



No State Left Behind: A Better Approach to Climate Policy

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Fair and effective climate policy:

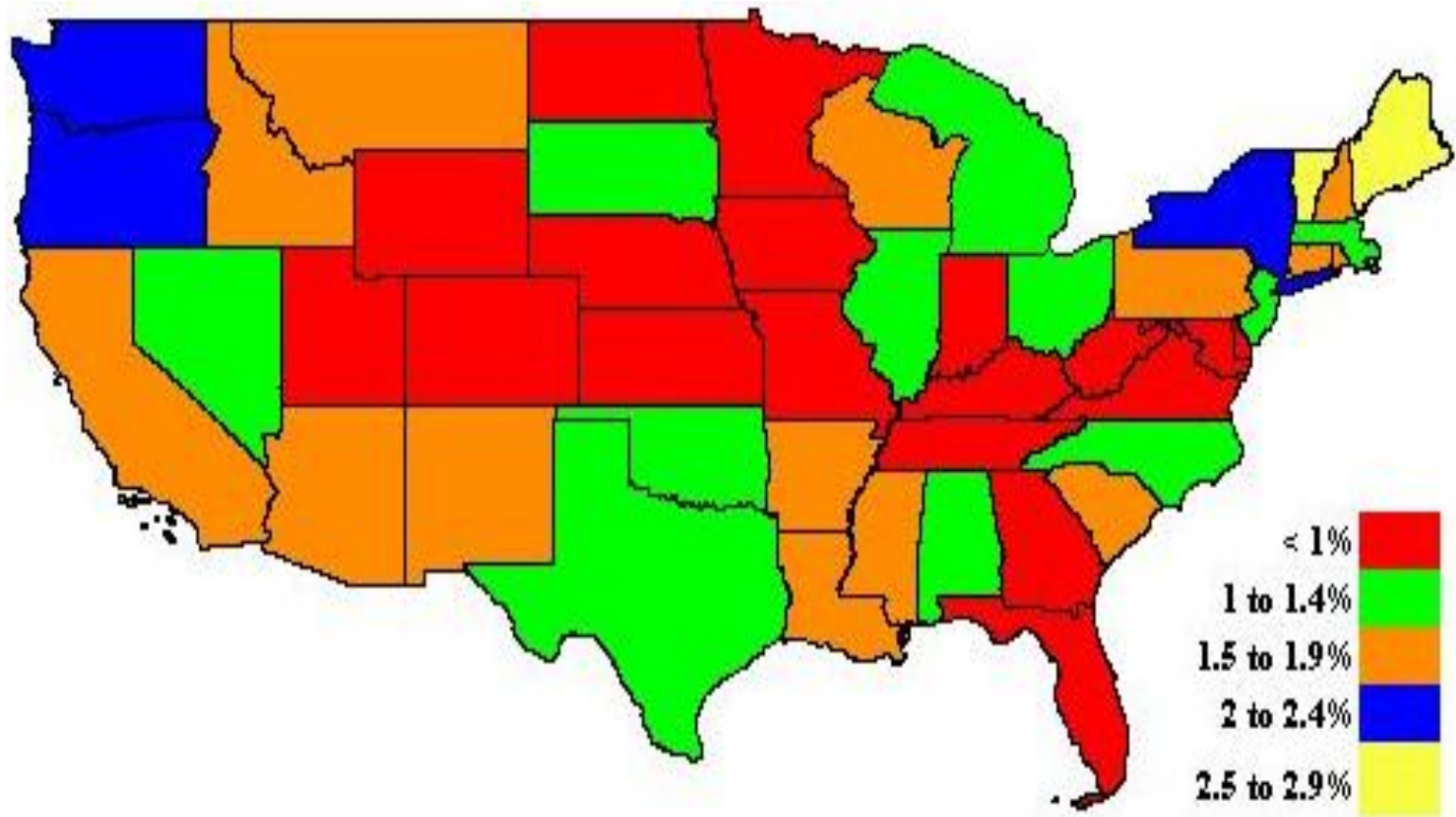
- Puts a price on carbon emissions
- Uses the resulting revenues wisely

Fair and effective climate policy:

- \$75 per metric ton carbon price or fee in 2020
- 85 percent of tax returned to households as rebate
- U.S. median 4-person household pays about \$3,300, or 3.8% of income (poorest households pay \$2,200, richest households pay \$5,200)
- Every 4-person household receives an annual rebate check of about \$4,500
- 80% of U.S. households receive a net dividend
- Carbon revenues total \$402 billion, \$60 billion is left over after rebates (of which \$12 billion is spent on energy efficiency improvements reducing average residential electricity consumption by 15%)
- U.S. greenhouse gas emissions reduced by 17%

Fair and effective climate policy:

\$75/mT CO₂ in 2020: Median household net dividend as a share of income



Note: Values rounded to the nearest tenth of a percent. Median household net dividend as a share of income is 1.3 percent for Alaska, 1.0 for Hawaii, and 0.6 for the District of Columbia.

