Copenhagen and the US

- US delegation managed to look forthcoming without alienating Congress
- UNFCCC process has little effect on Congress and US domestic policy more broadly
  - » Other countries are finally learning that the President doesn't control what the US can implement.
- Dysfunction illustrates value of smaller negotiating forum, e.g. Major Economies Forum

What did we agree to?

- McKibbin, Morris, and Wilcoxen (2010) use the G-Cubed model to compare efforts implicit in the agreement.
- Stylized policy: Economy-wide price on carbon rising at 4% real. Solved for initial price in 2012 to hit 2020 target.
  - NOT A POLICY PREDICTION.
- Modeled least stringent target proposed
- Target and reductions apply only to domestic fossil energy-related carbon.
  - No offsets, emissions trading, non-CO_2 gases, or land use

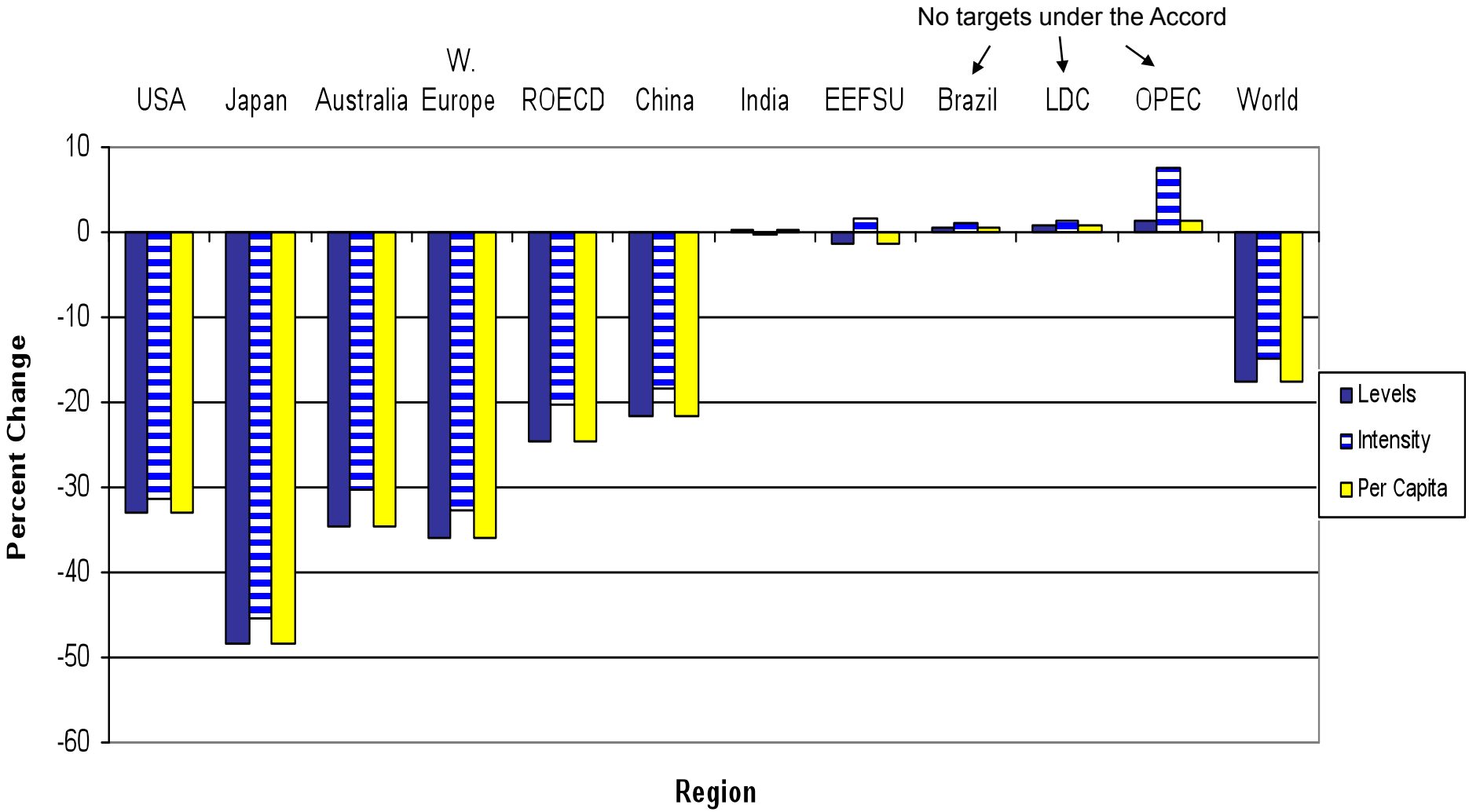
Copenhagen Target for 2020 as a Percent Change Relative to…

