

# Introduction to Ecomodernism?

## A New Vision for Energy and the Environment



**Who are we?**

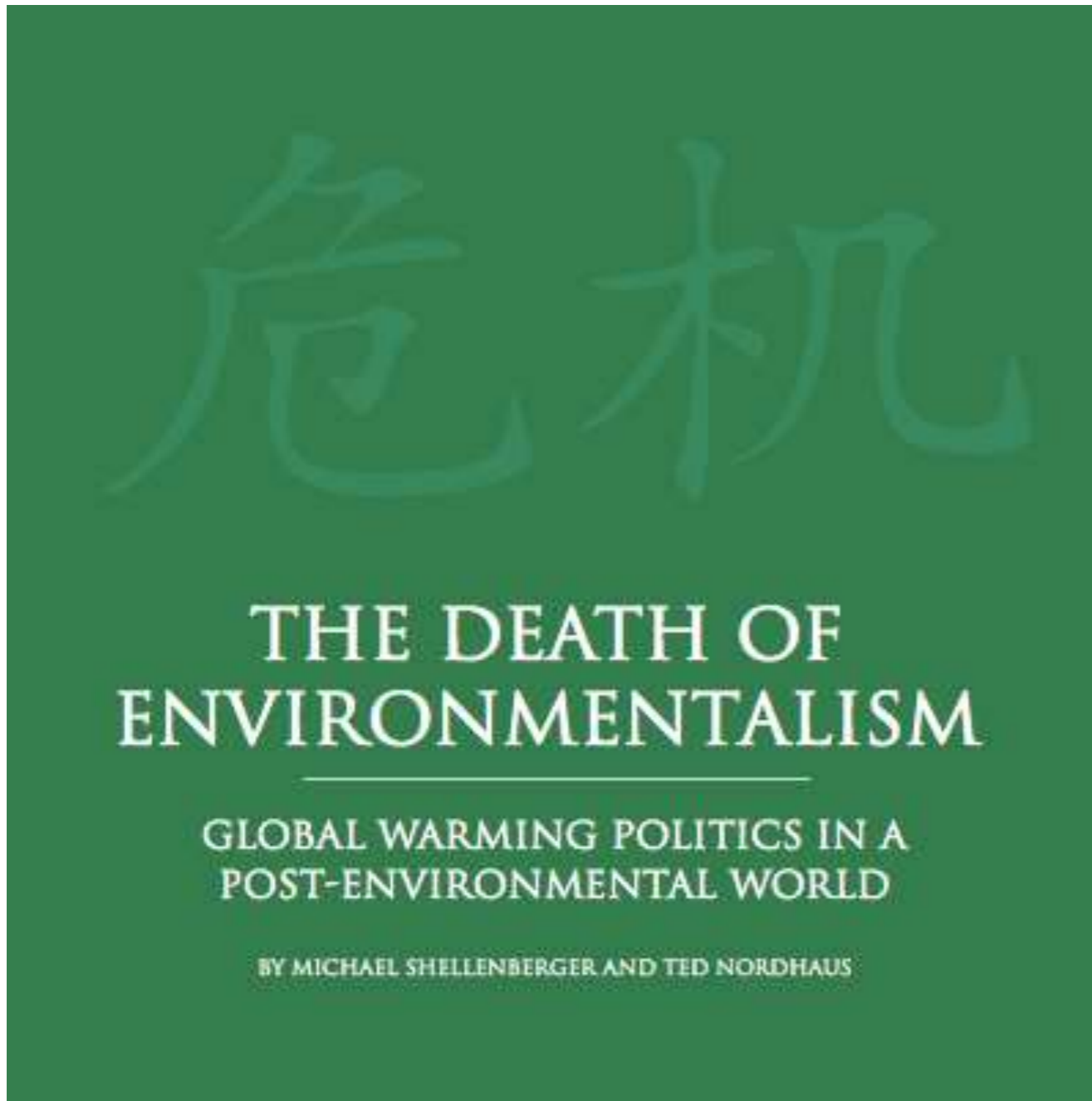


# The New York Times

U.S.

## *Paper Sets Off a Debate on Environmentalism's Future*

By FELICITY BARRINGER FEB. 6, 2005



# Fast, Clean, & Cheap: Cutting Global Warming's Gordian Knot

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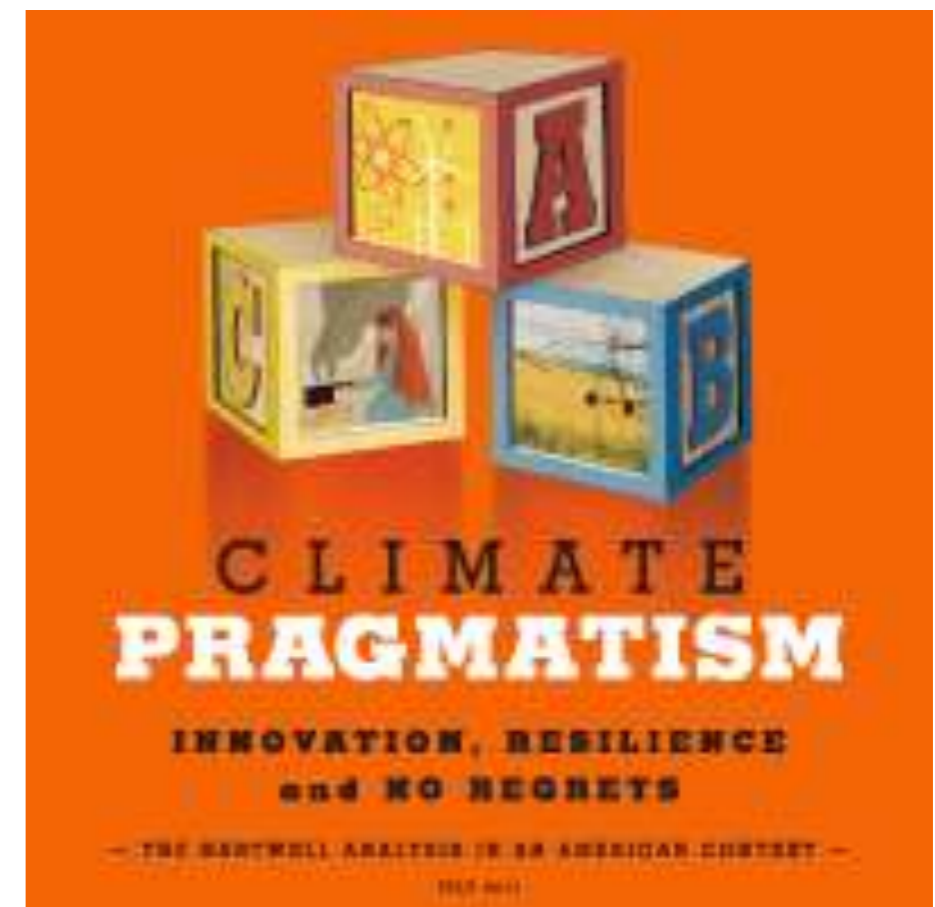
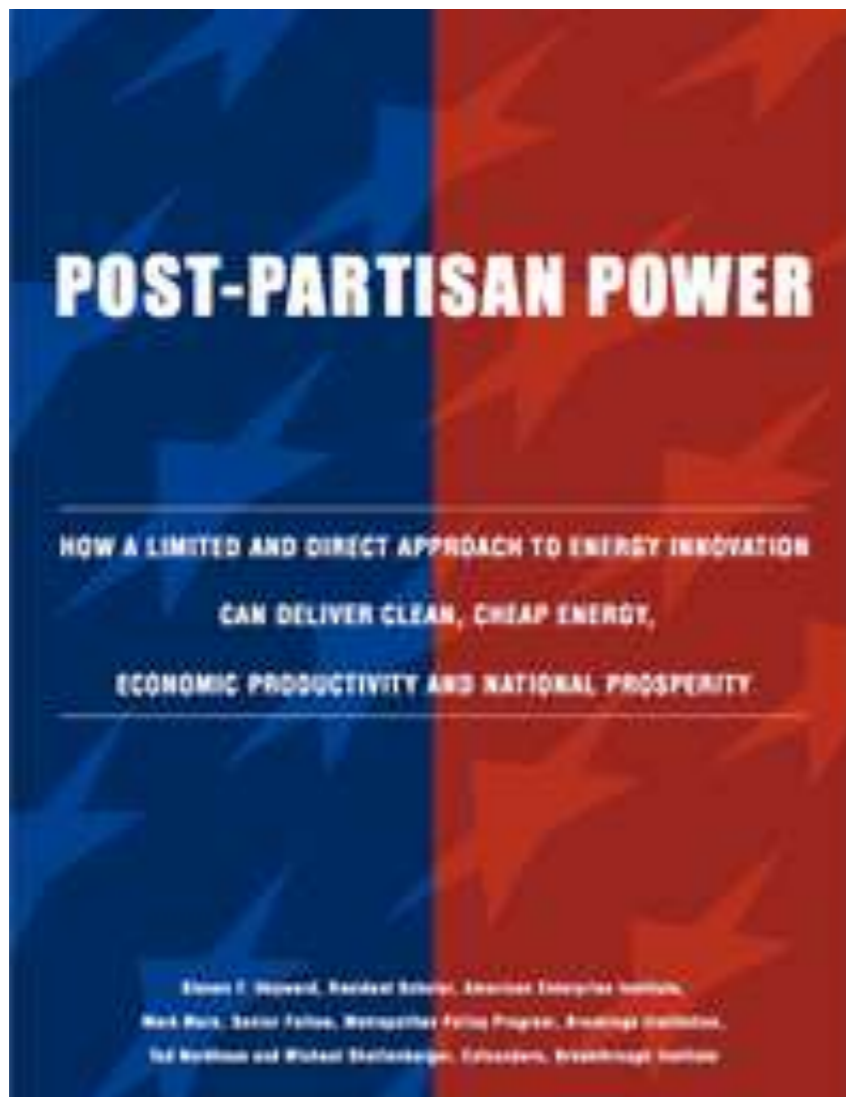
*Michael Shellenberger\**

