Tax Policy:

**Renewable Energy Property Tax Assessment** - Locally Assessed Renewable Energy Property: Photovoltaic (PV) and wind energy facilities with a capacity of 2 megawatts (MW) AC or less are assessed locally for property taxes. Low impact hydro, geothermal, and biomass facilities with a capacity of 2 MW or less and that were placed in service prior to January 1, 2010 are assessed locally for property taxes. In assigning value to renewable energy property, local assessors are required to use the cost approach outlined in the Assessors' Reference Library. Assessors must also examine sales comparison and income approaches, both described in the Assessor's Reference Library. State Assessed Renewable Energy Property: Renewable energy systems with a capacity greater than 2 MW are assessed for property taxes by the State Assessed Properties Section of the Division of Property Taxation. Small or low impact hydro, geothermal, and biomass facilities of any size placed in service on or after January 1, 2010 are assessed by the state for property taxes. These facilities are valued as though its actual value for property taxation is that of a non-renewable energy facility, including all direct and indirect costs. The incremental value of the renewable energy facilities above the non-renewable facilities is disregarded. The Division of Property Taxation is responsible for determining the nonrenewable comparison value each year. For 2014, the nonrenewable facility value was $1,089 per kilowatt for renewable energy projects up to 2 megawatts (MW), and $388 per kW over 100 MW, with other values for various size ranges. Applies to renewable energy connected to the grid; does not apply to off-grid customers.

**Local Option - Property Tax Exemption for Renewable Energy Systems** – Colorado enacted legislation in April 2007 (SB 145) to authorize counties and municipalities to offer property or sales tax rebates or credits to residential and commercial property owners who install renewable energy systems on their property. Eligible renewable energy property is defined as "any fixture, product, system, device or interacting group of devices that produce electricity from renewable resources, including, but not limited to, photovoltaic systems, solar thermal systems, small wind systems, biomass systems, or geothermal systems.”

**Sales and Use Tax Exemption for Renewable Energy Equipment** – Exempts all sales, storage, and use of components used in the production of alternating current electricity from a renewable energy source from the state's sales and use tax. Effective July 1, 2009, through July 1, 2017 for systems that produce electricity from a renewable resource that includes but is not limited to photovoltaic (PV) systems, solar thermal-electric systems, small wind systems, biomass systems, or geothermal systems. Effective May 5, 2014, through July 1, 2019, all sales, storage, and use of components used in biogas production systems are exempt from the state's sales and use tax (H.B. 1159). The statute defines the components of a system eligible for the exemption; these include trackers, generating equipment, supporting structures or racks, inverters, towers and foundations, balance of system components such as wiring, control systems, switchgears, and generator step-up transformers. The exemption only applies to state sales and use taxes – not to sales and use taxes assessed by incorporated towns, cities, and counties. However, Colorado has granted local jurisdictions the authority to exempt renewable energy equipment from sales and use taxes if a local government chooses to do so.

**Renewable Energy Forest Biomass Incentives** – The legislation emphasized the importance of reducing the large amount of diseased timber in Colorado by encouraging the use of forest biomass for energy generation and material for forest industry development will reduce the risk of future catastrophic wildfires, benefit the state's economy, and address Colorado communities' long-term forest health needs. The legislation directed the state forest service to collaborate with federal agencies to facilitate the use of forest biomass as feedstock for timber mills and other industries and for renewable energy generation. The bill also encouraged communities that adopt or update its community wildfire protection plan (CWPP) to incorporate, as part of the CWPP, a biomass utilization plan developed in consultation with the state forest service. This bill directed the office of economic development (OEDIT) to apply tax credits and other incentives for the use of forest biomass in forest products industries and for biomass energy generation. These incentives would apply to facilities in the "red zones" of high wildfire risk as well as in existing enterprise zones. The bill further authorizes the executive director of the department of revenue to evaluate, apply, and publicize the application of economic development tax credits and other incentives from OEDIT.

