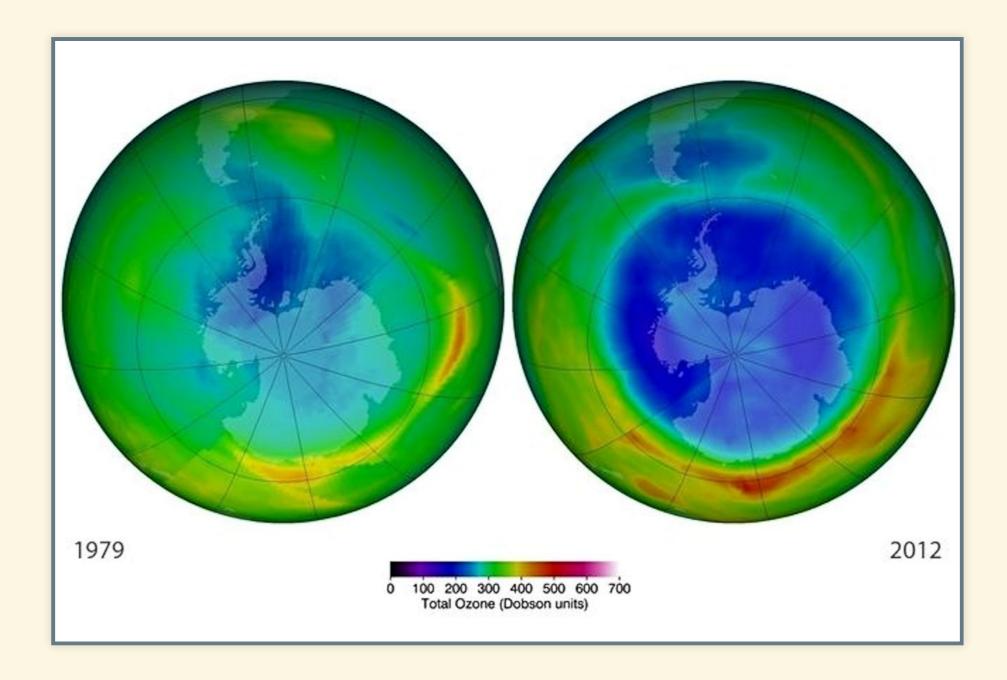
Policy Myths and Options

EES 3310/5310
Global Climate Change
Jonathan Gilligan

Class #23: Friday, March 18 2022

Pielke's Lessons from the Ozone Hole

Pielke's Lessons from the Ozone Hole



- 1970s: Significant scientific uncertainty
- Decision to take action without waiting for certainty
- Discovery of hole: tipping point
- "No regrets"" policy
- Flexible policy (renegotiate details every two years)

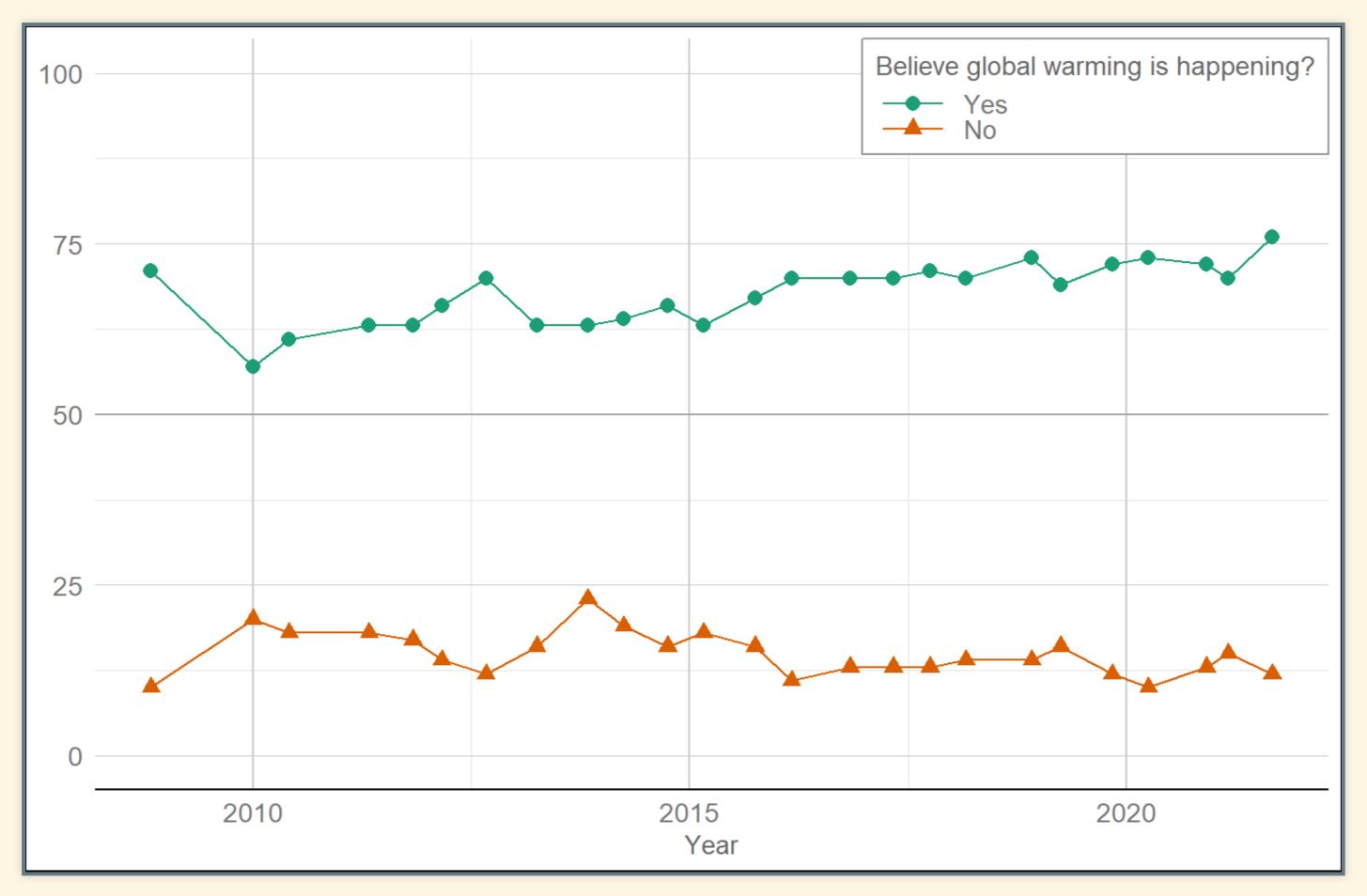
Policy Myths

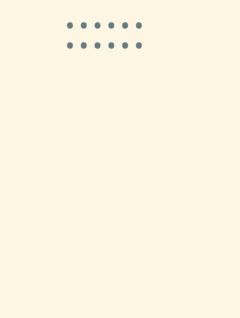
Policy Myths

- 1. We lack political will
- 2. We must trade off the economy for the environment
- 3. We have all the technology we need