*Ted Nordhaus\*\**

*Jeff Navin\*\*\**

*Teryn Norris\*\*\*\**

*Aden Van Noppen\*\*\*\*\**





A REVIEW OF THE LITERATURE

BY JESSIE LINDINE

TED NORONHA AND

MICHAEL FREILICHERMAN

## ENERGY EMERGENCE

REBOUND & BACKFIRE

AS EMERGENT PHENOMENA



ANALYSIS

# HOW TO MAKE NUCLEAR CHEAP



SAFETY, READINESS,  
MODULARITY, and EFFICIENCY



**Philosophy**









"[A]ll life seemed to live in harmony  
with its surroundings.  
—Rachel Carson *Silent Spring*, 1962



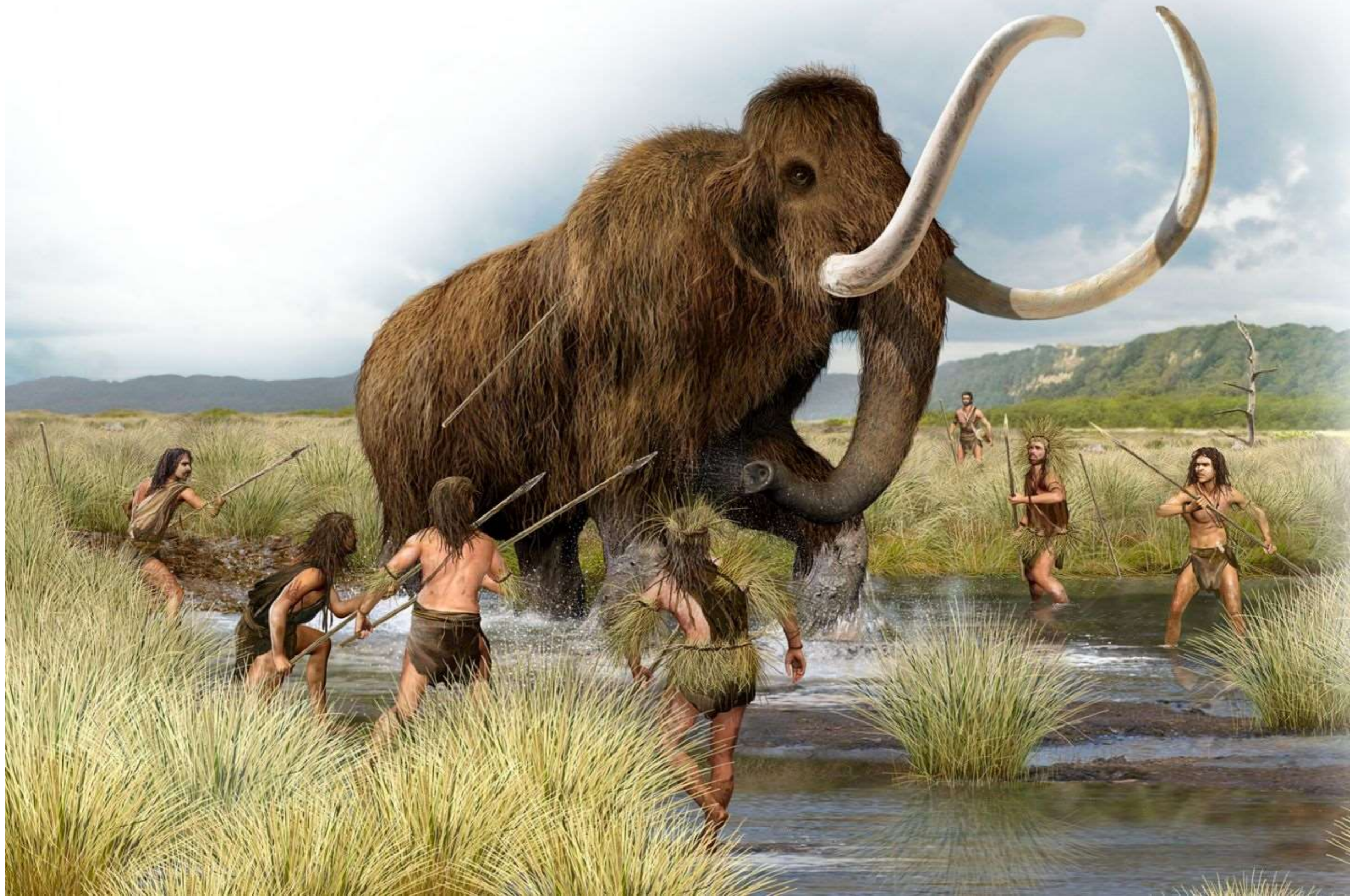
New Orleans, 2005

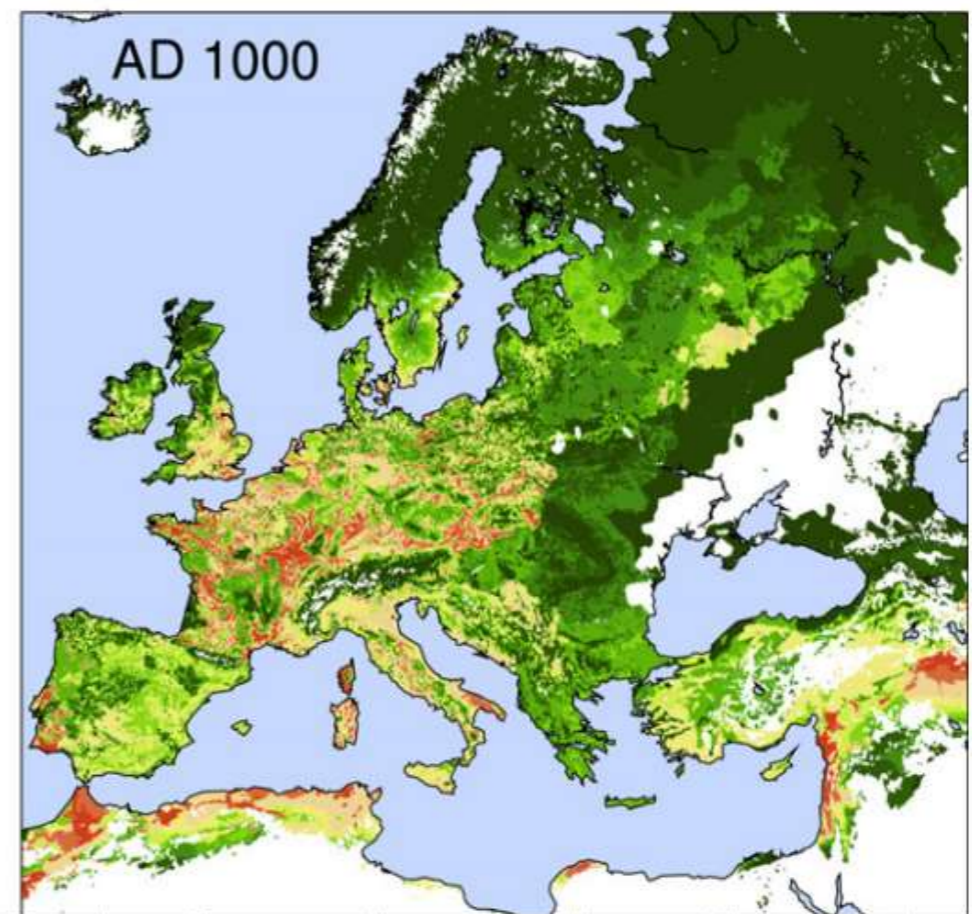
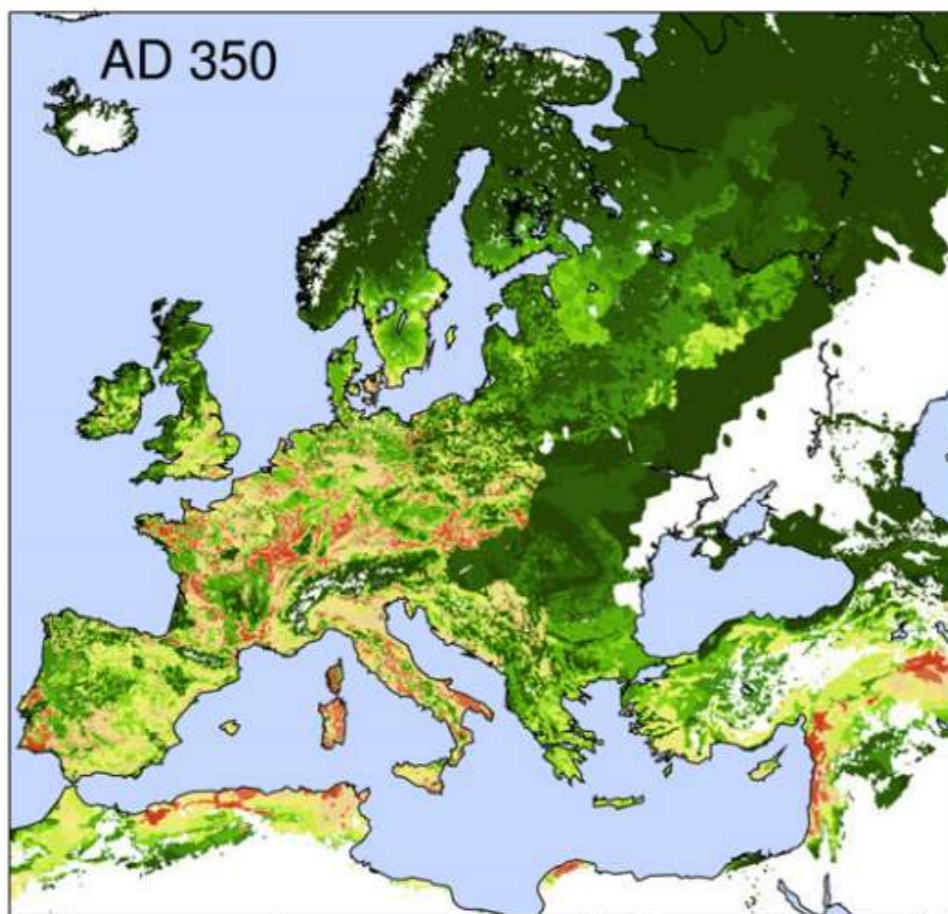
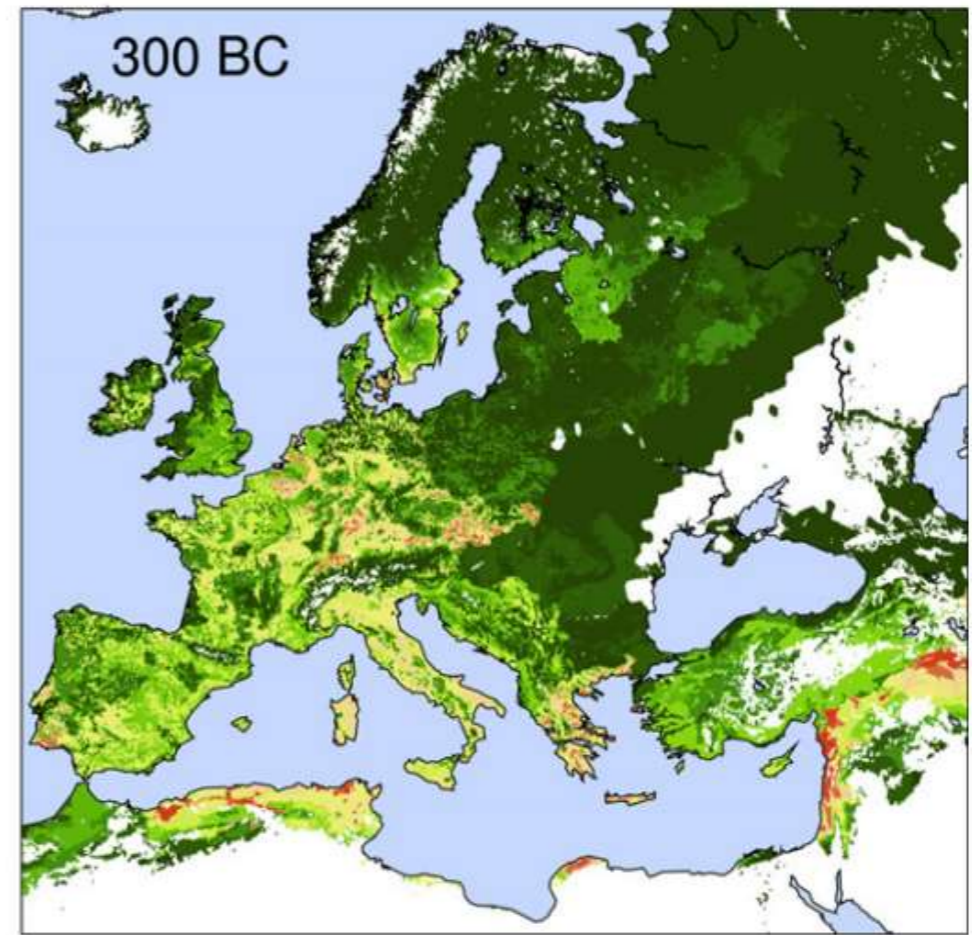
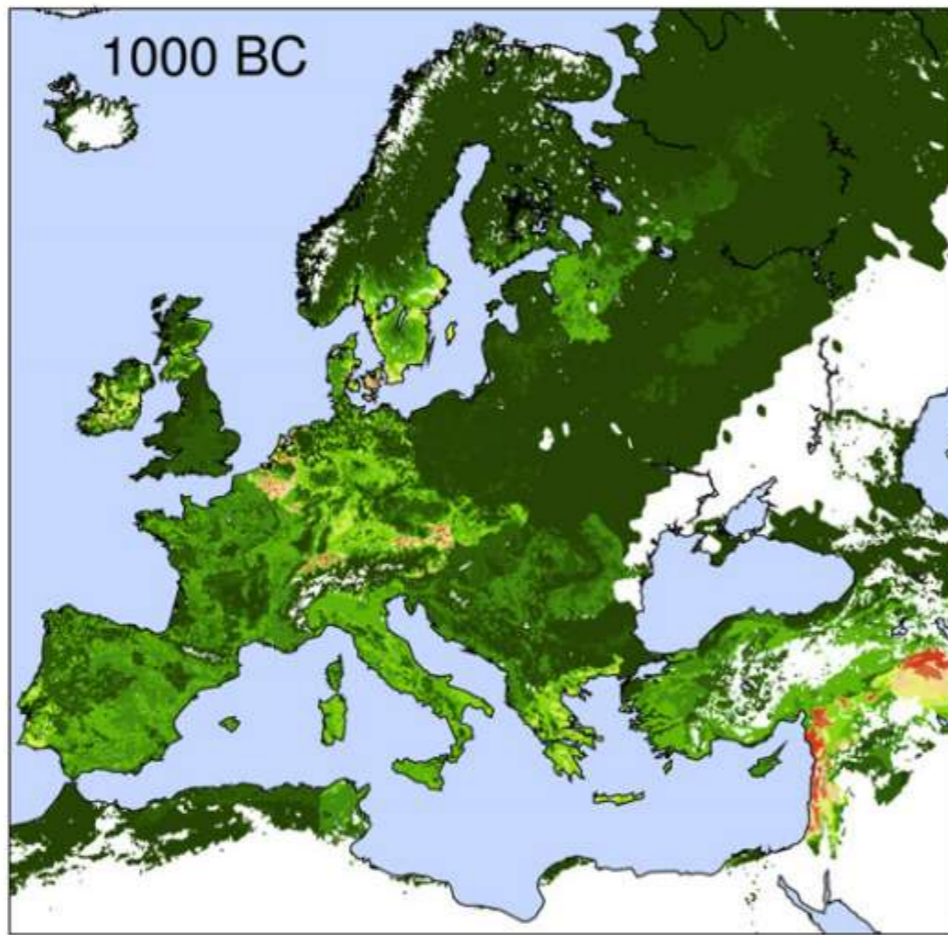
“It was almost like a nature hike through the Book of Revelation.”

“The truth about the climate crisis is an inconvenient one that means we are going to have to change the way we live our lives.”

