

MARYLAND FORWARD

Governor's Forum on Sustainability



**January 7, 2011
Chesapeake College
Wye Mills, Maryland**

Table of Contents

Introduction

- Purpose of the Event
- Forum Recommendations

Moving Maryland Forward: Governor's Forum on Sustainability

- Making the New Economy Ours
- Governor's Sustainability Goals
- Progress and Opportunities

Forum Recommendations

- Bay Restoration
- Clean Energy & Climate Change
- Smart Growth
- Resource Based Industries

Conclusion



Purpose of the Forum

On January 7, 2011 Governor Martin O'Malley convened the *Maryland Forward* Forum on Sustainability at Chesapeake College on Maryland's Eastern Shore. A diverse group of over 700 leaders from every region of the State participated, including private sector, academic, and local, state and federal government representatives. Dozens of new ideas were proposed and many of the issues discussed will help shape the O'Malley-Brown Administration's sustainability policy agenda in its second term. This report summarizes those discussions and recommendations.

While Maryland faces a challenging budget picture and a long economic recovery, Governor Martin O'Malley believes that none of these difficulties should deter the State from the urgent task of restoring our natural assets, and making the necessary investments that will usher in a new economy based around green jobs and clean energy. Tough economic times cannot prevent us from doing all that we can to restore the Chesapeake Bay, promote smarter, more sustainable growth, and protect those resource based industries, such as farming and aquaculture, which not only help drive Maryland's economy but shape its identity and character as well. Under Governor O'Malley's leadership and thanks to Maryland's innovation assets such as the federal government's emphasis on cyber security, expanding federal facilities, a booming science and healthcare industry, and new opportunities in green technology and clean technology, Maryland has fared better than most other states. Our Blue crab population is at its highest levels since 1997 and our renewable energy policies are among the most aggressive in the country, leading Maryland to become only the second state to reach the RFI stage in developing offshore wind. But there is still much work to do if we are going to secure a truly sustainable future for the next generation of Marylanders.

The Governor's Forum on Sustainability was held to solicit feedback from business and agricultural sector leaders, stewards of our environment, and entrepreneurs on what more the State can do to support jobs while protecting our natural resources. Forum participants—split into industry sector groups—were asked to identify the top actions that the State could take to:

- Restore the health of the Chesapeake Bay,
- Support clean energy and defend against climate change,
- promote Smart growth
- Develop Maryland's resource based industries to grow our economy

The resulting recommendations were recorded and are outline in the following document, organized by the strategic goal to which they correspond.

Maryland Forward: Sustainability Today and into the Future

“Working together, we are fusing science, innovation, and responsibility to create a new beginning for Maryland’s beloved Chesapeake Bay. We know that our problems are manmade, and so too are their solutions.” -Governor Martin O’Malley

J. P. Morgan once famously said, "The first step towards getting somewhere is to decide that you are not going to stay where you are." Four years ago, we took a hard look at sustainability in Maryland and decided to move in a new direction. New strategies were developed to tackle the



issues of Chesapeake Bay restoration, clean energy and climate change, smart growth, and resource based industries. We have seen progress across all of these areas, but it is important that we work together to build on these successes and continue to move Maryland forward sustainably.

While Maryland is positioned to take advantage of growth in a variety of knowledge-based industries, including biotechnology, information

technology (including cyber security), health, trade, and aerospace, our state is uniquely poised to become a national and global leader in renewable energy, clean technologies, and many other sustainable economies. During his first term, Governor Martin O’Malley made moving Maryland toward a more sustainable future one of his top priorities, taking steps to clean up the Chesapeake Bay, revitalize the Smart Growth movement, reform our state’s energy policy, encourage transit ridership, and reduce greenhouse gas emissions. None of these issues exists in isolation, and, as the Governor asserts, progress on one of them means progress toward all.

For Maryland to succeed in the new economy and help its current and emerging industries to grow and create jobs, it must prioritize innovation, education and skills, protecting public safety, and enhancing quality of life. During his first term, Governor O’Malley and his administration worked to protect these priorities and move the State forward. To prepare for a new term, however, means assessing the progress of the past four years and making the proper adjustments for the next four. With that in mind, the Governor convened five *Maryland Forward* forums focused on priorities for his second term:

- Advancing Jobs and the Economy
- Advancing Skills of all Marylanders
- Advancing Public Safety & Homeland Security
- Advancing Environmental Sustainability
- Advancing the Health of all people

The third of these forums, held on January 7, 2011, focused on the State's role in fostering and supporting a more prosperous and sustainable future. More than 700 business, academic, and government leaders convened that day at Chesapeake College to discuss the current state of Bay restoration, clean energy, Smart Growth, and other sustainability efforts in Maryland. The goal of the Forum was to elicit feedback on current efforts and generate new ideas to guide policy choices during the second term.

Forum participants were split into four work groups and asked to frame their conversations around the Administration's five strategic sustainability goals, which the Governor believes are central to positioning Maryland as one of the most prosperous and environmentally sustainable states in the nation. The groups were Bay Restoration, Clean Energy and Greenhouse Gas Reduction, Smart Growth, and Resource-based Industries.

The remainder of this report is organized by work group and corresponding sustainability goals and efforts, the progress made, the questions posed to forum participants, and the recommendations that forum participants made to the Governor.

The Strategic Sustainability Goals of the O'Malley-Brown Administration

Background on the Governor's Strategic Policy Goals

Governor O'Malley ran for office in 2006 with a commitment to make government work again for the people of our State. Upon taking office, the Governor instituted StateStat, a system of performance-based management, to make our State government more accountable and efficient. In 2008, the Governor created the Delivery Unit as an extension of StateStat to implement cross-agency initiatives and effectively align State and federal resources. Working with the Executive Agencies and StateStat, the Delivery Unit oversees the Governor's 15 strategic policy goals, broadly categorized into four key areas – skills, security, sustainability, and health.

This structure of centrally coordinated policy implementation and accountability has propelled Maryland's progress towards attainment of the strategic policy goals and has set the course for governmental efficiency and innovative reform. Five of the 15 goals were central to the discussions held at Sustainability Forum. They are:

- **Accelerate Bay Restoration Efforts to Reach the Healthier Bay Tipping Point by 2020**
- **Double Transit Ridership in Maryland by end 2020**
- **Reduce Per Capita Electricity Consumption in Maryland by 15% by 2015**
- **Increase Maryland's Renewable Energy Portfolio by 20% RPS by 2022**
- **Reduce Maryland's Statewide Greenhouse Gas Emissions by 25% by 2020**

While the O'Malley-Brown Administration has assigned an individual goal for each of these areas of policy, it recognizes that all of these policy objectives are inextricably linked. For the purposes of this forum, however, the strategies, status, accomplishments, and recommendations for each of these goals will be dealt with individually.

