

# A US Carbon Tax: Costs, Fairness, and Politics

# Projected Impacts

Temperature Change (1-4 degrees C. by 2100)

(reversal of thermohaline current?)

Changes in Precipitation

Giving Rise To:

Sea level rise (0.5-1.0 meter by 2100)

Increase in tropical diseases

(expansion of tropics)

Greater intensity of storms

Greater variability of weather

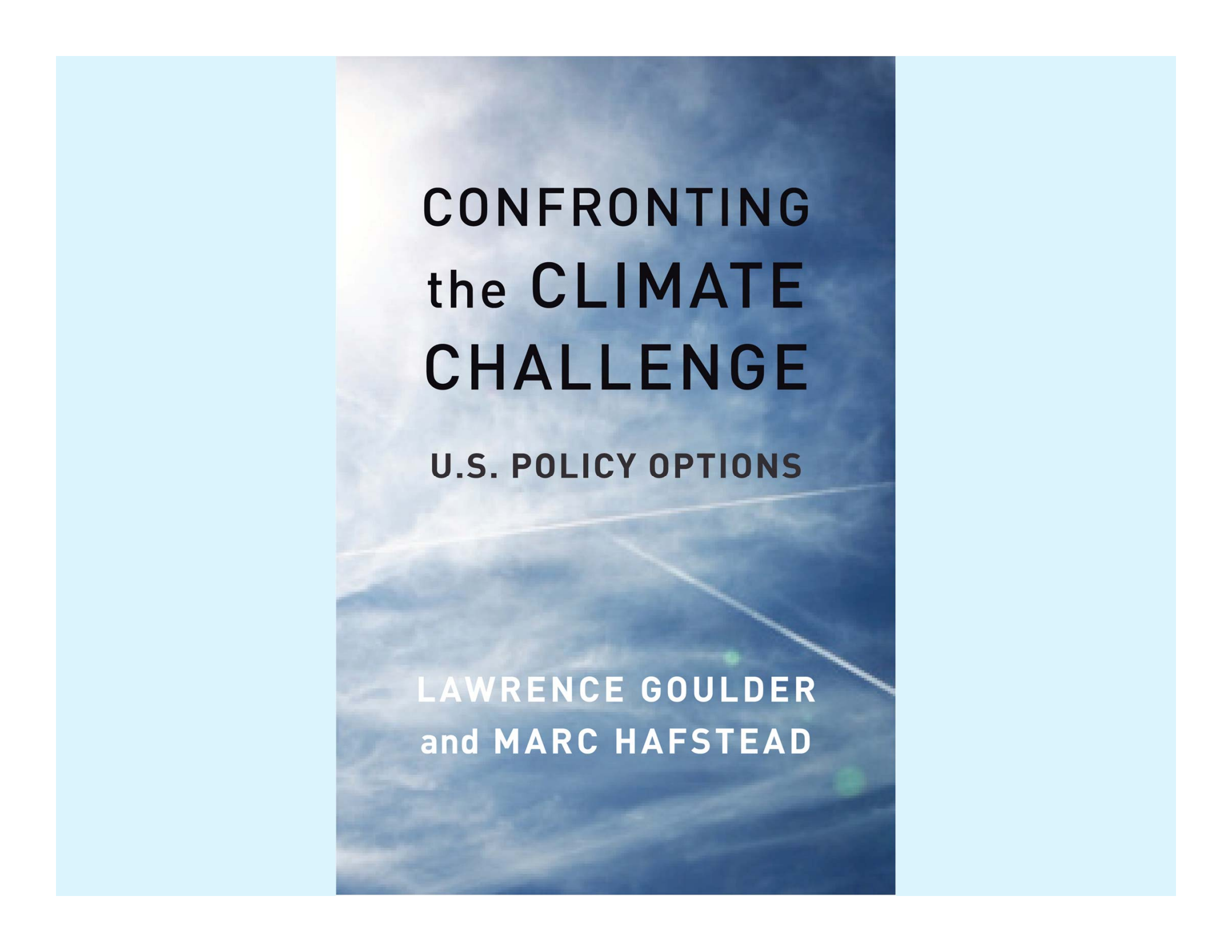
Impacts on agriculture and forestry (shifts in pests, changes in productivity)

Impacts on energy needs

Impacts on ecosystems

-- species loss

-- compromised ecosystem function (lost services)



