



**Department of the Environment**

# Greenhouse Gas Emissions Reduction Act of 2009 Update

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Senate Education, Health, &  
Environmental Affairs Committee

Presented by  
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Acting Secretary





# Maryland and Climate Change

Maryland is the 4<sup>th</sup> most vulnerable state in the nation to coastal sea-level rise having lost approximately 1 foot during the 20<sup>th</sup> century

Loss of aquatic life (impacts to oysters, crabs, and the Bay ecosystem)

Potential for extreme weather conditions including annual average temperature increases, heavier precipitation events, and more droughts





# Maryland Commission on Climate Change

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Established in 2007 by Executive Order

16 members of the Governor's Cabinet and 6 representatives from the General Assembly

Charged with addressing Maryland's climate challenge on all fronts: mitigation (MDE), adaptation (DNR), science and effects in Maryland (UMD)

Released 2008 Climate Action Report in August 2008

Includes reports from 3 working groups, 42 strategies on mitigation, and 10 strategies on adaptation





# The Path to Reduction

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From the 2008 Climate Change Plan:

Existing programs will lower emissions by 12.5% including the Healthy Air Act, RGGI, Clean Cars Program, EmPOWER MD, Renewable Portfolio Standards, LEED standards for public buildings

Other initiatives to reduce emissions such as transit incentives, urban trees, smart growth, 'Buy Local' programs, advanced recycling

New Initiatives:

Regional Low-Carbon Fuel Standards Initiative  
Regional Transportation and Climate Initiative

Federal/EPA requirements such as vehicle and truck standards and permitting





# Conclusions of the Climate Action Plan

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- Reducing GHG's in a way that supports economic development and job creation can be done
- Implementation of Climate Change Actions will facilitate development of the green economy
- Reductions in the 25% to 50% range by 2020 are achievable
- Economic benefits from the Climate Action Plan could be considerable (\$2 billion net economic benefit by 2020)





# Greenhouse Gas Emissions Reduction Act of 2009

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Developed in partnership with key interest groups through an MDE sponsored “facilitated” stakeholder process

## Key Provisions:

- 25% GHG emission reduction (from 2006 levels) by 2020
- Draft Climate Action Plan by December 2011, final plan by December 2012
- Plan must have a positive impact on Maryland’s economy including job creation and the protection of existing jobs
- Reports to the legislature include an independent economic report and a report on progress
- Updated emissions inventory
- 2016 Legislative action required to adjust reduction goals if needed





# Summary of GGRA Timeline

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June 1, 2011- emissions inventory & forecast due

December 31, 2011- submission of draft plan to achieve a 25% reduction by 2020 to the Governor and General Assembly

December 31, 2012- adopt final plan

October 1, 2015- independent economic study submitted to the Governor and General Assembly by University of Maryland; progress report submitted to the Governor and General Assembly by the department

