

Allocation choices to smooth the transition to a green economy

Chris Busch, Ph.D.
chris@resource-solutions.org

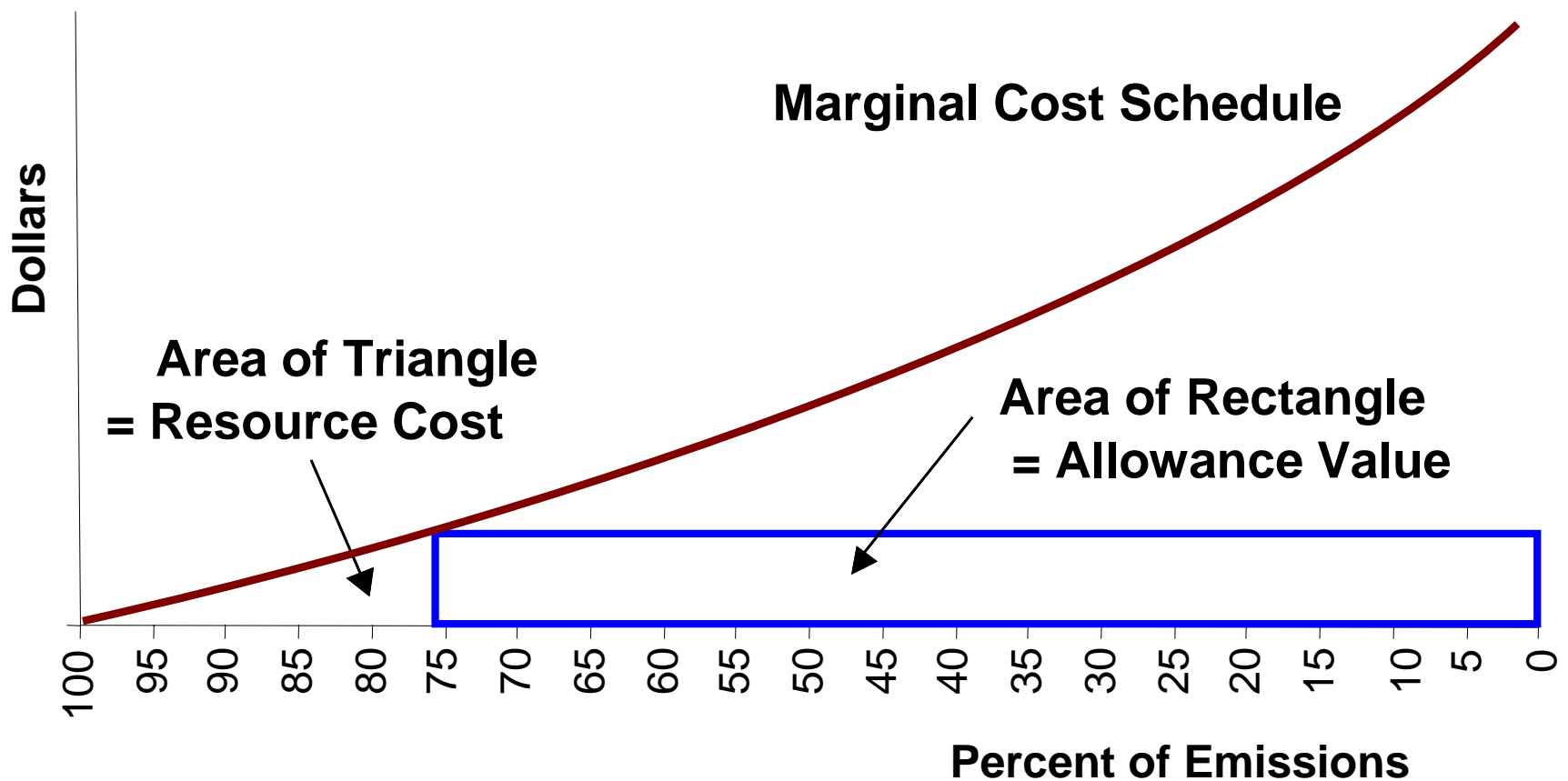
UC Berkeley Labor Center Climate Policy Conference
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Value of allowances will far exceed costs



Advantages of 100% auction

- Consistent with public ownership of the atmosphere (polluter pays)
- Avoids windfall profits
- Avoids problematic incentives
- Rewards early action
- Creates a level playing field for new entrants
- Provides revenue
 - For investments that can lower costs
 - For consumer protection and worker transition

Auctioning avoids market distortions

Repeated allocations to incumbents can lead to significant distortions

- degree and nature depends on allocation method

Allocation method

Auction		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Capacity	X		<input type="checkbox"/>	<input type="checkbox"/>
Capacity and technology	X	X		<input type="checkbox"/>
Historic output	X		X	<input type="checkbox"/>
Historic output and technology	X	X	X	<input type="checkbox"/>
Historic emissions	X	X	X	X

Distortions increase emissions and/or price impacts

Excess carbon-intensive capacity

Inefficient fuel choice

Less energy-efficiency investment

Discourage closure of plants
 Discourage closure of inefficient plant
 Increase operation of inefficient plants
 Reduce incentives for
 Efficiency-improving investment

Distortions

Slide borrowed from UK Carbon Trust Chief Economist Michael Grubb's presentation.

