



# THE MORAL CASE FOR FOSSIL FUELS

by Alex Epstein



**CENTER for  
INDUSTRIAL  
PROGRESS**







**Alex Epstein** ✓

@AlexEpstein

Following

[@billmckibben](#) Duke will host a debate between you+anyone and me+Dr.-Eric-Dennis on the morality of fossil fuels. You'll get \$10K. Deal?

4:15 PM - 25 Jul 2012

11 Retweets 3 Likes



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**Bill McKibben** ✓ @billmckibben · 29 Jul 2012

Replying to [@AlexEpstein](#)

[@Alexepstein](#) happy to debate \$10k to [350.org](#), you and me 1 on 1, "Resolved: Humans are causing risky warming," neutral audience



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## The Opinion Pages

**Dot Earth**NEW YORK TIMES BLOG

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**CLIMATE CHANGE**

# Will Storm's Wall Street Impact Influence U.S. Carbon Policy?

BY ANDREW C. REVKIN   NOVEMBER 8, 2012 1:46 PM   50

Watch this [video of this week's Duke University debate](#) between carbon campaigner [Bill McKibben](#) and carbon defender [Alex Epstein](#) to see how this plays out.

Who won?

Given that they argued their positions using entirely different framings of costs and benefits, victory is in the eyes of the viewer.

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# Global Warming's Denier Elite

President Obama has vowed to take action to fight global warming. Meet the polluters, politicians and propagandists who've vowed to stop him



Aerial view of a coal fired power station. Paul Langrock/Zenit/laif

## Alex Epstein

*President and founder, Center for Industrial Progress*

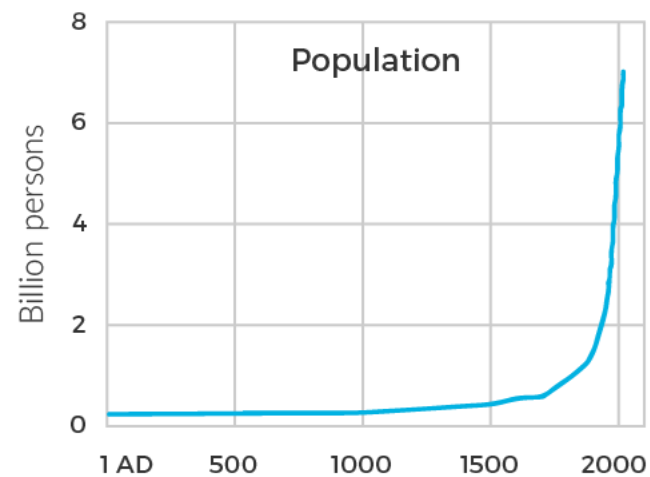
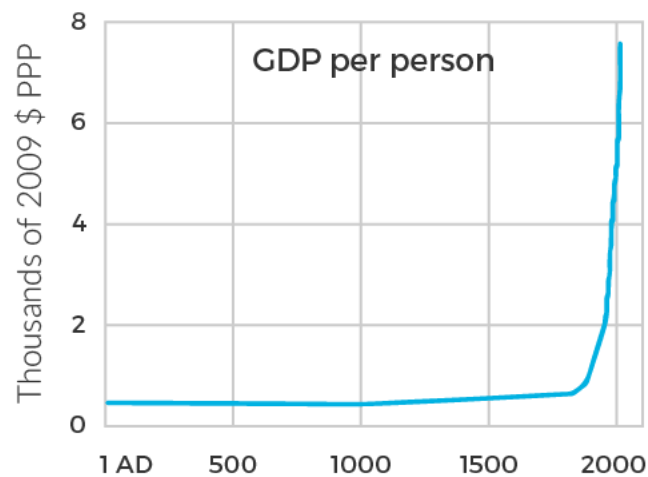
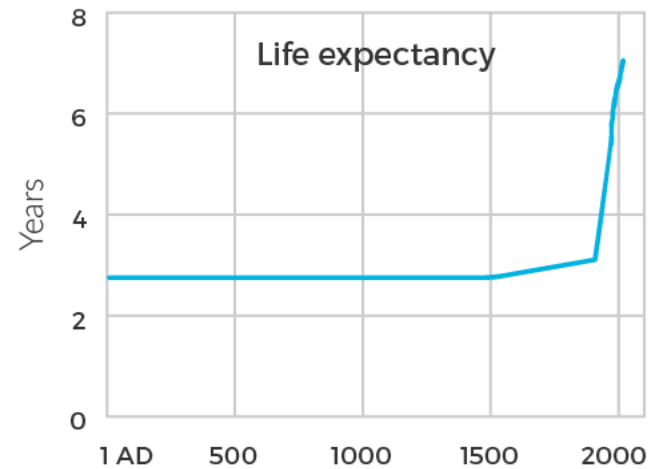
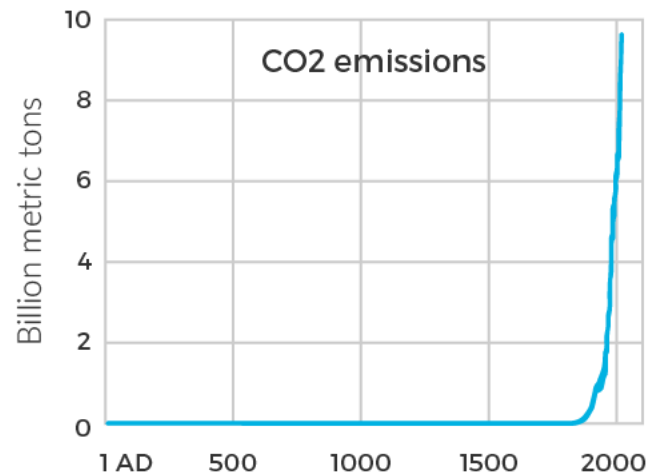
The youthful Epstein tours college campuses debating environmentalists and promoting the benefits of oil and coal to modern society; "Fossil Fuels Improve the Planet" was the title of his April talk at Vassar. Recently he termed the Tesla Model S "a coal car" because "the electricity in an 'electric car' must come from somewhere – and that somewhere is usually fossil fuels." And in April, Epstein told a Canadian oil-industry gathering, "Thank you for producing the lifeblood of civilization."