Framing Questions and Themes

Each breakout session was framed by relevant portions of the following cross-cutting questions:

1. What are the top 3 – 4 specific actions that the State can take to:
 - a. Restore the Bay?
 - b. Promote clean energy use and development, and reduce greenhouse gas emissions?
 - c. Support smarter, more sustainable growth?
 - d. Support Maryland's sustainable resource industries?
2. What are the most effective existing programs/policies/laws in support of Bay restoration, climate change mitigation, clean energy use, and Smart Growth that should be continued or expanded?
3. Are there any existing programs/policies/laws that are detrimental to Bay restoration, mitigating climate change, expanding clean energy use, and Smart Growth? Should these programs be eliminated or reformed?
4. What actions can Maryland take that both move the State forward toward an environmentally sustainable future, while expanding the state's economy and creating more jobs?
5. What partnership opportunities for resource leveraging between business, government, academia, NGO's, or others are being missed or should be developed?
6. What are some innovative ideas on how State government could be structured to operate more efficiently with respect to moving Maryland forward to a smarter, greener, more prosperous, and sustainable future?

Breakout Session One: Bay Restoration

Watermen, environmentalists, farmers, and business leaders contributed their perspectives to help the O'Malley-Brown administration assess the previous four years' progress on restoring the Chesapeake Bay. The Forum discussion centered on the Administration's Bay Restoration goal and on the strategies, actions, and ideas for goal attainment.

Related Strategic Policy Goal: Accelerate Bay Restoration Efforts to Reach the Healthier Bay Tipping Point by 2020

The O'Malley-Brown Administration is committed to restoring the Chesapeake Bay and has set a goal of reaching our bay restoration targets by 2020 – a self-imposed deadline five years earlier than the EPA and other Bay states. In looking at past Bay restoration efforts, we realized a new approach was needed to drive actual improvement rather than just articulating lofty goals. We established long term goals and short-term milestones for nutrient reduction. We began relentlessly tracking our progress in achieving those goals through BayStat. We developed a series of geo-spatial maps to enable us to identify high value resources, to get programs to those areas most beneficial to Bay restoration, and tracking our efforts geographically. We engaged the people of Maryland in extensive public outreach to mine innovative ideas to restore the Bay. And we held ourselves accountable for the results of our efforts. Maryland's suite of actions represent a 138% increase in our rate of nitrogen reduction and an over 500% increase in our rate of phosphorus reduction, and put Maryland on a pace to meet our Bay Restoration Goals by 2020.

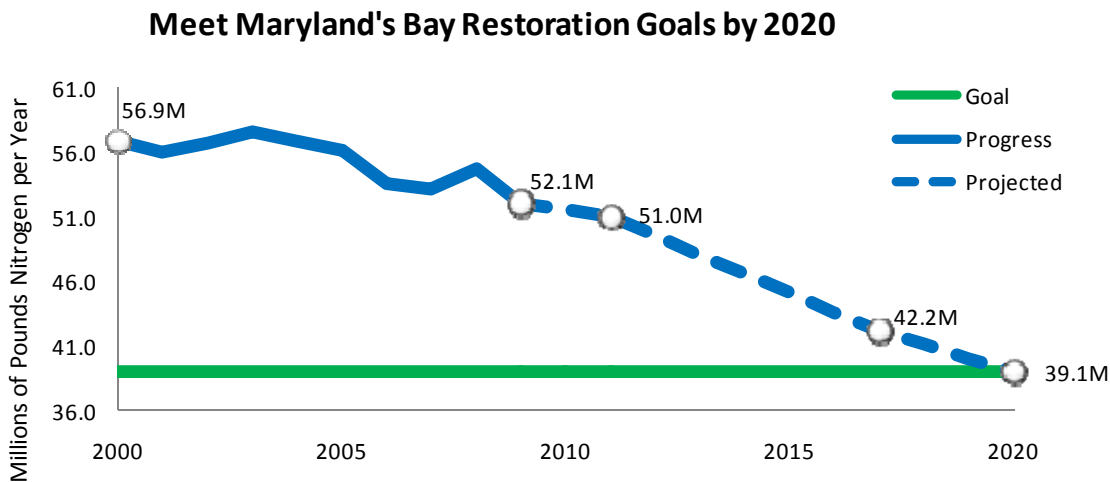
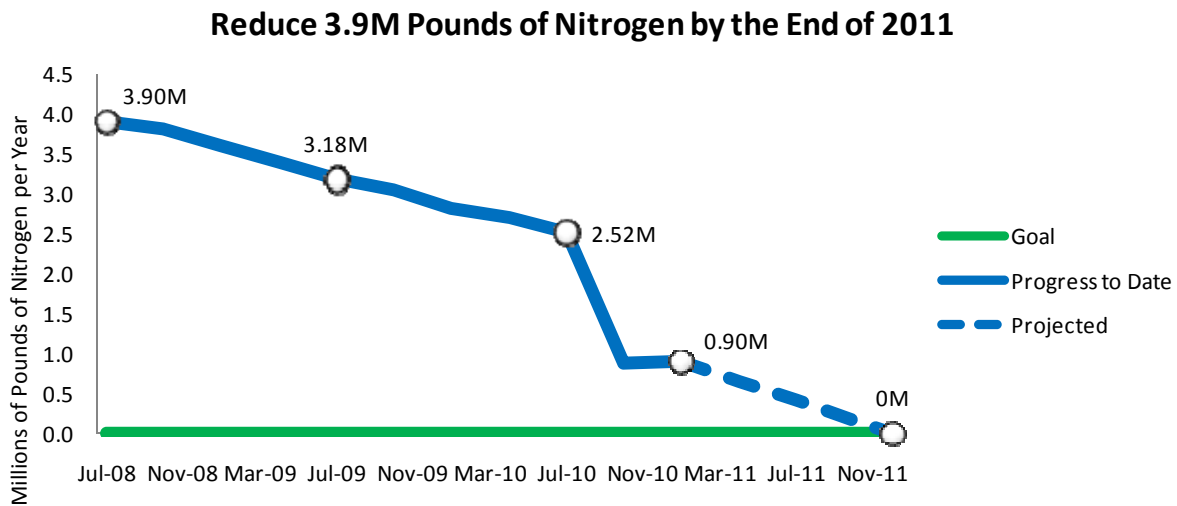
Bay Restoration Strategies

