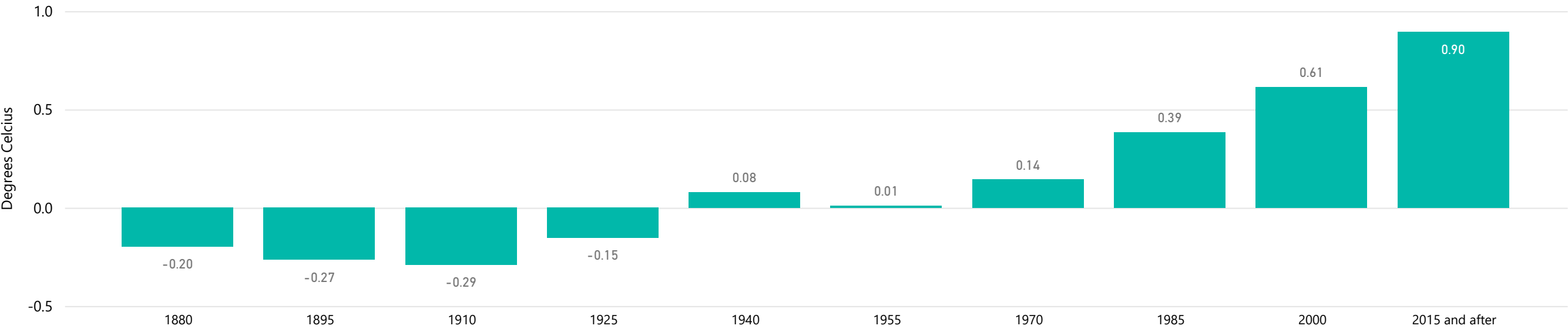


# How has the Global Temperature Changed Since 1880?

Greenhouse Gases are increasing the Earth's temperature. Increases in air temperature disrupt natural processes and are occurring too fast for plants and animals to adapt, (EPA, 2021).

<https://www.epa.gov/climate-indicators/climate-change-indicators-us-and-global-temperature>

How Global Temperature Changes in 15 Year Increments (Celsius)

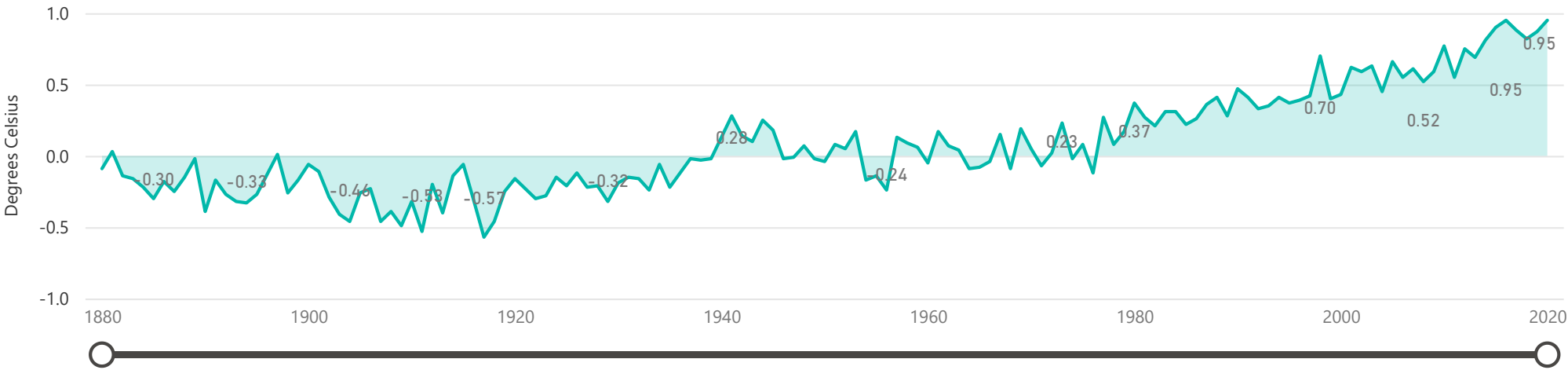


What were the years did we experience most change?

**Largest Temperature Increase in a Year (°C)**  
0.08      2020

**Largest Temperature Decrease in a Year (°C)**  
-0.37      1890

Global Temperature Change Ungrouped (Celsius)



# Where are the Greenhouse Gases (GHG) Coming From?

HDD = energy needed to heat a building.  
CDD = energy needed to cool a building.