Region in G-Cubed Model	1990 Emissions	2000 Emissions	2005 Emissions	BAU Projections for 2020
USA	-1	-15	**-17**	-33
Japan	**-25**	-37	-39	-48
Australia	30	**-5**	-18	-35
Europe	**-20**	-24	-27	-36
Rest of OECD	10	-7	**-17**	-25
China	496	350	146	-22
India	346	159	120	0.4
EEFSU	**-15**	28	18	-1.3

Source: W. McKibbin, A. Morris, and P. Wilcoxen, "Comparing Climate Commitments: A Model-Based Analysis of the Copenhagen Accord," Brookings Institution, 2010. Numbers in green report each country's choice of target formulation.

Copenhagen Accord Outcomes for 2020

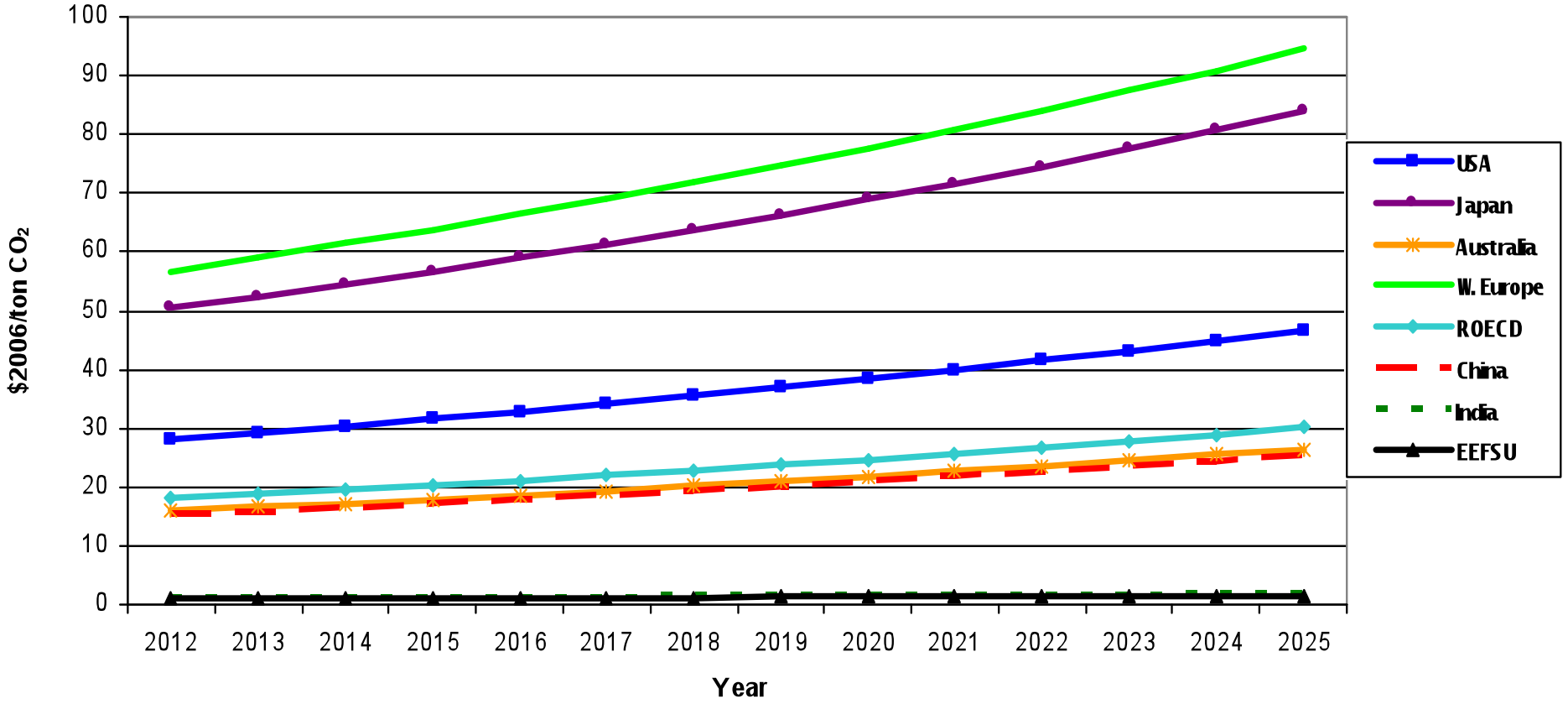
Figure 3: Percent Change in 2020 Emissions Relative to Baseline