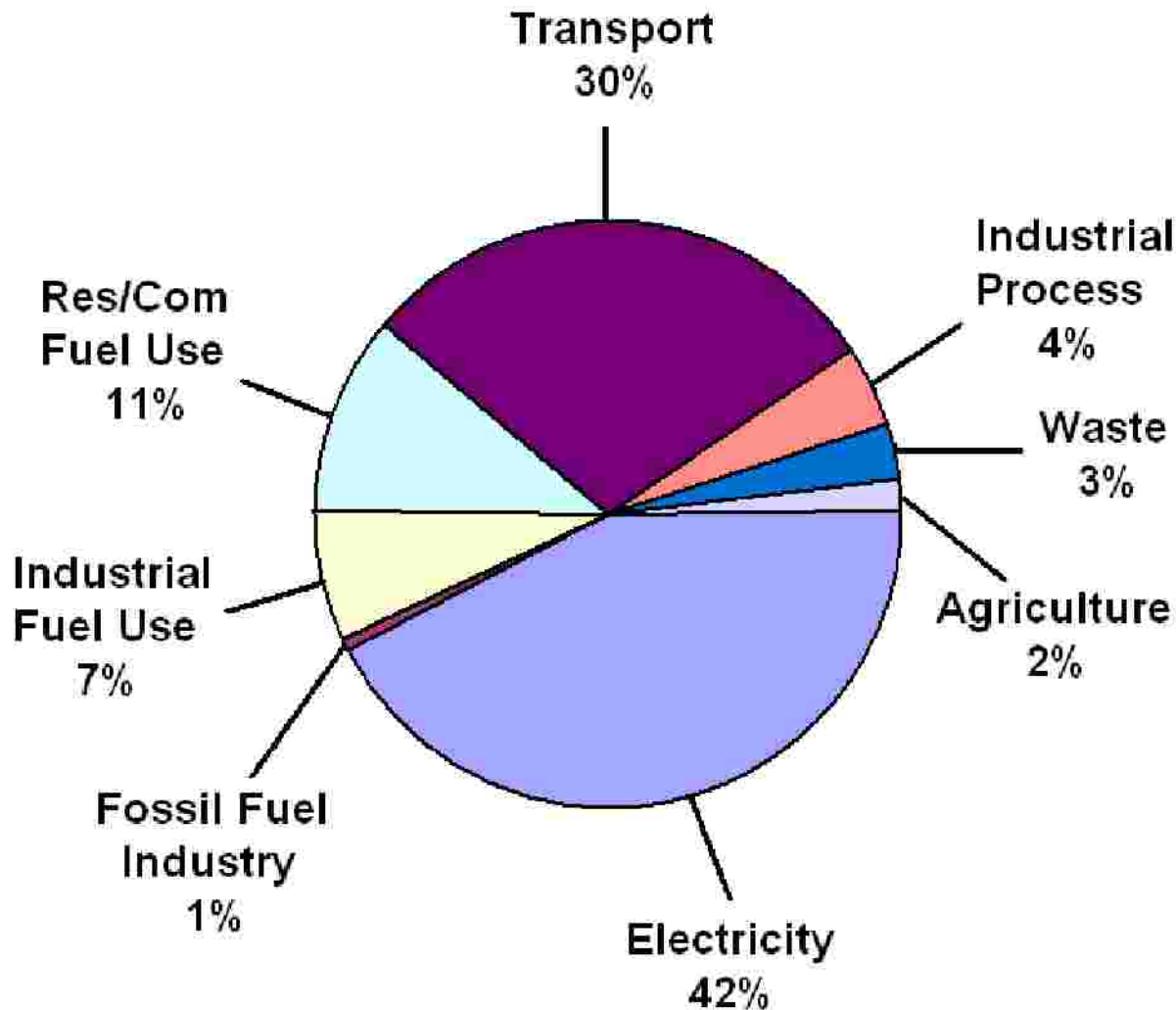
2016 session- legislative action to adjust goals (if needed)