Setting measureable milestones in the near term requires us to hold ourselves accountable for making progress at a pace needed to meet our ultimate pollutant reduction targets by 2020. To achieve this goal, the Administration has developed a focused plan for restoring the Bay, centering on the following 34 specific and accelerated actions with near term (2-year) milestones:

1. Plant 145,000 new acres of Cover Crops;
2. Increase Nutrient Management Plan Enforcement on an additional 100,000 acres;
3. Update Soil Conservation and Water Quality Plans on 257,049 acres;
4. Continuous No-Till Farming on 150,000 acres;
5. Precision Agriculture on 100,000 acres;
6. Construct 145 Livestock Waste Structures;
7. Construct Water Control Structures for 25,000 acres;
8. Implement Dairy Manure Incorporation Technology on an additional 2,500 acres;
9. Expand Stream Protection with Fencing on an additional 3,000 acres;
10. Expand Manure Transport Program by 10,000 tons;
11. Construct 53 Poultry Waste Structures;
12. Expand Stream Protection without Fencing on an additional 3,000 acres;
13. Establish 75 Runoff Control Systems;
14. Upgrade 22 Wastewater Treatment Plants to Enhanced Nutrient Removal (ENR) technology;
15. Nutrient Management for 220,000 acres of Urban Land;
16. Implement the Maryland Healthy Air Act;
17. Upgrade Blue Plains WWTP to Biological Nutrient Removal;
18. Retrofit Storm water Management systems on 90,000 acres;
19. Required retrofits of 1,080 Septic Systems in the Critical Area to Best Available Technology;
20. Retrofit 1,920 Septic Systems outside the Critical Area to Best Available Technology;
21. Upgrade 75 State-owned DNR Septic Systems;
22. Expand Streamside Grass Buffers by 7,000 acres on Private Lands;
23. Expand Streamside Forest Buffers by 3,000 acres on Private Lands;
24. Restore 1,000 acres of Wetlands on Private Lands;
25. Retire 1,800 acres of Highly Erodible Land on Private Lands;
26. Plant 1,550 acres of Trees on Public Lands;
27. Restore 555 acres of Wetlands on Public Lands;
28. Expand Streamside Forest Buffers by 345 acres on Public Lands;
29. Plant 450 acres Trees on Public Lands;
30. Expand Streamside Grass Buffers by 69 acres on Public Lands; and
31. Restore 45 acres of Grassland on Public Lands.

Current Status

Maryland is leading all Bay states by achieving approximately 78% of its first 2-Year Bay Restoration Milestone, which represents 8% of the Administration’s 2020 goal.



O’Malley-Brown Administration Bay Restoration Progress

In some cases, our efforts are already achieving “tipping point” – levels of restoration in a river or part of the Bay at which natural processes can further accelerate restoration and build upon positive trends. Among the actions leading to these gains are the following accomplishments of the past four years:

- Submitted Final Watershed Implementation Plan to EPA:** The Phase I draft Watershed Implementation Plan submitted in September 2010 was the most substantial such plan submitted by any State, confirming that the work done by the O’Malley-Brown Administration over the past four years has laid the groundwork for reaching Maryland’s nutrient reduction goals by 2020 — a self imposed goal five years ahead of the other bay jurisdictions.

- **Led development of 2-Year Pollution Reduction Milestones throughout the Bay Watershed:** The 2-Year Milestones represent a significant and bold change to our more than 25- year effort to restore Chesapeake Bay. 2-Year Milestones ensure that we are making progress in the short term toward our ultimate goal – forcing us to hold ourselves accountable for progress, not future administrations.
- **Created the Chesapeake and Coastal Bays 2010 Trust Fund:** Provides up to \$50 million annually to comprehensive programs targeted to the most effective practices and locations to restore the Chesapeake Bay.
- **Established BayStat:** For the first time in the Maryland Bay Restoration effort, the Governor and senior staff meet regularly with key agencies to review progress and make critical decisions. The BayStat website provides transparent tracking of progress to inform the public and hold agencies accountable. BayStat is now a model for a new federal ChesapeakeStat effort track efforts watershed-wide.
- **Issued New and Updated Storm water Pollution (MS4) Permits:** Since 95% of storm water runoff in Maryland comes from already developed land, there is significant regulatory focus on storm water discharge permits issued to Maryland's 10 largest counties and the State Highway Administration—that require control of storm water pollution from existing developed land.
- **Issued new CAFO regulations:** Maryland issued new regulations and a permit in 2009 to, for the first time, implement manure handling requirements on 85% of poultry litter generated from Maryland's poultry operations.
- **Increased environmental enforcement actions for three straight years:** MDE has issued more enforcement actions than in any previous year, a 54% increase since 2007. MDE's 14th annual Enforcement and Compliance Report shows that the number of enforcement actions between July 2009 and June 2010 was nearly 7 percent higher than in the prior 12 months. The more than 3,000 enforcement actions taken during the fiscal year ending in June 2010 is the highest number for any year since reporting began in 1998.
- **Greatly increased conservation of Maryland's critical landscape and open spaces:** Realized full funding of Program Open Space (POS) for four years in a row, resulting in a four-fold increase over the previous administration in State land acquired and protected (30,000+ acres protected through POS as of 10/10).
- **Created the Maryland Forest Brigade:** Collaborative effort to utilize inmates to plant 1 million trees in Maryland by 2011, thereby improving water quality and habitat in sensitive ecological locations. Over 622,000 trees have been planted to date.
- **Enhanced the Maryland Cover Crop Program:** Governor O'Malley has provided \$34.7 million dollars for farmers to plant cover crops to remove nitrogen and phosphorus leftover after crop harvest. This program has removed approximately 5.8 million pounds of nitrogen from reaching the waterways of Maryland.