**Local Option - Sales and Use Tax Exemption for Renewable Energy Systems** – Colorado enacted legislation in April 2007 (CRS § 31-20-101.3) (SB 145) to authorize counties and municipalities to offer property or sales tax rebates or credits to residential and commercial property owners who install renewable energy systems on their property. Eligible renewable energy property is defined as "any fixture, product, system, device or interacting group of devices that produce electricity from renewable resources, including, but not limited to, photovoltaic systems, solar thermal systems, small wind systems, biomass systems, and geothermal systems.”
Rules and Regulations:

**Fuel Mix Disclosure (1999)** – The Colorado Public Utility Commission (PUC) adopted regulations requiring the state’s utilities to disclose information regarding their fuel mix to retail customers. Utilities are required to provide this information as a bill insert or as a separate mailing twice annually, in April and October of every year. The PUC provides a suggested format for the disclosure. Fuel mix percentages are to be based on the power supply mix for the previous calendar year. Supporting documentation concerning the calculations used to determine the power supply mix percentages must be submitted to the PUC for approval.

**Market-Based Green Tag Program for Electricity from Forest Biomass and Coal** – The idea is to sell green tags from the biomass portion of the electricity generated through co-firing to residents, businesses and government agencies to help offset the additional cost of biomass when compared to coal. Green tags can be sold to anyone and are not limited by geography or utility service territory. To market and sell green tags from the power, project partners will perform the following: identify and meet regulatory and green power certification requirements; work with certification programs to negotiate certification of forest biomass; develop a green tag pricing policy for the power provider; conceive and implement a business model for selling green tags to consumers; develop a marketing plan and materials for the program; and implement the green tags program; and document the program results.

**Renewable Energy Standard** – Colorado's Renewable Portfolio Standard (RPS) was introduced in 2004 and amended in 2007 to require utilities achieve the following standards: utilities Investor-owned utilities: 30% by 2020 electric cooperatives serving fewer than 100,000 customers: 20% by 2020 electric cooperatives serving 100,000 or more customers: 20% by 2020 municipal utilities serving more than 40,000 customers: 10% by 2020. This is to be achieved in stages as follows: Investor-owned: 5% renewable energy for the years 2008–2010, 10% for 2011–2014, 15 percent for 2015–2019, and 20% for the year 2020 and for each following year. All electric cooperatives with more than 40,000 customers must achieve one percent renewable energy by 2008, 3% by 2011, 6% by 2015, and 10% by 2020 and for subsequent years.

**Greening of State Government** – Colorado has established mandatory sustainability requirements for the design and construction of state-owned buildings (including schools), state-assisted buildings, and publicly-assisted housing projects buildings. In July 2005, Colorado’s governor signed Executive Order D005 05, mandating that state agencies and departments evaluate business operations and implement new programs “to promote environmentally sustainable and economically efficient practices.” The order also created the Colorado Greening Government Coordinating Council (CGGCC), made up of representatives from each state agency and department, to develop and implement new conservation policies and augment existing ones. (Rules and Regulations)

**Interconnection Standards** – In December 2005, the Colorado Public Utilities Commission (PUC) adopted standards for net metering and interconnection, as required by Amendment 37, a renewable energy ballot initiative approved by Colorado voters in November 2004. The PUC standards generally apply to investor-owned utilities (IOUs) with 40,000 or more customers and all electric cooperatives. Municipal utilities with 5,000 customers or more are required to adopt interconnection rules that are functionally similar to the PUC’s standards (see H.B. 1160). Electric cooperatives and municipal utilities may reduce or waive any insurance requirements that apply to IOUs (H.B. 07-1169). The PUC adopted new rules in September 2009, as required by S.B. 51, which relaxed some of the insurance requirements for interconnection and addressed utility concerns with highly seasonal circuits and voltage flicker. Colorado’s interconnection rules are based on the Federal Energy Regulatory Commission’s (FERC) interconnection standards for small generators, adopted in May 2005 by FERC Order 2006. Colorado’s rules for interconnection include provisions for three levels of interconnection for systems up to 10 megawatts (MW), based on system complexity.