## Craig Idso

*Chairman, Center for the Study of Carbon Dioxide & Global Change*

A leading skeptic who believes that rising carbon levels are actually a

# CPR energy is fundamental to flourishing -- and difficult



# Our global energy discussion is:

1

Biased

2

Sloppy

3

Anti-human

# Perfect Planet Premise

Stable  
Safe  
Sufficient

Humans are polluter-parasites

Goal: minimize human impact



# Perfectible Planet Premise

Dynamic  
Dangerous  
Deficient

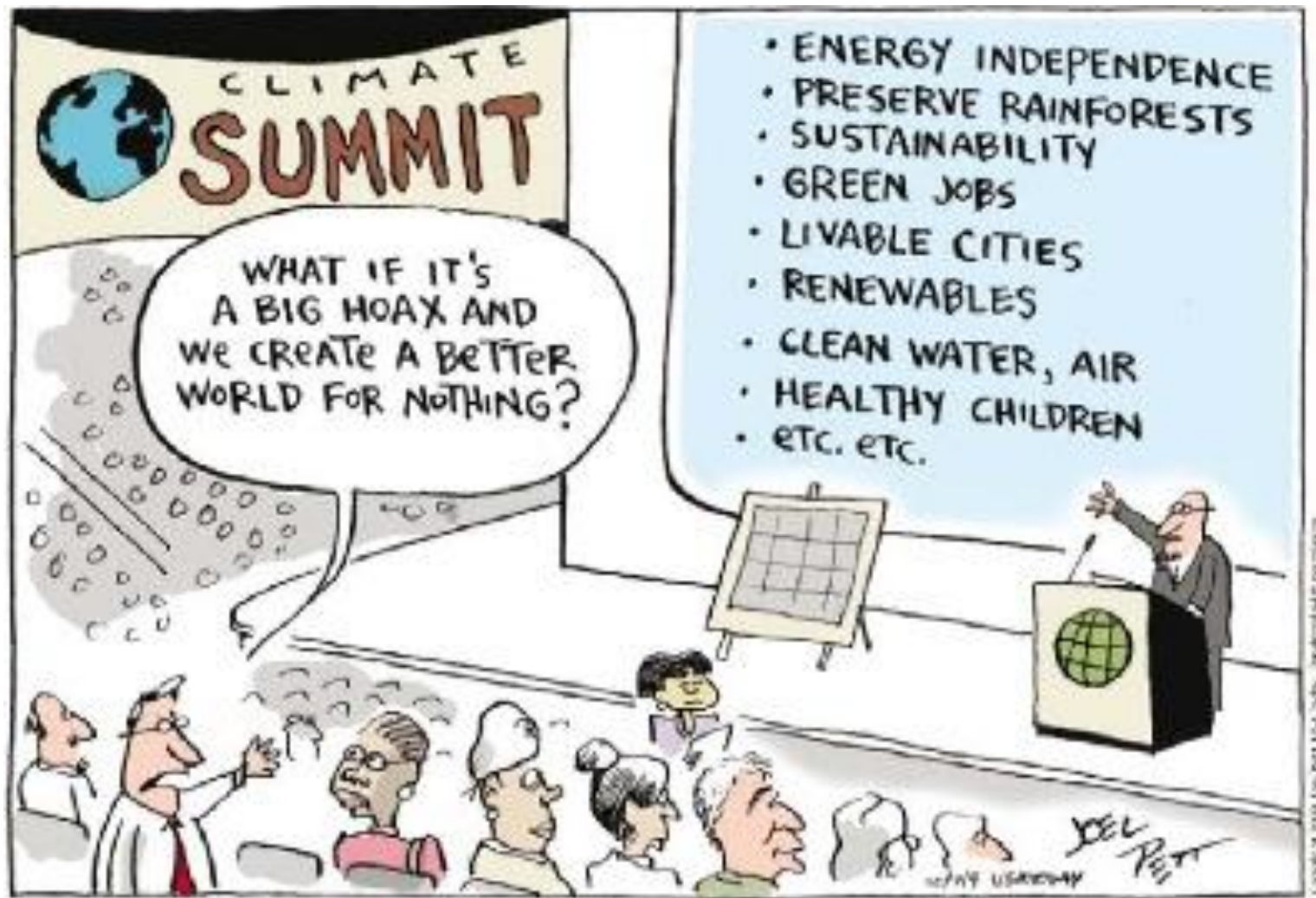
Humans are perfecter-producers

Goal: Maximize human flourishing  
through intelligent transformation

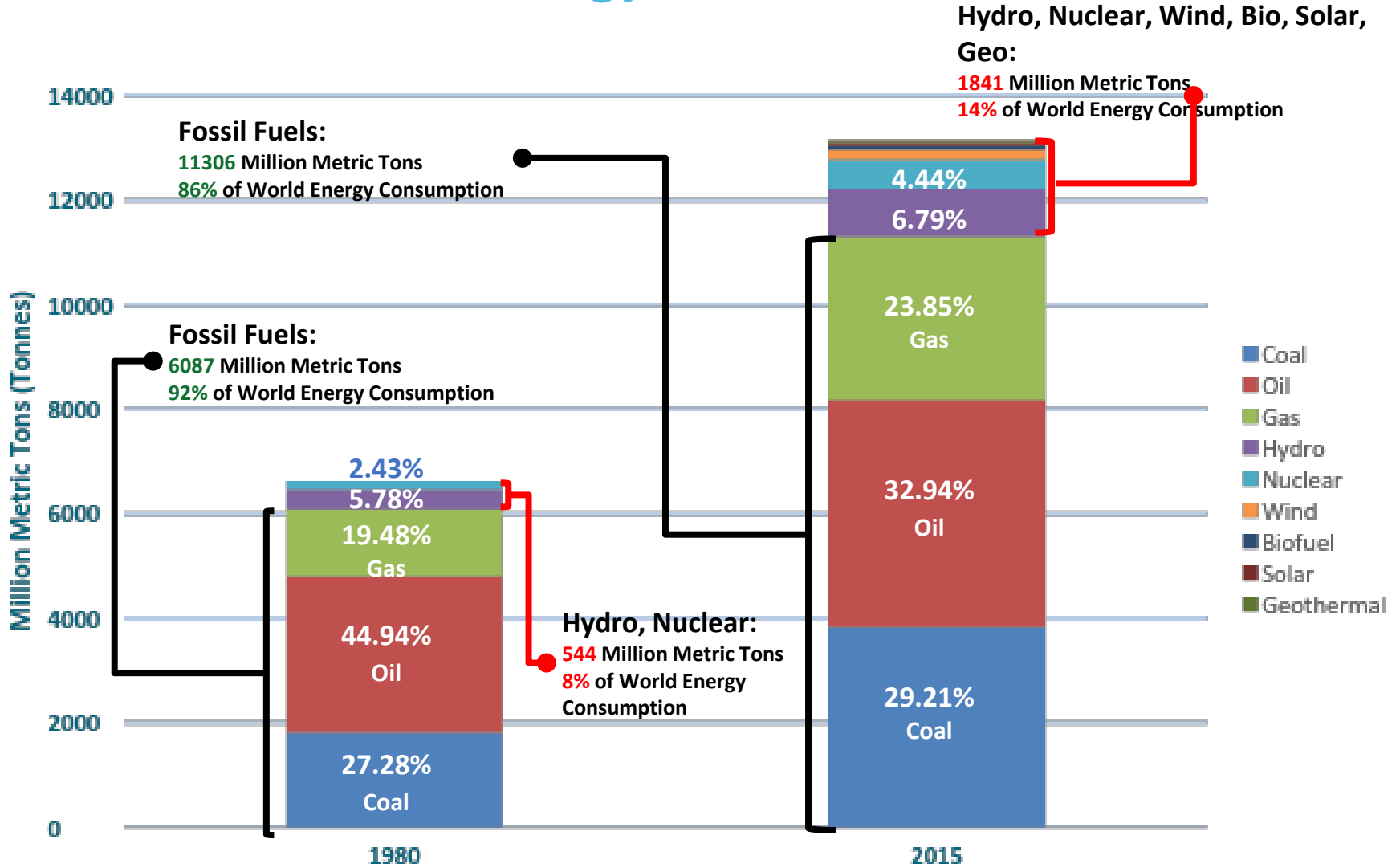
## Full Context

Potential unique benefits (access to energy, CO<sub>2</sub>), potential unique risks (CO<sub>2</sub>, pollution, depletion) for human flourishing.

# “Renewables”: free and forever?



# The truth about energy



Source: BP, Statistical Review of World Energy 2015, Historical data workbook

Jimmy Fallon makes the world's best case...

