#### **Climate change and effective policy**

#### Stop alarmism wasting trillions

Bjørn Lomborg

www.lomborg.com

# Global Warming

Real and Manmade

## **Global Warming**

Often exaggerated

### **Claims on Global Warming**

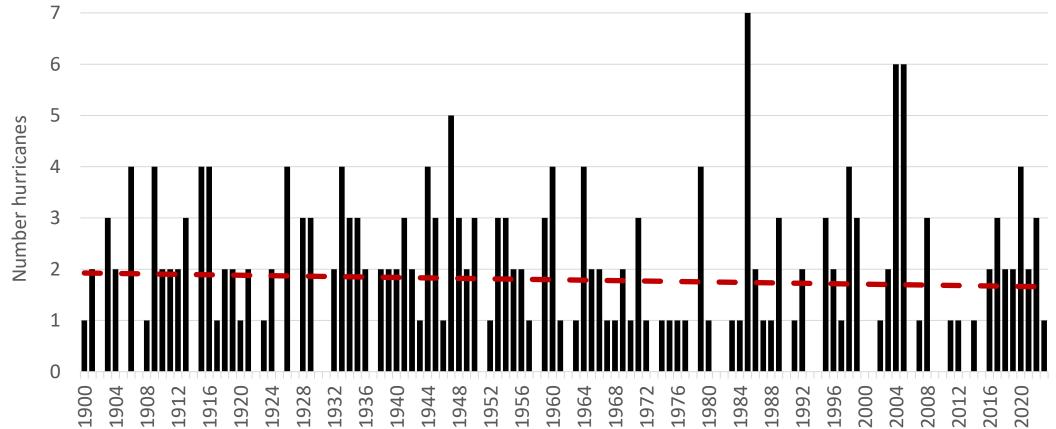
- Guterres, UN Secretary General
  - "The world is facing a grave climate emergency... Every week brings new climate-related devastation. Floods. Drought. Heatwaves.
    Wildfires. Superstorms."
  - "We are in a battle for our lives"
  - "Climate change is the biggest threat to the global economy"

https://unfccc.int/news/guterres-climate-action-is-a-battle-for-our-lives https://unfccc.int/news/antonio-guterres-climate-change-is-biggest-threat-to-global-economy

## Hurricanes

#### Hurricanes

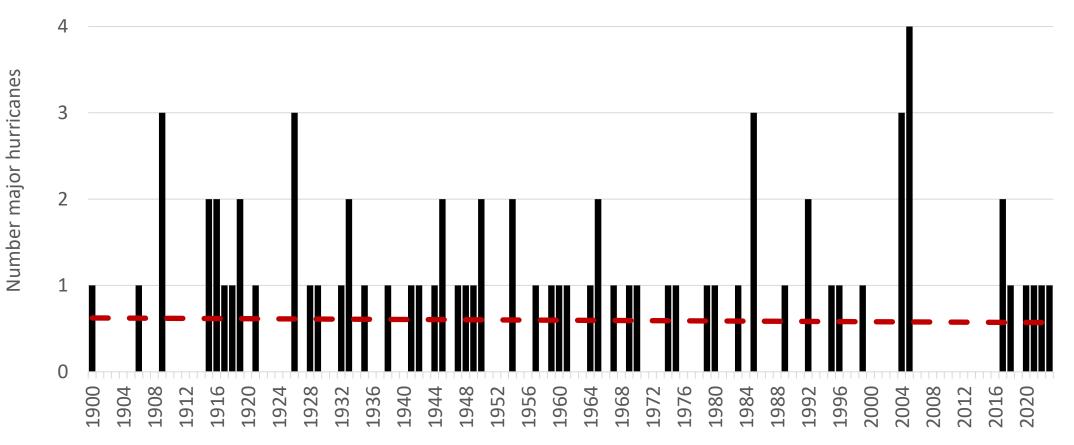
• US landfalling hurricanes 1900-2023, all



Klotzbach et al 2018 and updates from author

#### Hurricanes

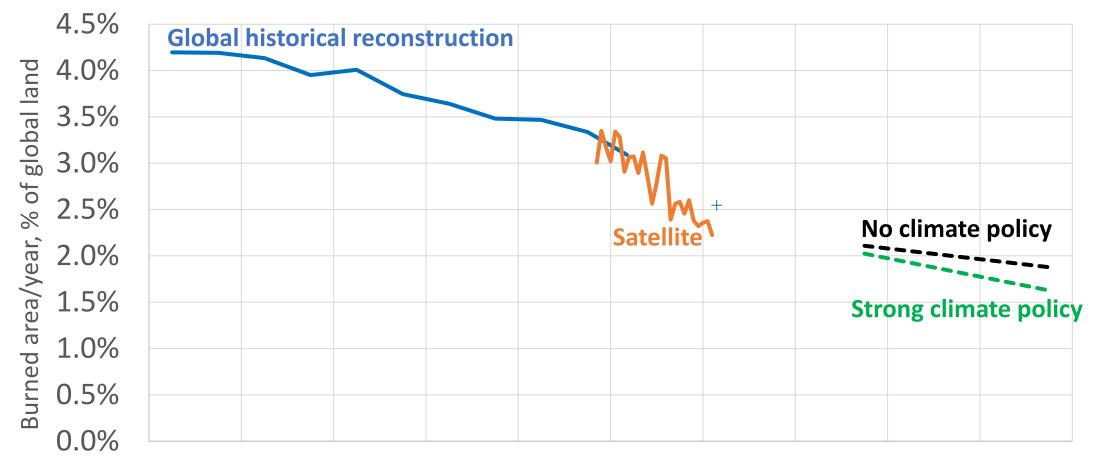
#### • US landfalling hurricanes 1900-2023, major



