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Enhanced Economic Analysis and Social Equity Issues

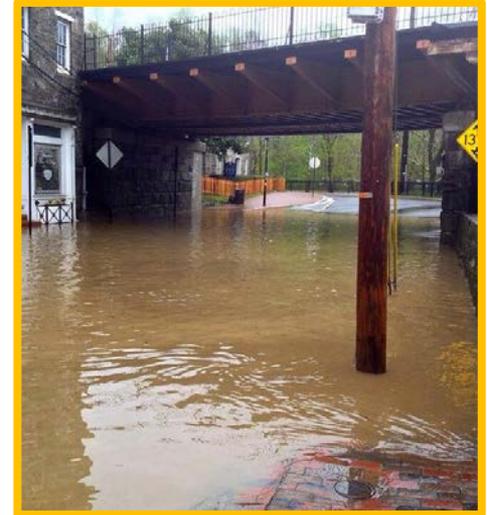
What's already in the Works at MDE?



Tad Aburn and Chris Hoagland, MDE
Mitigation Working Group Meeting
April 25, 2016

Presentation Overview

- Timing - The Greenhouse Gas Emission Reduction Act (GGRA) of 2016
- Enhancing existing economic analyses
 - New efforts with Towson's Regional Economic Studies Institute (RESI)
 - Expanded efforts on quantifying public health and other co-benefits from the Greenhouse Gas Emission Reduction Act (GGRA)
- Enhanced efforts on social equity issues
- Critical areas where outside resources could really help further strengthen these two areas of the GGRA



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The Basic Schedule - GGRA of 2016

- 2016, 2017 and 2018 - MDE, other State agencies, MWG and stakeholders research, analyze and build 40 by 30 plan
 - Reductions, economic benefits, jobs, social equity, reliability, rural impacts, manufacturing impacts ... and much more
 - Stakeholder meetings across the State
- December 31, 2018 - Draft plan
- December 31, 2019 - Final plan
- October 1, 2022 - MDE owes mid-course status report
 - Emission reductions, jobs, economics, equity, more
 - Manufacturing study due
- December 1, 2023 – Law terminates if not reauthorized

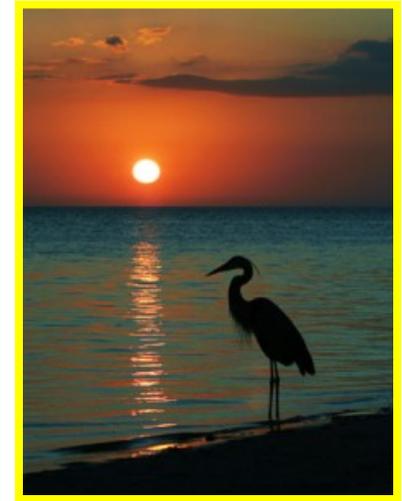


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Current MDE Plans

... for enhancing analyses related to jobs, the economy and equity

- MDE is already working with RESI and the Northeast States for Coordinated Air Use Management (NESCAUM) to enhance economic analyses and multi-pollutant health risk and cost-benefit analyses for the 40 by 30 planning process
 - Will also build social equity analyses into the process
 - Encourage MWG members to look back at how these analyses have been done for 2012 plan and 2015 update
- Also working to increase efforts to insure that social equity issues are given a higher priority in building and communicating the new plan
 - Similar to priority given to emission reduction, jobs and the economy in earlier GGRA documents



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Planned Economic Analysis Enhancements

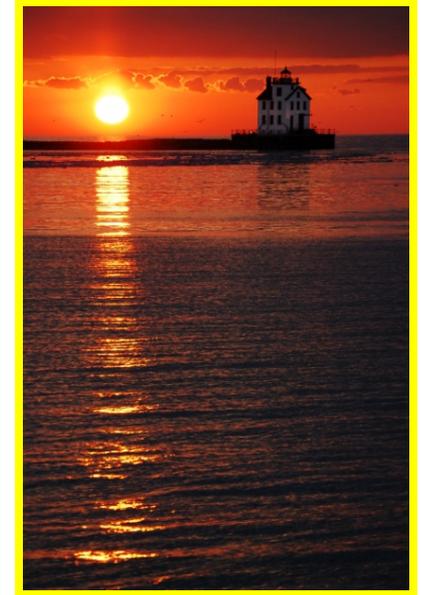
- Continue to refine inputs and analyses of the 50 plus programs in the current plan (RESI, MDE and other State agencies)
- Expand multi-pollutant analysis framework to improve health risk reduction and cost-benefit tools to better address health and equity issues (NESCAUM, RESI and MDE)
- Create new system for quantifying and tracking job creation and economic growth (RESI and MDE)