Fair and effective climate policy:

\$75/mT CO₂ in 2020: States with highest and lowest net dividend

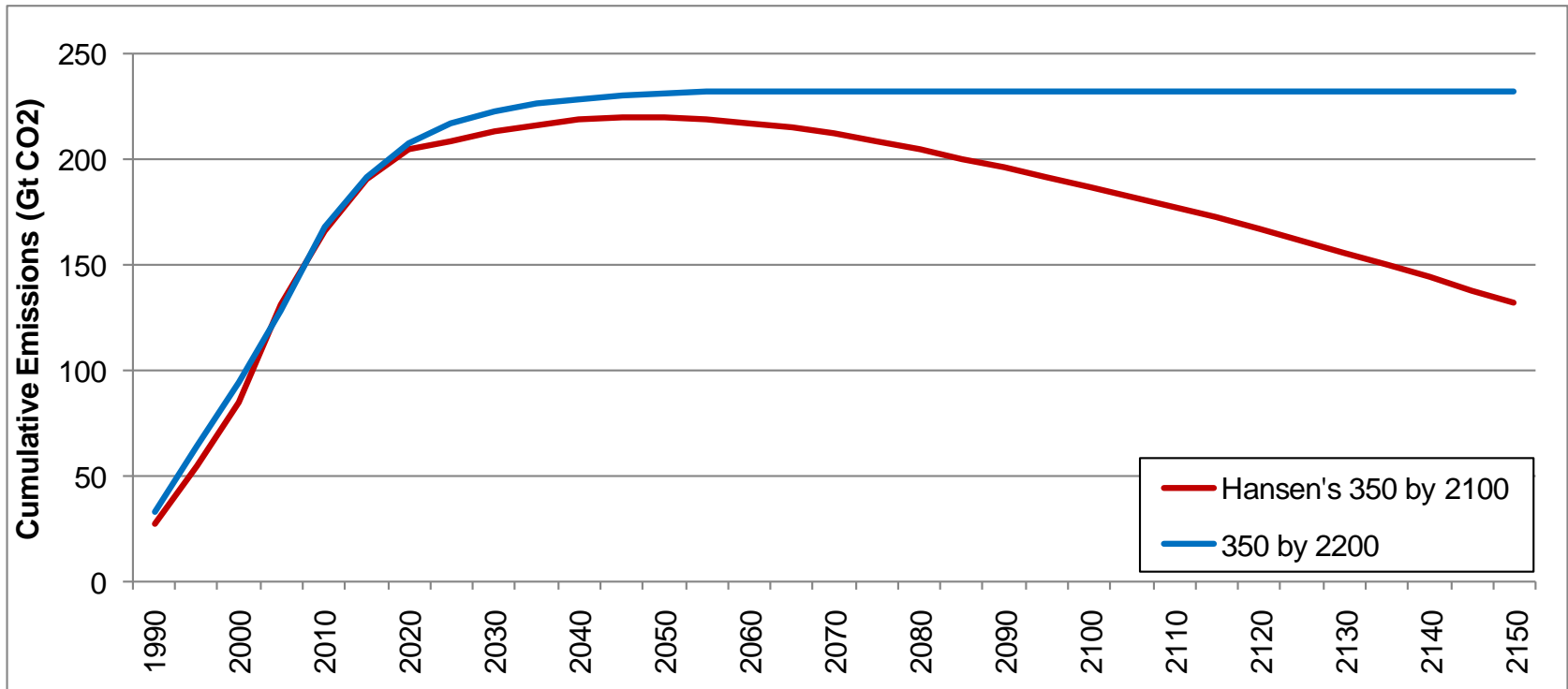
Median Household Net Dividend (2009\$)				...as a Share of Household Income			
Vermont	\$2,296	Wyoming	\$473	Vermont	2.6%	Virginia	0.5%
New York	\$2,199	Virginia	\$490	Maine	2.5%	Minnesota	0.5%
Maine	\$2,025	North Dakota	\$525	New York	2.4%	Wyoming	0.5%
Oregon	\$1,863	Minnesota	\$541	Oregon	2.2%	Maryland	0.6%
Washington	\$1,851	Dist. Columbia	\$558	Washington	2.1%	Dist. Columbia	0.6%
New Hampshire	\$1,769	Indiana	\$602	Wisconsin	1.9%	West Virginia	0.6%
Rhode Island	\$1,690	West Virginia	\$603	Montana	1.9%	North Dakota	0.7%
Connecticut	\$1,614	Kansas	\$603	Rhode Island	1.8%	Kansas	0.7%
California	\$1,591	Maryland	\$623	Mississippi	1.8%	Indiana	0.7%
Massachusetts	\$1,435	Missouri	\$639	South Carolina	1.8%	Nebraska	0.8%

Seven questions for a good climate policy:

- Are the emissions targets low enough to do the job?
- Will price ceilings interfere with emission reductions?
- Are large-scale investments made in energy efficiency?
- Will a significant share of revenues be rebated to households?
- Are emission permits given away?
- Is there a strategy for retiring coal plants?
- Is green investment directed toward the states most affected by climate policy?

Are the emissions targets low enough to do the job?