Klotzbach et al 2018 and updates from author

### Wildfire

#### Global fire, burned area 1900-2100



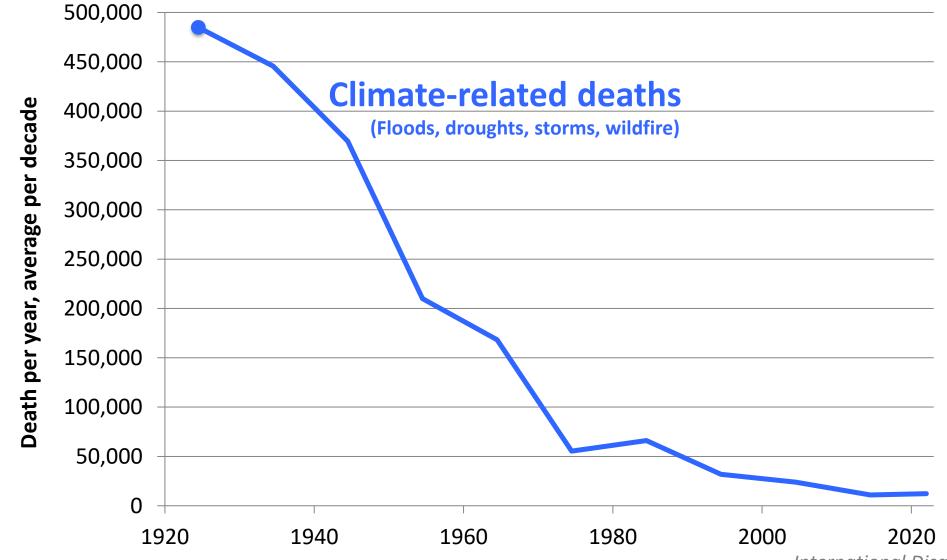
1900 1920 1940 1960 1980 2000 2020 2040 2060 2080 2100

https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1002/2013JG002532, https://www.sciencedirect.com/science/article/pii/S0034425718303705, https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2020EF001786

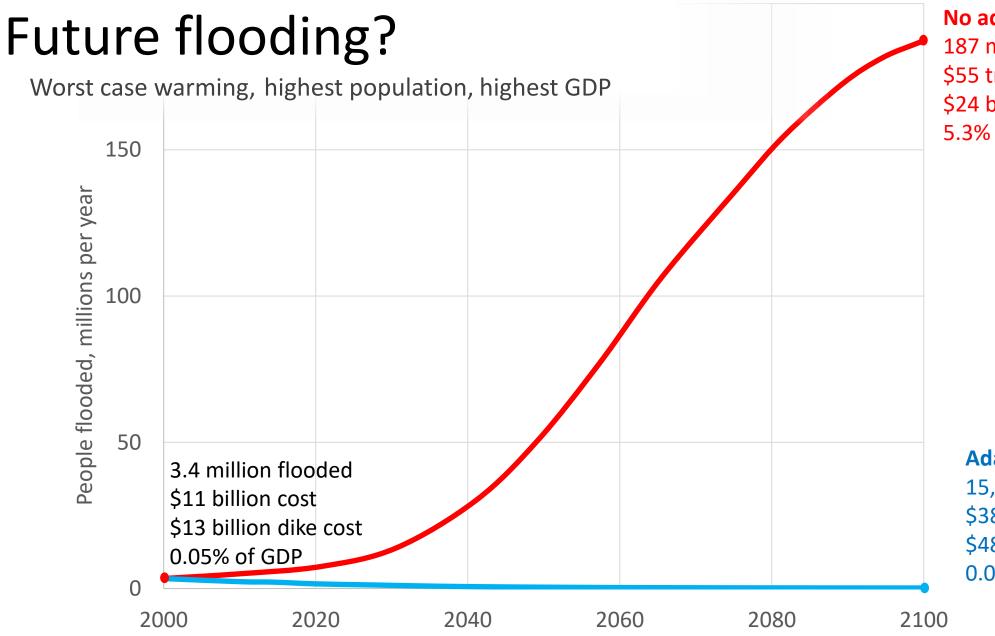
# Why do we get it so wrong on Global Warming?

Miss adaptation

#### Deaths from Climate, 1920-2023



International Disaster Database 2024



No adaptation 187 million flooded \$55 trillion flood cost \$24 billion dike cost 5.3% of GDP

> Adaptation 15,000 flooded \$38 billion flood cost \$48 billion dike cost 0.008% of GDP

