

Update on CEO Policy Efforts

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Strategies to Address Climate Change

- Develop a roadmap to greenhouse gas (GHG) reductions
- Engage in PUC proceedings
- Conduct a study on beneficial electrification
- Analyze regional electricity markets
- Analyze the potential for a low carbon fuel standard
- Support widespread transportation electrification



Roadmap to GHG Reductions

Purpose

- Inter-agency effort to develop a detailed statewide GHG reduction roadmap that will provide an action plan for upcoming years
- Includes: recommendations on the form and structure for statewide GHG inventories; possible legislative initiatives; regulatory actions; voluntary programs; local government actions.

Process & Timeline

- Develop with extensive and inclusive stakeholder engagement that will be designed to capture the full range of voices in the State.
- RFI issued Summer 2019
- Roadmap complete by June 30, 2020



PUC Engagement

CEO is participating in:

- 17M-0204E: Xcel Rate Pilot
- 19R-0096E: Electric Rulemaking
- 19AL-0286E: Xcel Phase I Electric Rate Case
- 19AL-0290E: Xcel Electric Vehicle Rate
- 19A-0369E: Xcel Renewable Energy Plan

This year CEO expects to be party to:

- Rulemaking for Tri-State Electric Resource Plan
- Electric Resource Plans of Xcel, Tri-State, and Black Hills
- SB-77 Plan filings of Xcel and Black Hills
- Investigatory proceedings for regional electricity markets and performance based ratemaking



Beneficial Electrification

Purpose

- Gain a better understanding of the opportunities, challenges and policy drivers for the potential for “beneficial electrification” of various residential and commercial end-uses, industrial processes and other applications.
- Beneficial electrification is transition of end uses from other fossil fuels to electricity that results in net reduce greenhouse gas emissions and a reduction in other negative environmental impacts.
- Will result in recommended policy changes including the potential for legislation.

Process & Timeline

- RFI issued Summer 2019
- Study completed by Q1 2020



Regional Electricity Markets

Purpose

- CEO and PUC staff have been working with other western states on a Western State's Strategic Roadmap for Electric Market Regionalization. This process will also inform CEO's positions for the proceeding required by SB19-236.
- The roadmap will model different market types growth existing markets (such as the Western Energy Imbalance Market (EIM) or the CAISO's Extended Day-Ahead Market (EDAM) and different footprints for those markets.
- States involved: Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

Timeline:

- Roadmap complete by 2021



Low Carbon Fuel Standard

Purpose:

- Examine the technical, administrative and economic feasibility of a LCFS for Colorado.
- An LCFS is a fuel-neutral market-based performance standard which requires cleaner fuels over time.

Process & Timeline:

- Q1-Q4: Stakeholder Engagement
- Q1/Q2: Design, solicitation and vendor selection
- Q2/Q3: Study evaluation and completion
- Q3/Q4: Recommendation to Governor on whether to proceed