— Al Gore, “Inconvenient Truth,” 2006

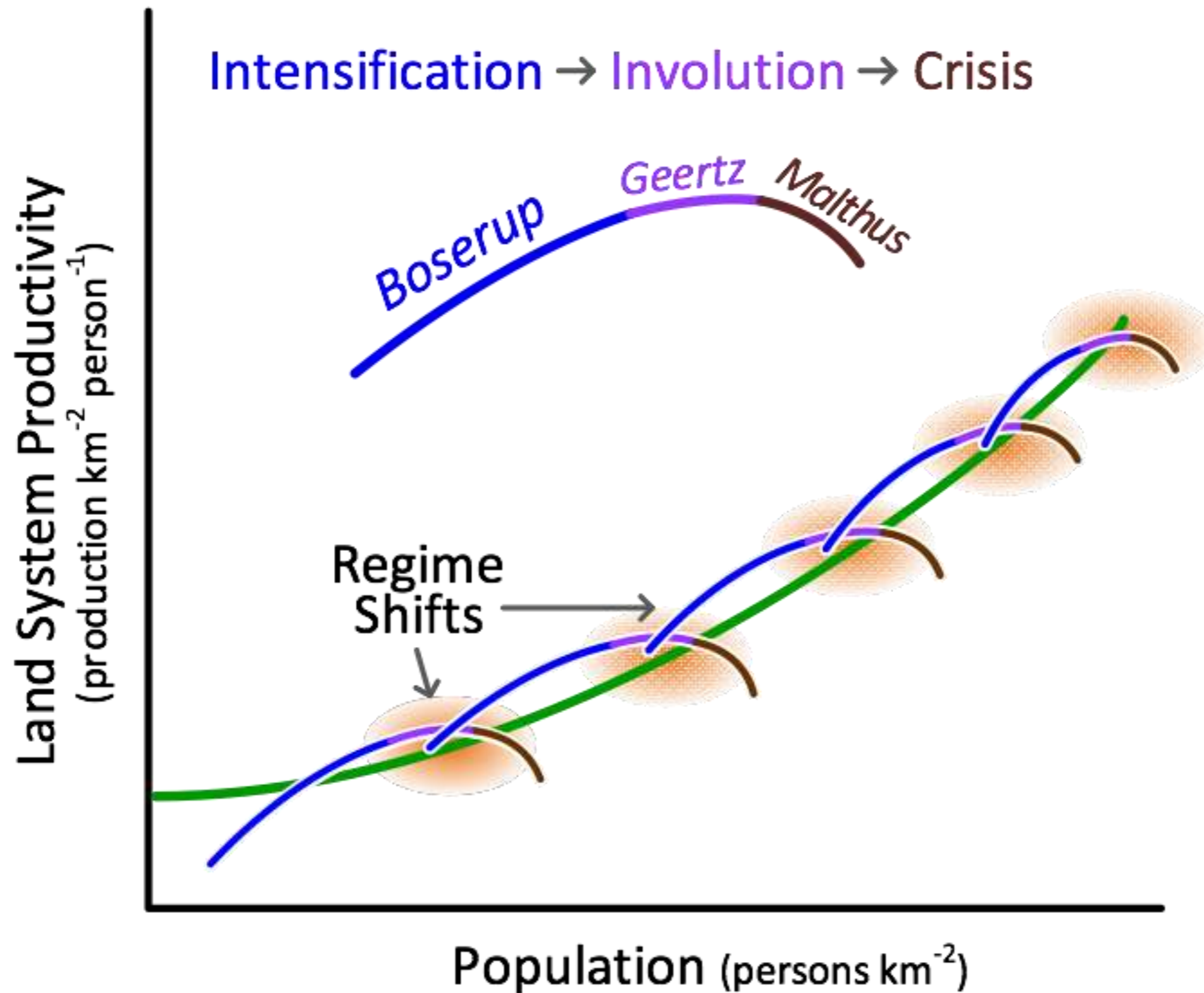






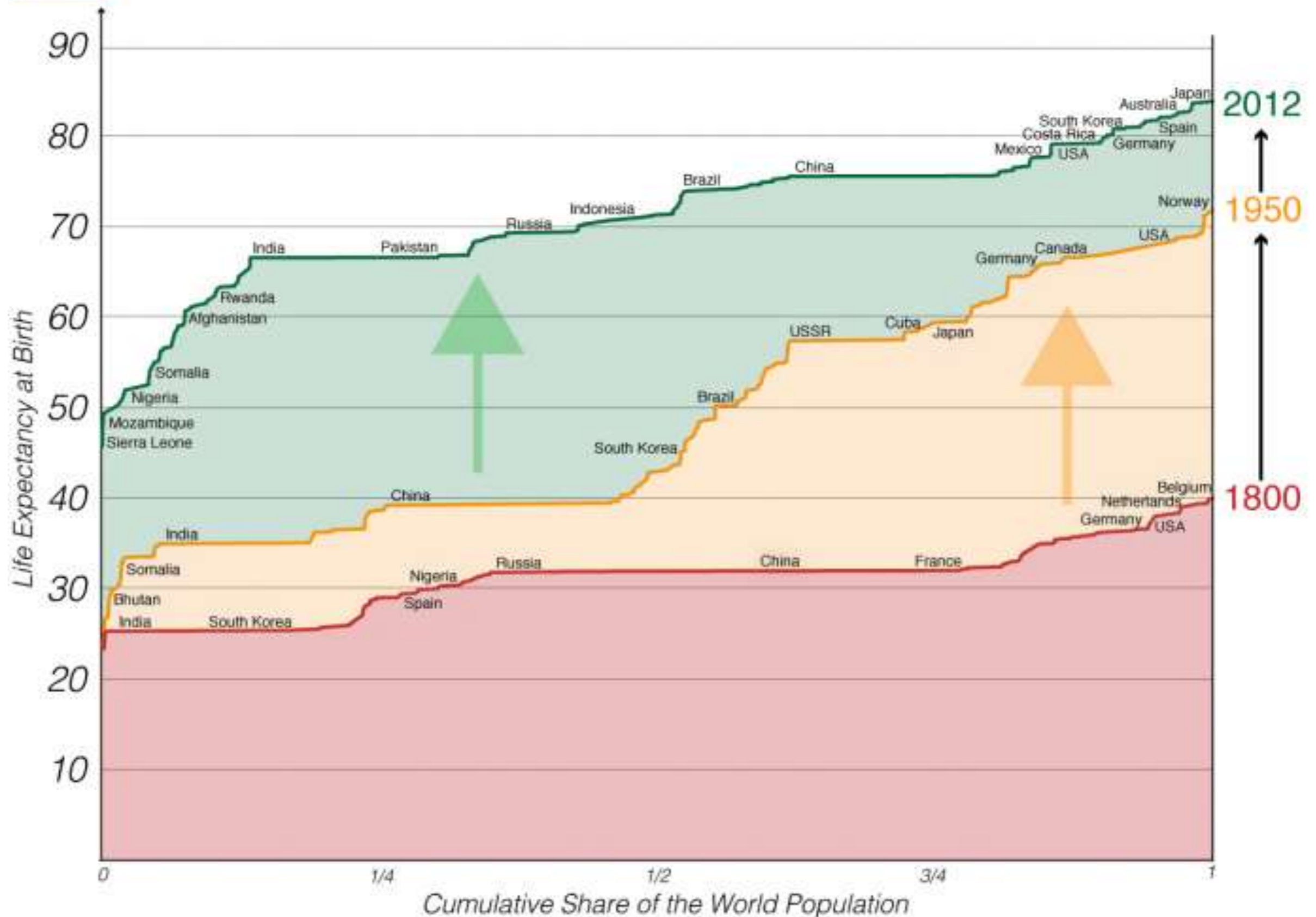


# Land Use Intensification: A General Model





# The Life Expectancy of the World Population in 1800, 1950 and 2012 – Max Roser





"An ape's fingers are long and good for hanging from branches, while the human hand (right) has a long, strong thumb that makes the hand more versatile"

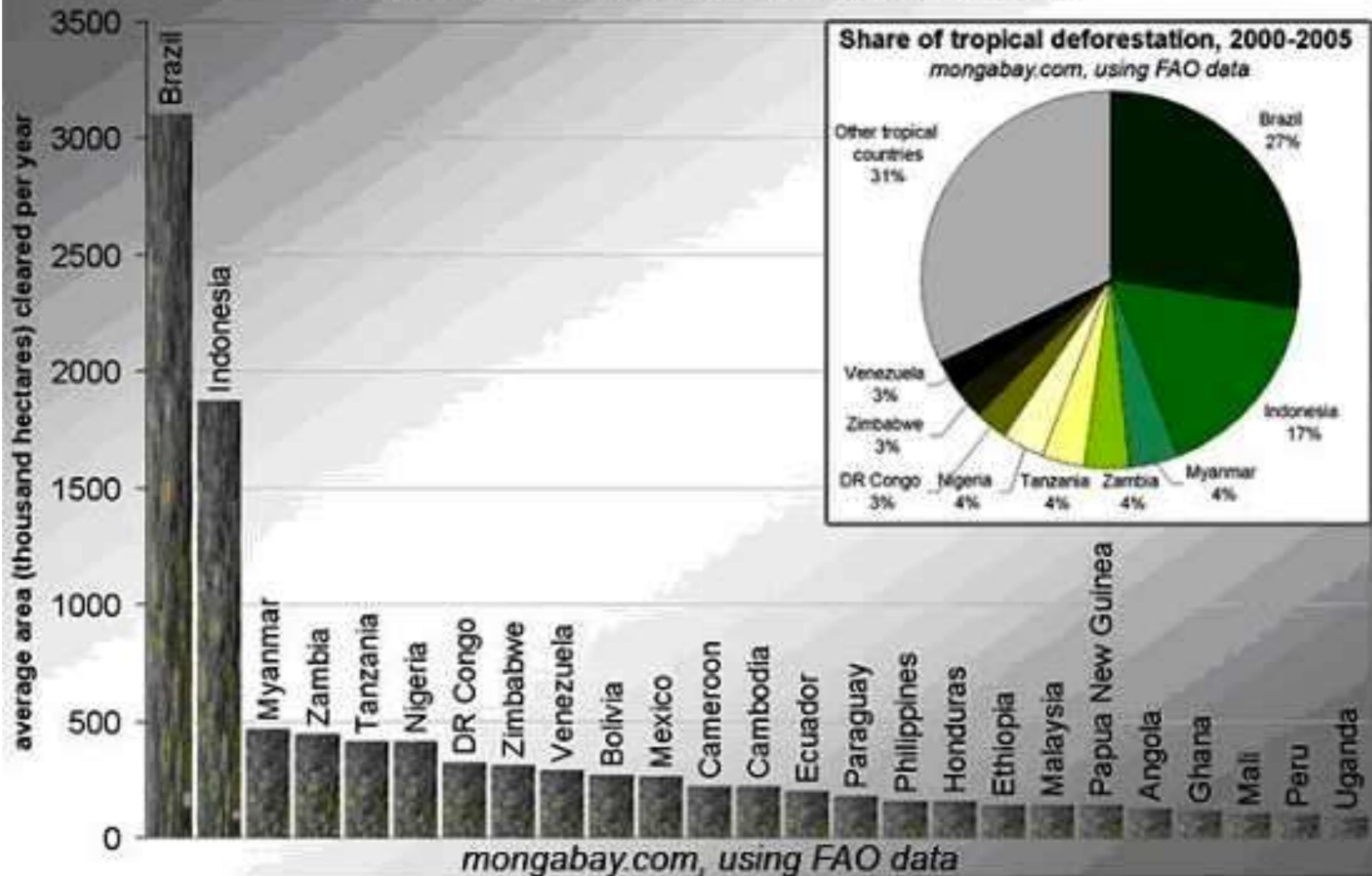
(Joyce 2010). **Credit: Maggie Starbard/NPR**

  
The logo features the word "Eco" in a stylized font where the letters are filled with green foliage. To its right, the word "MODERNIST" is written in a clean, grey, sans-serif font. Below "Eco MODERNIST", the word "MANIFESTO" is written in a smaller, grey, sans-serif font.

Eco MODERNIST  
MANIFESTO

“What we refer to when we speak of modernization is the long-term evolution of social, economic, political, and technological arrangements in human societies toward vastly improved material well-being, public health, resource productivity, economic integration, shared infrastructure, and personal freedom.”

