MARYLAND COMMISSION ON CLIMATE CHANGE

Serena McIlwain, Chair

The Just Transition Workforce and Retraining Working Group

Presentation by: Cindy Osorto, Policy Analyst, Climate Change Program

April 26, 2024

Outline

- Member Introductions
- Overview of the MCCC and Working Group Charge
- Overview of Maryland's Climate Pollution Reduction Plan
- Brief Legislative Update
- Discussion on Work Plan and Process

Part 1

Introductions and Overview of the MCCC and JTWG

Introductions

- Note that member biographies have been sent out
- Please introduce yourself, including your role and organization name

The Maryland Commission on Climate Change (MCCC)

- MCCC Goal: Provide recommendations on how to reduce GHG emissions and adapt to the impacts of climate change
- Originated in 2007
  - Developed the 2008 Maryland “Climate Action Plan”
  - Led to the Greenhouse Gas Emission Reduction Act (GGRA) of 2009
- Commission codified into law in 2015
  - Made recommendations on the GGRA in December of 2015
  - GGRA of 2016 signed into law in April 2016
- The Climate Solutions Now Act of 2022 expanded MCCC membership and state goals

MCCC Working Groups

- Originally had four working groups:
  - The Adaptation and Response (Resilience) Working Group
  - The Scientific and Technical Working Group
  - The Education, Communication and Outreach Working Group
  - The Greenhouse Gas Mitigation Working Group
- Four new working groups due to the CSNA:
  - **The Just Transition Employment and Retraining Working Group**
  - The Energy Industry Revitalization Working Group
  - The Energy Resilience and Efficiency Working Group
  - The Solar Photovoltaic Systems Recovery, Reuse and Recycling Working Group

Just Transition Employment and Retraining Working Group

- The JTWG will advise the MCCC on equitable workforce development and training, including relating to energy efficiency measures, transportation, natural working lands, renewable energy, and other clean energy technologies.
- The JTWG will analyze and support clean/renewable and equitable economic development opportunities at community levels.
- Meeting Dates (a Friday, 10am-12pm):
  - April 26, May 31, June 28, July 26, August 30, September 27, October 25, and November 22

Just Transition Employment and Retraining Working Group

Membership (partial list):

- Two members of the State Senate, appointed by the President of the Senate - Sen. John Mautz and Sen. Dawn Gile
- Two members of the House of Delegates, appointed by the Speaker of the House - Del. Regina Boyce and Del. David Fraser-Hildago
- The MDE Secretary, or the Secretary's designee - Cindy Osorto (designee)
- The Secretary of Labor, or the Secretary's designee - Chanel Viator (designee)
- The Secretary of Transportation, or the Secretary's designee - Allison Breitenother (designee)
- An electrical worker, selected by the International Brotherhood of Electrical Workers - Richard Strong
- A construction laborer, selected by the Baltimore-Washington Laborers' District Council - Victoria Leonard
- Two representatives of the building and construction trade industry, selected by the Baltimore-D.C. Metro Building and Construction Trades Council: Empty
- Three labor representatives selected by MD AFL-CIO: Donna S. Edwards, President of the Maryland State & DC AFL-CIO, Gerald Jackson, UA 486, and Jerry R. Williford Jr., President, IBEW Local Union 1900
- A labor representative selected by Mid-Atlantic Pipe and Trades Association - Sean Straser
- A representative of the energy efficiency industry, selected by the MDE Secretary - Casey Ross
- Two representatives of environmental organizations, selected by the Governor - Ryan Trauley

Just Transition Employment and Retraining Working Group

Membership (continued):

- A representative of the solar energy industry, selected by the Maryland-D.C.-Delaware-Virginia Solar Energy Industries Chesapeake Solar and Storage Association - Stephanie Johnson
- A representative of the wind energy industry, selected by the Clean Power Association - Moira Cyphers
- A representative of the geothermal energy industry selected by the Maryland Geothermal Association - Erin Appel
- A representative of registered apprenticeship sponsors, selected by the Maryland Chapters of the Associated Builders and Contractors - Empty
- A representative of registered apprenticeship sponsors, selected by the Baltimore-D.C. Metro Building and Construction Trades Council - Empty
- A community college representative, selected by the Maryland Association of Community Colleges - Brad Philips
- A representative who is a veteran, selected by the Maryland Military Coalition - Lynn Nash
- A representative who is a formerly incarcerated individual, selected by the Legal Action Center Nation 4 H.I.R.E. Networks - Kimberly Haven
- Two at-large representatives who are women working in an affected industry, selected by the Governor - Jennifer Walsh, Suzanne K. McCoskey
- Two representatives selected by the Maryland State Chapter of the NAACP - Kobi Little and Tifani Fisher
- A heating oil or propane distributor in the state, selected by the MDE Secretary - Larry Shifflet, Burch Oil
- A representative of municipal electric utilities, selected by the Public Service Commission - John Hines, Easton Utilities
- A representative of investor-owned utilities, selected by the Public Service Commission - Tanya Terrell, Baltimore Gas and Electric