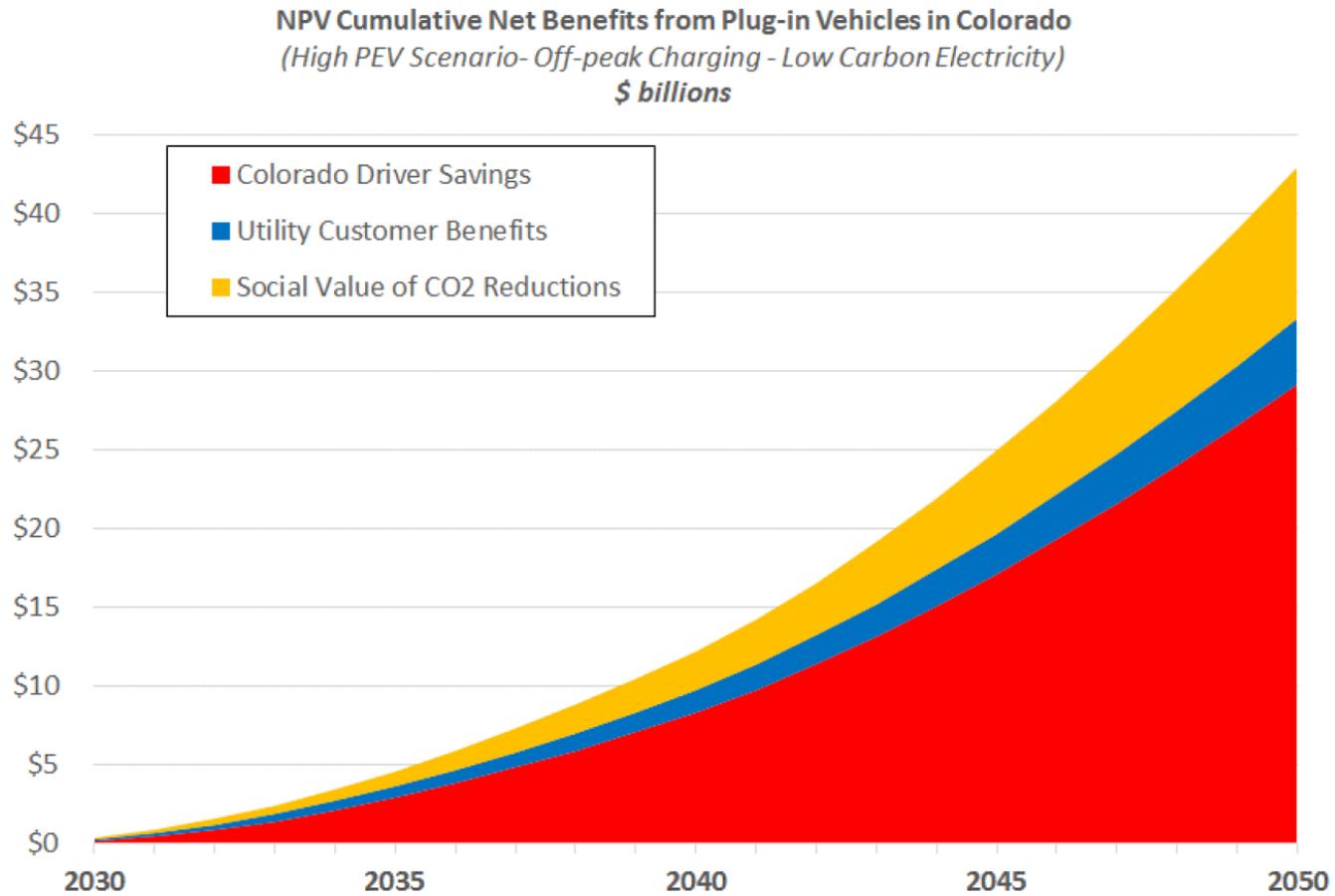
Transportation Electrification

- Widespread transportation electrification is essential to air quality in the front range and meeting goals of HB19-1261.
- CEO is performing multiple studies - MJ Bradley study of costs and benefits; RMI analysis of EV rate structures, Navigant market study; ICCT study of vehicle costs; will be analyzing outreach and marketing needs.
- Focused on implementation of SB19-77 and SB19-239
- CEO is participating in the ZEV Rulemaking
- CEO/CDOT have negotiated groundbreaking compromise with the automobile industry on ZEV standards.



Figure 3

NPV Cumulative Societal Net Benefits from CO PEVs – High PEV scenario

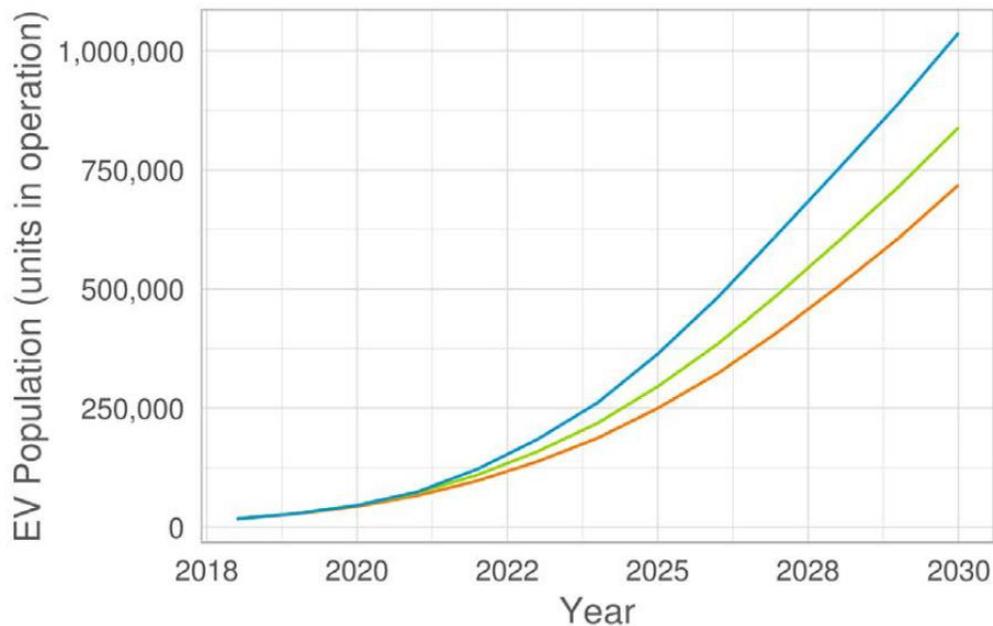


Source: MJB&A



Increasing policy support leads to the PEV population for 2030 increasing from ~719,000 vehicles (BAU) to ~1,038,000 vehicles (High) in operation.

Colorado EV Sales Over Time By Scenario
Includes BEV and PHEV



— BAU
— ZEV+
— High

PEV Population – Units in Operation
Percentage of Total Population

Scenario	2020	2025	2030
BAU	43,346 0.8%	249,683 4.1%	718,787 10.2%
ZEV+	45,701 0.8%	295,223 4.8%	838,997 11.9%
High	45,701 0.8%	363,692 5.9%	1,037,586 14.8%



Source: Navigant

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