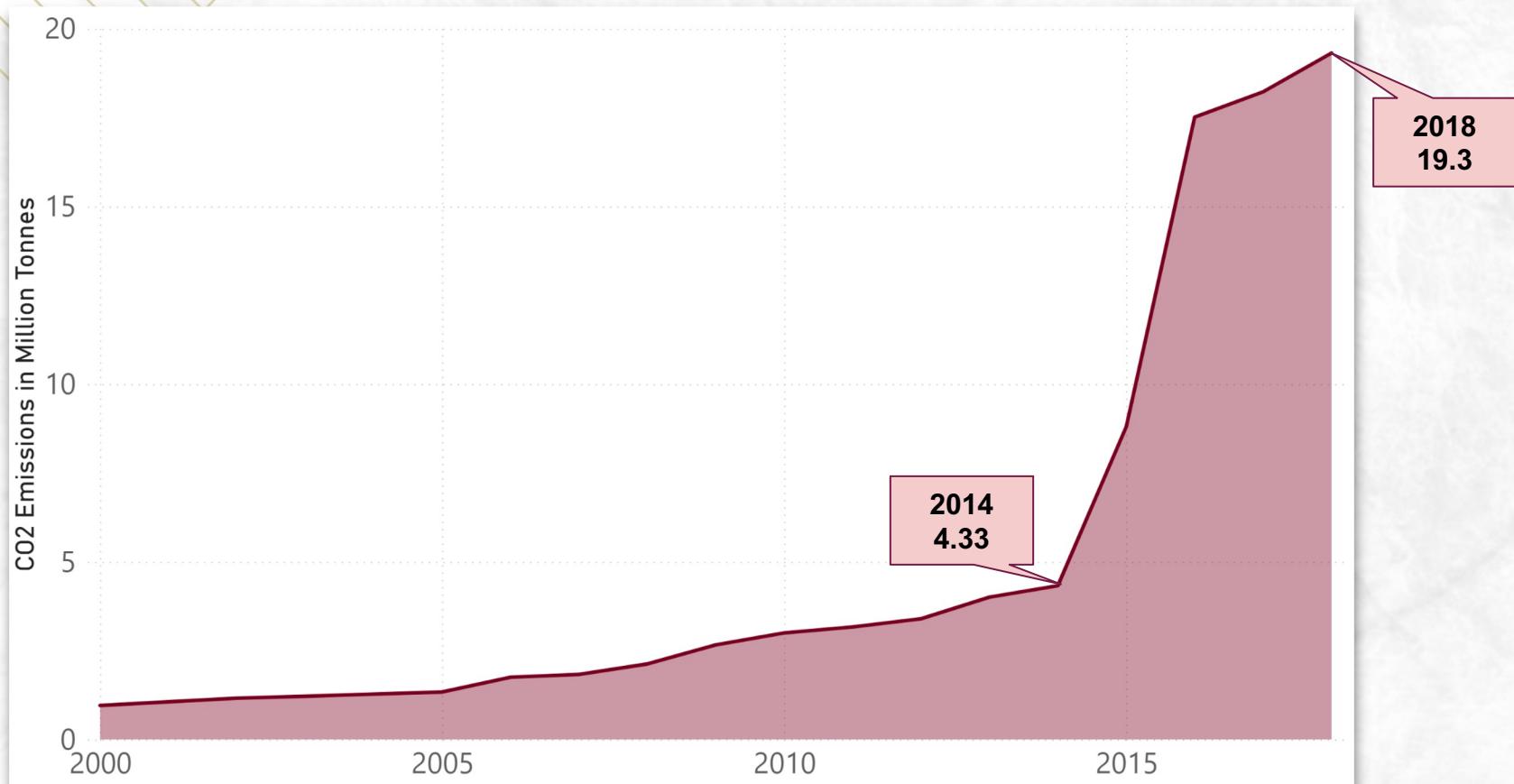
# Laos within Southeast Asia

Carbon Emissions, GDP, and Population of SEA Countries (2016)

