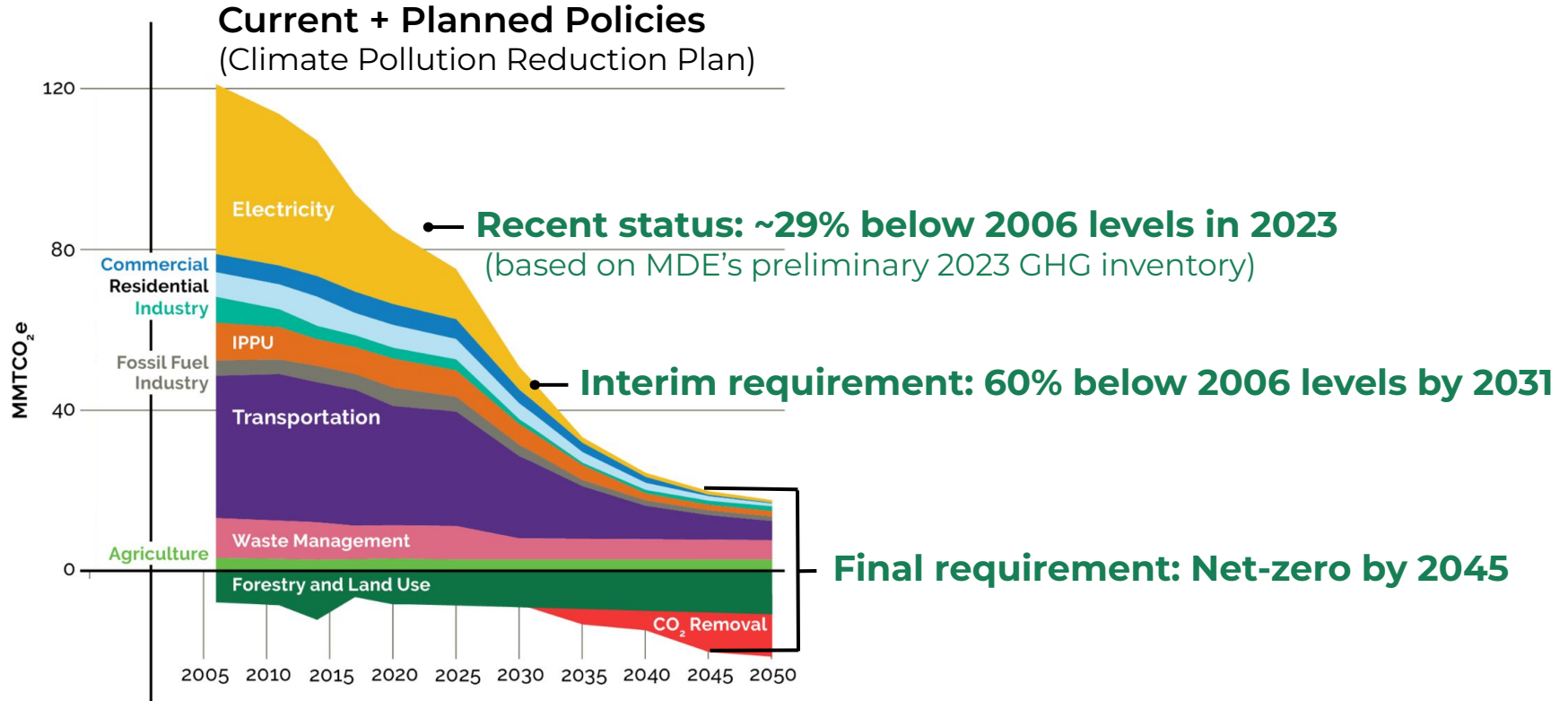


GHG Reduction Policies Facing Implementation Uncertainties



Maryland's GHG Reduction Requirements





Federal Policies

*Slides sourced from a Center for Global Sustainability (CGS) presentation to the Maryland Commission on Climate Change (MCCC) on April 15, 2025