Bay Restoration Recommendations

Since the health of the Chesapeake Bay truly affects every Marylander, gathering input from a wide variety of stakeholders is important to developing our Bay restoration policy. The following recommendations and themes were highlighted during the Bay Restoration breakout and closing plenary session and will inform future iterations of the Bay Restoration delivery plan:

- Promote smarter, more sustainable growth policies and practices that strengthen older communities, and address growth related funding formulas for housing, transportation and education that encourage and discourage growth in the appropriate places. Use Maryland's WIP to assist in this effort, as well as to protect the State's most valuable natural resources.
- Find money to cover the anticipated funding shortfall for Maryland's ENR program for Wastewater Treatment plants.
- Establish new funding streams to support storm water management projects. Storm water taxes or fees would not only constitute such a stream, but also raise awareness of the impacts of storm water on Maryland's environment.
- Make Maryland a leader in environmental entrepreneurship, using current incentives and new tools to promote innovation.
- Develop nutrient trading platforms to promote cost conscious and cost effective reductions in Bay pollution.
- Streamline Maryland State agency permit processes.
- Target Maryland State agency tax incentives, grants and contracts using sustainability metrics.
- Find markets for waste.
- Maintain good programs and target implementation to make best use of state resources. Examples include Program Open Space, cover crops, the Chesapeake Bay Trust Fund, Rural Legacy, and the Sustainable Communities Tax Credit.
- Strengthen education and outreach programs that are targeted towards general public by comprehensively showing success and providing incentives to members of the public to participate in environmental programs.

Breakout Session Two: Clean Energy & Climate Change

Balancing a growing population and its energy needs with a changing climate and a transitioning economy is the challenge that Maryland's entrepreneurs, climate scientists, and energy experts grappled with during their breakout session. The O'Malley-Brown Administration sought this group's input to find innovative ways to make further progress on its three strategic energy and climate change goals:

- **Reduce Per Capita Electricity Consumption in Maryland by 15% by 2015**
- **Increase Maryland's Renewable Energy Portfolio to 20% by 2022**
- **Reduce Maryland's Greenhouse Gas Emissions by 25% by 2020**

Reduce Per Capita Electricity Consumption in Maryland by 15% by 2015

The EmPOWER Maryland Energy Efficiency Act of 2008 sets targets to reduce both per capita energy consumption and per capita peak demand by 15 percent by the end of 2015 (based on a 2007 baseline).

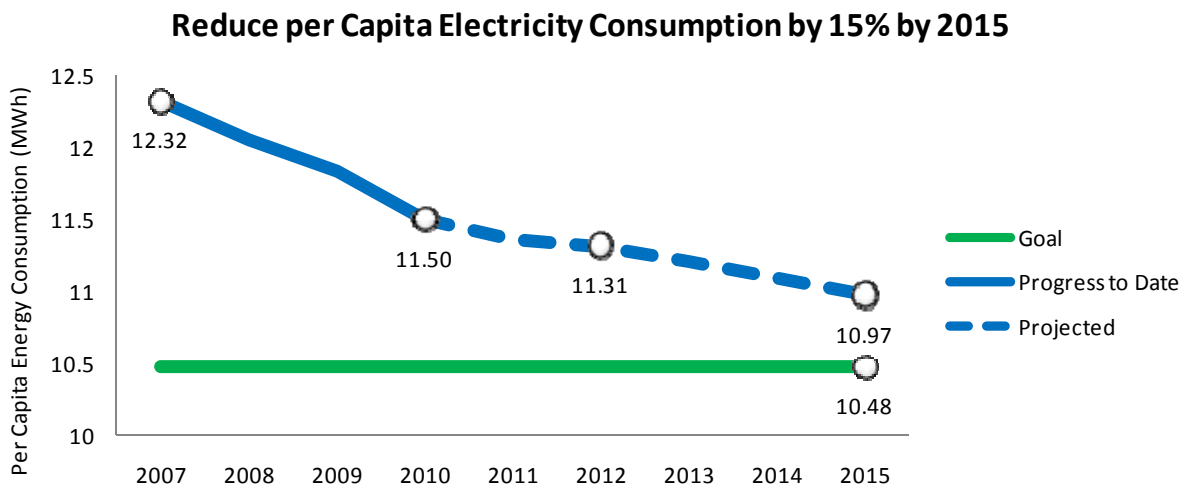
Electricity Consumption Reduction Strategies

To achieve this ambitious goal, the Maryland Energy Administration (MEA), the state’s utilities, and the Public Service Commission (PSC) developed a series of strategies to help Maryland’s industrial, commercial, and residential rate payers become more energy efficient. In fact, between 2009 and 2010, the MEA estimates that 64,000 MWh were saved through programs to help reach the EmPOWER targets:

- Providing energy efficient appliance rebates and establishing home performance with ENERGY STAR programs;
- Partnering with academic institutions to expand energy related job training opportunities;
- Supporting the conduct of energy efficiency retrofits to reduce energy bills for low and moderate income families;
- Providing EmPOWERing Clean Energy Communities grants to support energy efficiency projects that generate significant energy savings;
- Developing programs to support greater code compliance; and
- Providing financial assistance and loans to help Maryland businesses, institutions and government agencies implement energy efficient upgrades.

Current Status

Since 2008 when the O’Malley – Brown Administration passed the EmPOWER Maryland statute, the program has resulted in energy savings of 464,207,787 kWh of electricity, roughly 18% of the 2015 target.



O’Malley-Brown Administration Progress in Reducing Electricity Consumption:

- **Established EmPOWER Maryland and Associated Programs:** Established via legislation two statutory goals which are among the most ambitious in the nation; 1) reducing peak electricity demand by 15% per capita by 2015 which will help keep the lights on, and, 2) reducing overall electricity consumption by 15% per capita by 2015 which will help reduce household bills.
- **Made Homes and Communities more Energy Efficient:** In the spring of 2010 DHCD was awarded \$20 million through the U. S. Department of Energy's competitive Better Buildings Program, which will promote energy efficiency in 15 target areas across the State and will provide affordable financing for energy improvements in homes, small businesses and multifamily buildings. In addition, DHCD weatherized over 3,600 homes for low-income Marylanders through the Weatherization Assistance Program.
- **EmPOWERed Clean Energy Communities:** Provided 120 local governments, 13 counties and dozens of non-profits grants and loans to finance a variety of clean energy projects, including energy makeovers of government buildings or installation of renewable energy systems.



Reducing Electricity Consumption Recommendations

The following recommendations and themes were highlighted during the Clean Energy and Climate Change breakout and closing plenary session:

- Require county jurisdictions to follow state energy efficiency codes;
- Establish a dedicated funding source for climate/clean energy efforts. Such a source might simply be the tighter, efficiency focused allocation of Strategic Energy Investment funding (SEIF) funding;
- Inventory programs and resources and share resources efficiently through a State clearinghouse;
- Invest more in clean energy, energy efficiency and climate change education and awareness efforts, including those directed at consumers, school children, and health care professionals;
- Create legislation that requires energy audits and disclosure for every property transfer;
- Develop a limited State loan guarantee program to accelerate the energy efficiency retrofitting of commercial office and multifamily buildings; and
- Do more to utilize public-private partnerships to finance energy efficiency retrofits.