Part 2

The Climate Pollution Reduction Plan

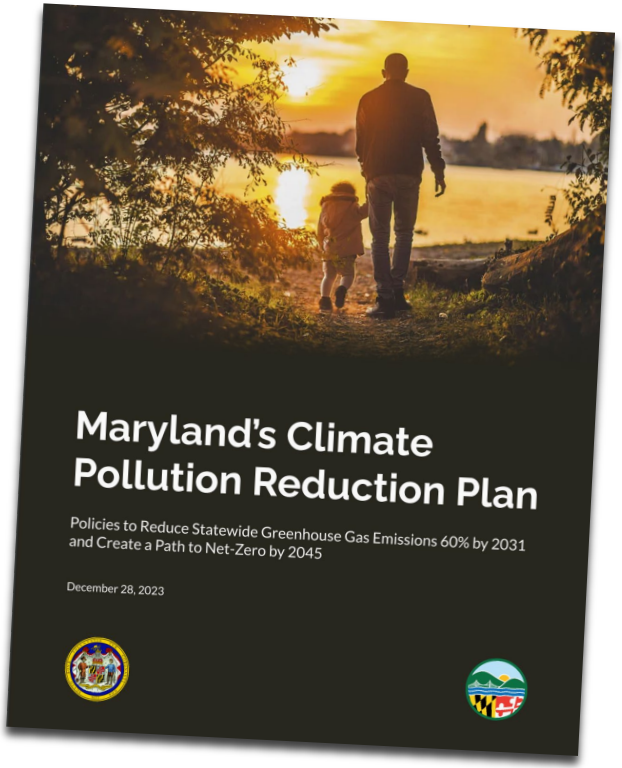
Maryland
Department of
the Environment

Maryland's Climate Pollution Reduction Plan

What is the Climate Pollution Reduction Plan?

MDE's final plan to:

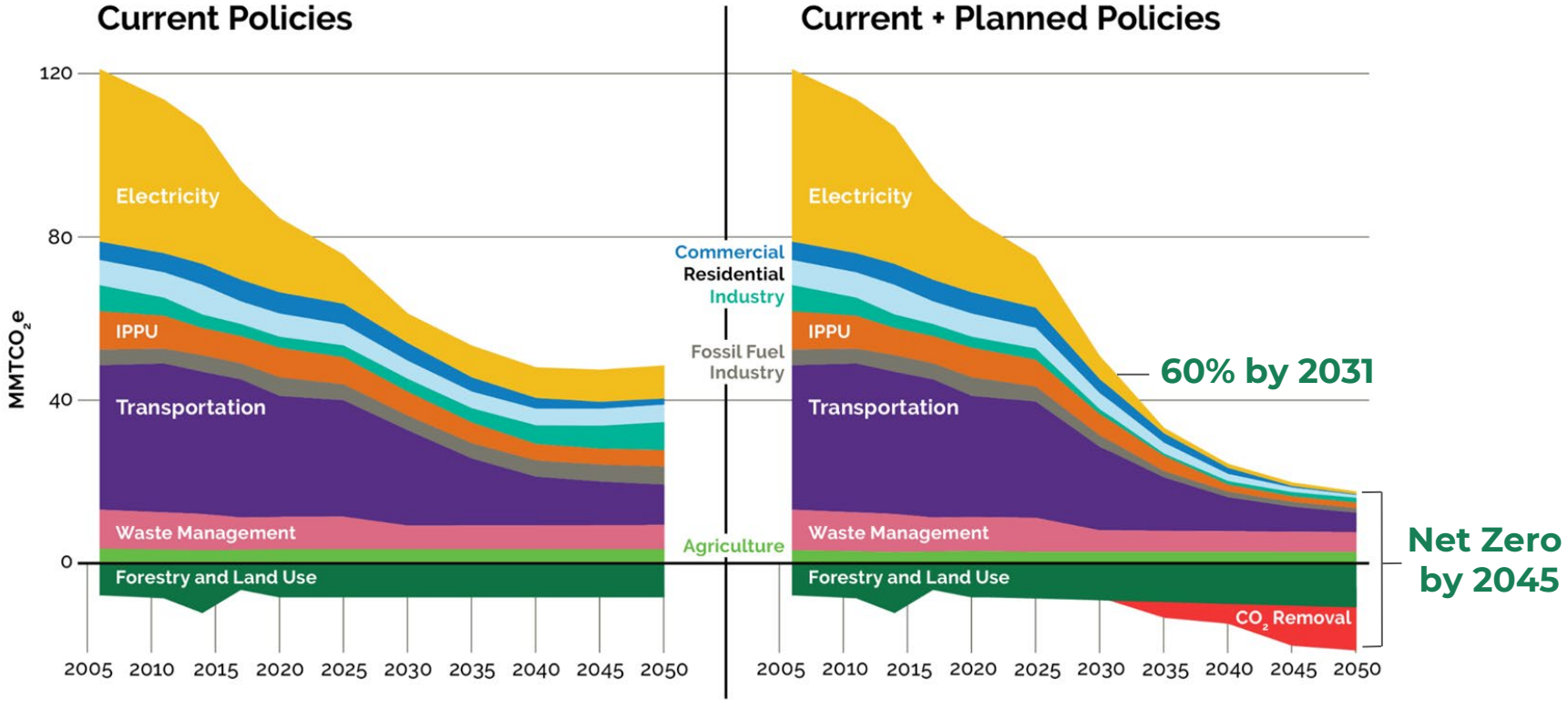
- Reduce statewide greenhouse gas emissions **60% by 2031** (from 2006 levels)
- Set the state on a path to achieve **net-zero emissions by 2045**
- **Create net economic benefits** for Maryland



The full plan is available at **mde.maryland.gov**

Achieving the State's Goals

42 policies that, if fully implemented, will achieve Maryland's goals



Maryland has Already Come so Far

Maryland once had the worst air quality in the eastern half of the U.S.

