The 2018 EV Plan and Progress

Colorado’s first electric vehicle (EV) plan which set forth goals, actions and strategies to develop EV fast-charging corridors across the state and establishing a target of 940,000 EVs by 2030.

Significant achievements include:

➢ Award of a contract to ChargePoint for the build-out of EV fast-charging stations at 33 sites along Colorado’s major transportation corridors;

➢ State investment to install 351 EV chargers across Colorado;
The 2018 EV Plan and Progress

- Adoption of a zero emission vehicle (ZEV) standard in August 2019 with the support of the auto manufacturing industry;

- Dedication of all remaining state Volkswagen diesel settlement funds to ZEV charging infrastructure and zero emission buses, shuttles and trucks including first round grant awards totaling $13.9 million to six transit agencies for 23 battery electric buses and supporting infrastructure—with a second round of awards to be announced in spring 2020; and

- More than doubling the number of EVs registered in Colorado from 11,238 in August 2017 to over 24,000 in June 2019

- Living Document
EV Plan 2020: Vision

Large scale transition of Colorado’s transportation system to zero emission vehicles, with a long term goal of 100% of light-duty vehicles being electric and 100% of medium- and heavy-duty vehicles being zero emissions.
Five Goals

1) Increase the number of light-duty electric vehicles (EVs) to 940,000 by 2030;

2) Develop plans for transitioning medium-duty (MDV), heavy-duty (HDV) and transit vehicles to zero emission vehicles (ZEVS);

3) Develop an EV infrastructure goal by undertaking a gap analysis to identify the type and number of charging stations needed across the state to meet 2030 light-duty vehicle (LDV), MDV and HDV goals;

4) State government agencies meet directives and goals related to EVs from the updated Greening Government Executive order; and

5) Develop a roadmap to full electrification of the light-duty vehicle fleet in Colorado.
A Note on Timing

Unless otherwise noted, all actions/strategies are to be completed by January 2022 - however, dates may be impacted and modified due to the 2020 COVID-19 Pandemic
EV Actions in Support of Goals

Four areas that work together comprehensively:

1) **Policy, Planning and Guidance Actions** – In response to CEO analysis (Navigant) analysis showing that policy support needed to electrify the transportation sector

2) **Programming and Funding** - providing funding and programming to address market gaps

3) **Supporting Emerging EV Technology and Innovation** – connecting with Colorado research collaboratives to support transportation electrification innovation, emerging technology and data gaps

4) **Engaging People** – communicating and educating all Coloradans on how they can access the benefits of EVs
Policy, Planning Guidance Actions

Electrification of the Transportation Sector

- **Light Duty Sector**
  - Roadmap to 100% electrification (CEO, CDOT, CDPHE, RAQC)
  - Action on outcome of CDOT’s Emerging Mobility Impact Study

- **Medium/Heavy-Duty Sector**
  - Electrification strategy by July 2021 including investigation of a Clean Truck Rule (CEO, CDOT, CDPHE, RAQC)
  - Development of strategies in support of adoption of zero emission school buses (RAQC)
Policy, Planning Guidance Actions

- **Transit Sector**
  - Investigate the adoption of a Clean Transit Rule (CEO, CDOT, CDPHE)
  - Explore equity and rural-focused transit options and provide recommendations for action in next EV Plan (CEO, CDOT, CDPHE, CEVC)
  - Development of a state-approved master purchasing contract for zero emission vans, cutaways and large buses and third party financing options (CDOT and CEO)
  - Expansion of transit electrification planning to attain ZEV goals (CDOT)
Policy, Planning Guidance Actions

▪ **E-bike Sector**
  - E-bike considerations into mobility planning and support of e-bike incentives for low income individuals (CDOT, CEO)

▪ **Supporting Consumer Choice**
  - Gap analysis to identify types, locations and number of charging stations need to meet 2030 LDV, MDV and HDV goals (CEO)
  - State agency support of ZEV HOV/express lane incentives
  - Support of Direct Sales EV legislation (CEO)
  - Work with the legislature for removal of Home Owner Association barriers to EV charging (CEO)
Policy, Planning Guidance Actions