Increase Maryland's Renewable Energy Portfolio Standard by 20% by 2022

Maryland’s renewable energy portfolio standard requires electricity suppliers to procure 20% of their electricity from renewable energy sources by 2022, and sets escalating interim goals which they have met through a combination of purchasing renewable energy credits and making alternative compliance payments.

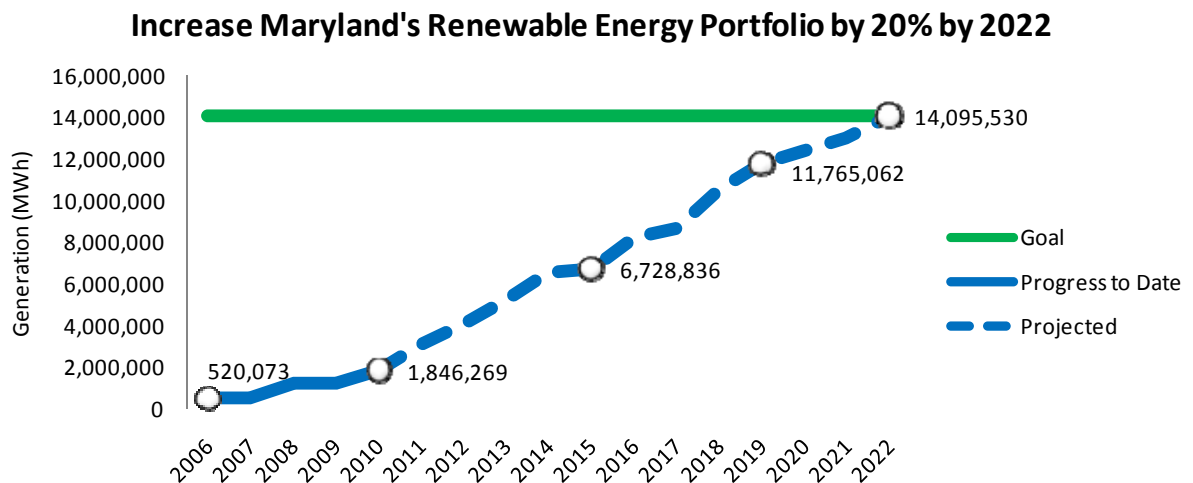
Renewable Energy Strategies

In order to achieve its renewable energy goals in future, Maryland is concentrating on growing its in-state generation. The following strategies are among those that MEA has developed to increase Maryland’s in-state renewable energy generation and achieve the goals set out by the O’Malley-Brown Administration:

- Grow in-state solar capacity so it represents more than 2% of the Renewable Portfolio Standard by 2022;
- Utilize Maryland’s existing biomass feedstock resources (such as forestry waste, agricultural crops, municipal waste, and poultry manure) to increase Maryland’s renewable energy output;
- Support the development of onshore wind projects through grant programs, fast-tracked permitting, and other programs and processes; and
- Aggressively pursue and support the development of large offshore wind farms.

Current Status

For calendar year 2010, electricity suppliers were required by law to procure 3.025% of their electricity supply from Tier-1 renewable energy sources, and, through the 3rd quarter of 2010, they generated 297 million kWh through Tier-1 controls, or 76% of the total target for calendar year 2010. This represents 2% of the 2022 goal.



O’Malley-Brown Administration Renewable Energy Progress:

- **Increased the Renewable Energy Portfolio Standard:** More than doubled Maryland's renewable portfolio standard to require that 20% of Maryland's electricity come from renewable sources by 2022, and established a dedicated 2% solar carve out.
- **Aggressively Pursuing Maryland's Offshore Wind Potential:** Maryland joined nine other Atlantic states and the Department of the Interior to form the Atlantic Offshore Wind Consortium to coordinate regionally prominent issues surrounding the development of off-shore wind along the Atlantic outer continental shelf, launched a formal state-federal task force to begin leasing the Outer Continental Shelf for potential offshore wind development, and became the second State in the country in which the Department of the Interior has issued a Request for Information for offshore leases.
- **Identified the green economy as an engine of economic development:** Supported legislation to establish the Maryland Clean Energy Center, established the Green Jobs and Industry Task Force, created the Clean Energy Economic Development Initiative which provided \$5.35 million to 11 businesses that will spur clean energy production and create a projected 130 direct full-time jobs and 230 construction jobs over the next 18 months.
- **Leading by Example:** The Department of General Services has entered into three long-term power purchase agreements for renewable energy to power the State's buildings, has developed a state energy use database, so that energy use can be monitored and reductions measured, and has aggressively pursued energy performance contracts for State owned buildings, which not only reduce energy consumption, but also reduce costs to the taxpayers.

Renewable Energy Recommendations

The following renewable energy recommendations and themes were highlighted during the Clean Energy and Climate Change breakout and closing plenary sessions:

- Create and foster regional clean energy markets and mandates;
- Require Maryland utilities to execute long term power purchase contracts with renewable energy producers and suppliers;
- Aggressively pursue the use of poultry litter and other bio-waste as viable sources of energy; and
- Continue efforts to advance the State's Renewable Portfolio Standard and to promote the development of offshore wind generation.

Reducing Maryland's Greenhouse Gas Emissions by 25% by 2020

Reducing the State's electricity consumption and transitioning to renewable energy sources are not policies that exist just for their own ends. Rather, they fit into the O'Malley-Brown Administration's broader sustainability policy, which can be seen through the lens of its efforts to reduce Maryland's greenhouse gas emissions. The Administration has proven itself a leader in the efforts to curb climate change, establishing the Maryland Climate Change Commission, sponsoring the 2009 Greenhouse Gas Reduction Act, and developing a plan to reduce greenhouse gas emissions in Maryland by 25% by 2020.

Greenhouse Gas Emission Reduction Strategies

The Maryland Department of the Environment (MDE) is working to develop Maryland's Greenhouse Gas Reduction Plan for achieving a 25% reduction in carbon emissions by 2020. While the State is not required by law to adopt the final Reduction Plan until 2012, Maryland's State Agencies have already begun implementing several core greenhouse gas reduction strategies.

