## Private Governance

EES 3310/5310
Global Climate Change
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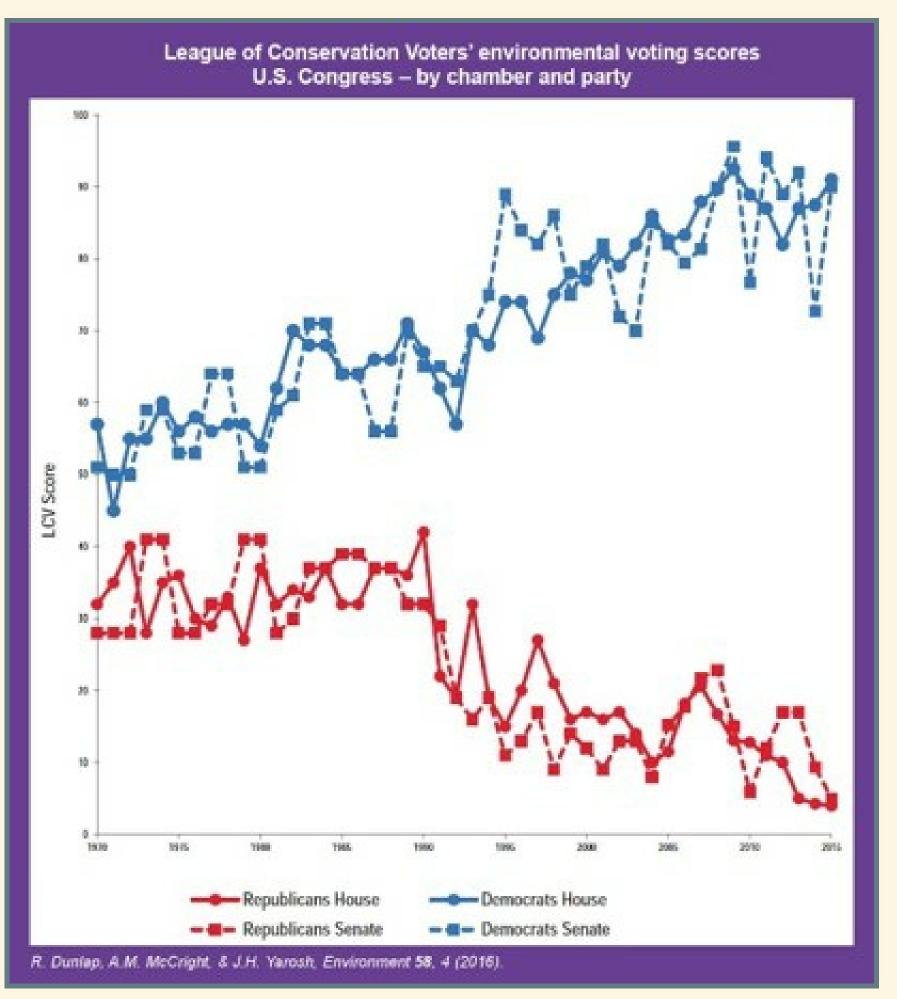
# Obstacles to Public Governance