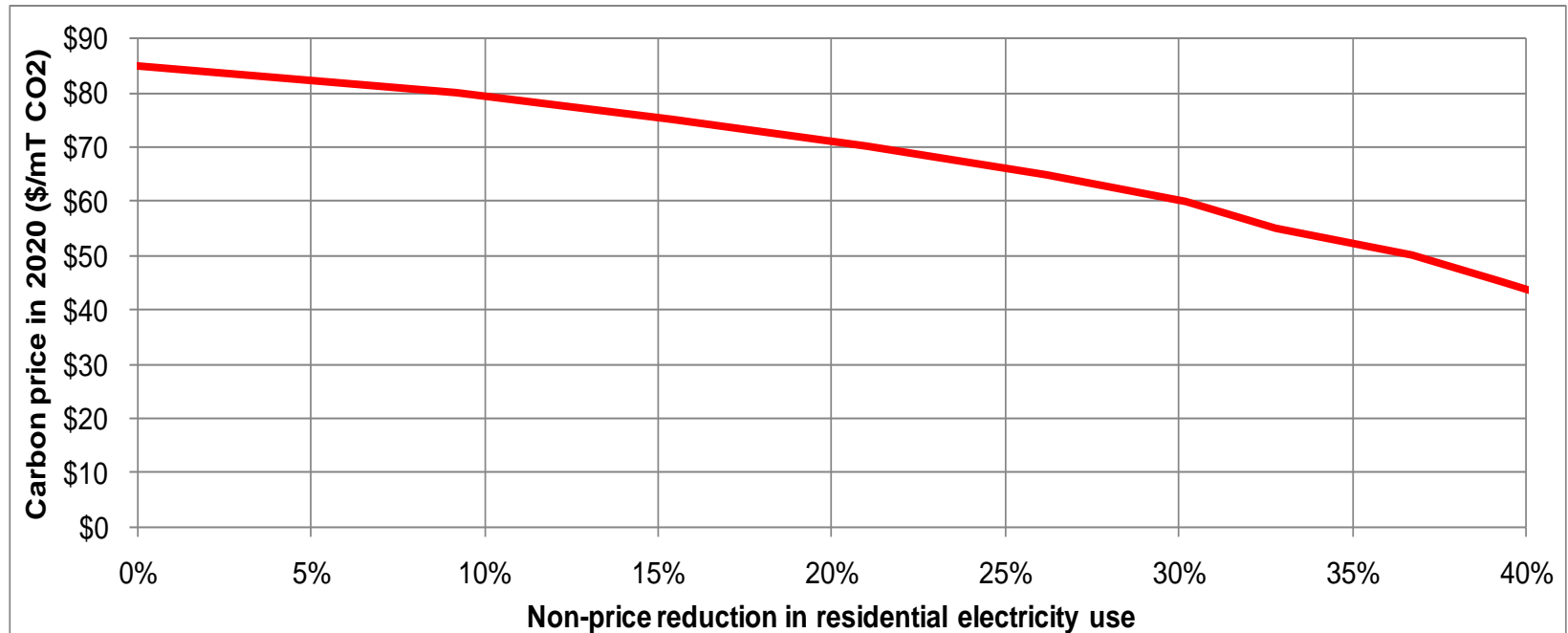
Comparing Cumulative Emissions for a 350ppm CO₂ Trajectory (Gt CO₂)



Source: Ackerman, Stanton, DeCanio, Goodstein, Howarth, Norgaard, Norman, and Sheeran (2009). *The Economics of 350: The Benefits and Costs of Climate Stabilization*. Somerville, MA, and Portland, OR: Economics for Equity and the Environment Network.

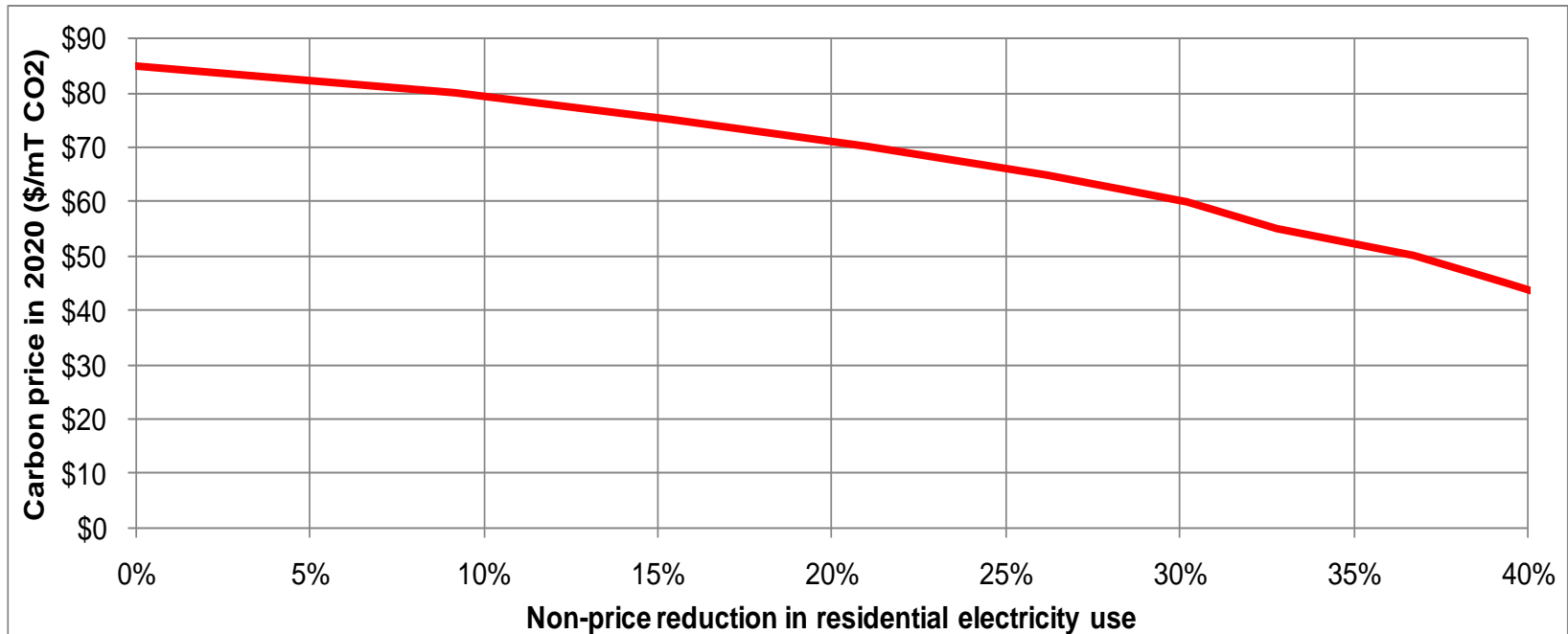
Will price ceilings interfere with emission reductions?

