

Global Warming Gridlock

EES 3310/5310

Global Climate Change

Jonathan Gilligan

Class #38: Friday, April 22 2022

Announcements

Lab Monday

- We will meet in Stevenson 6740 instead of Wilson Hall
- We will play a board game, “Energetic” about transforming New York City to using renewable energy.

Final Exam

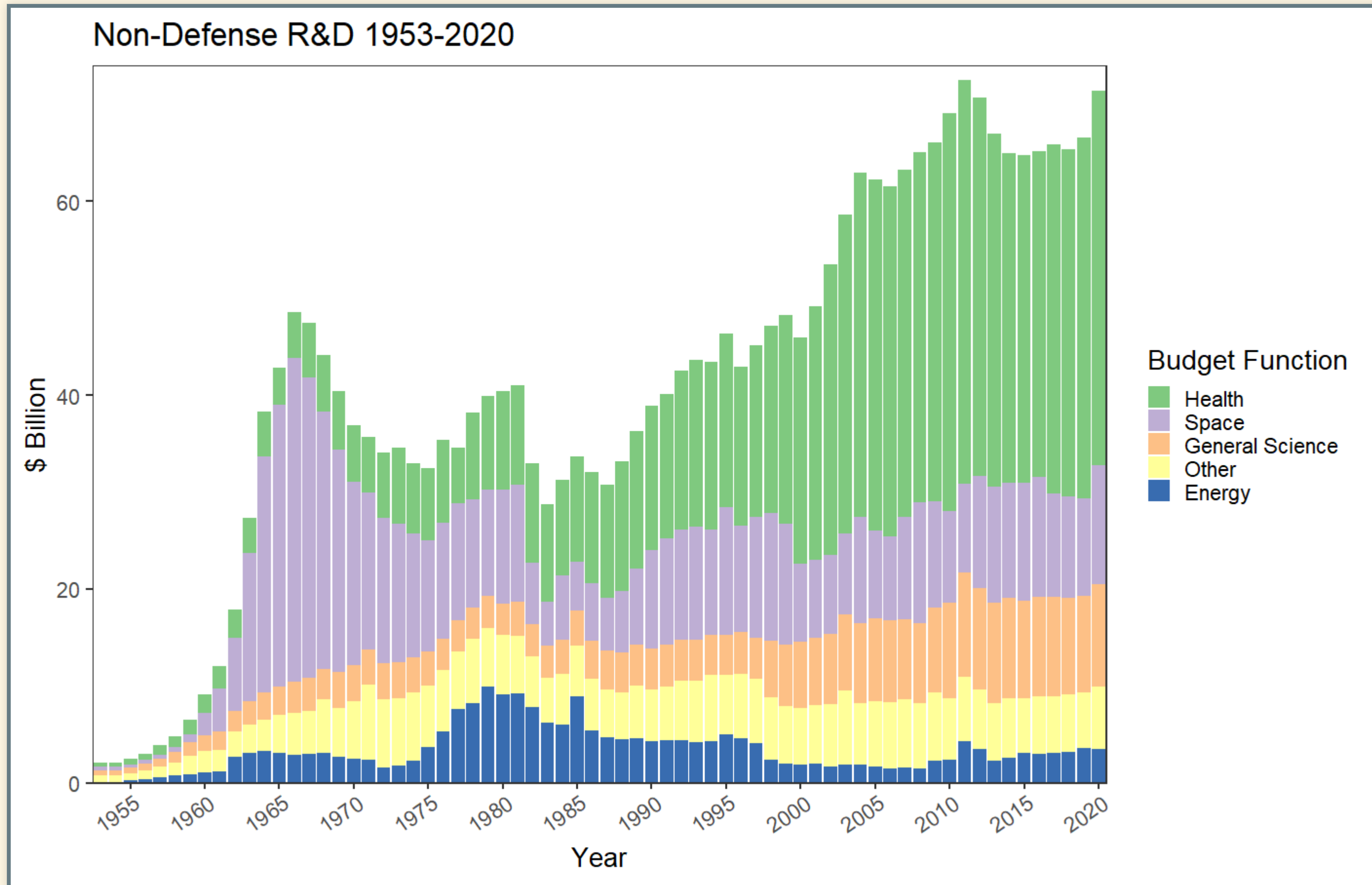
- Take-home, essay format
 - I will post the exam to Brightspace on Friday April 29
 - Due (on Brightspace) Saturday, May 7 by 11:00 AM Nashville time
 - I recommend you read the exam shortly after I post it even if you won't start working on it until much later.
 - Give yourself a chance to think about it, ask questions if anything is unclear.
- **Rules**
 - Open book, open notes, use can use additional books, internet, etc.
 - **You must do your own work**
- **Format**
 - Two short essays tying together material we have studied throughout the semester
 - The focus is about the big ideas we have studied, not little details
 - Recommended length: about 1–2 pages single-spaced for each essay