Region

All

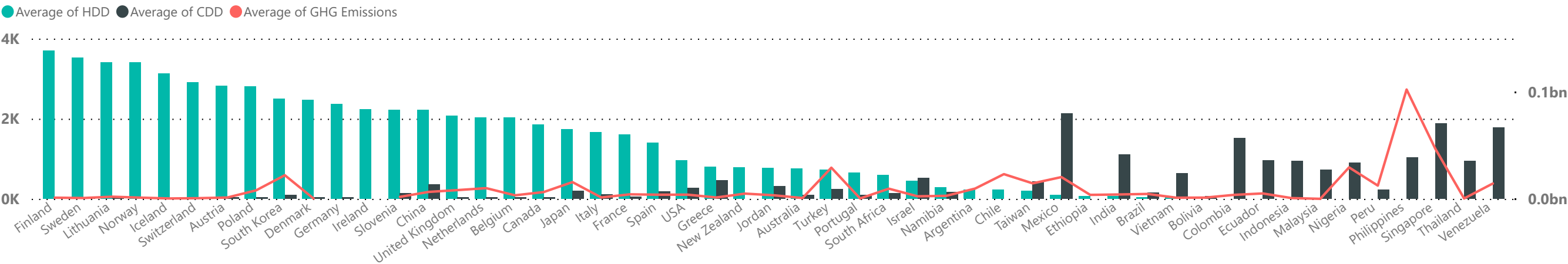
Country

All

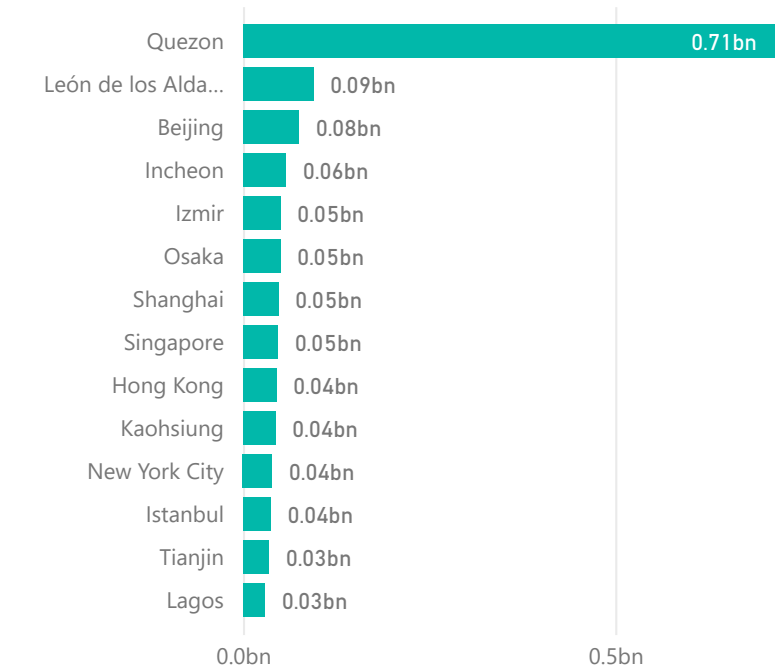
City name

All

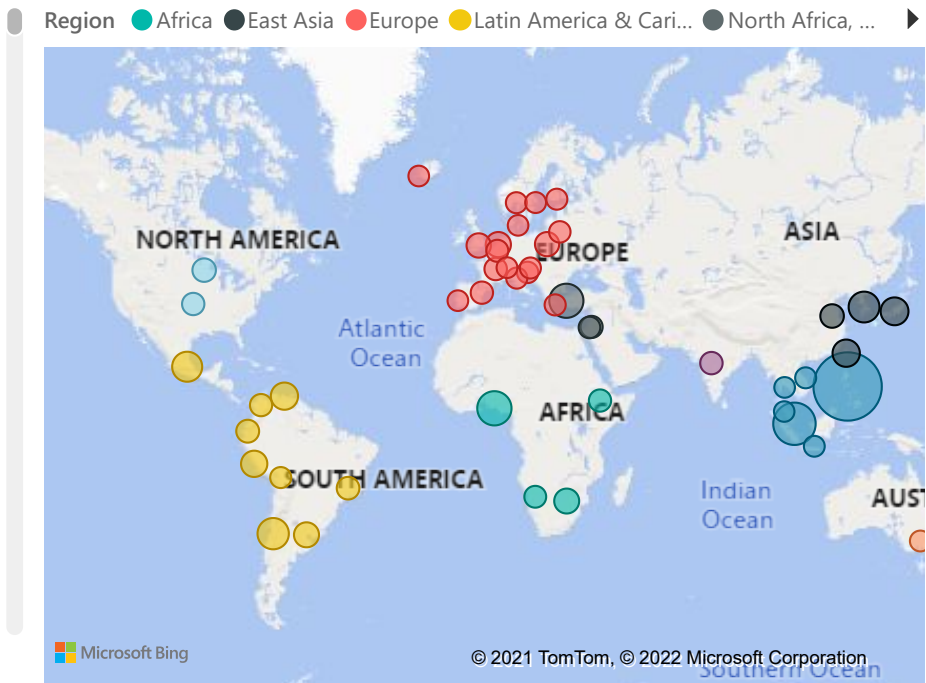
Amount of Heating Degree Days and Cooling Degree Days Vs GHG Production