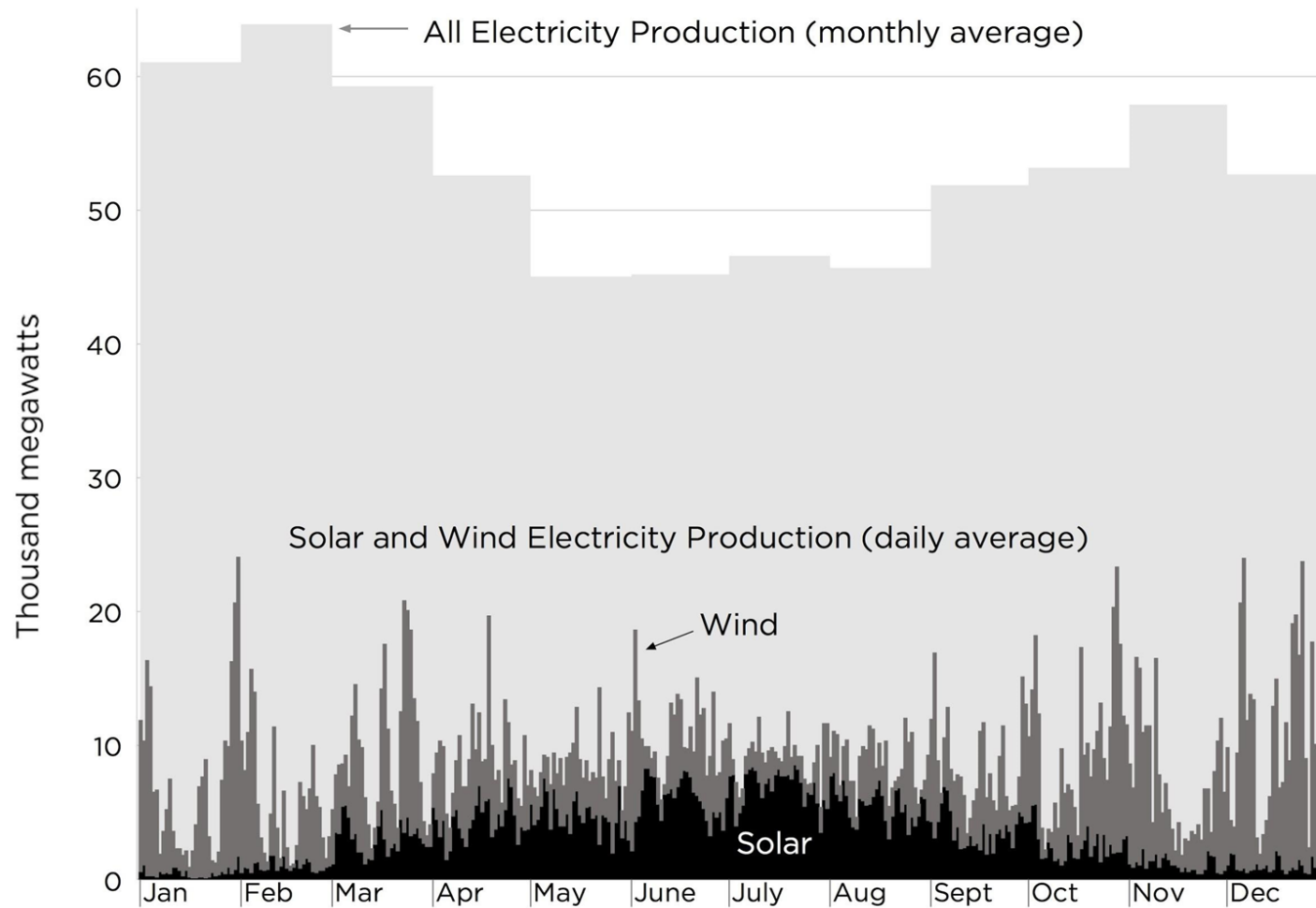




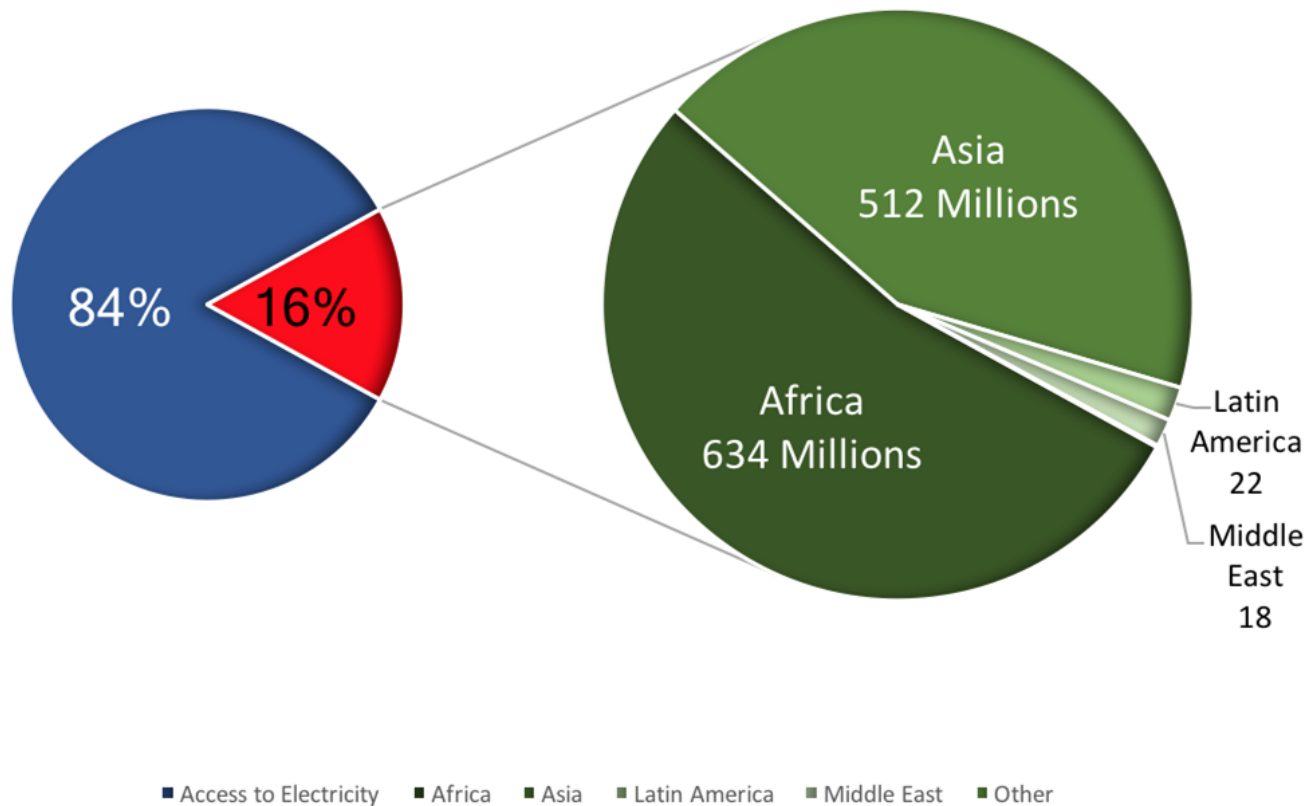
Every energy technology is a resource-intensive process—some are much more resource-intensive than others

Mining  
Processing  
Manufacturing  
Transportation  
Operation  
Maintenance  
Disposal

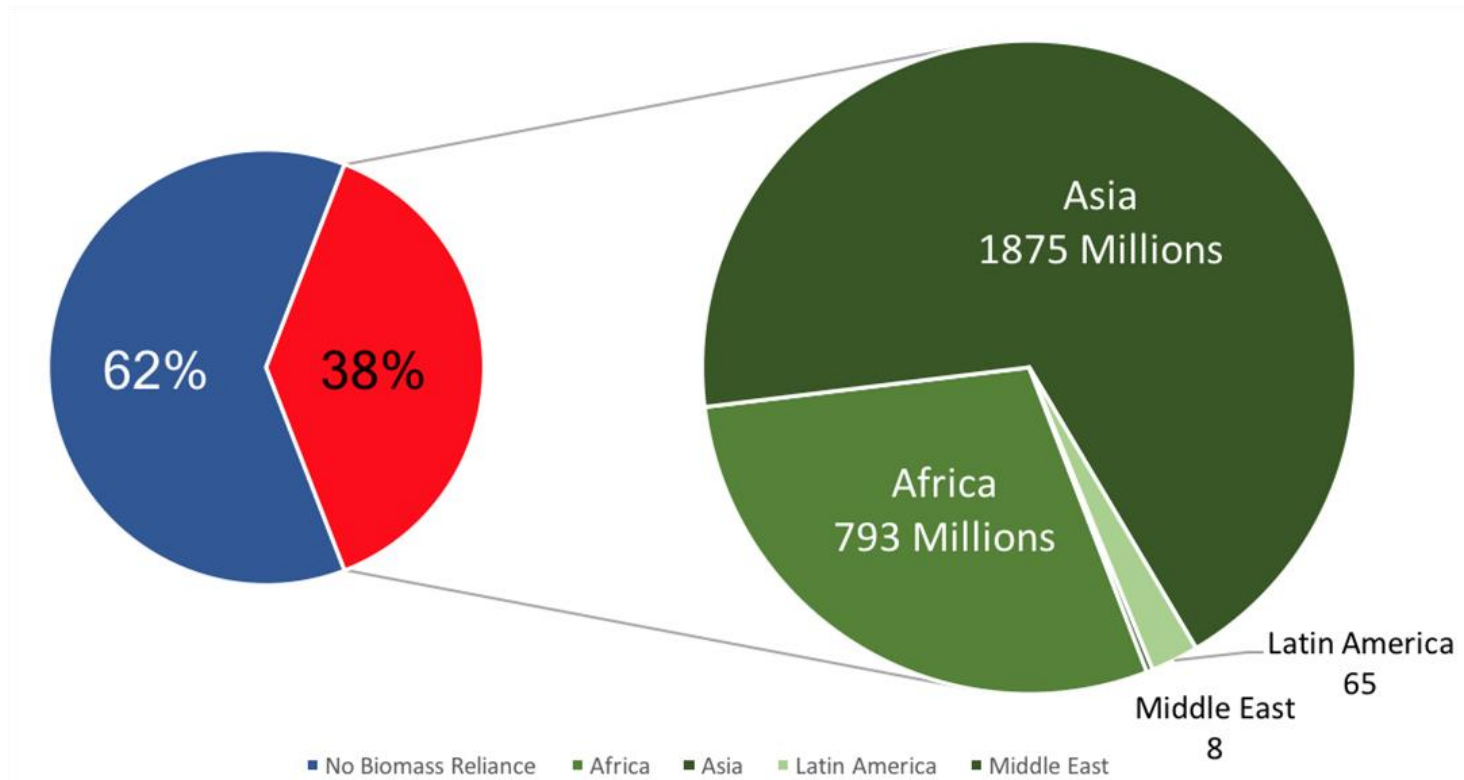
# The truth about unreliable: Germany



# 1.2 billion humans without access to electricity



## 2.7 billion humans rely on biomass for cooking and heating



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The unique benefits of fossil fuel use place an extremely high burden of proof on any restrictive proposals.