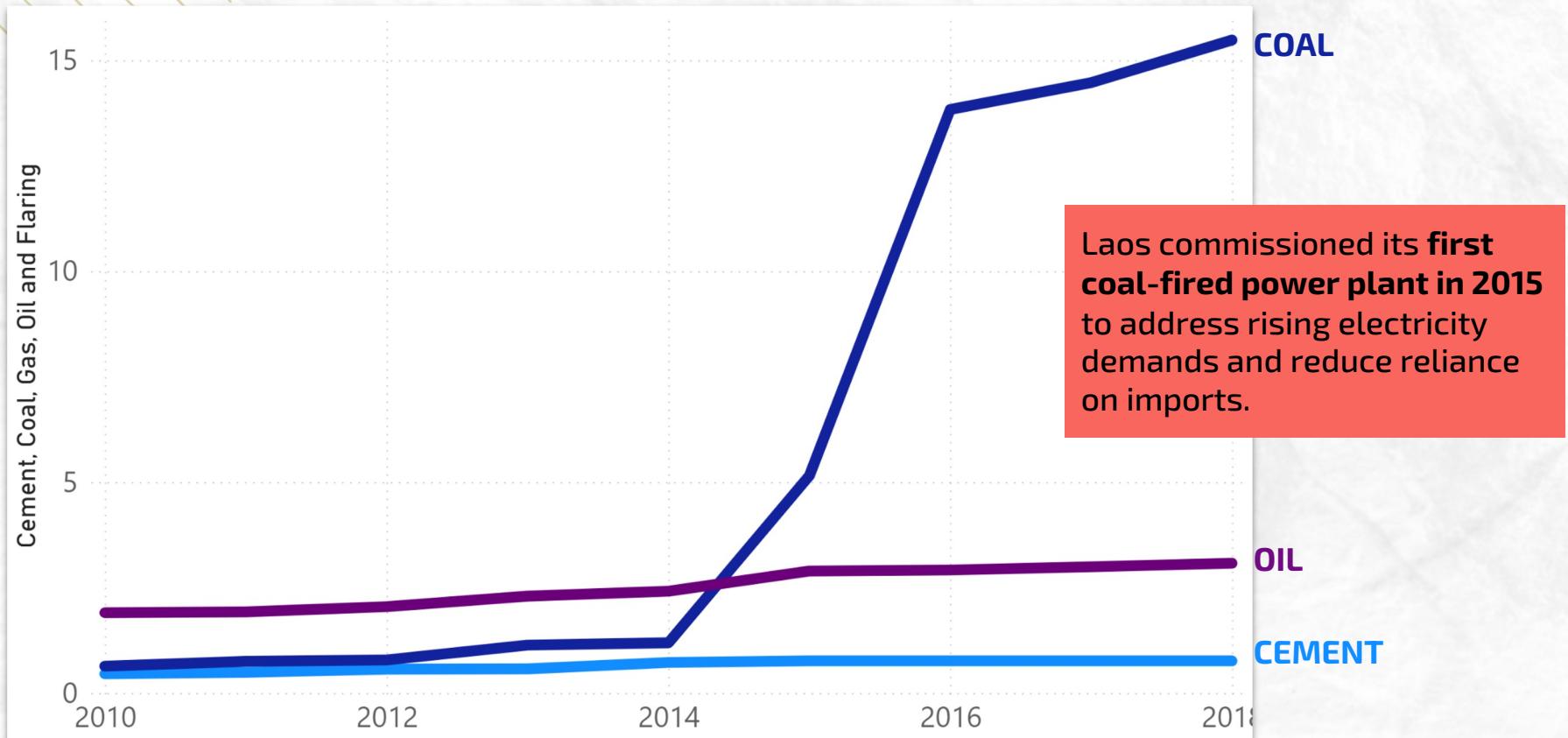


2nd lowest GDP  
3rd smallest population  
2nd lowest CO2 emissions

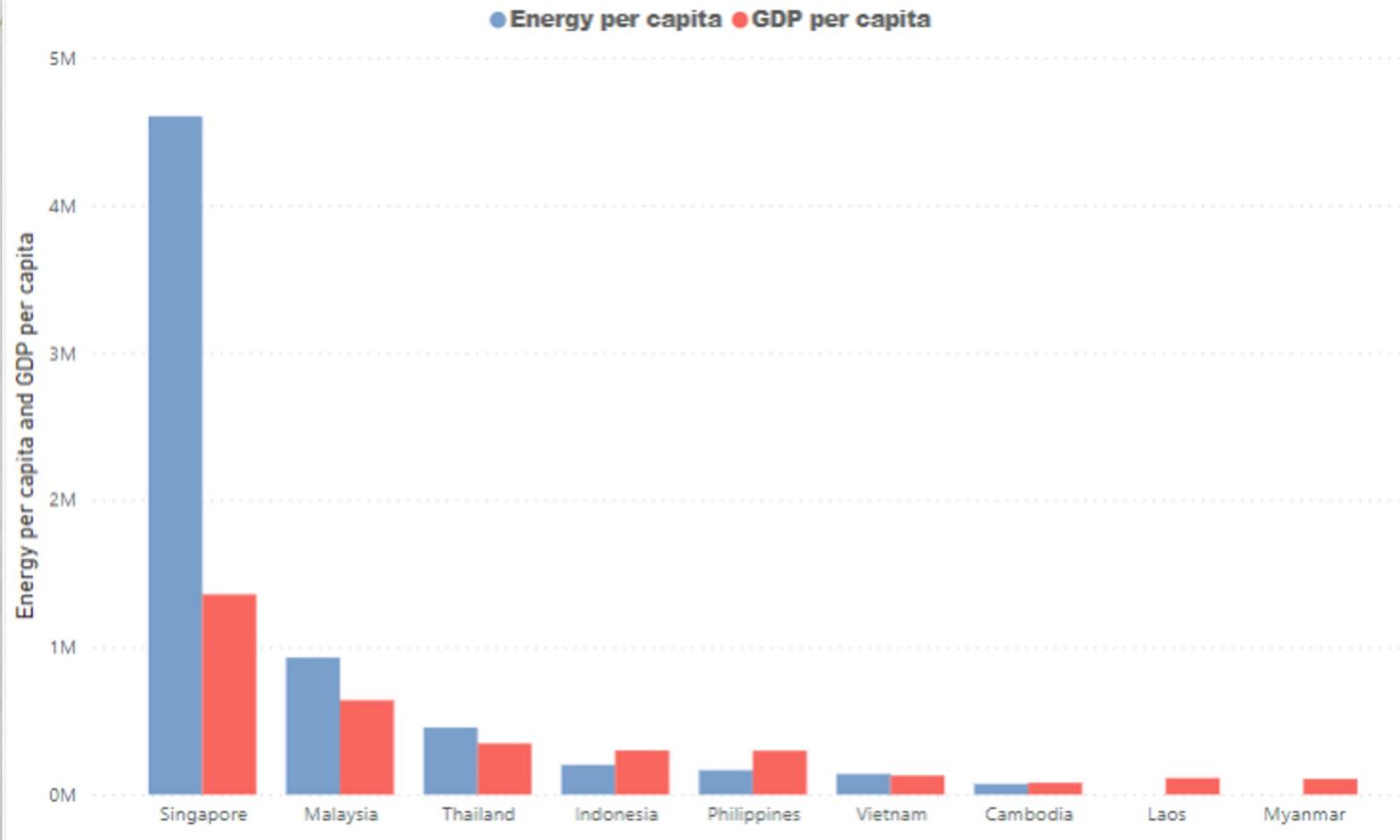
# CO2 Emissions in Laos



# CO<sub>2</sub> Emissions: Industries with the highest contributions



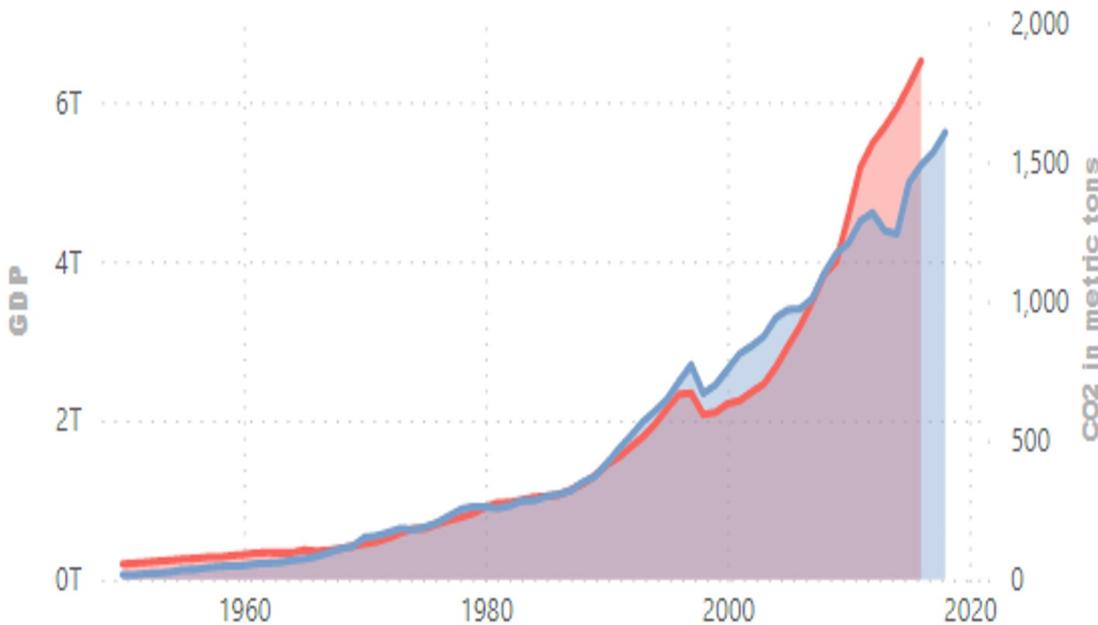
# Energy Use & Productivity in SEA



# CO2 Emissions & GDP in SEA

## Relationship of GDP and CO2 emissions

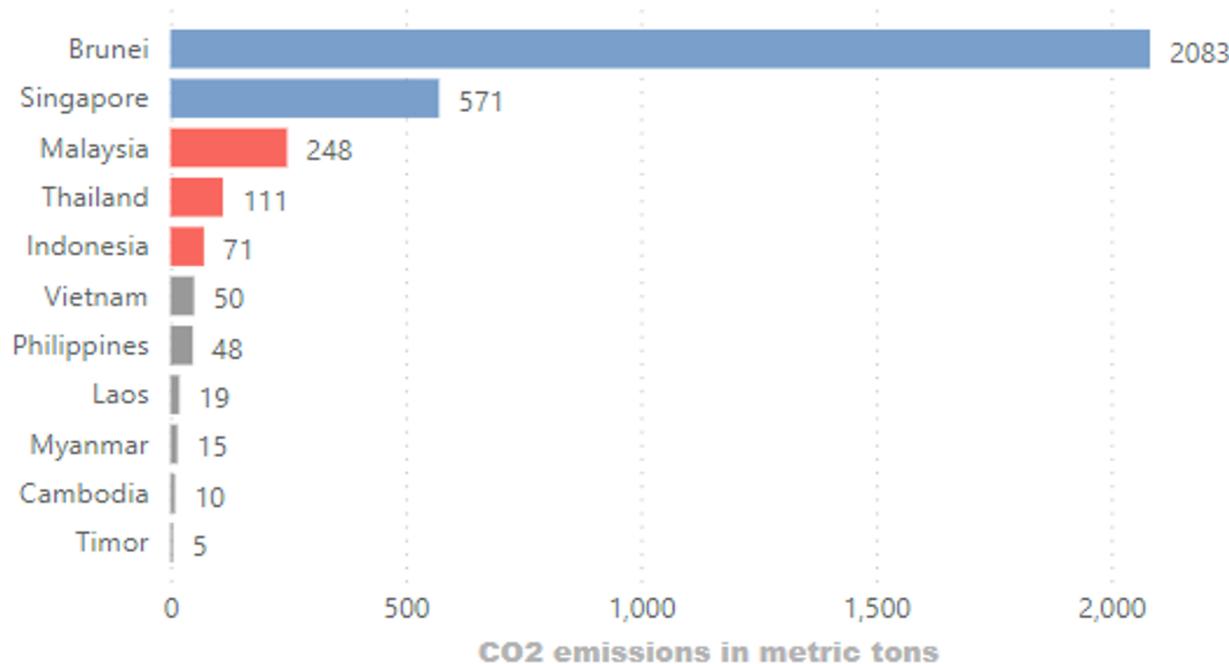
● GDP ● CO2 in metric tons



Is there a correlation between a country's increased wealth and higher CO2 emissions?

# CO2 Emissions & GDP in SEA

## CO2 Emissions per capita in Southeast Asia



High Income

Upper middle income

Lower middle income



# HOW CAN LAOS BOOST PRODUCTIVITY WHILE LOWERING EMISSIONS?

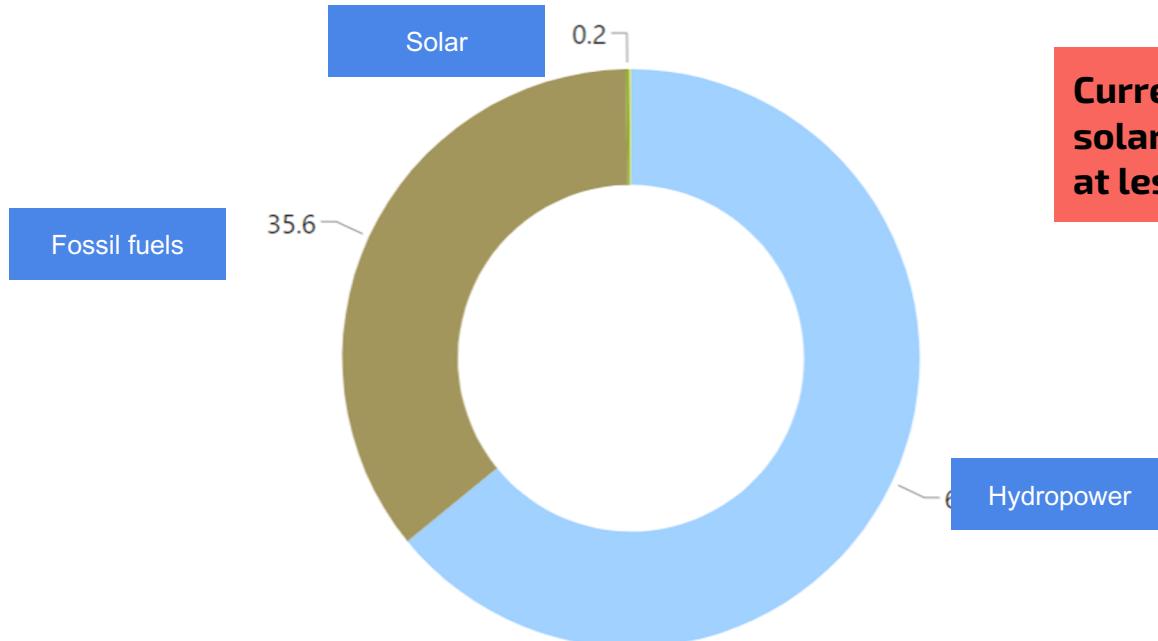
# SOLUTION 1: ENERGY TRANSITION

Investing in alternative energy sources such as solar energy to reduce dependence on fossil fuels such as coal.

According to the 2019 energy sector assessment by ADB, strategy and roadmap of Lao PDR, there is still a **huge potential for solar energy**

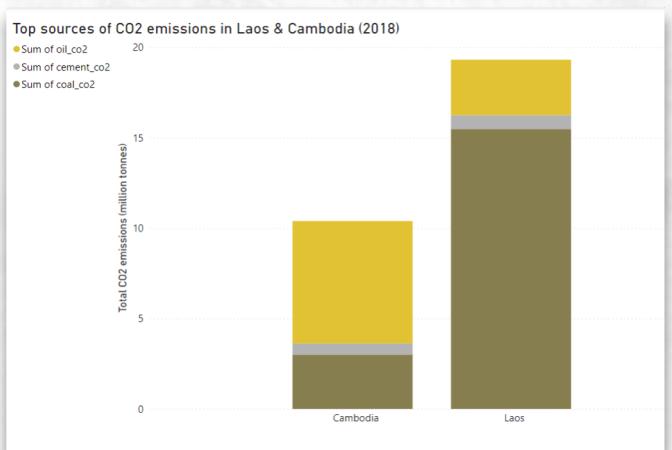
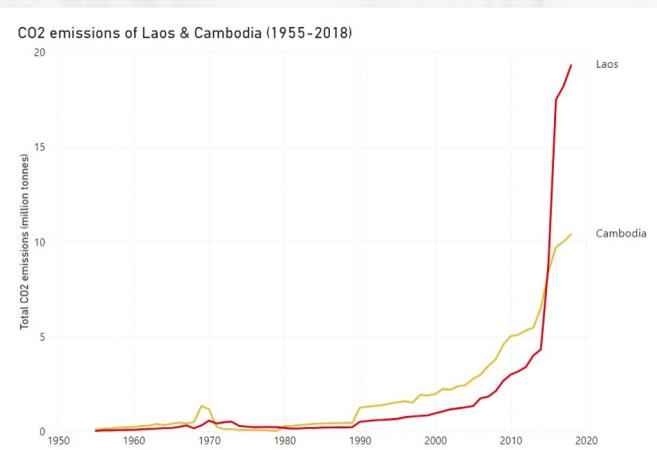
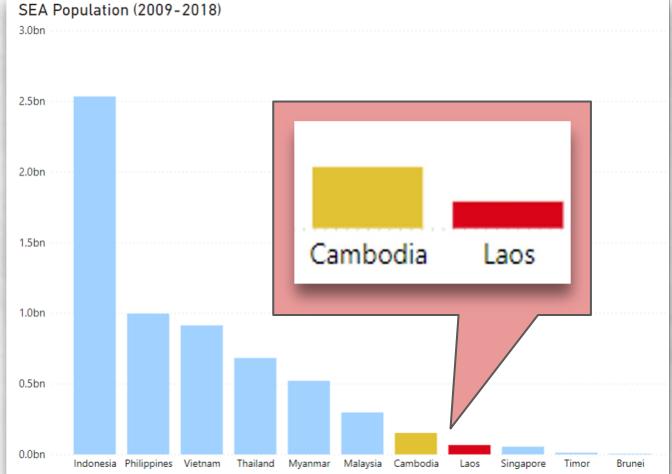
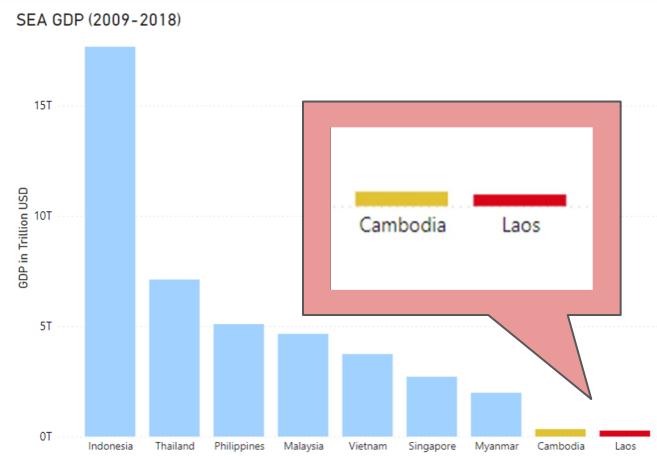