> > Hinkel et al, 2014

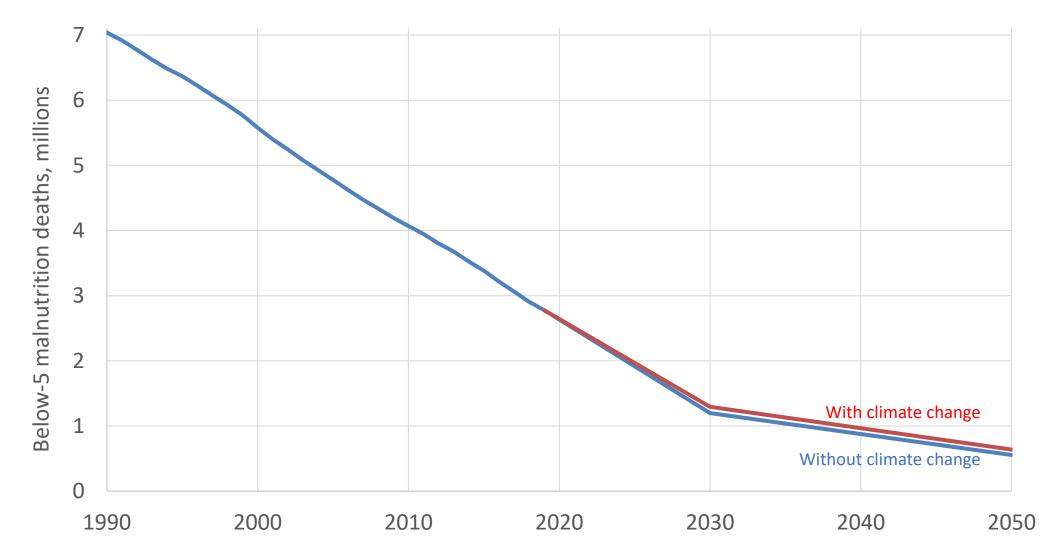
### Climate not end-of-world

It is a problem

#### Better, slightly slower

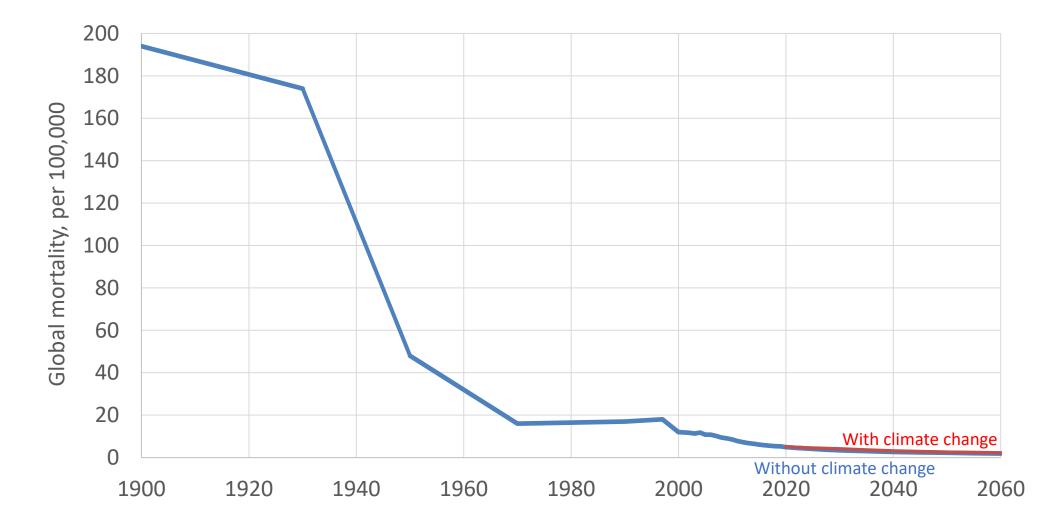
- Climate change doesn't mean end-of-world
- It means things get much better, slightly slower