Gridlock

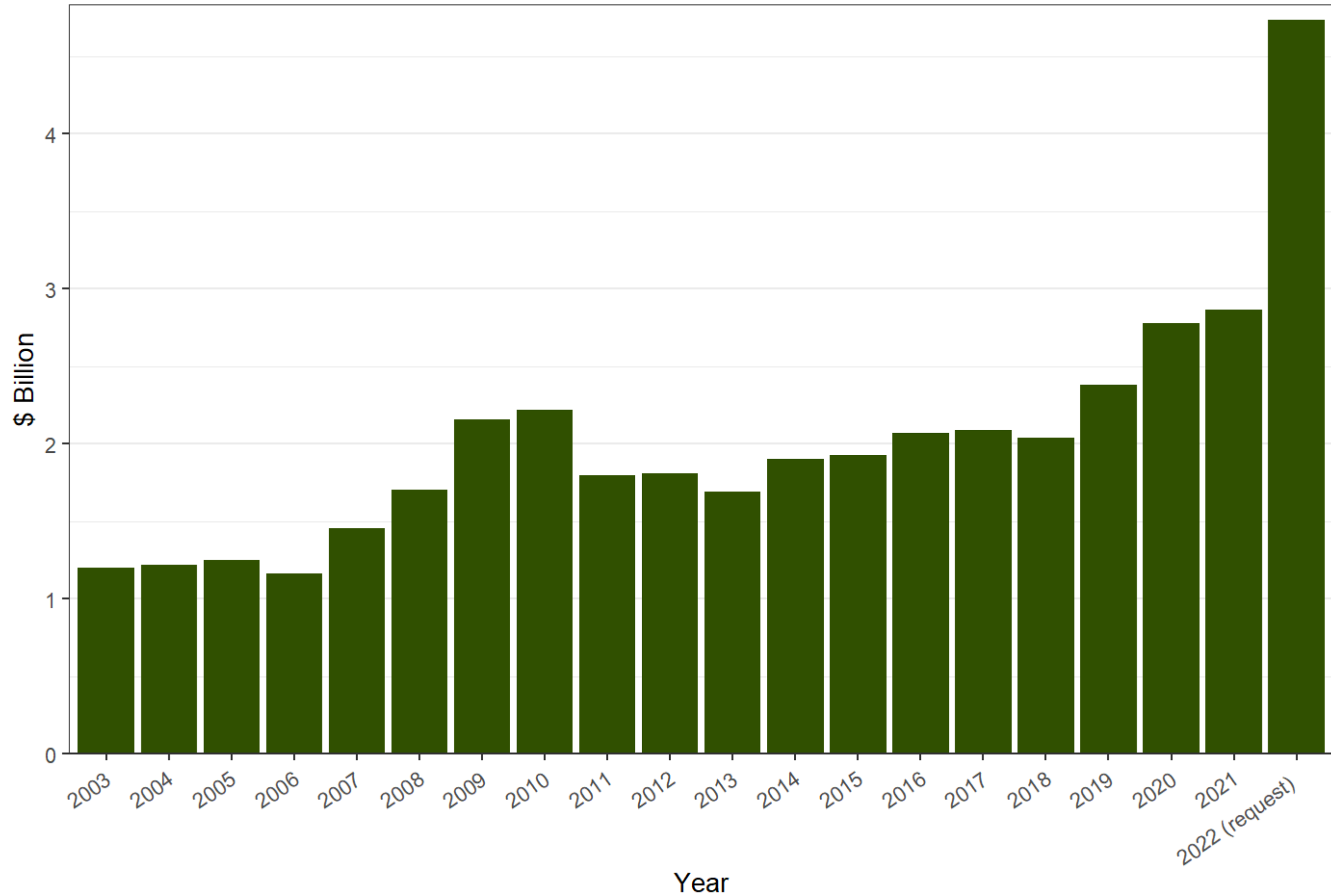
Gridlock: Basic Outline

1. Science: CO₂ is a “stock pollutant”
2. Three myths:
 - a. Scientists’ myth: Science can us tell what policy should be
 - b. Diplomats’ myth: Universal treaties
 - c. Engineers’ myth: $RE < C$
3. Regulating emissions
 - Power, interests, capabilities
- 4. Investing in innovation**
5. Bracing for change
6. New International Strategy

Investing in Innovation



U.S. Energy Efficiency and Renewable Energy Budget



Federal Subsidies (2002-08)

FOSSIL FUELS
\$72.5 billion

RENEWABLE ENERGY
\$29.0 billion

\$2.3 billion
**CARBON CAPTURE
AND STORAGE***

\$12.2 billion
**TRADITIONAL
RENEWABLES**

\$0.3
\$2.0

\$6.0 \$6.2

all subtotals in \$ billions

Tax breaks
(outer ring)

\$53.9

Direct spending
(inner circle)

\$16.3

\$5.0

\$11.8

\$16.8 billion
CORN ETHANOL**

\$70.2 billion
**TRADITIONAL
FOSSIL FUELS**

Gridlock

Gridlock: Basic Outline

1. Science: CO₂ is a “stock pollutant”
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 - a. Scientists’ myth: Science can us tell what policy should be
 - b. Diplomats’ myth: Universal treaties
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3. Regulating emissions
 - Power, interests, capabilities
4. Investing in innovation
5. Bracing for change
 - Adaptation, geoengineering
6. New International Strategy

Fairness & Justice

- Corrective Justice
- Distributive Justice

U.S. TO GIVE \$3 BILLION TO CLIMATE FUND TO HELP POOR NATIONS AND SPUR RICH ONES

By CORAL DAVENPORT and MARK LANDLER

NY Times, Nov. 15, 2014, p. A5

Republicans ... are working to block the administration from funneling federal dollars to developing nations so they can tackle climate change.