**Colorado Net Metering** – Credited to customer’s next bill; IOS: utility pays customer at end of year for excess kWh credits at the average hourly incremental cost for that year. Electricity generated at a customer’s site can be applied toward meeting a utility’s renewable-generation requirement under the CO RPS. The RPS mandates that 4% of the renewables requirement be met with solar energy; half of this percentage must come from solar electricity generated at customers’ facilities.

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Disbursements:

**Clean Energy Development Authority** – The Colorado Clean Energy Development Authority is created and may issue bonds to finance projects that involve the production, transportation, and storage of clean energy. Clean energy includes fuels that are manufactured by, and energy derived from, the following: biodiesel; biomass research such as biogas, agricultural or animal waste and landfill gas; ethanol; and fuel cells that do not use fossil fuels.

**Direct Lending Revolving Loan Program (no-date)** – The Colorado Energy Office (CEO) provides financing to "eligible and extraordinary projects and companies that promote energy efficiency or renewable energy." The program is intended to fill gaps in financing opportunities and provide capital to companies and projects not capable of securing financing from the private sector. Financing obtained through this program can be used for a wide array of projects. The Loan Committee uses a range of criteria to evaluate loan applicants and projects, including: financial strength of an applicant, job creation potential, reduction in consumer costs, energy security, environmental stewardship, addressing financing gaps, and leveraging potential.

**Renewable Energy and Energy Efficiency for Schools Loan** – The Renewable Energy and Energy Efficiency for Schools (REEES) Loan Program was created in 2009 to provide low-interest loans to school districts for the purpose of installing renewable energy systems and purchasing energy efficient school buses. The program was amended in May 2014 via S.B. 14-202 to broaden the scope of eligible energy efficiency projects to include all projects that result in a more efficient use of energy or resources, including water conservation projects. Eligible types of renewable energy include wind, solar, biomass, small hydro, and other sources of renewable energy. Renewable energy project loans are provided to qualified school districts on a competitive basis. The maximum loan a school district can receive is $1,000,000, and the maximum loan term is 15 years.

**Community Biomass for Thermal Usage Program** – $100,000 allocated for this program from the Colorado Clean Energy Fund. The purpose of this partnership program is to provide financial support for biomass-heating projects that utilize community-based biomass sources. Funding for feasibility studies or economic analyses may be considered in rare cases. Financial support from multiple stakeholders must be committed before a project can receive additional funding through the program. Priority given to projects that use community produced wood chips or Colorado manufactured pellets. High-priority given to projects that include supply from fuel-reduction, restoration activities, local collection sites, and/or projects that demonstrate long term availability of biomass supply. Residential and large industrial projects are not illegible for funding.

Research and Development:

**Colorado Biomass Market Transformation** – The Colorado Governor’s Office of Energy Management and Conservation (OEMC) funded studies, demonstrated technologies, shared results, and developed internal expertise. Through Rebuild Colorado, OEMC helped state and local governments implement $100 million worth of facility upgrade projects with performance contracts. The bio-based fuel of choice in Colorado is wood chips from forest thinning projects for use in heating buildings. State and local governments, particularly in forested areas, are motivated to thin forests to reduce the danger of forest fires so the ability to use the forest thinning activities for energy is viewed as a win-win prospect. This activity implemented eight projects that will save $1.6 million and use 20,000 tons of wood chips per year.

Government Services:

**The Woody Biomass Program** – This program supported biomass efforts to use woody wastes from forest thinning activities and urban weather destruction events; other agricultural wastes such as plant remains after harvests; animal wastes (manure and body parts) from slaughter facilities and farming operations; and grown-for-energy-conversion plantings. It brought together all member groups within targeted industries to form coalitions or working groups to further biomass use plans. It employed demonstrations using off-the-shelf material and devices to showcase energy possibilities. It prepared, published, and disseminated comprehensive reports on the efforts.