



Department of the Environment

Status Report State Climate Change Activities in Maryland

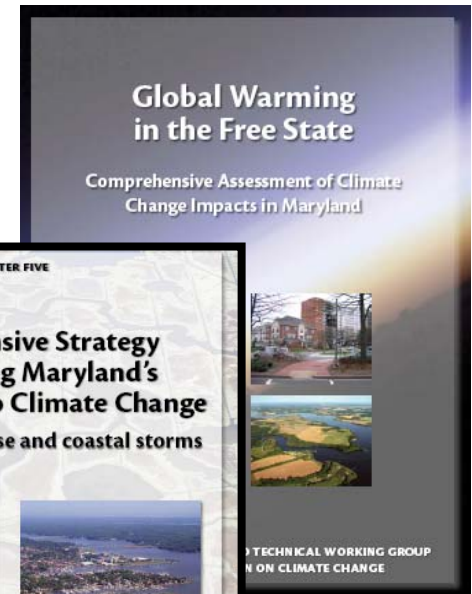
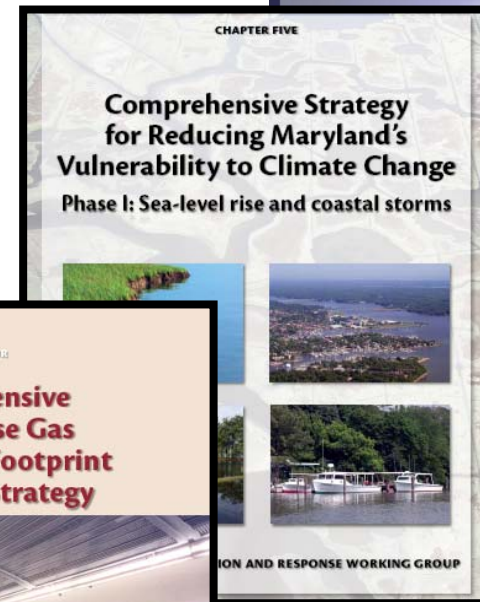
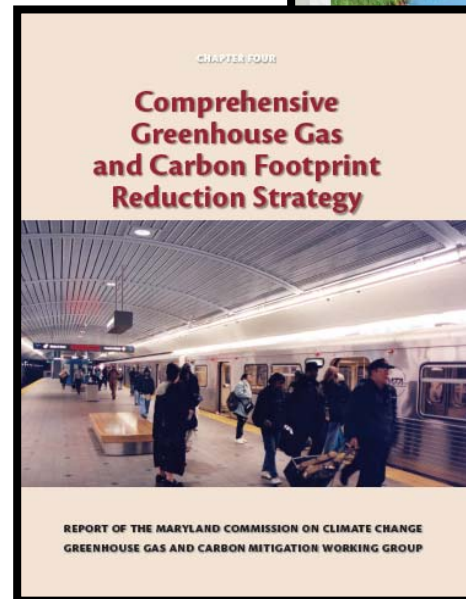
Luke Wisniewski, Engineer
Climate Change Division
Maryland Department of the Environment



- Climate Change Commission
- Regional Greenhouse Gas Initiative
- Greenhouse Gas Reduction Act of 2009

The Climate Action Plan

- Finalized in 2008
- Reports from 3 Working Groups
 - 42 recommended strategies on mitigation
 - 19 recommended strategies on Adaptation
 - Effects of global warming on Maryland
- Other Issues:
 - The cost of inaction
 - Transition to a future Federal program

