Catalog of State Actions
Energy Supply (ES) Policy Working Group

A catalog of state-level, GHG-reducing actions and policy options prepared by the Center for Climate Strategies (CCS) and the Rocky Mountain Climate Organization based on actions undertaken or considered by Colorado and other states, including regional, state, local and private actions.

Key To Future Rankings of Options in the Tables that Follow:

Potential GHG Emission Reductions 1/	Potential Cost or Cost Savings 1/ 2/
High (H): At least 1.0 million metric tons (MMt) carbon dioxide equivalent (CO_2e) per year by 2020 (~1% of current Colorado emissions)	**High (H)**: $50 per metric ton CO_2e (tCO_2e) or above
Medium (M): From 0.1 to 1.0 $MMtCO_2e$ per year by 2020	**Medium (M):** \$5-50/tCO_2e
Low (L): Less than 0.1 $MMtCO_2e$ per year by 2020, or 1 MMtCO2e by 2050	**Low (L):** Less than \$5/tCO_2e
Uncertain (U): Not able to estimate at this time	**Uncertain (U):** Not able to estimate at this time
1/ Several measures may overlap in terms of emissions reductions and/or cost impacts. Estimates assume measures would be implemented independently from other measures. 2/ Costs are denoted by a positive number. Cost savings (i.e., "negative costs") are denoted by a negative number.	

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.

Notation of Options:
Options marked with an asterisk (*) indicate options that are at least partially "base case" policies, i.e., that have been considered or undertaken at some level in Colorado. Distinctions are made between statewide (S) and local (L) policies where appropriate.
Options marked with two asterisks (**) indicate options that have been proposed for consideration.

Options that are marked with AZ, MT, and/or NM are substantially similar to options that were included in Arizona or New Mexico's final plan(s) or are under consideration in Montana.

Energy Supply (ES)

Option No.	GHG Reduction Policy Option	Priority for Analysis	Potential GHG Emissions Reduction	Potential Cost or Cost Savings	Ancillary Impacts, Feasibility Considerations	Notes
ES-1	**RENEWABLE ENERGY**					
1.1	Environmental Portfolio Standard (renewables and energy efficiency) with renewable energy credit trading		H	M		AZ, MT, NM – indicates that this option is included in the Arizona, Montana and/or New Mexico state plans
1.2	Greenpower renewable resources programs *(S,L)		L	L		AZ, NM
1.3	State purchase of electricity through Greenpower renewable resources programs		L	M		NM
1.4	Public Benefit Charge Funds *(L)		H	L		AZ, NM
1.5	Renewable Energy Incentives (biomass, wind, solar, geothermal) *(L)		H	M		AZ, MT, NM
1.6	Green Power Purchases and Marketing *(L)		L	L		
1.7	Renewable energy development issues (zoning, siting, etc.) *(S,L)		M	L		AZ
1.8	Research and Development (R&D) *		M	H		AZ, MT, NM
1.9	Landfill Gas Recovery (see also Waste)		L	L		

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1.10	Waste to Energy (see also Waste) *(L)		L	M		
ES-2	**DISTRIBUTED GENERATION (DG)**					
2.1	Incentives for combined heat and power (CHP) and clean DG **		M	M		AZ, MT, NM
2.2	Removing barriers to CHP and clean DG (including utility rate and interconnection barriers, financing, information, etc.)**		M	L		AZ, MT, NM
2.3	Interconnection Rules for clean, distributed generation *(S,L)		M	M		AZ, MT, NM
2.4	Net Metering *(S,L)		L	H		AZ, MT
2.5	Pricing strategies *		L	H		AZ, NM
ES-3	**ADVANCED FOSSIL FUEL**					
3.1	Incentives for advanced coal, including IGCC and carbon capture and storage (CCS) **		U	H		MT, NM
3.2	Incentives for CO2 pipelines for CCS **		L	H		
3.3	Fuel Cell Development Incentives		L	H		
3.4	Combined H2/electricity production from fossil fuels with sequestration		U	H		MT

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3.5	Research and Development (R&D) *(S)		U	H		MT
ES-4	**NUCLEAR**					
4.1	New Nuclear Capacity and Licensing		H	H		NM
4.2	Nuclear Plant Relicensing		N/A	N/A		
4.3	Nuclear Plant Uprating		N/A	N/A		
ES-5	**OTHER ELECTRICITY MEASURES**					
5.1	Efficiency Improvements and Repowering Existing Plants **		H	M		MT
5.2	Transmission System Upgrading **		M	M		NM
5.3	Reduce Transmission and Distribution Line Loss **		M	M		NM
ES-6	**EMISSIONS POLICIES**					
6.1	CO2 Tax		M	M		MT
6.2	GHG Cap and Trade		U	M		AZ, MT, NM
6.3	Generation Performance Standards **		M	M		AZ, MT, NM
6.4	GHG Offset/mitigation requirements for new power plants		M	H		
6.5	GHG Offset/mitigation requirements for existing power plants		M	H		
6.6	Voluntary Utility CO2 Targets		L	L		

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ES-7	**EDUCATION/AWARENESS**					
7.1	Brownfield Re-development *(S,L)		U	U		
7.2	Environmental (emissions) Disclosure		U	L		NM
7.3	Public Education *(S,L)		L	L		AZ, NM
ES-8	**OIL AND GAS OPERATIONS**					
8.1	Methane and CO_2 reduction in oil & gas operations, including fuel use and emissions reduction in venting and flaring *(S,L)		M	M		MT, NM
8.2	GHG reduction in refinery operations, including in future coal-to-liquids refineries *(S,L)		M	L		MT, NM
8.3	CO_2 capture and storage or reuse (CCSR) in Oil &Gas operations, including refineries and coal-to-liquids operations *(S,L)		M	M		MT, NM

*(S,L) – THIS IS A PLACE MARKER ONLY