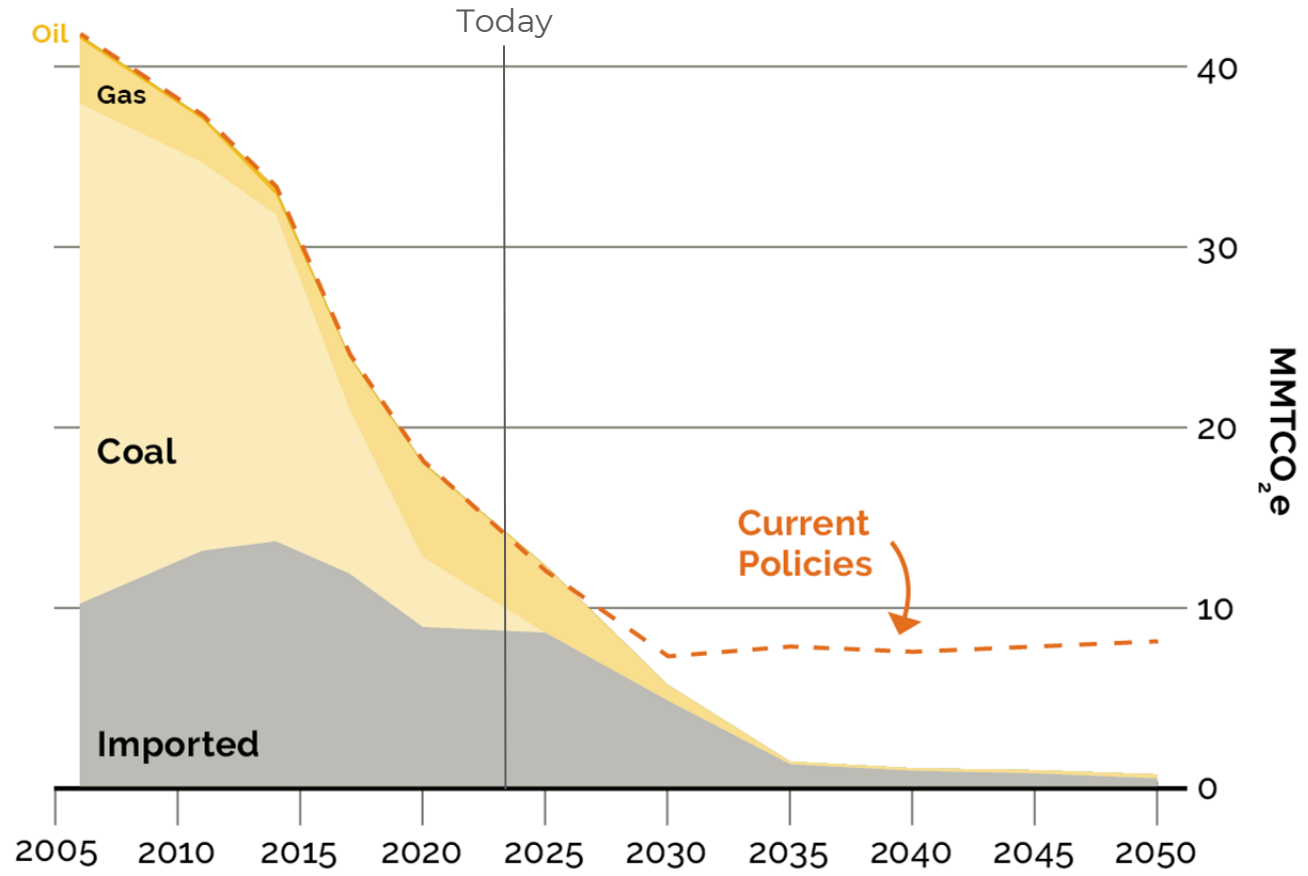
8 coal-fired power plants in 2006 (2 left today)

Countless cases of respiratory illness and hospitalizations

From the Dirtiest Air to the Cleanest

In 2022, Maryland met all national air quality standards for the first time since the Clean Air Act was established over 50 years ago

Greatest Improvements from the Electricity Sector



Emissions from electricity generation plummeted since 2006

Two-thirds of statewide emissions reductions were from this sector

Current policies will further reduce emissions

New policies will provide 100% clean electricity to all Marylanders by 2035

Shifting Focus from Large to Small Sources

To further improve air quality and reduce greenhouse gas emissions, we must **electrify millions of small sources** of emissions including cars, trucks, furnaces, boilers, and water heaters.