# Laos' energy mix for electricity use



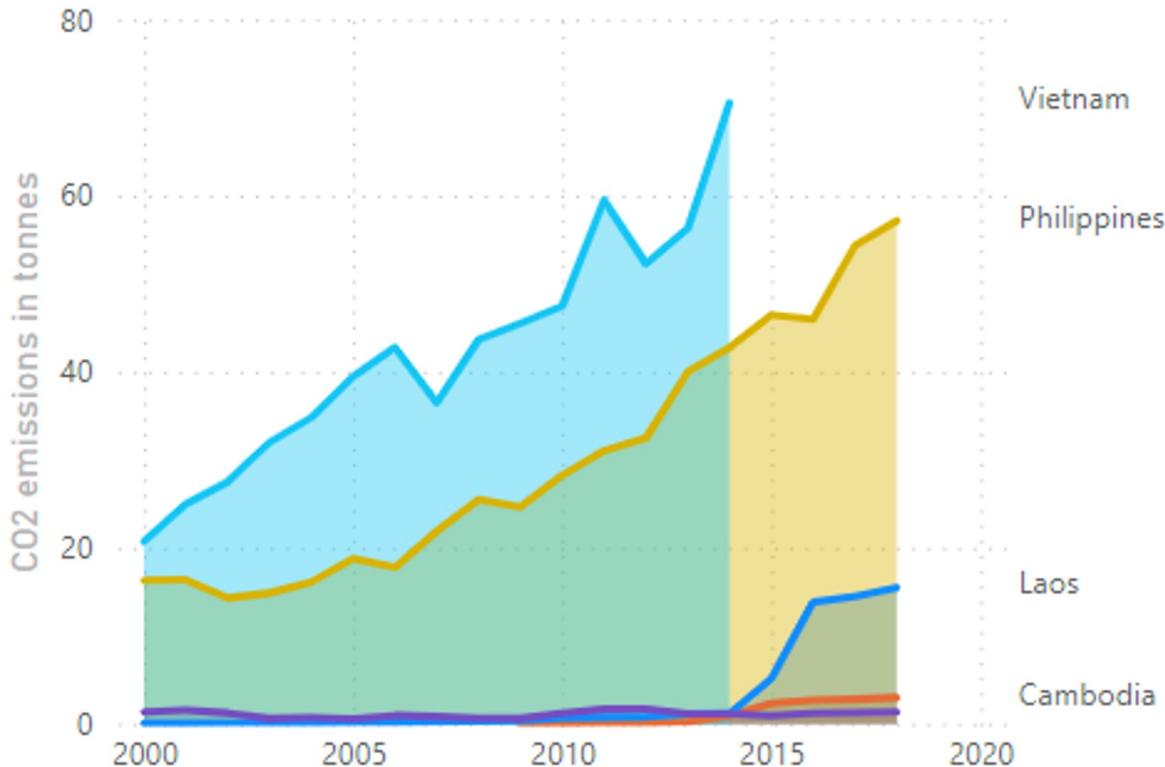
**Currently, Laos' use of solar is almost negligible at less than 1%.**

# Case Study: CAMBODIA



# Future Projections for Laos?

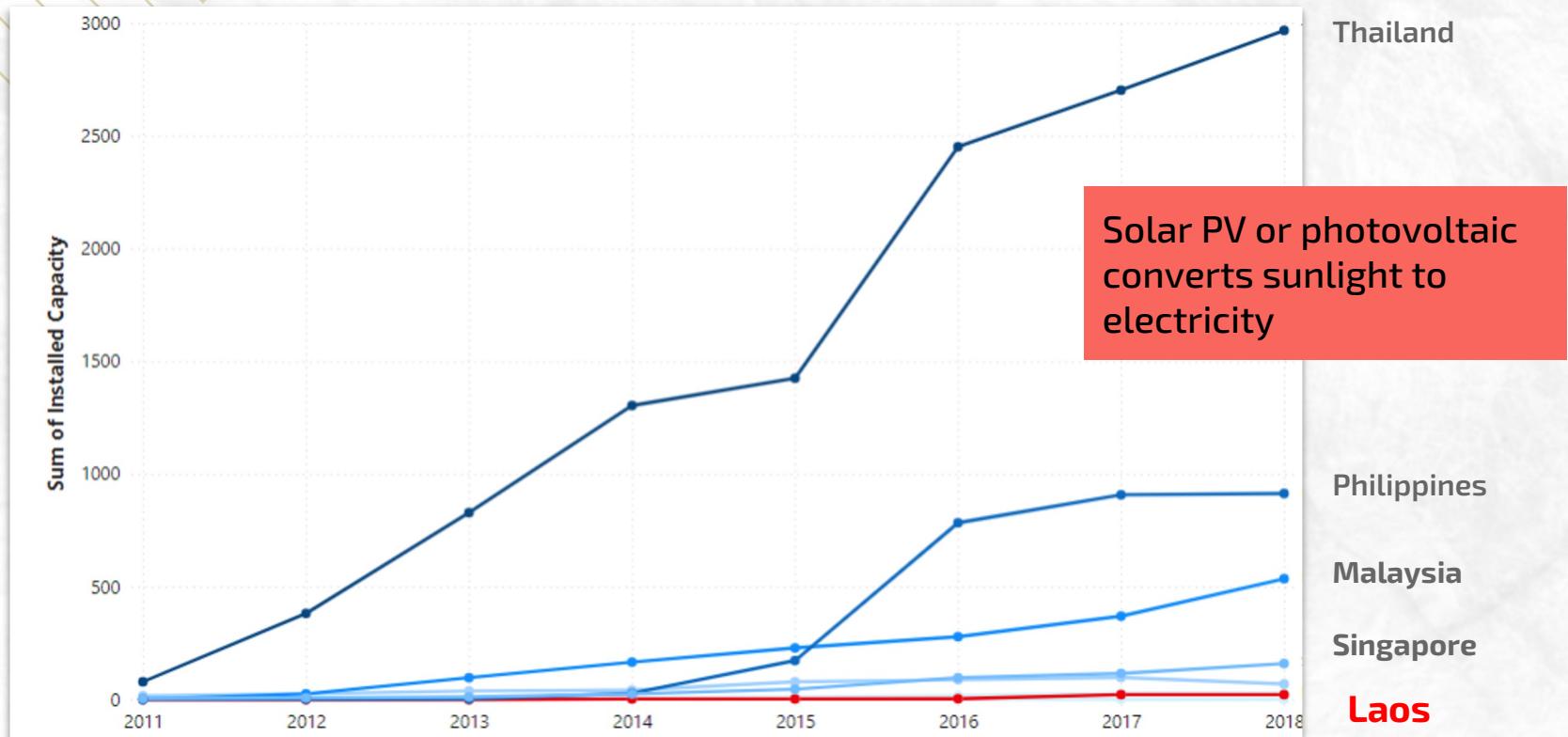
## CO2 emissions in Coal industry



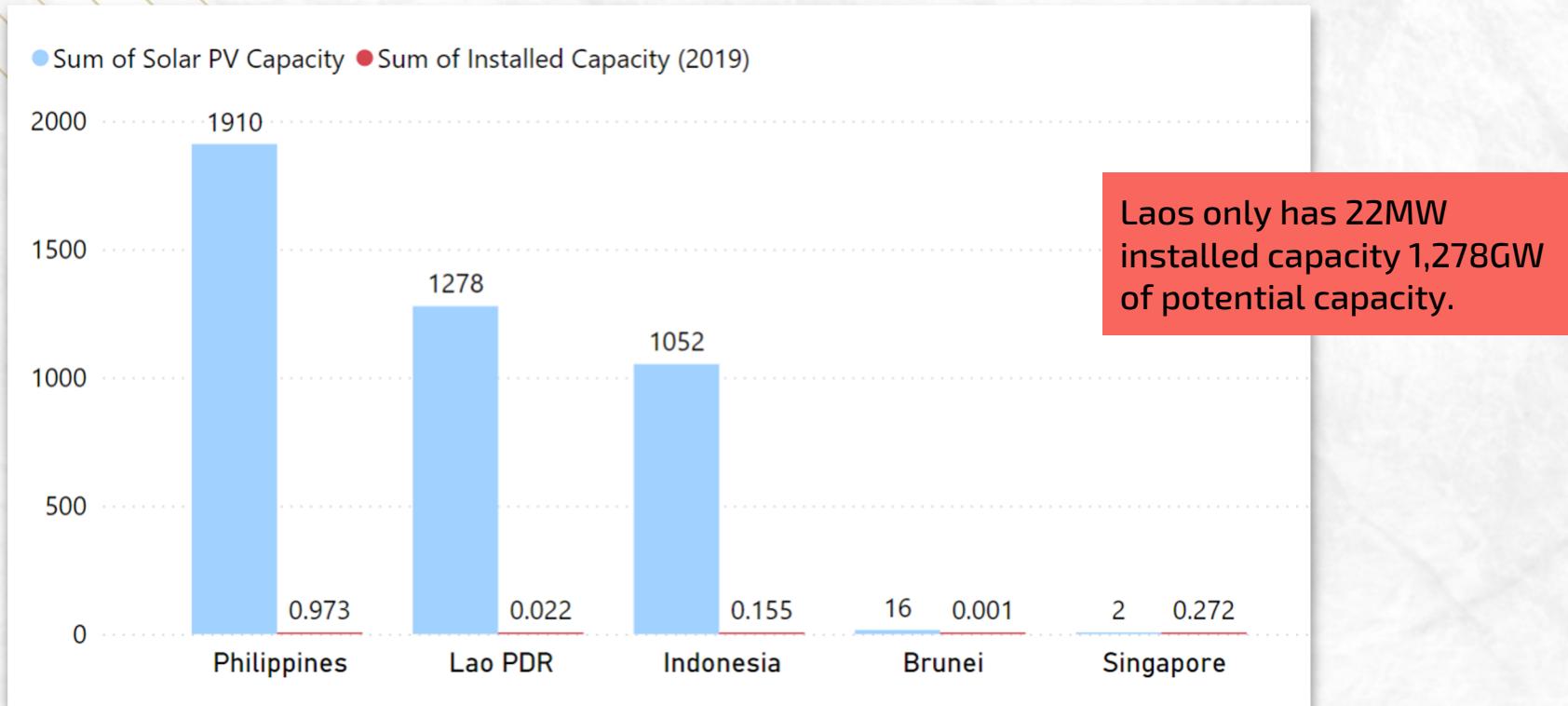


# THE CASE FOR SOLAR POWER IN LAOS

# Installed solar PV capacity in SEA



# Installed Solar PV Capacity vs Potential Capacity



## SOLUTION 2: GREEN INVESTING

In 2018, **95.7 percent of foreign direct investment** in Laos went to traditional energy projects

Redirecting this to solar energy projects will address the challenge financing given Laos' low GDP.