# Tax Code versus EPA Regulations



Photo credit: Michael Gerrard

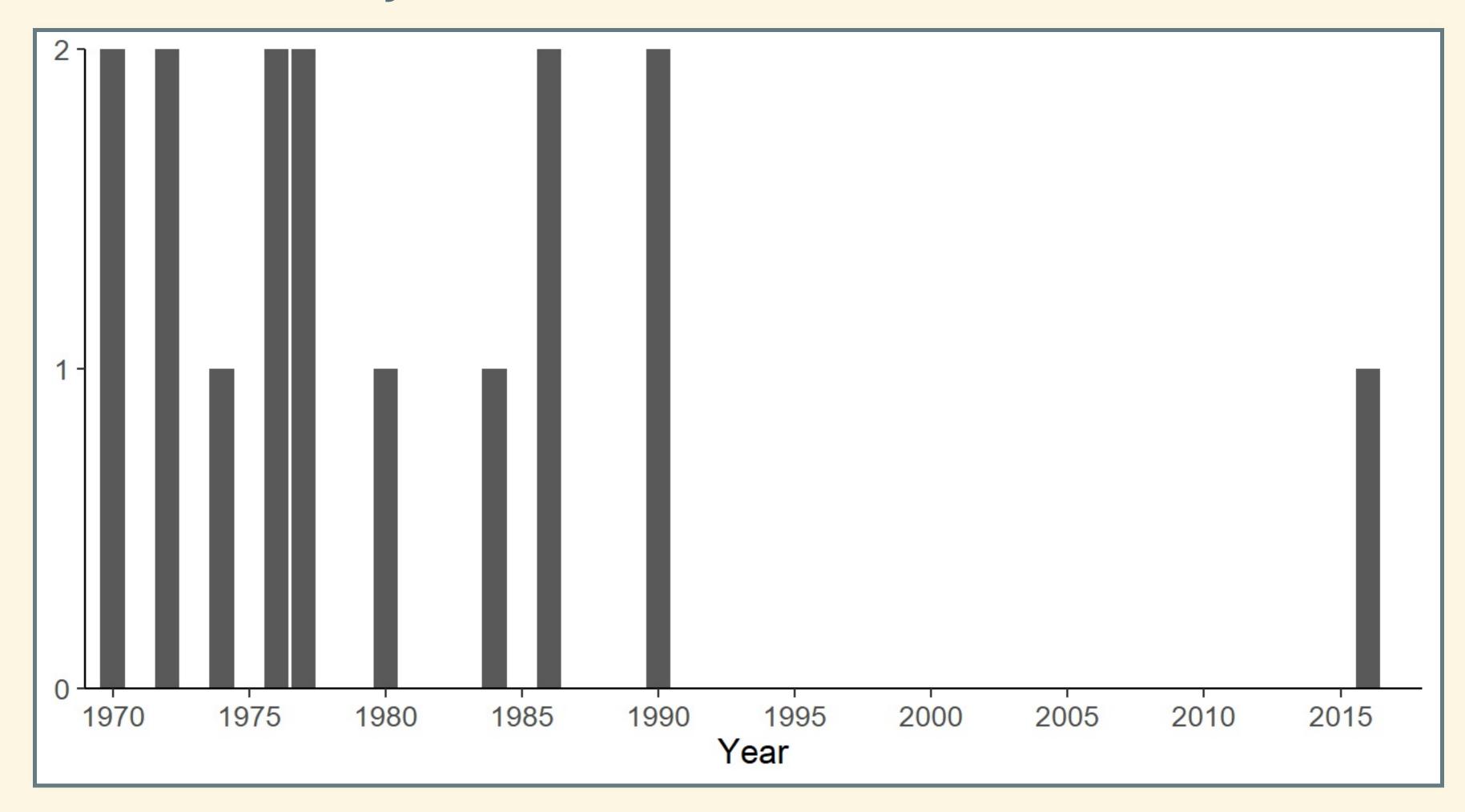
#### Political Polarization in the U.S.



#### What Does the Public Think?

- "Record high in U.S. say big government is greatest threat" (Gallup, 2013)
- 72% say "big government" is a greater threat than big business or big labor
  - 92% of Republicans, 56% of Democrats

# Major Environmental Laws



#### Psychological Heuristics

Solution aversion:

If a solution is ideologically unacceptable, deny the problem exists.

Motivated reasoning:

Desire to reach a certain conclusion leads to biased and selective examination of evidence

• Cultural cognition:

Credibility of expertise depends on perception of similar values, norms.

## Problems with Policy Approach So Far

- Focus on best solutions (e.g., carbon tax)
- Emphasis on how well it will work when put into practice
- Neglects how hard it is to get government to adopt best solutions
  - "Political opportunity cost"
- Second-best or third-best may be easier to enact quickly
  - A good plan violently executed now is better than a perfect plan executed next week
  - —Gen. George Patton, attrib.

# Private Governance

#### Private Environmental Governance

- Actor:
  - Government → Private organization
- Action:
  - Law, policy → Private initiative

