

# Denmark's Climate Change Initiative

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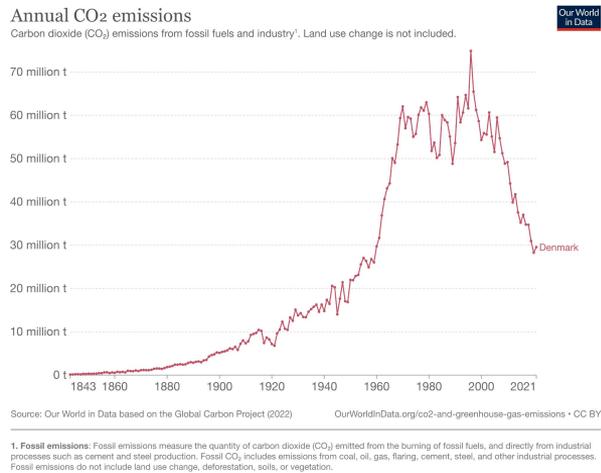
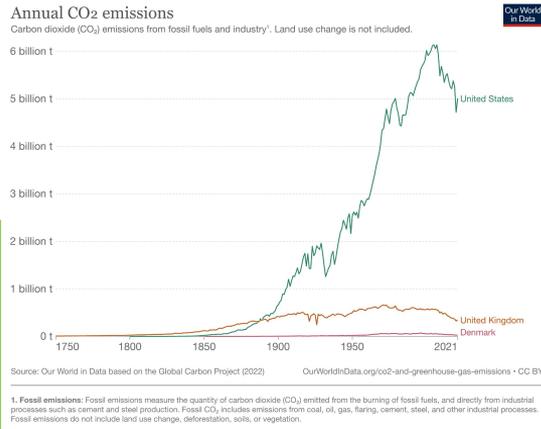
# Background on Denmark



# Denmark as a Country

- 16,584 square miles
  - (2 times smaller than Maine)
- 5.8 million people
  - (same population size as Colorado)
- Progressive in their climate initiatives, ranked 4th in international and national climate policy

# Denmark Stats:



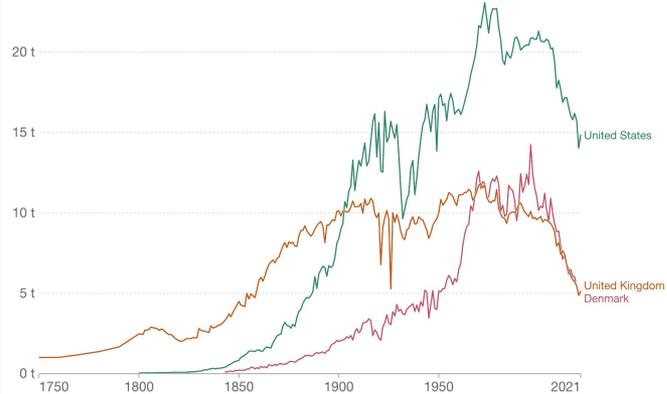
- Collective emissions of greenhouse gases from Denmark were 55.5 Million tons in 2013.
  - In comparison, America released 6.6 billion tons in 2013
- Since 1990, Denmark's collective emissions have dropped by approximately 20%.
- The primary causes for this include more efficient energy use and an increased use of renewable energy sources such as solar and wind.
  - In 1991, Denmark accelerated the green transition by building the world's first offshore wind farm (wind farms account for 20% of the electricity supply)
- Denmark's current annual CO<sub>2</sub> emissions is 29.5 million tons

# Denmark's CO2 Per Capita:

## Per capita CO2 emissions

Carbon dioxide (CO<sub>2</sub>) emissions from fossil fuels and industry<sup>1</sup>. Land use change is not included.

Our World  
in Data



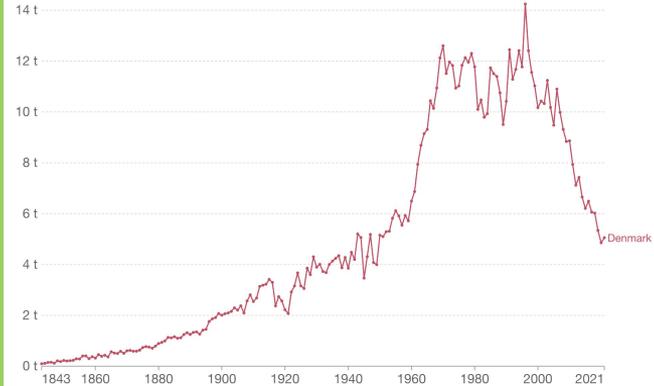
Source: Our World in Data based on the Global Carbon Project (2022) [OurWorldInData.org/co2-and-greenhouse-gas-emissions](https://OurWorldInData.org/co2-and-greenhouse-gas-emissions) · CC BY

