

COLORADO

ZERO EMISSION VEHICLE (ZEV) PROGRAM A Win for Colorado's Economy, Environment, and Public Health

WHAT'S AT STAKE FOR COLORADANS? This important clean air program means that while no Coloradan has any obligation to buy or choose a zero polluting vehicle ALL Coloradans who want to purchase a cleaner vehicle will have more zero emitting vehicles and models available from which to choose. And while these clean vehicles will save Coloradans hard-earned money at the gas pump and will cut dangerous climate pollution, they will also help reduce smog-forming pollution in all communities across Colorado, clean up Denver's brown cloud, and lift the veil of haze pollution in our world class national parks and wilderness areas.

In short, this clean air program will mean healthier air, fuel cost savings, more vehicle choice and a safer climate for all Coloradans.

IN **AUGUST 2019**, THE COLORADO AIR QUALITY CONTROL COMMISSION WILL HOLD A FORMAL HEARING TO CONSIDER ADOPTION OF A STATE ZERO EMISSION VEHICLE (ZEV) PROGRAM

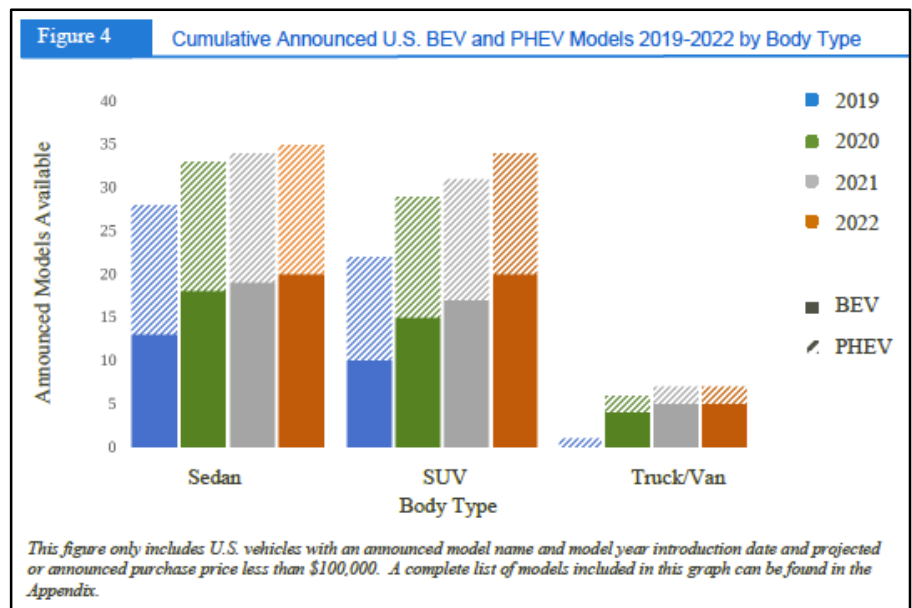
IN **2018**, COLORADO ADOPTED THE COLORADO LOW EMISSION AUTOMOBILE REGULATION (CLEAR), WHICH APPLIES MORE PROTECTIVE CRITERIA AND GREENHOUSE GAS STANDARDS TO VEHICLES SOLD IN COLORADO, BEGINNING WITH THE 2022 MODEL YEAR AND CONTINUING THROUGH MODEL YEAR 2025.

THESE NEWER MODELS BOAST SUBSTANTIALLY GREATER BATTERY RANGE – MORE THAN **3.5** TIMES THE RANGE OF EARLIER MODELS

IN ADDITION TO INCREASED MODEL AVAILABILITY AND RANGE, THERE HAS BEEN A STEADY DECREASE IN VEHICLE PRICES. ONE OF THE FACTORS DRIVING DOWN EV PRICES IS THE RAPIDLY DECLINING COST OF BATTERIES.

SWIFT EXPANSION OF EV INVESTMENTS, NEW-MODEL AVAILABILITY, AND DECLINING COSTS

Between 2019 and 2022, the number of battery electric (BEV) and plug-in hybrid (PHEV) models available to U.S. consumers will increase from 51 to 80, with new types of vehicles becoming available, including sport-utility vehicles (SUVs), cross-overs and pick-up trucks, as shown in Figure 4 of the ZEV Market Study



COLORADO ZEV PROGRAM WILL HELP DELIVER NET ECONOMIC BENEFITS

COLORADO WILL REALIZE AN INCREASE OF MORE THAN **8,400 ZEV SALES BY 2025**, RELATIVE TO THE BASELINE, AS A RESULT OF ADOPTING A ZEV PROGRAM

