



# **LET'S TALK POLLUTION**



## A SIMPLE DEFINITION OF POLLUTION?

Pollution is the introduction of contaminants (CO<sup>2</sup>, methane and nitrous oxide) into the natural environment that cause adverse change. Pollution can take the form of chemical substances or energy, such as noise, heat or light. Pollutants, the components of pollution, can be either foreign substances/energies or naturally occurring contaminants.

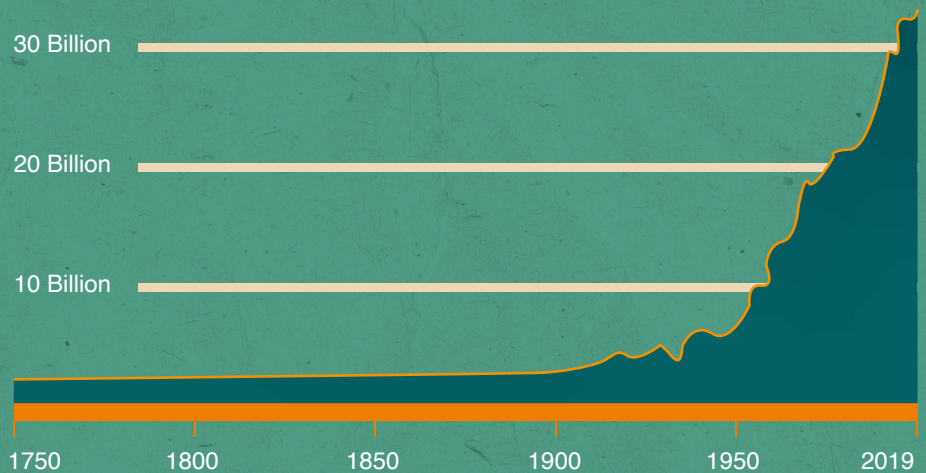


“ **91% of the world's population live in places where air quality exceeds WHO guideline limits** ”

WHO

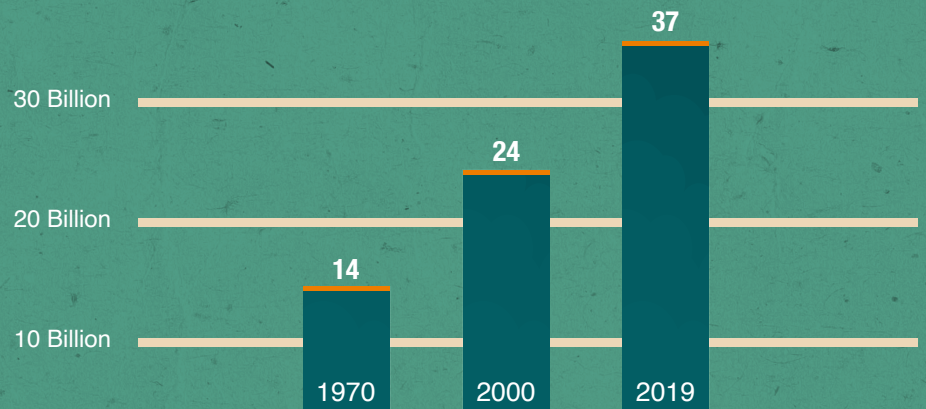
Air pollution kills an estimated seven million people worldwide every year. WHO data shows that 9 out of 10 people breathe air containing high levels of pollutants. WHO is working with countries to monitor air pollution and improve air quality.

Since the industrial revolution, humans have released over **1.5 TRILLION TONS** of carbon dioxide (CO<sup>2</sup>), into the Earth's atmosphere.