Source: W. McKibbin, A. Morris, and P. Wilcoxen, "Comparing Climate Commitments: A Model-Based Analysis of the Copenhagen Accord," Brookings Institution, 2010

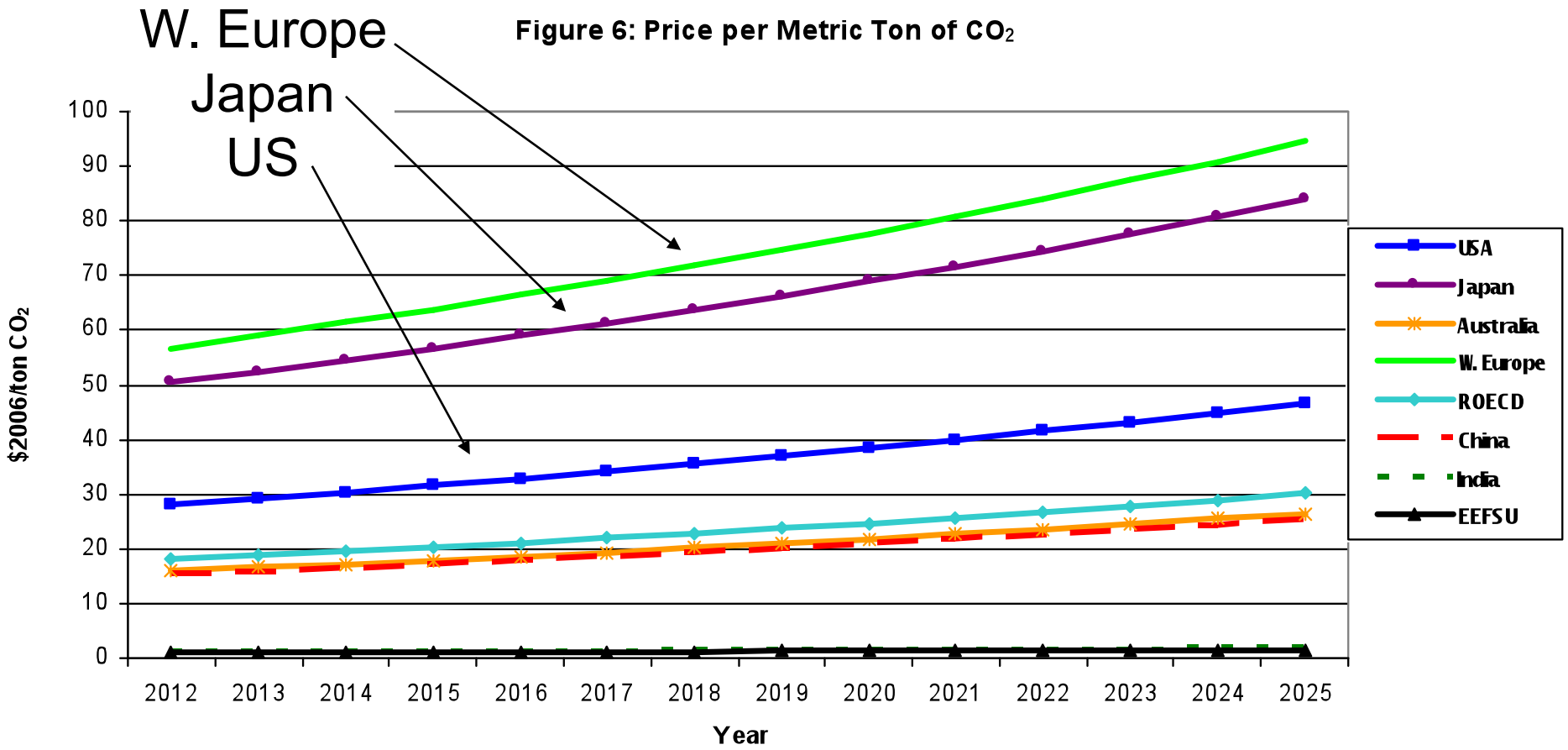
Projected Price Signals Necessary to Achieve Copenhagen Accord Targets (Fossil Carbon)