Source:

<https://www.state.gov/reports/2020-investment-climate-statements/laos/>

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# KHOB CHAI

## THANK YOU

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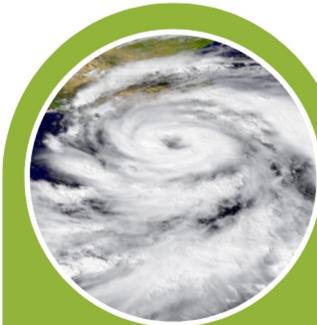
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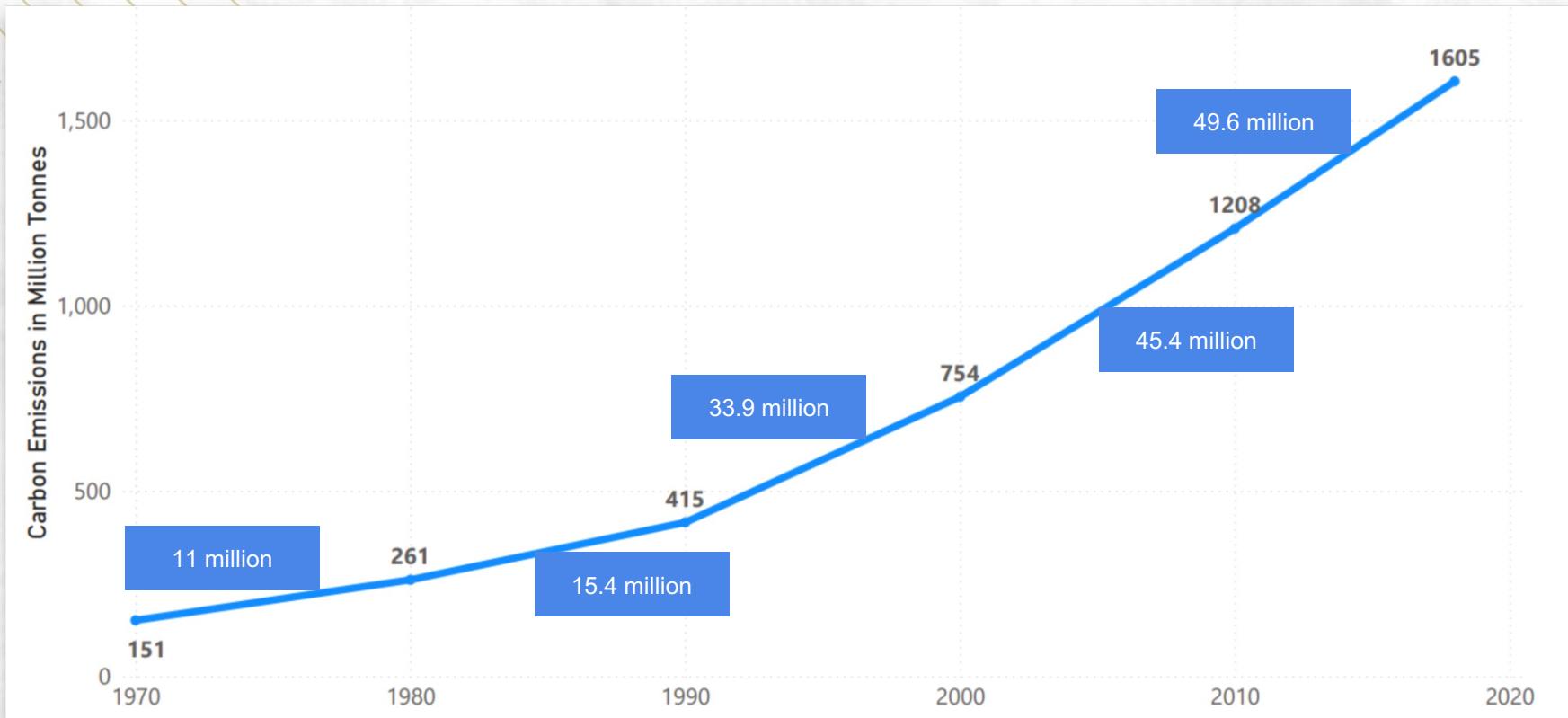
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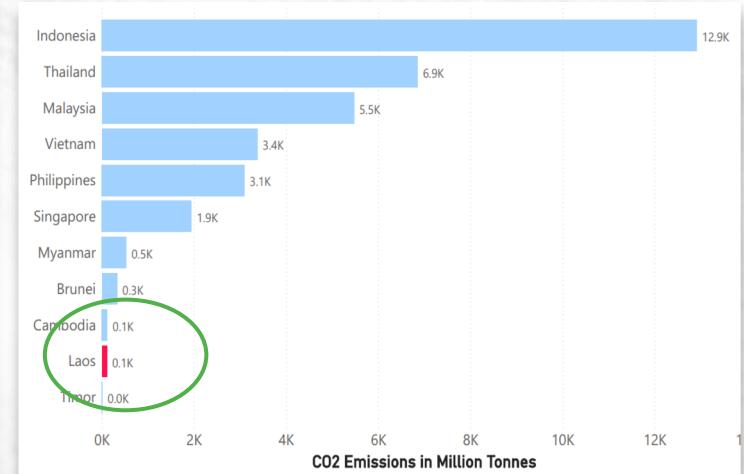
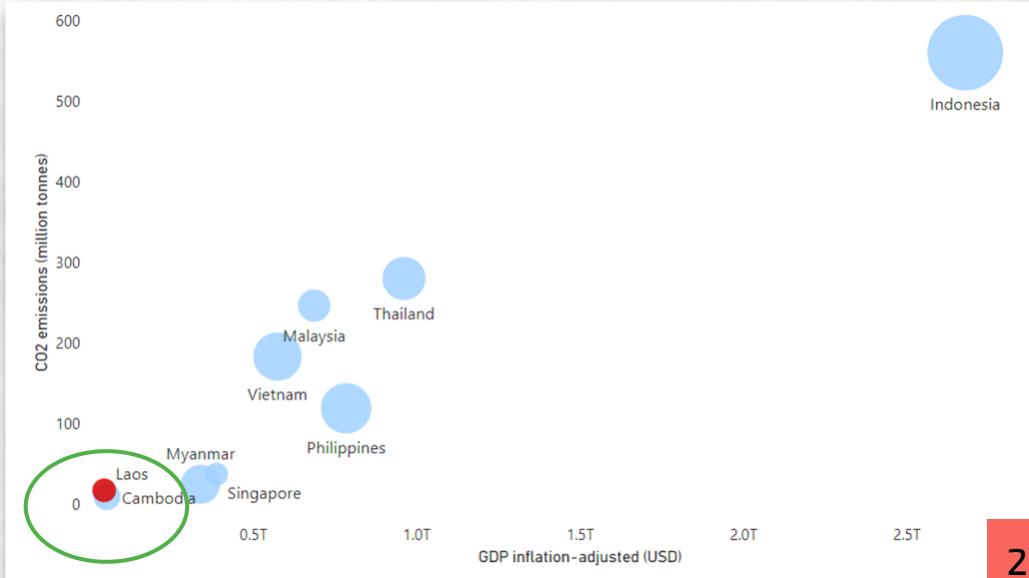
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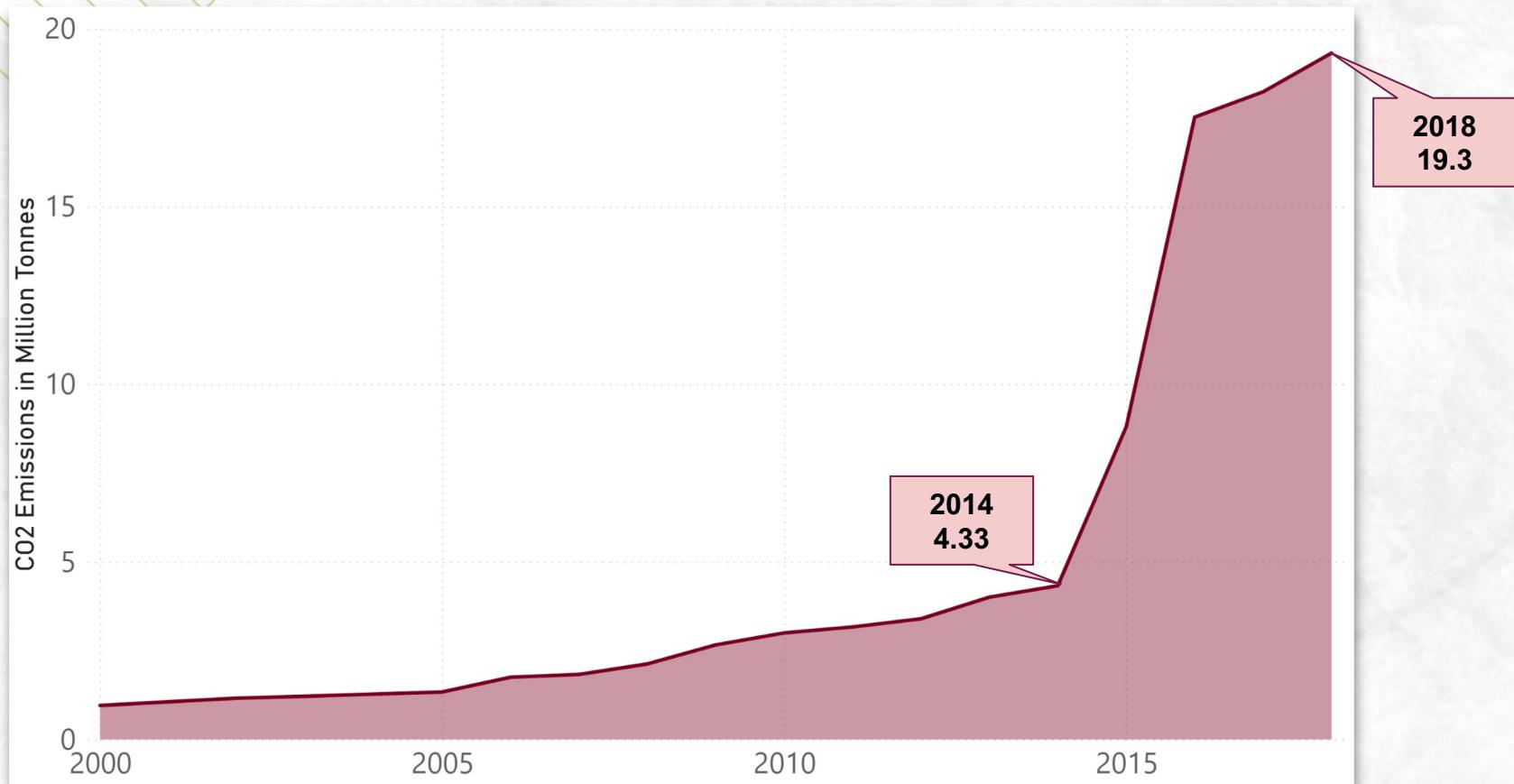
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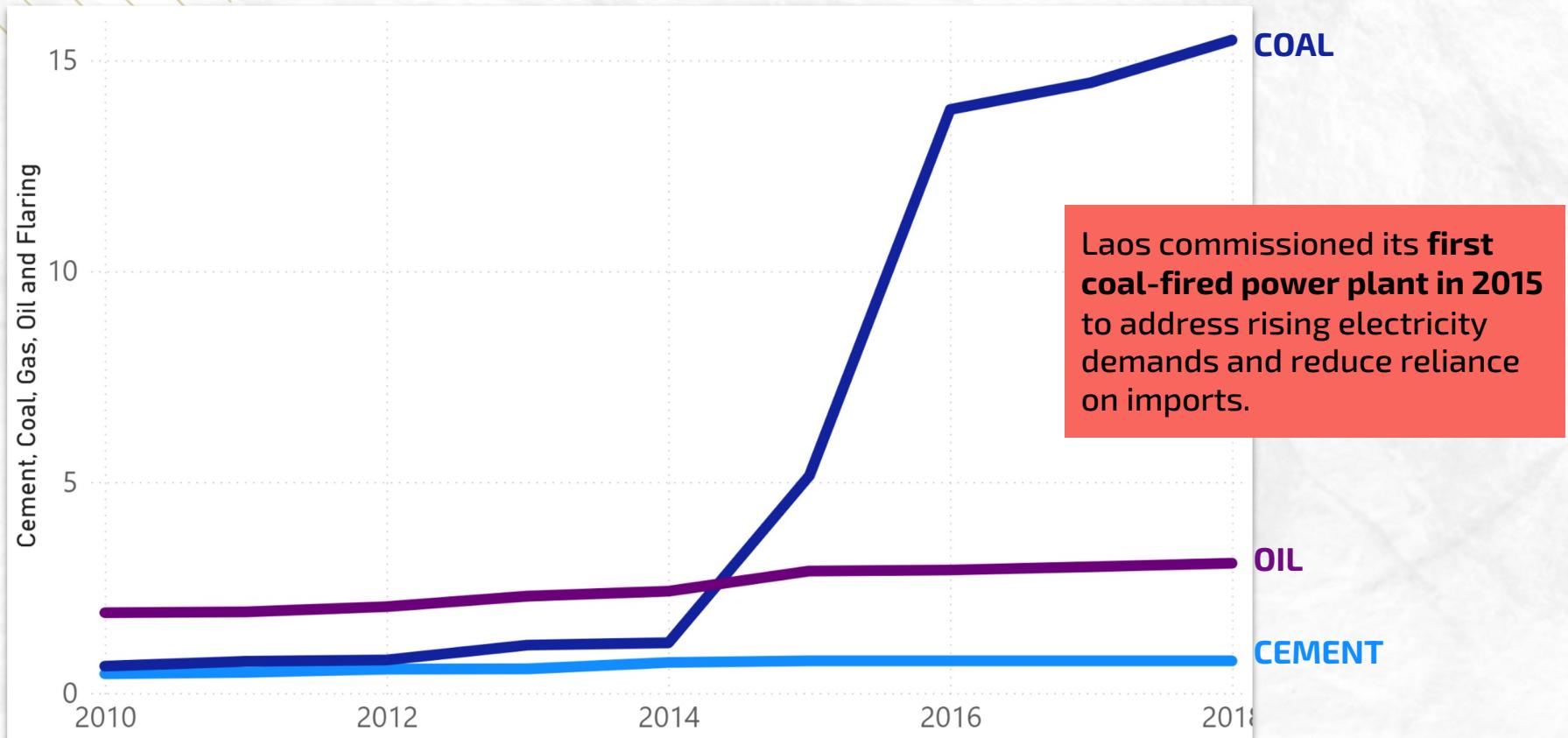