Achieving 20-percent reduction from 2005 emissions in 2020



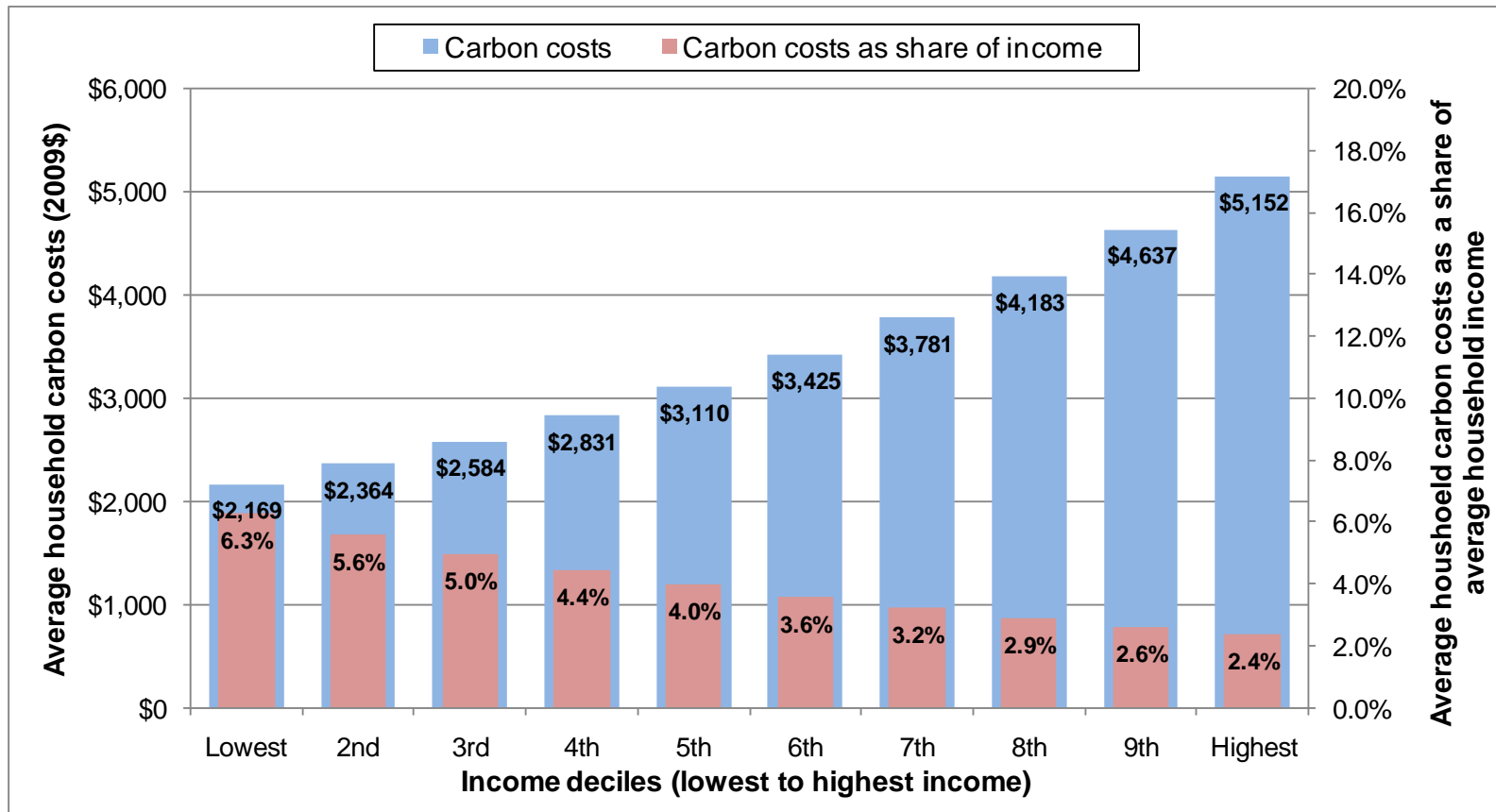
Are large-scale investments made in energy efficiency?

Achieving 20-percent reduction from 2005 emissions in 2020



Will a significant share of revenues be rebated to households?