## 37 BILLION TONS IN 2019 ALONE

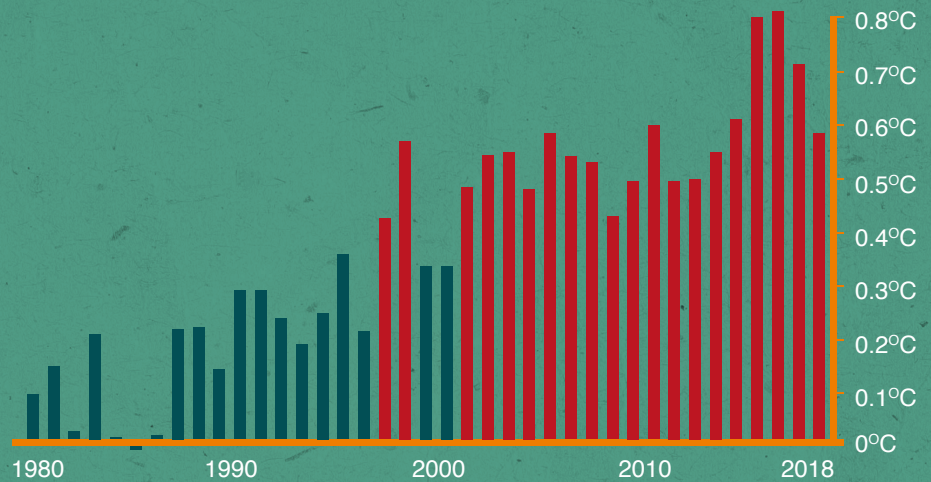
That's 50% more than the year 2000, and almost 3 times as much as 50 years ago.





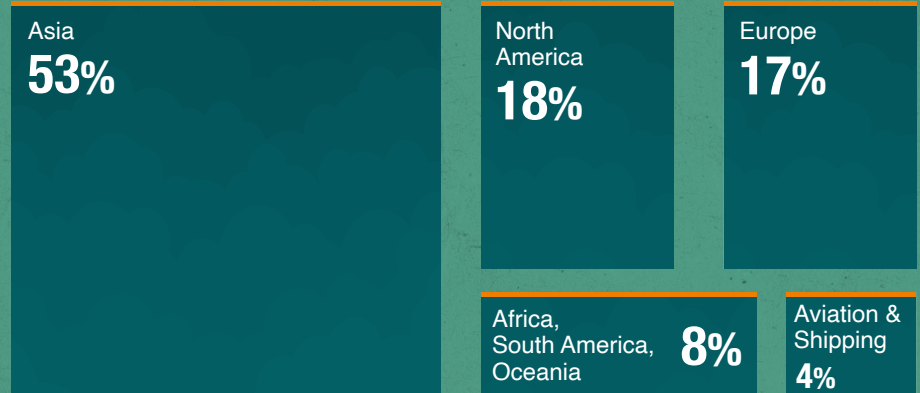
## AVERAGE TEMPERATURE ANOMALY, GLOBAL

Air pollution in the form of carbon dioxide and methane raises the earth's temperature.



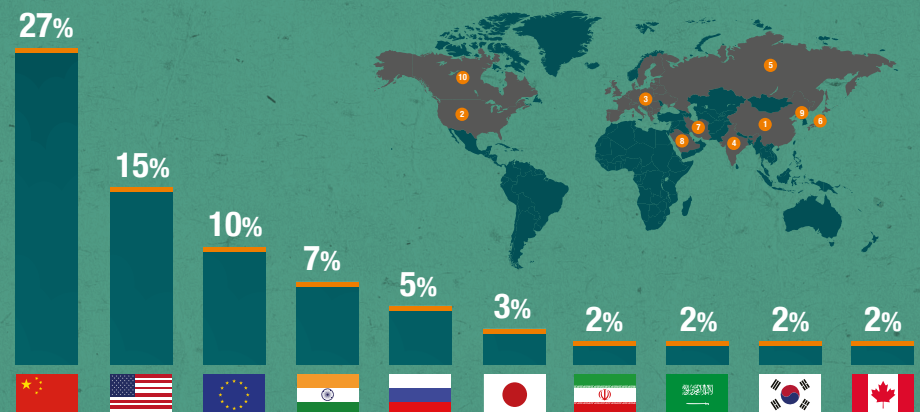
## GLOBAL EMISSIONS BY CONTINENT (2017)

More than 50% came from Asia. North America and Europe followed with 18% & 17%. While Africa, South America and Oceania together only makes 8%.