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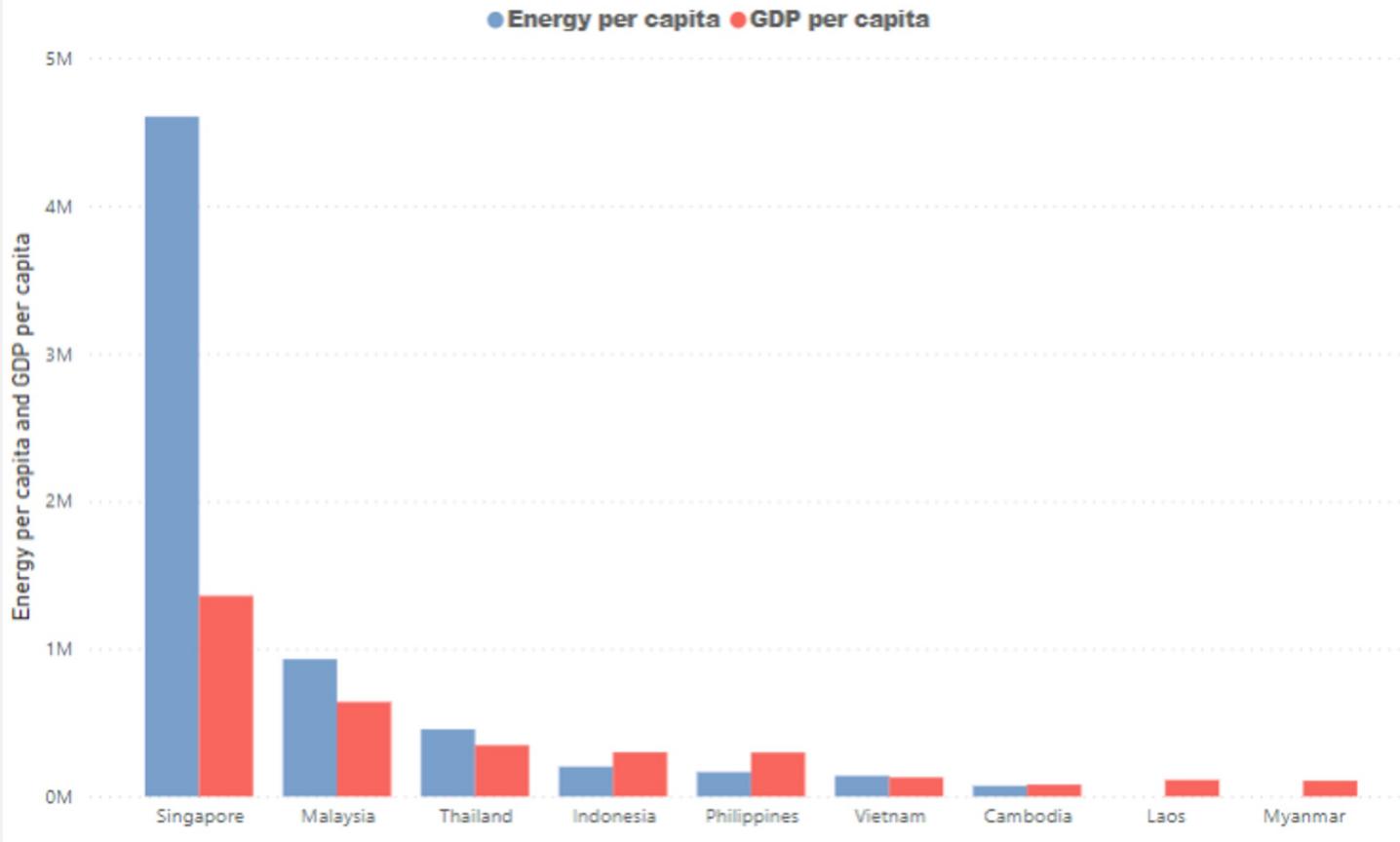
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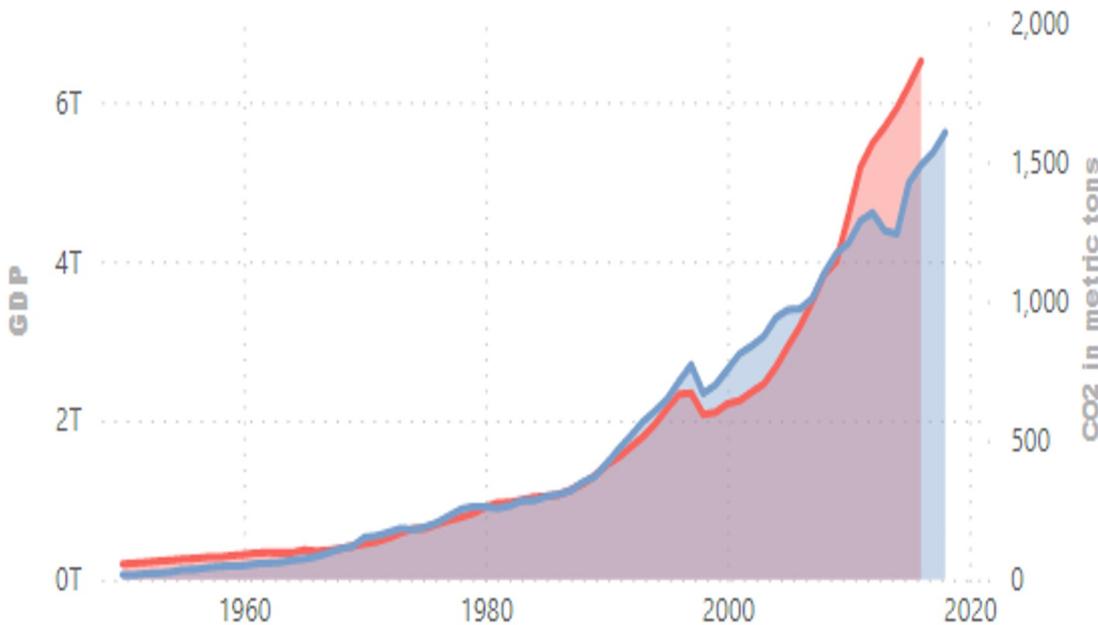
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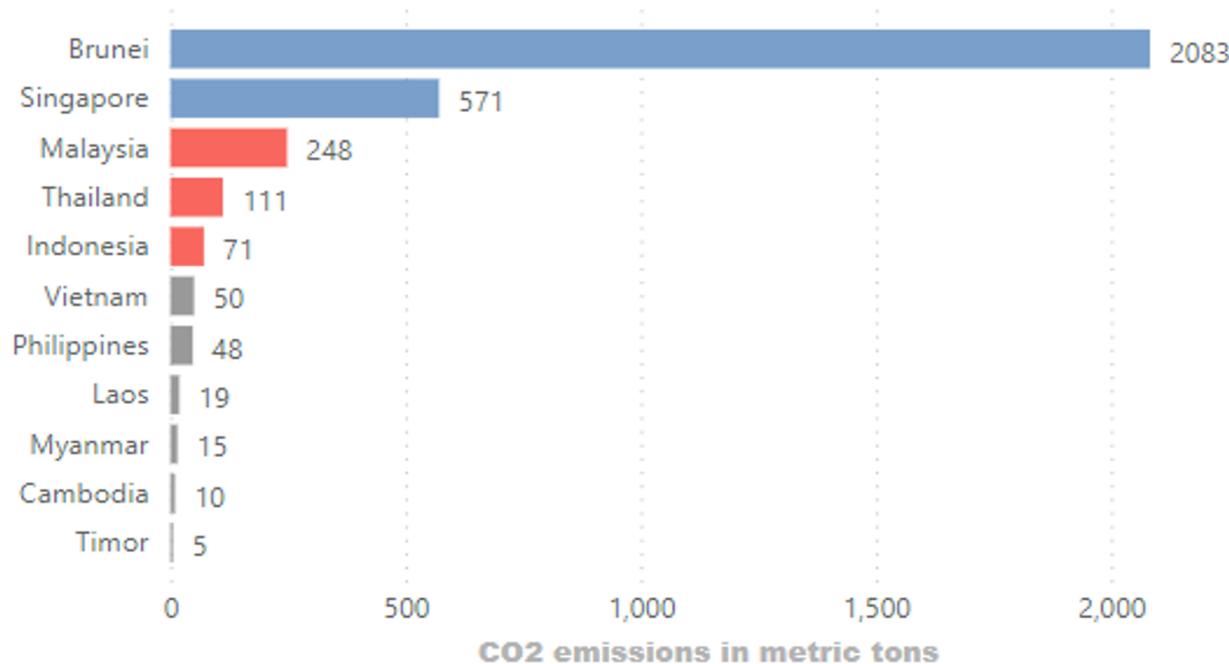
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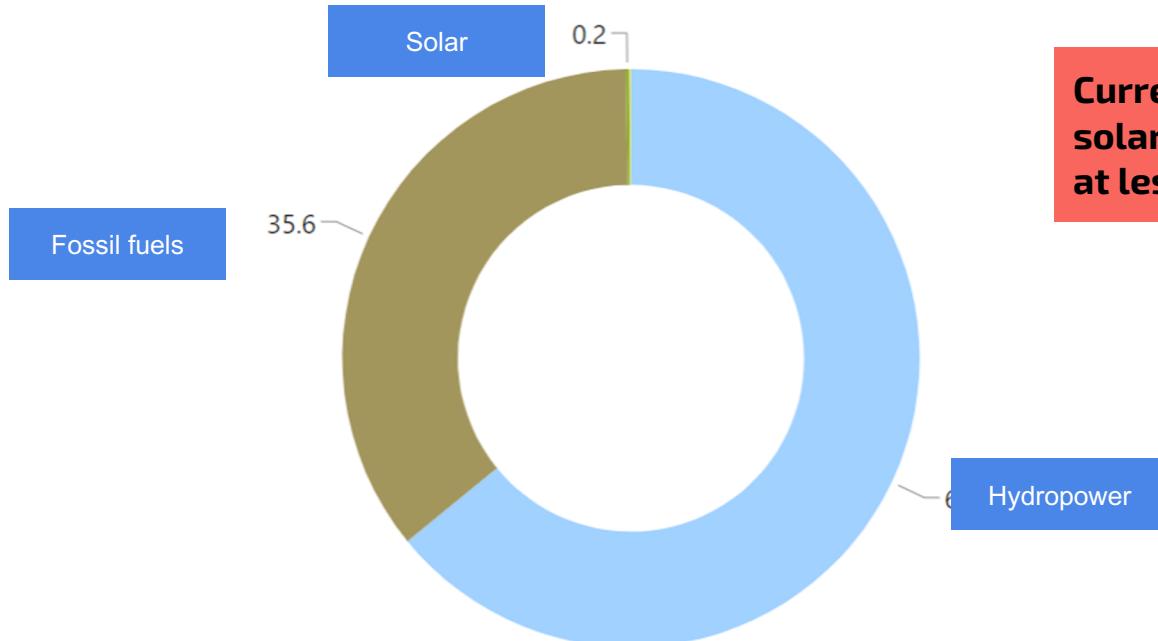
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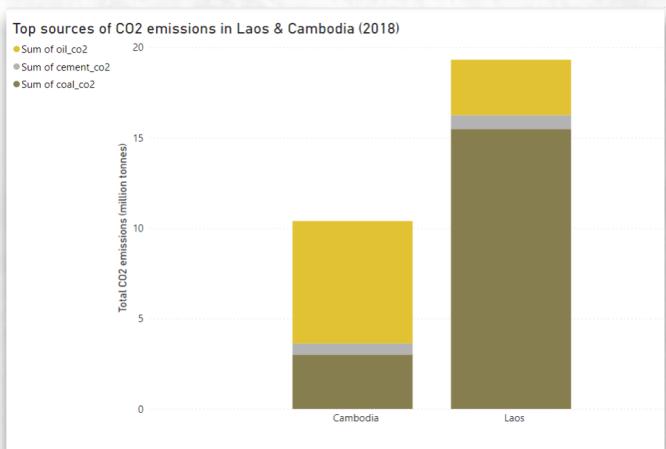
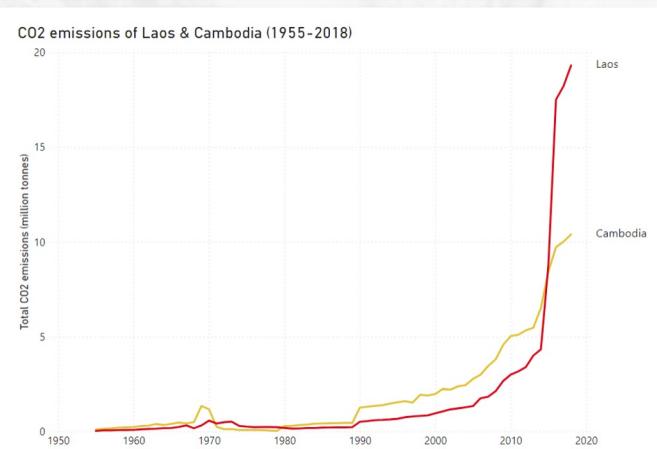
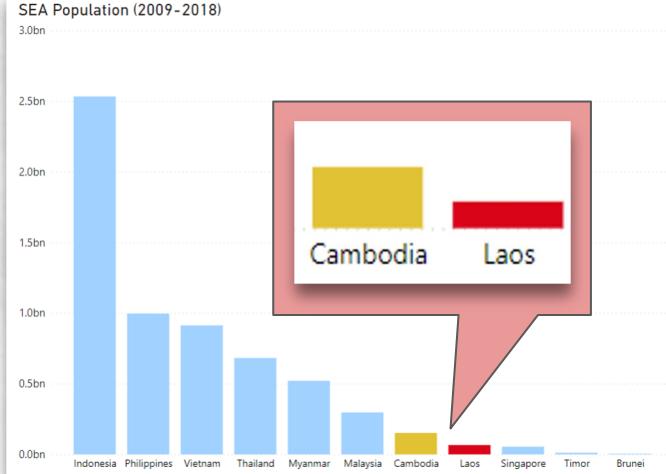
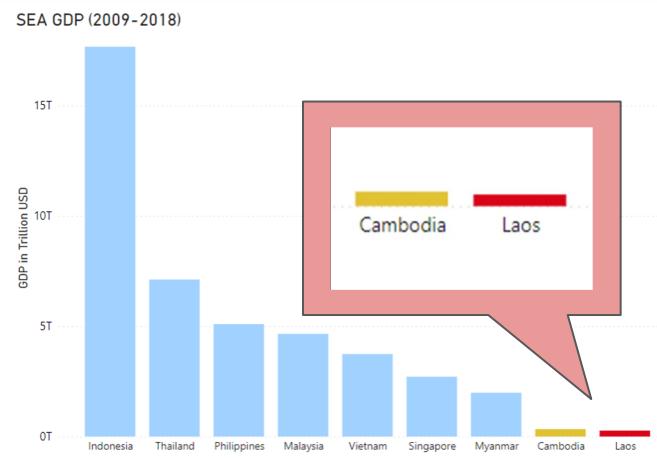


