

# Greenhouse Gas (GHG) & Carbon Mitigation Working Group (MWG) Policy Options

www.mde.state.md.us/Air/climatechange/index.asp

## **Cross Cutting (CC)**

- GHG Inventories and Forecasting (CC-1): Prepare a statewide inventory and forecast of GHG sources and sinks. LEAD: Maryland Department of the Environment (MDE)
- GHG Report and Registry (CC-2): Establish and oversee a GHG reporting system for GHG emitting sources. LEAD: MDE
- Statewide GHG Reduction Goals and Targets (CC-3): Adopt a 25% by 2020 GHG emission reduction goal from a 2006 baseline. LEAD: MDE
- State and Local Government Lead by Example (CC-4): Promote energy efficiencies and GHG reductions through procurement and purchasing practices for State and local governments. LEAD: MDE
- Public Education and Outreach (CC-5): Combine current educational and action campaigns on climate change with community action and State climate change policies. LEAD: MDE
- Review Institutional Capacity to Address Climate Change Issues Including Seeking Funding for Implementation of Climate Action Panel Recommendations (CC-7):

  Develop the State governance, organizational capacity, and funding to focus on GHG mitigation and adaptation policies and programs. LEAD: Commission
- Participate in Regional, Multi-State, and National GHG Reduction Efforts (CC-8): Participate in and encourage regional programs and national organizations to work with the Federal government to reduce GHG emissions. LEAD: MDE
- Promote Economic Development Opportunities Associated with Reducing GHG Emissions in Maryland (CC-9): Work with public and private entities to develop green industries and jobs. LEAD: Department of Business and Economic Development (DBED)
- Creat Capacity to Address Climate Change in an "After Peak Oil" Context (CC-10): Evaluate proposed policies and legislation to avoid the potential of increased GHG emissions for inexpensive oil alternatives. LEAD: Maryland Energy Administration (MEA)
- Evaluate Climate Change Policy Options to Determine Projected Public Health Risks/Costs/Benefits (CC-11): Review the health risks, costs, and benefits of proposed climate change policies and legislation. LEAD: Department of Health and Mental Hygiene (DHMH)

#### Residential, Commercial, and Industrial Buildings (RCI)

- Improved Building Codes & Trade Codes & Beyond (RCI-1): Reduce energy consumption in new or renovated buildings through improvement and enforcement of building and trade codes. LEAD: Department of Housing and Community Development (DHCD)
- Demand-Side Management (DSM)/Energy Efficiency Programs, Funds, or Goals, for Electricity and Natural Gas (RCI-2): Meet energy consumption reduction goals by increasing investment in electricity and natural gas demand-side management programs. LEAD: MEA (Maryland Energy Administration)
- Low Cost Loans for Energy Efficiency (RCI-3): Establish revolving low-interest loan fund(s) for small-scale residential and commercial energy efficiency projects. LEAD:

  MEA
- Improved Design, Construction, Appliances & Lighting in New and Existing State and Local Government Buildings, Facilities and Operations: Gov't Lead by Example (RCI-4): Adopt practices to obtain high performance and energy efficient buildings in state and local government-owned and leased buildings. LEAD: MDE
- More Stringent Appliance/ Equipment Efficiency Standards (RCI-7): Implement appliance efficiency standards to reduce the market cost of energy efficiency improvements. LEAD: MEA
- Energy Efficiency Resource Standard (RCI-10): Establish mandatory utility electricity and natural gas reduction targets and utility plans to achieve per capita energy savings of 15% by 2015. LEAD: MEA
- Promotion and Incentives for Energy Efficient Lighting (RCI-11): Leverage incentives and an aggressive marketing campaign to encourage Maryland residents to choose high efficiency lighting. LEAD: MEA