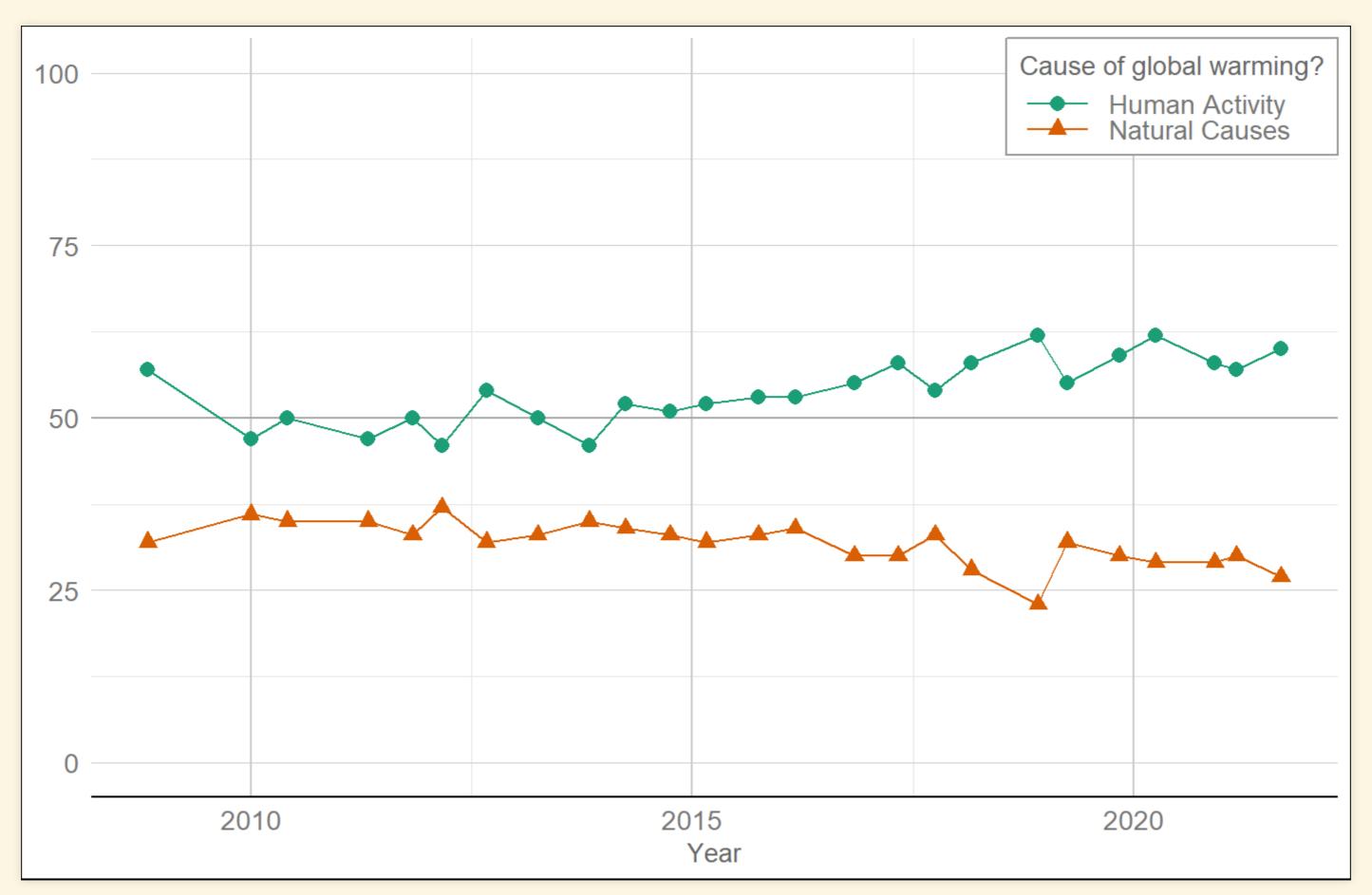
Myth 1: We Lack Political Will

Public Opinion: Is the Earth Warming

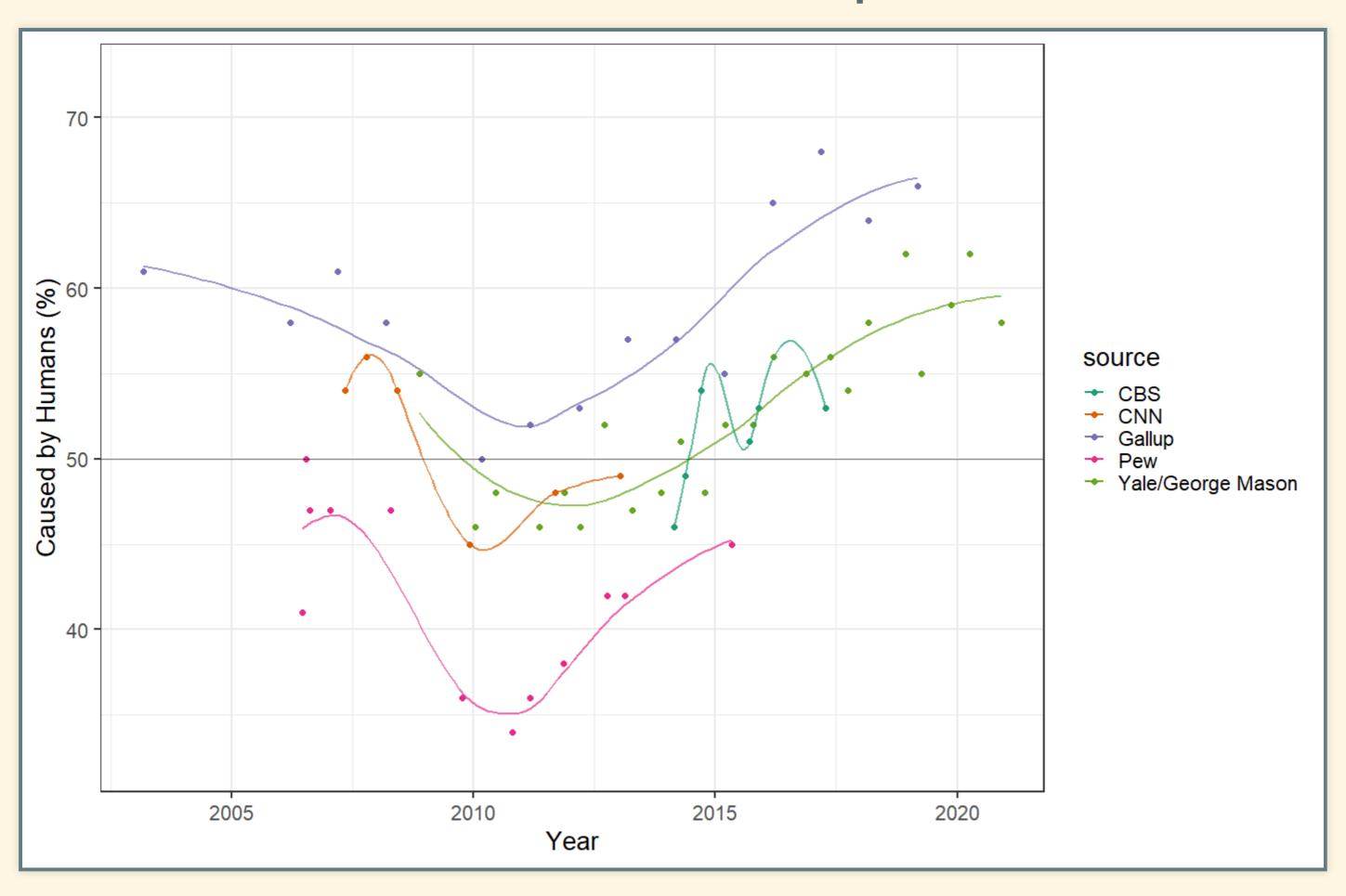




Public Opinion: Cause of Warming?