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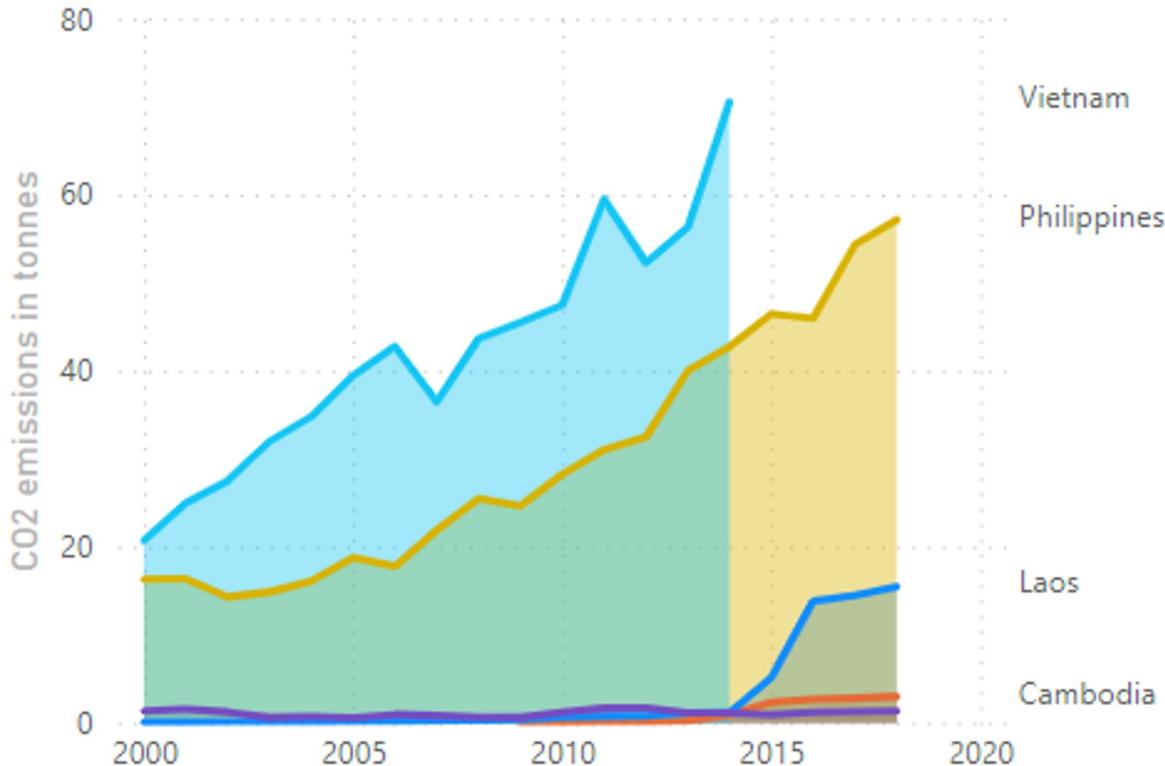
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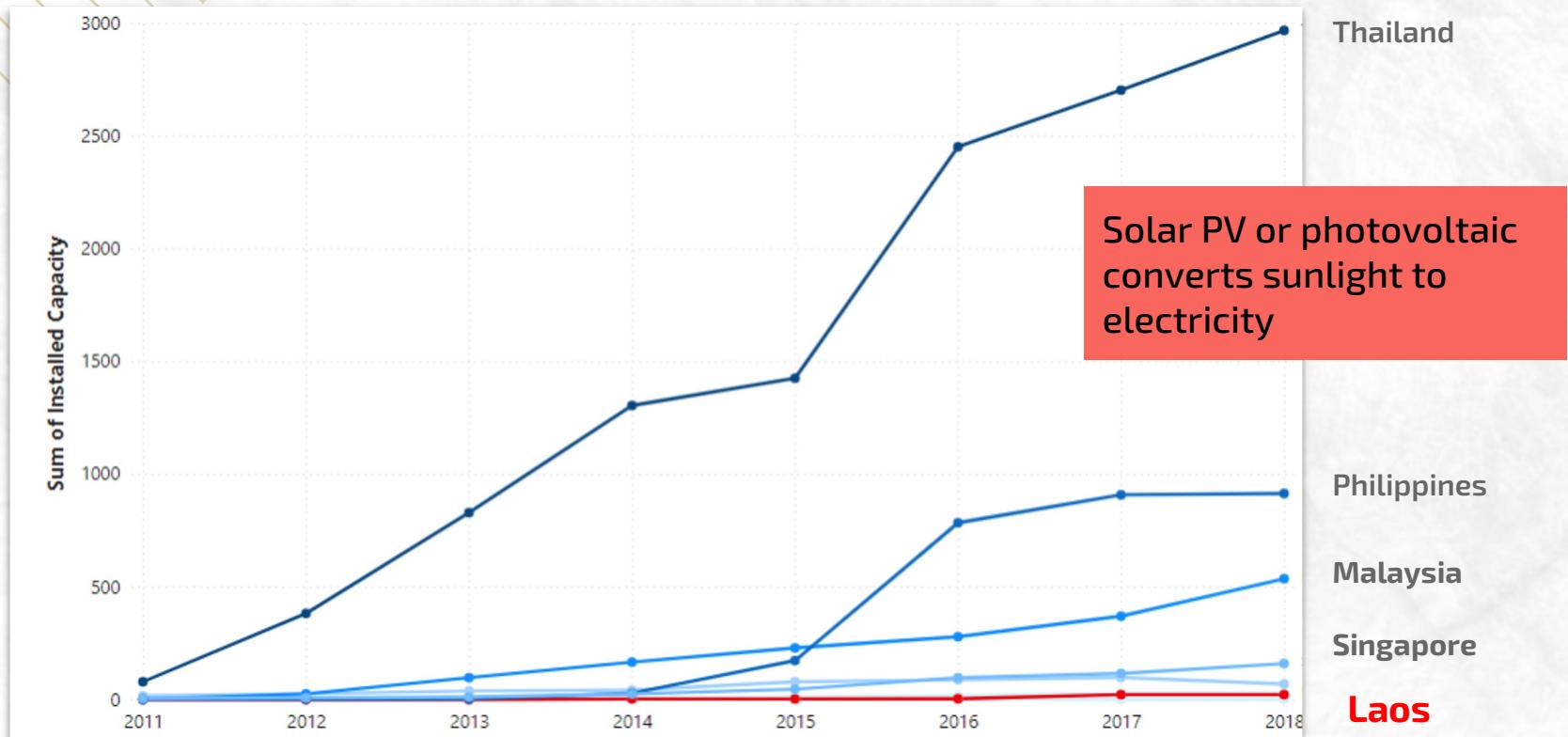
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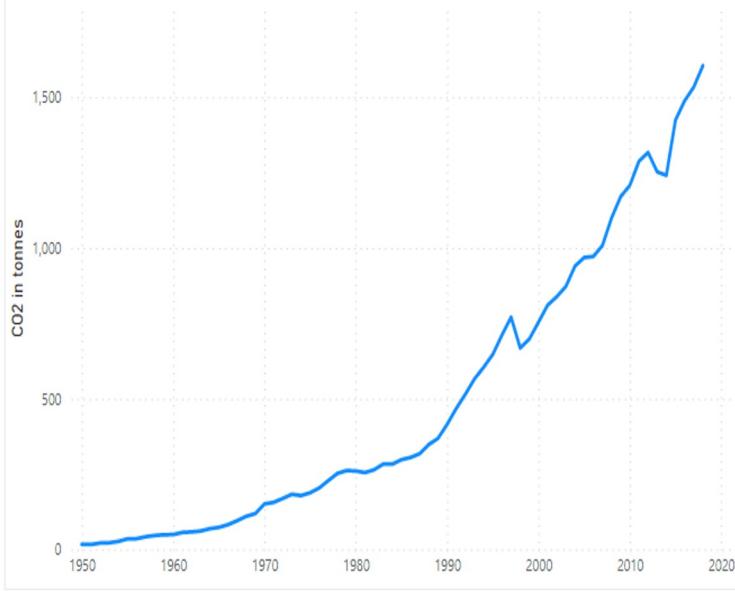
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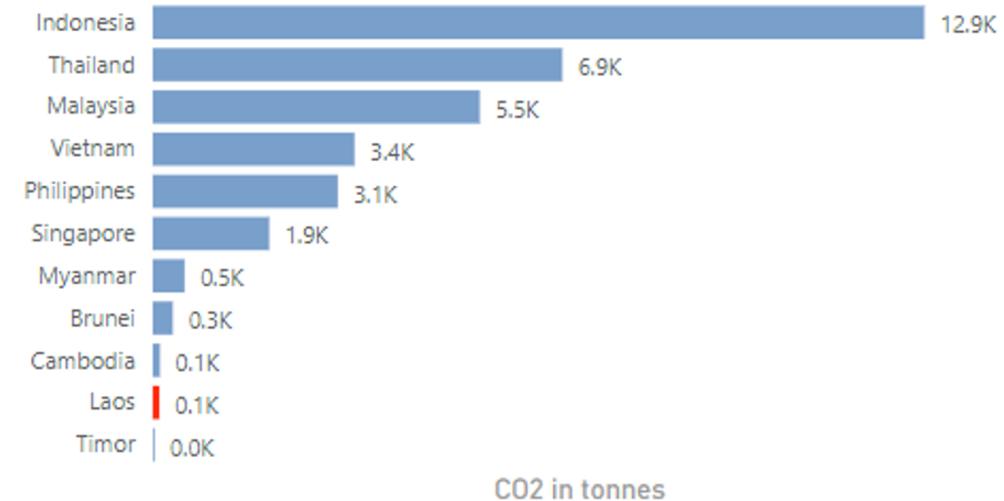


