



**Maryland**  
Department of  
the Environment

# Applications of NASA Carbon Monitoring System Research in MD & RGGI

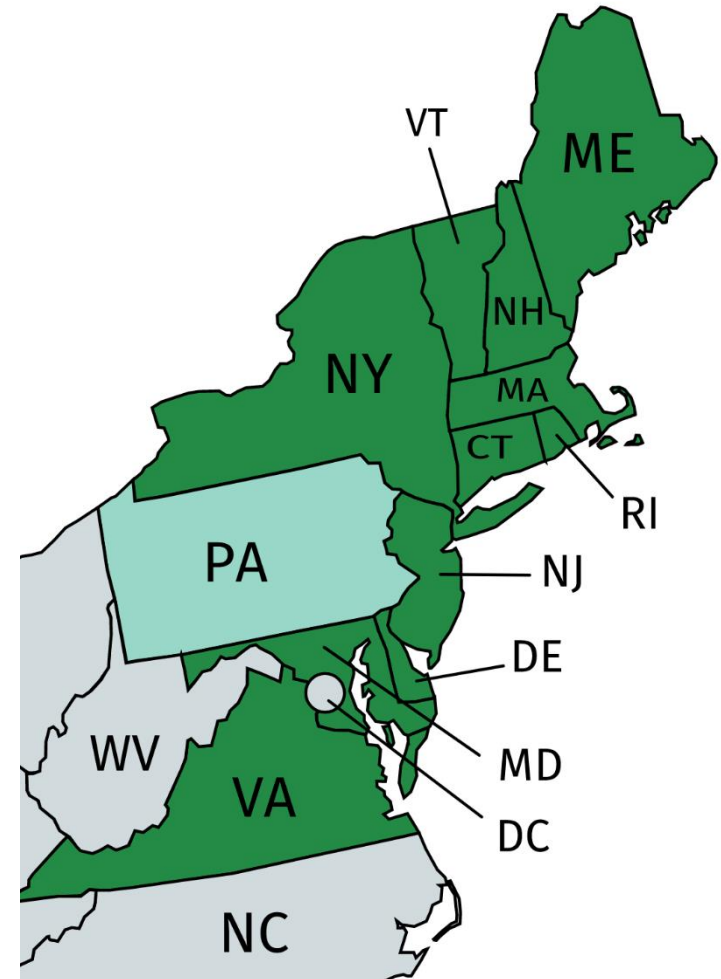
NASA CMS Policy Series

July 16, 2020