#### Hunger deaths, 1990-2050



*GBD 2023, WHO 2014* 

#### Malaria, 1900-2060

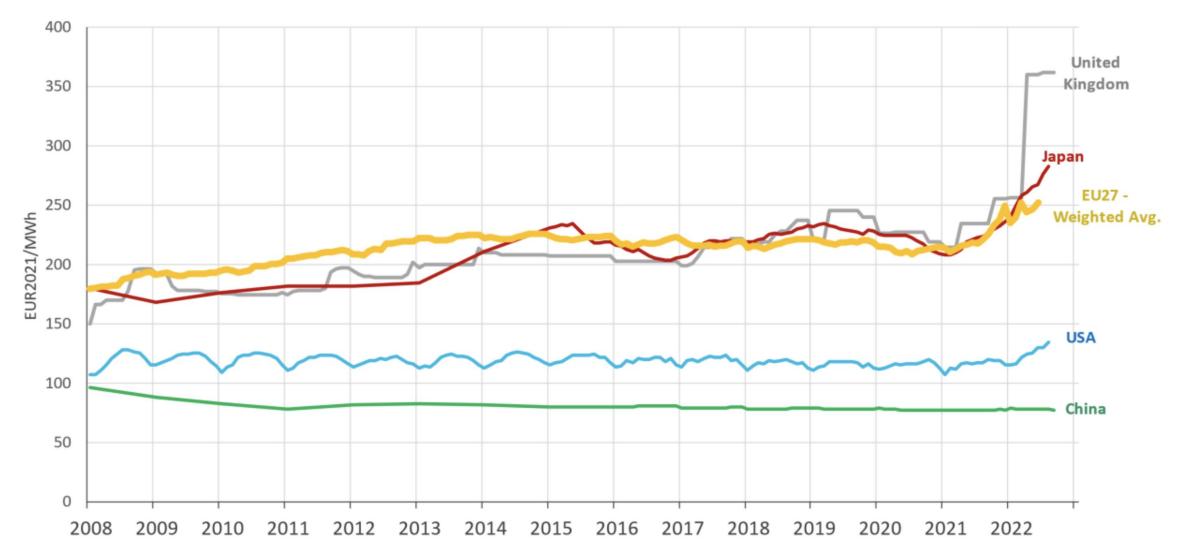


Carter & Mendis 2002, WHO 2014, World Malaria Report 2022

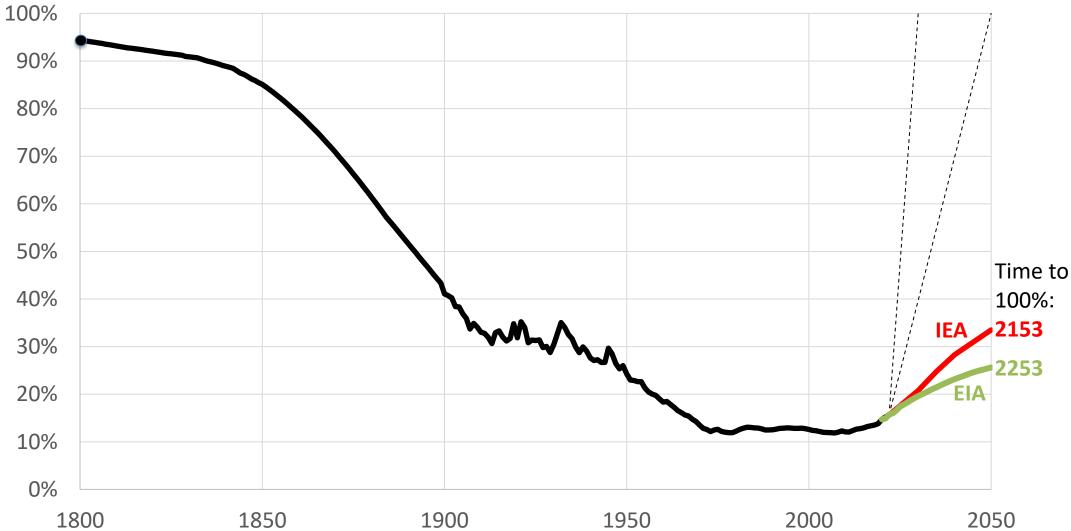
## **Current climate policies**

Unrealistic and unsustainable

#### EU household electricity price 2008-2022



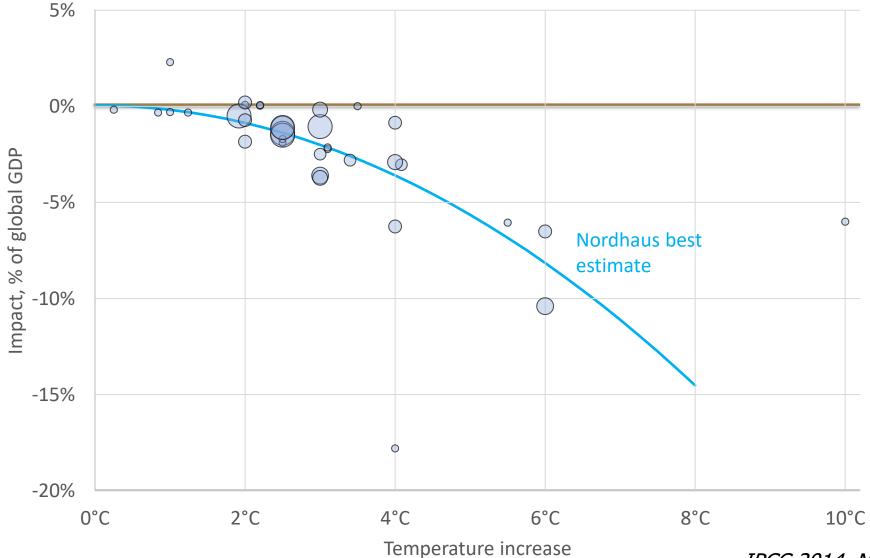
#### Global share of renewable energy, 1800-2050



Lomborg 2020, International Energy Agency 2023, Biden's Energy Information Administration 2023

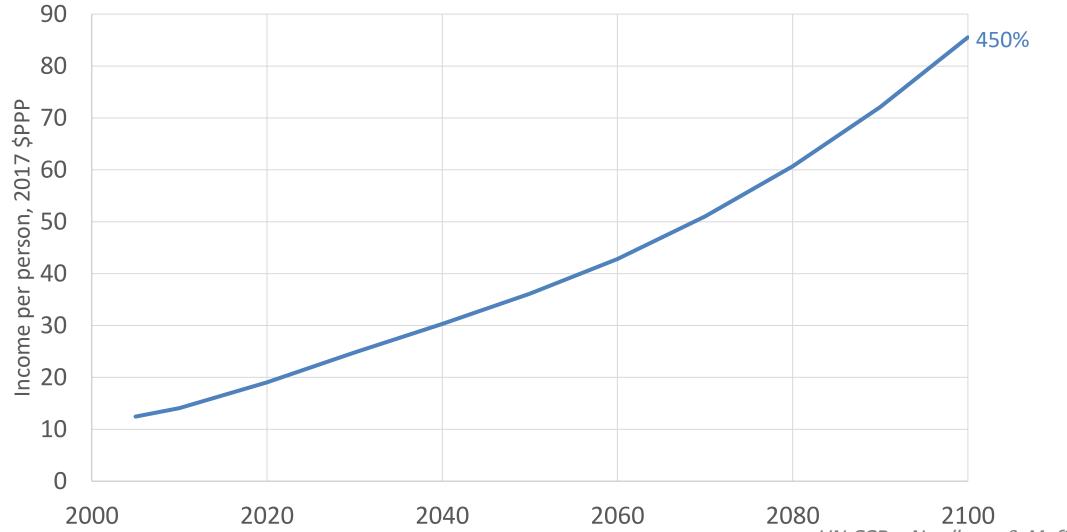
## How to do *smart* climate policy Climate means costly damages But climate policy *also* means costly damages