Figure 6: Price per Metric Ton of CO_2



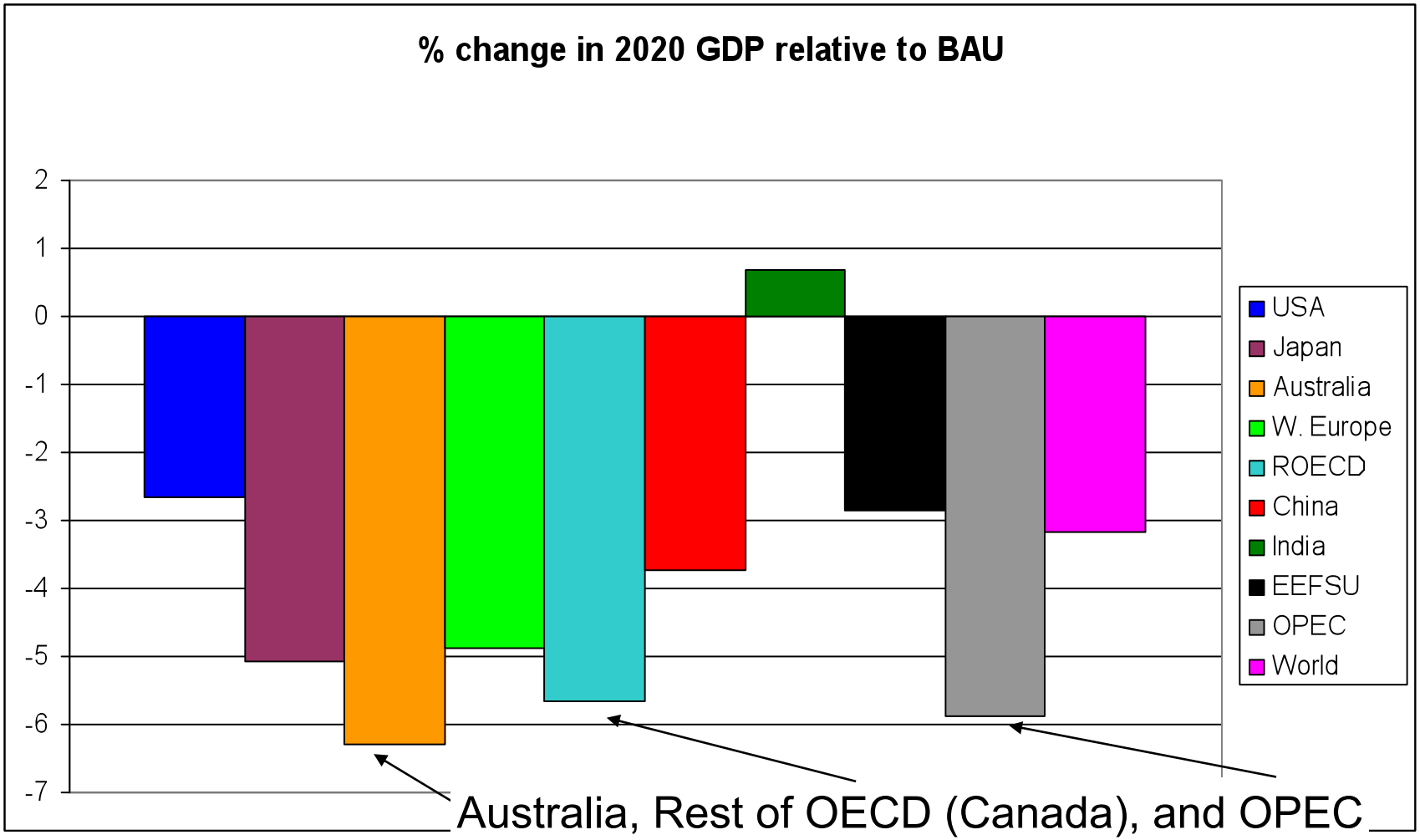
Source: W. McKibbin, A. Morris, and P. Wilcoxen, "Comparing Climate Commitments: A Model-Based Analysis of the Copenhagen Accord," Brookings Institution, 2010