# Tropical deforestation rates, 2000-2005



# WILDLIFE POPULATION DECLINE BETWEEN 1970 AND 2010



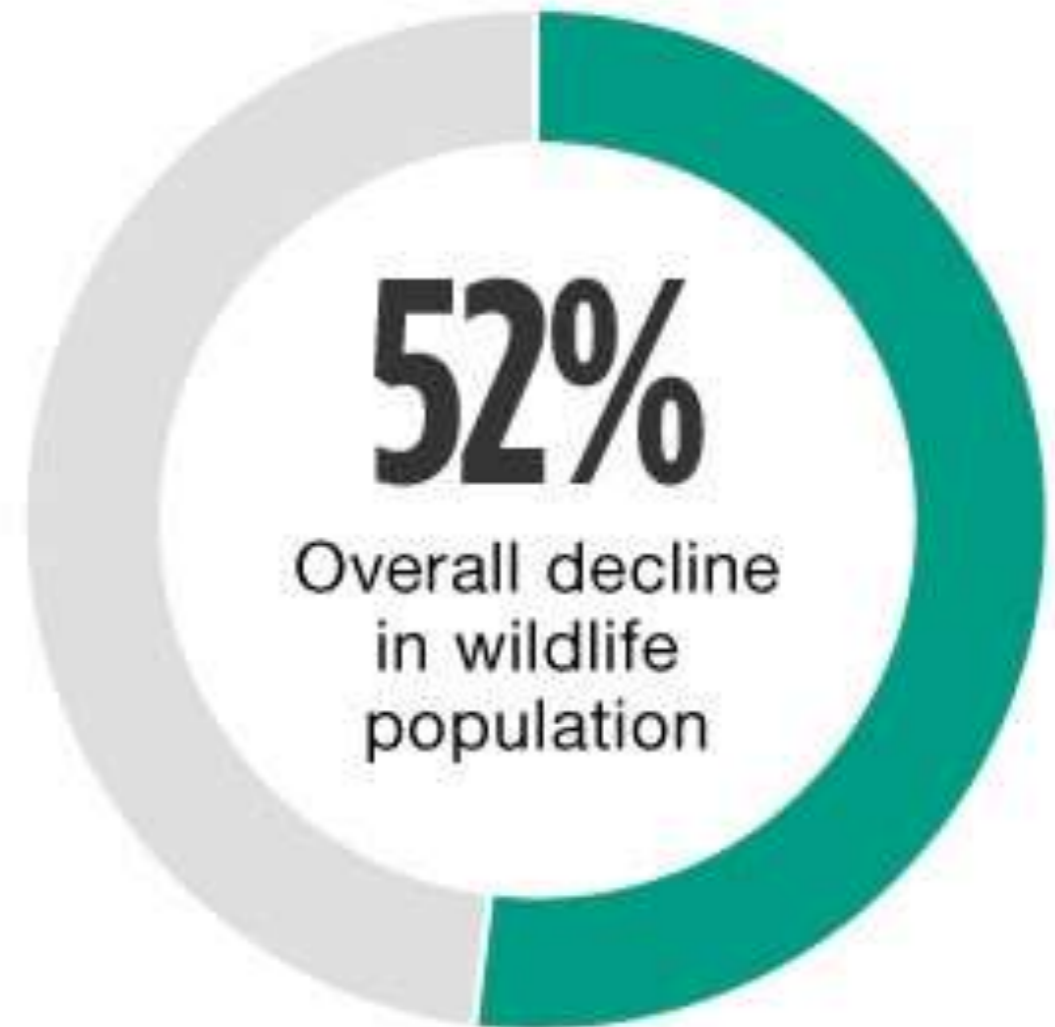
**76%**  
Freshwater species



**39%**  
Terrestrial species

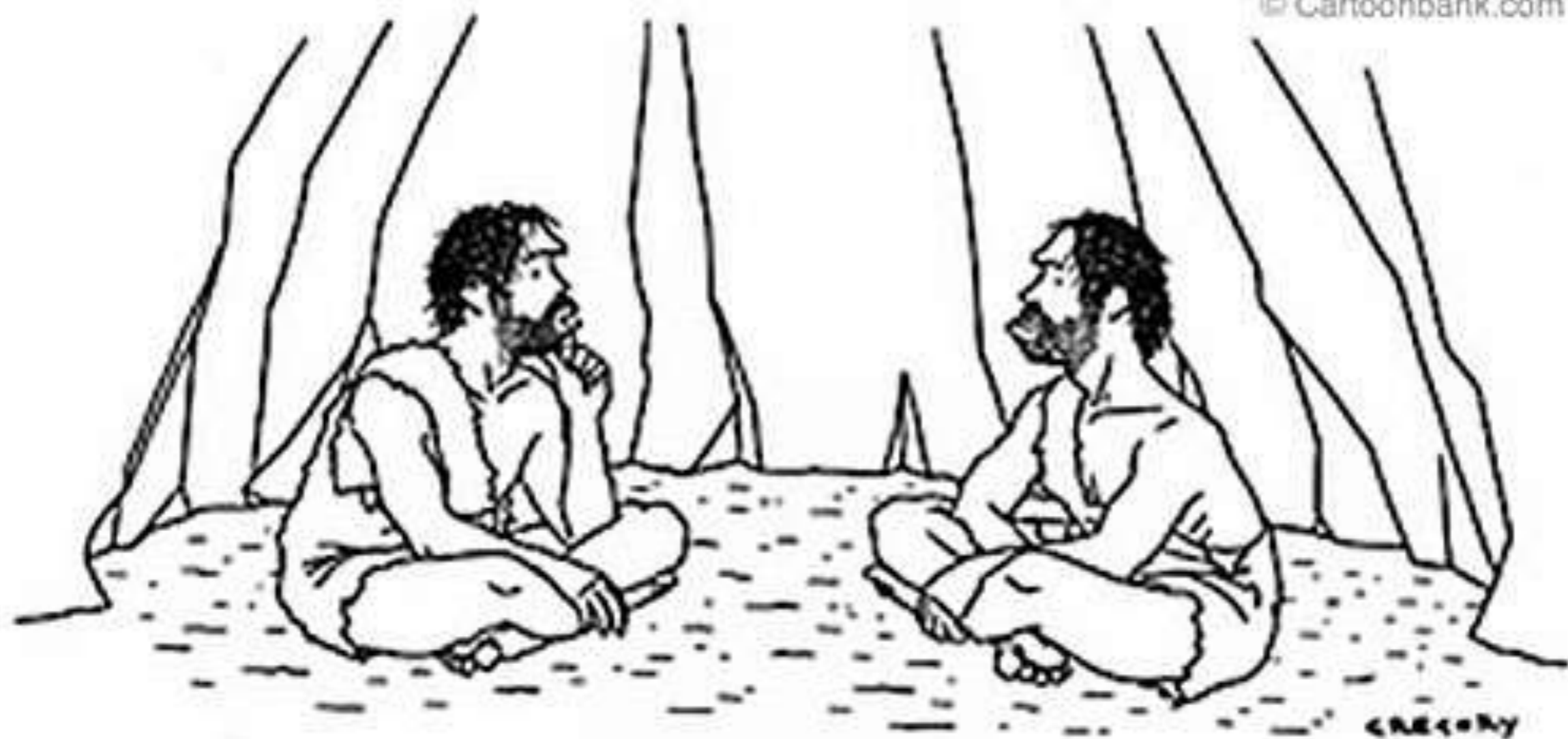


**39%**  
Marine species



SOURCE: World Wide Fund for Nature (WWF)

# Key Principles



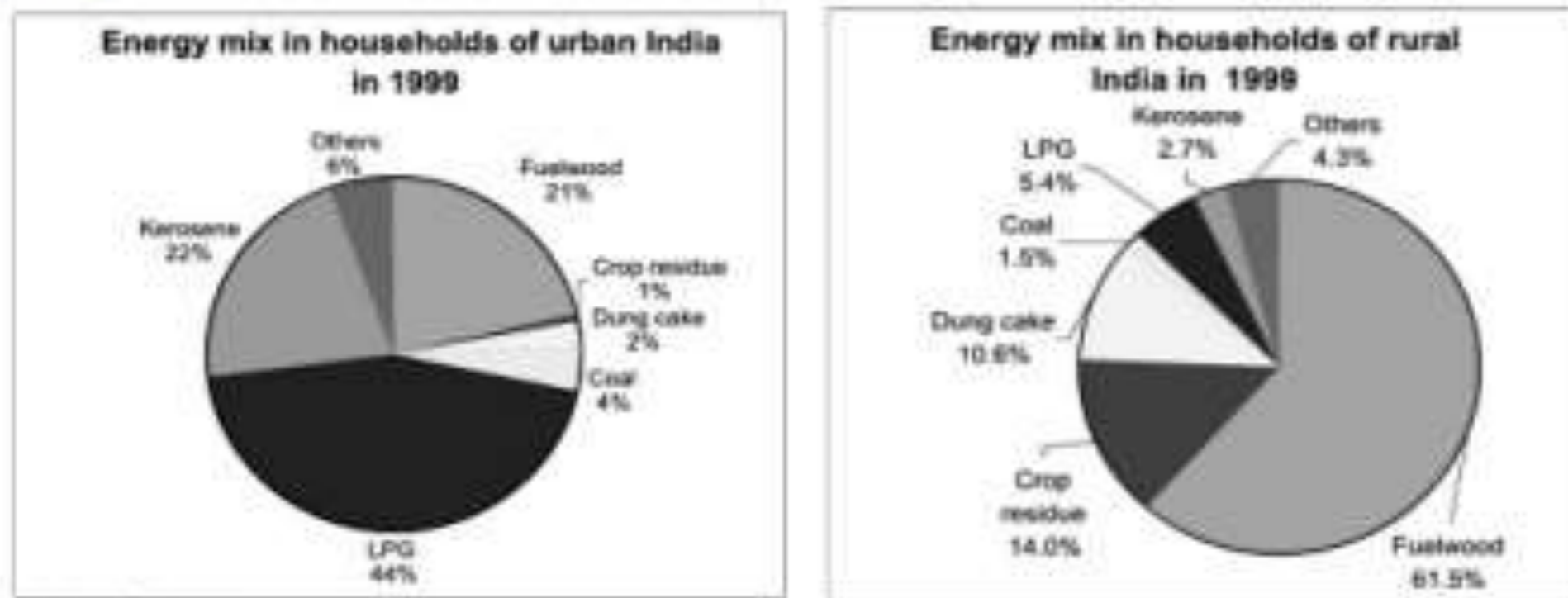
*“Something’s just not right—our air is clean, our water is pure, we all get plenty of exercise, everything we eat is organic and free-range, and yet nobody lives past thirty.”*





# CIFOR in India

Figure 4.2 (a) Composition of energy consumption for cooking in urban India and 4.2 (b) in rural India (Source: NSSO 2001)