#### Warming impact, in % global GDP



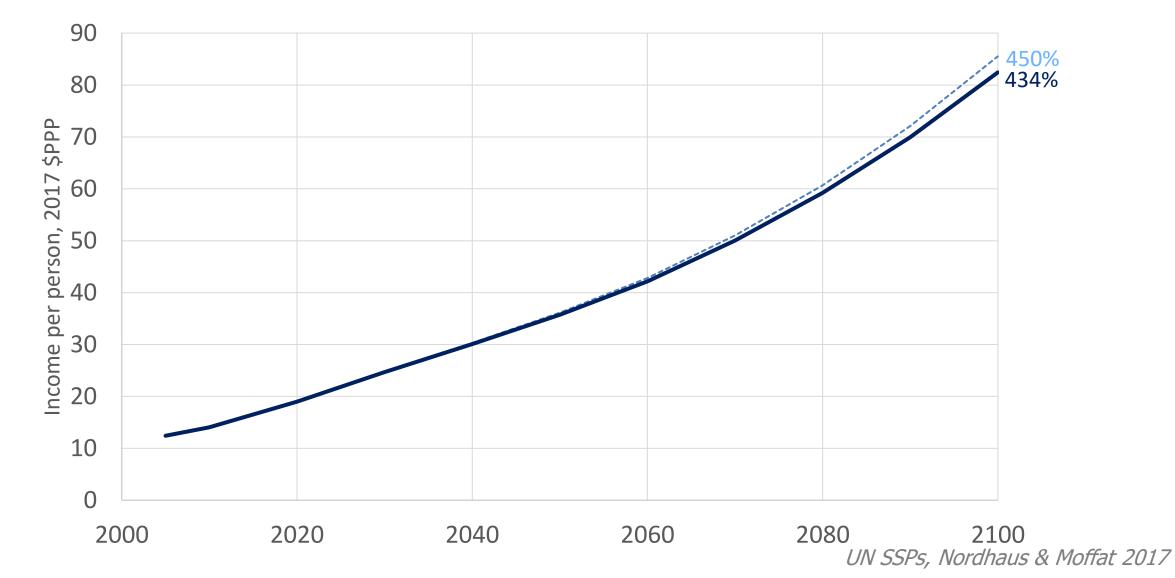
*IPCC 2014, Nordhaus & Moffat 2017* 

#### Average person 4.5x as rich

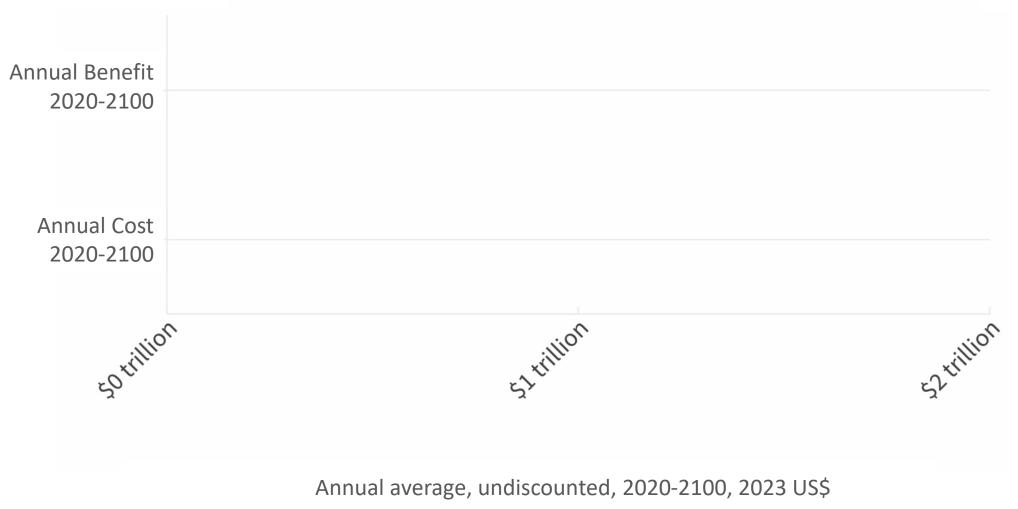


UN SSPs, Nordhaus & Moffat 2017

#### Because of climate, average person 4.3x as rich

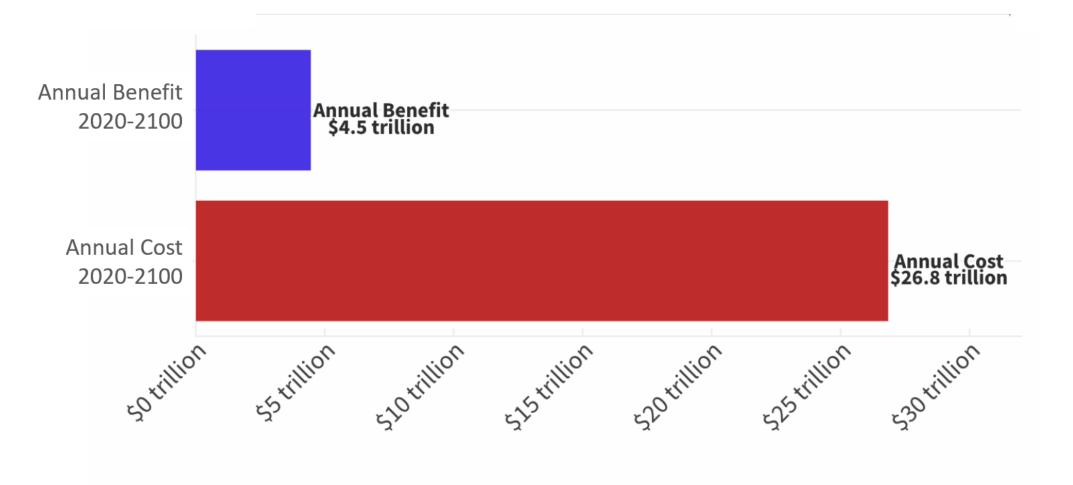


#### Net-Zero 2050: Costs outweight benefits



Climate Change Economics: Mendelsohn 2023, Tol 2023, Morris et al 2023

#### Net-Zero 2050: Costs outweight benefits



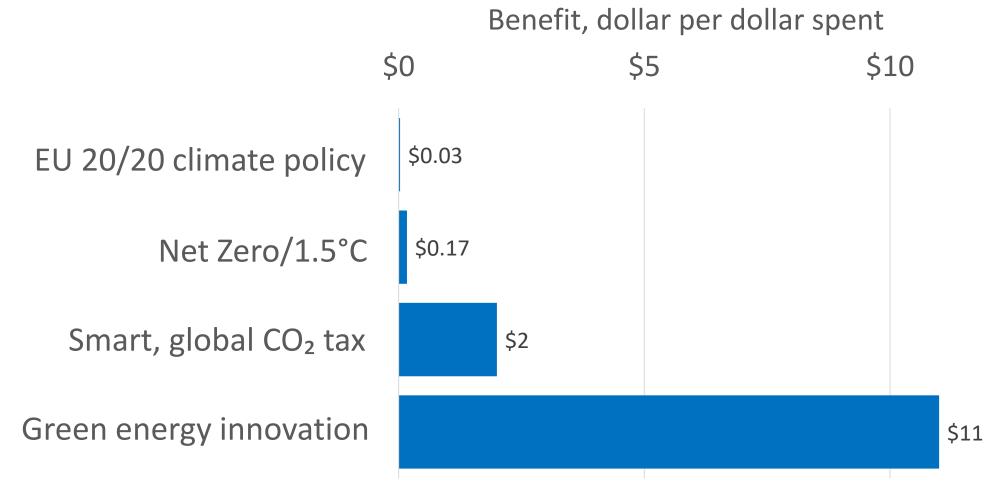
Annual average, undiscounted, 2020-2100, 2023 US\$

*Climate Change Economics: Mendelsohn 2023, Tol 2023, Morris et al 2023* 

## So, what should we do?

What is the smart ways to tackle climate?