By AMY HARDER and KRISTINA PETERSON

The Wall Street Journal, Nov. 27, 2015

GROWING CLAMOR ABOUT INEQUITIES OF CLIMATE CRISIS

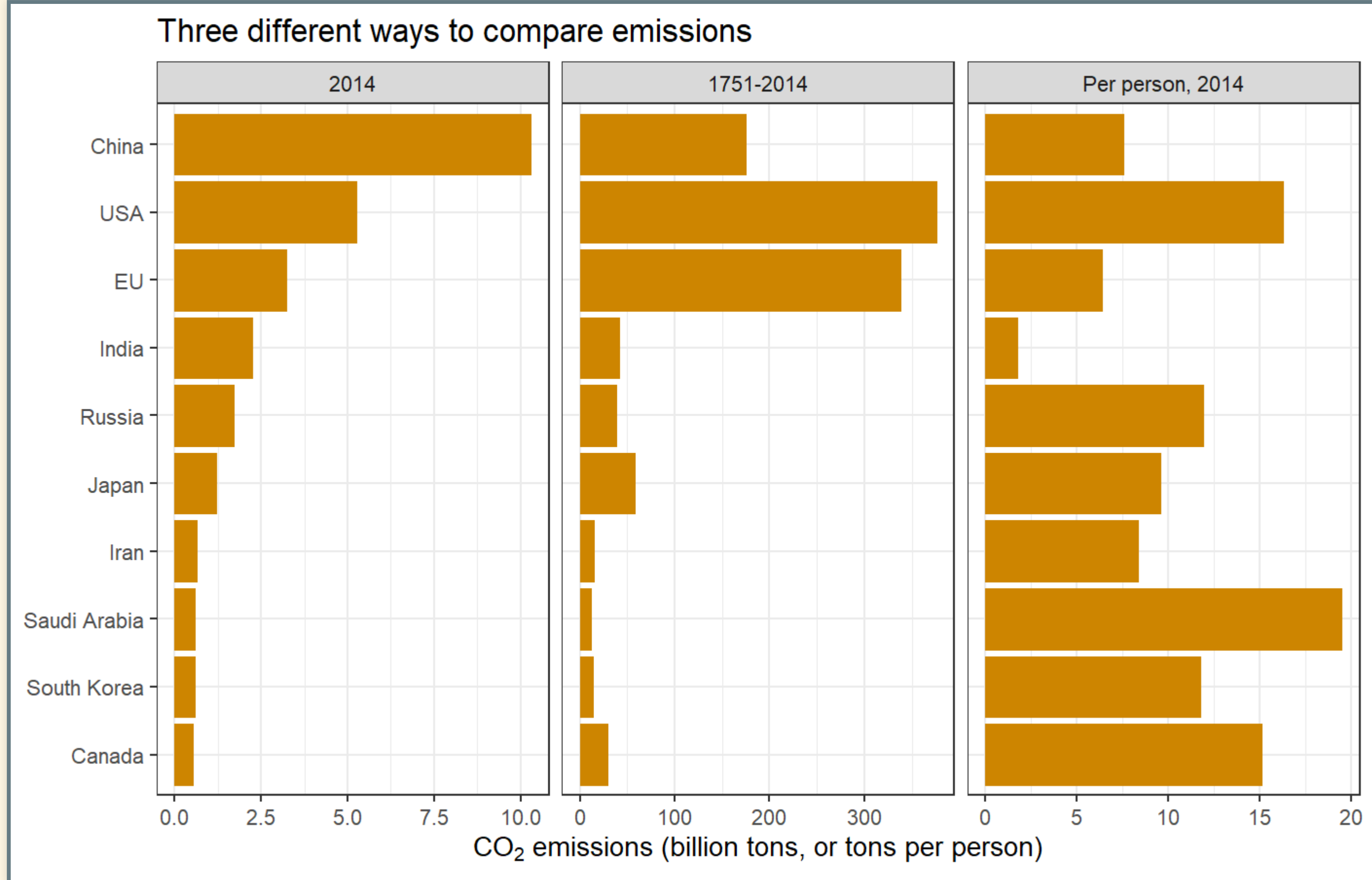
RESTITUTION DEMANDED

**Typhoon Highlights Rift
as Poor Nations Fault
Rich for Damage**

**By STEVEN LEE MYERS
and NICHOLAS KULISH**

NY Times, Nov. 17, 2013,
p. A1

CO₂ emissions



12 Nations = 77% of emissions

- 1. China
- 2. **US**
- 3. **EU**
- 4. India
- 5. Brazil
- 6. **Japan**
- 7. **Canada**
- 8. **Australia**
- 9. Indonesia
- 10. S. Korea,
- 11. S. Africa,
- 12. Mexico