**1. Fossil emissions:** Fossil emissions measure the quantity of carbon dioxide (CO<sub>2</sub>) emitted from the burning of fossil fuels, and directly from industrial processes such as cement and steel production. Fossil CO<sub>2</sub> includes emissions from coal, oil, gas, flaring, cement, steel, and other industrial processes. Fossil emissions do not include land use change, deforestation, soils, or vegetation.

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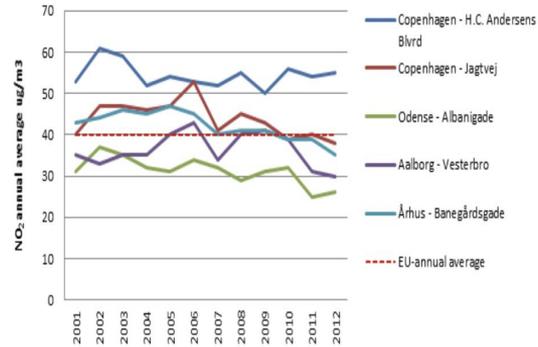
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Denmark: 5.05 t per capita  
America: 14.9 t per capita  
UK: 5.15 t per capita

# Areas of Impact on Climate in Denmark

Figure 1: NO<sub>2</sub> levels in Copenhagen, 2001-2012



## Agriculture:

- Takes up 60% of land in Denmark, use of pesticides exceed national targets

## Air Quality:

- Overall improving, but NO<sub>2</sub> levels especially in Copenhagen exceed EU national average.

## Water:

- Water consumption has decreased 25-30% over the last 20 years, and quality of lakes and streams has increased. Only issue is the amount of runoff of pesticides.

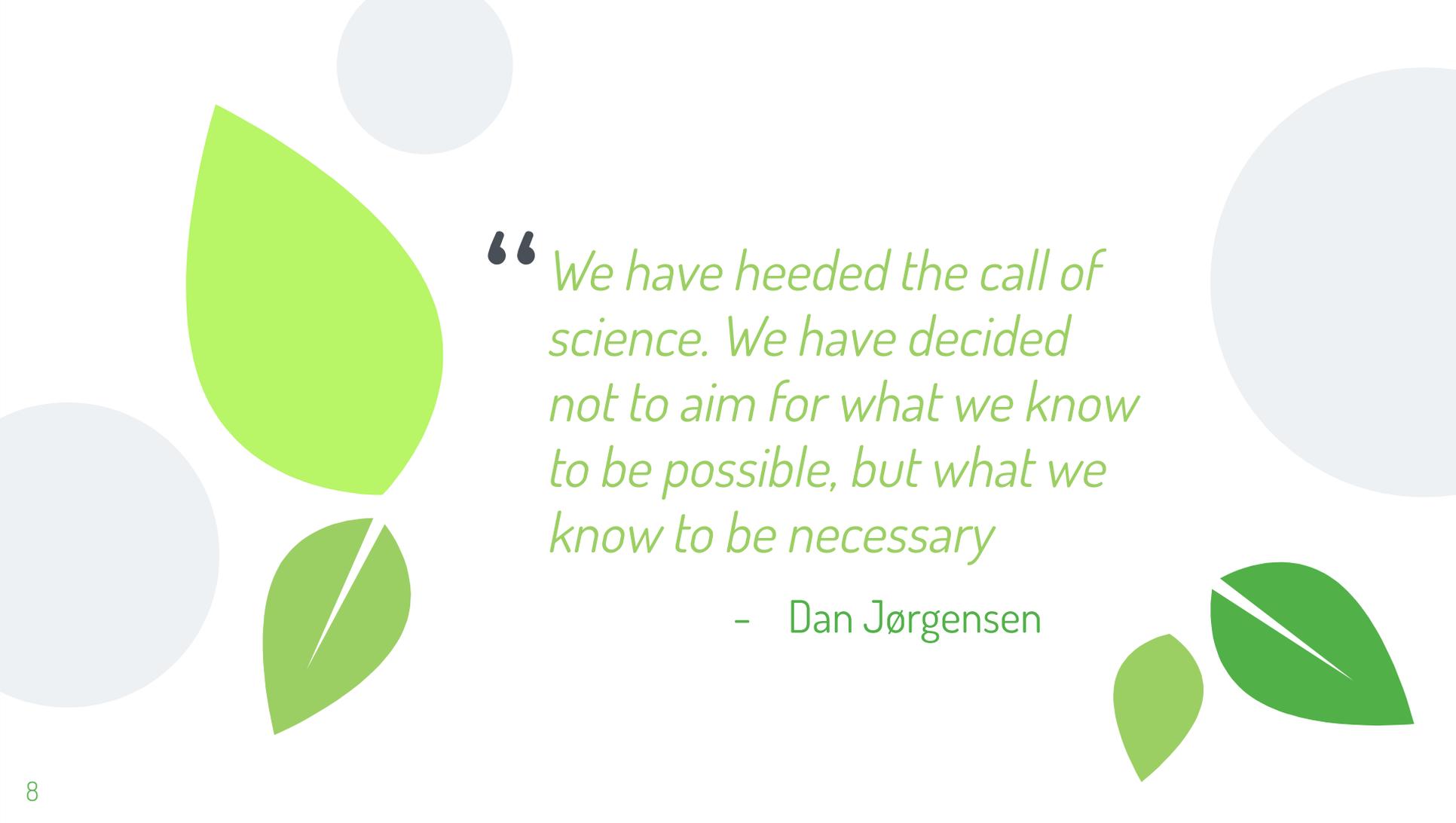
## Waste:

