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Catalog of State-Level GHG Reduction Policy Options
Energy Supply

Prepared by The Center for Climate Strategies (CCS) for the Montana Climate Change Advisory Committee (CCAC) and its Scientific Advisory Panel (SAP) and Technical Work Groups (TWGs) based on actions undertaken or considered by all US states.

Key to Future Rankings of Options in the Table that Follows:

Potential Emission Reductions 1/	Potential Cost or Cost Savings 1/ 2/
High (H): At least 1 Million Metric Tons (MMT) carbon dioxide equivalent (CO_2e) per year by 2020 (~1% of current MT emissions)	**High (H)**: $50 per Metric Ton CO_2e ($MTCO_2e$) or above
Medium (M): From 0.1 to 1 MMT CO_2e per year by 2020	**Medium (M):** $5-50/$MTCO_2e$
Low (L): Less than 0.1 MMT CO_2e per year by 2020, or 1 MMT CO2e by 2050	**Low (L):** Less than $5/$MTCO_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 will be marked with an asterisk (*) at a later date to indicate options that are at least partially "base case" policies, i.e., that have been considered or undertaken at some level 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					
1.2	Greenpower renewable resources programs					
1.3	State purchase of electricity through Greenpower renewable resources programs					
1.4	Public Benefit Charge Funds					
1.5	Renewable Energy Incentives (biomass, wind, solar, geothermal)					
1.6	Green Power Purchases and Marketing					
1.7	Renewable energy development issues (zoning, siting, etc.)					

Option No.	GHG Reduction Policy Option	Priority for Analysis	Potential GHG Emissions Reduction	Potential Cost or Cost Savings	Ancillary Impacts, Feasibility Considerations	Notes
1.8	Research and Development (R&D)					
1.9	Landfill Gas Recovery (see also Waste)					
1.10	Waste to Energy (see also Waste)					
ES-2	**DISTRIBUTED GENERATION (DG)**					
2.1	Incentives for combined heat and power (CHP) and clean DG					
2.2	Removing barriers to CHP and clean DG (including utility rate and interconnection barriers, financing, information, etc.)					
2.3	Interconnection Rules for clean, distributed generation					
2.4	Net Metering					
2.5	Pricing strategies					
ES-3	**ADVANCED FOSSIL FUEL**					
3.1	Incentives for advanced coal, including IGCC and carbon capture and storage (CCS)					
3.2	Incentives for CO2 pipelines for CCS					

Option No.	GHG Reduction Policy Option	Priority for Analysis	Potential GHG Emissions Reduction	Potential Cost or Cost Savings	Ancillary Impacts, Feasibility Considerations	Notes
3.3	Fuel Cell Development Incentives					
3.4	Combined H2/electricity production from fossil fuels with sequestration					
3.5	Research and Development (R&D)					
ES-4	**NUCLEAR**					
4.1	New Nuclear Capacity and Licensing					
4.2	Nuclear Plant Relicensing					
4.3	Nuclear Plant Uprating					
ES-5	**OTHER ELECTRICITY MEASURES**					
5.1	Efficiency Improvements and Repowering Existing Plants					
5.2	Transmission System Upgrading					
5.3	Reduce Transmission and Distribution Line Loss					
ES-6	**EMISSIONS POLICIES**					
6.1	CO2 Tax					
6.2	GHG Cap and Trade					
6.3	Generation Performance Standards					

Option No.	GHG Reduction Policy Option	Priority for Analysis	Potential GHG Emissions Reduction	Potential Cost or Cost Savings	Ancillary Impacts, Feasibility Considerations	Notes
6.4	GHG Offset/mitigation requirements for new power plants					
6.5	GHG Offset/mitigation requirements for existing power plants					
6.6	Voluntary Utility CO2 Targets					
ES-7	**EDUCATION/AWARENESS**					
7.1	Brownfield Re-development					
7.2	Environmental (emissions) Disclosure					
7.3	Public Education					