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Integrating Economic, Jobs, Health and Equity Analyses

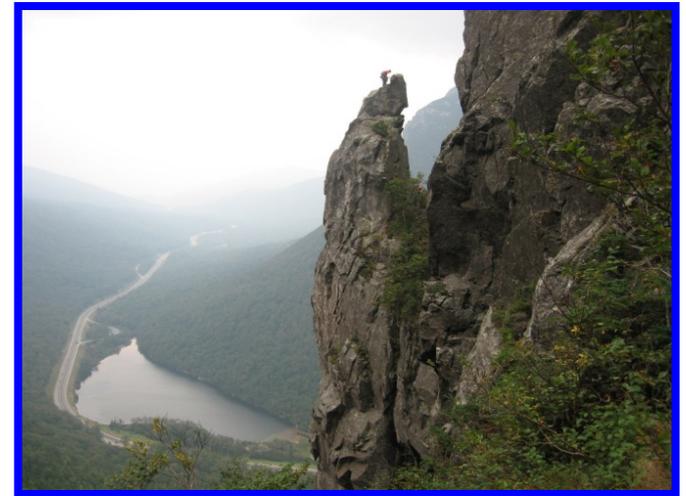
- MDE has looked at other states efforts that look at the key economic and equity issues associated with greenhouse gas (GHG) planning
- The planned MDE tool - A poor man's version of what California is working on
- Working with RESI, NESCAUM and hopefully Resources for the Future (RFF) to enhance and streamline current analysis tools used in the past
 - Links economic benefits, jobs, health risk, cost-benefit and social equity analyses
- If interested in providing input, feel free to drop Chris Hoagland a note



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Relevant Models

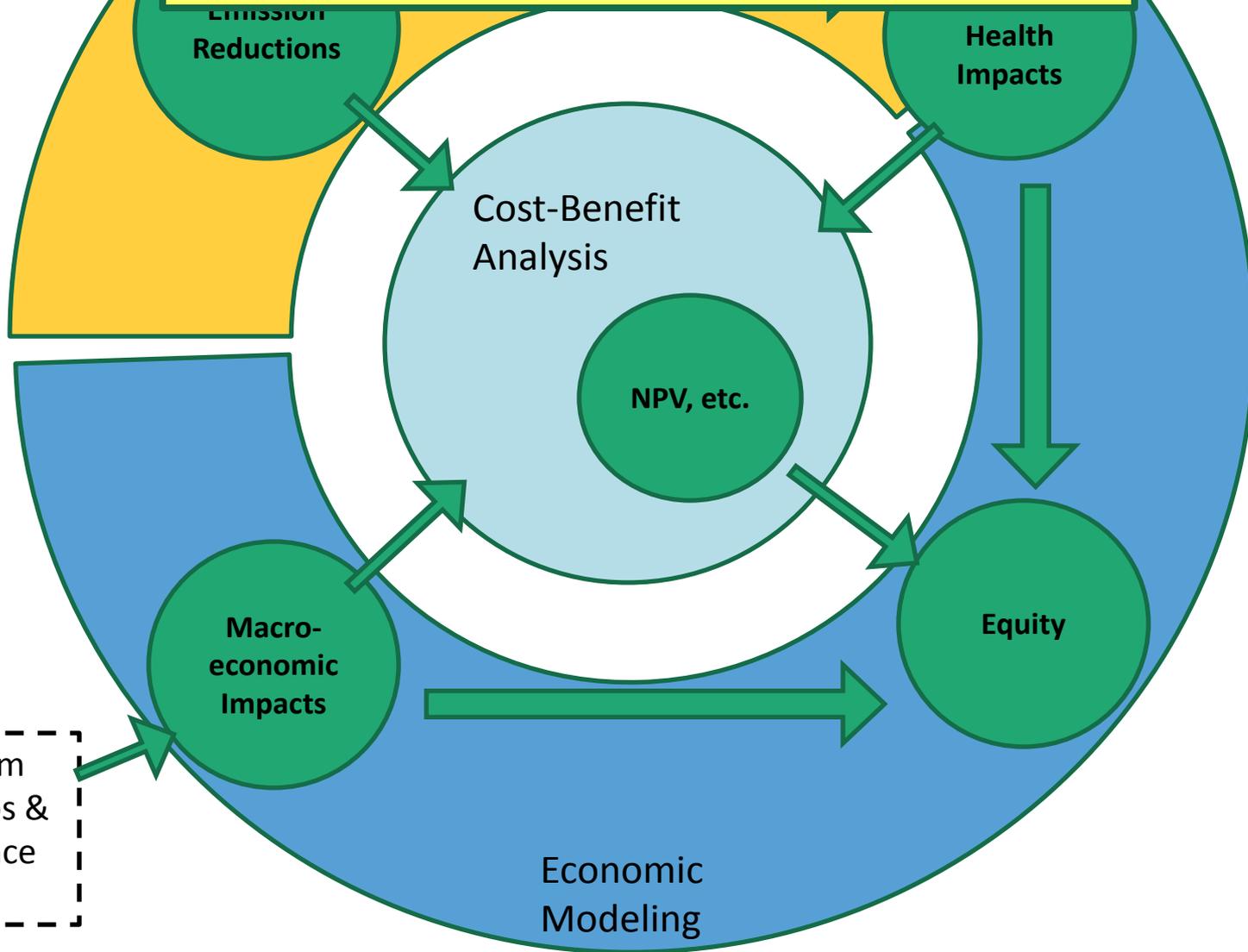
- Emission models like MOVES and ERTAC
- Air quality models like CMAQ and CAMX
- Energy models like NE-MARKAL and IPM
- Economic models like REMI
- Benefit assessment models like BenMAP
- Environmental justice models like EJ-SCREEN