There are three main concerns about fossil fuels:

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catastrophic  
resource  
depletion



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catastrophic  
pollution

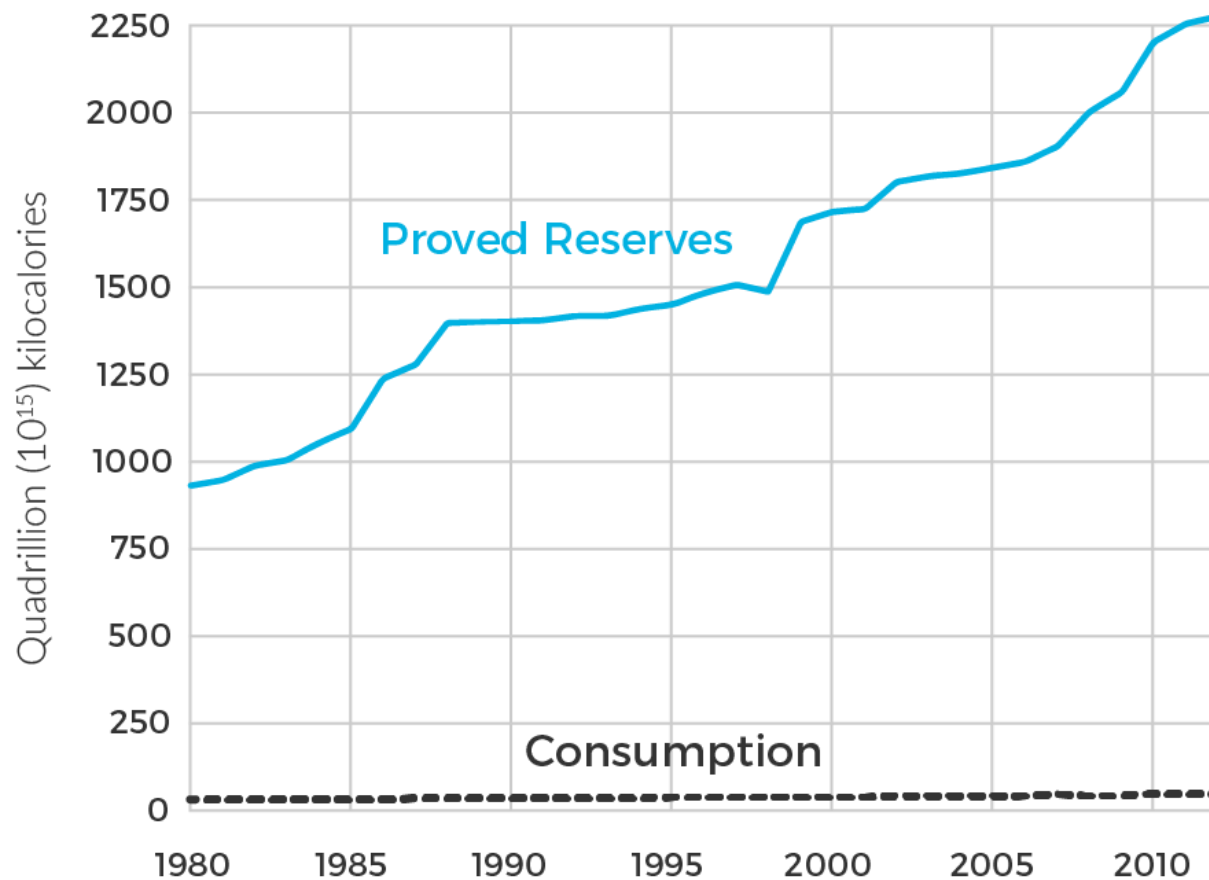


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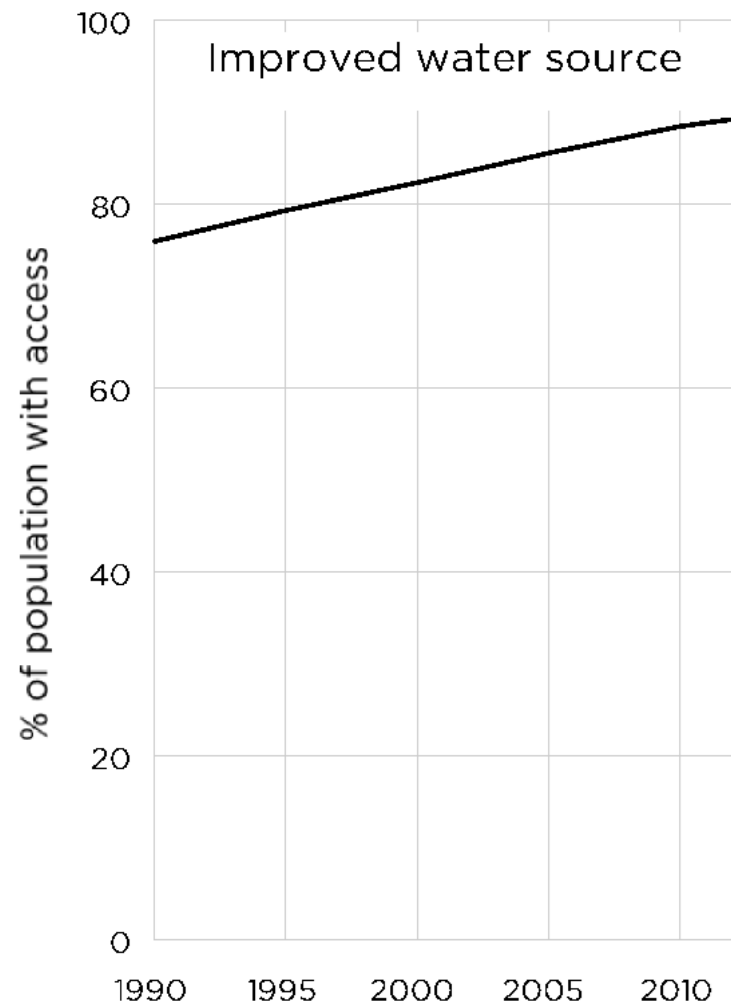
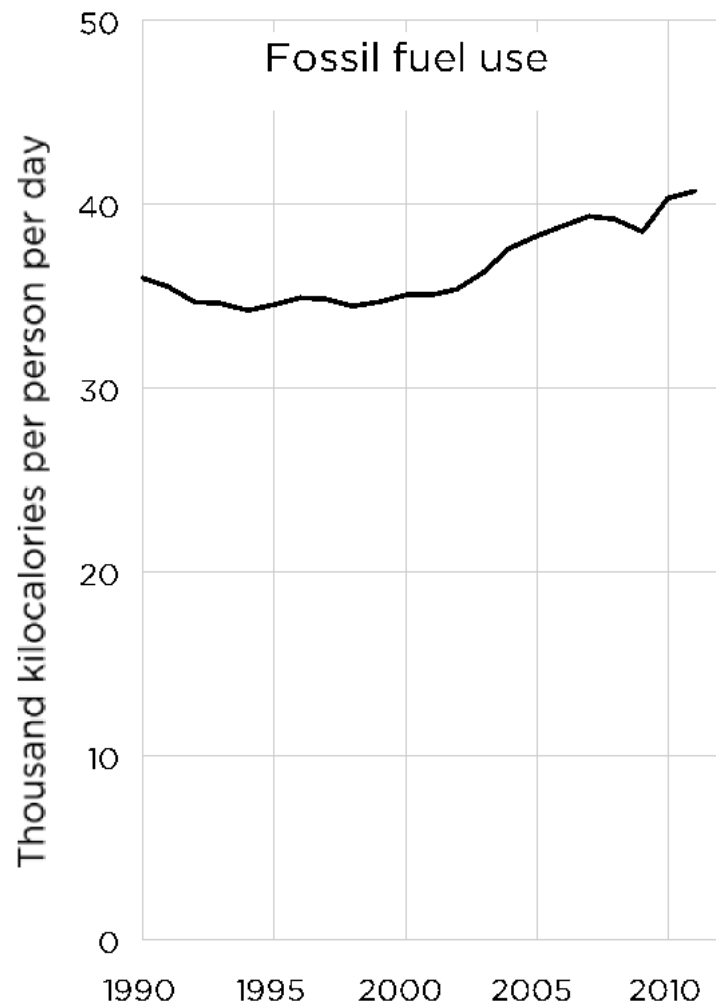
catastrophic  
climate  
change