Note that the top three countries by carbon price…



Source: W. McKibbin, A. Morris, and P. Wilcoxen, "Comparing Climate Commitments: A Model-Based Analysis of the Copenhagen Accord," Brookings Institution, 2010

…are not the top three by largest GDP losses.



Source: W. McKibbin, A. Morris, and P. Wilcoxen, "Comparing Climate Commitments: A Model-Based Analysis of the Copenhagen Accord," Brookings Institution, 2010

Conclusions from Modeling Analysis

- "Comparable effort" remains elusive.
- The effort and burden of the agreement are importantly different.
- Economic spillovers will matter more to some countries than their own commitments.

Prospects for Cancun

- More non-binding discussion.
- Other countries can attribute their stalled domestic climate policy to lack of action by US, but that's only part of it.
- Near term progress may be confined to "clean energy" cooperation and, maybe, REDD.

Prospects for US Domestic Climate Policy in the Short Run

-

What happened to cap-and-trade?

- House passed Waxman-Markey in June 2009
- Senate version passed Environment Committee
- Senate leadership counted insufficient votes (<60) so pulled the plug for this session of Congress
  - » but not before considering proposals for limited-scope Power Sector Only approach.
- Contributors to the demise of climate policy in the Senate: Recession; 10% unemployment; marketing failures; intractable distributional squabbles; pending tough elections and too many competing priorities for the Democrats; recession

Prospects for US Domestic Climate Policy in the Medium Run

- Clean Air Act Regulation
- Federal Dogs and Cats
- State/Regional Initiatives
- Dark Horse: Republican-Sponsored Market-Oriented Legislation
- Less likely: Federal Renewable Electricity Standard

Clean Air Act Regulation of GHGs

- Covers Mobile Sources and Stationary Sources
- Standards for new vehicles finalized March 2010
- *What happens with stationary sources?*
- Tailoring rule sets out targeted sources

- Richardardson N., A. Fraas, and D. Burtraw, "Greenhouse Gas Regulation under the Clean Air Act: Structure, Effects, and Implications of a Knowable Pathway," Resources for the Future Discussion Paper 10-23, April 2010
- Parker, L. and J. McCarthy, "Climate Change: Potential Regulation of Stationary Greenhouse Gas Sources under the Clean Air Act," Congressional Research Service, R40585, 2009.

What CAA authorities will EPA use?

1. National Ambient Air Quality Standards, Sections 108-110; Federal standard with state implementation
2. International Emissions, Section 115
3. New Source Performance Standards, Section 111; Emissions standards by source category
4. Hazardous or Toxic Air Pollution, Section 112
5. Prognosis: Litigation and more litigation