\$75/mT CO₂ in 2020: Carbon cost distribution across income deciles



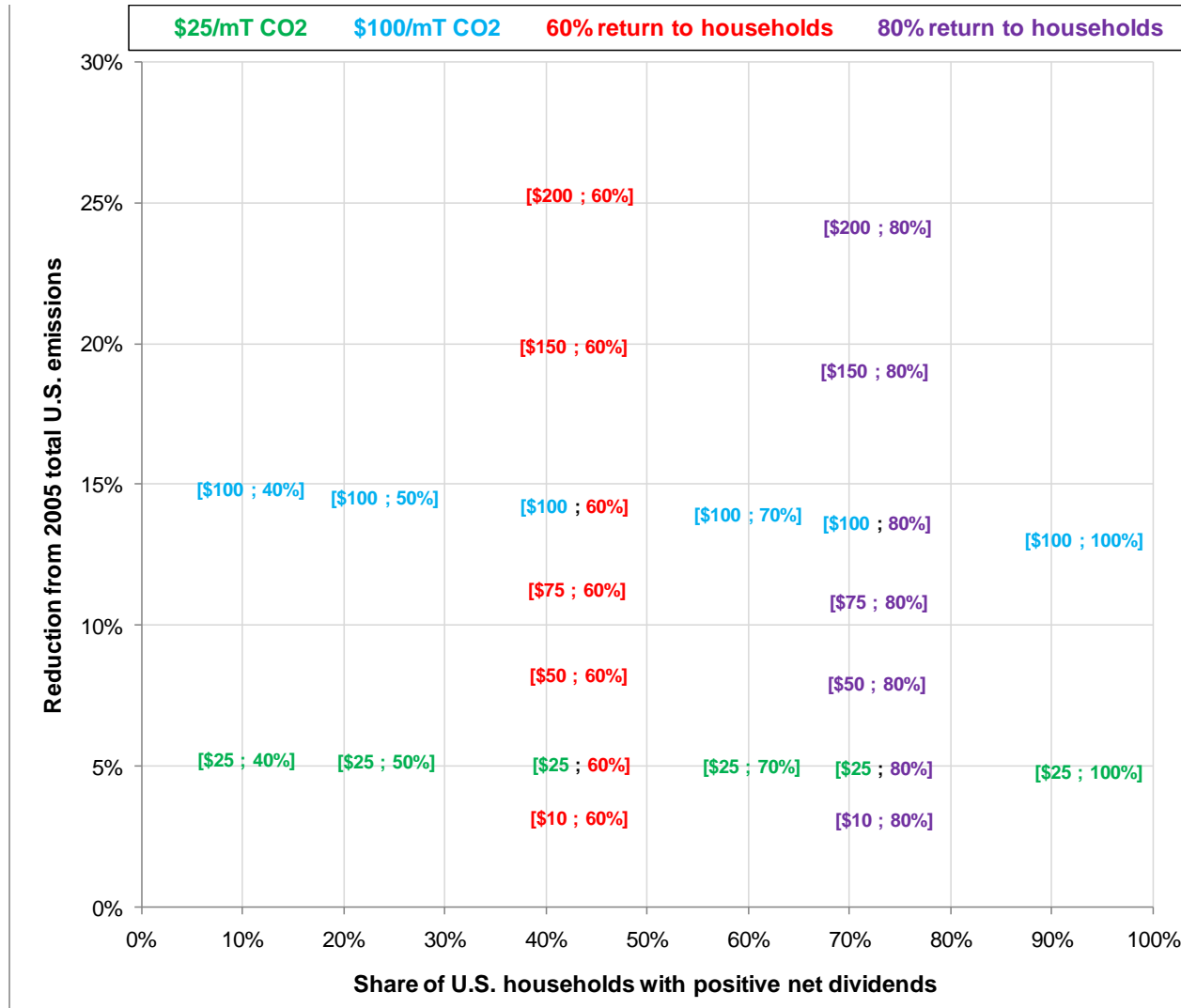
Will a significant share of revenues be rebated to households?

\$75/mT CO₂ in 2020: States with highest and lowest carbon costs

Median Household Carbon Costs (2009\$)				...as a Share of Household Income			
Wyoming	\$4,030	Vermont	\$2,207	Kentucky	5.3%	New York	2.5%
Virginia	\$4,013	New York	\$2,304	Tennessee	5.0%	Vermont	2.5%
North Dakota	\$3,978	Maine	\$2,478	North Dakota	5.0%	Connecticut	2.6%
Minnesota	\$3,962	Oregon	\$2,640	New Mexico	4.8%	New Hampshire	2.7%
Dist. Columbia	\$3,945	Washington	\$2,652	Texas	4.8%	New Jersey	2.9%
Indiana	\$3,901	New Hampshire	\$2,733	Missouri	4.8%	Massachusetts	3.0%
West Virginia	\$3,900	Rhode Island	\$2,813	Arkansas	4.8%	Maine	3.0%
Kansas	\$3,900	Connecticut	\$2,889	Alabama	4.8%	Washington	3.0%
Maryland	\$3,880	California	\$2,912	Mississippi	4.8%	California	3.0%
Missouri	\$3,864	Massachusetts	\$3,068	Indiana	4.7%	Rhode Island	3.1%