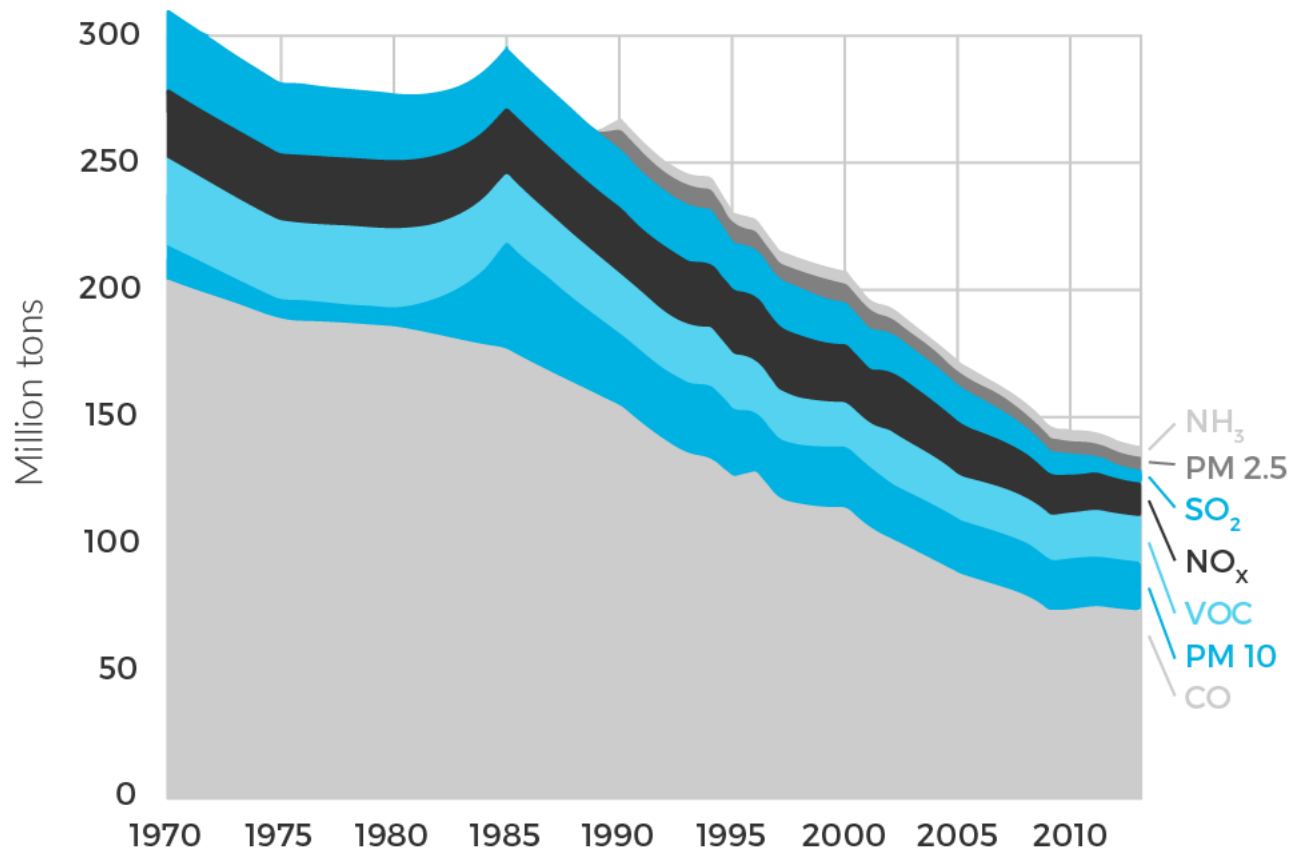
We have untold amounts of potential hydrocarbon resources – over 10X more than we've used in the history of civilization.



# More fossil fuels, better water



As fossil fuel use has gone up in the US,  
concentrations of air pollutants have gone down.



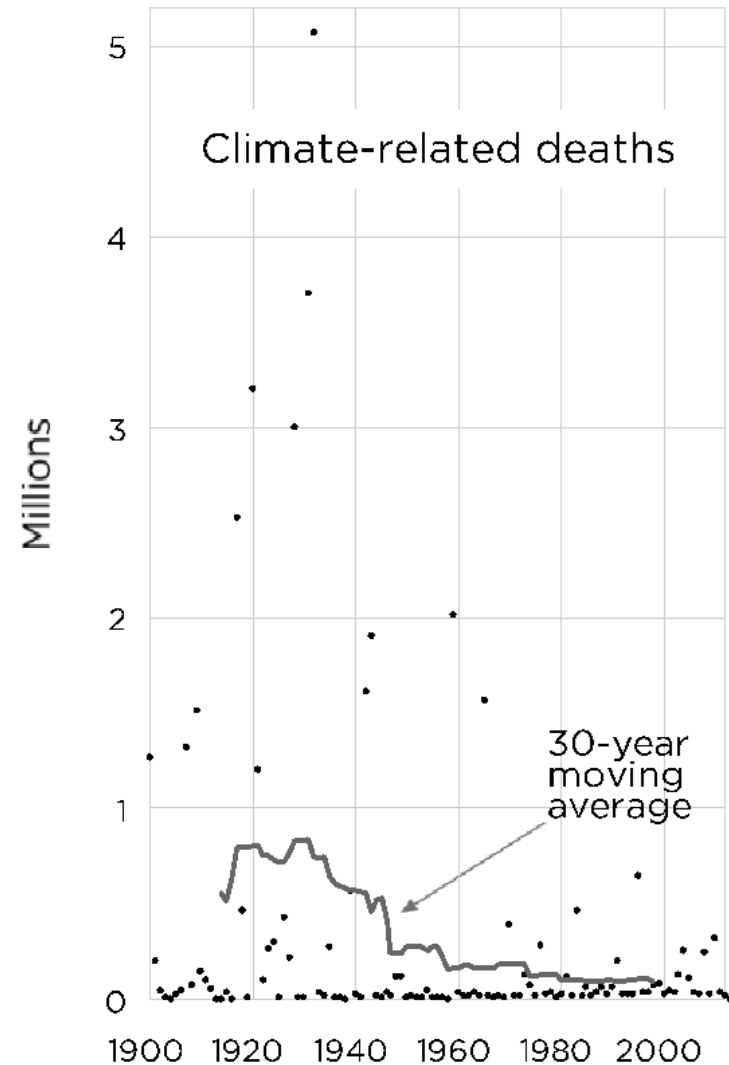
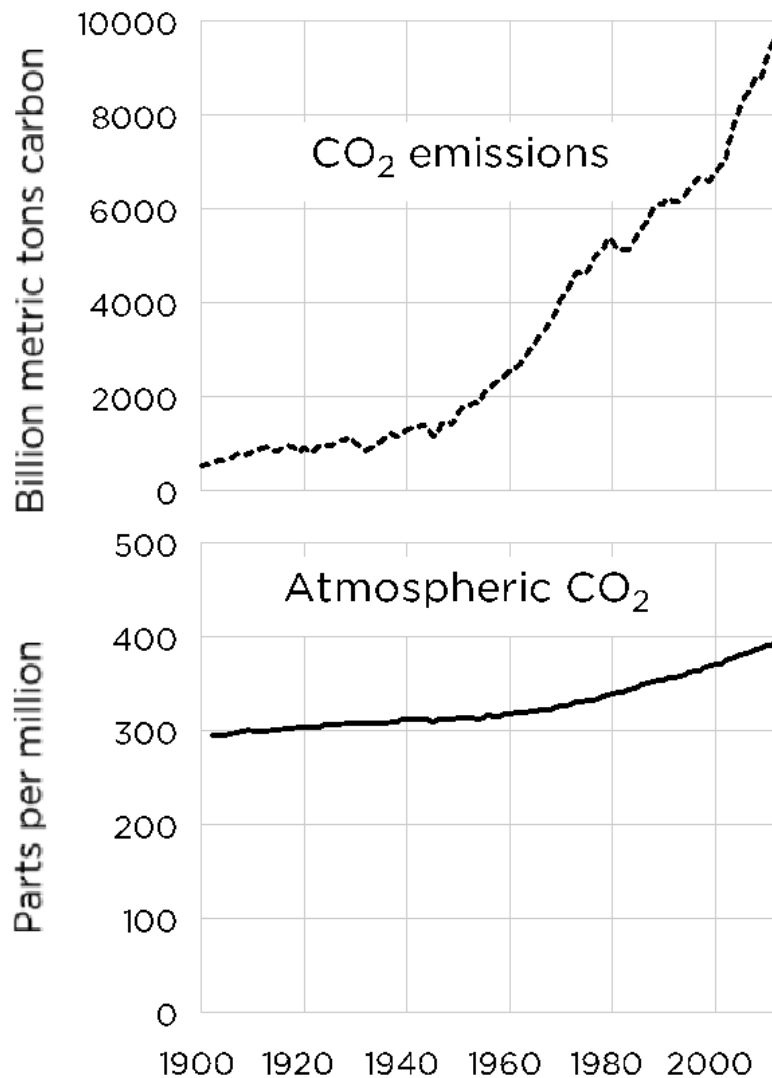
## Assessing climate livability