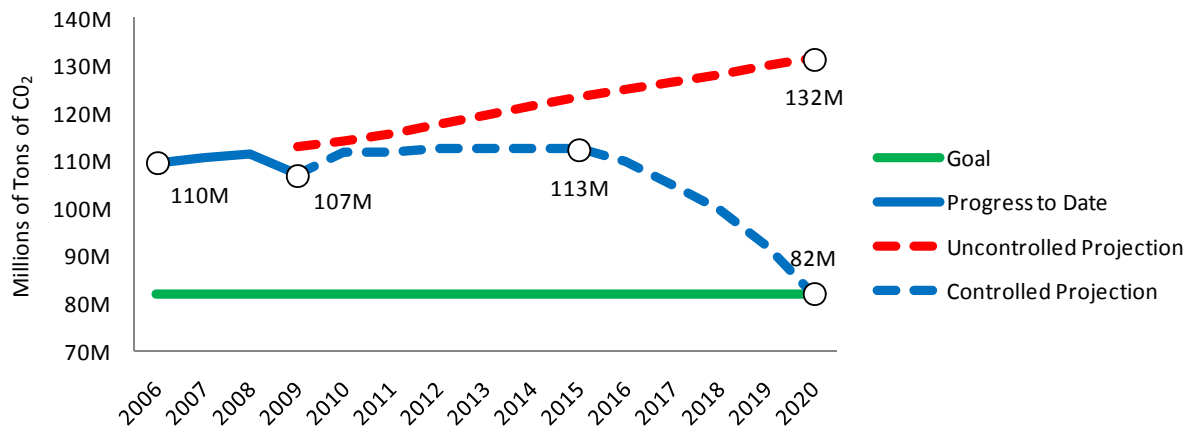
- Fully participate in the Regional Greenhouse Gas Initiative (RGGI), the nation's first energy cap-and-trade auction;
- Assertively implement the Maryland Clean Cars Program and actively support the development of clean cars technologies;
- Fully implement EmPOWER Maryland;
- Aggressively pursue efforts to double transit ridership in Maryland by 2020;
- Achieve the State's renewable energy goal, which requires that Maryland's electricity suppliers provide 20% of their total electricity from such renewable resources as solar, wind, biomass, landfill gas, and hydroelectric power by 2022;
- Pursue integrated planning for land use and location efficiency to develop and implement smarter, more sustainable growth policies and practices;
- Expand "Buy Local" programs to promote and support the production and consumption of local agricultural and other products; and
- Effectively implement the Maryland Environmental Footprint Mitigation Initiative to measure and reduce State government's total environmental impact, including carbon emissions, water use, waste and wastewater production, and storm water runoff.



Current Status

To date, reductions through MEA EmPOWER Programs, Gas Fuel Sales, and Power Plant emissions have resulted in 5,755,000 tons of CO₂ reduced or approximately 10% of the 2020 goal. Note that the reductions shown in this graph do not represent net emissions. Reductions represent reductions calculated from three sources: MEA EmPOWER Programs, Gas Fuel Sales, and Power Plant emissions. Potential growth in other GHG source sectors has not been added.

Reduce Maryland's Greenhouse Gas Emissions by 25% by 2020



O'Malley-Brown Administration Greenhouse Gas Emissions Reduction Progress:

- Generated Maryland Climate Action Plan:** Established the Maryland Climate Change Commission which met for over a year to develop the Climate Action Plan recommending 42 mitigation actions to achieve a 25% - 50% reduction in greenhouse gas emissions by 2020.
- Passed the Greenhouse Gas Reduction Act of 2009:** Maryland is one of a limited number of states (California, Massachusetts, Washington and New Jersey) to adopt State law (the Greenhouse Gas Emission Reduction Act of 2009) to reduce greenhouse gas emissions 25% by 2020 while promoting economic recovery and job creation.
- Passed Regional Greenhouse Gas Initiative:** Maryland is a leading member of the Regional Greenhouse Gas Initiative – the nation’s only successfully operating cap-and-trade program targeting reductions of greenhouse gas emissions. RGGI has generated over \$139 million in revenue to date to provide rate payer relief and fund energy efficiency and renewable energy programs in the state.
- Established EmPOWER Maryland and Associated Programs:** Established via legislation two statutory goals which are among the most ambitious in the nation; 1) reducing peak electricity demand by 15% per capita by 2015 which will help keep the lights on, and, 2) reducing overall electricity consumption by 15% per capita by 2015 which will help reduce household bills.
- Initiated Maryland Clean Cars Program:** In 2007 Maryland adopted Clean Cars legislation, implementing California’s stricter vehicle emission standards targeted at reducing greenhouse gas emissions. Because of this state action, in 2010, the federal government amended the federal car program to be consistent with the California clean car program.
- Increased the Renewable Energy Portfolio Standard:** More than doubled Maryland’s renewable portfolio standard to require that 20% of Maryland’s electricity come from renewable sources by 2022, and established a dedicated 2% solar carve out.
- Entered Low Carbon Fuel Standard Agreement:** In 2009, Maryland joined 10 other states to develop a low carbon fuel standard designed to reduce greenhouse gas emissions from vehicles while creating local jobs and decreasing dependence on foreign oil.

- **Increased Recycling and Reduced Waste:** In 2008, Marylanders realized greenhouse gas savings equivalent to removing nearly 1.5 million passenger cars from the roadway by recycling and reducing waste. Additionally in 2008, Maryland diverted 47.5 percent of waste bound for landfills -- 43.9 percent was recycled, 3.6 percent of waste was reduced at the source.

Greenhouse Gas Emissions Reduction Recommendations

The following greenhouse gas emission reduction recommendations and themes were highlighted during the Clean Energy and Climate Change breakout and closing plenary sessions:

- Participate in Low Carbon Fuel Standard (LCFS) efforts;
- Invest in electric vehicle infrastructure, such as plug in stations;
- Lead by Example by institutionalizing climate change considerations - both mitigation and adaptation;
- Increase the statutorily mandated recycling goals;
- Purchase electric and hybrid vehicles for State use; and
- Increase Maryland’s already existing climate change mitigation goals.

Breakout Session Three: Smart Growth



Forty-one states are geographically bigger than Maryland yet only eighteen have larger populations, resulting in the nation’s 5th highest population density.¹ With a projected population increase of one million people in the next twenty years, strategies are needed to accommodate this growth in a way that is sustainable for future generations. Smart Growth, a concept pioneered in Maryland, seeks to mitigate sprawl by concentrating development in areas with existing infrastructure. The challenge of Smart Growth is to bring

together stakeholders from seemingly disparate fields to approach holistically a set of issues that affects them all. The issue of Smart Growth impacts all of the O’Malley-Brown administration’s sustainability goals, and the Smart Growth breakout session touched upon all of them and more. Of particular relevance was the Administration’s transit ridership goal and the State’s efforts to support Transit Oriented Development (TOD).