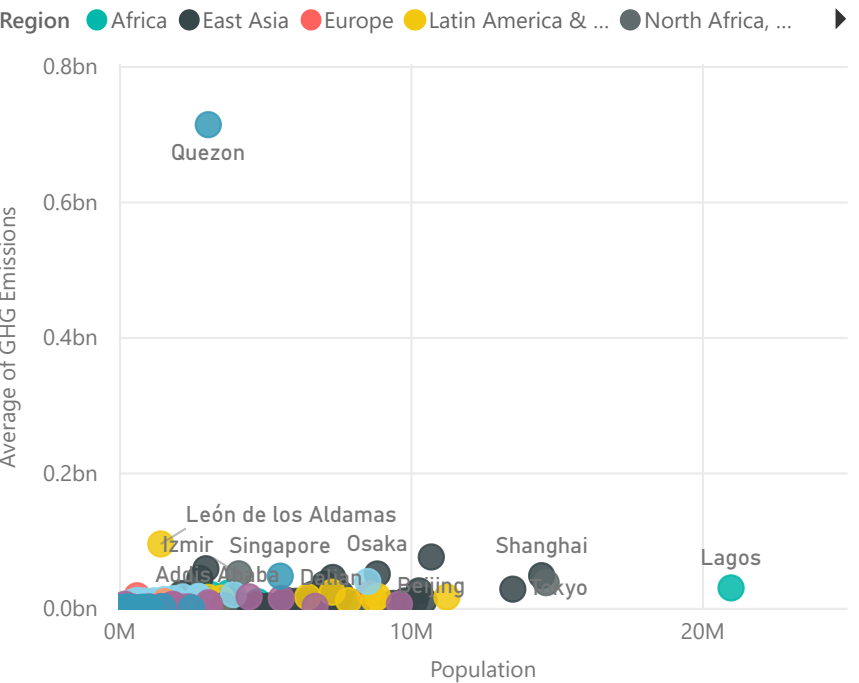
GHG Emissions by City



Location and Size of Point as GHG Amount



Population affect on GHGs

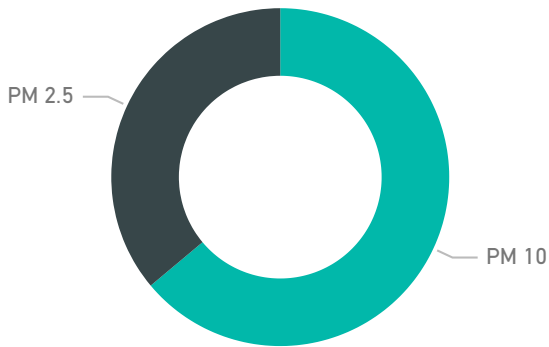


# PM 2.5 and PM 10 Production

RegionCountryCity name

AllAllAll

Average Distribution of PM 2.5 and PM 10 Produced



PM = Particulate Matter.

PM 2.5's & PM 10's are small particulate matter that can damage lungs.

According to WHO (2021), the particulate matter component of air pollution is associated with an increased risk of cancers, especially lung cancer.

Source  
[https://www.who.int/news-room/fact-sheets/detail/ambient-\(outdoor\)-air-quality-and-health](https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health)

Average Annual PMs Produced (ug/m3) by Location

PM Level PM 10 PM 2.5