Federal Dogs and Cats

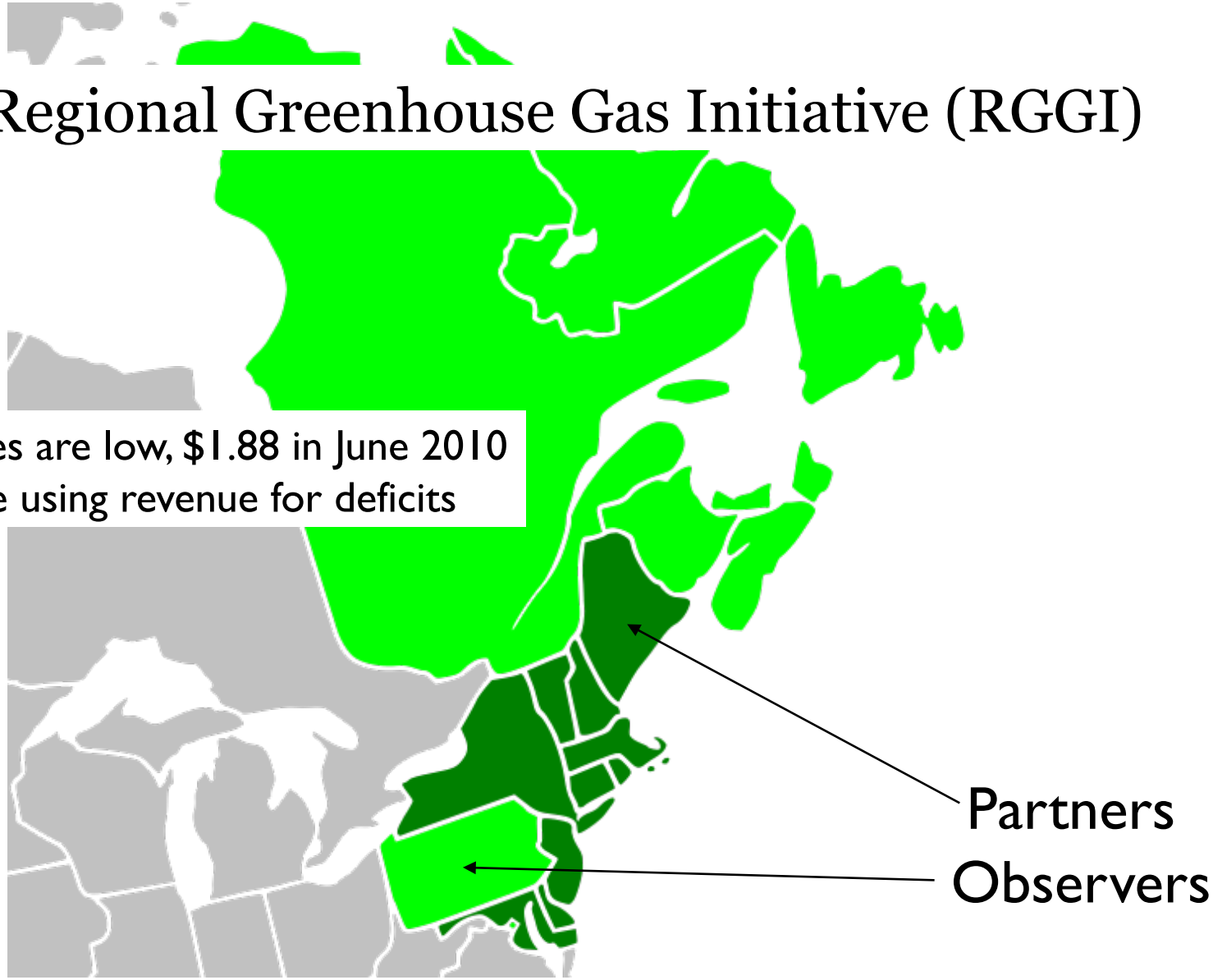
- Provisions in stimulus spending law and more on the way
- Home Star—tax subsidies for home energy efficiency retrofits
- Appliance standards: AC units, furnaces, outdoor lighting
- Subsidies for electric cars and renewables
- Subsidies for nuclear power research and development
- Actual impact on GHG emissions unclear.

