Renewable Energy

**SB 13-273 (Enacted)**
Renewable Energy Forest Biomass Incentives

**SB 13-286 (Enacted)**
Renewable Energy Investment Tax Credit Carryover Years

**SB 13-252 (Enacted)**
Renewable Energy Standard Retail Wholesale

**HB 13-1293 (Enacted)**
Governor to Create Executive Branch Climate Change Position

**HB 13-1216 (Postponed Indefinitely)**
Incentives for Distributed Energy

**Energy Efficiency**

**HB 13-1105 (Enacted)**
Energy Saving Mortgage Program

**SB 13-272 (Postponed Indefinitely)**
Energy Efficiency and Renewable Energy Jobs Act

The General Assembly considered a variety of energy-related legislation during the 2013 session. Major topics included renewable energy and energy efficiency.

**Renewable Energy**

Colorado has numerous renewable energy resources including solar, wind, and geothermal potential. In 2013, the General Assembly considered five bills regarding various aspects of renewable energy; four bills passed and one failed.

**Senate Bill 13-273** directs the Colorado Forest Service (CSFS) to collaborate with federal agencies to facilitate the use of forest biomass as feedstock for timber mills and authorizes the CSFS to assist communities in high risk areas with their community wildfire protection plans. The bill also authorizes the Air Quality Control Commission to analyze equipment fueled by biomass for compliance with air emissions standards and requires the Colorado Public Utilities Commission, when evaluating the use of biomass in electricity generation, to consider the contribution of this fuel source to wildfire risk mitigation.

Within the legislative declaration in **House Bill 13-1293** the General Assembly declares that climate change presents serious, diverse, and ongoing issues for Colorado's people, economy, and environment, and directs the Governor to create a climate change-related position in the executive branch to assess climate change issues within the state. The Governor may locate this position anywhere within the state government. The person appointed may be a current employee and perform other duties within any executive branch department. The position duties include, at a minimum, the development and periodic update of a climate action plan including policy recommendations that the state could use to reduce greenhouse gas emissions and collaboration with other entities regarding climate preparedness studies. The bill requires the appointee to submit an annual report to the House and Senate Agriculture committees and the House Transportation and Energy committee regarding specific ways in which climate change impacts Colorado as well as general climate change issues. Development of the plan must take into account previous plans and relevant executive orders from the Governor.
**Enterprise zone investment tax credit.** A taxpayer may claim an Enterprise Zone Investment Tax Credit for qualified investments located in an enterprise zone. The income tax credit is equal to 3 percent of the investment. House Bill 13-1142 limited the amount the taxpayer could claim during any tax year to $750,000. In addition, the bill extended the carried forward period for any credits above the limit from 12 years to 14 years. [Senate Bill 13-286] extends the carry forward period of the Enterprise Zone Investment Tax Credit by 8 years for any qualified renewable energy companies. The bill defines a renewable energy company as an entity in the solar thermal electric, photovoltaic, landfill gas, wind, biomass, hydroelectric, geothermal electric, recycled energy, anaerobic digestion, or renewable fuel business.

**Renewable energy standard.** In November 2004, Colorado became the first state to create a renewable electricity standard (RES) when Amendment 37 was passed via ballot initiative. The original statute required utilities serving 40,000 or more customers to supply 10 percent of their retail electric sales through renewable energy. Since 2004, numerous changes have been made to the RES. Most recently, [Senate Bill 13-252] enacted, expands the definition of "eligible energy resources" that may be used to comply with the RES. The expanded definition includes coal mine methane and synthetic gas produced from municipal solid waste, subject to a determination by the Colorado Public Utilities Commission (PUC) that the production and use of these gases does not cause a net increase in greenhouse gas emissions. The bill also increases from 10 to 20 percent the share of retail electricity sales that must be achieved from eligible energy resources by cooperative electric associations (CEAs) serving more than 100,000 meters, beginning in the year 2020. In addition, the maximum amount that CEAs may increase their rates to consumers in order to meet the required RES is raised from 1 percent to 2 percent.

Generation and transmission CEAs providing wholesale electricity to CEAs in Colorado are defined in Senate Bill 13-252 as wholesale CEA's and are also subject to this increased RES and retail rate impact rule, beginning in 2020. Wholesale CEAs may take credit for energy generated from eligible resources by its Colorado members. The bill specifies that if the purchase of energy generated from eligible resources by a Colorado member CEA would cause an increase in rates exceeding the 2 percent retail rate impact rule, the obligation of the wholesale CEA is reduced by the energy necessary to allow compliance by the member with the rule. Wholesale CEAs are required to use a system of renewable energy credits to comply with the new RES. In addition, wholesale CEAs must report annually to the PUC on standard compliance.

For purposes of CEA compliance with the RES, Senate Bill 13-252 authorizes a 3 kilowatt-hour multiplier for solar generation and adds a distributed generation requirement for CEAs generally of 1 percent of total electricity sales. This requirement is reduced to 0.75 percent for CEAs serving less than 10,000 meters. Finally, the bill eliminates:

- in-state preferences for wholesale distributed generation;
- the in-state requirement for the "community-based project" 1.5 kilowatt-hour multiplier; and
- the 1.25 kilowatt-hour multiplier for eligible energy resources beginning operation on or after January 1, 2015.
As introduced, **House Bill 13-1216**, which was postponed indefinitely, would have required CEAs and municipally owned utilities (MOUs) to derive a minimum of 0.5 percent of their electricity sales from retail distributed generation (RDG) from 2015 through 2019 and 1 percent thereafter. RDG is an on-site renewable energy resource, interconnected to the grid that covers the customer's electricity load. CEAs and MOUs would have also been required to establish standard offers to purchase renewable energy credits from wind generation. The bill also would have increased maximum customer generation capacity limits for CEAs and MOUs to enable net-metering for up to 25 kilowatts of residential customer-generated electricity and up to 75 kilowatts of industrial or commercial customer-generated electricity.

**Energy Efficiency**

In 2013, the General Assembly considered two bills related to energy efficiency.

The Colorado Energy Office (CEO) currently administers the Colorado Energy Star mortgage incentive program providing interest rate buy-downs to persons taking out mortgages to finance purchases of new energy efficient homes or improvements that make existing homes more energy efficient. **House Bill 13-1105** redefines that program as the Colorado Energy Saving Mortgage program. All energy saving mortgages funded through the program must be funded with contributions from the state, a participating public utility (including investor owned, municipally owned, and cooperative energy associations), and a participating lender. The CEO may adopt guidelines specifying minimum percentages of total funding for non-state sources. Utilities that participate using demand-side moneys may only use these moneys for savings attributable to energy efficiency improvements. Mortgages financing improvements to existing homes must be approved by CEO, and require an initial energy audit of the home and verification of increased energy efficiency resulting from the improvement.

House Bill 13-1105 limits the value to borrowers of energy saving mortgages, depending on the home's expected energy efficiency, measured by the home energy rating system (HERS) index. For new homes with a HERS index score of 0, the maximum value of the mortgage is $8,000. For new homes with a HERS index score between 0 and 50, the maximum value of the mortgage is to be established by CEO guidelines. For improvements to existing homes, the maximum value of the mortgage is to be established by CEO guidelines, up to $8,000.

Participating public utilities may receive credit toward demand-side management goals and any potential future carbon emission goals. Demand side management money contributed by utilities that exceed the cost of the energy efficiency improvements must be accounted for in the utility's demand side management plan and approved by the PUC.

As introduced, **Senate Bill 13-272** would have broadened the types of measures that may be deployed as part of a gas utility's demand-side management (DSM) program. The bill was postponed indefinitely.