# Climate policies: what works — and what doesn't

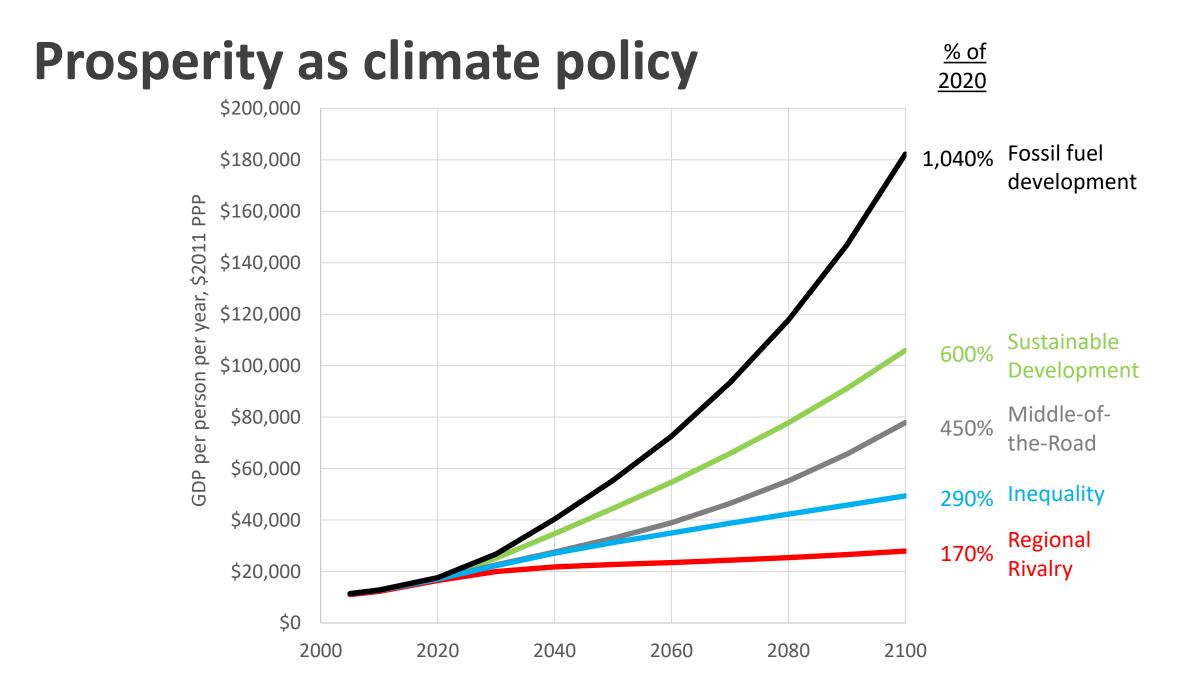


## How to do climate policy

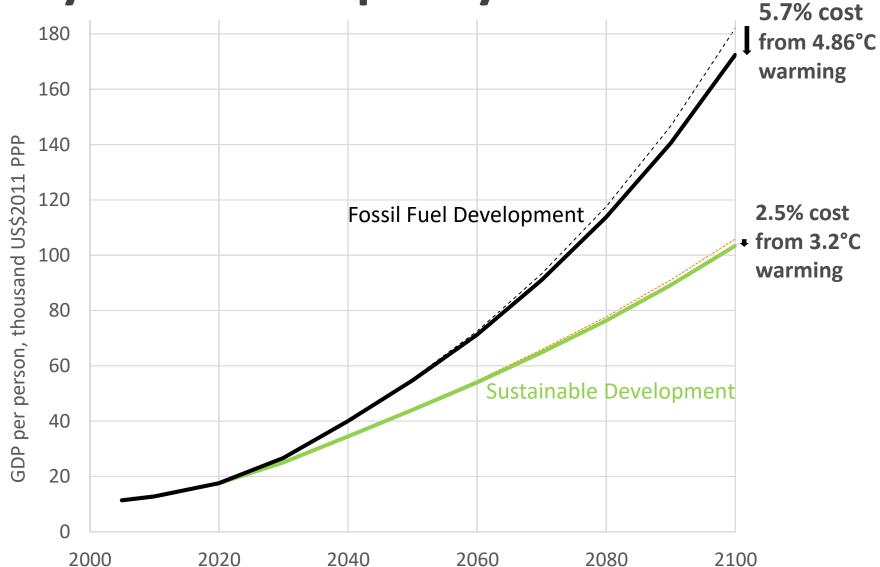
Prosperity

### **Prosperity as climate policy**

- If you are richer, you are less likely to suffer badly from climate