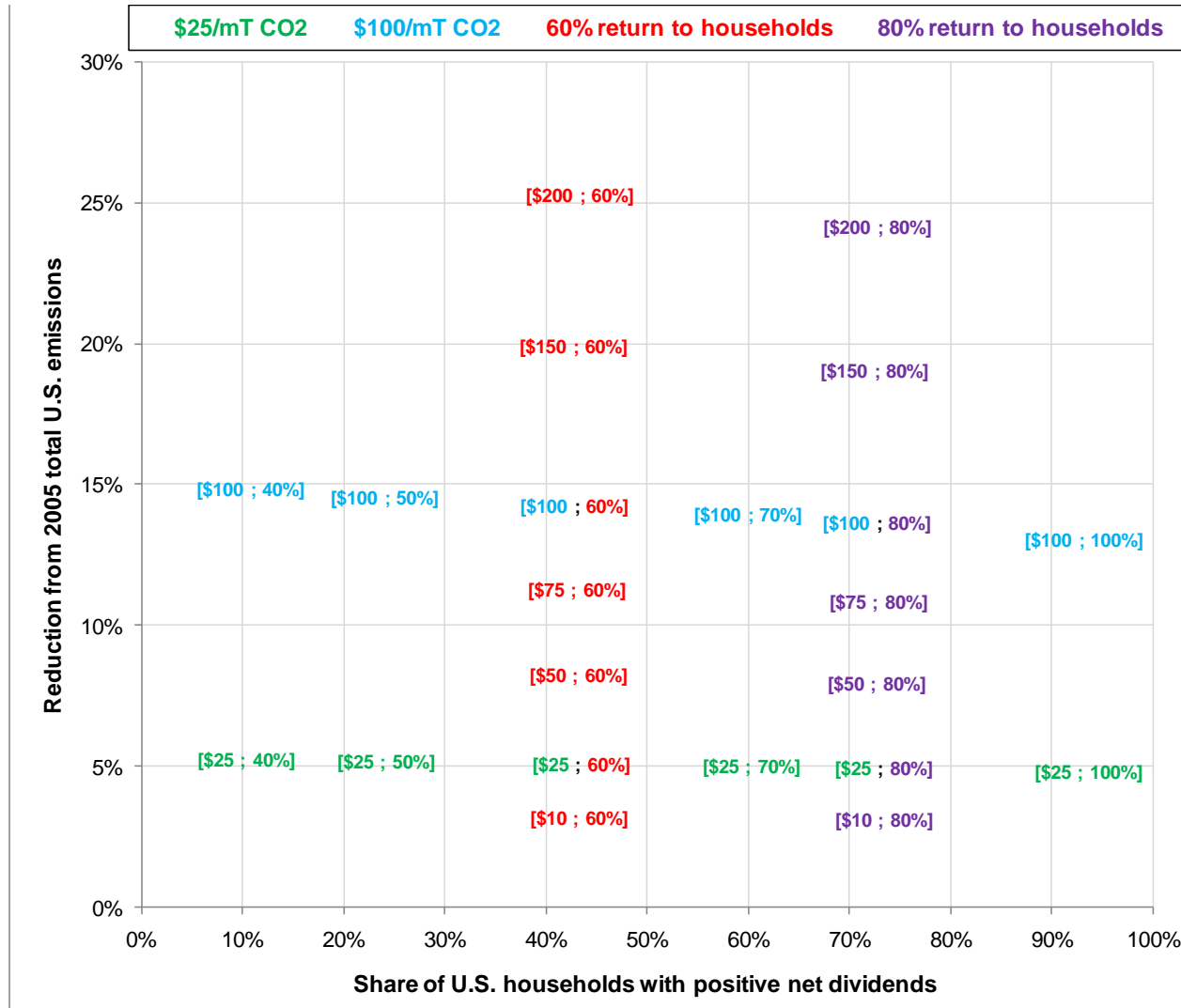
Will a significant share of revenues be rebated to households?

Impacts from varying carbon price and share of carbon revenue returned to households



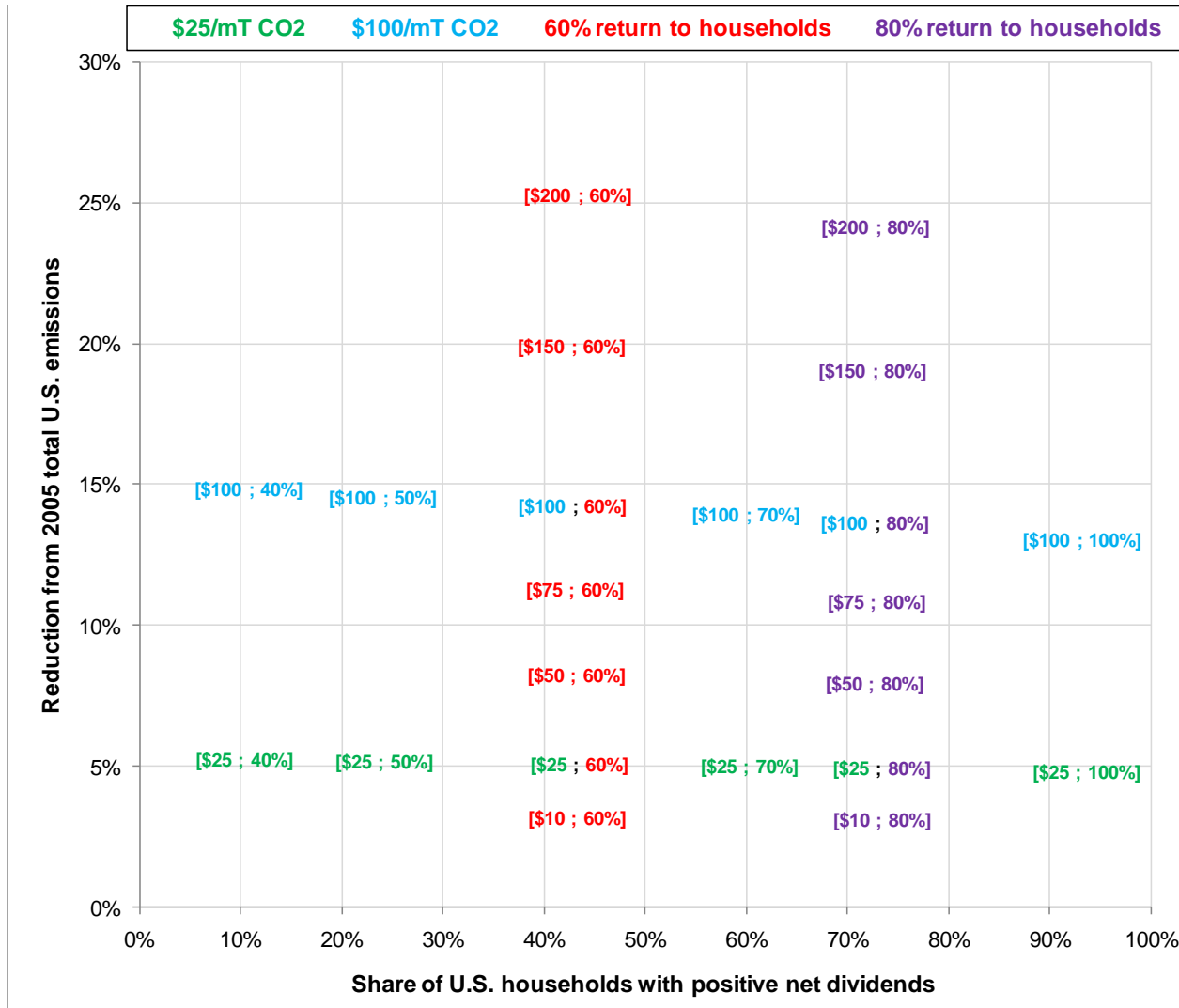
Are emission permits given away?