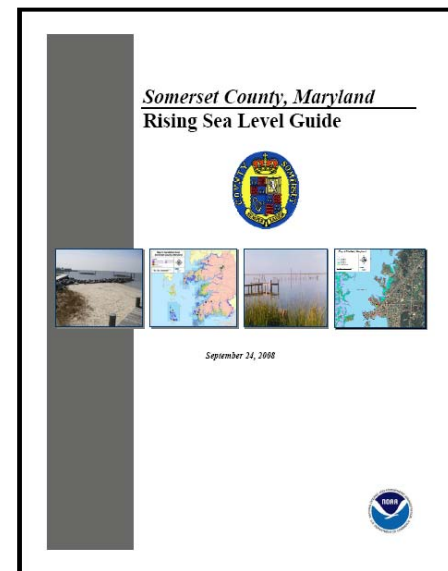


19 recommendations

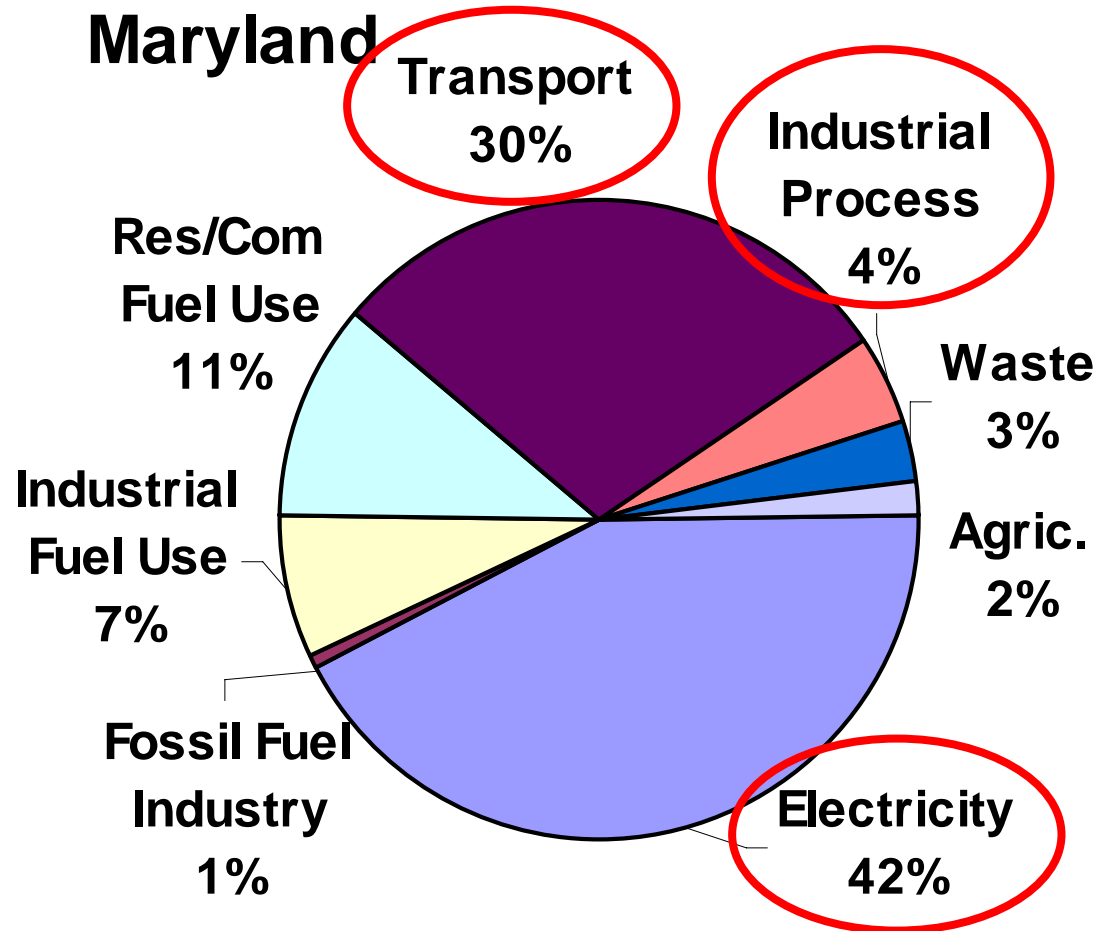
- Existing-Built Environment
- Future Growth & Development
- Human Health, Public Safety & Welfare
- Natural Resources & Resource-based Industries

Examples of recommendations:

- Building code and floodplain management revisions
- Integrated planning for sea level rise
 - transportation/infrastructure siting & design
 - growth and development planning
- Climate change insurance advisory committee
- Forest and wetland protection
- Sustainable shorelines and buffer management
- Local government guidance