Electrification is Underway

Heat pumps started outselling gas furnaces in the U.S. in 2022

The best-selling car in the U.S. in 2023 was an EV

Electric devices are increasingly powered by clean electricity

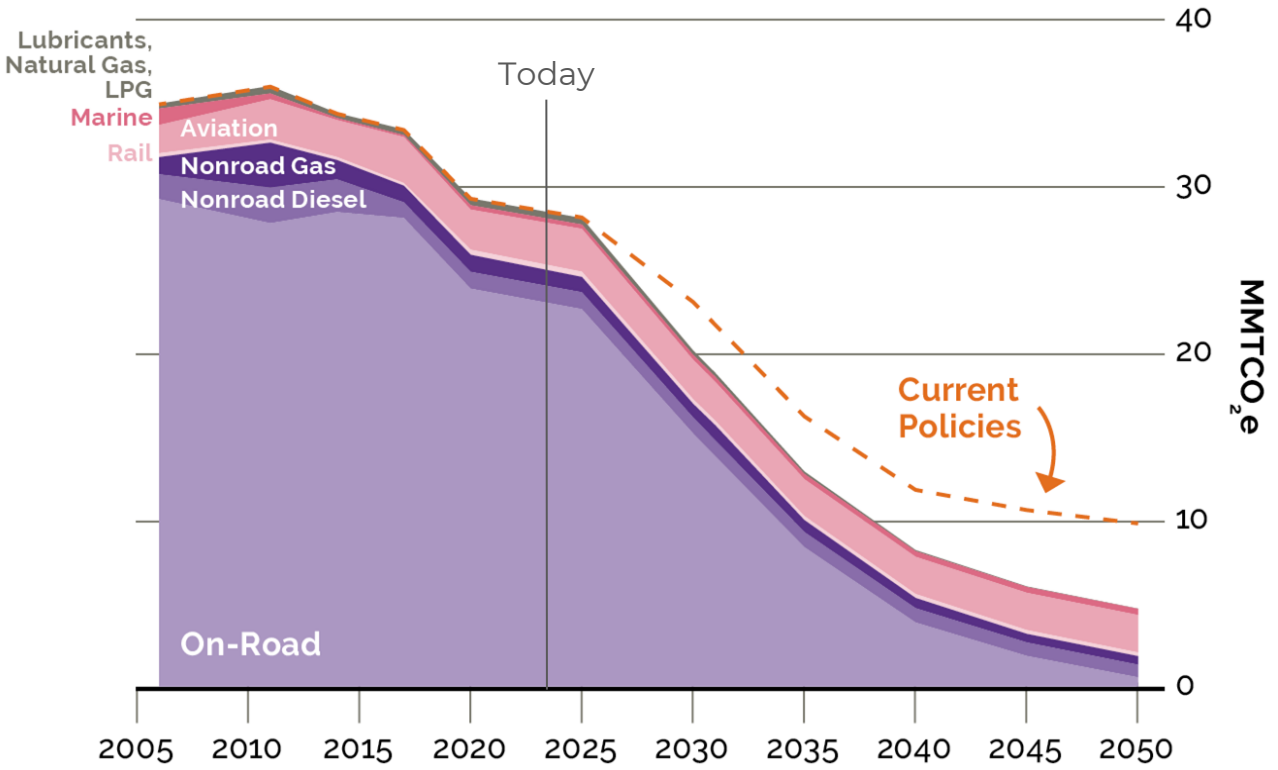
Can the Grid Handle It?

Yes.

The Climate Solutions Now Act required the Maryland Public Service Commission (PSC) to study this issue.

The PSC study found that efficient electrification of buildings and vehicles will require modest electric grid investments below historic levels.

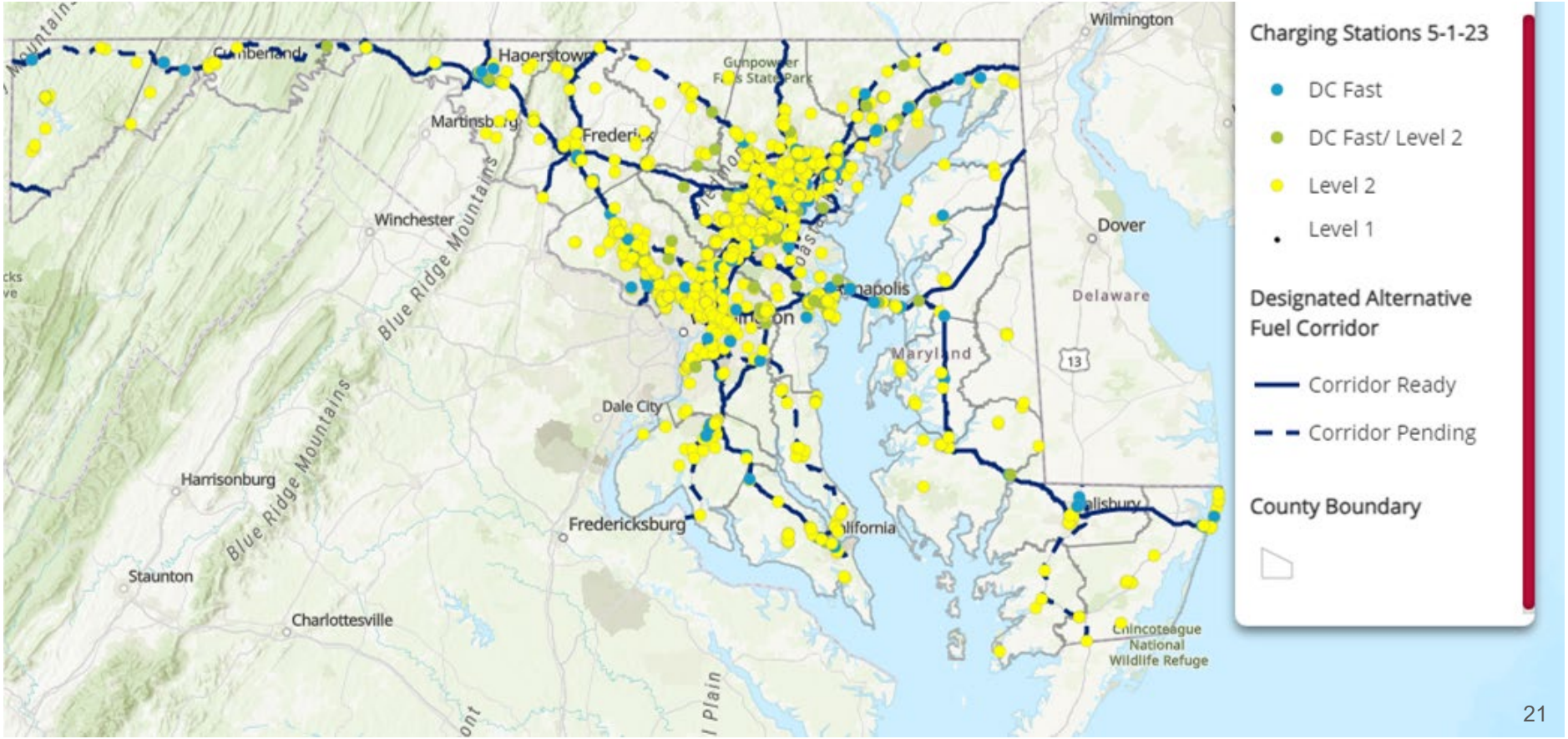
Transportation Decarbonization is Driven by Electrification



