



Regulatory Option for an Enforceable Emissions Cap-and-Invest Program in Maryland

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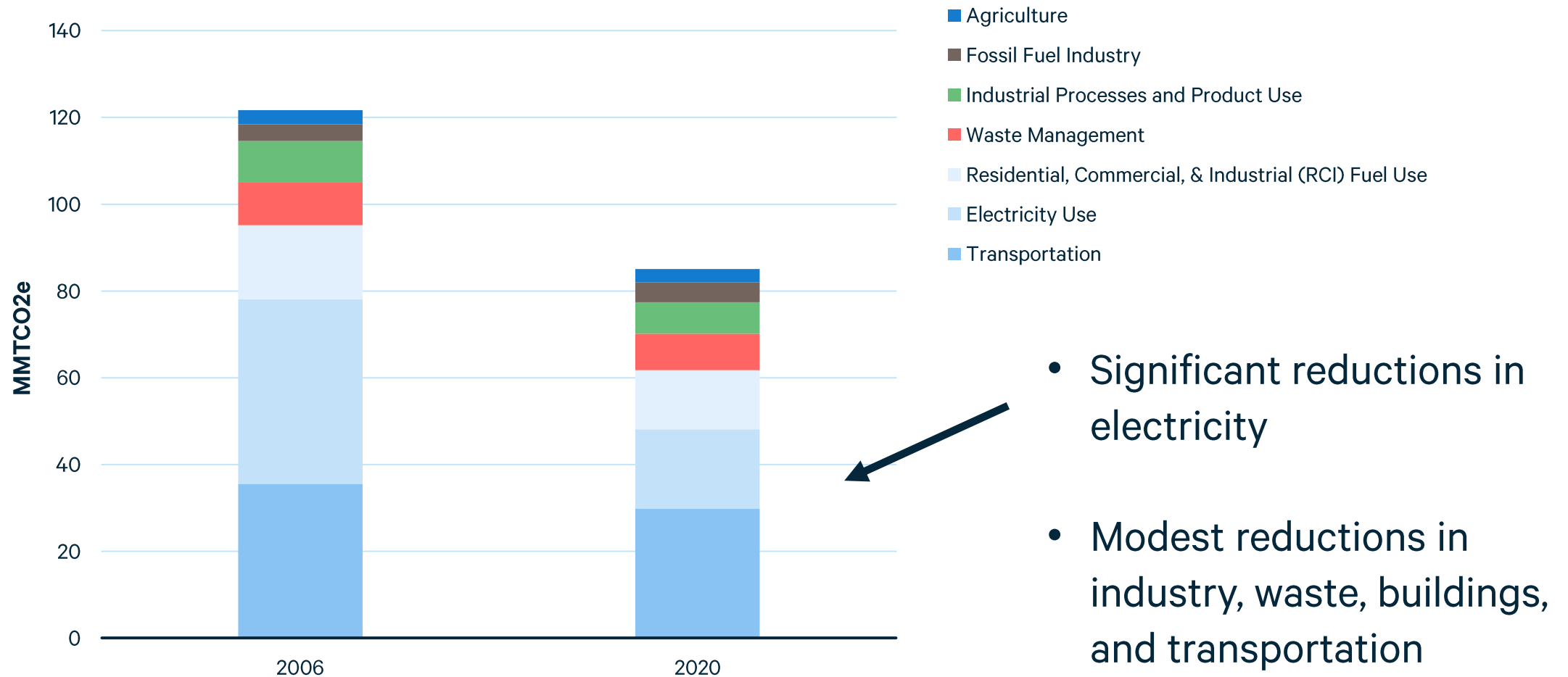


Results

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Sources and Trends of Maryland Greenhouse Gas Emissions



Proposed Policies for Maryland's Climate Pathway

- Expanding the state's RPS to 100 percent clean in-state electricity by 2035
- Strengthening RGGI to achieve zero regional GHG emissions in electricity by 2040
- Reducing vehicle miles traveled
- Setting zero-emissions appliance and construction standards
- Strengthening energy efficiency standard
- Creating "Buy Clean" standards
- Requiring cement plants to switch from coal to alternative fuels
- Economy-wide cap-and-invest program



What Is Cap-and-Invest?

