Maryland climate plan passes key tests in UMD studies

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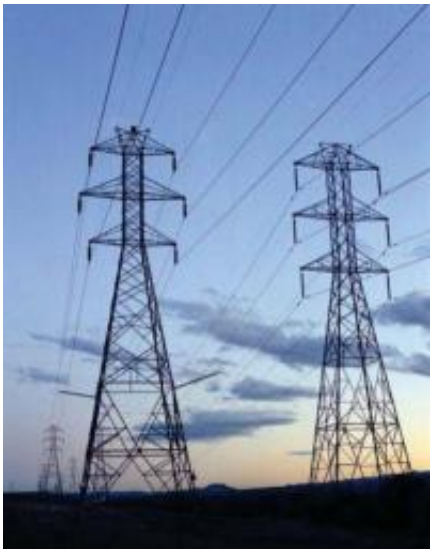

"...sound environmental responses to climate change do not have to come at the expense of Maryland's economy, or put a crimp in the availability of electricity in the State," says UMD researcher Matthias Ruth. "To the contrary, we see net benefits." Credit: National Renewable Energy Laboratory, Photographic Information Exchange

Maryland's plan to cut greenhouse gas emissions 25 percent by 2020 meets a series of benchmark tests set by state lawmakers, concludes a new pair of studies by the University of Maryland Center for Integrative Environmental Research (CIER). The findings should help clear the way for adoption of a full Climate Action Plan next year, the researchers say.

Maryland's 2009 Greenhouse Gas Reduction Act ordered independent studies to make sure that its provisions won't hurt the reliability of the state's electricity supply or damage the manufacturing sector of the economy. The CIER studies give State plans a passing grade on these scores and project some upsides:

- Improves reliability of electric service for consumers and industry.
- No expected loss of jobs.
- May stimulate some "green" jobs.
- No economic harm to Maryland's manufacturing sector.

"We can allay critics' fears," says University of Maryland School of Public Policy Professor Matthias Ruth, the study's principal investigator and CIER director. "Our studies confirm that sound environmental responses to climate change do not have to come at the expense of Maryland's economy, or put a crimp in the availability of electricity in the State. To the contrary, we see net benefits."

These reports come as part of an ongoing effort by the state to assess the impact of Maryland's developing Climate Action Plan (CAP) on the manufacturing sector and the wider state economy. Future studies are expected to assess manufacturing-specific and economy-wide impacts.

For example, the Greenhouse Gas Reduction Act requires an additional independent study by 2015, with oversight from an industry-represented task force, evaluate climate policy effects on manufacturing.

Full Reports Available Here:
http://www.cier.umd.edu/MDGHGReduction2011/

"We expect manufacturing in Maryland, and its economy as a whole, to

be agile enough to make the necessary changes in technologies and business practices to absorb what has been portrayed as a policy-induced shock on the economy," concludes one of the new University of Maryland reports. "At worst, the CAP will become an indistinguishable part of a larger and longer-term trend of declining manufacturing employment in the state. At best, the CAP will generate new business opportunities and jobs."

New "green" jobs would likely grow out of the work involved in emissions reductions, the study says. It does not forecast a specific number, but suggests the economic and policy atmosphere is ripe for green job growth: "Maryland stands to benefit from new employment opportunities that will support mitigation policies associated with the state's CAP. Maryland must ensure that it continues to capitalize on its talented and skilled workforce and that policies and strategies are in place to support growth and attract new green jobs."

The Maryland Department of Environment commissioned the studies. It is charged with submitting a tentative Climate Action Plan (CAP) to Gov. O'Malley by the end of 2011.

"These reports provide essential information about the early effects of implementing Maryland's Climate Action Plan," says Sean Williamson, CIER researcher and report co-author. "They should remove potential roadblocks and advance the process."

In their analyses, the CIER researchers, along with colleagues from Towson University's Regional Economic Studies Institute and Johns Hopkins University Professor Benjamin F. Hobbs, analyzed the impact resulting from implementation of the following climate remediation programs, including:

- Renewable Energy Portfolio Standard: requires electricity suppliers to meet a portion of retail electricity sales from renewable energy sources
- Regional Greenhouse Gas Initiative: first market-based regulatory program in the United States to reduce greenhouse gas emissions. Maryland is one of 10 Northeast States in the program
- EmPower Maryland: Energy conservation initiatives

SPECIFIC FINDINGS

MANUFACTURING SECTOR IMPACT: 2009 Greenhouse Gas Reduction Act (GGRA) requires that cuts in emissions may not cause a significant increase in costs to the manufacturing sector.

FINDING: No significant increase in capital or energy costs for the manufacturing sector. Large, electricity-intensive industries, such as chemical plants, will see the greatest energy cost increases - between 1 and 2 percent. Small, less energy-intensive industries, such as printing, could see cost savings as a result of participation in energy conservation programs, such as EmPower Maryland.

JOBS: GGRA says greenhouse gas reduction requirements may not cause reductions in existing manufacturing jobs.

FINDING: "Job losses in the manufacturing sector attributable to select CAP policies will be minimal and may not occur at all," says the economic report. It notes that Maryland's manufacturing sector has lost jobs since the 1970s, a trend expected to continue with or without the CAP.

GREEN JOBS: GGRA requires reduction measures to produce a net increase in jobs in Maryland, and encourage new employment opportunities in the State related to energy conservation, alternative

energy supply, and greenhouse gas emissions reduction technologies - so called "green jobs."

FINDING: New jobs in each of these categories are expected to grow. Currently, green jobs make up about 3 percent of the state's workforce. Green job opportunities will be available to those who enhance or modify existing skills.

ELECTRIC RELIABILITY: GGRA requires the Maryland Department of the Environment to "ensure the plan does not decrease the likelihood of reliable and affordable electrical service and statewide fuel supply."

The researchers define "electric reliability" as having adequate amounts of electricity to meet peak summer demand plus a safety margin. These needs can be met by either in-state generation capacity, power importation or by managing demand. Reliability does NOT pertain to disruptions in electricity service caused, for example, by downed wires from fallen trees and branches.

FINDING: "We find electricity reliability in Maryland...will improve with the implementation of specific mitigation policies originally identified in the 2008 Climate Action Plan," the report concludes. "Despite uncertainties in future electricity transmission in Maryland, electricity reliability in the state will be improved with the addition of the three climate mitigation policies."

By the end of the decade, Maryland will have to import electricity because of the retirement of old generating plants, the researchers explain. Planned projects, such as the Mid-Atlantic Power-Pathway, will help satisfy the state's needs, if brought on line by 2015. Climate Action planning can improve this picture due to conservation measures that will reduce peak-demand, the researchers say. Increases from renewable

sources such as offshore wind will help too.

Provided by University of Maryland