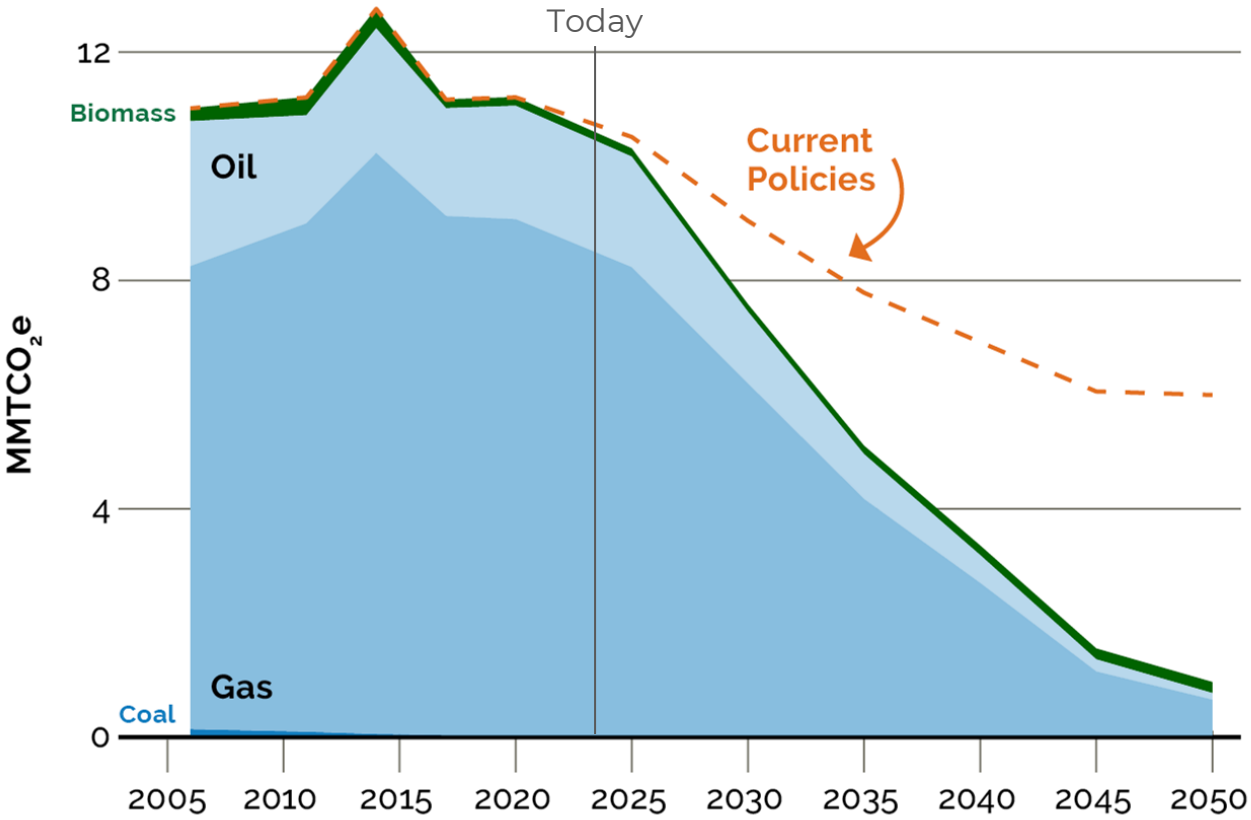
Advanced Clean Cars II and **Advanced Clean Trucks** guide the transition to zero-emission electric cars and trucks

MDOT's efforts to develop **transit projects** and **reduce vehicle miles traveled (VMT)** will further reduce emissions

Maryland's EV Charging Network is Poised for Additional Growth



Building Decarbonization is Driven by Electrification



Building Energy Performance Standards and federal incentives for heat pumps reduce emissions, but not enough

New policies such as **Zero-Emission Heating Equipment Standards** and **Clean Heat Standards** will reduce emissions fast enough to achieve the state's goals

Electrification Creates Local Jobs

Upgrading a boiler to a heat pump is work that can't be outsourced

Implementing this Plan will create an additional **27,000 jobs** in Maryland between now and 2031

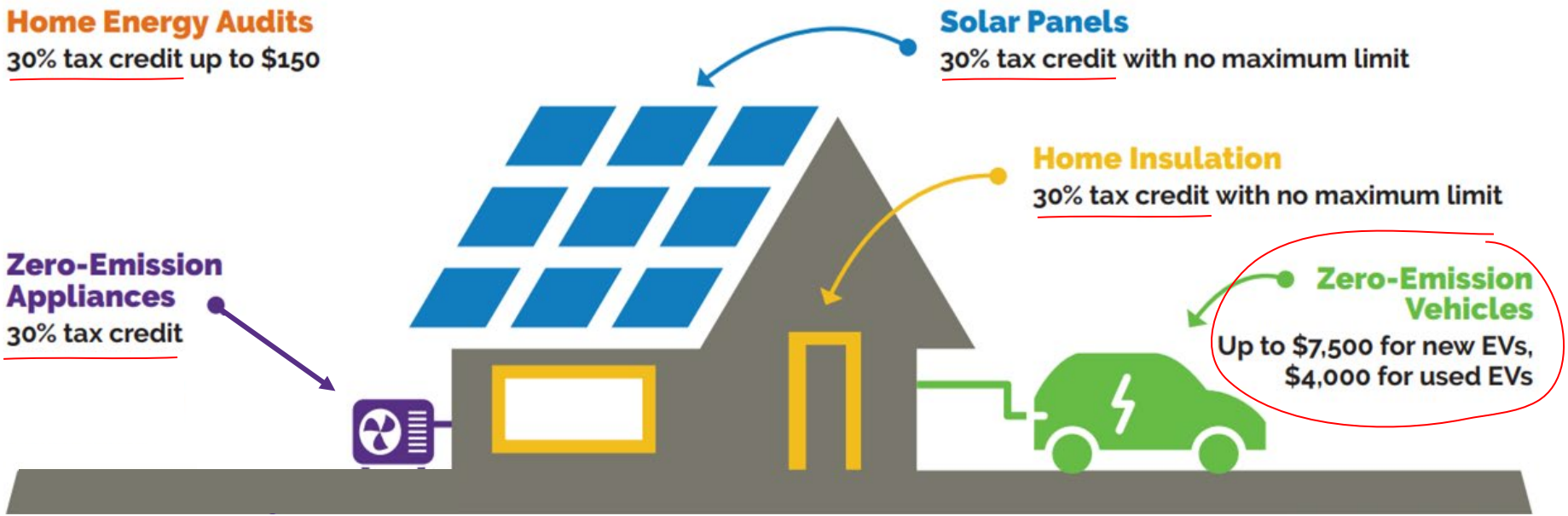
Electricians and heat pump installers are among the job sectors that will see strong demand