# The Regional Greenhouse Gas Initiative

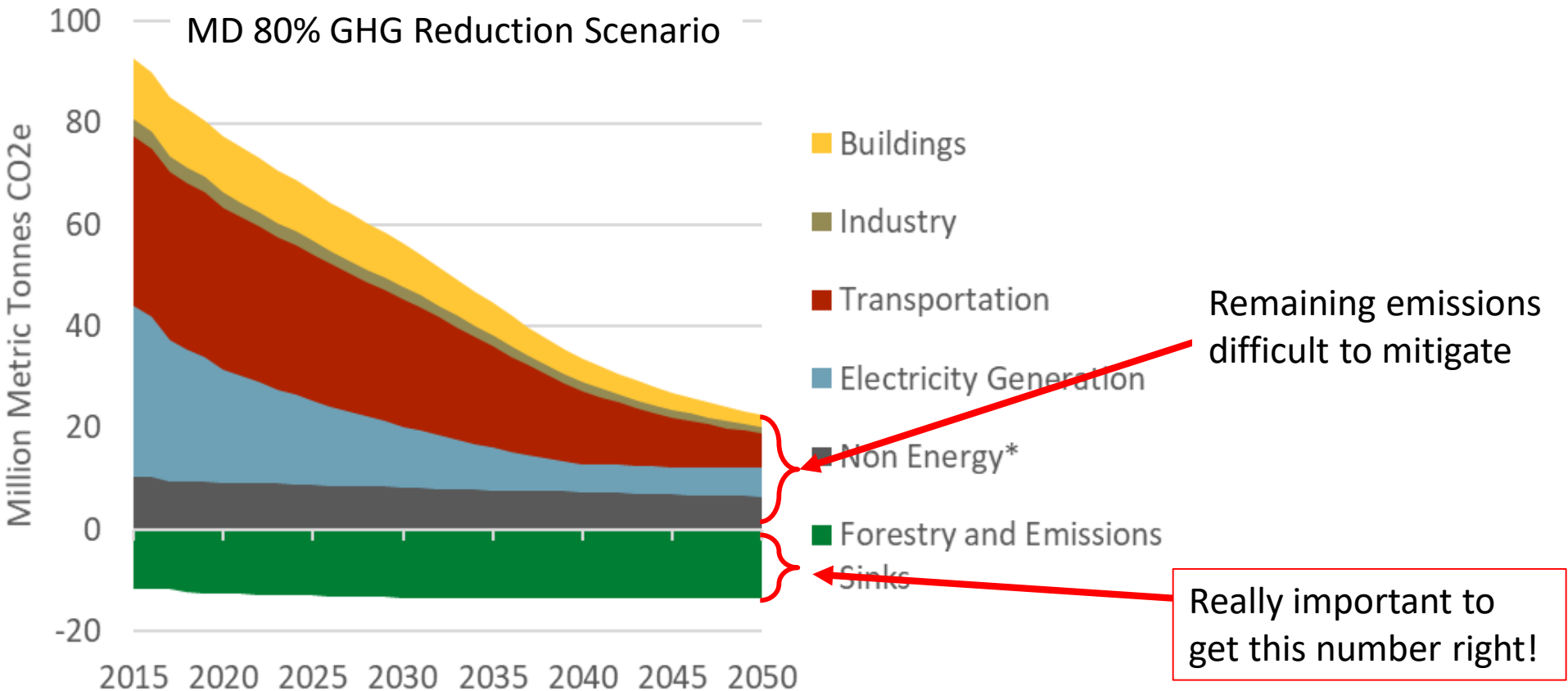
- Carbon cap on power plants
- 11 States Participate
  - PA engaged in rulemaking
- CO2 allowance auctions raise proceeds for energy programs
- Opportunities for CMS data in offsets