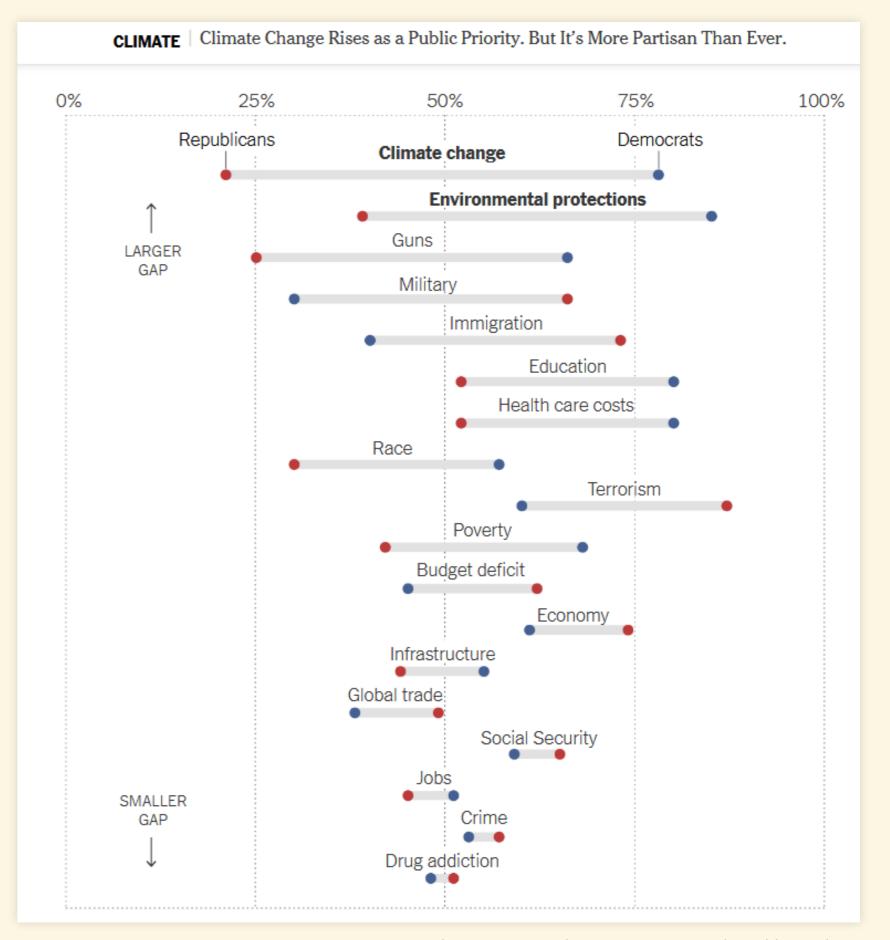
Variation across polls



Partisan Split

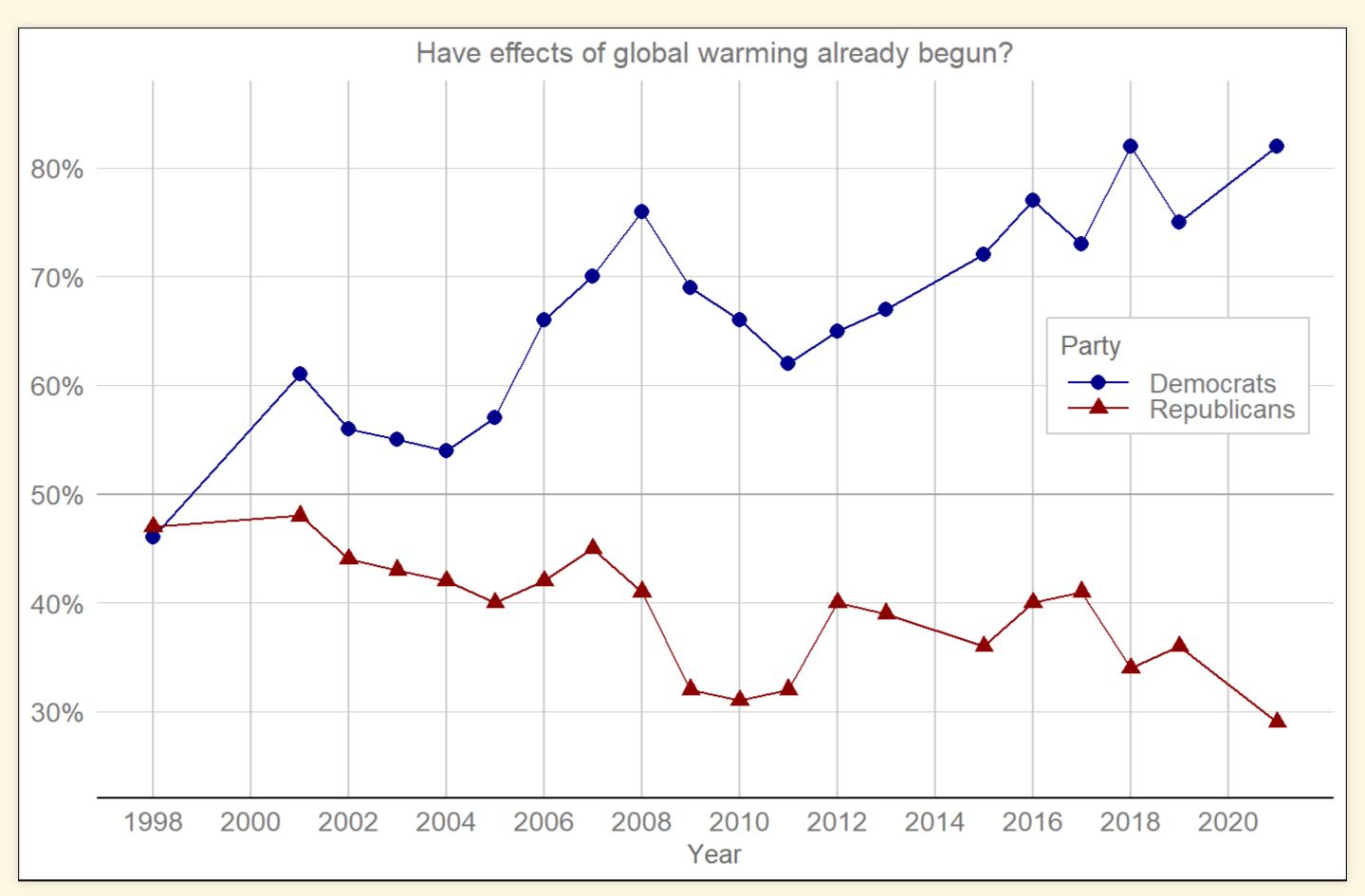
Partisan Split:

- Climate policy is the most divisive issue
- Greater partisan polarization than abortion