  - The Shelling conjecture
- The UN Climate Panel SSPs (Shared Socio-economic Pathways)

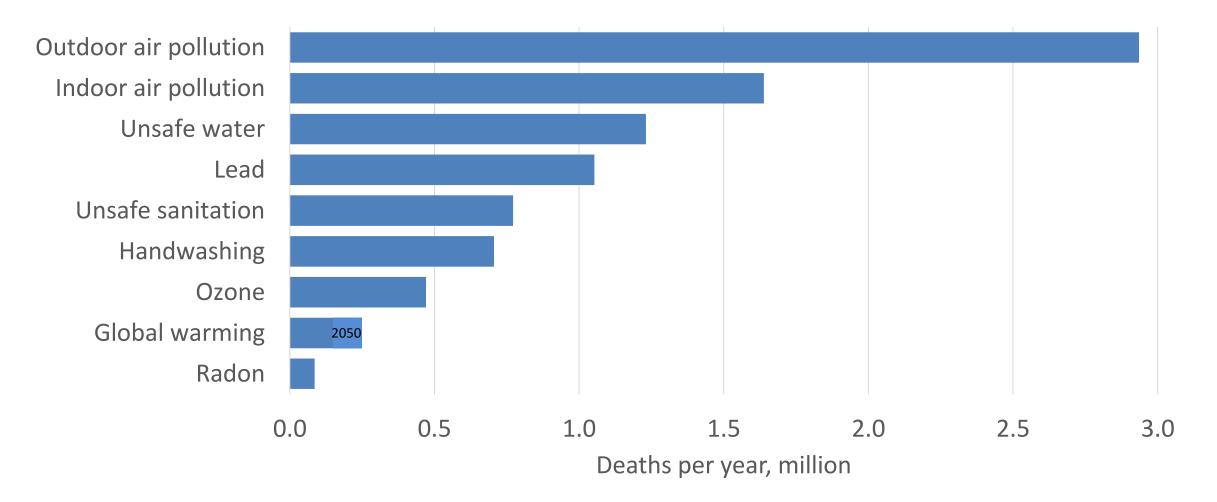


### **Prosperity as climate policy**



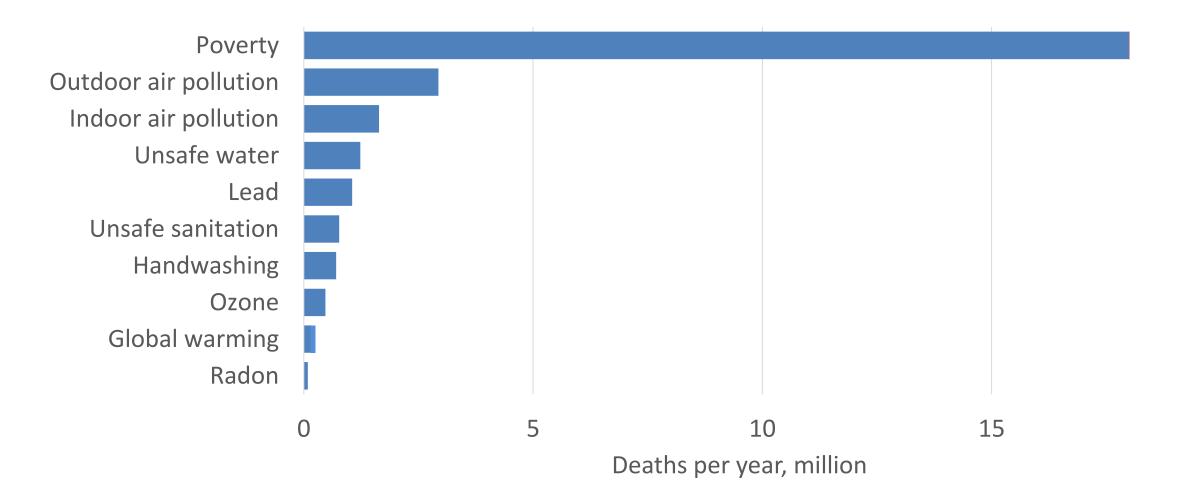
## Many, many other problems beside global warming Poverty, hunger, disease etc.