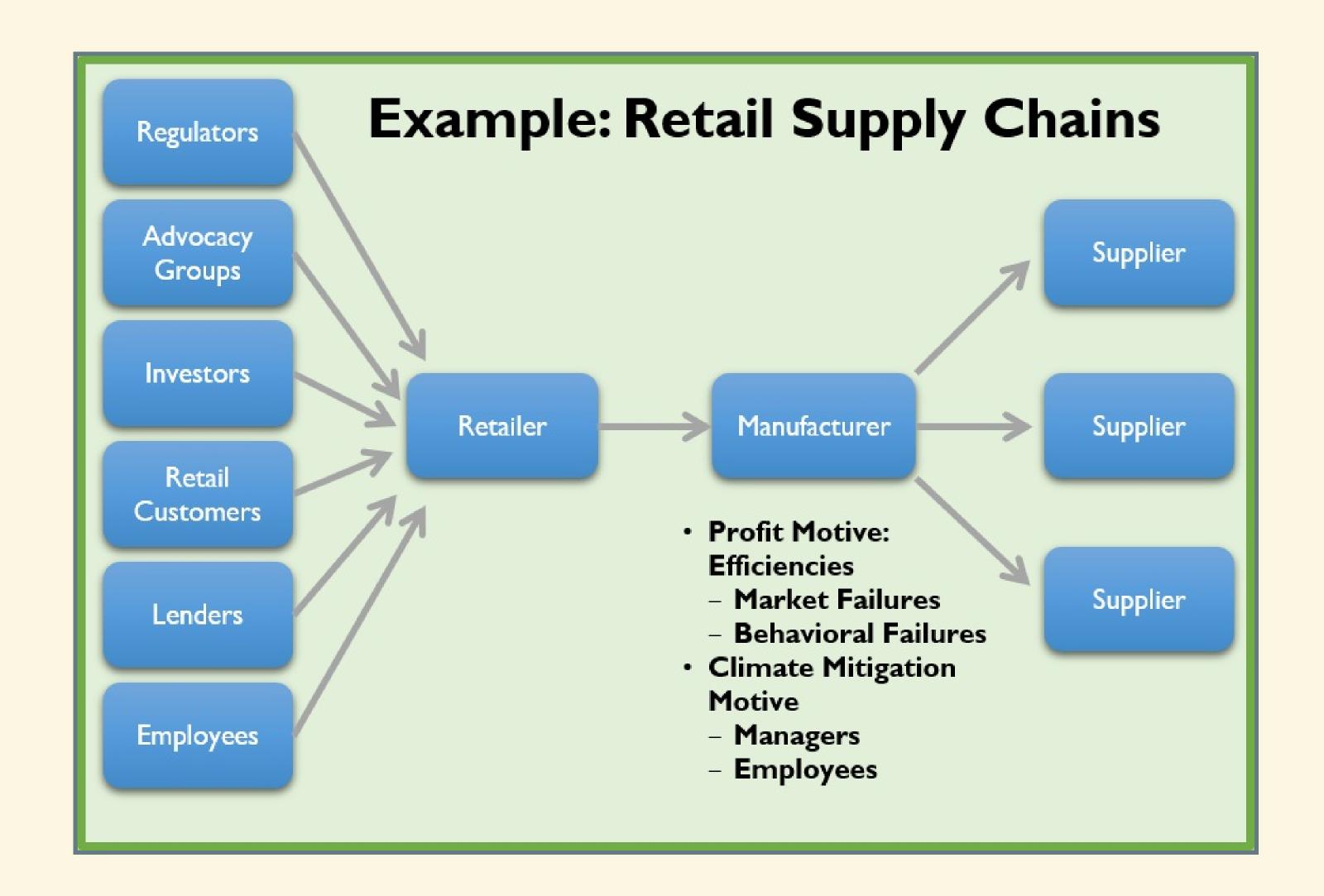
### Examples of Private Environmental Governance

#### Institutions

- Marine Stewardship Council (10% of all fish sold)
- Forest Stewardship Council (14% of all lumber & wood products)
- Carbon Disclosure Project

#### Practices

- Supply-Chain contracting requirements
  - Walmart & Target regulate toxic chemicals far more strictly than the government does.
- Internal carbon taxes
  - 517 companies, including Microsoft, Novartis, Yale University,



#### Motives

- Self-interest
  - Financial gains from efficiency
  - Third-party pressure
    - Value of reputation
- Beyond self-interest
  - Support for climate action
  - Sense of responsibility (individual & org)

## Corporate Initiatives

- Carbon Disclosure Project (CDP)
  - Used by >800 investors with ~\$100 Trillion (pension funds, etc.)
- Participation:
  - 6.1% reductions in 2012 (~500 million tons CO<sub>2</sub>e)
- Around half of S&P 500 have set climate or clean-energy targets

## Specifics {#}

- WalMart pledged 1 billion tons CO<sub>2</sub>e emissions cuts through 2030
- Microsoft announced that it is now 100% carbon neutral
- In 2017 Shell oil pledged 50% reduction of emissions by 2050
  - Includes emissions from "energy products" it sells (oil, etc.)