D. Pandey, 2002

We have worked on questions of sustainable fuelwood provision

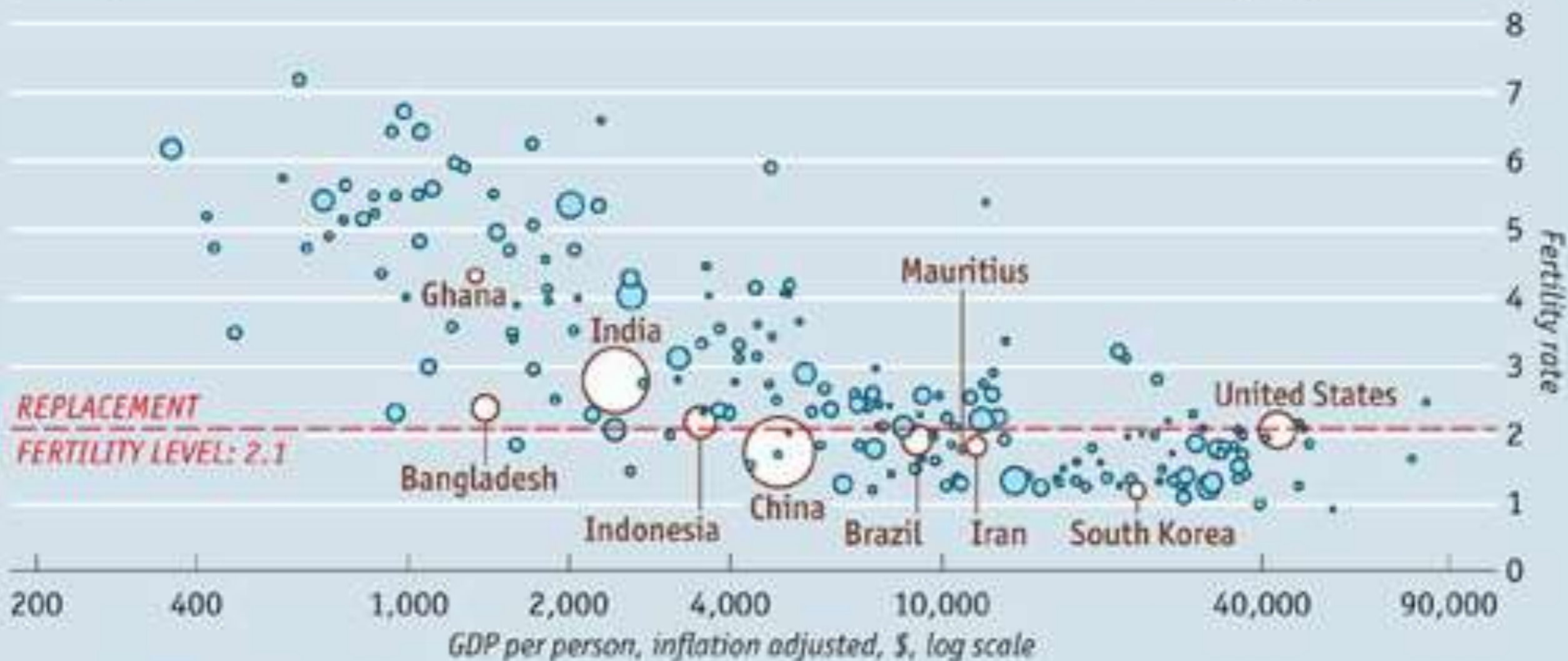


## Less is more

Fertility vs GDP, 2007

2

○ Size of circle is proportional to country's population



Source: gapminder.org

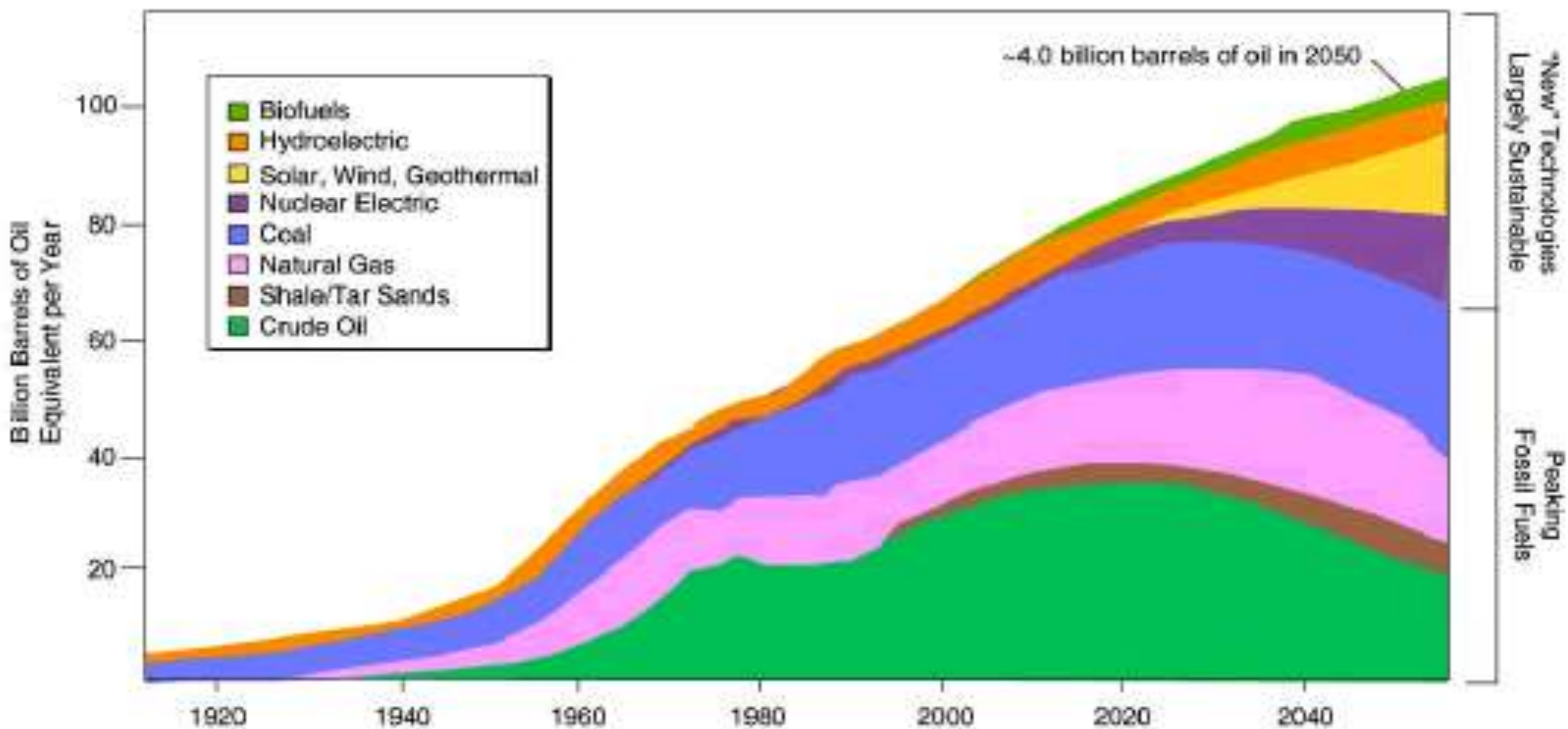