Maryland's Emissions



- 70% of Maryland's GHG emissions come from the combination of the electricity consumption and transportation sectors
- Electricity consumption includes the >25% of electricity created outside of Maryland's borders



42 Recommended Measures

Energy
Supply

Residential,
Commercial,
And
Industrial
Strategies

Transportation
and
Land Use
Strategies

Agricultural,
Forestry and
Waste
Strategies

Cross
Cutting
Strategies

For Each Measure:

- GHG Emission reductions
- Costs
- Benefits
- Linkage to existing efforts
- Other benefits from the measure



Types of Measures

- **EXISTING**
 - Healthy Air Act, the Clean Cars Program, EmPOWER MD, RPS, LEEDs standards in public buildings, 2008 energy legislation
- **UNDERWAY**
 - Telework programs, transit incentives, Smart Growth, urban trees, buy local
- **VOLUNTARY**
 - Public Education and Outreach, Government Lead by Example
- **LEGISLATIVE**
 - Generation Performance Standards
 - Improved building & trade codes





Climate Action Plan Reductions

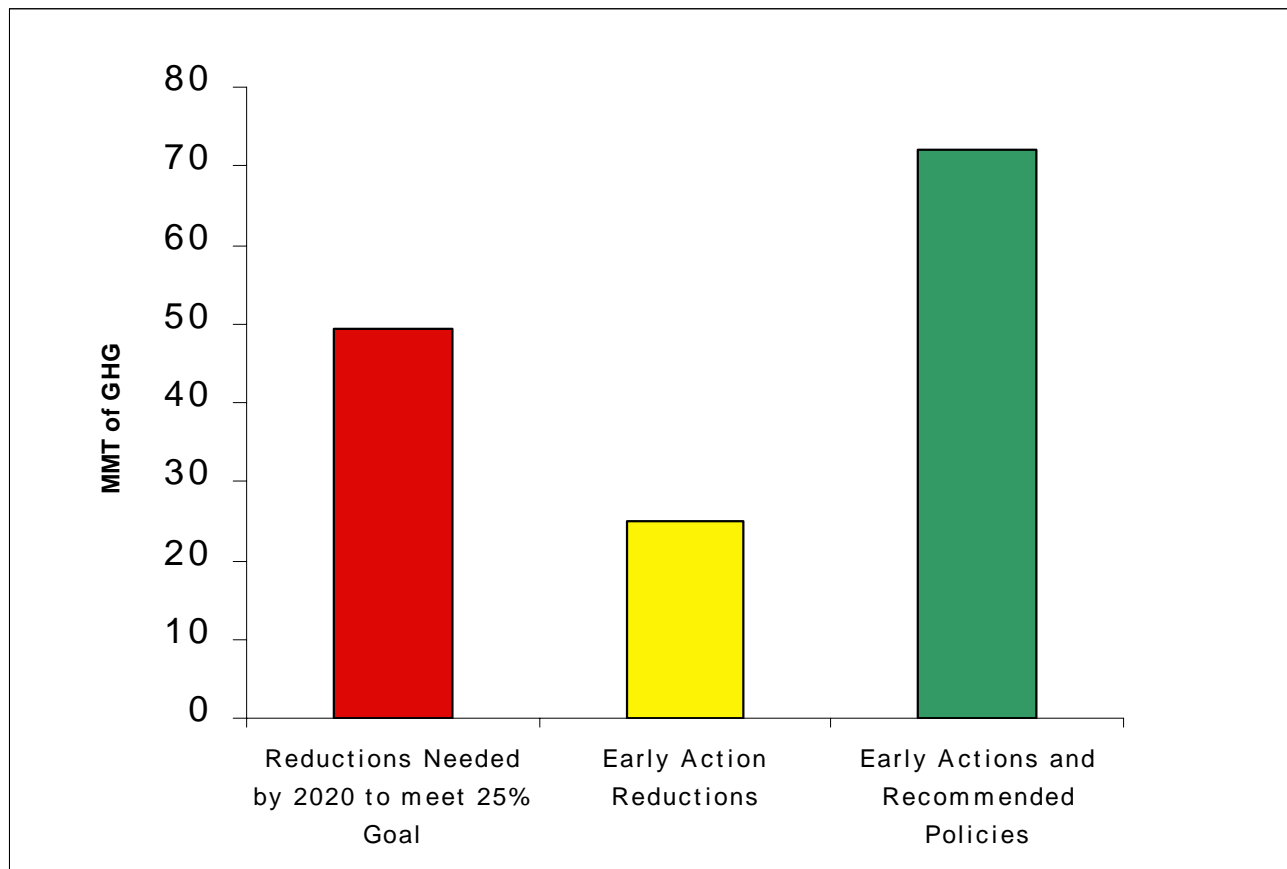
<i>Reduction Program</i>	<i>Projected 2020 Emission Reductions in MMT of CO2</i>	<i>Percentage of Total Reductions</i>
RGGI	8.7	11
CALEV	6.2	8
EmPOWER Maryland	6.8	8
Renewable Portfolio Standard	12.2	15
Recommended Energy Supply Programs	12.4	15
Recommended Residential, Commercial, Industrial Programs	11.2	14
Recommended Transportation and Land Use Programs	16.0	20
Recommended Agricultural, Forestry and Waste Programs	5.6	7
ALL Reductions	81.0	100



