

Department of Legislative Services
Maryland General Assembly
2009 Session

FISCAL AND POLICY NOTE

Senate Joint Resolution 9 (Senator Pugh)
Education, Health, and Environmental Affairs

Reduction of Greenhouse Gas Emissions

This joint resolution (1) urges the U.S. Congress to act expeditiously to enact comprehensive legislation to reduce greenhouse gas emissions; and (2) requires a copy of the resolution to be forwarded to the Maryland Congressional Delegation.

Fiscal Summary

State Effect: The joint resolution does not directly affect State operations or finances.

Local Effect: None.

Small Business Effect: None.

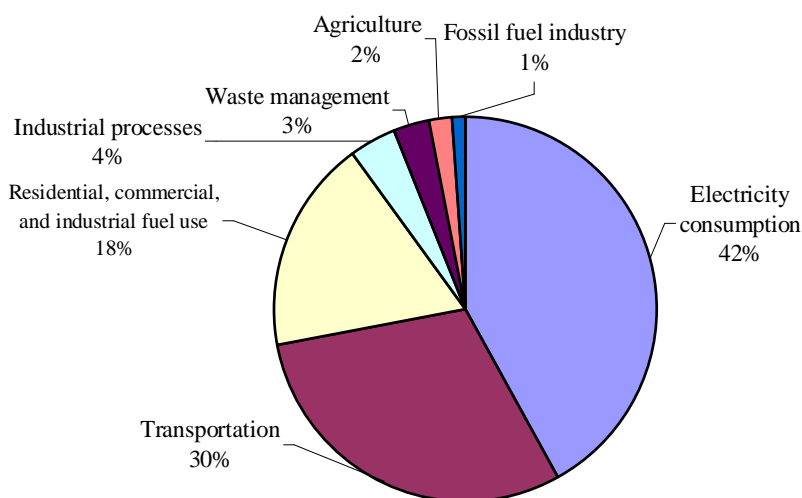
Analysis

Current Law/Background: According to the Intergovernmental Panel on Climate Change, the world's temperatures are climbing and human activities are very likely contributing to this increase. Continued global warming is expected to affect sea levels and weather patterns, resulting in impacts on human health, the environment, and the economy.

In 2005 Maryland's greenhouse gas (GHG) footprint (which includes GHG emissions from sources within the State and emissions from out of state that are created by consumption in Maryland) totaled approximately 109 million metric tons of carbon dioxide (CO₂) equivalent. According to the Maryland Commission on Climate Change, and as shown in **Exhibit 1**, in 2005, the largest GHG emission sources in Maryland were electricity consumption and transportation. Other sources include residential, commercial, and industrial fuel use; industrial processes; waste management; agriculture;

and the fossil fuel industry. Due to increases in population and consumption, Maryland's GHG emissions are expected to continue to grow over time. Although Maryland has already taken steps to reduce GHG emissions from certain sources, without any new programs, the commission estimates that Maryland can expect to exceed emissions of 130 million metric tons of CO₂ equivalent by 2020.

Exhibit 1
Sources of GHG Emissions in Maryland, 2005



Source: Maryland Commission on Climate Change

At the federal level, climate change policy consists largely of voluntary programs and partnerships to meet a national goal of reducing the GHG intensity of the American economy by 18% from 2002 to 2012. Although several bills addressing GHG reductions have been introduced in the U.S. Congress in recent years, to date, no federal legislation has been enacted. However, the Obama Administration has indicated that it supports the implementation of a nationwide and economywide cap-and-trade system to reduce carbon emissions by 80% by 2050.

Because the federal government has not yet taken significant action on this issue, several states are moving ahead with their own efforts to reduce GHG emissions. In Maryland, although legislation was introduced during both the 2007 and 2008 sessions to require reductions in GHG emissions, that legislation was not successful. Nevertheless, Maryland has implemented numerous policies and programs in recent years that address energy conservation and efficiency, renewable energy, alternative energy sources, and GHG emissions.