1. The greenhouse effect
2. The fertilizer effect
3. The protection effect



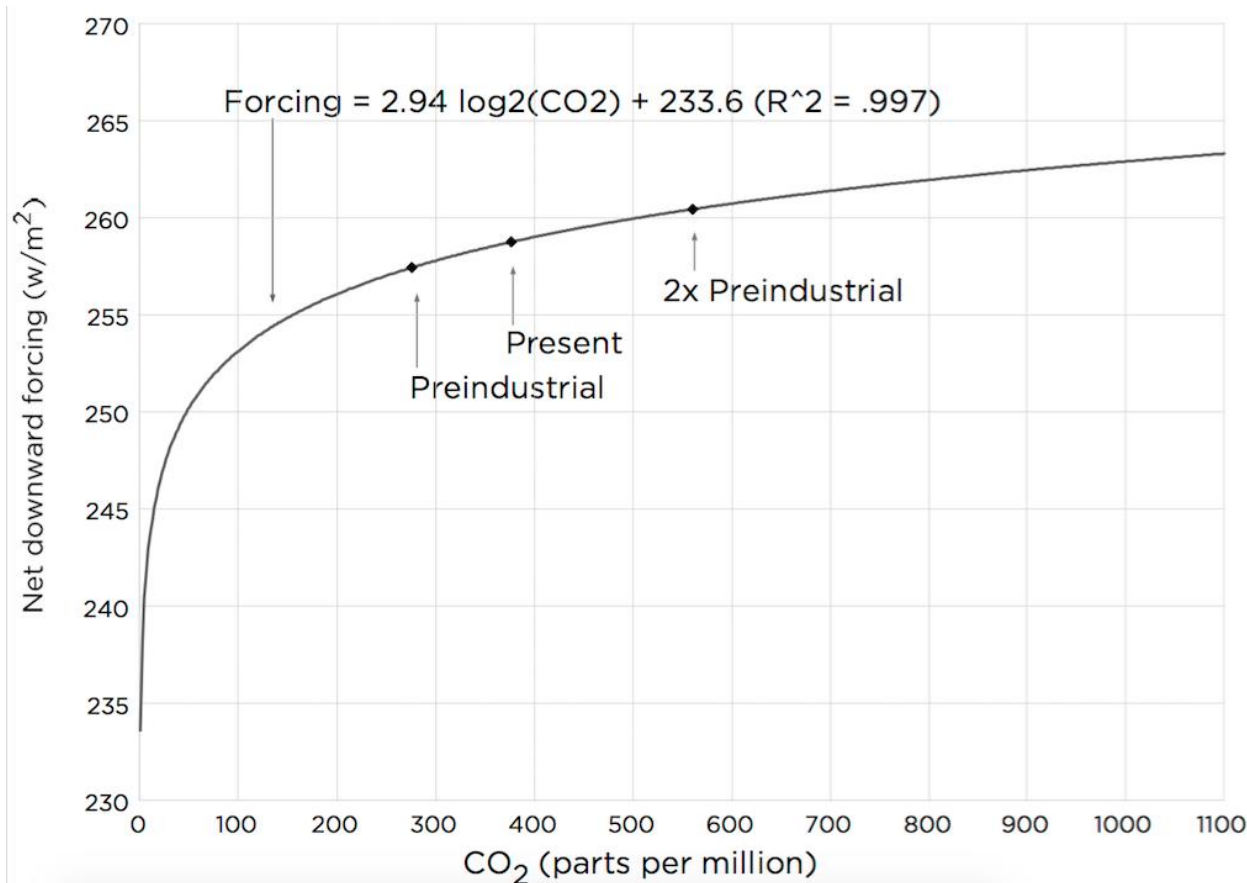


# Climate-related deaths



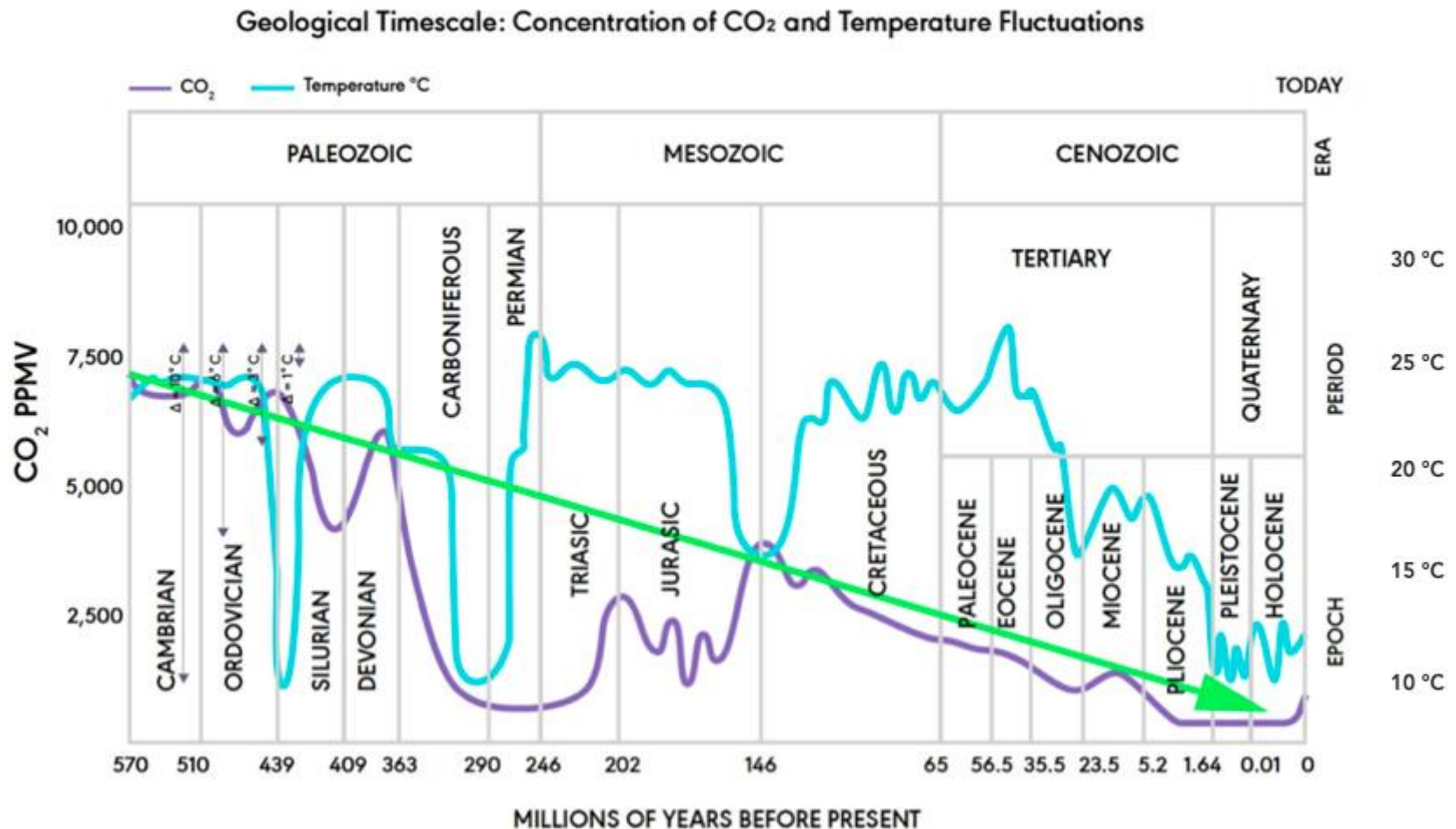
# The greenhouse effect of CO<sub>2</sub> is a diminishing effect.

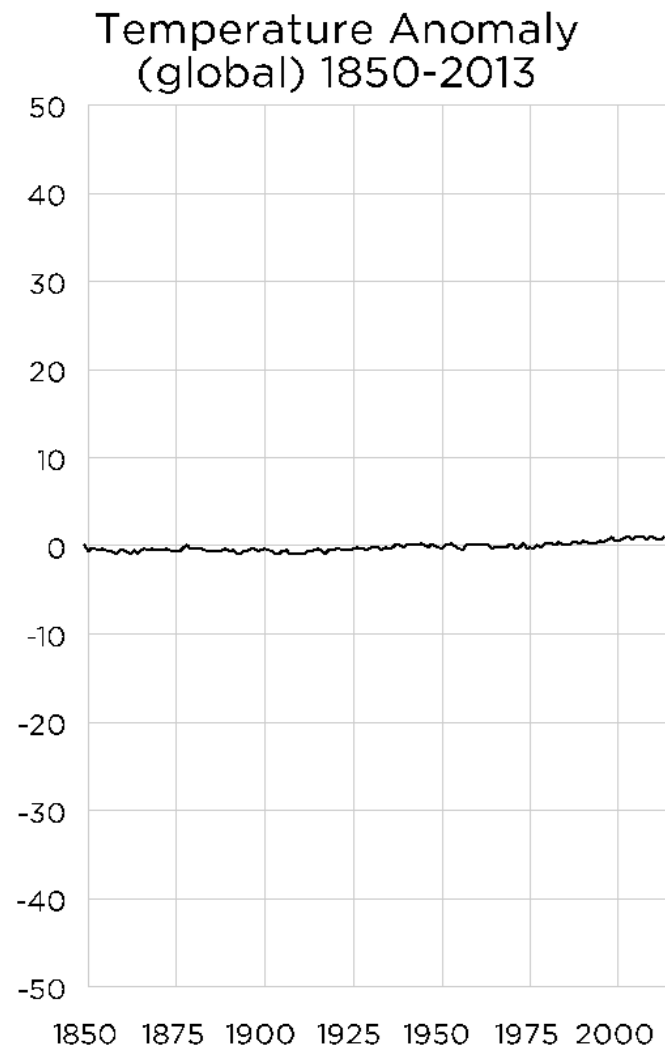
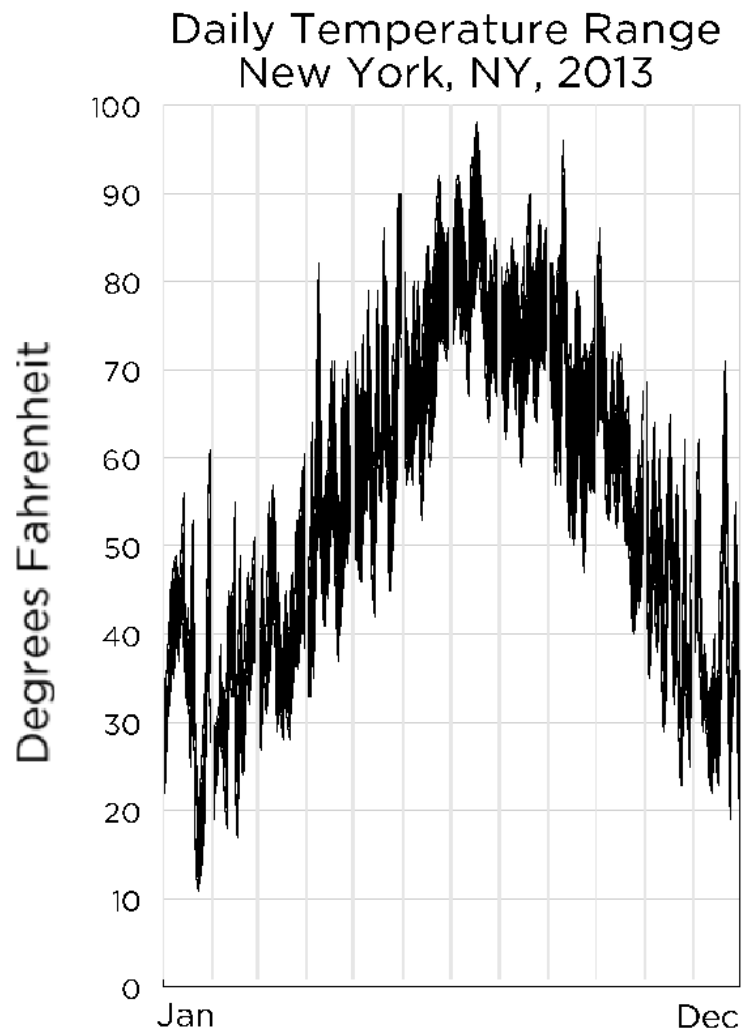
How does the **greenhouse effect** work? CO<sub>2</sub> absorbs parts of the infrared radiation coming from the planet's surface and traps part of the heat energy temporarily.