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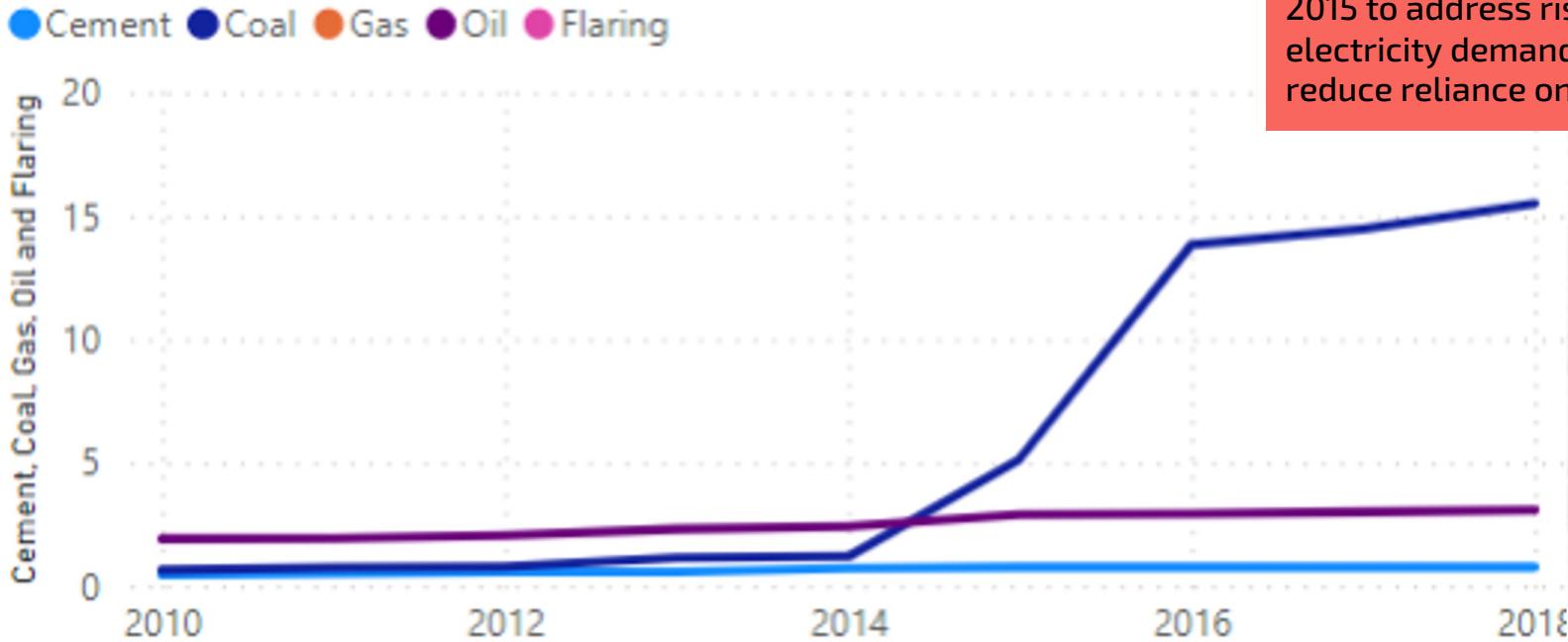
Trend of CO2 emissions



## Total CO2 Emissions per country

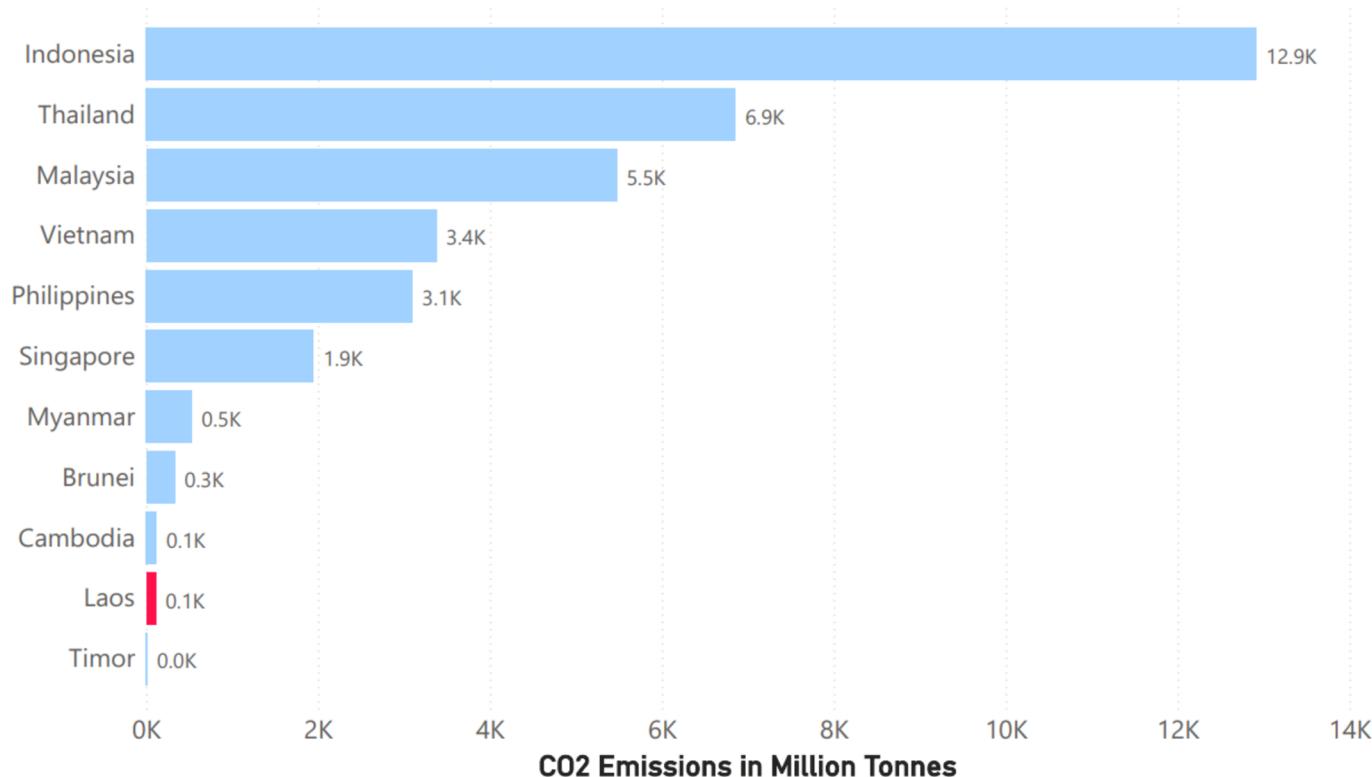


# CO2 Emissions: Industries with the highest contributions



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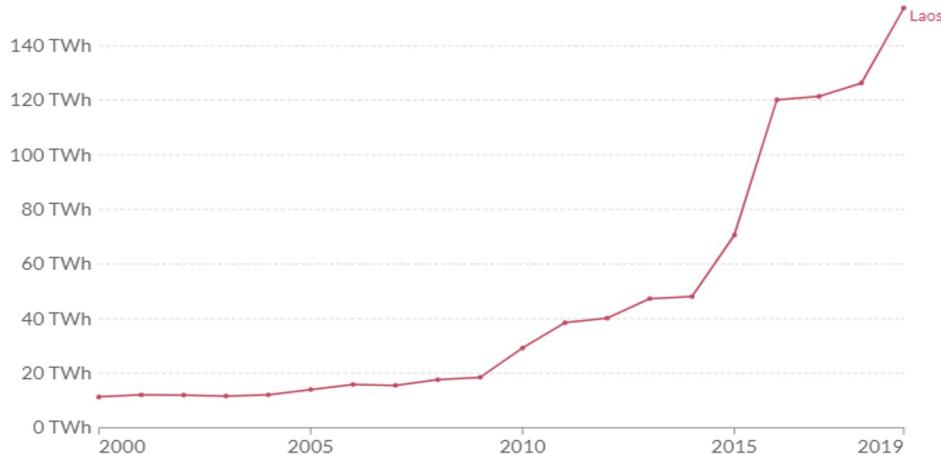


## Primary energy consumption

Primary energy consumption is measured in terawatt-hours (TWh).