## Principles of Private Governance Analysis

Technical Potential

Reduction if everyone takes action

Behavioral Plasticity

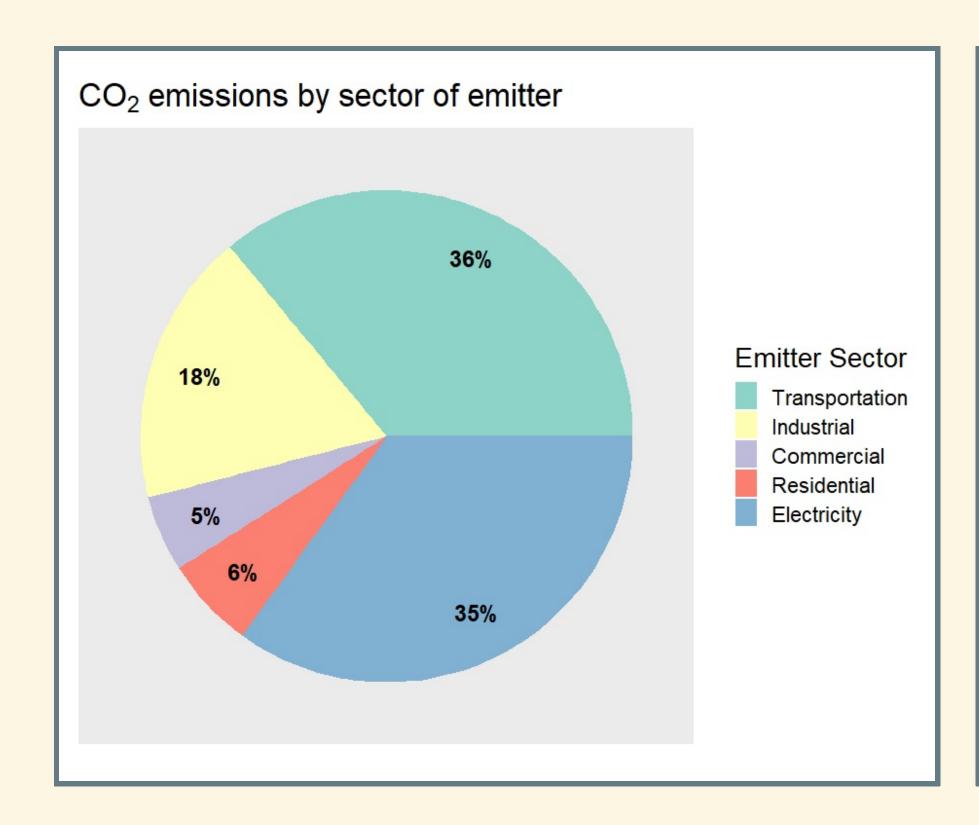
What fraction of actors would take action with appropriate incentives?