# Maryland's 2006 Emissions

Maryland Emissions by Sector



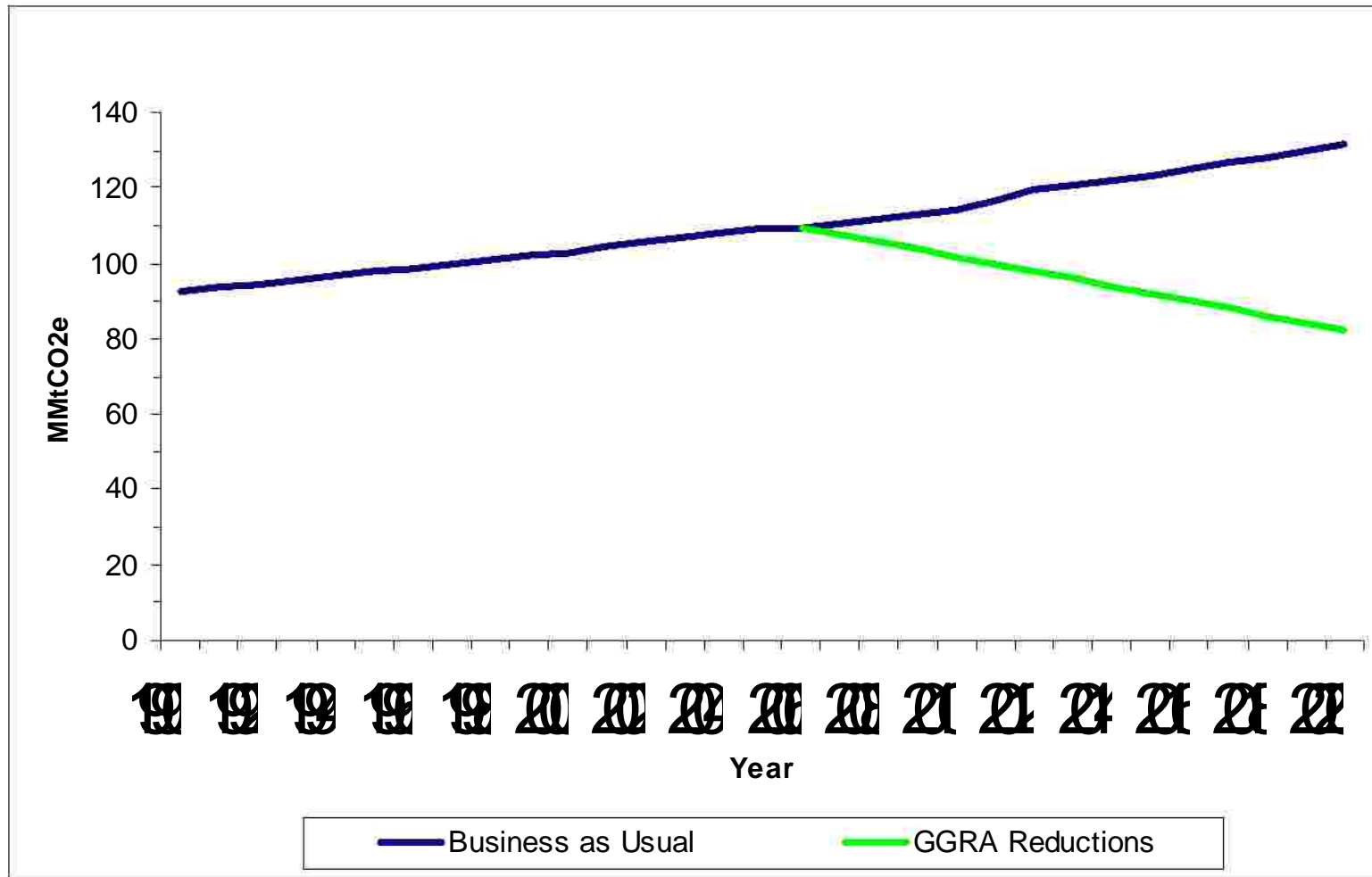
- 70% of Maryland's GHG emissions come from the electricity consumption and transportation sectors
- Electricity consumption includes the > 25% of electricity created outside of Maryland's borders







# Maryland Emissions Projections





## Next Steps

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MDE and other State agencies have been developing and in implementing reduction measures since 2009

### 2011 Timeline

**May** - draft for stakeholder meetings available

**May to December** - approximately 20 stakeholder meetings including outreach to urban and rural interests

**Dec 31, 2011** - draft due to Governor and General Assembly





## Next Steps - 2015 UMD Study

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- Review control opportunities in manufacturing
- Impact on electrical service reliability
- Protect existing jobs
- Review of net economic impact to the state
- New employment opportunities





# Challenges

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- Staffing
- Impact of the economic downturn
- Lack of overarching federal climate program





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