# CMS Applications in MD: Getting Sequestration Right

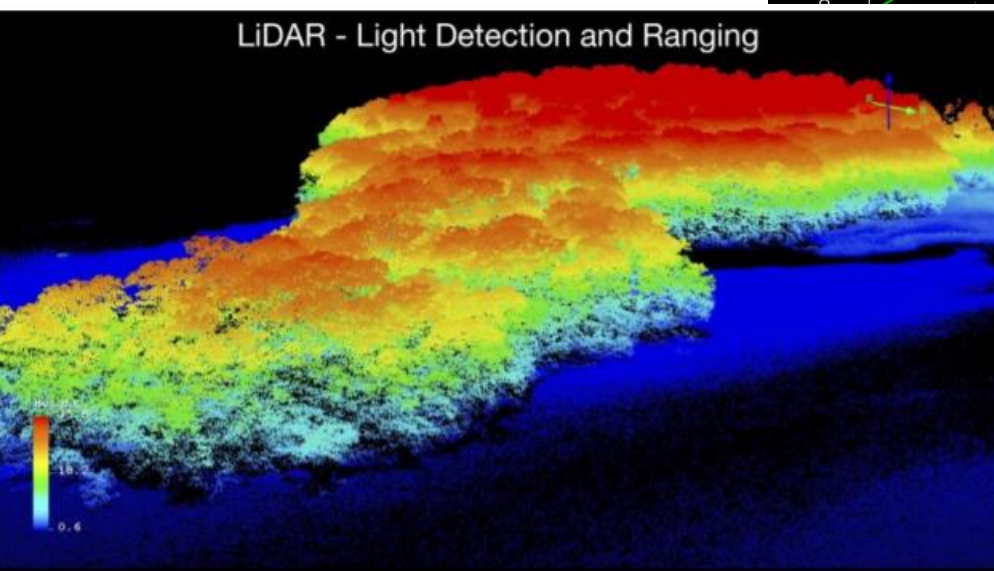
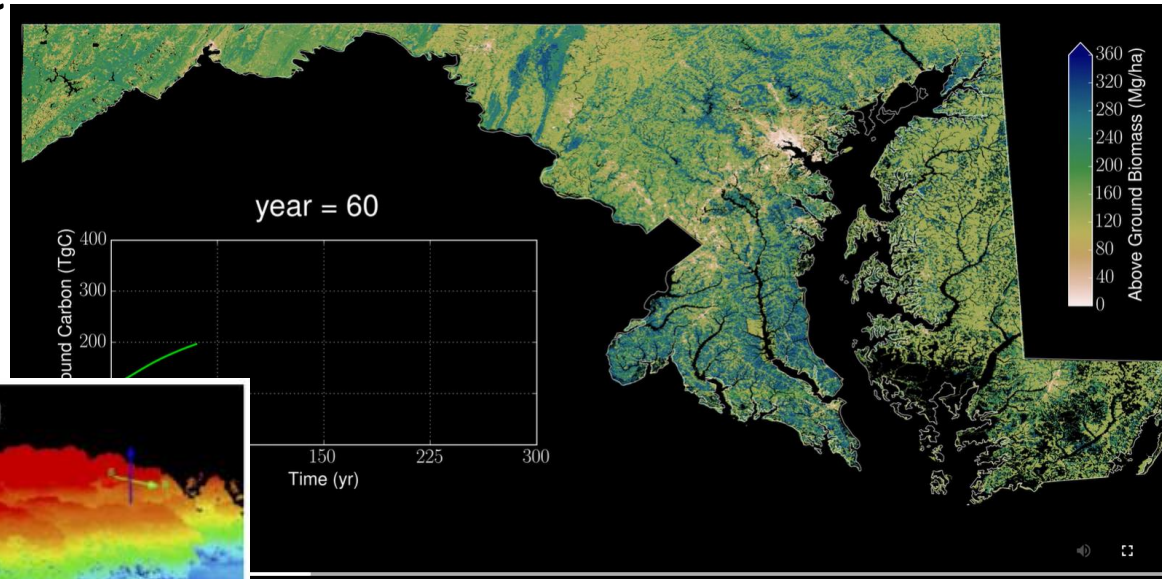
Sequestration accuracy extremely important in mid-century GHG mitigation planning.





# CMS Applications in MD: Forest Carbon (DNR & UMD Partnerships)

DNR incorporating high-resolution LiDAR data & modeling plus satellite data into MD GHG inventory.



Hurtt et al, 2016



## CMS Applications in MD: Forest Carbon (DNR & UMD Partnerships)

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Beyond a more accurate inventory, better forest carbon data will inform forest management:

- Identify areas with high sequestration potential.
- Those areas are priorities for state management programs.
- And potentially offset projects.



# CMS Applications in MD: Blue Carbon (UMCES Partnerships)



## 2020-21 Blue Carbon Activities

1. **Virtual Workshop: Calculating the Capture and Potential of Blue Carbon**
2. **Virtual Workshop: Innovative Financing for Implementing Blue Carbon Projects**
3. **Restore America's Estuaries' Webinars**
4. **Science in Action Roundtable:**  
*Exploring the Future of Blue Carbon*

with Maryland Department of Environment, Department of Natural Resources, MDOT Dredge Material Management Program, University of Maryland Center for Environmental Science, University of Maryland College Park, Smithsonian Environmental Research Center, NOAA, USGS, US Army Corps of Engineers . . . . . and many others





# CMS Applications in MD: Blue Carbon (UMCES Partnerships)

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## Coastal Resilience

- Maryland profoundly threatened by sea level rise, coastal erosion, saltwater intrusion.
- Immediate need for resilience projects.

## GHG Mitigation

- Offset protocols can open up investments, potentially through an ETS.



# Contact

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