



**Catalog of State Actions**  
**Residential, Commercial and Industrial**  
 Draft Prepared for RCI Technical Working Group  
 August 31, 2007

**Key to Future Rankings of Options in the Tables that Follow:**

Potential GHG Emission Reductions <u>1/</u>	Potential Cost or Cost Savings <u>1/ 2/</u>
<b>High (H):</b> At least 1.0 million metric tons (MMt) carbon dioxide equivalent (CO <sub>2</sub> e) per year by 2020	<b>High (H):</b> \$50 per metric ton CO <sub>2</sub> e (tCO <sub>2</sub> e) or above
<b>Medium (M):</b> From 0.1 to 1.0 MMtCO <sub>2</sub> e per year by 2020	<b>Medium (M):</b> \$5-50/tCO <sub>2</sub> e
<b>Low (L):</b> Less than 0.1 MMtCO <sub>2</sub> e per year by 2020, or 1 MMtCO <sub>2</sub> e by 2050	<b>Low (L):</b> Less than \$5/tCO <sub>2</sub> e
<b>Uncertain (U):</b> Not able to estimate at this time	<b>Negative (Neg):</b> Net cost savings
	<b>Uncertain (U):</b> Not able to estimate at this time
<p><u>1/</u> Several measures may overlap in terms of emissions reductions and/or cost impacts. Estimates assume measures would be implemented independently from other measures.</p> <p><u>2/</u> Costs are denoted by a positive number. Cost savings (i.e., “negative costs”) are denoted by a negative number.</p>	

**Definition of “Priorities for Analysis”:**

- **High:** High priority options will be analyzed first.
- **Medium:** Medium priority options will be analyzed next, time and resources permitting.
- **Low:** Low priority options will be analyzed last, time and resources permitting.

## Residential, Commercial and Industrial (RCI)

Option No.	GHG Reduction Policy Option	Potential GHG Emissions Reduction	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes / Related Actions in Maryland
<b>RCI-1</b>	<b>ENERGY EFFICIENCY PROGRAMS, FUNDS, AND GOALS</b>					
1.1	Demand-Side Management (DSM)/Energy Efficiency Programs, Funds, or Goals for Electricity (including expansion of existing programs)					Empower Maryland sets statewide goal of reducing per capita energy use by 15% electricity use by 2015.
1.2	Demand-Side Management (DSM) Energy Efficiency Programs, Funds, or Goals for Natural Gas, Propane, and Fuel Oil					
1.3	Energy Efficiency Funds (e.g., public benefit funds) administered by state agency, utility or 3 <sup>rd</sup> party					Regional Greenhouse Gas Initiative (RGGI) auction proceeds may be dedicated to EE.
1.4	Regional Market Transformation Alliance					
1.5	Low-cost loans for energy efficiency					
<b>RCI-2</b>	<b>BUILDINGS</b>					
2.1	Improved Building Codes for Energy Efficiency					
2.2	Promotion and Incentives for Improved Design and Construction (e.g. LEED, green buildings) in the Private Sector					

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2.3	Improved Design and Construction in new and existing state and local government buildings, "Government Lead-by-example"					Maryland Building Council to establish energy efficiency standards for state-funded projects. State buildings required to reduce energy use by 15% by 2015.
2.4	Support for Energy Efficient Communities Planning, "Smart Growth"					
2.5	Increased Use of Blended Cement (substituting fly ash or other pozzolans for clinker reduces CO <sub>2</sub> emissions)					
2.6	Training and Education for Builders and Contractors (e.g. HVAC <sup>1</sup> sizing, duct sealing)					
2.7	Energy Management Training/Training of Building Operators					
<b>RCI-3</b>	<b>APPLIANCE STANDARDS</b>					
3.1	More Stringent Appliance/Equipment Efficiency Standards					
3.2	Support for Federal-level Appliance Efficiency Standards					
<b>RCI-4</b>	<b>EDUCATION AND OUTREACH</b>					
4.1	Consumer Education Programs					

<sup>1</sup> HVAC = Heating, Ventilation, and Air Conditioning

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4.2	Energy Efficiency and Environmental Impacts Awareness in School Curricula					
4.3	In-home energy displays					
4.4	Energy performance disclosure					
<b>RCI-5</b>	<b>PRICING AND PURCHASING</b>					
5.1	Green Power Purchasing for Consumers					
5.2	Net-metering for Distributed Generation and Combined Heat and Power					Some net metering in place, more underway at PSC.
5.3	Rate structures and Technologies to Promote Reduced GHG Emissions					
5.4	Bulk Purchasing Programs for Energy Efficiency or Other Equipment					
<b>RCI-6</b>	<b>CUSTOMER-SITED DISTRIBUTED ENERGY AND COMBINED HEAT AND POWER</b>					
6.1	Incentives to Promote Implementation of Renewable Energy Systems					
6.2	Incentives and Resources to Promote Combined Heat and Power (CHP, or "cogeneration")					
<b>RCI-7</b>	<b>GHG EMISSIONS-SPECIFIC GOALS AND POLICIES, INCLUDING PROCESS EMISSIONS</b>					
7.1	GHG Cap and Trade Program (for RCI Sectors)					
7.2	GHG or Carbon Tax					

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7.3	Switching to Lower GHG Fuels					
7.4	Policies and/or Programs Specifically Targeting Non-energy GHG Emissions					
7.5	Negotiated/Voluntary Emissions or Energy Savings Agreements					
<b>RCI-8</b>	<b>TECHNOLOGY-SPECIFIC POLICIES</b>					
8.1	White Roofs, Rooftop Gardens, and Landscaping (including Shade Tree Programs)					
8.2	Focus on specific end-uses/technologies					
<b>RCI-9</b>	<b>NON-ENERGY EMISSIONS (HFCS, PFCS, SF<sub>6</sub>, CO<sub>2</sub> PROCESS EMISSIONS)</b>					
9.1	Participation in Voluntary Industry-Government Partnerships					
9.2	Process Changes/ Optimization					
9.3	Leak Reduction /Capture, Recovery and Recycling of Process Gases					
9.4	Appliance Recycling/Pick-Up Programs					
<b>RCI-10</b>	<b>OTHER</b>					
10.1	Focus on specific market segments: existing homes (weatherization), new construction, apartments, low					

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	income, etc.					
10.2	Municipal Energy Management					
10.3	Industrial ecology/ by-product synergy					
10.4	Industrial Audits					
10.5	Green building tax credit					MD green building tax credit in place.