**CONFRONTING**  
the **CLIMATE**  
**CHALLENGE**

**U.S. POLICY OPTIONS**

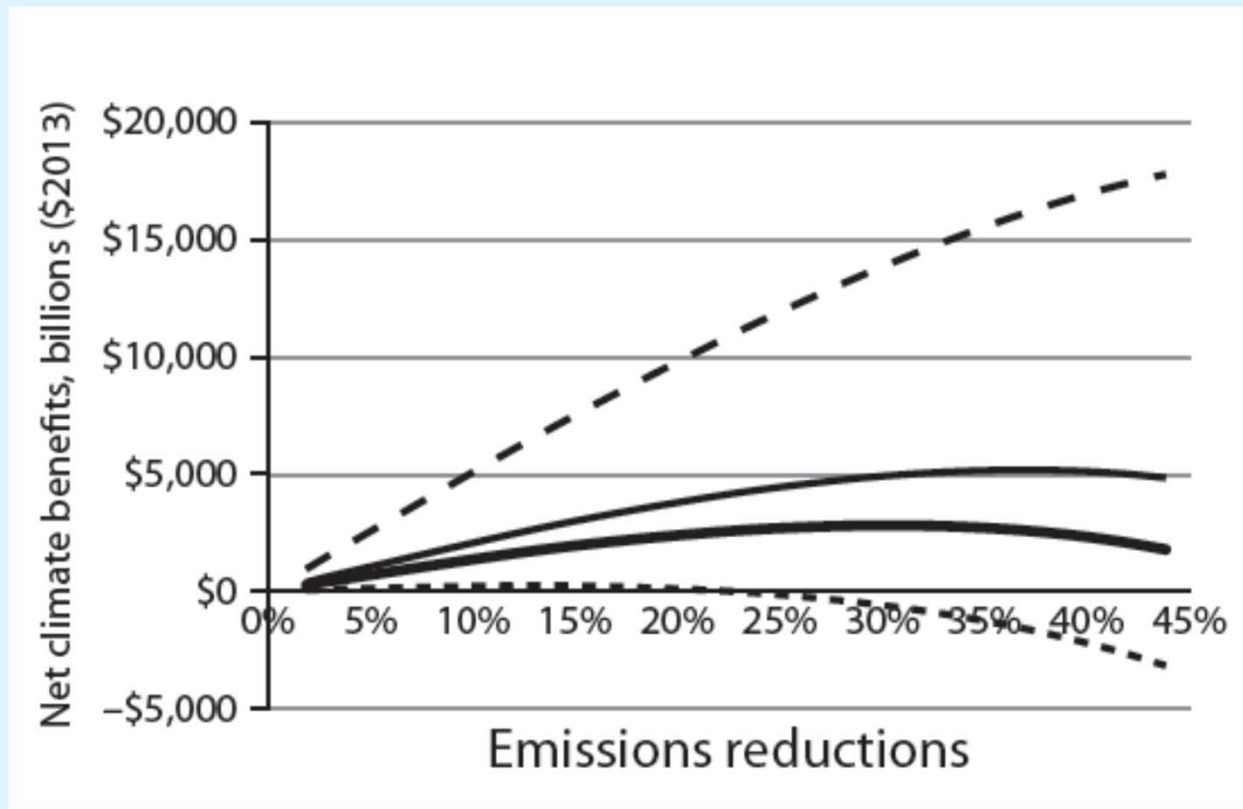
**LAWRENCE GOULDER**  
and **MARC HAFSTEAD**

# Cost-Effectiveness of a Carbon Tax

- Gives firms flexibility in ways to reduce emissions
- Promotes efficient allocation of emissions abatement across firms
- Yields efficient incentives for demand-side conservation (cf. technology mandates)
- Allows cost-reductions from revenue-recycling

**Do the Benefits Exceed the Costs?**

# Net Benefits by Recycling Option (health and other co-benefits not included)



Discount Rate for Calculating Soc. Cost of Carbon

----- 5% Average      ——— 3% Average  
———— 2.5% Average      - - - 3%, 95th percentile