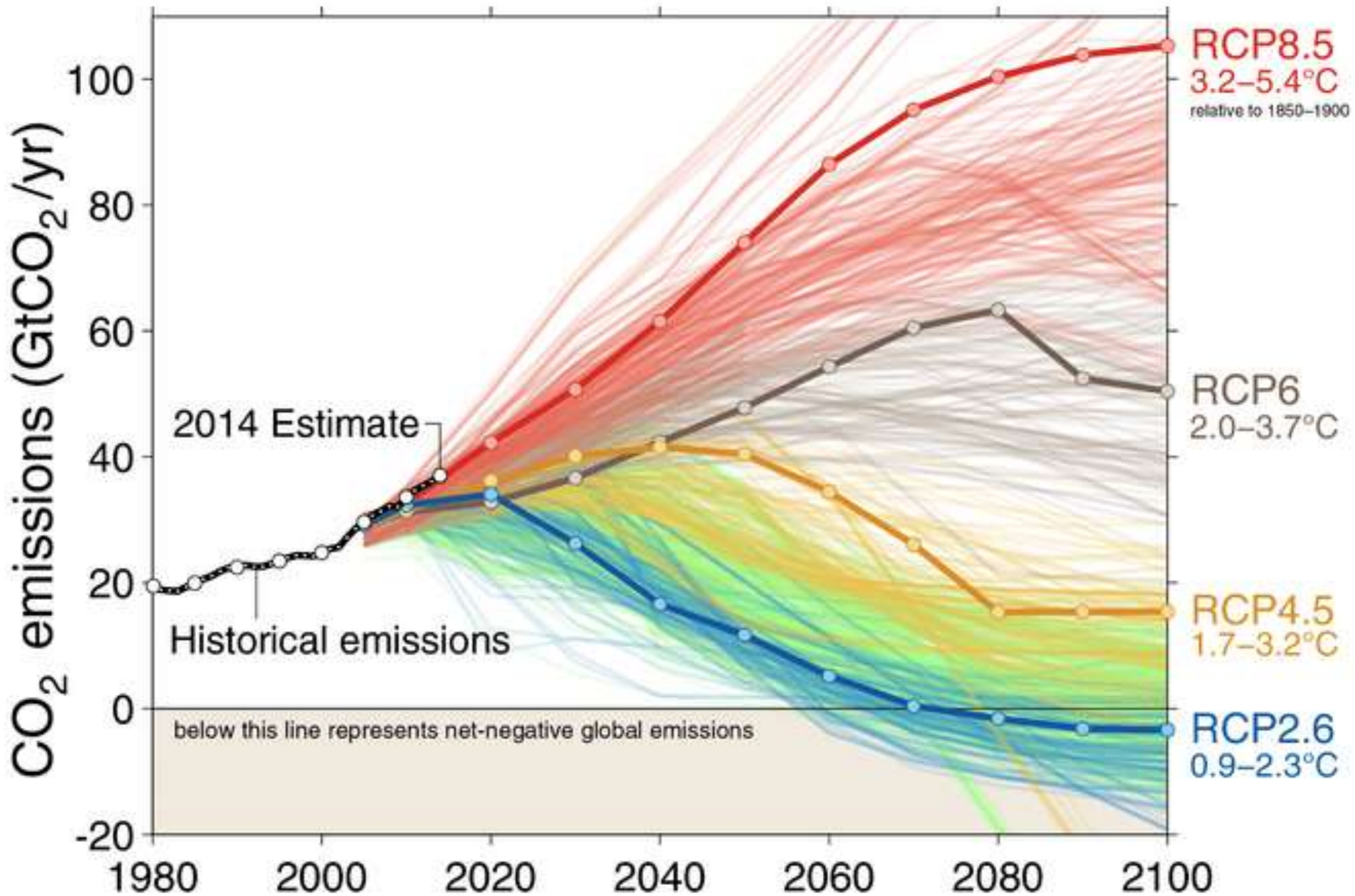


## World Energy Demand—Long-Term Energy Sources



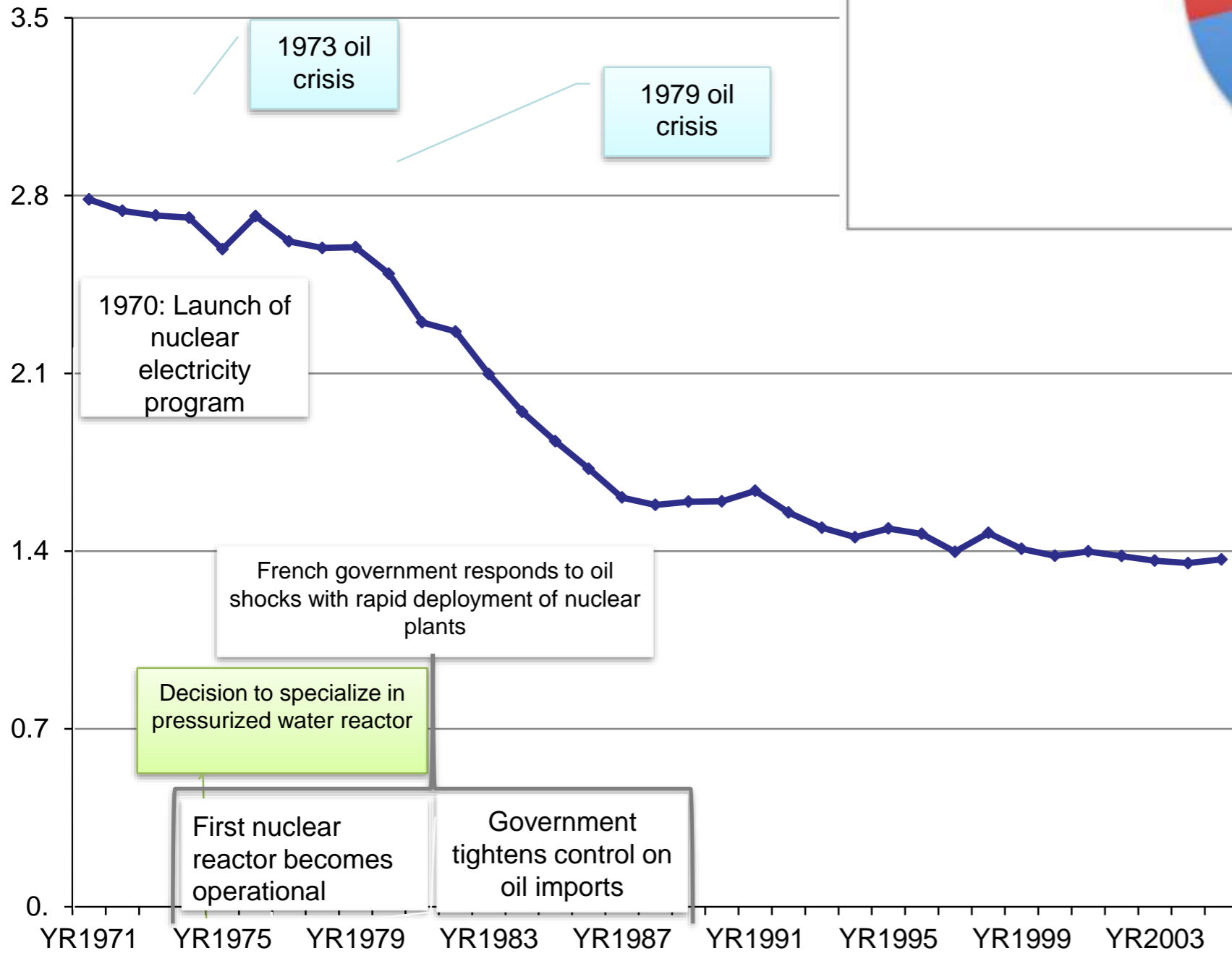
Sources: Lynn Orr, *Changing the World's Energy Systems*, Stanford University Global Climate & Energy Project (after John Edwards, American Association of Petroleum Geologists); SRI Consulting.