Modeled federal regulatory rollbacks

Sector	Modeled Policy	CGS Rollback Modeling	Status, April 2025
Electricity	Clean Air Act section 111(b) Standards for New Stationary Combustion Turbines	Regulations withdrawn	Being “reconsidered”
	Clean Air Act section 111(d) Emission Guidelines for Existing Fossil Fuel-Fired Sources	Regulations withdrawn	Being “reconsidered”
Transportation	Updated CAFE standards and GHG standards for light-duty vehicles	Rollback to model year 2020 standards	Being “reconsidered”
	Updated GHG emissions standards for freight trucks	Rollback to model year 2020 standards	Being “reconsidered”
Methane	New Source Performance Standards OOOOb/c for oil and gas methane regulations	Regulations withdrawn	Being “reconsidered”

*Slide from April 15 CGS presentation to MCCC

Modeled federal legislative rollbacks

Legislation	Modeled Provisions	CGS Rollback Modeling	Status, April 2025
IRA, Electricity	<ul style="list-style-type: none"> - Production tax credit and Investment tax credit - Residential clean energy credit - PTC for existing nuclear - Energy infrastructure reinvestment financing 	Fully rescinded	Energy infrastructure reinvestment financing under review
IRA, Transport	<ul style="list-style-type: none"> - Clean vehicle credit - Alternative refueling property credit - Commercial clean vehicle credit - Extension of incentives for biofuels 	Fully rescinded	Unchanged
IRA, Buildings	<ul style="list-style-type: none"> - Energy efficient commercial building deduction - Energy efficient home improvement credit - Energy efficient home credit - Home energy efficiency credit - High efficiency home rebate program 	Fully rescinded	Unchanged
IRA, Industry	<ul style="list-style-type: none"> - Extension of 45Q credits for carbon capture - Production credit for clean hydrogen - Manufacturing ITC for advanced energy projects - Advanced industrial facilities deployment program 	Fully rescinded	Hydrogen, carbon capture, technology development, and industrial demonstration programs under review
IRA, Methane	<ul style="list-style-type: none"> - Methane fee for oil and gas producers 	Fully rescinded	Regulations withdrawn
IRA, Lands	<ul style="list-style-type: none"> - Agricultural Conservation Easement Program - Conservation Stewardship Program - Environmental Quality Incentives Program - Regional Conservation Partnership Program - Urban and Community Forest Assistance Program 	Fully rescinded	Unchanged
BIL, Transport	<ul style="list-style-type: none"> - Grants from charging and fueling infrastructure - Carbon reduction program - National Electric Vehicle Formula Program (NEVI) - Congestion mitigation and air quality improvement program - Clean school bus program and grants for buses 	Fully rescinded	NEVI funding suspended
AIM Act	<ul style="list-style-type: none"> - HFC phase down 	Fully rescinded	Being reconsidered

*Slide from April 15 CGS presentation to MCCC

Other federal rollbacks not modeled

- Ban on new or renewed wind energy leasing on U.S. waters and federal lands (captures all offshore wind)
- Onshore wind permitting
- Rollback of federal appliance efficiency standards
- Withdrawal from Paris Agreement
- Freezing of Greenhouse Gas Reduction Fund
- IRA and BIL funding freezes and investment uncertainty
- Threats to endangerment finding
- Executive Orders
 - “Reinvigorating America’s Beautiful Clean Coal Industry”
 - “Zero-based Regulatory Budgeting to Unleash American Energy”
- Tariffs

Possible additional federal impacts on subnational actions

California waivers

- House Republicans voted to eliminate three waivers under Congressional Review Act (CRA), Senate deliberating holding a vote
 - Advanced Clean Cars II (ACC II)
 - Advanced Clean Trucks (ACT)
 - Heavy-Duty Low NOx Omnibus regulation
- Not subject to Judicial Review, but lawsuits likely:
 - GAO has twice determined EPA waivers under Clean Air Act not subject to CRA resolutions
 - Senate Parliamentarian disapproves use of CRA to block waivers
- Difficulty reinstating waivers under a future administration:
 - CRA prohibits agencies from approving new rules “substantially similar” to ones previously disapproved
- Waivers can be revoked through regulatory processes, attempted under first Trump Administration

Executive Order “Protecting American Energy from State Overreach”

- Challenges state-led climate litigation, cap-and-trade programs, and permitting

*Slide from April 15 CGS presentation to MCCC with May 2025 updates from CGS on the California waivers