- **Near-term State Government Lead by Example Planning**
  - Annual charging station need identification and EV take home policy development (CEO, DPA)
  - Exploration of alternative vehicle procurement strategies (DPA, CEO)

- **EV Building Code and Parking Guidance**
  - Develop an Advanced Building Code Adoption Toolkit (CEO)
  - Develop guidance on Charging Station Parking Enforcement (CEO, CEVC)
Policy, Planning Guidance Actions

- Near-term Electric Utility Engagement
  - Survey municipal utilities and rural co-ops on rates to develop new rates that encourage EV adoption (CEO, CEVC)
  - Convene an EV rates workshop for all Colorado utilities to discuss and develop best practices (CEO)
  - Work with regulated utilities and market stakeholders to ensure their Transportation Electrification Plans (TEPs) meet requirements and make it attractive to own EVs and EVSE (CEO)
  - Encourage unregulated utilities to submit TEPs and invest in transportation electrification (CEO)
Programming and Funding Actions

- **Community-Based EV Charging**
  - 15% of Charge Ahead Colorado Program (CAC) awards to multi-family housing and workplaces (CEO, RAQC)
  - Identification of new funding sources for CAC (CEO, RAQC)
  - Launch of community-based DC Fast-Charging Plaza Grant Program (CEO, RAQC, CDOT)
Programming and Funding Actions

- **Corridor-Based ZEV Charging**
  - Continue and monitor DC Fast-Charging Corridors Program, adding stations if needed at high-volume locations (CEO)
  - Continue participation in REV West to enable EV travel across Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah and Wyoming (CEO, CDOT)
  - Work with Colorado Tourism Office to electrify scenic byways, state parks, ski areas, national parks and monuments (CEO)
Programming and Funding Actions

- **Medium- & Heavy-Duty Electric Vehicles**
  - CDOT’s Division of Transit and Rail will continue to utilize remaining VW settlement funds to support purchase of zero emission vehicles.
  - CDOT will incorporate EV Plan transit goals into program planning by Jan. 2021.
  - RAQC will fund medium- & heavy-duty ZEVs for 20-25 fleets statewide through ALT Fuels Colorado Program.
Supporting Emerging EV Technology/Innovation Actions

- Research in Support of EVs and Associated Technologies and Systems
  - Engage Colorado Energy Research Collaboratory to identify funding and industry partnerships and share information to inform current EV research, potential end-users and business development (CEO, CSU)
  - Engage with University of Colorado and other research universities on graduate student-led Capstone projects (CEO)
Supporting Emerging EV Technology/Innovation Actions

- Support of Development of EV Charging Standard and Hydrogen as an EV Fuel
  - Development of EV Charging Standards (CDLE)
  - Develop a hydrogen roadmap for Colorado (CEO, CDLE, CDOT, RAQC)
  - Introduction of legislation to stimulate fuel cell electric vehicle fueling infrastructure projects (CDLE)
Supporting Emerging EV Technology/Innovation Actions

- Development of Public EV Data Resources
  - Develop and host an EV Registration tracking dashboard (CEO)
  - Develop a Performance Data Warehouse to monitor performance of electric transit vehicles (CDOT)
Engaging People Actions

- **EV Equity**
  - Conduct an EV Equity Study by which to evaluate and prioritize programming and outreach and incorporate recommendations into transit and MD/HDV electrification planning (CEO, CDOT, RAQC, CDPHE)
  - CEO’s interventions in PUC proceedings will ensure plans increase access for low-income customers (CEO)
Engaging People Actions

- **EV Education & Outreach**
  - Conduct EV market research study and use to inform the development of dealership engagement strategy and a public-focused website (CEO, CDOT)
  - Explore collaborations with non-profits (CEO, CDPHE, CDOT, RAQC)
  - ReCharge Colorado coaches with conduct EV Workshops, Ride and Drives and Group Buys
Engaging People Actions

- EV Community Readiness
  - Provide grants in support of local EV Readiness Planning (CEO, CDOT, DOLA)