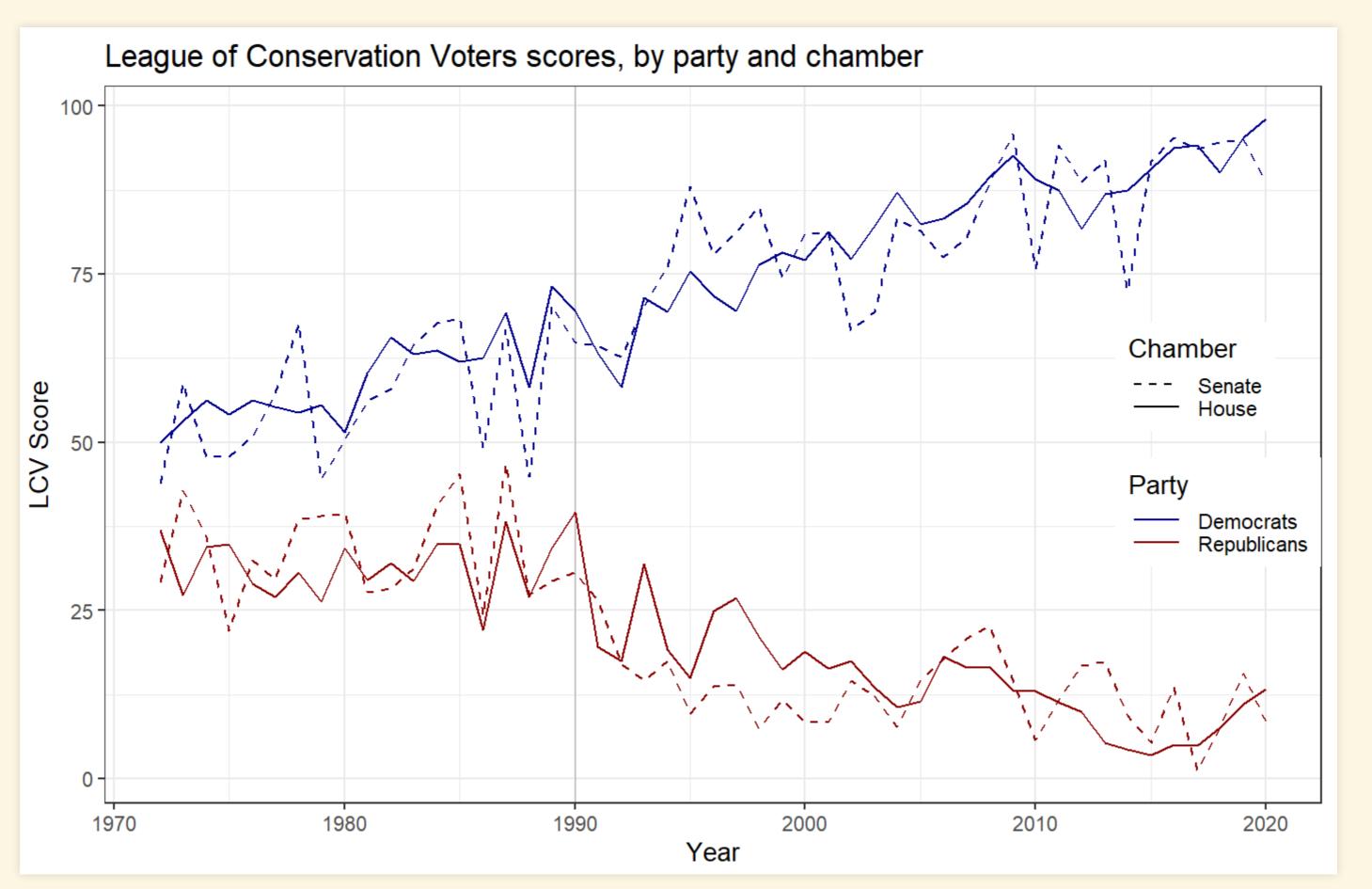


Pew: As Economic Concerns Recede, Environmental Protection Rises on the Public's Policy Agenda

Partisan split

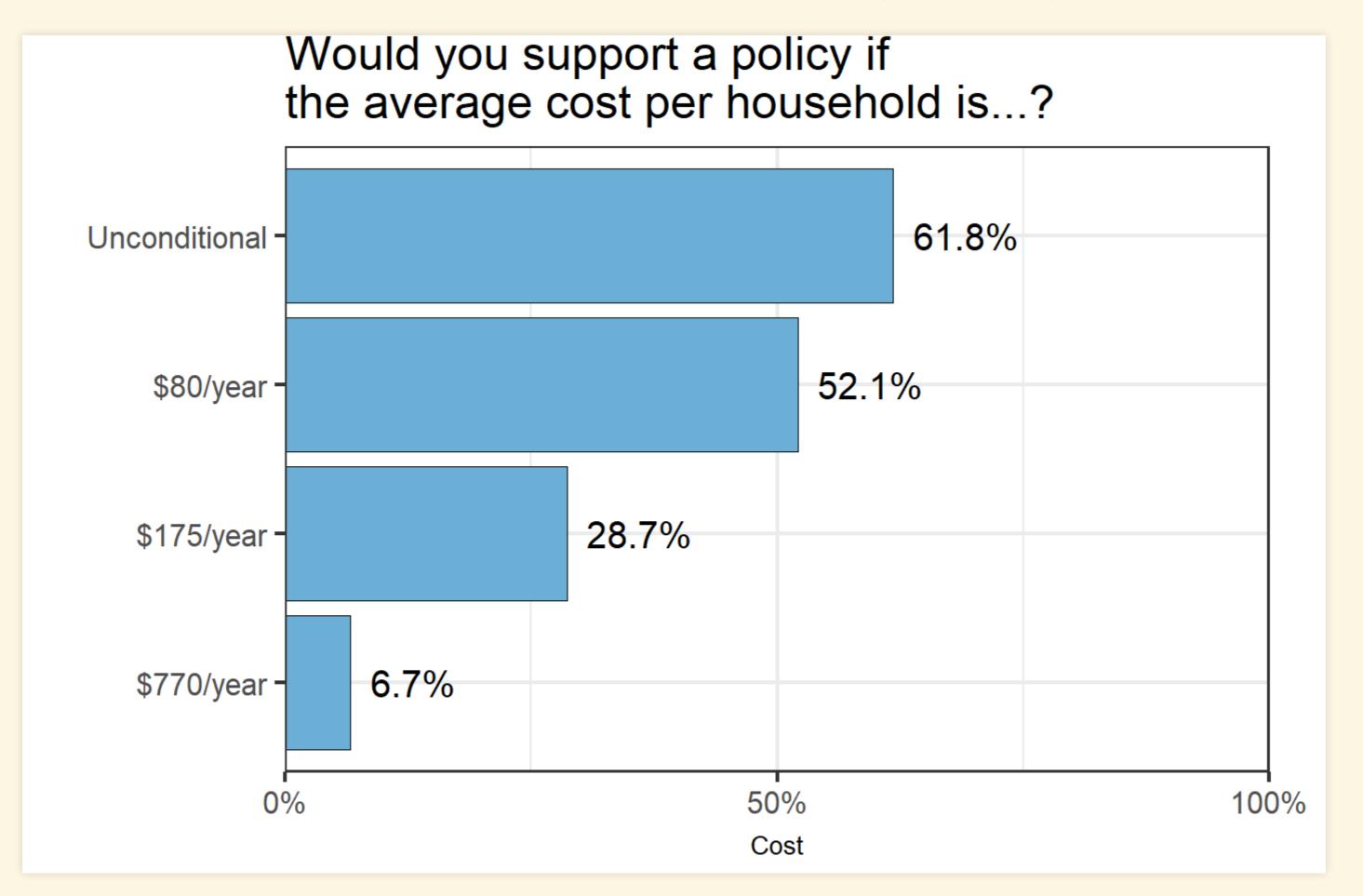


Polarization in Congress 1972-2020



Myth 2: We must trade off the economy for the environment

Willingness to pay (2009)



Iron Law of Climate Policy

- People want action on global warming
- But if climate policies conflict with economic growth, growth will win every time.

Frank Luntz (2010)

What has changed is that the American economy went to hell. And when you ask voters are they more concerned about destroying their environment over the next 100 years or rehabilitating their economy over the next 100 weeks, they'll choose the economy over the environment any day.