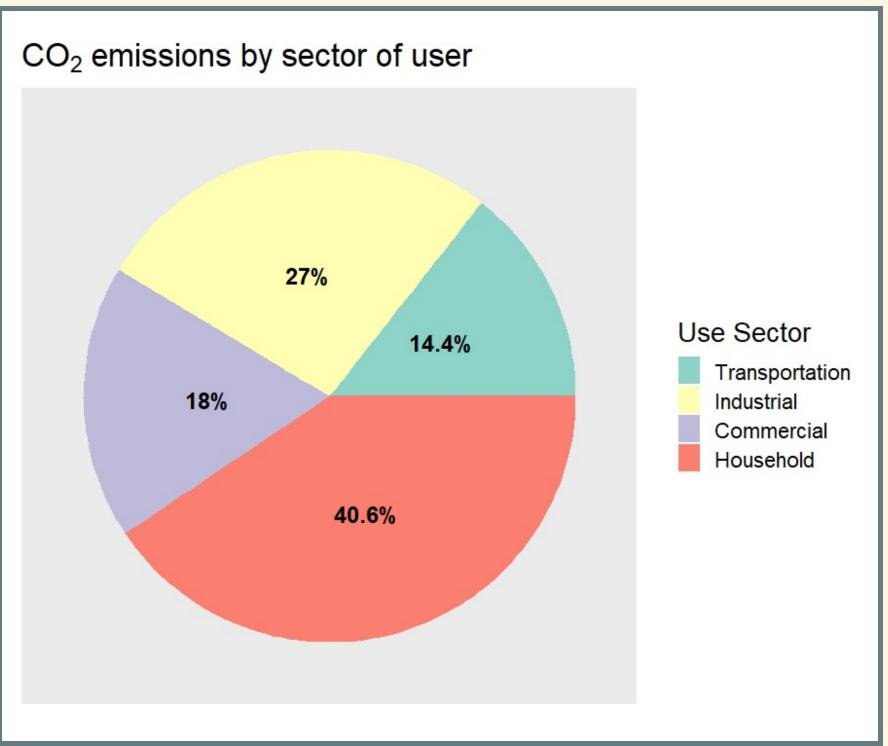
Policy Plasticity

Potential for public or private actors to provide incentives

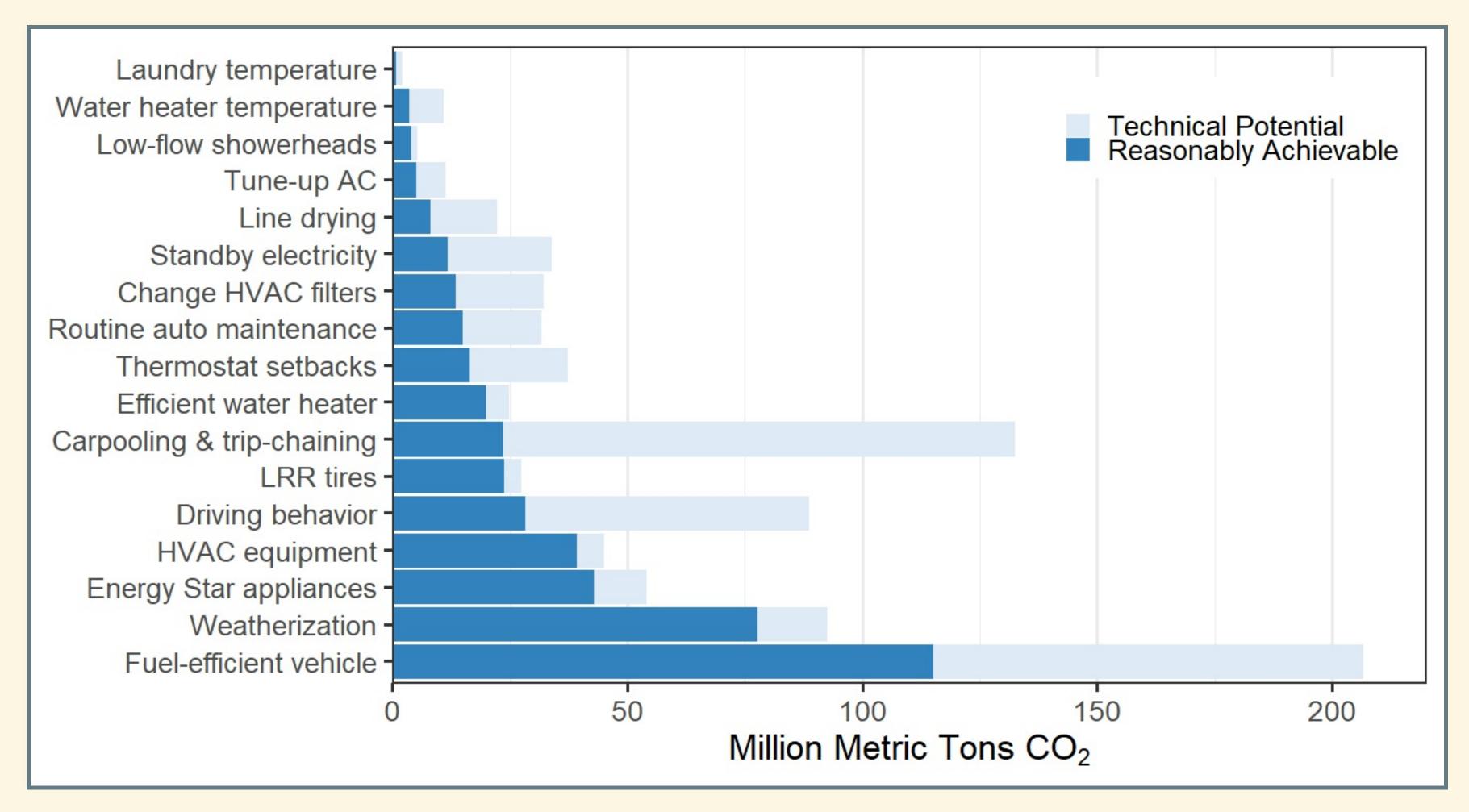
# Household Sector

# Who Emits CO<sub>2</sub>?

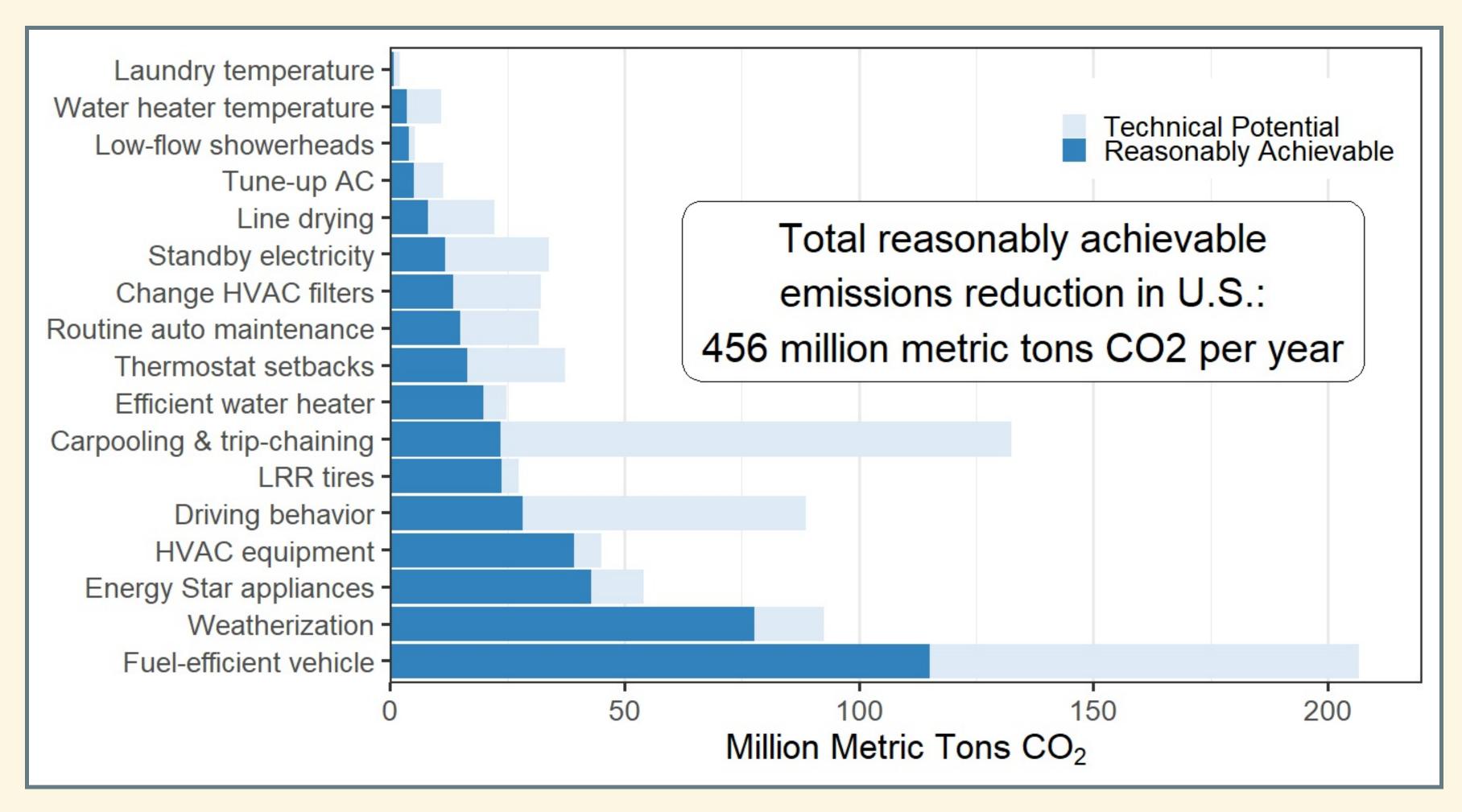




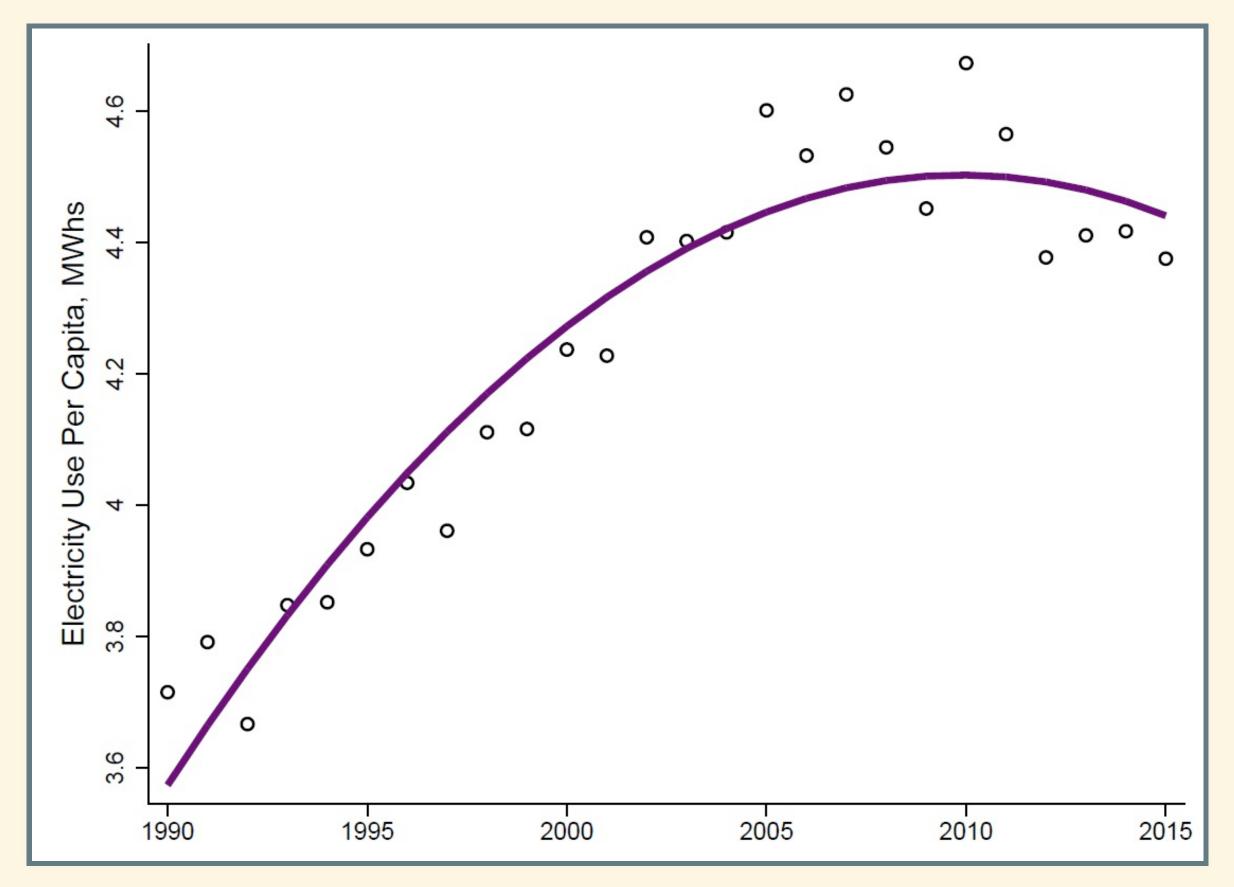