In 2006 the General Assembly passed the Healthy Air Act (Chapters 23 and 301), requiring Maryland to join the Regional Greenhouse Gas Initiative (RGGI), a regional cap-and-trade system to reduce CO₂ emissions from specified electric generating units. Under RGGI, each participating state is allocated a certain number of CO₂ allowances permits to emit one ton of CO₂ that serve as the state's respective share of a regional "cap" on CO₂ emissions. The cap will stabilize emissions through 2014 and will then be reduced by 10% from 2015 through 2018. The majority of CO₂ allowances are being distributed through regional auctions. The first two auctions were held on September 25, 2008 and December 17, 2008. At the first auction, allowances were sold at a price of \$3.07 per allowance, generating \$16.4 million in revenue for the State. At the second auction, allowances were sold at a price of \$3.38, generating another \$18.0 million for the State. Revenue from the auctions is deposited into the Strategic Energy Investment Fund within the Maryland Energy Administration (MEA) and used for specified purposes including energy efficiency and conservation programs, electricity rate relief for residential customers, and clean energy programs.

In 2007 the General Assembly passed the Clean Cars Act (Chapters 111 and 112), requiring the State to establish a Low Emission Vehicle (LEV) Program and authorizing the State to adopt the strictest automobile emission standards allowable under federal law, California's LEV standards. The GHG component of this program cannot take effect without federal approval, which was denied by the Bush Administration but will likely be reconsidered by the Obama Administration. Once fully implemented, the Act is expected to reduce GHG emissions along with other air pollutants.

In addition to those efforts, in 2007 Governor O'Malley issued an executive order establishing the Maryland Commission on Climate Change to develop a plan of action to address climate change and to prepare for the likely consequences and impacts of climate change. In January 2008, the commission released an interim report. The combined recommendations of this interim report and those made by MEA in its Strategic Electricity Plan formed the basis for a range of energy-related legislation introduced during the 2008 session. The legislation that was passed during the 2008 session:

- addressed energy efficiency by codifying the EmPOWER Maryland initiative to reduce electricity consumption 15% below 2007 levels by 2015 (Chapter 131), requiring utilities to educate customers on the costs and benefits of its energy efficiency programs (Chapter 129), and requiring the implementation of "smart" electric meters if deemed cost-effective after further study by the Public Service Commission (Chapter 131);
- required certain State government buildings and new schools to be constructed in accordance with high performance green building standards (Chapter 124);

- encouraged additional clean energy generation in Maryland by modifying the Renewable Portfolio Standard to increase the percentage of electricity required to come from renewable energy sources (Chapter 126), and by increasing the cap on grants for investments in solar and geothermal energy (Chapter 132);
- established the Maryland Clean Energy Center as a technology incubator and source for industrywide collaboration (Chapter 137); and
- created the Strategic Energy Investment Fund within MEA to allocate revenue from the auction of CO₂ allowances under RGGI for consumer benefit and strategic energy purposes (Chapters 127 and 128).

In August 2008 the Maryland Commission on Climate Change issued its Climate Action Plan, which includes a comprehensive assessment of climate change impacts in Maryland and a review and assessment of the costs of inaction. Most notably, however, the plan recommends the adoption of goals to reduce GHG emissions by 10% by 2012; 15% by 2015; 25% to 50% by 2020; and 90% by 2050 (from 2006 levels). The plan includes a suite of 42 mitigation strategies to meet those goals; according to the commission, adoption of those strategies will achieve an approximate reduction in GHG emissions of 40% to 55% from 2006 levels by 2020. Finally, the plan includes a comprehensive strategy for reducing Maryland's vulnerability to climate change.

Additional Information

Prior Introductions: None.

Cross File: HJ 6 (Delegate Hucker, *et al.*) - Rules and Executive Nominations.

Information Source(s): Department of Natural Resources, Maryland Department of the Environment, Maryland Energy Administration, Public Service Commission, Department of Legislative Services

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mcp/ljm

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