PURCHASERS OF NEW GASOLINE VEHICLES THAT ARE LOWER POLLUTING WILL ALSO REALIZE NET LIFETIME SAVINGS THAT RANGE FROM **\$2,000 TO \$4,000+**

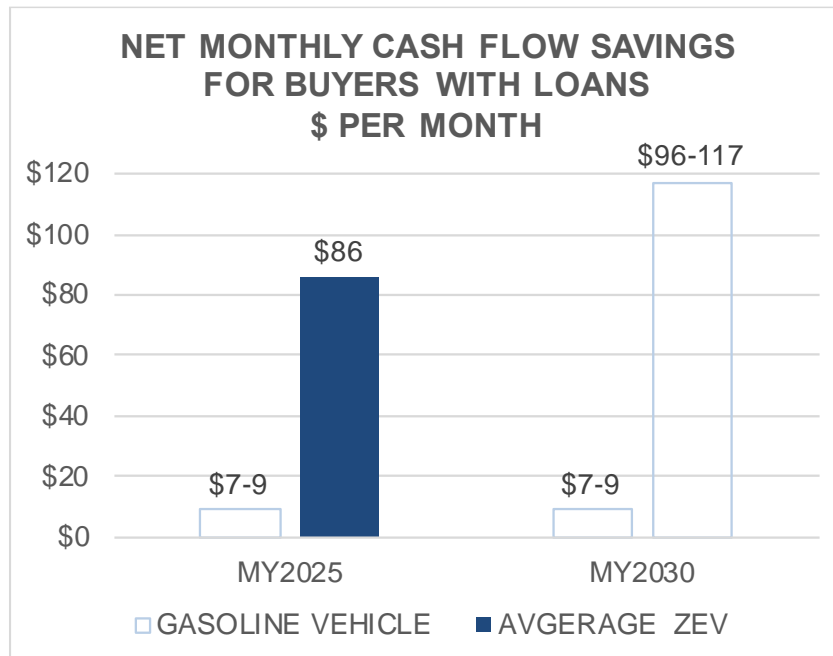
COLORADO CONSUMERS WILL REALIZE SUBSTANTIAL COST SAVINGS

Based on the aggregate costs of owning and operating a vehicle (vehicle purchase, insurance, fuel, and maintenance costs), the CO ZEV report projects that a combined CLEAR and ZEV program will yield significant economic savings for individual Coloradans who buy new ZEVs and gasoline vehicles in the future.

LIFETIME FUEL SAVINGS MORE THAN OFFSET THE HIGHER AVERAGE COST OF PURCHASING A NEW ZEV

NET LIFETIME SAVINGS	MY2025	MY2030
GASOLINE PRICE BASED ON AEO REFERENCE CASE	\$5,000	\$10,000
+ HIGHER TAX CREDITS (\$9,500 TOTAL TAX CREDIT)	\$13,000	\$20,000
FOR CONSUMERS WHO PURCHASE NEW ZEV WITH CASH AND DRIVE THEM FOR THE FULL VEHICLE LIFETIME		

The CO ZEV report projects the impact on monthly cash flow for the majority of consumers who finance the purchase of new vehicles with loans in 2025 or 2030 relative to the average vehicles in the baseline. **A consumer who buys a new ZEV with a loan in 2025 and 2030 is projected to realize a much greater monthly savings under all scenarios than consumers buying a new gasoline vehicle.**



MOST ANALYSTS AGREE THAT PRICE PARITY BETWEEN ELECTRIC VEHICLES AND INTERNAL COMBUSTION ENGINE VEHICLES WILL OCCUR SOMETIME BETWEEN 2020 AND 2025

COLORADO ZEV PROGRAM WILL HELP DELIVER POLLUTION BENEFITS

COLORADANS WILL REALIZE SUBSTANTIAL POLLUTION REDUCTIONS

AND HEALTH BENEFITS In addition to saving consumers money, a combined CLEAR and ZEV program will deliver significant climate and health benefits to Coloradans:

"THE REGIONAL AIR QUALITY COUNCIL (RAQC) SUPPORTS THE ... ADOPTION OF REVISIONS TO REGULATION NO. 20 RELATED TO THE CALIFORNIA ZERO EMISSION VEHICLE (ZEV) PROGRAM...WHICH WILL RESULT IN EMISSION BENEFITS IN THE DENVER METRO/NORTH FRONT RANGE ... OZONE NONATTAINMENT AREA AND BEYOND."