State and Regional Initiatives

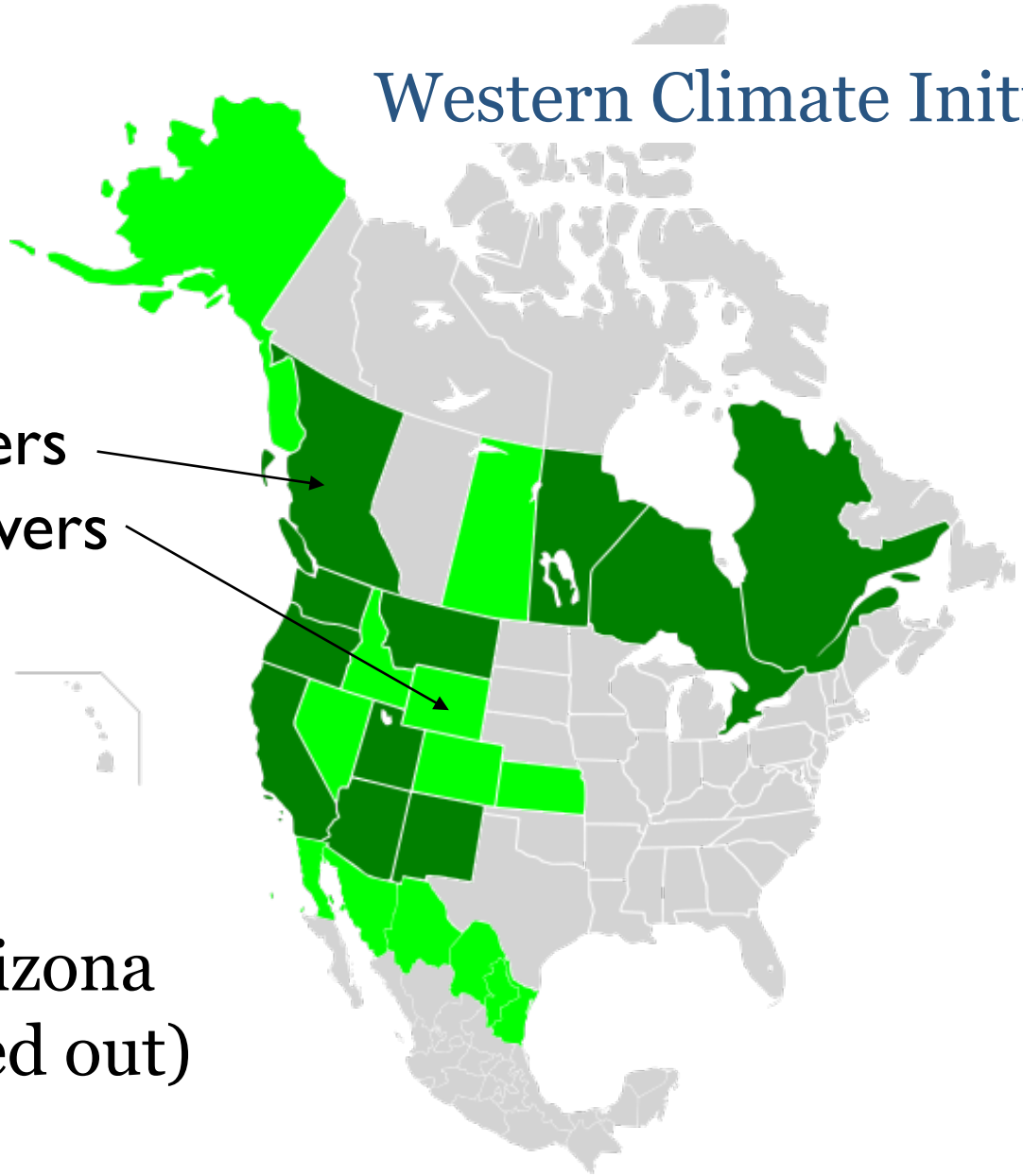
- California AB32
  - » Mandates control of greenhouse gases in California
  - » Remains controversial
  - » Repeal proposition, AB23, is on the ballot this fall
  - » Debate centers around employment effects of the program

Regional Greenhouse Gas Initiative (RGGI)

- Allowance prices are low, $1.88 in June 2010
- Some states are using revenue for deficits



Western Climate Initiative



(Arizona pulled out)

Dark Horse Republican Bill

- Proposition: Republicans need to close out climate issue before 2012 Presidential election and can no longer be the party of "no"
- Solution: Core group of center-right market-oriented Republicans put together a bill that Democrats can't refuse
- Challenge: Painted into a rhetorical corner with "cap-and-tax" and "government takeover of the energy sector"

Conclusion

- Climate policy is and will continue to be messy and n^{th} best
- Policies and points of debate are challenging to model
  - » Spatial resolution, e.g. state level
  - » Employment
  - » Distributional effects across income categories and sectors
  - » Specific durables, renewable technologies
  - » Effects of exacerbated deficits from tax expenditures
- Analysis of these policies is valuable, if inelegant