## Behavioral Wedge Analysis



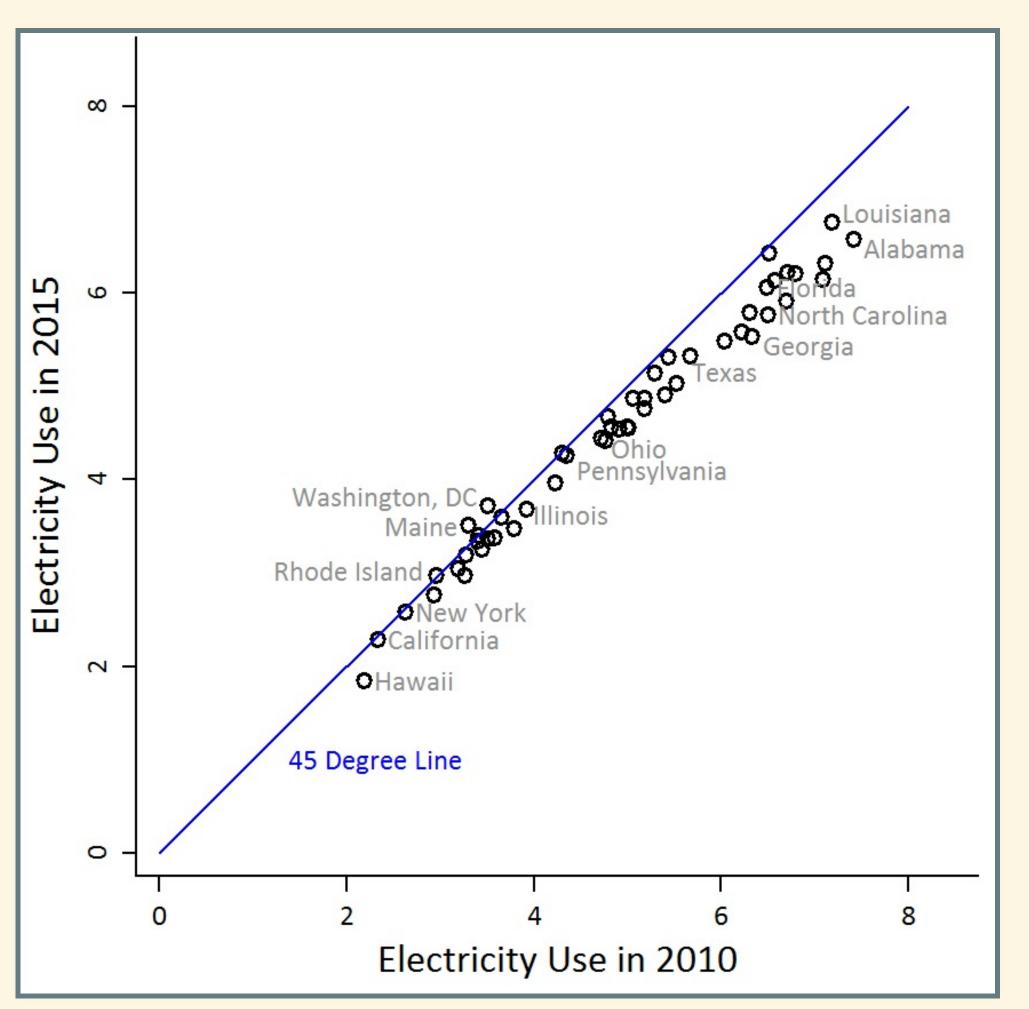
## Behavioral Wedge Analysis



## Recent Developments: Household Electricity Use



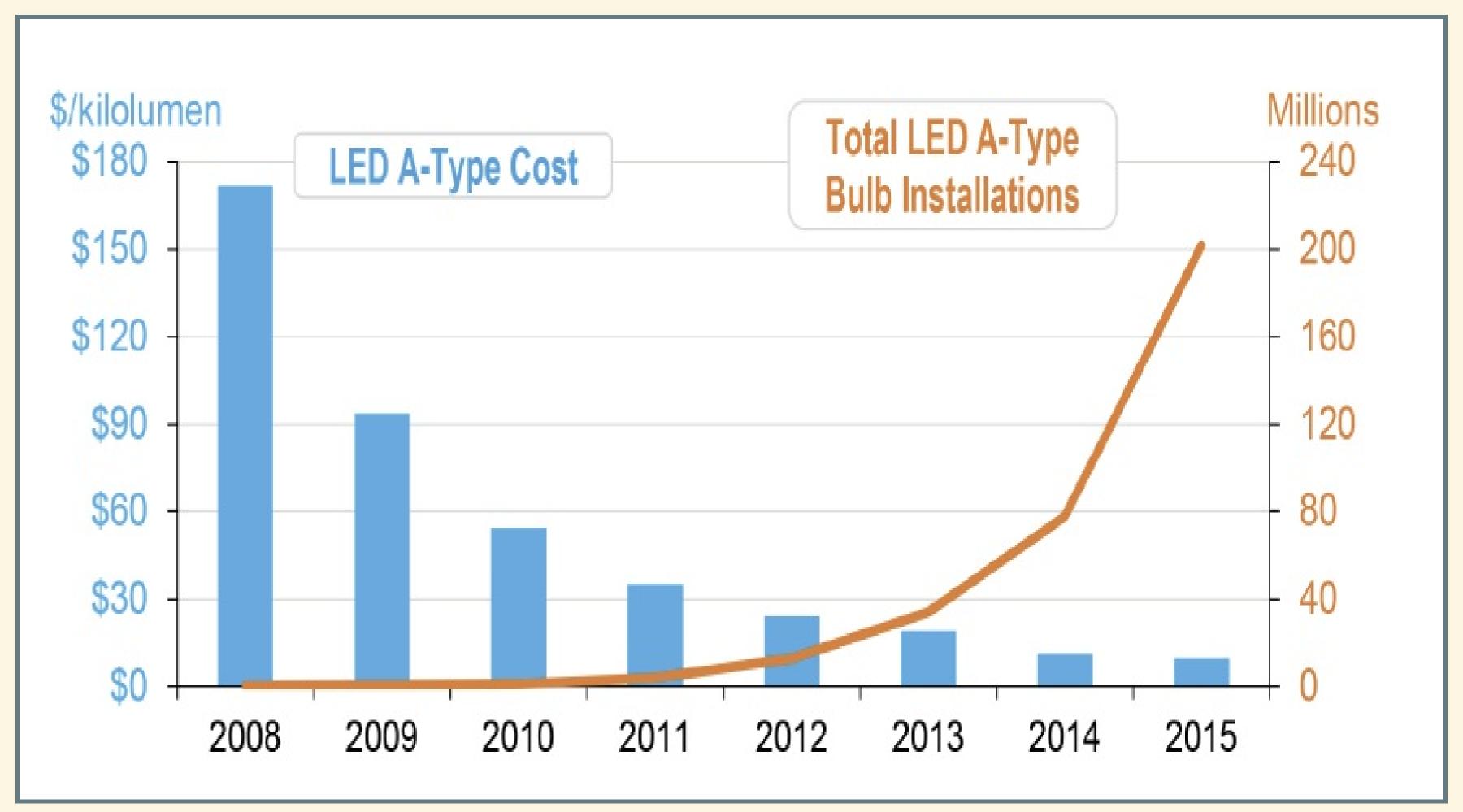
### Reductions in 48 States



#### Private Governance

- 2007: WalMart sets and exceeds goal of selling 100 compact fluorescent light bulbs in one year.
  - Meets goal in 10 months
- 2011: WalMart launches competition among suppliers:
  - Best high-quality LED bulb under \$10: We will help you sell hundreds of millions!
- 2013: WalMart teams up with TCP to launch 60W equivalent bulb for less than \$9
- Replacing 5 most used bulbs in your house with LEDs will save around \$75/year

## LED Light Bulb Sales



# Conclusions

#### Conclusions

- Private governance can likely reduce global emissions by more than 1 billion tons per year rapidly
- This isn't even close to solving the whole climate problem
- But it can help considerably, and buy time to enact other measures before it's too late.