THE REGIONAL AIR QUALITY COUNCIL IS THE LEAD AIR QUALITY PLANNING AGENCY FOR COLORADO'S OZONE NONATTAINMENT AREA

REDUCTIONS IN GREENHOUSE GAS EMISSIONS

Colorado has the potential to reduce up to 3.2 million tons of GHG emissions in 2030 and reduce 7.6 million tons in 2040, assuming ZEV sales continue to grow past 2025. That would be **equivalent to taking more than 600,000 cars off of Colorado's roads in 2030 and removing nearly 1.6 million cars in 2040.**

REDUCTIONS IN CRITERIA AIR POLLUTION EMISSIONS

A combined CLEAR and ZEV program would result in up to **10 saved lives per year by 2050** and up to **670 lost work days avoided**. Colorado would **save \$2-6 million annually in 2025** from ambient PM-related health benefits **and up to \$100 million annually in 2050 from these PM health benefits.**

"THESE HEAVILY TRAFFICKED HIGHWAYS BISECT GLOBEVILLE AND ELYRIA-SWANSEA, COMMUNITIES THAT FOR DECADES HAVE SUFFERED FROM ACUTE POLLUTION PROBLEMS AND A STRIKINGLY HIGH INCIDENCE OF RESPIRATORY ILLNESS, ESPECIALLY AMONG CHILDREN AND LOW-INCOME HOUSEHOLDS. ADOPTING THE ZERO EMISSION VEHICLE (ZEV) STANDARDS WILL ACCELERATE COLORADO'S TRANSITION TO CLEAN ELECTRIC CARS, WHICH WILL SIGNIFICANTLY REDUCE AIR POLLUTION AND IMPROVE QUALITY OF LIFE IN THESE AND OTHER VULNERABLE COMMUNITIES."

ELYRIA AND SWANSEA NEIGHBORHOOD ASSOCIATION; GLOBEVILLE, ELYRIA-SWANSEA COALITION, AND COLORADO LATINO FORUM

STATES AND PROVINCES, MAJOR INTERNATIONAL CITIES, AND COUNTRIES ARE RECOGNIZING THE IMPORTANCE OF SWIFTLY DEPLOYING ZEVs

A STATE ZEV PROGRAM has been adopted by ten other states across the country. Should Colorado adopt a ZEV program, the state will join a growing number of states, international cities, and countries around the world in adopting policies that will help to ensure robust deployment of electric vehicles.

"AS BUSINESSES, EMPLOYERS, INSTITUTIONS, INVESTORS, AND RESIDENTS OF COLORADO, WE STRONGLY SUPPORT THE ADOPTION OF THE ADVANCED CLEAN CARS (ACC) PROGRAM BY THE STATE. THE ACC PROGRAM WOULD BOOST COLORADO'S ECONOMY BY CREATING FUEL AND ELECTRICITY COST SAVINGS FOR CONSUMERS AND BUSINESSES, CUTTING HEALTH COSTS BY REDUCING SMOG-FORMING EMISSIONS, AND REDUCING GREENHOUSE GAS (GHG) EMISSIONS. CLEANER, MORE EFFICIENT VEHICLES HELP ORGANIZATIONS LIKE OURS CUT COSTS, AVOID THE VOLATILITY OF FOSSIL FUEL PRICES, AND ACHIEVE OUR CLIMATE GOALS."

BUSINESS AND INVESTOR ZEV SUPPORT LETTER
JULY 30, 2019

NET ECONOMIC AND POLLUTION BENEFITS TO THE STATE OF COLORADO FROM THE CLEAR AND ZEV PROGRAM ARE POSITIVE, AND GROW SUBSTANTIALLY OVER TIME

The majority are direct economic benefits to consumers due to fuel savings with the remainder being monetized environmental and health benefits due to pollution reductions. **Annual statewide benefits are \$65 million in 2025, \$488 million in 2030, more than \$1 billion in 2040, and grow to \$1.3 billion in 2050.**

SOURCES

CO ZEV REPORT	Rick Rykowski, Colorado Zero Emission Vehicle Program Will Deliver Extensive Economic, Health and Environmental Benefits, <i>Environmental Defense Fund</i> (July 2019).
	THE REPORT ASSUMES A BASELINE WHERE THE TRUMP ADMINISTRATION ROLLS BACK THE FEDERAL STANDARDS, HOLDING THEM CONSTANT AFTER 2020
ZEV MARKET STUDY	Dana Lowell and Alissa Huntington, Electrical Vehicle Market Status - Update: Manufacturer Commitments to Future Electric Mobility in the U.S. and Worldwide, <i>MJ Bradley and Associates</i> (July 2019).