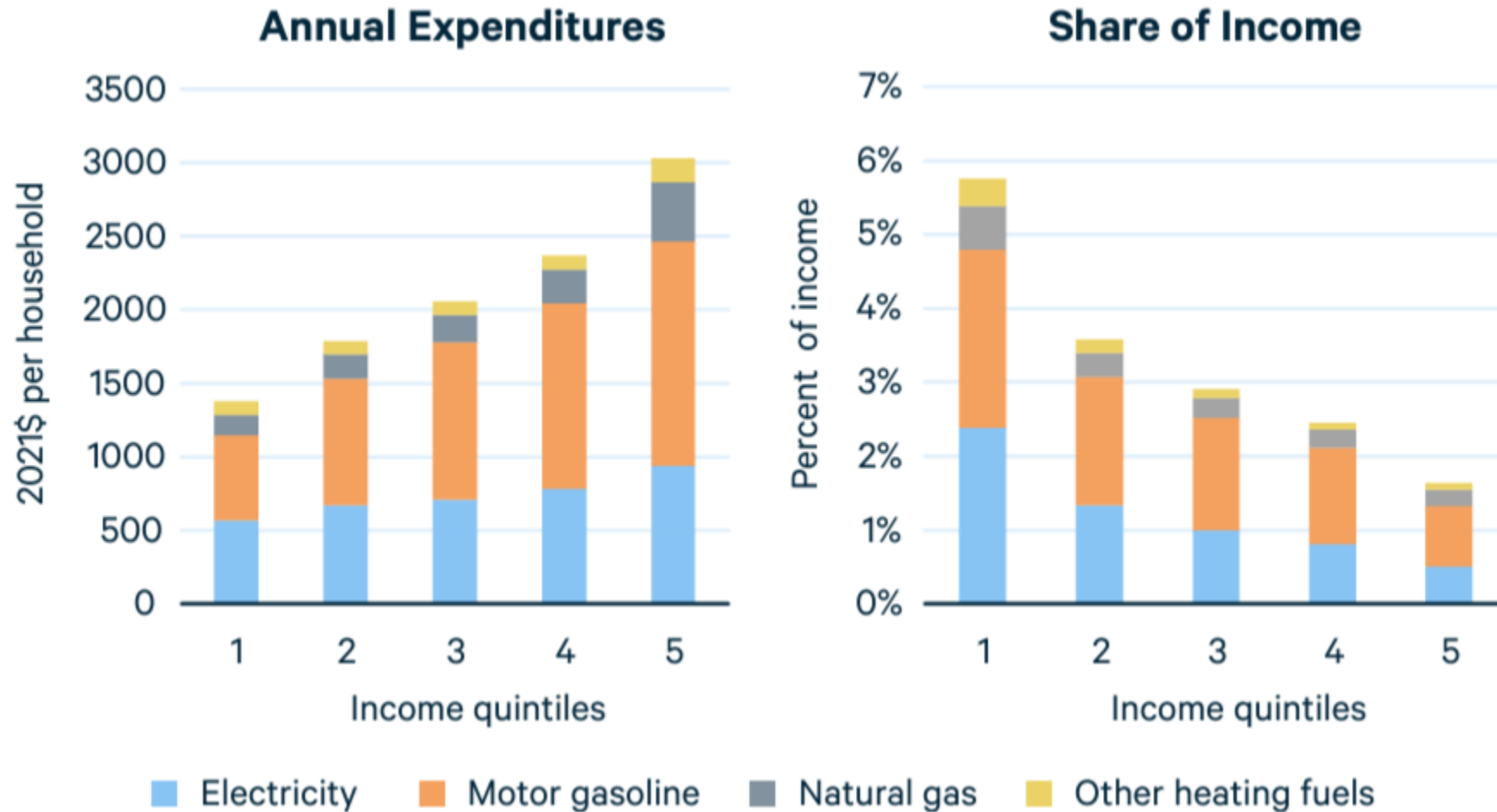
1. **Sets an emissions cap**; covered entities surrender one “allowance” per ton
 2. **Auctions** or distributes allowances
 3. **Invests** auction proceeds to generate emissions reductions and for fairness goals
- A well-designed cap-and-invest policy **amplifies and accelerates** the impact of regulations. They are not opposed; they are in sync.

The cap-and-invest policy can....

- Improve cost effectiveness! Catch all low-hanging fruit
- Provide “polluter pays” incentives to reduce emissions
- Generate revenues for investments and fairness
- Improve the predictability of regulations and prevents backsliding



Cap-and-Invest is Important to Achieve Fairness



The Economic Case for Cap-and-Invest as a Tool for Climate Policy

- Compliance flexibility
 - Allows the market to determine when, where, and how emissions are reduced
 - Emissions can be reduced through lower emissions intensity, reductions in energy demand, or through capture and storage
- Equalizes incentives (not reductions) across sectors
 - More reductions in low-cost sectors, less reductions in high-cost sectors
- Encourages innovation across the energy sector (including negative emissions technologies)
- Creates revenues



Expected Annual Household Cost of a \$25 Carbon Price

	Income	Quintile 1 (lowest)	Quintile 2	Quintile 3	Quintile 4	Quintile 5 (highest)
Transportation	Average cost	\$54	\$81	\$101	\$118	\$143
	Percent of revenue to compensate	11%	16%	20%	24%	29%
Buildings	Average cost	\$19	\$22	\$24	\$28	\$49
	Percent of revenue to compensate	14%	15%	17%	20%	34%





Some Key Design Options for Cap-and-Invest

- Set the cap
- Identify covered entities
- Prioritize emissions reductions in overburdened communities
- Invest allowance auction proceeds
- Identify the role for emissions offsets
- Link with other programs



Design Options for Cost Management

- Trading
- Banking
- Easy first-year cap to encourage banking, learning
- Price floor, price steps, allowance reserves in allowance supply
- Forward auctions
- Offsets (potentially)
- Linking (potentially)
- Regular program reviews





Some Key Elements in the Administration of a Cap-and-Invest Program

- Allowance tracking system
- Points of obligation
- Allowance auction
- Distribution of allowances
- Trading
- Banking
- Enforcement
- Implementing investments and compensation
- Program review



Potential for Linking with Other Programs

Existing North American programs: California & Quebec, Washington, New York (soon), Regional Greenhouse Gas Initiative

Potential benefits of linking:

- Cost-effectiveness
- Price formation
- Market stability
- Mitigation of leakage risks
- Administrative and policy coordination
- ...and a stronger policy signal nationally!





Thank you.

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