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Conceptual Description of Planned MDE Integrated Analysis System

Program
Scenarios &
Reference
Case



Program
Scenarios &
Reference
Case

Economic
Modeling

Tracking Economic Progress

- The GGRA requires MDE to provide “every 3 year” inventory analyses of GHG emissions to track progress and insure that the emission reductions are generally on schedule
- MDE is working with RESI to develop a data collection process that would allow us to also begin to track how the GGRA plan is also helping Maryland improve its economy and create new jobs “in the real world”
 - Same 3 year schedule as the GHG emissions “rate-of-progress” tracking
- Open to thoughts on how to track equity progress as well



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Other MDE Efforts on Equity

- Historically we have emphasized three key policy drivers of the GGRA in our plans and other communications
 - Emission reductions
 - Economic growth
 - Job creation
- Other drivers are included in reports, but often not given priority coverage
 - Equity ... Reliability ... Rural impacts ... Airports ... Many more
- For equity, the GGRA plans have also not clearly shown how different strategies are linked and how those linkages better deal with equity concerns than individual strategies by themselves
 - Cap-and-Invest under the Regional Greenhouse Gas Initiative (RGGI) as an example

Expanding Outreach Efforts

... to insure appropriate input on social equity issues

- The GGRA requires MDE to seek extensive public input
- MDE has already begun to work with the Maryland Commission on Environmental Justice & Sustainable Communities (CEJSC) to hold several GGRA listening sessions a year, for the next few years, that target the environmental justice community
- Briefed CEJSC on March 22nd

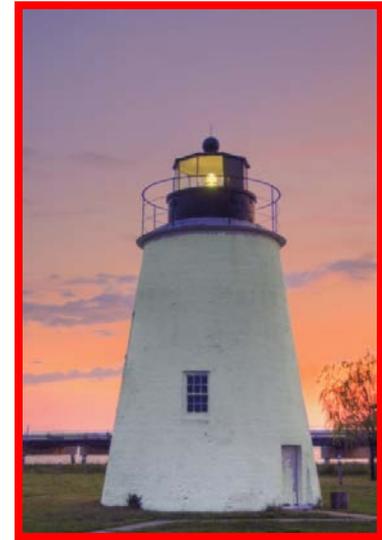


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Things That Would be Useful

... from MWG members or outside resources

- We will need to coordinate with ARWG on the numerous resiliency and adaptation issues in social equity areas
- Metrics for social justice analyses
 - Public health protection, costs, jobs, access to benefits ... what else?
- Complementary analyses
 - Coordinated with MDE - Efforts to enhance overall economic and equity analyses
- Case studies and real world examples
 - Public health, economic, job, equity, reliability and other benefits



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A bright sun shining through a blue sky with white clouds. The sun is positioned in the upper right quadrant, casting rays across the sky. The clouds are scattered and fluffy, with some larger ones on the left and right sides. The overall scene is a clear, sunny day.

Questions?