Lower Energy Costs

The average Maryland household saves **$2,600** annually by using heat pumps and EVs instead of gas appliances and gas cars

Savings increase to **$4,000** annually for households that switch from oil or propane to heat pumps and EVs

Take Advantage of Existing Federal Tax Credits



Amping Up Electrification with Rebates

Rebates will be available starting in 2024 for low, moderate, and middle-income households.

$8,000 rebate
Heat pump HVAC

$4,000 rebate
Electric panel upgrade

$2,500 rebate
Electric wiring

$1,750 rebate
Heat pump water heater

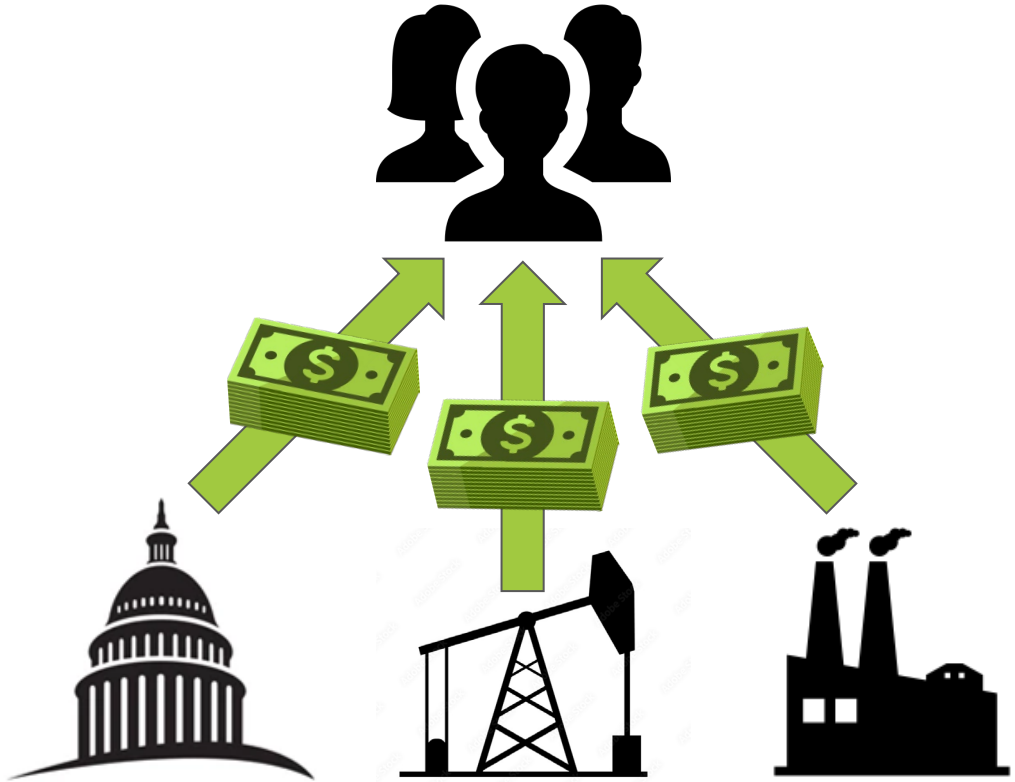
$840 rebate
Electric stove or cooktop

$840 rebate
Heat pump clothes dryer

This Plan proposes to keep electrification rebates flowing when federal funding runs out.

Potential Funding Sources

- Federal grants and loans
- Green revenue bonds
- Cap and invest program
- Carbon fee
- Hazardous substance fee
- Fees on fuel-burning vehicles