Projected Reductions

Can we meet our 2020 goal?

- The Commission's 2020 goal is to achieve a 25% to 50% reduction
- Combined with Maryland's early action programs, the 42 strategies are projected to achieve or exceed the 25% reduction goal

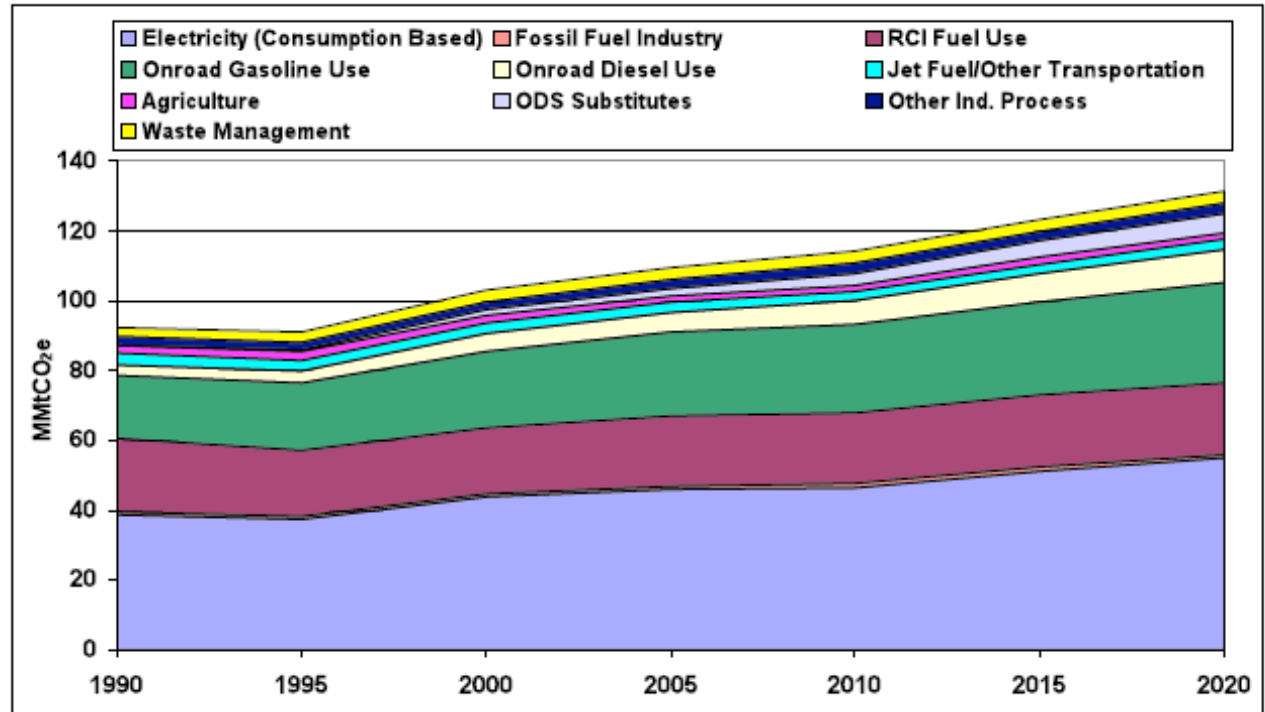


* Emission reduction projections under review

Importance of Early Actions

- 1 ton of GHG reduction now is more valuable than 1 ton of reduction in 2050
- Implementing all 42 measures estimated to result in a net economic benefit of approximately \$2 Billion in 2020
- More greenhouse gases accumulate and stay in the atmosphere each year

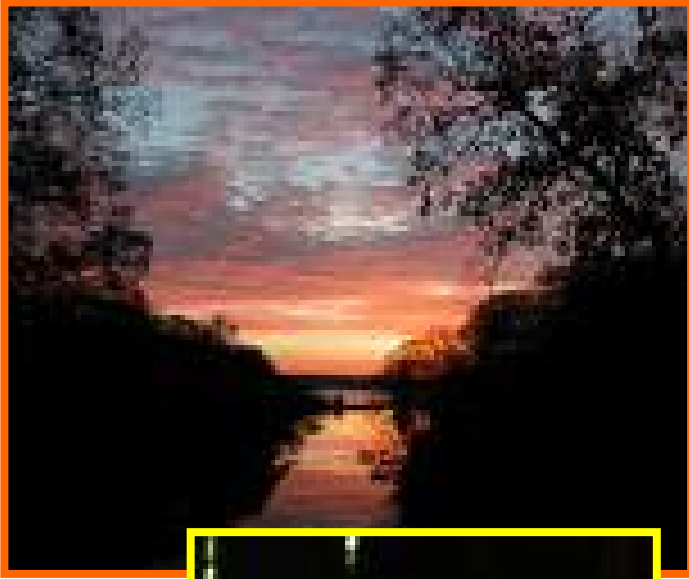
Greenhouse Gas Emission Trends in Maryland



- RGGI is a cooperative effort of New England and Mid-Atlantic states
- Establishes a cap-and-trade program focused on power plant emissions of greenhouse gases (CO₂)
- First CO₂ cap-and-trade program of its kind



Reductions from RGGI



- Applies to fossil fuel-fired electric generating units 25 megawatts and larger
- Involves a two-phase cap. Will stabilize MD emissions 2009-2014 at 37.5 tons, then reduce emissions 10% by 2018
- Reductions based on auctioned allowances – MD has raised over 50 million from three auctions so far
- Strategic Energy Investment Fund – managed by MEA