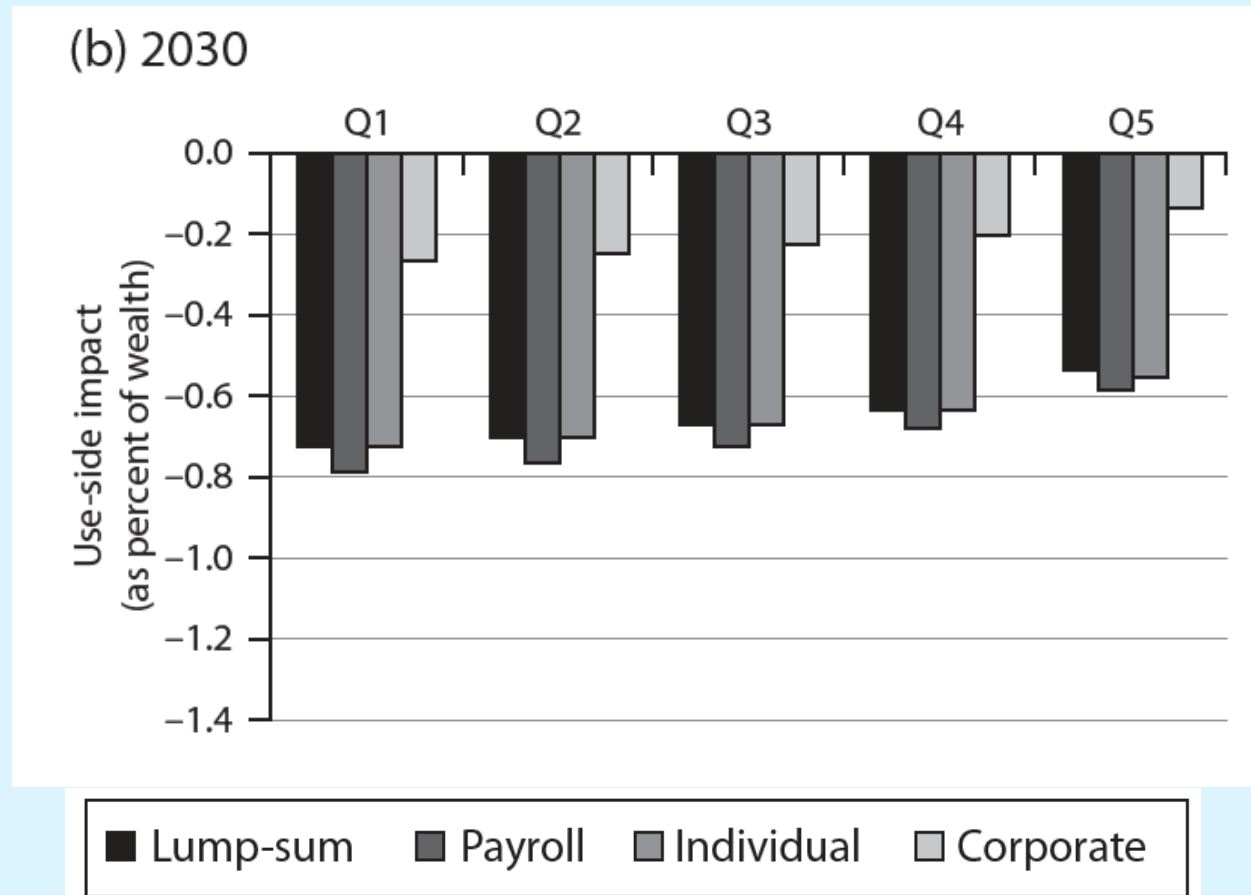
What about Fairness?

# Fairness across Households

Unacceptable relative (regressive) impact?

Unacceptable absolute impact on low-income households?

## Expenditure-Side Impacts of Carbon Tax by Quintile





# Fairness across Industries

## PERCENTAGE CHANGE IN PROFIT

INDUSTRY	(1)	(3)
	INDIVIDUAL INCOME TAX CUTS	TRADABLE TAX EXEMPTIONS <sup>a</sup>
Oil extraction	-0.1	-0.1
Natural gas extraction	-23.3	0.0 (8.9)
Coal mining	-45.7	0.0 (2.3)
Electric transmission and distribution	-7.6	0.0 (2.0)
Coal-fired electricity generation	-74.6	0.0 (4.5)
Other-fossil electricity generation	-18.3	0.0 (0.9)
Nonfossil electricity generation	63.4	63.1
Natural gas distribution	-8.1	0.0 (1.0)
Petroleum refining	-6.1	0.0 (0.7)
Pipeline transportation	-7.0	0.0 (0.7)
Mining support activities	-4.9	0.0 (0.8)
Railroad transportation	-3.4	0.0 (0.8)
Construction	-1.8	-1.9
Manufacturing <sup>d,g</sup>	-1.8	-1.9
Transportation <sup>e,g</sup>	-1.9	-2.0
Other industries <sup>f,g</sup>	-1.0	-1.0
All industries <sup>g</sup>	-1.1	-1.1 (22.7)
GDP costs <sup>i</sup>	0.45	0.50

