www.climatestrategies.us

Combined Federal, State and Local Climate Policy Actions Hold Potential to Cut Household Energy Prices, Expand the U.S. Economy, and Achieve Strong New Emissions Targets

December 15, 2009

A new, state of the art macroeconomic study by the Center for Climate Strategies (CCS) using extensive microeconomic analysis and the REMI Policy Insight PI⁺ Model documents the reductions in greenhouse gases (GHGs) and household energy prices, as well as expansion of jobs, income and Gross Domestic Product (GDP), that would result from federal, state and local implementation of 23 energy, transportation and natural resource policies designed to tackle climate change, economic and energy needs. Actions were proposed by over 1,500 stakeholders and technical experts in 16 states appointed by Governors and state legislatures through comprehensive, fact based, consensus driven, climate action planning processes over the past four years. Detailed results and proceedings of these initiatives are available at www.climatestrategies.us.

Preliminary findings show the potential for national improvements of:

- 2 million net new jobs in 2020
- \$248 billion gain in Gross Domestic Product (in net present value terms) from 2010-2020
- \$19 billion net economic savings in 2020, driven primarily by energy savings, at an average net savings of -\$6 per ton GHG removed
- Residential energy price reductions of -1.39% for electricity; -0.37% for gasoline and oil; -0.40% for fuel oil; and -0.60% for natural gas by 2020

The study documents a 21 percent drop in projected GHG emissions since 2005 resulting from recent and planned policy actions by state, local and federal programs; private sector actions; changes in energy prices; and effects of the recession. New actions were analyzed for effects beyond this new business as usual (BAU) forecast taking into account 37 separate state and sector specific factors affecting implementation and performance of each of the 23 policies at the state and local levels in 34 additional states, under aggressive and moderate implementation scenarios.

The combination of 23 sector-based actions would surpass national GHG reduction targets proposed by President Obama and congressional legislation and would reduce U.S. emissions to:

- 25 percent below 1990 levels by 2020 under aggressive implementation (full implementation of all 23 actions in all U.S. states), equal to 3.1 billion metric tons of carbon dioxide equivalent (BMtCO₂e)
- 16 percent below 1990 levels by 2020 under moderate implementation (proportionate implementation based on actions in individual state climate plans), equal to 2.6 BMtCO₂e

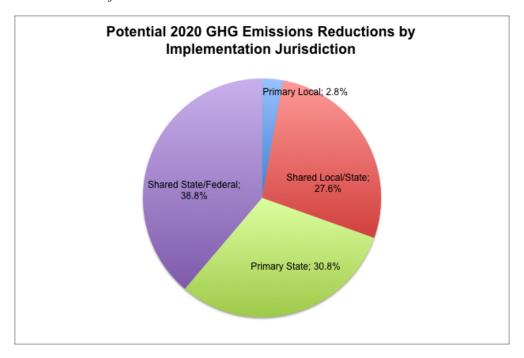
The portfolio of 23 sector based climate actions, with specific matching policy instruments, include:

 Residential. Commercial and Industrial Energy Efficiency: Demand Side Management Programs, High Performance Buildings, Appliance Standards, Building Codes, and Combined Heat and Power

- <u>Clean and Renewable Heat and Power Supply:</u> Renewable Energy Standard, Nuclear Power, Carbon Capture Storage and Reuse, and Coal Plant Efficiency Improvements
- <u>Agriculture, Forestry and Waste Conservation:</u> Crop Production Practices to Achieve GHG
 Benefits, Livestock Manure, Forest Retention, Reforestation/Afforestation, Urban Forestry,
 Waste Source Reduction, Enhanced Recycling of Municipal Solid Waste, and Municipal Solid
 Waste Landfill Gas Management
- <u>Transportation and Land Use Improvements:</u> Vehicle Purchase Incentives, Renewable Fuel Standard (biofuels goals), Smart Growth, Transit, Anti-Idling Technologies and Practices, and Mode Shift from Truck to Rail

Recommended policies and measures included action at all levels of government and a variety of specific matching policy instruments, focused on use of existing authority. Policy tools for the 23 actions include funding support, tax incentives, price incentives, reform of codes and standards, technical assistance, information and education, and voluntary or negotiated agreements. Analysis shows the importance of integrating all levels of government and policy instruments to minimize costs and maximize co-benefits:

- 39 percent of total potential emissions reductions can be achieved through shared federal/state jurisdiction.
- 31 percent of potential emissions reductions can be achieved through measures primarily under state jurisdiction.
- 30 percent of potential emissions reductions can be achieved through measures under shared local/state or local jurisdiction.



The 18 member CCS study team included policy and economic experts from each of the economic sectors who have been involved in numerous state level climate planning initiatives and related policy studies, as well as a macroeconomic modeling team from the University of Southern California, lead by Dr. Adam Rose and Dr. Dan Wei. Final published results of the study will be available in January, 2010.