"Candidates Take Aim At Climate Bill To Win Votes" All Things Considered, NPR, 28 Oct. 2010

https://www.npr.org/templates/story/story.php?storyId=130888515

James Inhofe (2016)

I assumed like everybody else, way back when everyone was talking about global warming and all that, I assumed that that was probably right, until I found out what it was going to cost

Heritage Foundation Energy & Climate Policy Summit, Dec. 8, 2016

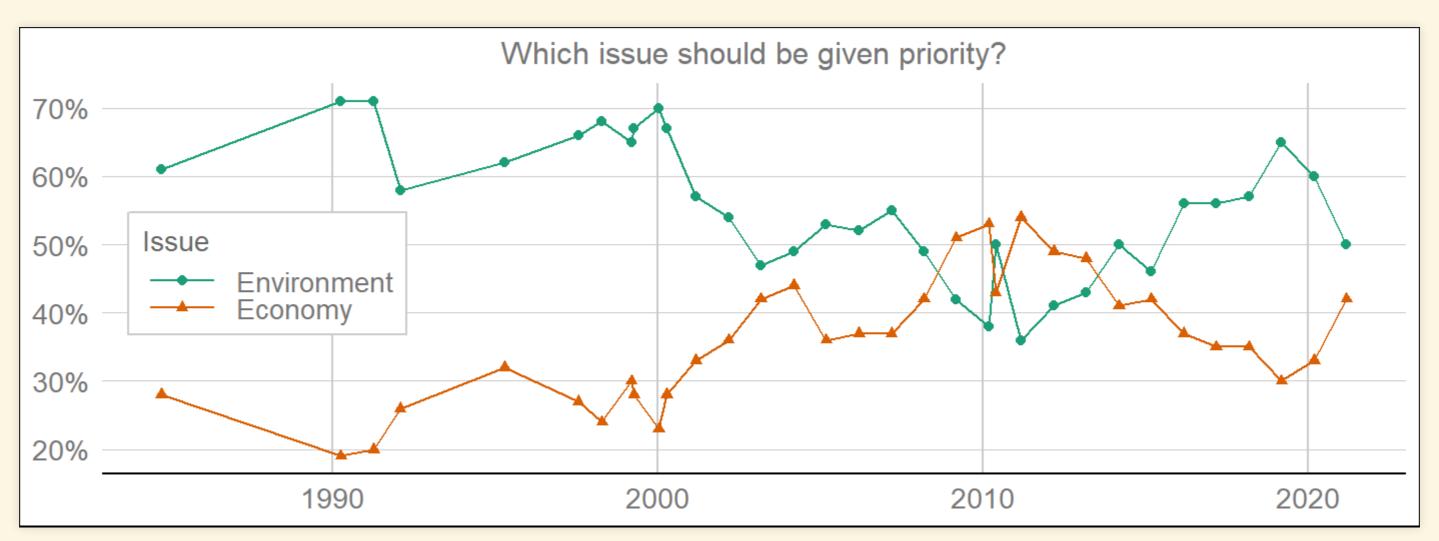
https://www.youtube.com/watch?v=surP84BQwhc

New Data

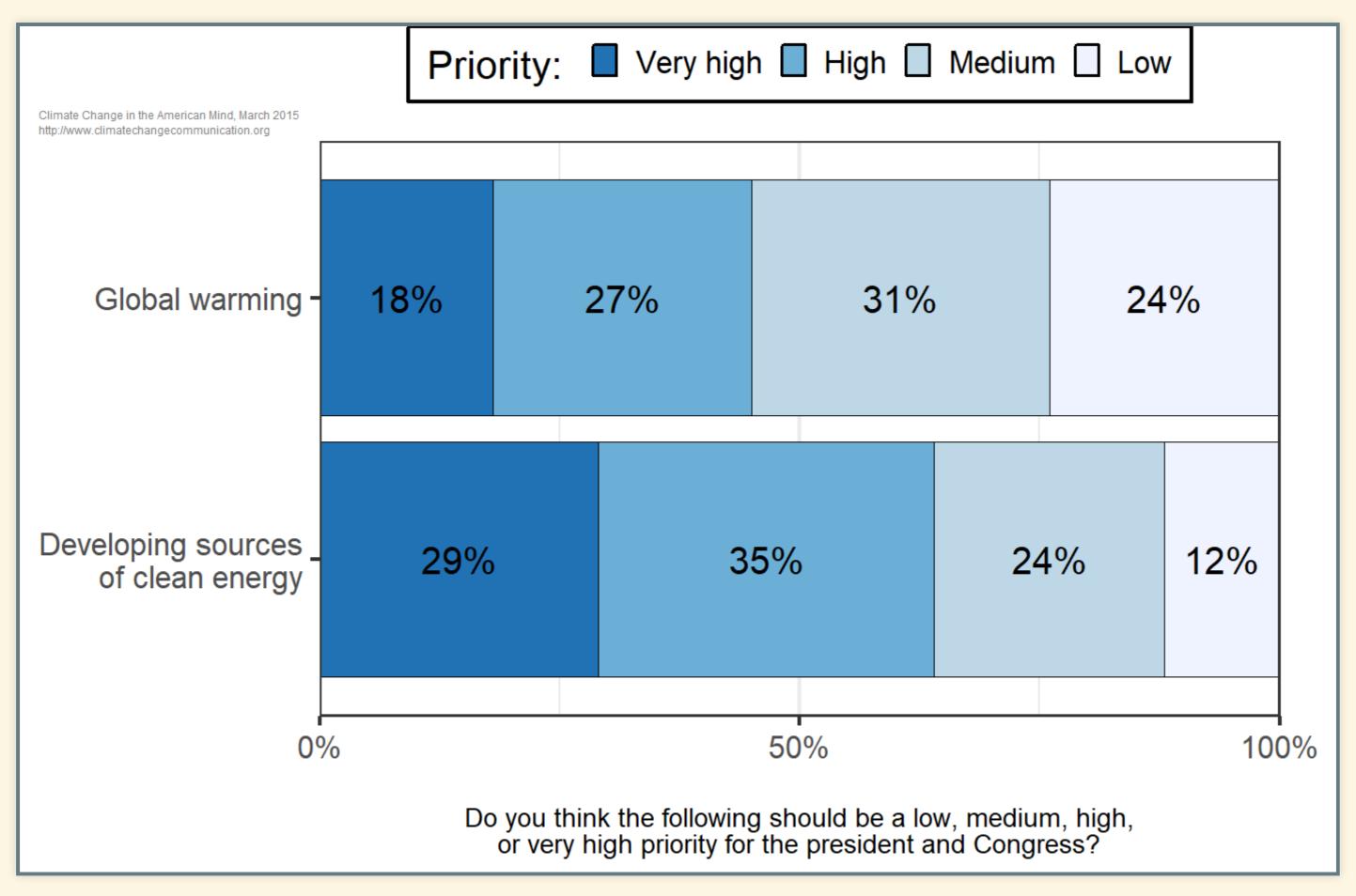
Nearly two-thirds of Americans ranked protecting the environment as a leading policy priority. — Pew survey (2020)

By the widest margin since 2000, more Americans believe environmental protection should take precedence over economic growth.