# The Political Landscape

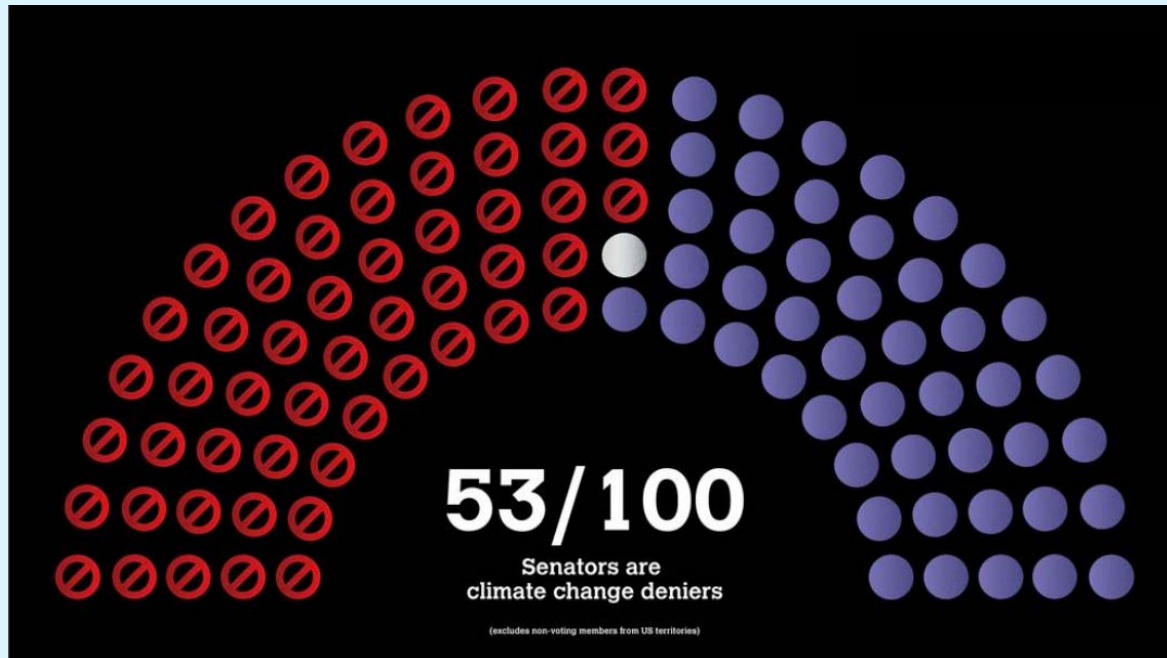
## Trump administration --

Last August: Formally notified UN that US intends to pull out of Paris agreement

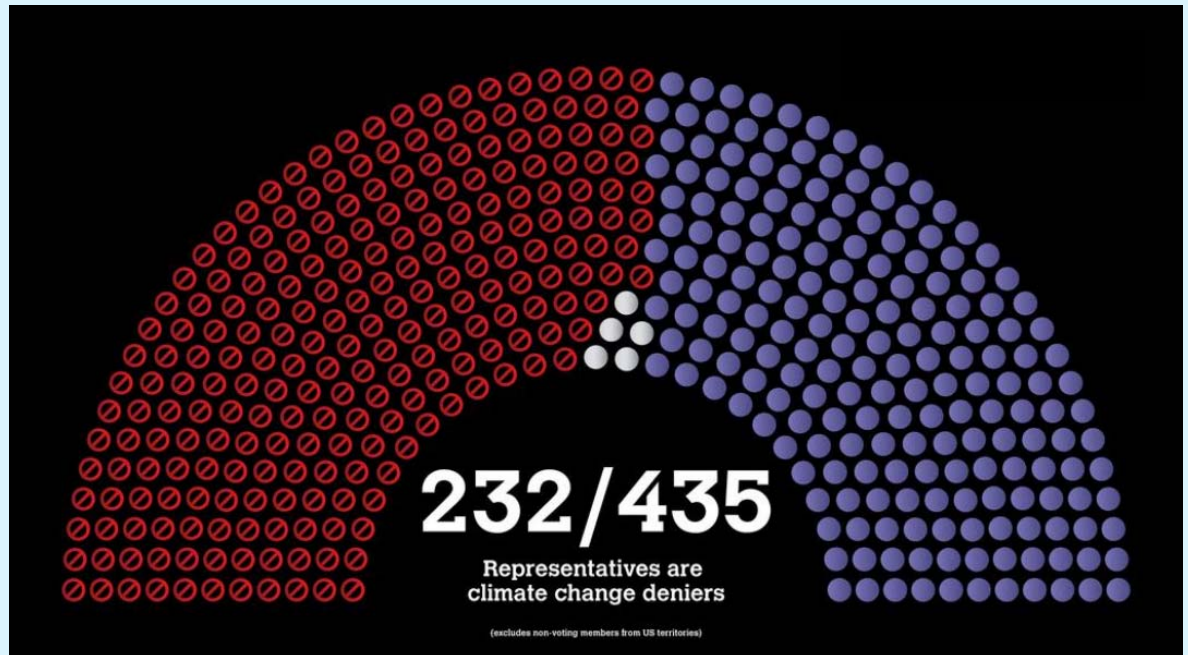
More recently: indicated it is open to “renegotiating” the agreement