## TOP EMISSIONS BY COUNTRY

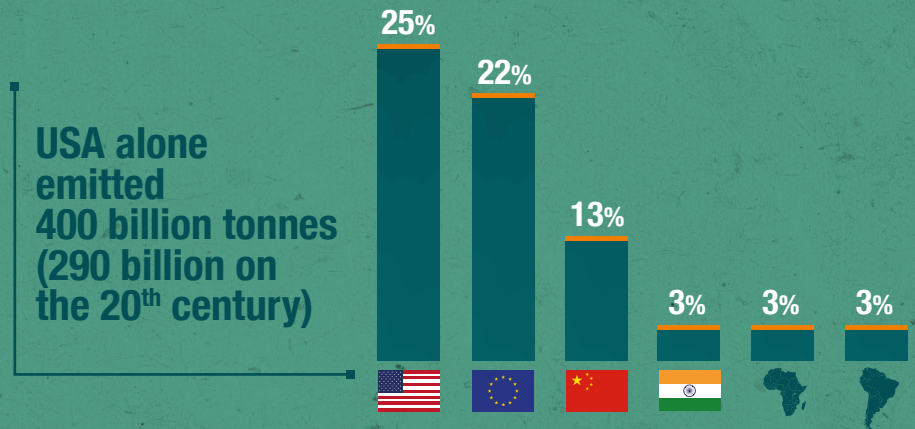
Top 3 together makes up **50%** of the global CO<sub>2</sub> emission.  
Top 8 together makes up **75%** of the global CO<sub>2</sub> emission.





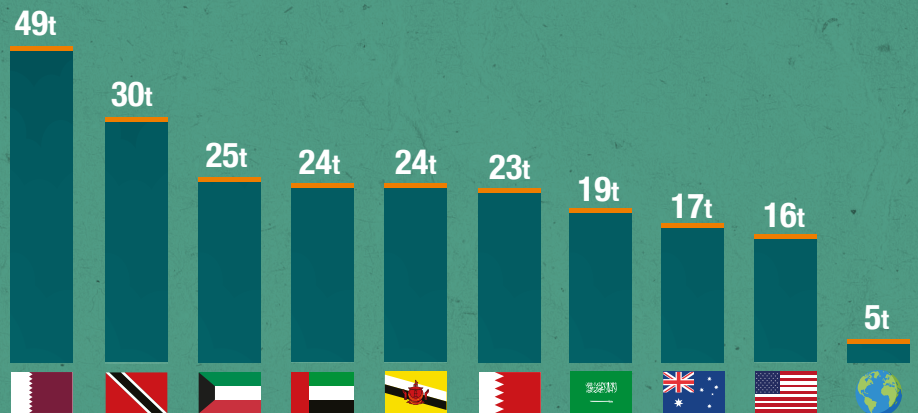
## GLOBAL EMISSIONS HISTORICALLY

USA - 25%  
 EU - 22%  
 China - 13%  
 India - 3%  
 Africa - 3%  
 South America - 3%



## COUNTRIES THAT EMIT THE MOST CO<sup>2</sup> PER PERSON

The average Human is responsible for 5 tons of CO<sup>2</sup> each year.  
 The countries with the largest CO<sup>2</sup> emissions per person are some of the worlds major oil and gas producers.



## CO<sup>2</sup> EMISSIONS HAVE BEEN CLOSELY TIED TO A HIGH STANDARD OF LIVING

Electricity, heating, air conditioning, lighting modern cooking, vehicles, airplanes, smartphones and computers.

High and upper middle income

3.8 Billion People

86%

Lower middle and low income

3.7 Billion People

14%

The data shows us that the higher income, the more emission.

The countries that contribute the least to the problem that stand to lose the most from rapid climate change: Food insecurity, conflicts over resources, harder and more frequent natural disasters, and large climate refugee movements.



## WHAT IS THE SOLUTION?

The most basic solution for air pollution is to move away from fossil fuels, replacing them with alternative energies (solar energy, wind energy, energy vehicles). We also need low-carbon technology to be cheap and available. As soon as the leading countries follow this path, the rest of the world will follow.



## HOW CAN THE DESIGN INDUSTRY INFLUENCE ON THE REDUCING POLLUTION IN INNER CITIES?

From a designer's point of view, we would need to redesign the whole city signage for cyclists and pedestrians (just for a start). We should utilize the big outdoor screens to create animations to educate the people on health benefits for a better air pollution and environment, and start a petition campaign to force the government to start investing on clean energy. Working closely with the Supreme Council for Environment, we should work on a nation-wide campaign that includes several phases. I think we could influence people to take action and maybe start switching to clean energy like using solar panels.

### There should be a shift in approach to urban design and planning

We can collaborate with the Ministry of Urban Planning to achieve this. Architecture and urban design should also support a shift towards zero-emission lifestyles. For example, new buildings should have less parking and better access to public transit.

## PODCAST

[Hyperlink](#)

**LET'S  
TALK  
POLLUTION**



Featuring Mrs. Amal Taha  
*Head of Marketing at the Supreme  
Council for Environment (SCE)*

We discuss the main causes of pollution, different terms of air pollution, the effects on public health, and some solutions from both points of view.