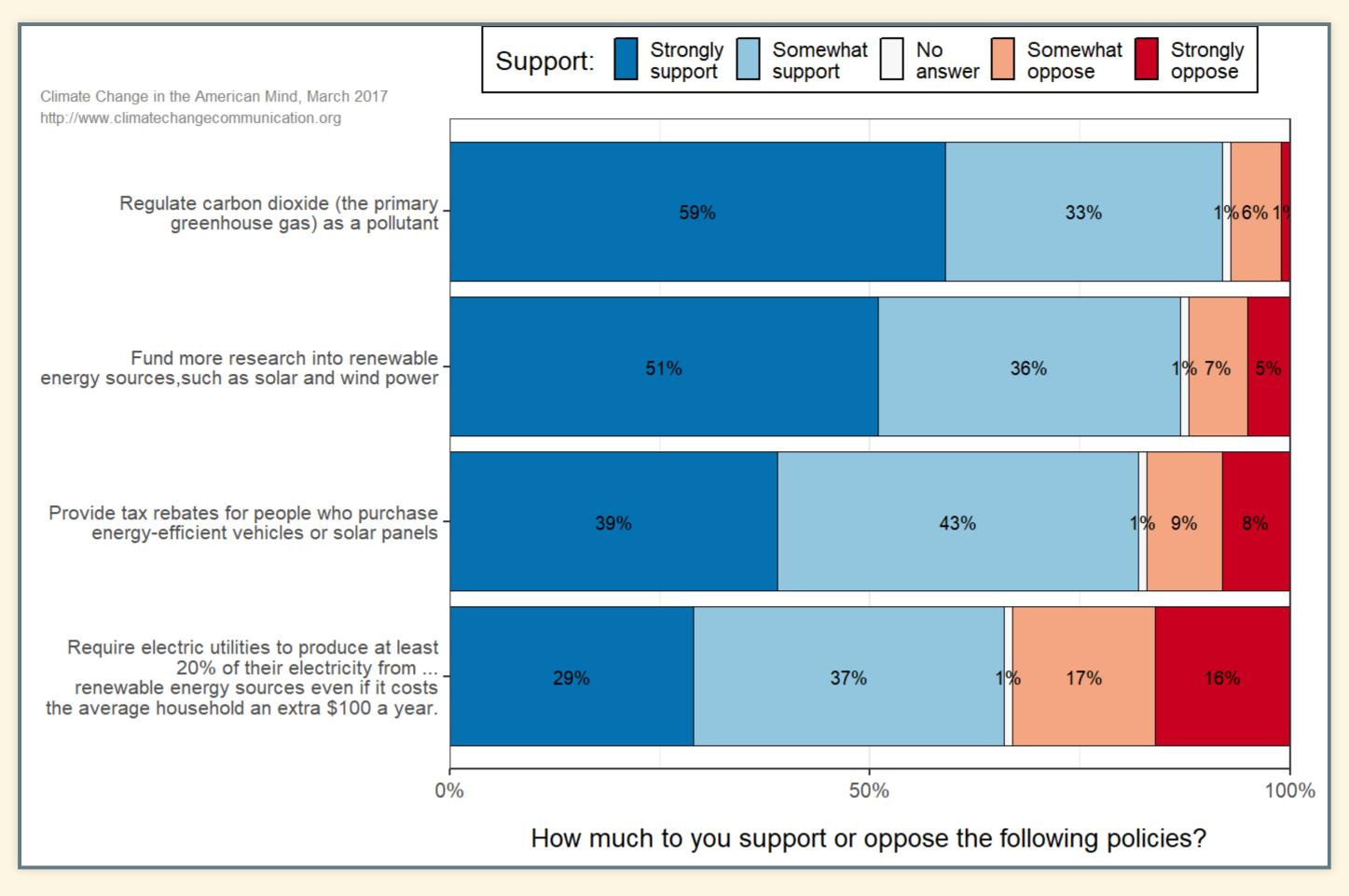
— Gallup Survey (2019)



Public Opinion on Priorities (2015)



Public Support for Policies (2017)



Political Will

Political Will

• Walter Lippmann (Pielke's paraphrase):

The goal of politics is not to get everyone to think alike, but to get people who think differently to act alike

Cass Sunstein

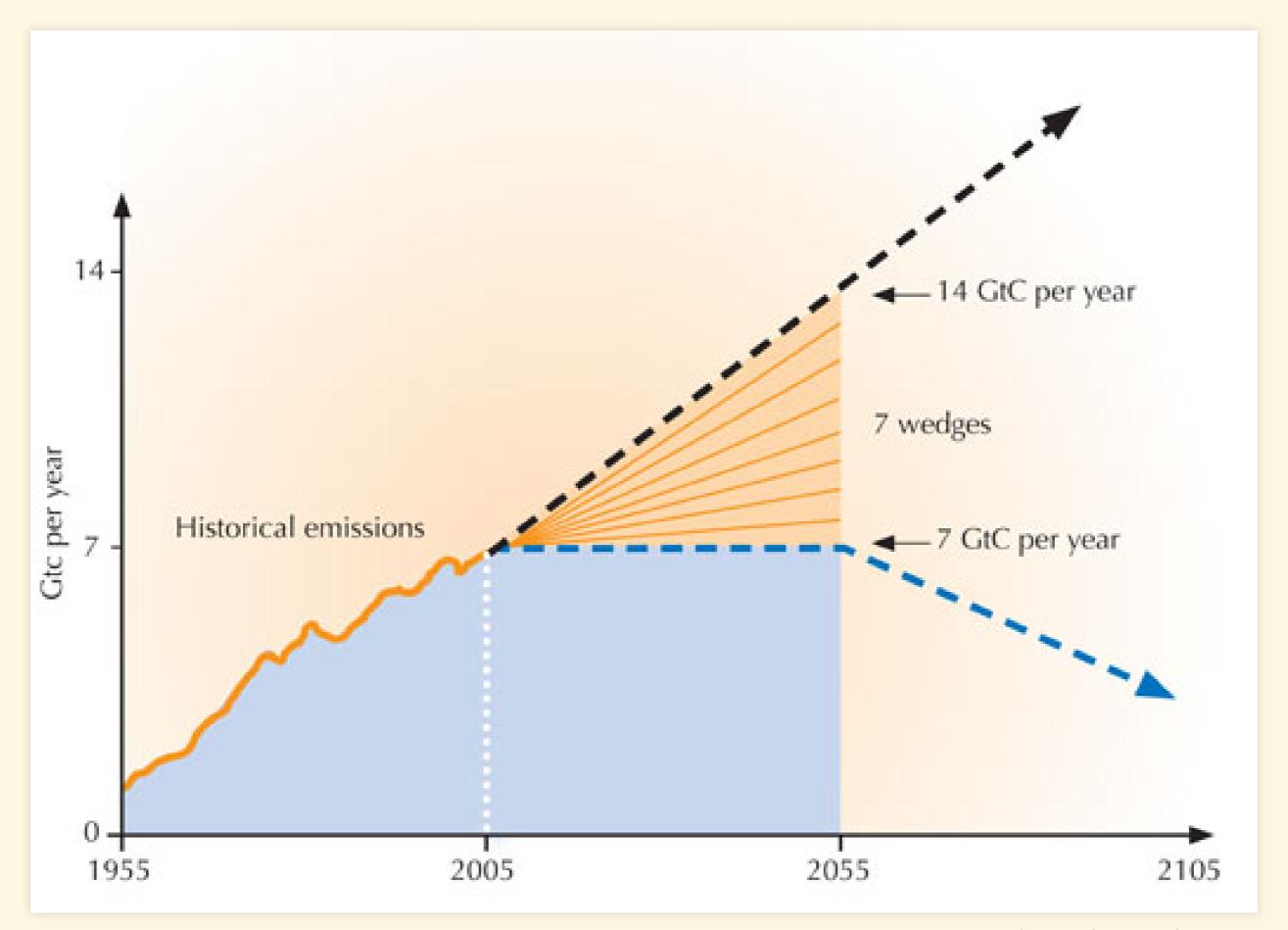
people can often agree on constitutional practices, and even on constitutional rights, when they cannot agree on constitutional theories