#### **Energy Supply (ES)**

- Promotion of Renewable Energy Sources (ES-1): Reduce regulatory and financial barriers to centralized and onsite generation and ensure consideration of renewable energy projects. LEAD: MEA
- Technology-focused Initiatives for Electricity Supply (ES-2): Support the development and adoption of biomass co-firing, energy storage, fuel cell, landfill gas, and clean energy supply. LEAD: MEA
- GHG Cap & Trade (ES-3): Support Maryland's active participation in RGGI and consider RGGI expansion in the absence of a national cap and trade program. LEAD: MDE
- Clean Distributed Generation (ES-5): Encourage investment in distributed energy and combined heat and power systems. LEAD: MEA
- Integrated Resource Planning (ES-6): Consider energy supply options prior to approving utility expansions of electricity generation or transmission. LEAD: Public Service Commission (PSC)
- Renewable Portfolio Standards (ES-7): Require electricity providers to obtain a minimum percentage of electricity sales from renewable energy sources. LEAD: PSC
- Efficiency Improvements and Repowering Existing Plants (ES-8): Identify emissions reductions from existing generating units through improving their operating efficiency and adding fuel changes. LEAD: MEA
- Generation Performance Standards (ES-10): Require load serving entities to meet a perunit GHG emission rate below a specified standard. LEAD: MDE

### Agriculture, Forestry, and Waste (AFW)

- Forest Management for Enhanced Carbon Sequestration (AFW-1): Promote sustainable forestry management practices in existing Maryland forests on public and private lands. LEAD: Department of Natural Resources (DNR)
- Managing Urban Trees & Forests for GHG Benefits (AFW-2): Maintain and improve the health and longevity of urban trees and increase urban tree canopy throughout the state. LEAD: DNR
- Afforestation, Reforestation & Restoration of Forests & Wetlands (AFW-3): Promote forest and wetland CO2 sequestration using a suite of strategies from green infrastructure planning to tax incentives. LEAD: DNR
- Protection & Conservation of Agricultural Land, Coastal Wetlands & Forested Lands (AFW-4): Map, designate, prioritize, and conserve existing forests, agricultural land, and wetlands. LEAD: Maryland Department of Agriculture (MDA)
- "Buy Local" Programs for Sustainable Agriculture, Wood, and Wood Products (AFW-5): Promote the sustainable production and consumption of locally produced agricultural and durable wood products. LEAD: MDA
- Expanded Use of Forest & Farm Feedstocks & By-Products for Energy Production (AFW-6): Promote the use of local biomass for generating electricity and thermal energy. LEAD: DNR
- In-State Liquid Biodiesel Production (AFW-7b): Promote sustainable in-state production and consumption of transportation biofuels and reduce overall transportation fuel consumption. LEAD: MEA
- Nutrient Trading with Carbon Benefits (AFW-8): Add carbon credits and enhanced nitrogen credits to the Upper Chesapeake Bay incipient nutrient trading program. LEAD: MDA
- Waste Management through Source Reduction & Advanced Recycling (AFW-9): Reduce Maryland's waste stream through programs that reduce waste, expand recycling, and enhance the re-use of products. LEAD: MDE



#### **Transportation and Land Use (TLU)**

- Integrated Planning for Land Use & Location Efficiency (TLU-2): Implement policies to reduce vehicle miles traveled as a means of reducing GHG emissions in the transportation sector. LEAD: Maryland Department of Transportation (MDOT)
- Transit (TLU-3): Promote compact, transit-oriented development and other growth management objectives. LEAD: MDOT
- Intercity Travel: Aviation, Rail, Bus and Freight (TLU-5): Enhance connectivity of non-auto transportation modes between cities through infrastructure and technnology investments. LEAD: MDOT
- Pay as You Drive Insurance (TLU-6): Explore options for implementing and marketing insurance policies that tie the cost of premiums to miles or hours driven. LEAD:

  Maryland Insurance Agency (MIA)
- Bike and Pedestrian Infrastructure (TLU-8): Develop infrastructure planning and design tools and encourage local governments to improve promote bicycle and pedestrian travel. LEAD: MDOT



- Incentives, Pricing, and Resource Measures (TLU-9): Establish incentives and disincentives such as GHG-emission based road user fees to reduce transport-related GHG emissions. LEAD: MDOT
- Transportation Technologies (TLU-10): Reduce GHG emissions from on- and off-road vehicles by implementing a range of strategies. LEADS: MDE/MDOT
- Evaluate GHG Emissions Impacts of Major Projects (TLU-11): Evaluation of transportation and land use GHG emissions related to state and local major capital projects. LEAD: MDOT