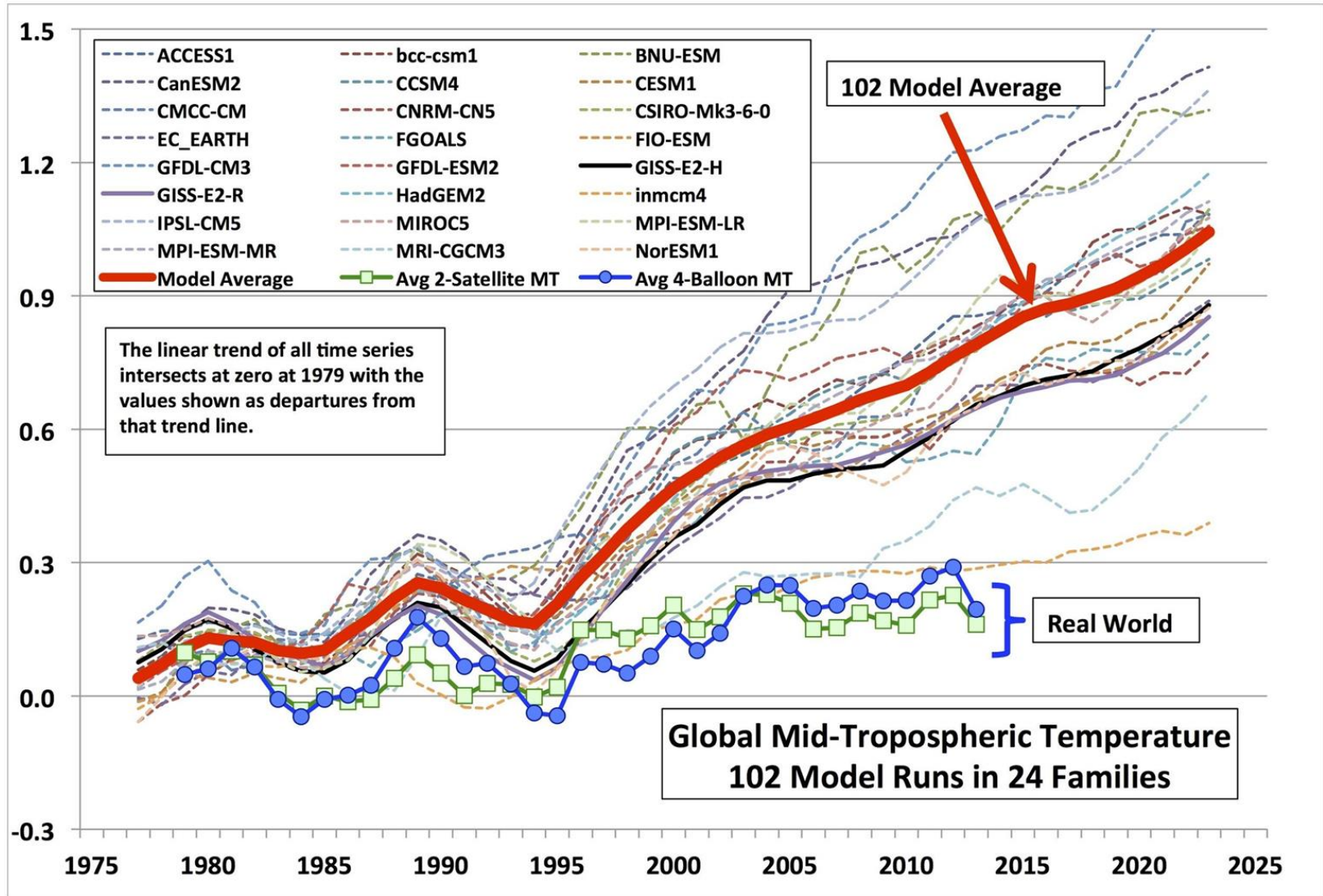
It's a  
diminishing,  
logarithmic  
effect.