• • •

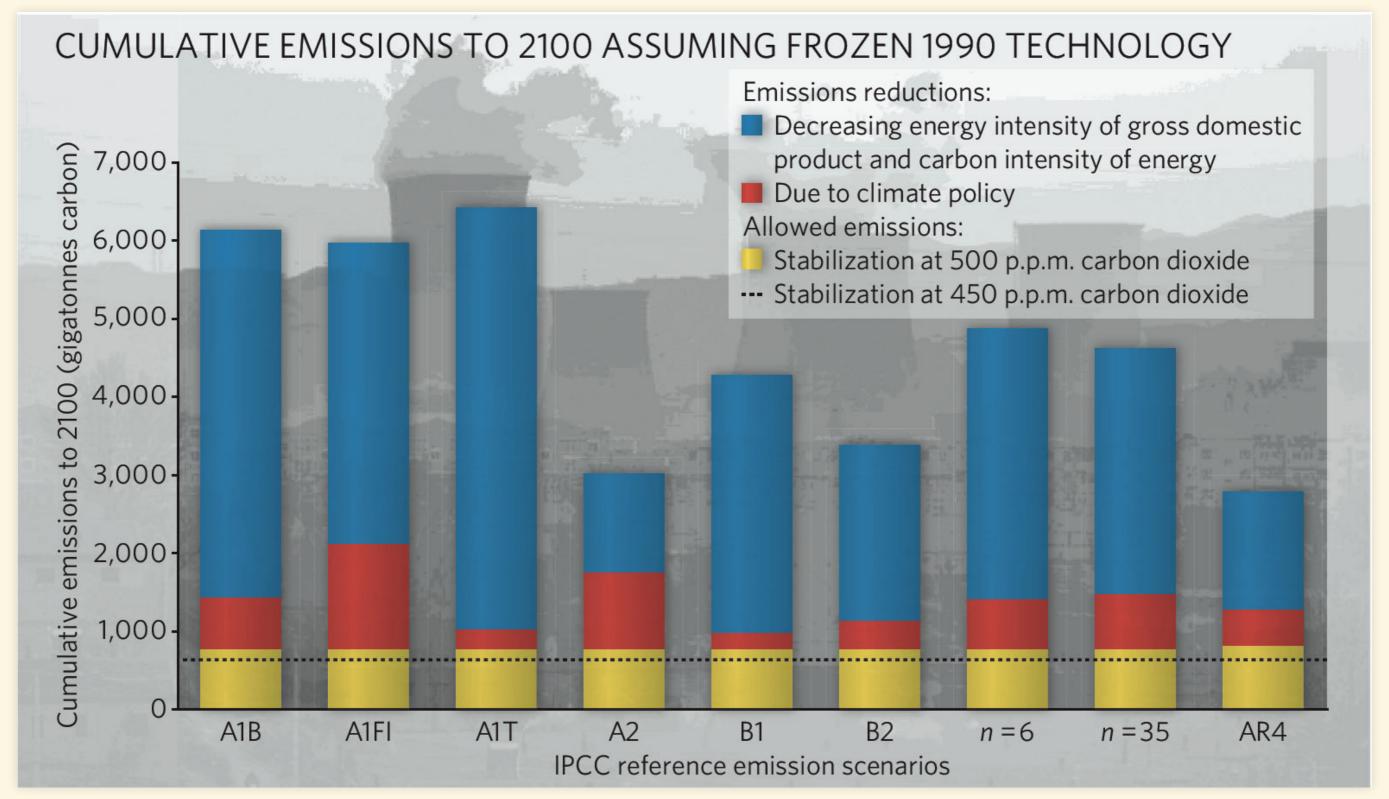
a major goal of a heterogeneous society [is] to make it possible to obtain agreement where agreement is necessary, and to make it unnecessary to obtain agreement where agreement is impossible.

Myth 3: We have all the technology we need.

Do we have the technology?



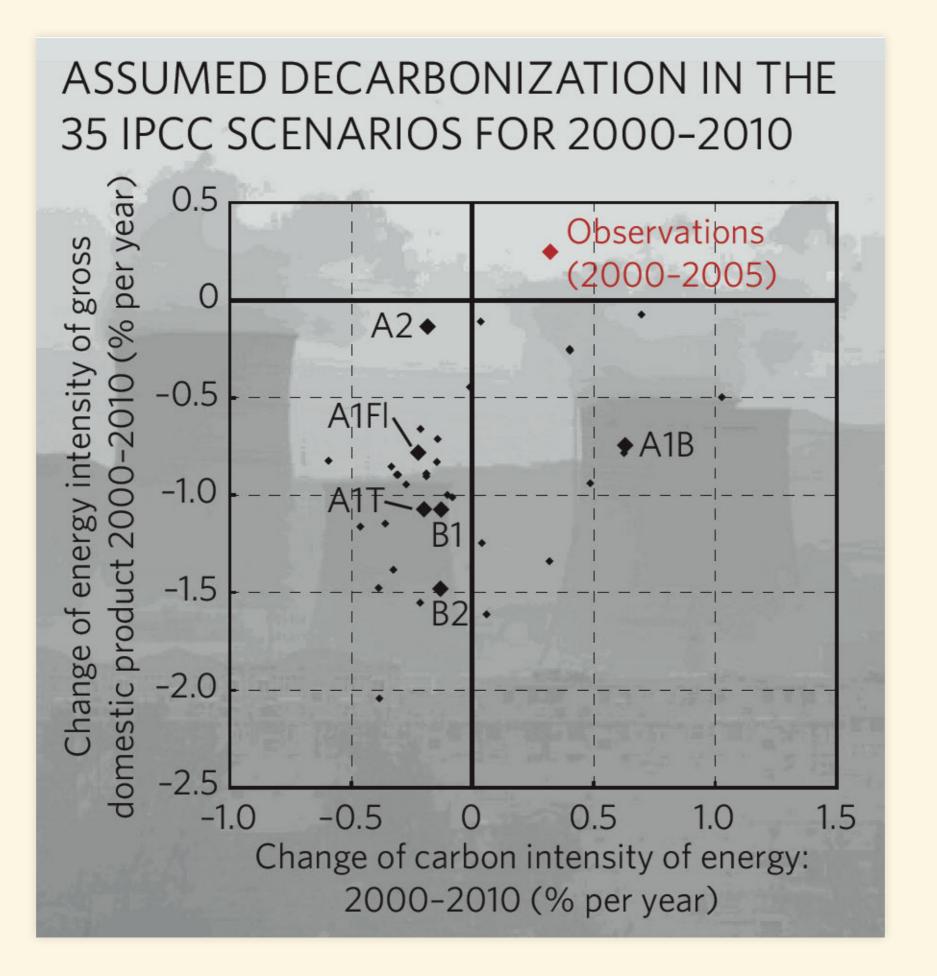
Do we have the technology?



R.A. Pielke, Jr. et al., Nature **452**, 531 (2008). doi: 10.1038/452531a

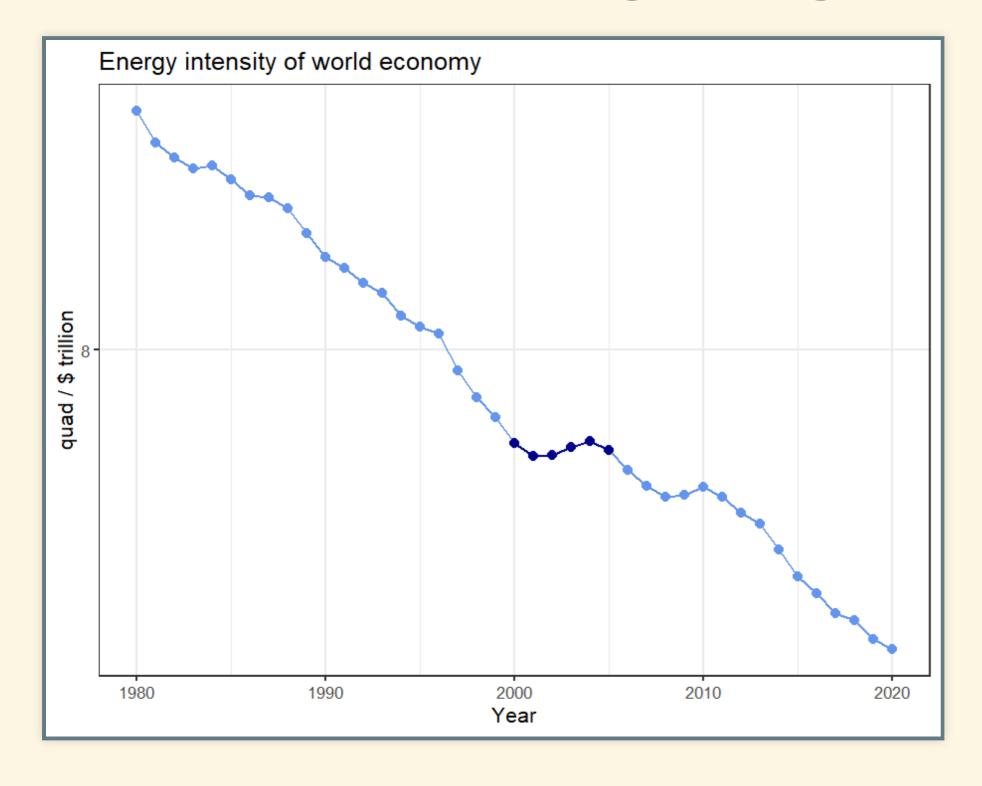
- Blue = Assumed spontaneous emissions reduction
- Brown = Regulations
- Yellow = Allowed emissions to stabilize CO₂ at 550 ppm.