Goals of GGRA Legislation

- Legislative Framework for Emissions Reductions
- Set Timeframe for Early Reductions
- Net Positive Economic Impact
- Protect Existing Manufacturing Jobs
- Protect All Sectors Affected
- Recognize Need for National Program
- Provide for Major Adjustment If Needed





Key Components

2020: 25% Reduction of Emissions

- State Plan by 2012
- 2 Reports to Legislature in 2015
- Requires 2016 Legislative Action
- Manufacturing Provisions
- Other Sector Provision





2 Reports to Legislature in 2015

MANUFACTURING

- Independent Study

MDE STATUS REPORT

- Are reductions on schedule?
- Are jobs being created and protected?
- Is Plan having a positive impact on Maryland's economy?
- What Are Requirements of Federal Program, if any?
- Should Maryland keep, change or eliminate the 25% Reduction by 2020 Requirement?





Mid-Course Correction in 2016

25% REDUCTION BY 2020 REQUIREMENT:

Legislature *Must Act* to Continue 25% Reduction

Renew, Change, Lapse: How is the law working?

- *Are existing jobs being affected?*
- *Are new jobs being created?*
- *Is the Plan having a positive impact on economy?*
- *Is there now a federal program?*
- *Should the Maryland program be changed or eliminated?*



THANKS - Questions?