

Beneficial Electrification

Regulatory and Policy Discussion

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Brief History of Legislation

- 2004 Colorado Voters Approve Amendment 37 - Established 10% RES(Co-ops opt out)
- HB 07-1281 (establishes “eligible” and “renewable definitions”)
 - IOU RPS increased to 20%
 - Muni/Co-op 10%
- HB 08-1160 - Cooperative net metering statute
- HB 09-1331 – Tax Credit for Alternative Fueled Vehicles
- HB 10-1001- Increased IOU RES to 30%
- HB 10-1365 - Fuel switching legislation (clean air/clean jobs)
- HB 12-1248 – Alternative Fueled Vehicles (infrastructure - IOU ownership restricted)
- SB 13-252- Increase RES to 20% for co-ops (DG requirement added)

Recent Legislative and Regulatory Changes

SB19-077 Public Utility Implementation of an Electric Vehicle Infrastructure Program

- Amends HB12-1258 which prohibited an IOU from using rate payer dollars to subsidize EV infrastructure
- Requires IOU's to submit plans every three years to expand EV's in the utilities service territory

SB19-239 Addressing Impacts of Changes Related to Commercial Vehicles

- CDOT to convene stakeholder group to make recommendations to address changing technologies in transportation
- CDOT will implement rule making and/or recommend statutory changes as necessary
- HB19-1159 Modifications to Income Tax Credits for Innovative Motor Vehicles
- Extends tax credits for EV from 2021 through 2025 with some modifications
- Allows ride-sharing companies (Uber/Lift) to claim credit if vehicles are provided to drivers under a lease program

HB19-1198 Powers and Duties of the Electric Vehicle Grant Program

- Provides a continuous appropriation to the Colorado Energy Office for funding
- Provides additional flexibility for the EV grant program

HB 19-1298 EV Charging Station Parking

- Authorizes fines for non-EV vehicle or non-charging vehicles parking in an EV parking spot – similar to handicap parking restrictions.

HB19-1261 Climate Action Plan to Reduce Pollution (narrative shift from RES to Carbon)

- Directs AQCC to pass regulations to achieve statewide goals of reducing GHG emissions 26% by 2025, 50% by 2030 and 90% by 2050 from 2005 baseline levels.

SB19-236 PUC Reauthorization

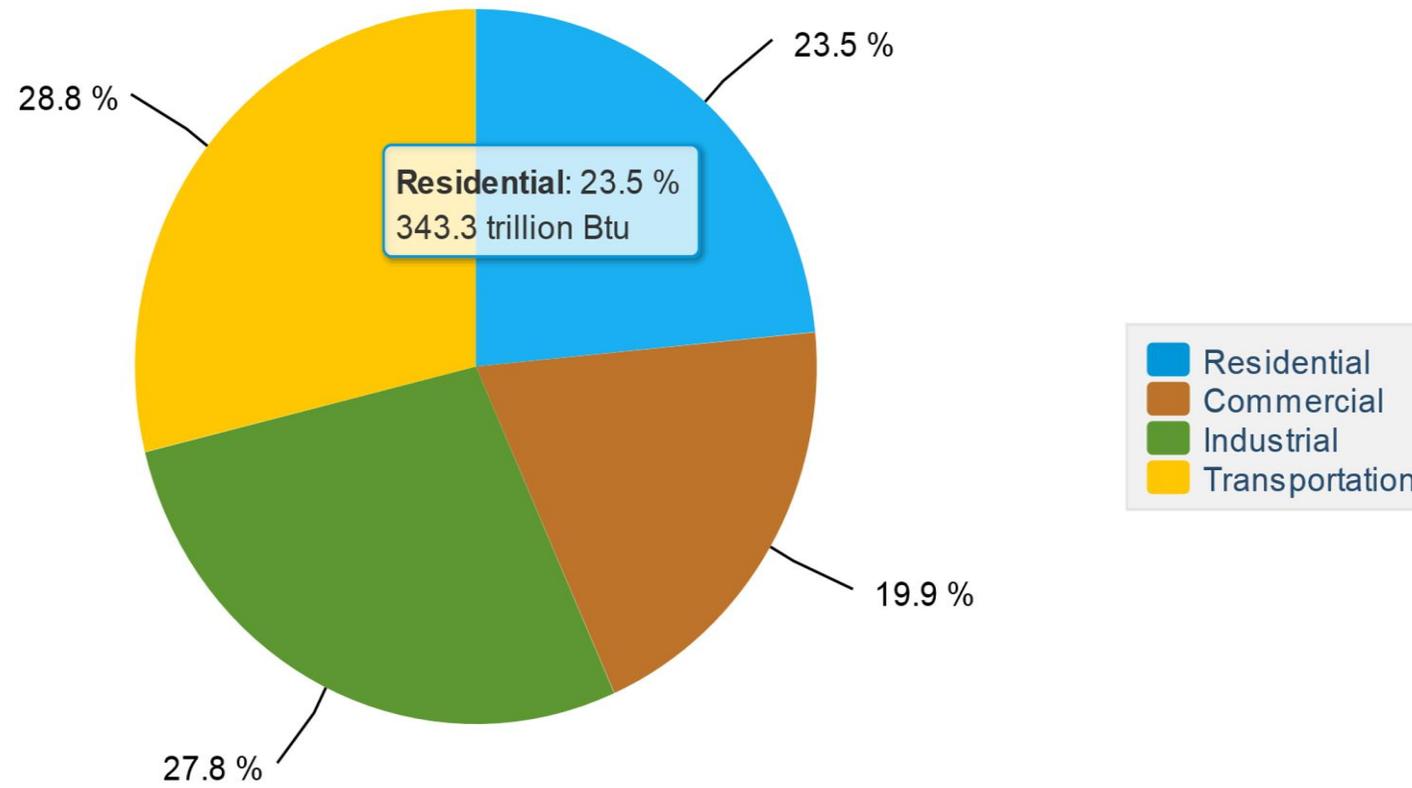
Expands resource planning to Tri-State, Social Cost of Carbon, Distribution planning for IOU