Related Strategic Policy Goal: Double Transit Ridership in Maryland by 2020

Easily accessible, high quality public transportation fosters more livable communities, provides greater mobility, expands economic activity, and reduces greenhouse gases that cause global warming. Recognizing the benefits of a strong, reliable public transit system, the O’Malley-Brown Administration has set a goal and is implementing a plan to double transit ridership in

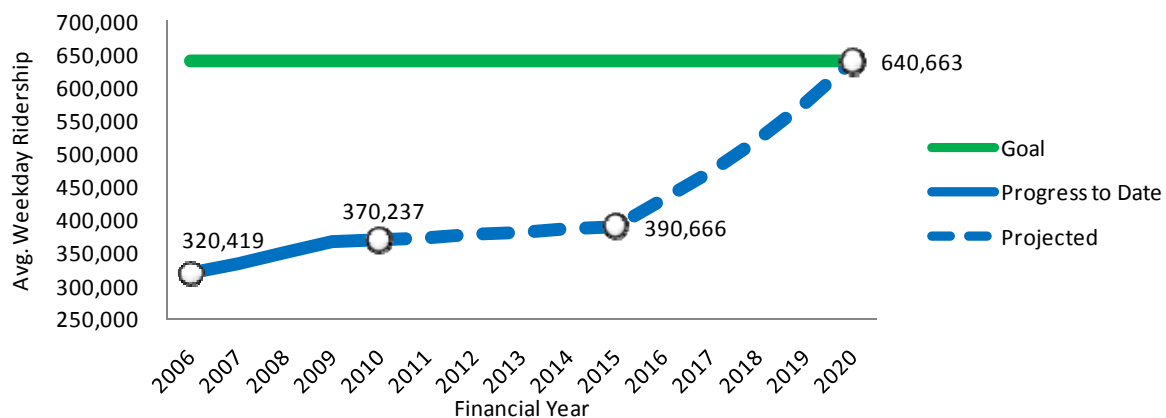
¹ Maryland State Data Center, 2010. Population Projections.
http://www.mdp.state.md.us/msdc/popproj/TotalPop_2040.pdf

Maryland by 2020. Strategies for reaching this transit goal include ensuring quality service; improving transit system safety and security; expanding transit service; enhancing existing service; and supporting the advancement of transit-oriented development, an approach to planning and development that promotes dense, mixed-use, pedestrian-friendly environments in proximity to centers of mass transit, helping to reduce traffic congestion, fuel consumption, pollution, and sprawl and promoting the use of public transportation.

Current Status

Maryland’s commitment to encourage the use of mass transit in the state has begun to pay dividends as average weekday ridership to date has increased nearly 17% over the 2006 baseline.

Double Maryland's Transit Ridership by the End of 2020



O'Malley-Brown Administration Smart Growth Progress

- Established Smart, Green, & Growing Initiative:** The Smart, Green, & Growing Initiative provides Maryland’s citizens with information on what their state is doing to become more sustainable and provides resources for individuals, community groups, businesses, and others to become involved. In 2010, we also initiated the first round of Smart, Green, and Growing Partnership Recognitions, which recognize individuals, groups, communities, and local governments in 13 categories for taking exceptional action towards helping
- Promoted Transit Oriented Development:** Enacted ground-breaking legislation to promote locally-driven development projects near transit, through funding, financing, tax credits and other incentives. Signed an Executive Order prioritizing the location of State offices in TODs, providing leadership by example and anchoring revitalization efforts. In the first year of the program, 14 projects have been designated by the State and local governments. The State Center TOD project was one of just eight projects in the world to win the New Urbanism Congress’s Charter Award.
- Developed PlanMaryland:** MDP initiated the first strategic smart growth plan for Maryland, which included developing initial documents that outline growth trends, projection, and best practices; holding two rounds of listening sessions across the state

and related stakeholder meetings about the plan; and directly meeting with over 1,600 citizens.

- **Initiated GrowthPrint for Targeting Redevelopment and Revitalization:** This mapping tool, now in development, will illustrate targeted areas within Priority Funding Areas that are favorable for growth, redevelopment and revitalization. This tool complements the Maryland **AgPrint and GreenPrint** GIS based tools that guide the state's restoration and preservation programs, ensuring that we get the best investment for the public's land preservation.
- **Passed Sustainable Communities Act:** Reauthorized the historic preservation tax credit and significantly updated the program to include allied programs in other agencies. This silo-busting bill takes one of the state's best community revitalizing tools and significantly improves its effectiveness by directly linking it to other existing programs that often affect adjacent areas.
- **Increased Stakeholder outreach and engagement:** This includes the creation of the Sustainable Growth Commission, an appointed Commission that advises the governor on State planning issues, coordination with local governments, and the content, preparation, and implementation of the State Development Plan, the State Transportation Plan, and the State Housing Plan.
- **Strengthened Local Government Infrastructure Finance Program:** Legislation passed the General Assembly in 2009 allowing DHCD to provide needed enhancements and respond to changes in the financial markets for the LGIF program.



Smart Growth Recommendations:

The following Smart Growth recommendations and themes were highlighted during the Smart Growth breakout and closing plenary sessions:

- Require different scales of density for different areas of the state (rural, suburban, urban, etc). PFA density requirements could be made flexible for rural versus urban communities;
- Address local concerns regarding Adequate Public Facilities Ordinances;
- Develop better standards for development on well and septic;
- Foster better collaboration with Smart Growth non-profit organizations;
- Adopt a higher gas tax to support expanded transit;
- Expand TIF and other financing mechanisms to fund community revitalization efforts;
- Streamline and better coordinate historic preservation funding;
- Resolve disparity issues and strengthen the ability of municipalities to raise revenue;
- Address disputes between counties and municipalities regarding annexations;



- Finalize PlanMaryland and, where appropriate, revise state programs, funding mechanisms and other planning tools to support its implementation;
- Complete and launch GrowthPrint;
- Better educate Marylanders on the policies, process, and consequences of Smart Growth;
- Evaluate and quantify the negative impacts of ‘dumb’ growth (i.e. health, environmental and fiscal costs);
- Set minimum state standards for agricultural zoning;
- Establish variable scales for agricultural preservation programs, allowing for smaller niche farming (example: wineries);
- Need to integrate urban agricultural into agricultural preservation programs and food system policies;
- Eliminate or reduce the Estate Tax and Inheritance Tax on farmland;
- Do more to incentivize infill development via more funding and green taping;
- Expand the amount of green space and urban agriculture (solicit more donated land) in growth areas to increase livability; and
- Provide more funding for schools located in priority growth areas.

