



Catalog of State Actions Energy Efficiency and Conservation

Draft Prepared for EEC Subcommittee
January 21, 2008

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>
High (H): At least 1.0 million metric tons (MMt) carbon dioxide equivalent (CO ₂ e) per year by 2020	High (H): \$40 per metric ton CO ₂ e (tCO ₂ e) or above
Medium (M): From 0.1 to 1.0 MMtCO ₂ e per year by 2020	Medium (M): \$15-40/tCO ₂ e
Low (L): Less than 0.1 MMtCO ₂ e per year by 2020, or 1 MMtCO ₂ e by 2050	Low (L): Less than \$15/tCO ₂ e
Uncertain (U): Not able to estimate at this time	Negative (Neg): Net cost savings
	Uncertain (U): 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.

Energy Efficiency and Conservation (EEC)

INSERT VOTES HERE	Option No.	GHG Reduction Policy Option	Potential GHG Emissions Reduction	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis L M H	Notes / Related Actions in Iowa
	EEC-1	ENERGY EFFICIENCY PROGRAMS, FUNDS, AND GOALS					
X (MA) X (IUB) X (SC) X(OCA) X (AL) X (IMU) X (UIA) X (IAE)	1.1	Demand-Side Management (DSM)/Energy Efficiency Programs, Funds, or Goals for Electricity (including expansion of existing programs, bulk purchasing programs for EE or other equipment)	H	L			Electric utilities must offer cost-effective energy efficiency programs. Iowa Code § 476.6 (14). The IUB establishes energy efficiency goals for investor-owned electric utilities (IOUs). DSM offered by consumer-owned electric utilities is not regulated.
X (MA) X (IUB) X (SC) X(OCA) X (AL) X (IMU) X (UIA) X (IAE)	1.2	Demand-Side Management (DSM) Energy Efficiency Programs, Funds, or Goals for Natural Gas	H	L			Natural gas utilities must offer cost-effective energy efficiency programs. Iowa Code § 476.6 (14). The IUB establishes energy efficiency goals for investor-owned gas utilities. DSM offered by consumer-owned utilities and other heating fuel providers is not regulated.

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						L	M	H	
X (IUB) X(OCA)	1.3 [new from 1.2]	Demand-Side Management (DSM) Energy Efficiency Programs, Funds, or Goals for Propane and Fuel Oil	H	L					The IUB establishes energy efficiency goals for investor-owned gas utilities. DSM offered by consumer-owned utilities and other heating fuel providers is not regulated.
X (UIA) X (IAE)	1.4	Energy Efficiency Funds (e.g., public benefit funds) administered by state agency, utility or 3 rd party	H	L					IOUs recover DSM expenditures through customer bills. The costs are recovered on a contemporaneous basis using an automatic adjustment mechanism, subject to annual true-up. Iowa Code § 476.6(16)e.
	1.5	Regional Market Transformation Alliance	M	L					MEEA Change a Light Change the World CFL promotion
X (IUB) X (SC) X(OCA) X (AL) X (IMU) X (UIA) X (IAE)	1.6	Low-cost loans for energy efficiency/self-liquidating financing [IAMU] proposed change: Investigate rebates; low-interest loans, performance contracting and shared savings for	M	L					

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		energy efficiency; investigate alternative funding mechanisms; investigate impact of alternative tax policies on CIP							
X (MA) X (IUB) X (SC) X(OCA) X (AL) X (UIA)	1.7	Incentive mechanisms: [new text] tools that reward or penalize performance or behavior in achieving energy efficiency; can be at various levels (program provider, contractor, building owner or home owner)	H	L					
X (IUB) X (SC) X (AL)	[new from 5.3] 1.8	Rate structures (e.g., CPP, TOU, real time pricing, strategies with AMI/Smart Metering) and Technologies to Promote Reduced GHG Emissions	L	L					Rate structures are included within definition of energy efficiency measure. 199 IAC 35.1. Iowa endorsement of National Action Plan on Energy Efficiency includes ensuring price signals that promote energy efficiency.
	1.9	White Roofs, Rooftop Gardens, and Landscaping (including	L	L/M					