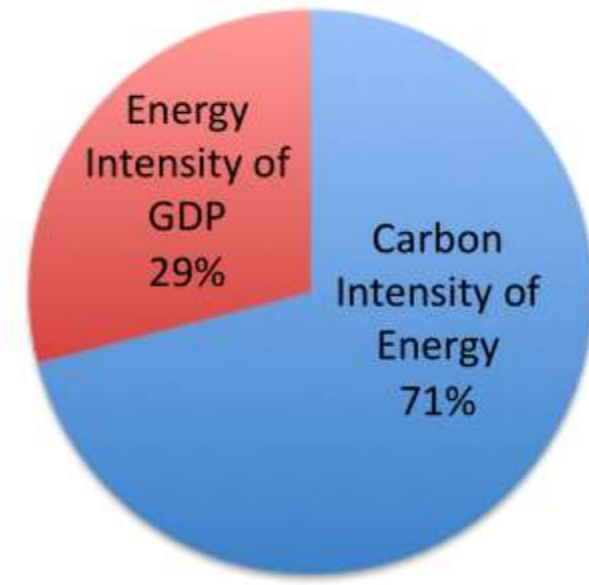


Source: Intergovernmental Panel on Climate Change, 2014

## France CO2/E, 1971-2003

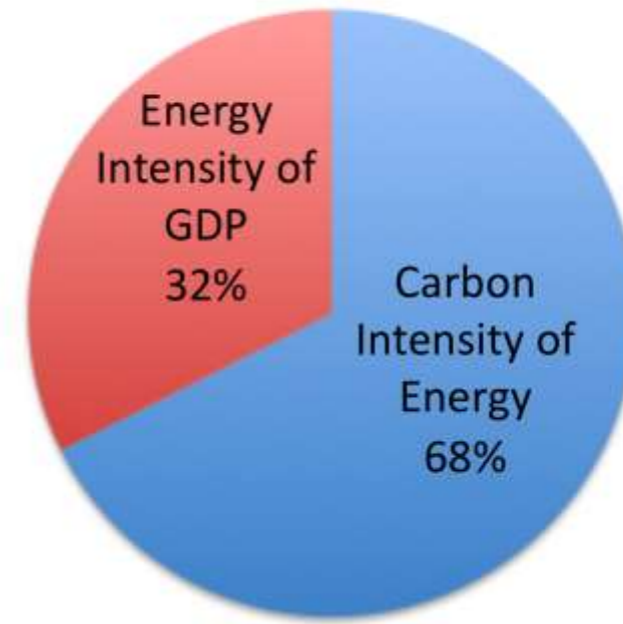


## Causes of Decarbonization: France

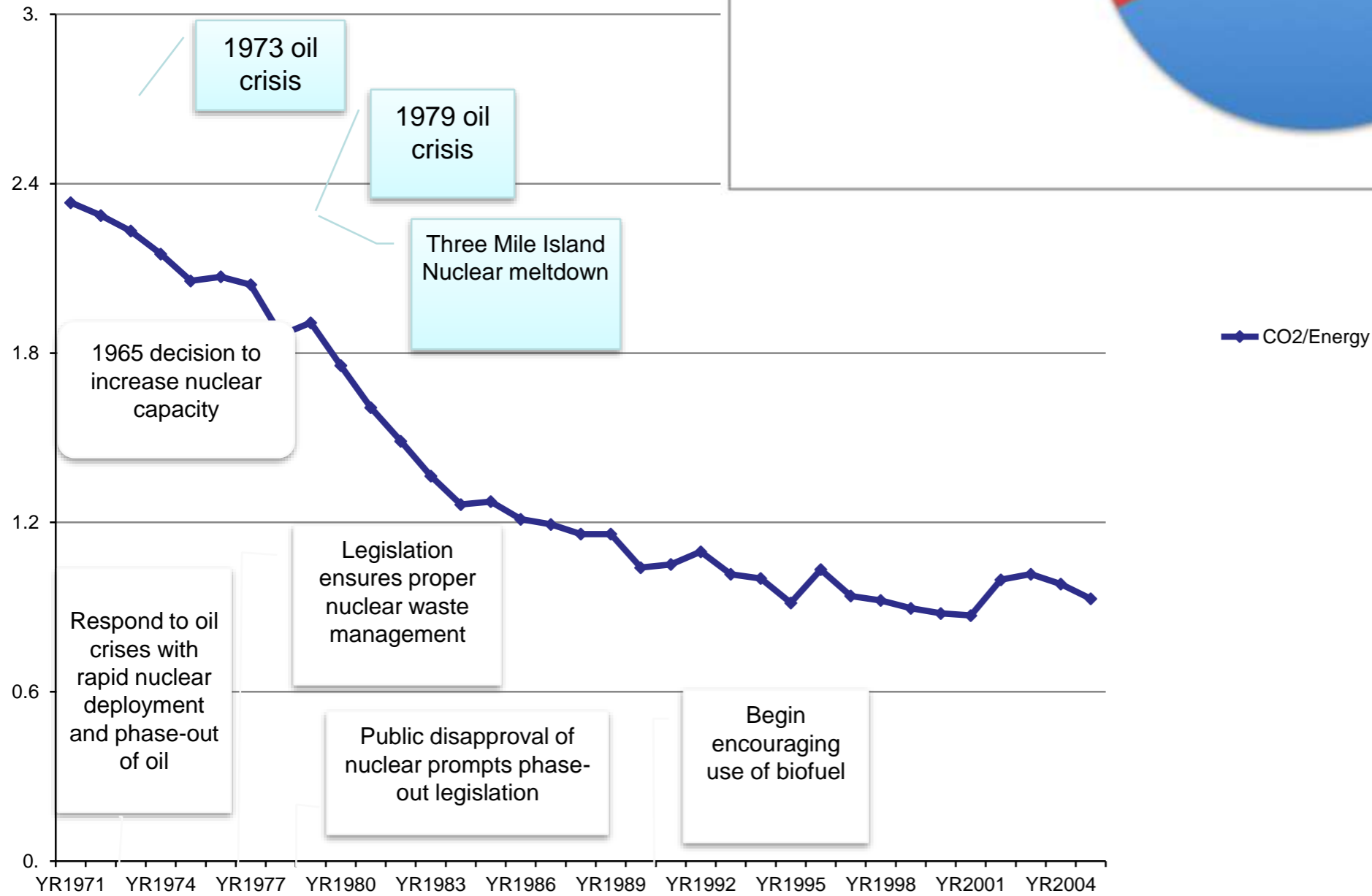


◆ CO2/Energy

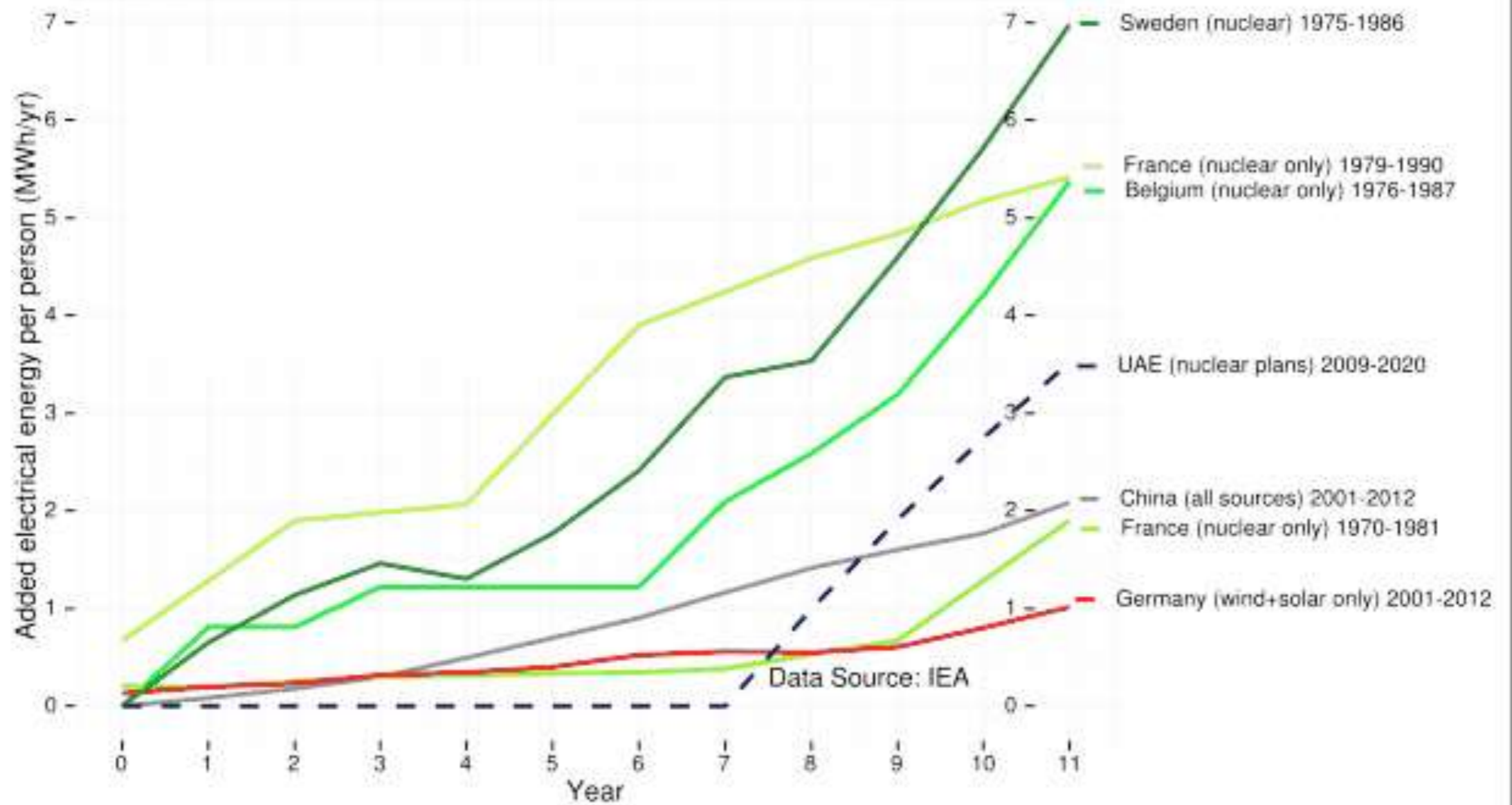
## Causes of Decarbonization: Sweden



## Sweden CO2/E, 1971



How much extra electrical energy can you add in 11 years?



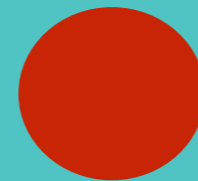


Land used for  
energy, 2010

300 mi

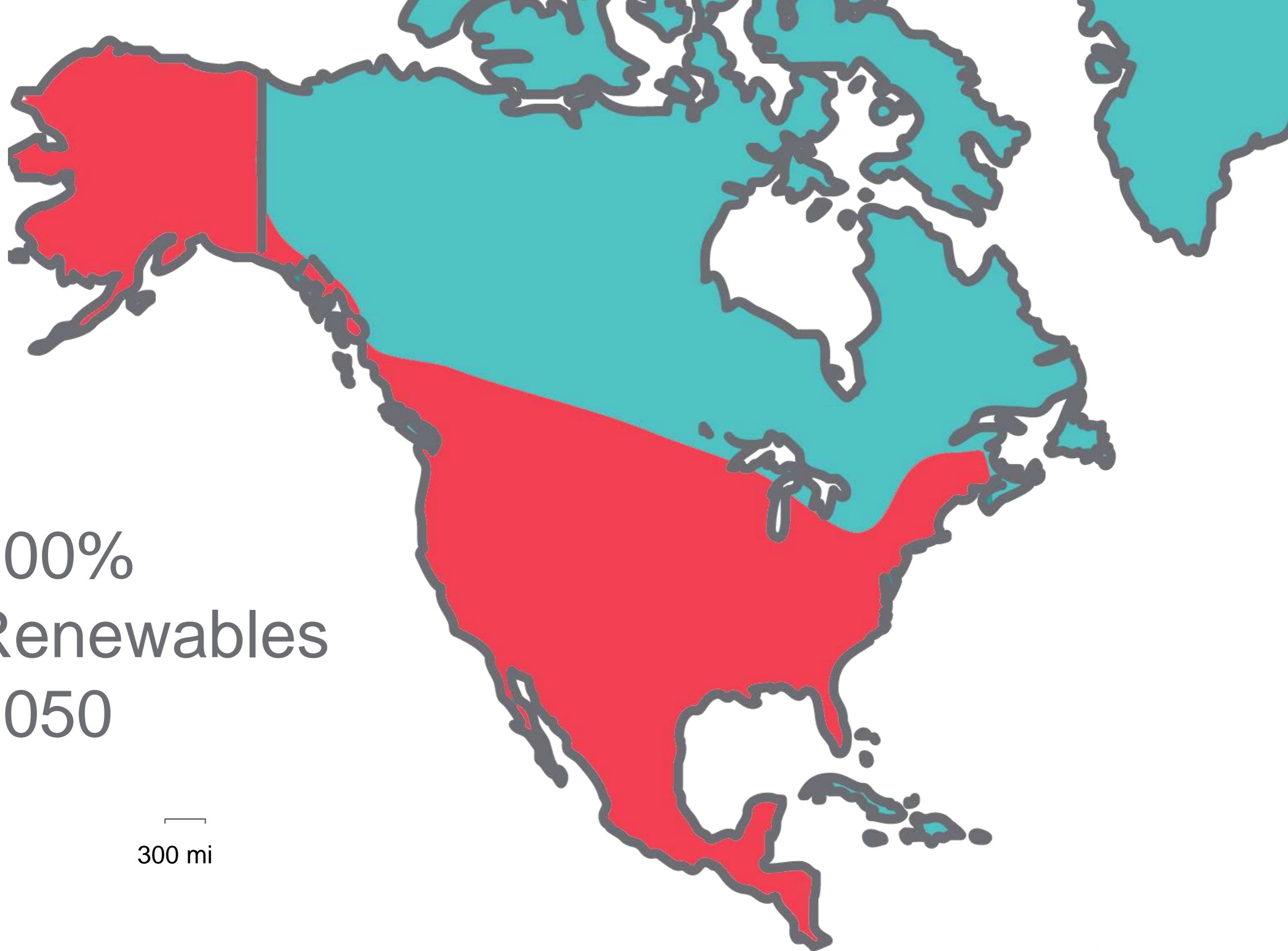
100% nuclear  
in 2050

300 mi



# 100% Renewables 2050

300 mi



Source: Breakthrough analysis based on Jacobson, M. Z. & Delucchi, M. A.  
Providing all global energy with wind, water, and solar power. Energy Policy 39, 1154–1169 (2011).







Thank You

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