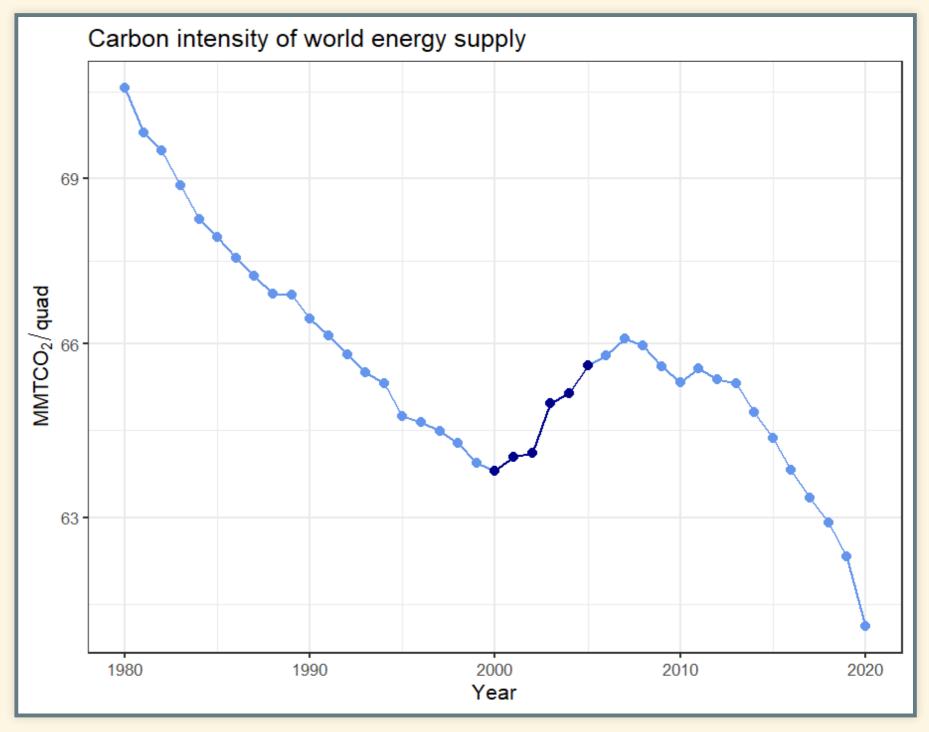
Optimism on energy efficiency



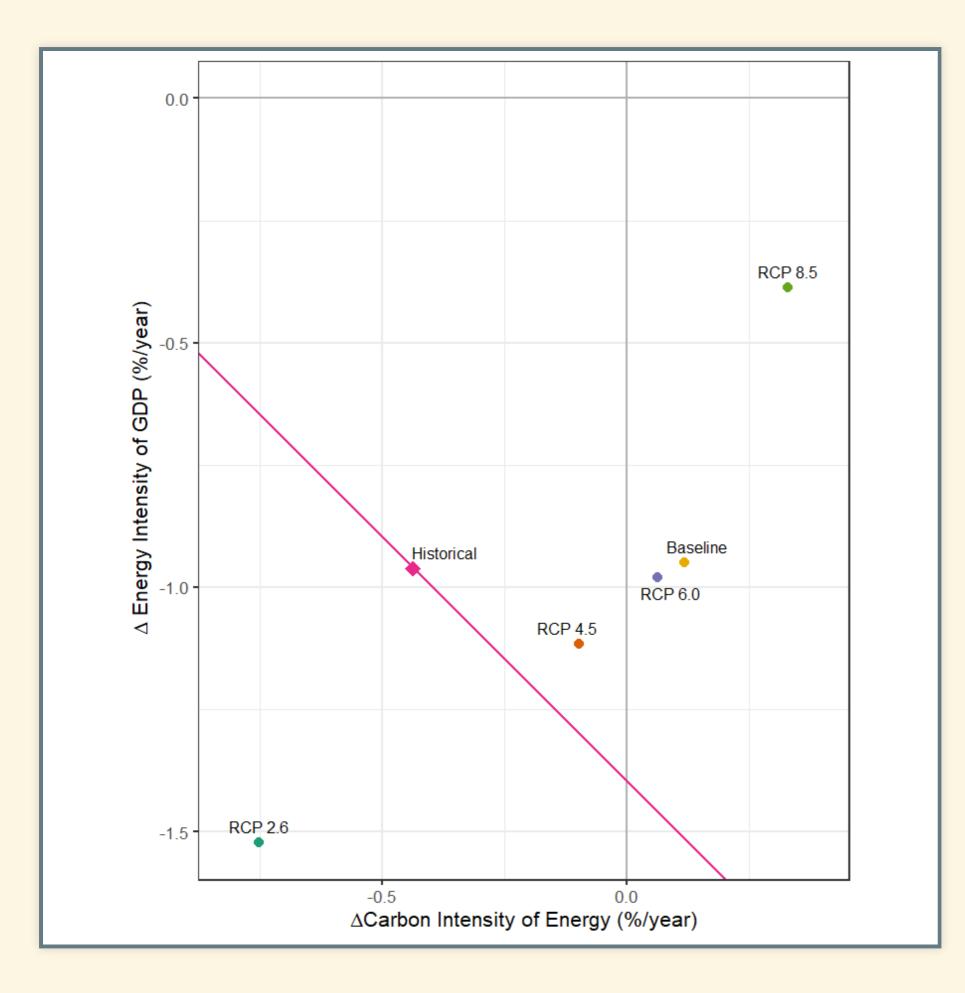
The View from 2018:

- Pielke's numbers focus on 2000–2005
 - The years when China's economy began really rapid growth
- After 2005, things changed:





Current Emissions Pathways



- Comparing actual trends for 2005–2017 to trends for 2005–2020 in 5 emissions scenarios:
 - Points above & right of the magenta line have higher emission trends than historical
 - Points below & left of the magenta line have lower emission trends than historical
- The historical trend from 2005–2017 is doing better (lower emissions) than several scenarios including baseline (no policies) and RCP 6.0 (business as usual with current policies).

Summary

- Pielke and others were very pessimistic around 2010
- Ten years later:
 - Some reasons for greater optimism
 - But still cause for concern

2021 UN Report



"Current levels of climate ambition are very far from putting us on a pathway that will meet our Paris agreement goals," said Patricia Espinosa, executive secretary of the U.N. Framework Convention on Climate Change.

Even if countries follow through, [they] would put the world on a path to achieve only a 1 percent reduction in global emissions by 2030....

By contrast, scientists have said that emissions must fall by nearly 50 percent this decade for the world to realistically have a shot at avoiding devastating temperature rise.

Do we have the technology?