Impacts from varying carbon price and share of carbon revenue returned to households



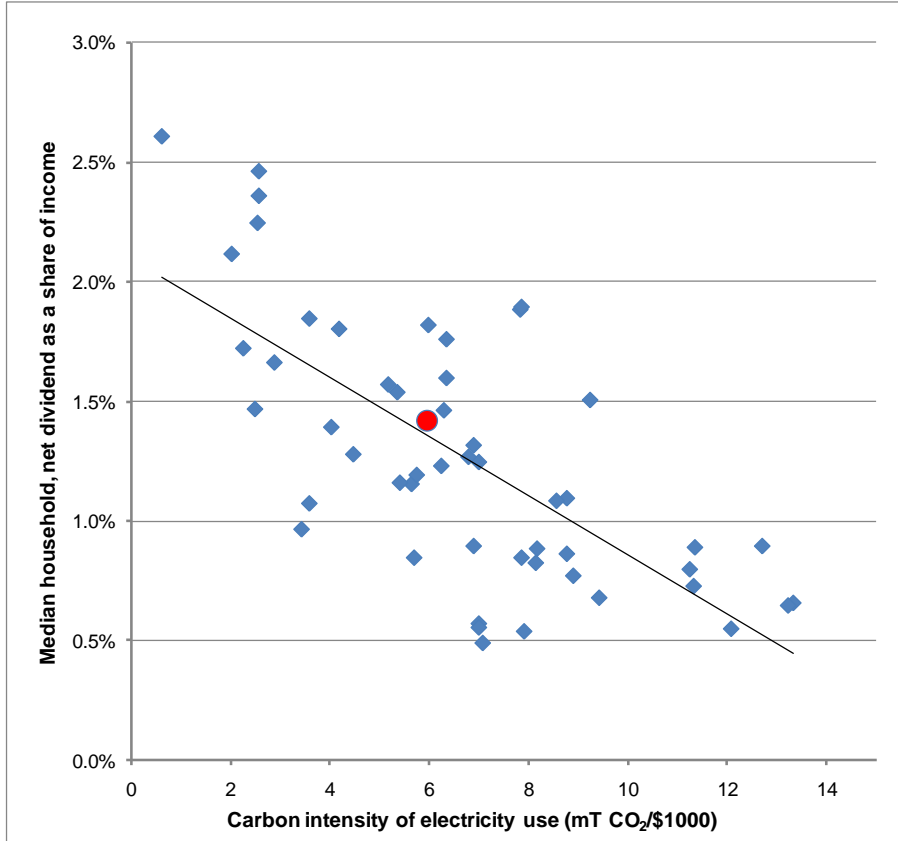
Who gets the money?

Impacts from varying carbon price and share of carbon revenue returned to households