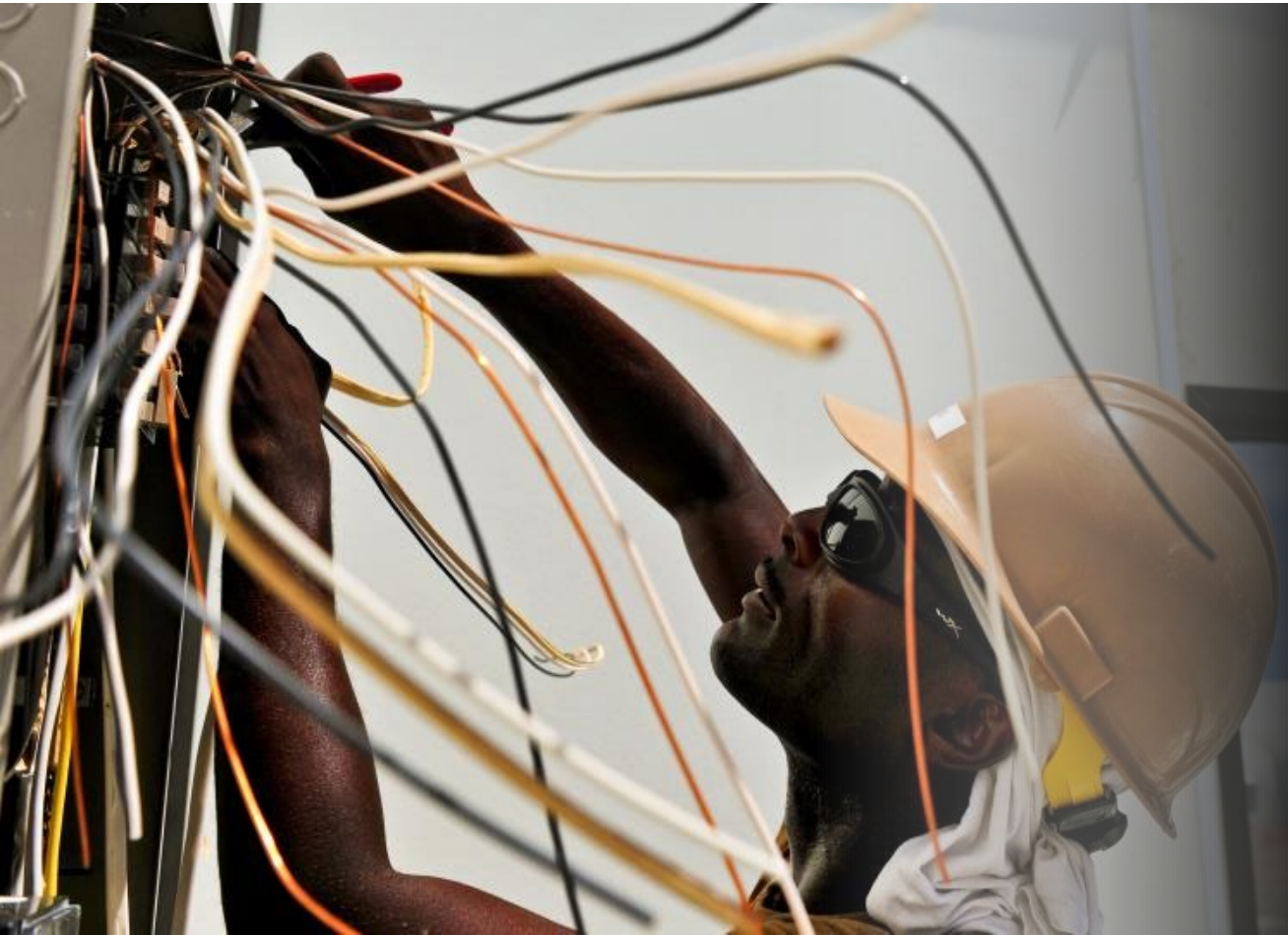


New Investments

With new funding sources established, the state will provide at least **$1 billion** annually to incentivize:

- Building electrification
- Transitioning to EVs
- Industrial decarbonization
- Workforce development
- and more

Economic Benefits



In addition to lowering household energy costs and creating 27,000 jobs, this Plan will also

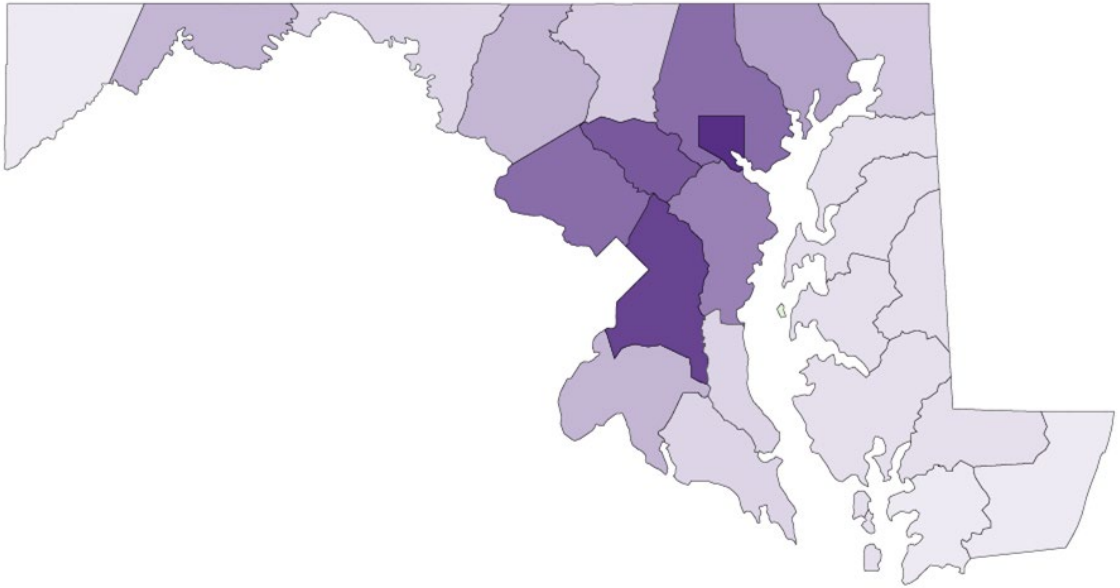
increase total personal income by $2.5 billion

and grow Maryland's **gross domestic product by $5.3 billion** between now and 2031

Health Benefits

This Plan delivers between **$142 million and $321 million** in additional health benefits in 2031 compared to current policies