- Denmark produces more trash per capita than any other country in the 27-member European Union
- The Danes tossed out 1,762 pounds of garbage per person in 2007, It even surpasses the Americans who toss out 1,690 pounds per person

- Meat consumption links to climate change because of widespread deforestation and release of methane. The average Dane consumed 321 pounds of meat per year - while Americans consumed 275 per year.



# The Initiative

The background features several stylized green leaves of various sizes and orientations, interspersed with large, light grey circles. The overall aesthetic is clean and modern, with a focus on natural elements.

“ *We have heeded the call of science. We have decided not to aim for what we know to be possible, but what we know to be necessary*

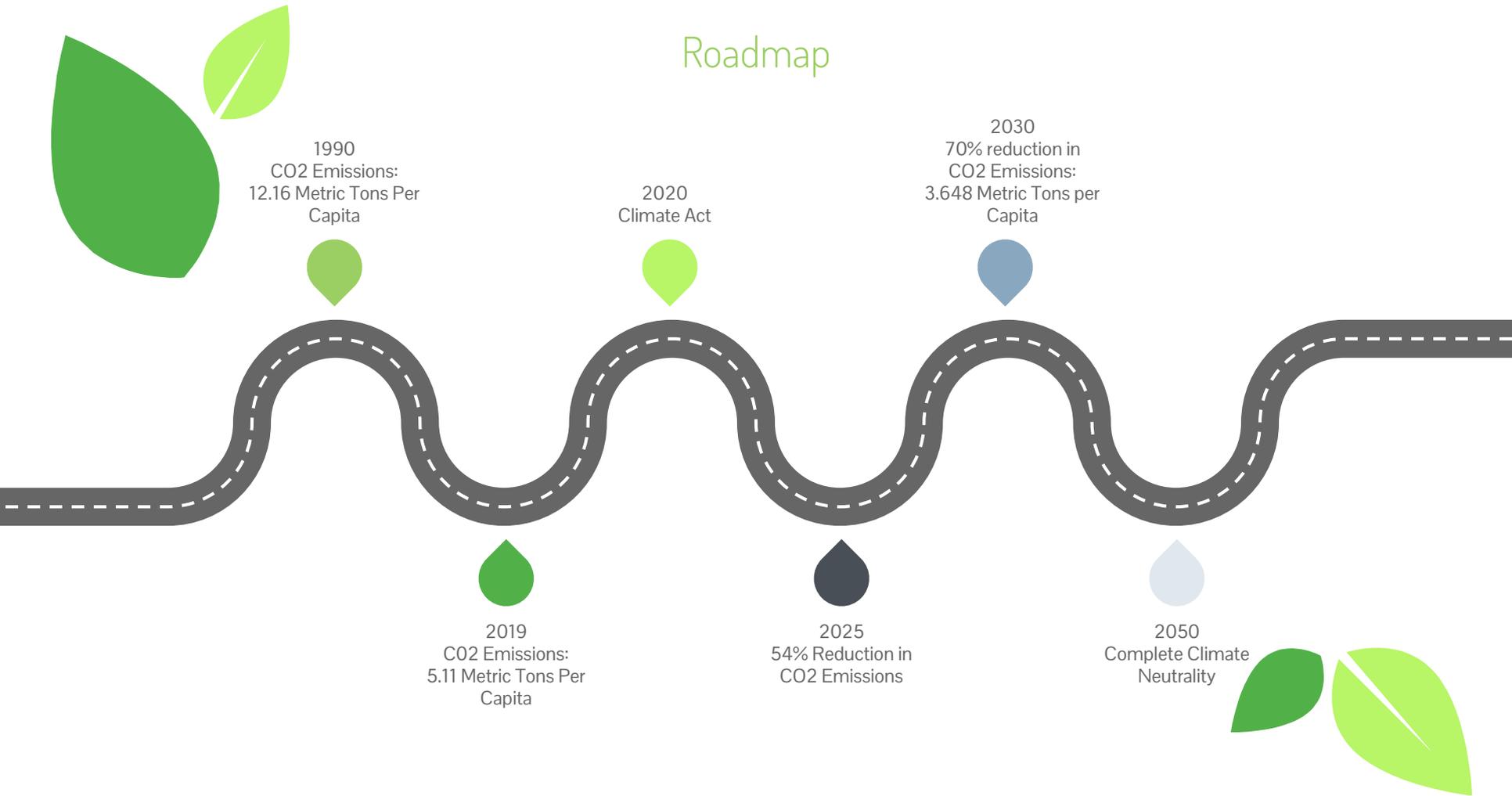
- Dan Jørgensen



## 2020 Climate Act

- Target is to reduce CO<sub>2</sub> emissions by 70% by 2030
  - Compared to 1990
- Long-term Goal is to achieve climate neutrality by 2050

# Roadmap





## How does that happen?

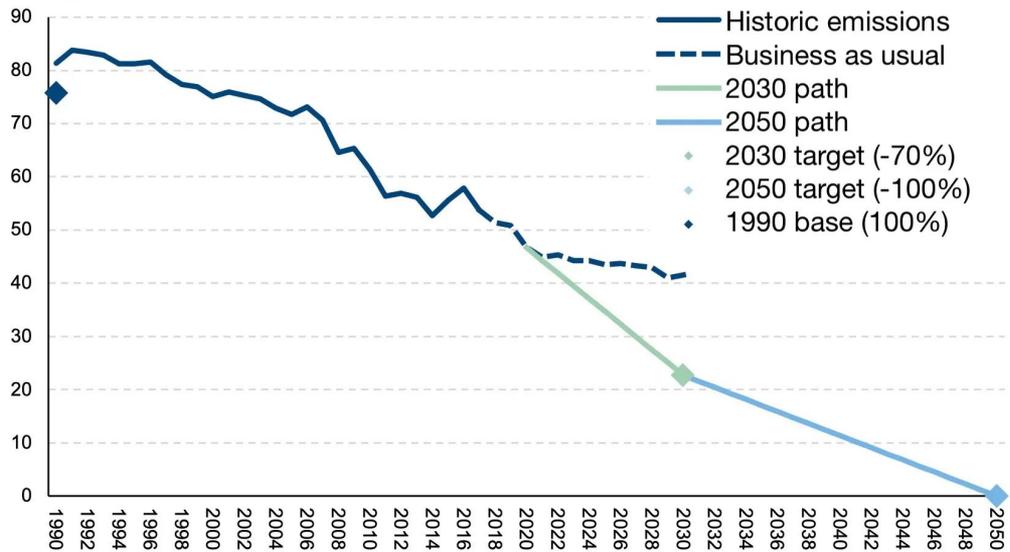
- Climate Council power is expanded
- Increased funding to Climate Council
  - Doubled
- Sets restrictions and obligations on the Government to reach the goal by 2050



# Governmental Changes

- Committee of Green Transformation
- Annual climate action plans
- The government must assess the climate impacts for every law passed
- Investments in research and initiatives such as offshore wind farms

Mio. ton CO<sub>2</sub>e





**Cons**

- 
- Difficulty in finding the restrictions and strategies
  - Publicly funded
    - Possibility of increased taxes



**Pros**

- 
- Sustainable and quality infrastructure
  - Preserve and create sustainable jobs
  - Quality of air and water will create healthier communities
  - Encourages the rest of the world!
    - Dan Jørgensen, Denmark's minister for climate, energy and utilities, stated, "we want to show the world that you can have a decarbonized economy that is wealthy and provides its people with a high quality of life."



# Personal Opinions

# Thanks!

ANY QUESTIONS?





# Sources:

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