



Catalog of State Actions Energy Supply (ES) Technical Work Group

A catalog of state-level, greenhouse gas (GHG)-reducing actions and policy options prepared by the Center for Climate Strategies (CCS), Arkansas Governor's Commission on Global Warming, and others based on actions undertaken or considered by Arkansas and other states, including regional, state, local, and private actions.

Important Note: The state actions are numbered in this catalog solely for convenience in referencing them. Their numbers do NOT reflect a ranking or prioritization of the actions.

Key to Future Rankings of Options in the Tables That Follow

Potential GHG Emission Reductions*	Potential Cost or Cost Savings* [†]
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	Uncertain (U): Not able to estimate at this time
	Negative (Neg): Net cost savings

*Several measures may overlap in terms of emissions reductions and/or cost impacts. Estimates assume measures would be implemented independently from other measures.

[†] 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.

Option No.	GHG Reduction Policy Option	Potential GHG Emissions Reduction	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes / Related Actions in AR
ES-1	EMISSIONS POLICIES AND OVERARCHING ITEMS					
1.1	GHG cap-and-trade					
1.2	Carbon (GHG) tax					
1.3	Generation performance standards and/or mitigation requirements for electricity					
1.4	Integrated resource planning (IRP)					
1.5	Voluntary GHG commitments					
1.6	Technology Research and Development					
ES-2	RENEWABLE ENERGY AND ENERGY EFFICIENCY					
2.1	Renewable and/or Environmental Portfolio Standard (RPS/EPS)					
2.2	Grid-based renewable energy incentives and/or barrier removal					
2.3	Distributed renewable energy incentives and/or barrier removal					
2.4	Green power purchases and marketing					
2.5	Combined Heat and Power (CHP) standards, incentives and/or barrier removal					

Option No.	GHG Reduction Policy Option	Potential GHG Emissions Reduction	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes / Related Actions in AR
2.6	Pricing strategies to promote renewable energy and/or CHP (e.g., net metering)					
2.7	Renewable energy development issues (zoning, siting, etc.)					*
2.8	Technology-focused initiatives (biomass co-firing, energy storage, fuel cells, etc.)					
2.9	Public Benefits Charge					
ES-3	FOSSIL FUEL AND NUCLEAR ELECTRICITY					
3.1	Advanced fossil fuel technology (e.g., IGCC, CCSR) incentives, support, or requirements					
3.2	New Nuclear Power					
3.3	Relicensing/Up-rating Existing Nuclear Power					
3.4	Efficiency improvements and re-powering existing plants					
3.5	Technology-focused initiatives					
ES-4	FUEL PRODUCTION, PROCESSING AND DELIVERY					
4.1	Oil and gas production: GHG emission reduction incentives, support, or requirements					
4.2	Natural gas transmission and distribution					

Option No.	GHG Reduction Policy Option	Potential GHG Emissions Reduction	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes / Related Actions in AR
4.3	Oil Refining: GHG emission reduction incentives, support, or requirements					
4.4	Coal Production: GHG emission reduction incentives, support, or requirements					
4.5	Coal-to-liquids Production: GHG emission reduction incentives, support, or requirements					
4.6	Low-GHG Hydrogen production incentives and support					
ES-5	CARBON CAPTURE AND STORAGE OR REUSE					
5.1	CCSR incentives, requirements and/or enabling policies (administration, regulation, liability, incentives)					
5.2	R&D for CCSR					
ES-6	OTHER ENERGY SUPPLY OPTIONS					
6.1	Transmission system upgrading					
6.2	Reduction of transmission and distribution line losses					
6.3	General distributed generation support (interconnection rules, net metering, etc.)					
6.4	Environmental (GHG emissions) disclosure					

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6.5	Landfill Gas Recovery (see also Waste)					
6.6	Waste to Energy (see also Waste)					
6.7	N ₂ O Reduction Co-benefit					
6.8	Smart Grid					