Most of the health benefits occur in historically disadvantaged communities



Global Benefits

Maryland's new policies are modeled to reduce emissions by **646 million metric tons of carbon dioxide equivalent** (MMTCO2e) between now and 2050

The global benefit is estimated to be **$135 billion!**

Next Steps

- Maximize federal funding opportunities
- Launch & implement regulatory processes
- Coordinate with the Maryland Commission on Climate Change
- Evaluate funding mechanisms

Please read the full plan at **mde.maryland.gov**

Part 3

2024 Legislative Session Highlights

(Pending the Governor's veto or approval)

Changes to MCCC Membership

SB 777 - State Treasurer and Comptroller - Membership Responsibilities

- Synopsis: “Removing the State Treasurer… or the State Treasurer's designee from the Maryland Commission on Climate Change, the Board of Directors for the Maryland Environmental Service, and the Coast Smart Council; and establishing the Comptroller or the Comptroller's designee as a member of the Maryland Commission on Climate Change and the Coast Smart Council.”

HB323/ SB 337 - Environment - Commission on Climate Change Membership - Addition

- Synopsis: “Adding the Secretary of Emergency Management, or the Secretary's designee, and the Chair of the Public Service Commission, or the Chair's designee, as members of the Commission on Climate Change.”

Impact: Starting this year, the MCCC membership will include MDEM, PSC, and the Comptroller. The Treasurer will no longer serve on the MCCC.

Require Resilience Measures in Local Plans

- 2023 MCCC Recommendation: “Using the NextGen Adaptation Plan as a guide, the general assembly should mandate that resiliency measures be addressed as an element in local-level comprehensive plans….The ARWG should form an Interagency Funding Task Force as a subgroup to implement the priorities identified in the Next Generation Adaptation Plan.”
- **SB148 - Comprehensive Flood Management Grant Program - Funding for Underserved and Overburdened Communities**
  - **Synopsis**: “Requiring at least 40% of funding provided under the comprehensive flood management grant program to be used for projects located in or directly benefiting underserved or overburdened communities and areas in which over 90% of households are at extreme risk of flooding in the next 30 years; and authorizing the Governor to include in the annual State budget and appropriation of up to $20,000,000 for the comprehensive flood management grant program in fiscal year 2026 and each fiscal year thereafter.”
  - **Impact**: Supports frontline communities by delegating a specific percentage of funding. An example of a funding solution to support adaptation and resilience goals in the Next Generation Adaptation Plan.

Modernize EmPOWER Energy Efficiency Programs

- 2023 MCCC Recommendation: “The General Assembly should amend Public Utilities Article § 7–211 to require that EmPOWER work better for reducing GHG emissions…”
- Climate Pollution Reduction Plan p. 90: “Modify EmPOWER - In consultation with PSC, pass legislation establishing GHG reduction goals for electric and gas utility companies and require the utilities’ programs to facilitate beneficial electrification of fossil fuel heating equipment.”
- **HB864 - Energy Efficiency and Conservation Plans**
  - **Synopsis**: “Requiring each electric company, each gas company, and the Department of Housing and Community Development to develop a plan for achieving certain energy efficiency, conservation, and greenhouse gas emissions reduction targets through certain programs and services and superseding certain existing energy efficiency and conservation goals…”
  - **Impact**: The central goal of EmPOWER is moving away from energy savings towards GHG emissions reductions, including through beneficial electrification measures. Utility and DHCD programs can support training and workforce development in energy efficiency initiatives.

Align State Spending with Climate Goals

- 2023 MCCC Recommendation: “The Governor and General Assembly should ensure that state spending on energy projects promotes climate-aligned, zero-emission technologies and does not support or incentivize fossil fuel projects, systems, or infrastructure and is, at minimum, delivering at least 40% of funding to overburdened and underserved communities to be aligned with the Justice40 initiative...”
- The budget bill (SB360) provided that at least 50 percent of $90M Strategic Energy Investment Fund (SEIF) funding will help uplift communities that have been historically overburdened and underserved and will be put toward three initiatives:
  - $17 million for grants to purchase and lease **electric school buses** to serve Maryland public school students;
  - $23 million for grants to install **electric vehicle charging infrastructure in low and moderate income communities**; and
  - $50 million for grants to **electrify hospitals, schools, multi-family housing, and other community buildings**.

Networked Geothermal

House Bill 397 Thermal Energy Network Systems – Authorization and Establishment (Working for Accessible Renewable Maryland Thermal Heat (WARMTH) Act)

- **Synopsis**: "Requiring gas companies serving at least 75,000 customers in their distribution territories and authorizing gas companies serving fewer than 75,000 customers to develop a plan for a pilot thermal energy network system or systems on or before October 1, 2024; requiring certain gas companies to submit a certain proposal or proposals to the Public Service Commission for approval on or before July 1, 2025; authorizing certain entities or a community organization to submit neighborhoods for consideration as part of a pilot system; etc."
- **Impact**: The bill strives to ensure a variety of labor best practices: prevailing wage requirements, project construction being subject to an agreement that establishes terms and conditions, a requirement that at least 80% of contractors take a 10-hour occupational safety and health administration course, and promotion of career-training opportunities in manufacturing, maintenance, and construction industries for local residents, veterans, women, minorities, and formerly incarcerated individuals.

Part 4

Review the Draft JTWG Work Plan

Highlights of Yearly MCCC WG Process*

- Draft Recommendations – Begin in August and Discuss in October
- Final Recommendations – Due to MCCC in October
- MCCC Votes on WG Recommendations – October or November timeframe
- MCCC Final Report – Submitted to the General Assembly and Governor in December

* Subject to change.