# Geological timescale: concentrations of CO<sub>2</sub> and temperature fluctuations



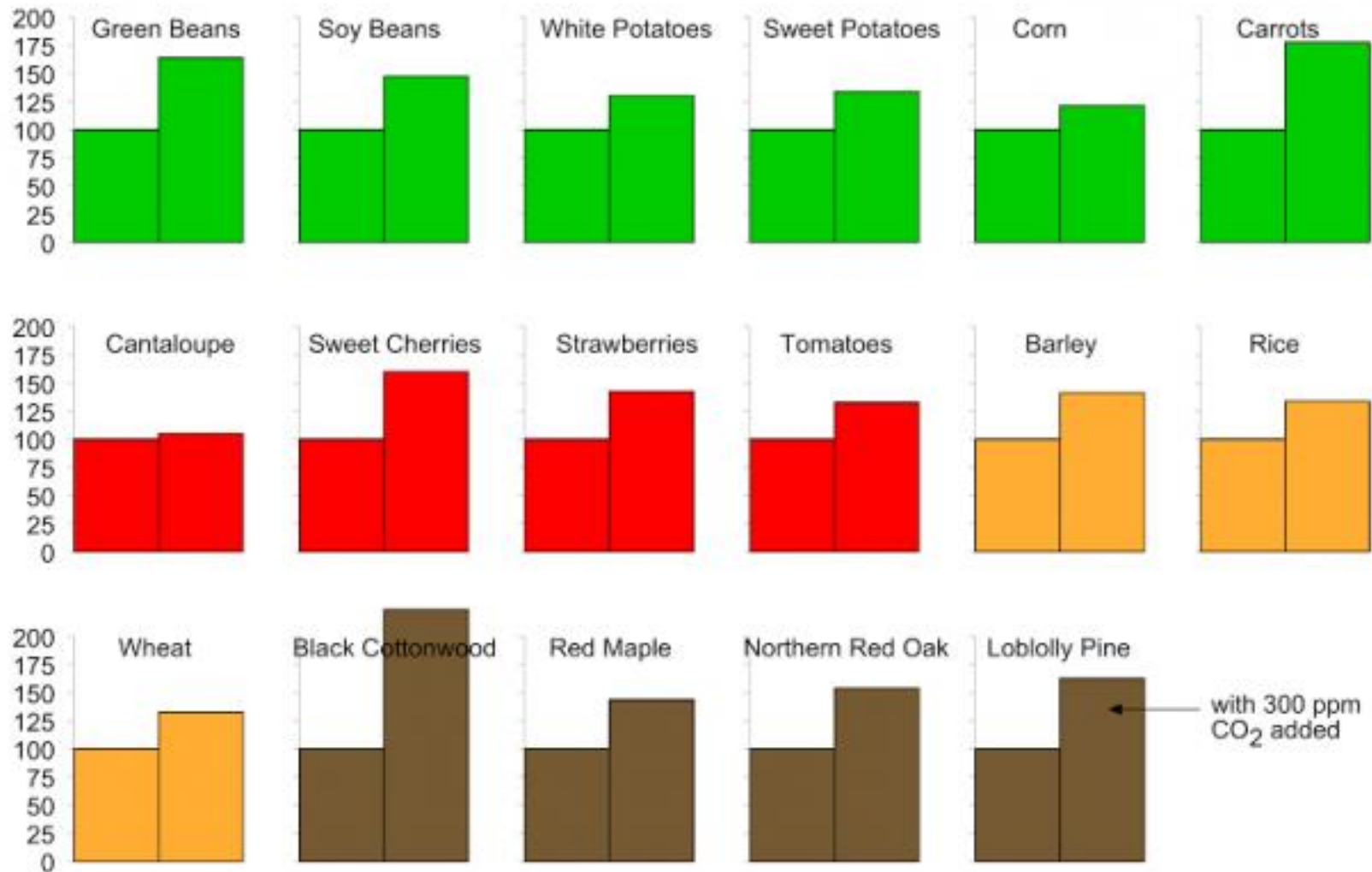


# Current climate models that can't predict climate

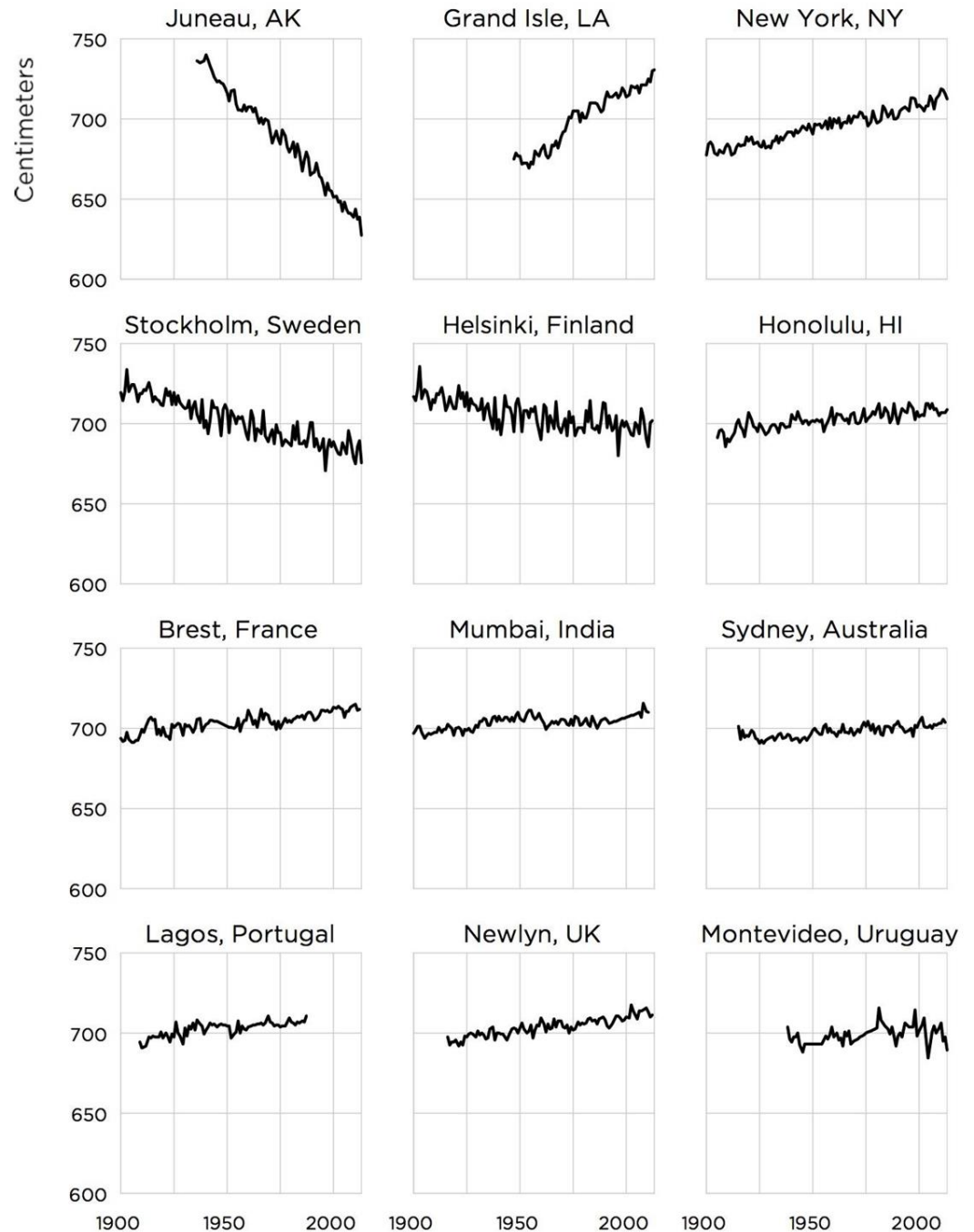




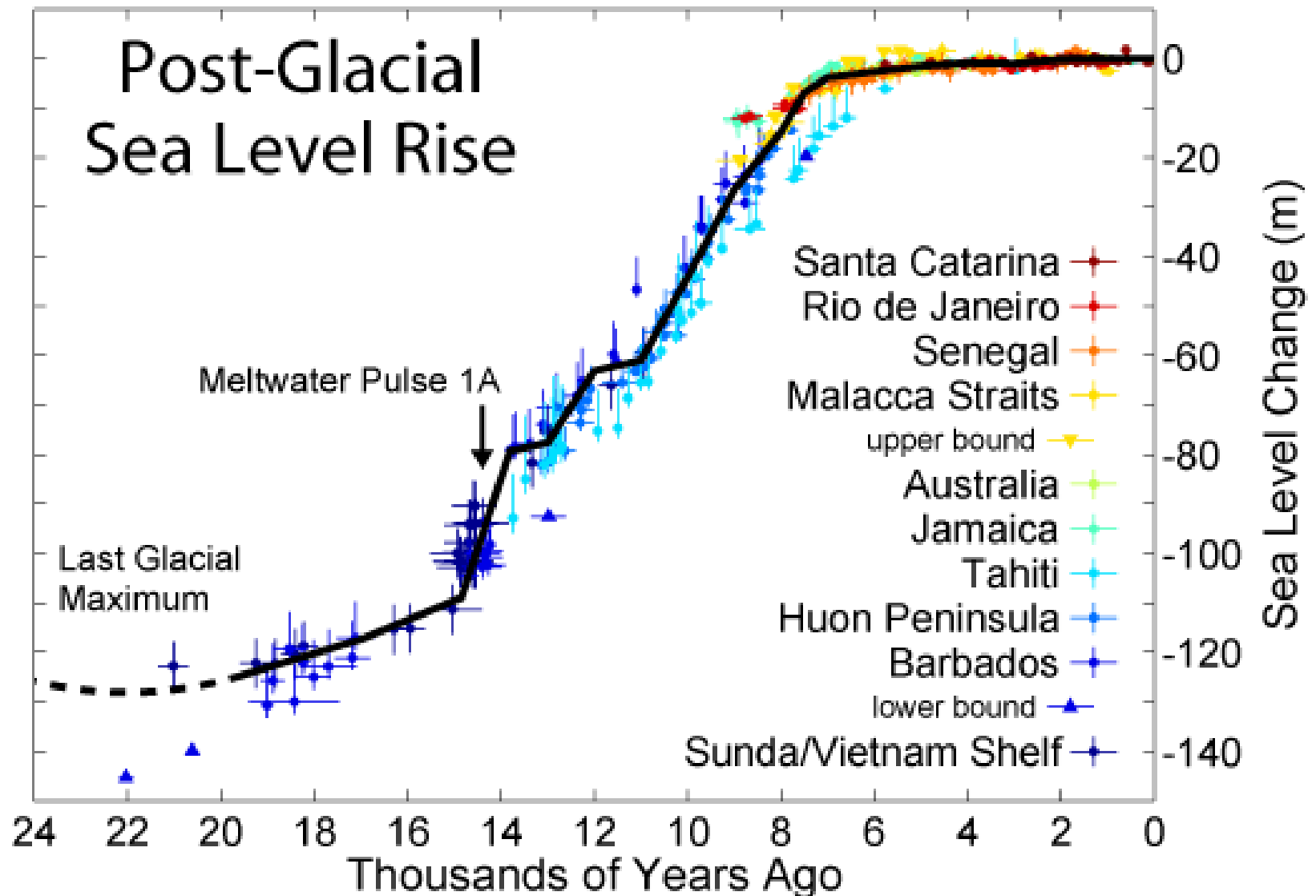
# The fertilizer effect of CO<sub>2</sub> is significant.



# Sea level trends around the world



# The historical context





If our goal is human flourishing and we look at the full context there is a strong moral case for using more fossil fuels, not less.



Human flourishing, not minimum impact, should be the guiding principle of energy progress.



And technological progress





An aerial night photograph of a city skyline, likely New York City, showing numerous illuminated skyscrapers and buildings. The lights create a vibrant contrast against the dark night sky. The Empire State Building is prominent on the left, and the Freedom Tower is visible in the center. The city extends to the horizon, with lights reflecting on the water in the distance.

# The Human Flourishing Project

And human progress



## More Resources



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Or text MORALCASE to  
444999