Breakout Session Four: Resource Based Industries

Agriculture, fisheries, forestry, environmental restoration, and ecotourism contribute billions of dollars to Maryland's economy and secure thousands of steady jobs. Such industries restore and protect our environment, provide economic opportunity, and ensure Maryland's historic culture and sense of place. Maryland's commitment to these industries helps promote the strategic goal of job growth as well as the five strategic goals dedicated to sustainability. This breakout session brought together farmers, watermen, environmental advocates, small-business owners, and policy makers to discuss how to protect those natural resources that offer a living and an identity to so many.

Strategies for Growing our Resource Based Industries

Maryland is implementing several key strategies aimed at promoting resource based industries:

- Support a regional processing and distribution system for local products;
- Support for local regulations (planning, zoning, health) that recognize the "changing face" of agriculture; and
- Implement recommendations from the Maryland Green Jobs and Industries Task Force and the Ecosystem Services Working Group Reports.

O'Malley-Brown Administration Resource Based Industries Progress:

- **Developed and implemented oyster restoration and aquaculture development plan:** Maryland completed the most scientifically exhaustive Oyster Environmental Impact Statement ever attempted, passed regulations to expand oyster sanctuaries from 9% to 25% of remaining habitat, opened thousands of new acres to aquaculture, streamlined the oyster aquaculture permitting process, established Aquaculture Enterprise Zones, and facilitated record numbers of oyster plantings.
- **Established Bay Restoration Work Programs for Watermen:** Secured \$15 million of federal funding and \$6 million of state capital funding to put Maryland watermen to work enhancing the blue crab habitat.
- **Implemented new management approaches to restore blue crab resource and fishery:** Coordinated measures with Virginia and Potomac River Fisheries Commission that, after two years, have resulted in a significant increase in the abundance of blue crabs. As a result, we estimate that 2010's blue crab population is the highest since 1997.
- **Protected Yellow Perch:** Adopted harvest restrictions to support a sustainable recreational and commercial yellow perch fishery which has resulted in the best reported recreational yellow fishery in decades, and a more stable commercial fishery that is expected to increase in profitability.
- **Passed Sustainable Forestry legislation:** Passage of the 2009 Sustainable Forestry Act, legislative improvements in 2009 to the Forest Conservation Act to ensure No Net Loss of Forests, and the establishment of the Sustainable Forestry Council.
- **Established Maryland Green Jobs and Industry Task Force:** In March, 2010, Governor O'Malley called together a group of 26 Maryland business leaders to recommend actions to promote green jobs and work toward a more sustainable economy.

- **Initiated Buy Local Program:** Maryland is aggressively implementing its Buy Local Program, which fosters and promotes the use of Maryland grown agricultural products. Maryland farmers received more than \$600,000 from WIC clients.
- **Kept Horse Racing in Maryland:** Governor helped broker a deal to keep horse racing tracks open and alive, protecting tens of thousands of jobs and hundreds of thousands of acres of open, productive agricultural land.
- **Preserved Farmland:** In 2008, soil conservation planners throughout the state collectively developed 922 new SCWQPs for 72,300 acres of Maryland farmland. Another 1,034 plans affecting 112,900 acres of farmland were updated to ensure their continued effectiveness in protecting natural resources. Together, these plans included more than 7,590 BMPs.

Resource Based Industries Recommendations:

The following recommendations and themes were highlighted during the resource industries breakout and closing plenary session

- Provide more support for Maryland’s “Local Food, Wood, & Fiber Economy;” including enhanced cross departmental coordination;
- Expand use of local products, such as food and wood-based fuels, especially in our schools;
- Utilize local resource-based energy sources for local energy consumption; and
- Ensure that cross-jurisdictional trade or economic activity at a local scale is supported by consistent and predictable policies, programs, and regulations, and at all levels of government and across various sectors.
- Conduct annual assessment and response to resource-based industries and market solutions in terms of State policies and practices;
- Specifically investigate financing options for restoration efforts and ecosystem services markets;
- Explore an aggressive branding and marketing campaigning for such sustainable resource-based industries as agriculture, fisheries, forestry, and aquaculture;
- Conduct valuation studies for ecosystem services, coordinate with State policies, and inject quantified values into State operations and markets, beginning with water;
- Leverage private funding for land preservation, Bay restoration, and other activities;
- More aggressively assist and promote MARBIDCO;
- Facilitate partnerships between universities, industry, and government to create research incubators, technology transfer opportunities, and critical job skill training; and
- Create more jobs by privatizing certain governmental services, such as nutrient management plan writing or restoration programs.
- Aggressively examine the “intent” of policies and their actual “impact”;
 - ✓ Bay restoration efforts, especially regulations that inhibit market-based solutions;
 - ✓ MALPF dis-incentivizes renewable energy sources;
 - ✓ Environmental regulations that may yield counter results re Smart Growth; and
- Address inter-jurisdictional partnerships, or lack thereof, between and among local, State, and federal stakeholders (specifically, Army Corps of Engineers); and

- Promote traditional and emerging resource-based industry career opportunities through early educational curriculum.

Conclusion

The O'Malley-Brown Administration is committed to making Maryland a leader in the development of skills for the new economy, safer communities, a sustainable environment and the improved health of its citizens through the achievement of its fifteen strategic goals. The Governor's Forum on Sustainability offered an opportunity to assess the progress of the previous four years and to consider the new actions that will drive progress in the next four. Gathering a wide range of stakeholders and subject-matter experts, including state and local officials, environmentalists, farmers, and business leaders allowed for the greatest understand of how creating a sustainable Maryland not only protects our natural resources but prepares the state to lead in the new economy.

Forum participants analyzed solutions for restoring the Chesapeake Bay, promoting clean energy, reducing our impact on climate change, supporting smart growth, and strengthening our resource based industries. While there are differences of opinion among a wide range of stakeholders, the forum proved that their interests are aligned more often than many of them believed. Across the four breakout sessions common themes emerged that the participants believed the state needs address, including:

- Promote education and awareness
- Invest in local existing communities
- Establish innovative funding streams
- Develop environmental markets
- Utilize public/private partnerships
- Lead rather than follow
- Channel growth efficiently
- Coordinate among different levels of government
- Streamline permit processes
- Build off existing successful programs
- Take advantage of all of Maryland's renewable resources
- Develop legislation that promotes sustainability



Governor O'Malley is committed to making Maryland a national leader in sustainable policies and practices. The ideas generated at this forum will inform the policies that the state pursues to achieve its strategic sustainability goals.