<http://www.arb.ca.gov/cc/etaac/meetings/042909pubmeet/mtgmaterials042909/EUETSallocation%20evolution-Grubb.pdf>

Competitiveness concerns should be taken into account, but recognize potential for excess compensation

- Power sector profits from EU ETS
 - €5bn+ during 2005
 - Likely aggregate Phase II profits €5-10bn/yr @ €20/tCO₂
- April 9, 2009. Reuters reports
 - EU steelmakers reap \$1.5 billion benefit from ETS
 - Received a third more permits than needed to cover emissions
 - “... a benefit attributed to aggressive lobbying.”

Clean Energy Dividend Is Progressive

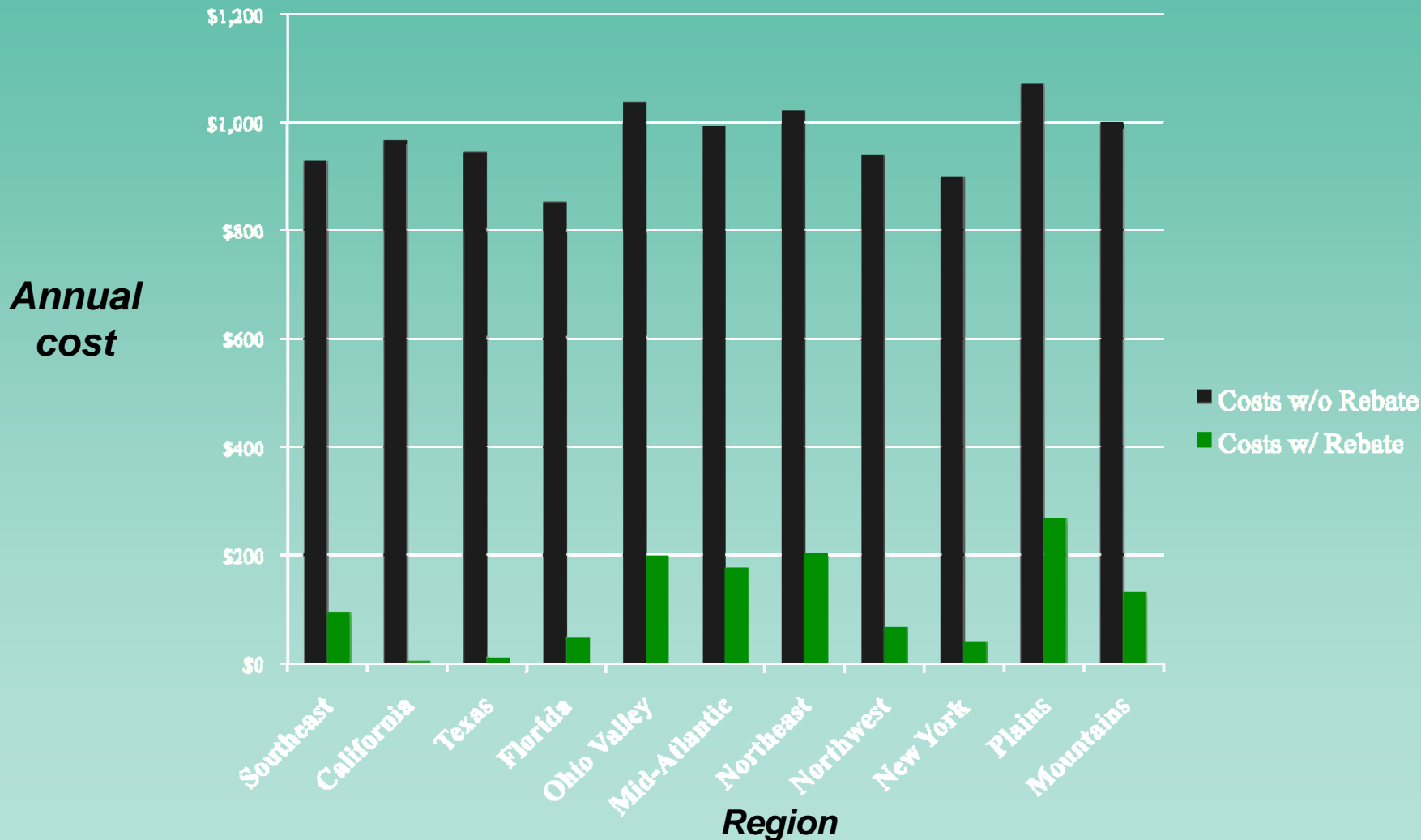
(Annual Cost Impacts on Consumers of
\$21 Price per Ton CO2 Before and After Rebate)



Dallas Burtraw, Rich Sweeney, and Margaret Walls, "The Incidence of U.S. Climate Policy,"
Resources for the Future, RFF DP 08-28, September 2008

Regional Cost Differences Not Large

(Annual Cost Impacts on Consumers of
\$21 Price per Ton CO₂ Before and After Rebate)



An even more progressive alternative?

- Efficiency and other investments plus rebate (or tax credit) to low/middle income households for revenue collected above some price.
- Burtraw et al. findings on use of \$s for investment in end use electrical efficiency.
 - Avoids equity-efficiency tradeoffs
 - Highly progressive
 - Lowers allowance prices, lowers compliance costs
 - Practical challenges, particularly in reaching low income households