Our World  
in Data

+ Add country



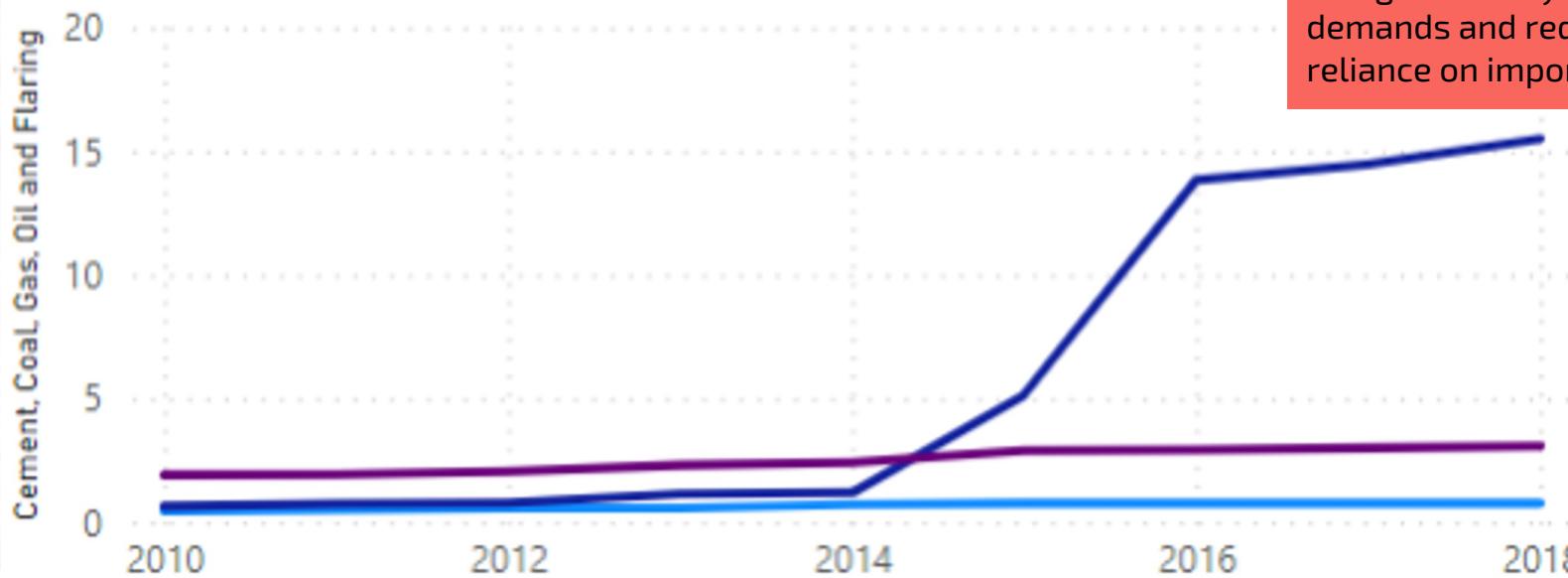
Source: BP Statistical Review of World Energy; and EIA

Note: Data includes only commercially-traded fuels (coal, oil, gas), nuclear and modern renewables. It does not include traditional biomass.

OurWorldInData.org/energy • CC BY

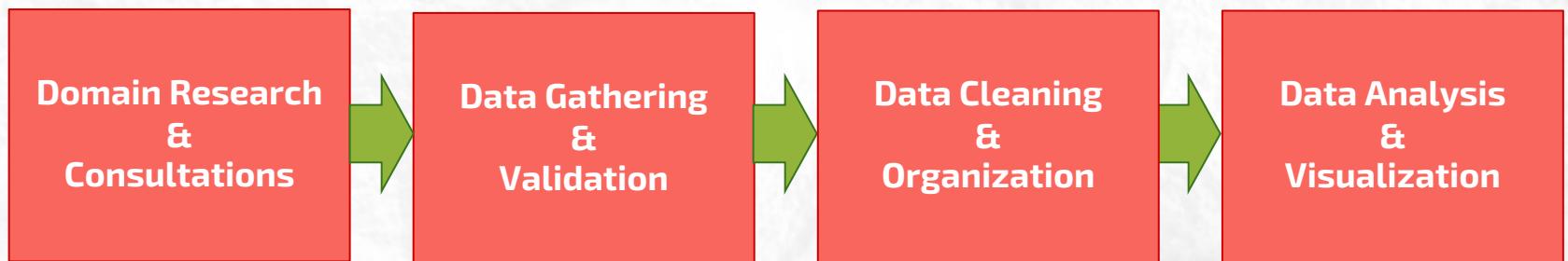
# CO2 EMISSIONS: INDUSTRIES WITH THE HIGHEST CONTRIBUTIONS

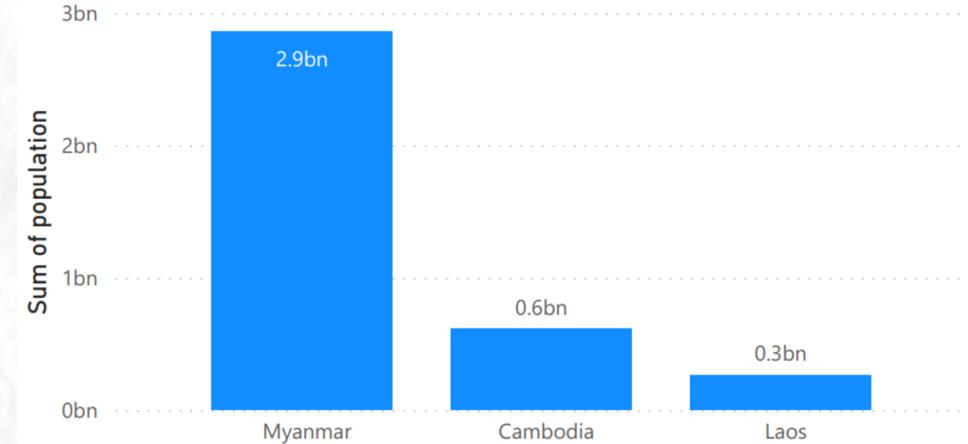
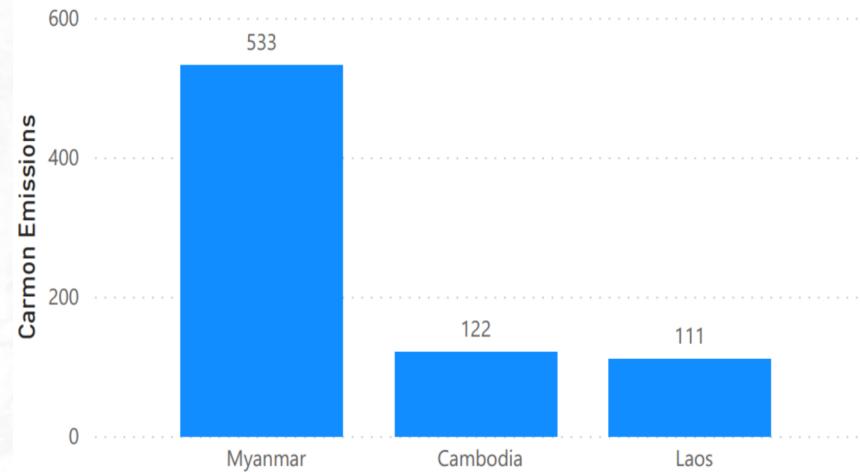
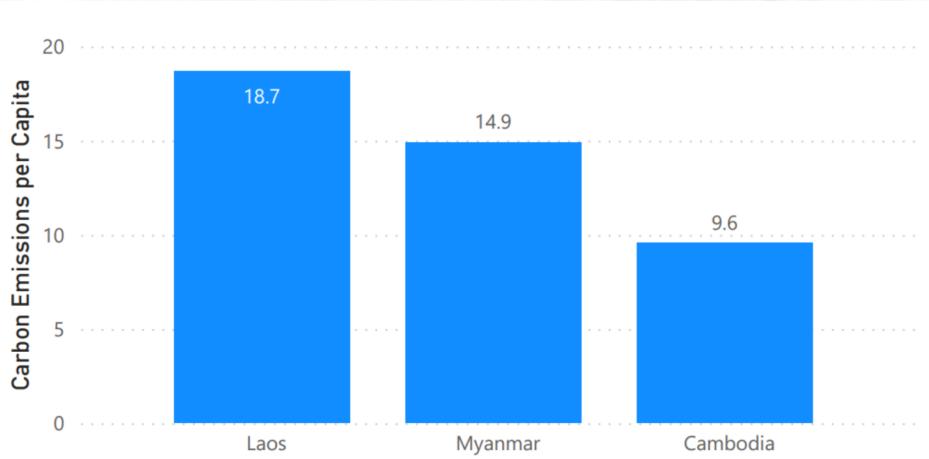
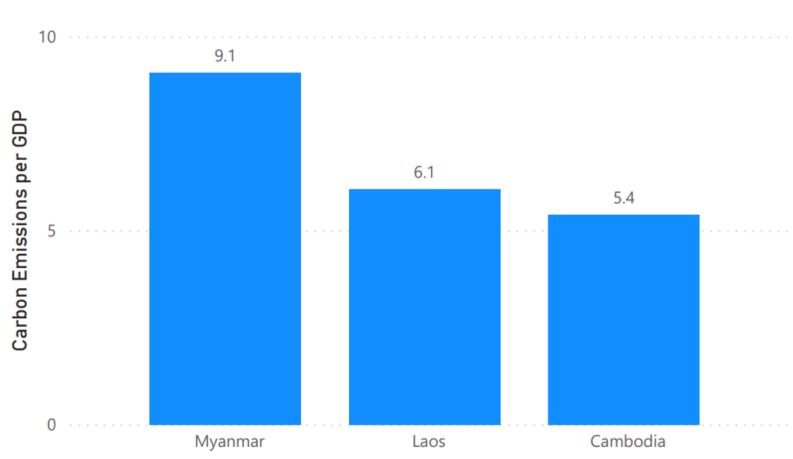
● Cement ● Coal ● Gas ● Oil ● Flaring



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# Methodology





Does subteam affect CSAT?

**Graph of Mean CSAT by subteam,  
controlling for origin, channel,  
etc.**

**If subteam affects CSAT, we should investigate over/under-performing  
subteams**



ESKWELABS

Slide Peg

## CO2 emissions of the whole world