AQCC regulatory dockets on Low Emission and Zero Emission vehicles

AQCC Broad Authorization to Address GHG Emissions

Colorado Energy Consumption by End-Use Sector, 2017

[DOWNLOAD](#)



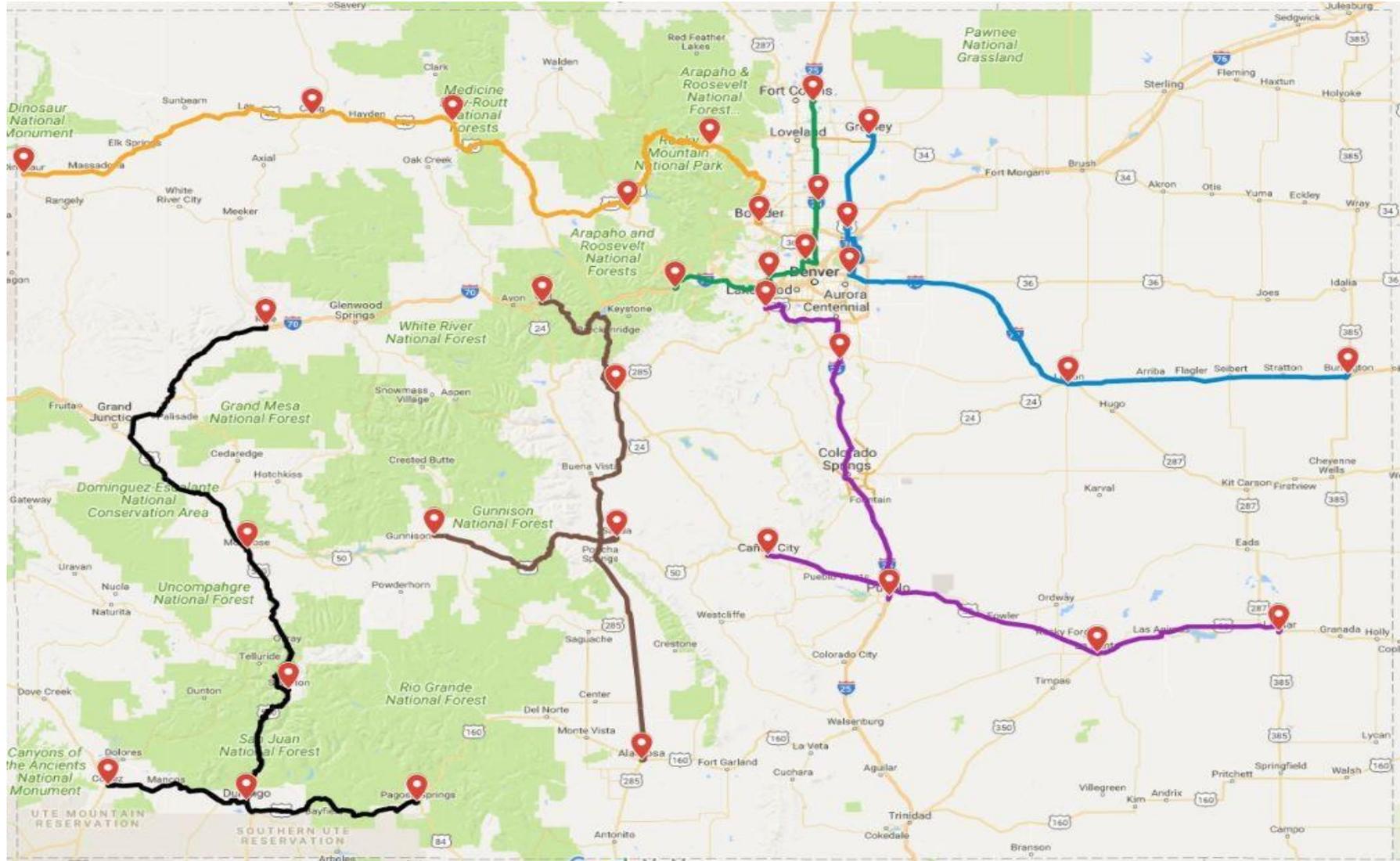
COOPERATIVE PROGRAMS

Transportation Sector

Residential Sector

Generation Mix

EV Fast-Charging Grant Corridors



Cooperative Grants

- GCEA: L2: 7
- LPEA: L2: 3
- Holy Cross: L2: 1
- SDCEA: L2: 1, L3: 1

- Awarded, but not yet operational:
- YVEA: L2: 2
- WREA: L2: 1, L3: 1
- San Isabel: L2: 2

San Isabel Electric member-owner rebates

- San Isabel Electric member-owners can save up to \$17,500 in rebates and tax credits for purchasing an eligible electric vehicle.
- San Isabel Electric member-owners can claim a rebate of \$500 after purchasing an eligible electric vehicle.
- Member-owners who purchase EV charging equipment can claim up to \$500 of the purchase cost and up to \$500 of the installation cost.
- Residential member-owners who choose to charge their electric vehicles at home, during off-peak hours can pay as little as the equivalent of \$0.59 per gallon of gasoline.
- Member-owners choosing to charge their electric vehicle during on-peak hours pay the average equivalent of \$1.43 per gallon of gas.

Holy Cross Built Environment

- Basalt Vista affordable housing project. A Net zero, all-electric community
- The homes will generate as much electricity as they use; meaning, homeowners will have a minimal electric utility bills (likely to be at least 85% less than a typical electric bill).
- The efficient heating and cooling systems and water-heating systems will feature electric technology that is compatible with the renewable energy that is generated on-site. In addition, state-of-the-art efficient appliances are being utilized: “smart” clothes dryers and induction stove-tops.
- Beneficial electrification– These homes will replace direct fossil fuel use (e.g., propane, natural gas and wood) with electricity in a way that reduces overall emissions and energy costs
- High-Performance Building Envelope– the air-tight well-insulated wall and roof assemblies, as well as energy-efficient windows / doors, are key first steps in optimizing energy use.