Last Monday: EPA head Scott Pruitt announces plan to scuttle Obama Administration’s Clean Power Plan

# Senate

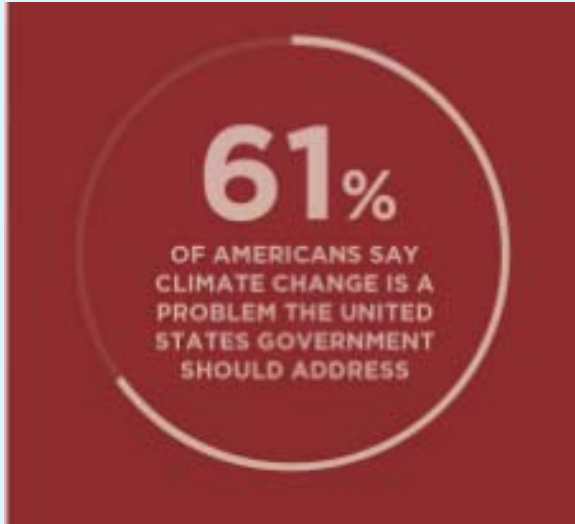


# House



# Positive Signs

# Grass-Roots Support




Democrats: 80%  
Independents: 63%  
Republicans: 43%



Source: August 2017 Poll by Associated Press-NORC Center and University of Chicago Energy Policy Institute

Energy and Environment

# Majority of Americans now say climate change makes hurricanes more intense

By [Emily Guskin](#) and [Brady Dennis](#) September 28 



A majority of Americans say that global climate change contributed to the severity of recent hurricanes in Florida and Texas, according to a new [Washington Post-ABC News poll](#). That marks a significant shift of opinion from a dozen years ago, when a majority of the public dismissed the role of global warming and said such severe weather events just happen from time to time.



CLIMATE  
LEADERSHIP  
COUNCIL

# THE CONSERVATIVE CASE FOR CARBON DIVIDENDS

How a new climate strategy can strengthen our economy,  
reduce regulation, help working-class Americans, shrink  
government & promote national security

**James A. Baker, III**

**Martin Feldstein**

**Ted Halstead**

**N. Gregory Mankiw**


**Henry M. Paulson, Jr.**

**George P. Shultz**

**Thomas Stephenson**

**Rob Walton**

February 2017





CLIMATE CHANGE

## Republican Senator Endorses 'Price on Carbon' to Fight Climate Change

Justin Worland / New Haven, Conn.

Updated: Sep 20, 2017 7:50 AM ET | Originally published: Sep 19, 2017



Sen. Lindsey Graham endorsed a "price on **carbon**" to fight climate change, breaking with much of the Republican Establishment.

"I'm a Republican. I believe that the greenhouse effect is real, that CO2 emissions generated by man is creating our greenhouse gas effect that traps heat, and the planet is warming," said Graham. "A price on carbon—that's the way to go in my view."



# 350 mayors adopt Paris climate accord after U.S. pulls out

*"The world cannot wait—and neither will we"*

BY ALISSA WALKER | @AWALKERINLA | JUL 11, 2017, 1:01AM EDT

## 14 States: We're on Track to Meet Paris Climate Goals, Despite Trump

The U.S. Climate Alliance members, including California and New York, represent more than a third of the U.S. population.



BY GEORGINA GUSTIN

[Follow @georgina\\_gustin](#)

SEP 21, 2017

U.S. Climate Alliance report: The 14 states are on track to hit a 24 to 29 percent cut in greenhouse gas emissions below 2005 levels by 2025, roughly in line with the U.S. Paris pledge that Trump has disavowed.



Govs. Jerry Brown of California, Andrew Cuomo of New York, and Jay Inslee of Washington, meeting here with former Secretary of State John Kerry, lead the U.S. Climate Alliance. Credit: U.S. Climate Alliance

*Will the carbon tax continue to gain adherents??*

## In Sum – The Case for the Carbon Tax Is...

*Very strong on economic grounds*

*Defensible on fairness grounds*

*Unsettled on political grounds*