#### What is the world's deadliest environmental problem?



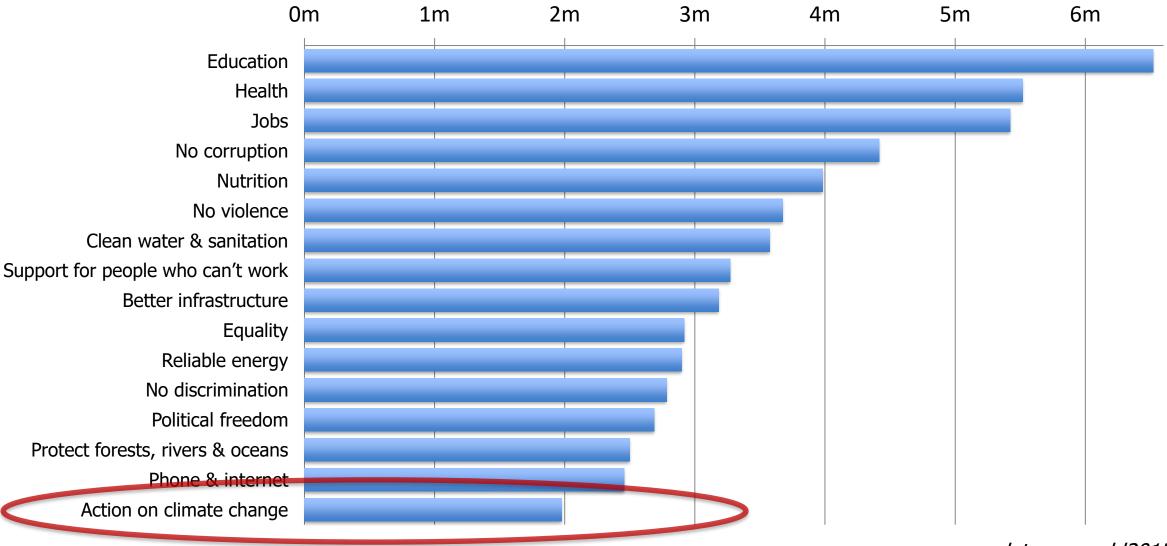
WHO 2014, Global Burden of Disease 2021

#### What is the world's deadliest problem?



WHO 2014, Global Burden of Disease 2021, Pogge 2005

#### The World's Most Important Problems? 9.7 million real people from across the world

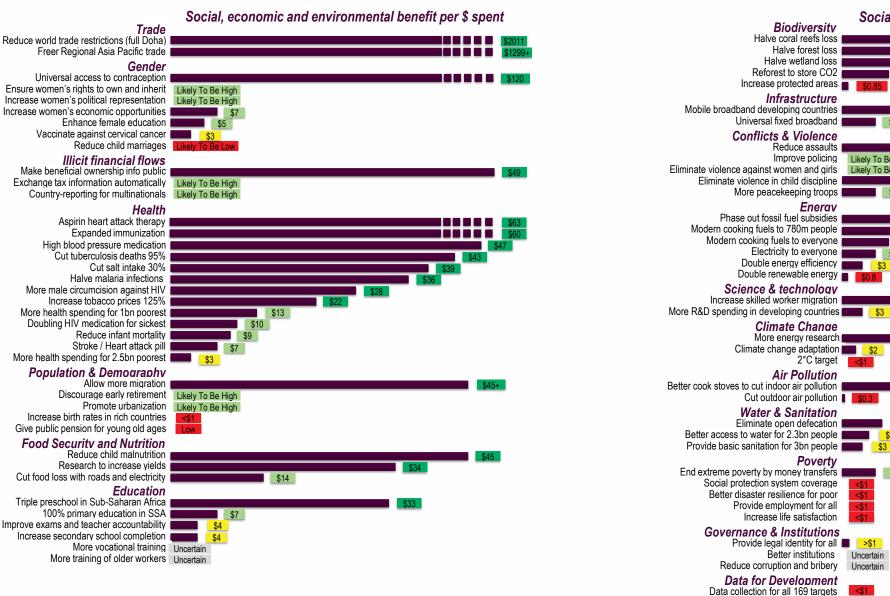


data.myworld2015.org

## Many other issues

#### Where we can do more good for less

#### We have worked with 100s of top economists



Social, economic and environmental benefit per \$ spent \$24

\$10

\$10

\$11

\$11

\$10

\$6

\$3

Uncertain

Uncertain

\$5

\$5

Likely To Be High

Likely To Be High

**Biodiversitv** 

Halve forest loss

Halve wetland loss

Reforest to store CO2

Increase protected areas

Universal fixed broadband

**Conflicts & Violence** 

More peacekeeping troops

Electricity to everyone

Double energy efficiency

Double renewable energy

Climate Change

More energy research

Climate change adaptation \_\_\_\_\_ \$2

Air Pollution

Cut outdoor air pollution

Water & Sanitation

Eliminate open defecation

Provide employment for all

Increase life satisfaction

Provide legal identity for all

Better institutions

2°C target

Povertv

Infrastructure

Reduce assaults Improve policing

Enerav

Halve coral reefs loss

#### More good per dollar spent

- We can do so much better per \$1 spent
  - \$87 Maternal and newborn
  - \$46 Tuberculosis
  - \$65 Education
  - And agricultural R&D, land tenure, skilled migration, e-procurement, trade, malaria, chronic disease, nutrition, childhood immunization
    - Total cost \$35bn/year
    - Total benefit:
      - Saves 4.2 million lives per year
      - Makes poorer world \$1.1 trillion richer per year