State Policies



Cap and Invest or Similar Policies

- **What is it?** Expand Maryland's existing cap and invest/RGGI model to other sectors, and/or develop similar revenue-generating policies that would incentivize individuals and businesses to reduce emissions on pace to meet the state's GHG reduction requirements
- **What's the status?** The MCCC recommended that 1) the General Assembly authorize a study to evaluate the design of a cap-and-invest program by the end of 2025; 2) MDE adopt a reporting rule requiring major polluters to begin reporting data in 2027; and 3) the General Assembly consider whether to direct MDE to adopt a cap-and-invest program. Legislation was not introduced in 2025.
- **GHG reduction potential** (full implementation of the policy as modeled):
 - 4,240,000 metric tons of CO₂e in 2031
 - 16,680,000 metric tons of CO₂e in 2045



Clean Energy Standard

- **What is it?** Requires 100% of the electricity consumed in Maryland to be generated by clean and renewable sources of energy by 2035.
- **What's the status?** Called for in the Climate Pollution Reduction Plan and Governor Moore's Executive Order 01.01.2024.19. Legislation passed to remove waste incineration as a clean energy resource, as called for in the Climate Pollution Reduction Plan, but legislation to authorize 100% clean electricity by 2035 did not pass.
- **GHG reduction potential** (full implementation of the policy as modeled):
 - 895,000 metric tons of CO₂e in 2031
 - 2,507,000 metric tons of CO₂e in 2045



Advanced Clean Cars II (ACC II)

- **What is it?** Requires 100% of new cars, light-duty trucks, and sport utility vehicles (SUVs) sold in Maryland to be ZEVs by 2035.
- **What's the status?** Governor Moore issued Executive Order 01.01.2025.10 delaying enforcement penalties for manufacturers that don't meet ZEV sales targets for model years 2027 and 2028 under certain conditions. Congress is also considering rescinding the Clean Air Act waiver that allows for ACC II.
- **GHG reduction potential** (full implementation of the policy as modeled):
 - 902,000 metric tons of CO₂e in 2031
 - 5,814,000 metric tons of CO₂e in 2045



Advanced Clean Trucks (ACT)

- **What is it?** Requires certain types of medium and heavy-duty trucks sold in Maryland to be ZEVs in certain years.
- **What's the status?** Governor Moore issued Executive Order 01.01.2025.10 delaying enforcement penalties for manufacturers that don't meet ZEV sales targets for model years 2027 and 2028 under certain conditions. Congress is also considering rescinding the Clean Air Act waiver that allows for ACT.
- **GHG reduction potential** (full implementation of the policy as modeled):
 - 496,000 metric tons of CO₂e in 2031
 - 821,000 metric tons of CO₂e in 2045



Maryland Transportation Plan (VMT Reduction)

- **What is it?** Aims to reduce vehicle miles traveled per capita by 20% through infrastructure and programmatic investments.
- **What's the status?** While the long-term vision described in the MTP – including a 20 percent reduction in per capita vehicle-miles-of-travel reduction from the 2006 level – remains the guiding goal, implementation speed and trajectory is challenged by conflicting and harmful federal directives.
- **GHG reduction potential** (full implementation of the policy as modeled):
 - 684,000 metric tons of CO₂e in 2031
 - 1,089,000 metric tons of CO₂e in 2045



Building Energy Performance Standards (BEPS)

- **What is it?** Requires certain buildings 35,000 square feet or larger to achieve specific energy efficiency and direct emissions standards, including achieving net-zero direct emissions by 2040.
- **What's the status?** If HB49 becomes law, then hospitals – which represent around 14% of the emissions reduction potential of BEPS – would be exempt from the program. Buildings in Montgomery County would also be exempt from the state's program.
- **GHG reduction potential** (full implementation of the policy as modeled):
 - 83,000 metric tons of CO₂e in 2031
 - 621,000 metric tons of CO₂e in 2045



Summary

GHG Reduction Policies Facing Implementation Uncertainties

<i>Policy</i>	<i>GHG reduction potential with full implementation</i> <i>(metric tons of CO₂e)</i>	
	<i>2031</i>	<i>2045</i>
Cap and Invest or similar policies	4,240,000	16,680,000
ACC II + ACT	1,398,000	6,635,000
Clean Energy Standard	895,000	2,507,000
MD Transportation Plan	684,000	1,089,000
BEPS	83,000	621,000