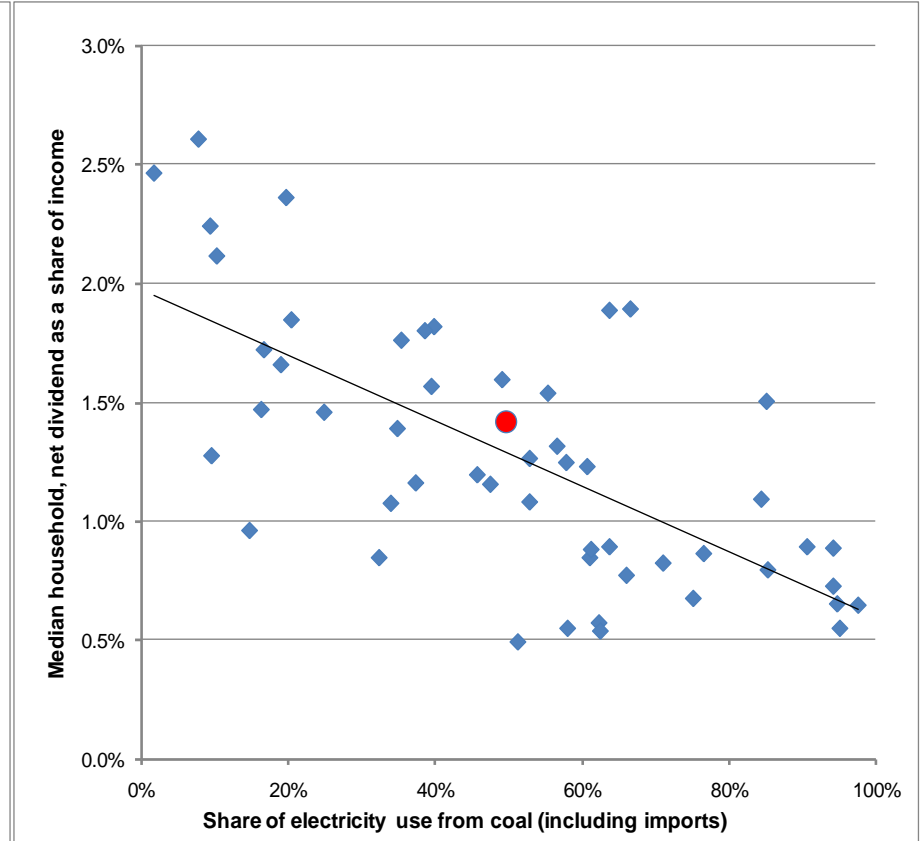


Is there a strategy for retiring coal plants?

Net dividend vs. carbon-intensity of electricity use

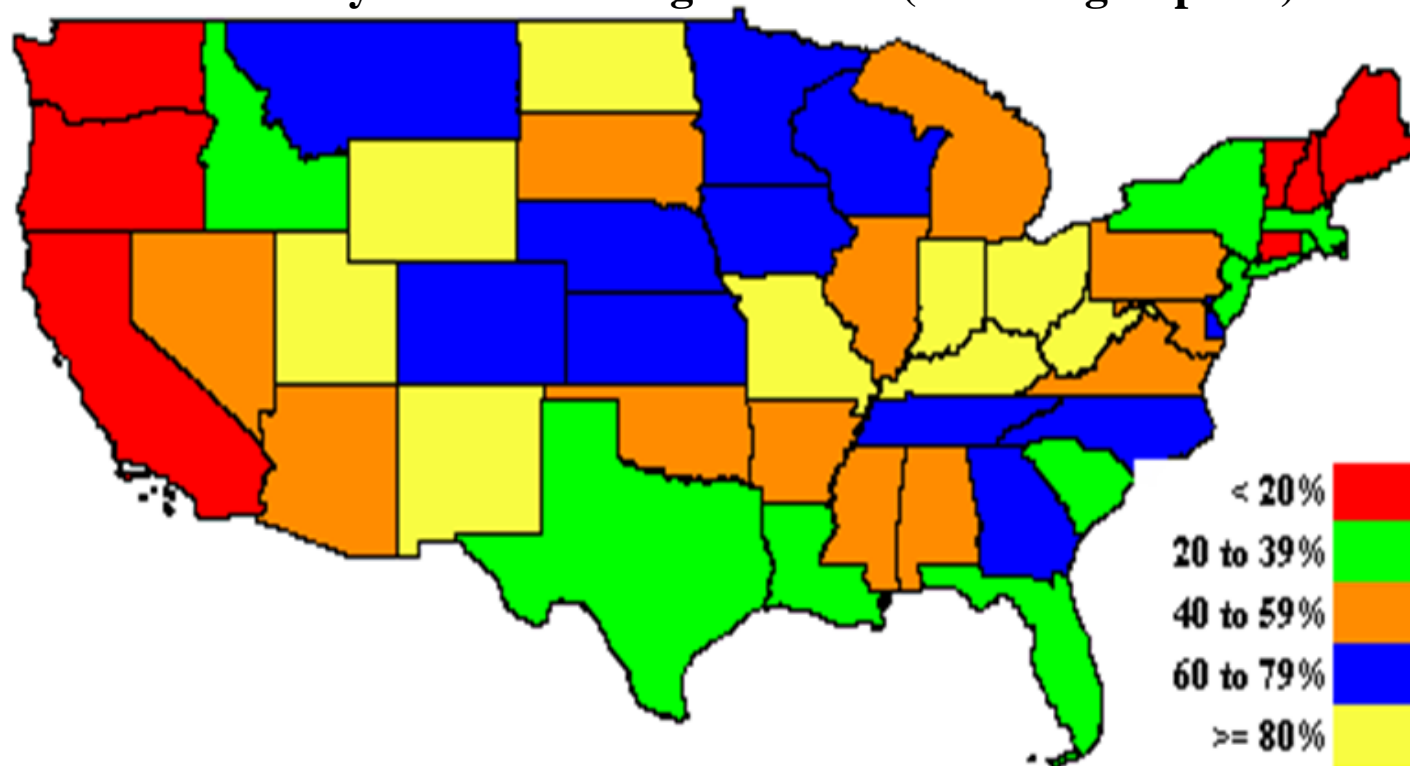


Net dividend vs. share of electricity use from coal



Is green investment directed toward the states most affected by climate policy?

Share of electricity use from coal generation (including imports)



Note: Values rounded to the nearest whole percent. Share of electricity use from coal (including imports) is 9.5 percent for Alaska, 14.8 for Hawaii, and 62.4 for the District of Columbia.

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