- On-Site Energy Production– These buildings will produce as much energy in a year as they consume; thus, the homes will be Net-Zero. The energy production will keep energy costs as low as possible, while using the grid as a storage system as needed.

Gunnison County Electric Association

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| Electric Water Heater 30 to 55 gallon only Energy Guide label not required, please do not pull the sticker off your tank | \$50 per unit Additional \$20/unit for lifetime tank warranty (e.g., Marathon) |
| Air Source Heat Pump Water Heater 30 gallon minimum | \$370/unit |
| Ground Source Heat Pump Water Heater Any size qualifies | \$120/unit for primary heating by direct exchange ground source or heat pump waste heat (a.k.a. desuperheater) \$25/unit additional for lifetime tank warranty |
| Electric Thermal Storage and Thermal Slab Permanently installed units only Minimum qualifying load is 1 kW | \$22/kW for ETS controlled by timers or master control system \$18/kW for slabs controlled by timers or master control system |
| Electric Heat Pump: Air Source <ul style="list-style-type: none"> • Minimum 15 SEER • Minimum equipment size is 1 ton (12,000 Btuh) • Energy Star rating not required | \$300/ton for units rated from 15 to 17 SEER plus \$150/unit \$450/ton for units greater than 17 SEER plus \$150/unit \$100/unit additional incentive for central air source with integrated controlled ETS backup in lieu of a separate ETS incentive \$85/unit for terminal units (through-the-wall mounted heat pumps) |
| Electric Heat Pump: Central Ground Source Minimum 3/4 ton (9,000 Btuh) Energy Star rating not required | \$500/ton for new installations plus \$150/unit \$250/ton for existing unit replacement |

Generation

HB19-1261 Prohibits the AQCC from establishing an increased RES

- Existing authority for air permits
- DSM/EE
- Cap and trade

SB19-236 Requires the PUC to consider a social cost of carbon in resource planning

- Increased cost for fossil fuel plants will encourage more renewable generation
- DSM/EE for IOU