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						L	M	H	
		Shade Tree Programs)							
	EEC -2								
X (MA) X (IUB) X (SC) X(OCA) X (AL) X (IMU) X (IAE)	2.1	Improved Building Codes for Energy Efficiency – should reflect statewide coverage and statewide enforcement	H	L					While Iowa has adopted improved Building Codes for Energy Efficiency (IECC 2006) for new construction, the scope of applicability, level of compliance and enforcement varies. Iowa Code § 103A.7, A.9, A.10.
X (IUB) X (SC) X(OCA) X (AL) X (IMU) X (IAE)	2.2	Promotion and Incentives for Improved Design and Construction (e.g. LEED, green buildings) in the Private Sector; adoption of the energy efficiency building code for commercial buildings Includes support for Energy Efficient Communities Planning, "Smart Growth"	H	L					Executive Order 41 (2005)
X (IUB) X (IAE)	2.3	Improved Design and Construction in new and existing state and local government buildings,	L	U					State government shall be a model and testing ground for the use of energy

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		"Government Lead-by-example"							efficiency systems. Iowa Code § 473.3, 473.13A-473.19.
	2.4	Increased Use of Blended Cement (substituting fly ash or other pozzolans for clinker reduces CO ₂ emissions)	L	U					
X (MA) X (IUB) X (SC) X (AL) X (IMU) X (IAE)	2.5	Training and Education for Builders and Contractors (e.g. HVAC ¹ sizing, duct sealing)	H	L					IAEC Momentum is Building Conference; IAMU proper HVAC sizing program, Community College programs, Iowa Energy Center 266.39; being evaluated in IOU assessment of energy efficiency potential
X (MA) X (IUB) X (SC) X (AL)	2.6	Energy Management Training/Training of Building Operators	H	L					IOU energy efficiency programs; Iowa Energy Center in cooperation with MEEA
	EEC-3								

¹ HVAC = Heating, Ventilation, and Air Conditioning

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X (SC) X (IMU)	3.1	More Stringent Appliance/Equipment Efficiency Standards	L	U			
	3.2	Support for Federal-level Appliance Efficiency Standards	U	U			
	EEC-4						
X (MA) X (IUB) X (IMU)	4.1	Consumer Education Programs. Consumer and Trade Ally Education Programs directly or through workplace	U	U			EE programs offered by electric and natural gas utilities; 476.6(16)Iowa Energy Center – Iowa Code § 266.39C(1)
X (MA) X (IUB) X(OCA)	4.2	Energy Efficiency and Environmental Impacts Awareness in School Curricula	U	U			IOU EE programs; Iowa Code § 266.39C(6)
	4.3	In-home energy displays	U	U			
X (UIA)	4.4	Energy performance disclosure	U	U			Iowa Code § 476.56 (upon request)
	4.5	Provide a web-based data bank of information about climate change					
	EEC-5						
	5.1	Policies and/or Programs Specifically Targeting Non-energy GHG Emissions	U	U			

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						L	M	H	
	5.2	Negotiated/Voluntary Emissions or Energy Savings Agreements	U	U					
X (SC) X (UIA) X (IAE)	5.3	Midwestern Governors Association Energy Security and Climate Stewardship Platform	U	U					Relevant provision is achieving 2% reduction of regional sales of natural gas for electricity through energy efficiency by 2015
	EEC-6								
	6.1	Focus on specific end-uses/technologies, such as appliances, CFLs	U	U					
	EEC-7								
	7.1	Participation in Voluntary Industry-Government Partnerships	L/M	L					
	7.2	Process Changes/Optimization	L/M	L					
	7.3	Leak Reduction /Capture, Recovery and Recycling of Process Gases	M	L					
	7.4	Appliance Recycling/Pick-Up Programs	L	M/H					
	EEC-8								
X (MA) X (SC) X(OCA)	8.1	Focus on specific market segments: existing homes (weatherization), new	H	L					IOU energy efficiency programs generally incorporate such

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X (IMU) X (UIA)		construction, apartments, low income, etc.							focus, including agriculture segment.
X (IMU) X (UIA)	8.2	Municipal Energy Management	H	L					e.g., water/wastewater efficiency, street-lighting, traffic lights, etc.
	8.3	Industrial ecology/ by-product synergy	U	U					Refers to use of one industry's by-products as inputs for other industries, rather than as waste.
	8.4	Industrial Audits and support for implementation of improvements	L	L					IOU energy efficiency programs
	8.5	Green building tax credit	U	U					
	8.6	Provide incentives for contractors to add energy efficient appliances							IOU energy efficiency programs
	8.7	Prohibit new incinerators	U	U					
	8.8	Improved recycling programs	U	U					
	8.9	Promote eco-industrial parks	U	U					
	8.10	Encourage replacement of inefficient industrial motors	U	U					IOU energy efficiency programs
X (MA) X (AL)	8.11	Adopt income tax incentives (credits or deductions) for the installation of energy							

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		efficiency measures					
X (UIA) X (IAE)	[new] 8.12	Formation of Energy Districts					Formed at the county level to coordinate local energy efforts.