
Date: July 7, 2022

To: Environmental Quality Commission

From: Richard Whitman, Director

Subject: Item C: Advanced Clean Cars II - New Light-Duty Vehicle Emission Standards and Zero-Emission Vehicle Requirements (Informational)
July 21-22, 2022, EQC meeting

Purpose DEQ will present an informational briefing for the commission on California's proposed new light-duty vehicle engine emission standards and requirements that Oregon is planning to propose the commission adopt by reference, maintaining Oregon's status as an opt-in entity under Section 177 of the federal Clean Air Act along with many other states. The proposed rules will require manufacturers to produce and deliver increasing percentages of zero-emission vehicles to Oregon through the 2035 model year.

Background EQC first adopted the California Air Resource Board's (CARB) emission standards for light-duty vehicles in late 2005. The first set of rules applied to model years 2009 through 2016. Since 2005, CARB has made changes to its emission standard rules including changes to the Zero-Emission Vehicles (ZEV) program in 2008, and in 2012, it made significant program changes referred to as the Advanced Clean Cars, or ACC, program. The ACC program required further reduction of smog-causing pollutants and greenhouse gas emissions including ZEV sale requirements through 2025 model year. EQC updated its Low- and Zero-Emission Vehicle rules to reflect CARB's changes.

Recently, California has proposed changes to its Advanced Clean Cars program, now referred to as the Advanced Clean Cars II regulation. These changes affect the 2026-2035 model year vehicles and include updated LEV and ZEV requirements.

Authorities The federal Clean Air Act grants the U.S. EPA original jurisdiction for establishing emissions standards for new motor vehicles. Section 209(a) of the federal Clean Air Act (42 USC § 7543) prohibits states or other political subdivisions, such as local or regional governments, from establishing emission standards for new motor vehicles. However, there is an important exception: Section 177 (42 USC § 7507) allows states to adopt new motor vehicle emissions standards that are identical to standards adopted by the state of California, if California has received a waiver from the U.S. Environmental Protection Agency to allow it to promulgate its own standards. This is an

authority that over a dozen states, Oregon included, have exercised for many years.

Additionally, ORS 468A.380 provides authority to the Environmental Quality Commission to establish motor vehicle emissions standards. It is under this authority, and consistent with the federal Clean Air Act, that Oregon has adopted motor vehicle emissions standards for new vehicles, such as adoption of California's light-duty Low- and Zero-Emissions Vehicle regulations.

Adoption of California standards by other states amplifies the environmental impact of the rules by ensuring they are applied to a larger market-share of new vehicles. It also ensures Oregon is aligned with some of its neighboring states and that Oregonian's have ample access to supplies of clean, lowest-emitting, vehicles. Supply limitations are currently constraining the growth of clean vehicles as a proportion of Oregon's vehicle fleet – exposing more consumers to price volatility in fossil fuels and slowing progress on reducing greenhouse gas emissions.

**Strategy
integration and
commitments**

The rules discussed during this information item are central to DEQ's efforts to reduce transportation-related greenhouse gas emissions. They are integrated into a variety of DEQ strategies and work, including:

Executive Orders 17-21 and 20-04

Governor Brown's Executive Orders 17-21 and 20-04 relate to zero-emission vehicles and reducing greenhouse gas emissions, respectively. Both orders include mandates to DEQ to:

- Maintain identically with the latest new vehicle emissions standards adopted by the California Air Resources Board
- Reduce transportation-related greenhouse gas emissions by accelerating the adoption of low- and zero-carbon technologies

Statewide Transportation Strategy and Every Mile Counts

In 2020, Governor Brown called for the Departments of Environmental Quality, Transportation, Energy and Land Conservation and Development to identify implementation actions to reduce greenhouse gas emissions. In response to that directive a multi-agency work plan was developed and the Every Mile Counts Campaign was launched. The workplan identifies high-impact strategies that the agencies can implement under existing authorities and with existing resources. Because of our authorities and technical capacity, DEQ is uniquely situated to focus on strategies that reduce vehicle emissions through the adoption of cleaner fuels and vehicles - an Every Mile Counts objective.

Clean Fuels Program Expansion Rulemaking

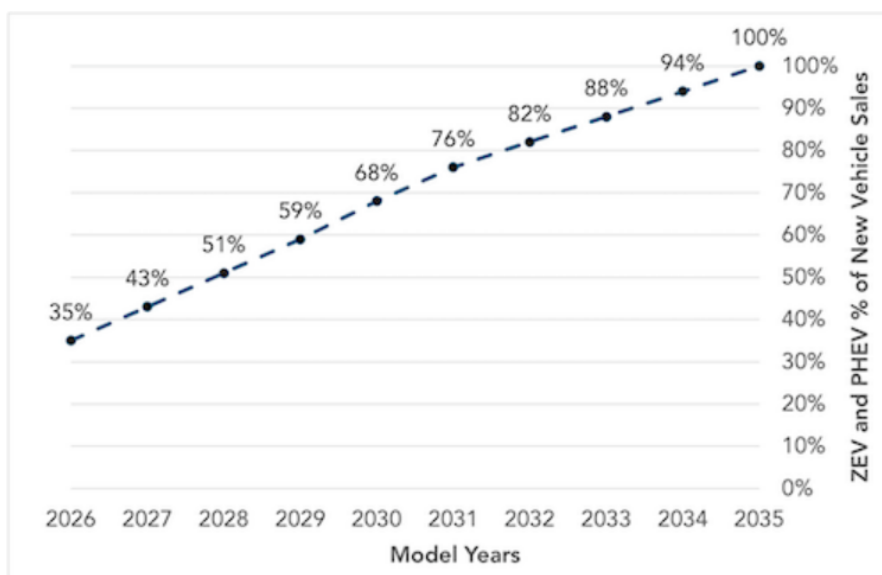
DEQ is conducting a rulemaking to expand the Clean Fuels Program beyond the 10 percent carbon intensity reduction target in 2025. The current proposal is

to establish a 20 percent reduction target in 2030 and a 37 percent reduction target in 2035. These proposed targets ensure that a variety of lower carbon fuels can play a role in decarbonizing the transportation sector as Oregon transitions to zero-emission technologies.

**Regulation
overview**

California has currently proposed the Advanced Clean Cars II Rule, which will result in greenhouse gas and tailpipe emissions reductions. The proposal will drive the sales of zero-emission vehicles (ZEV) to 100 percent ZEVs in Oregon by the 2035 model year, including battery electric vehicles, fuel cell vehicles, and the cleanest possible plug-in hybrid-electric vehicles. The proposal also amends the low-emission vehicle regulations to include increasingly stringent standards for gasoline cars and heavier passenger trucks to continue to reduce smog-forming emissions while the sector transitions toward 100 percent electrification by 2035.

The following chart provides the required annual sales requirements for manufacturers over the 2026-2035 model years:



The proposal includes zero-emission vehicle durability requirements, which include minimum warranties for batteries and parts, increase serviceability, and facilitate charging and battery labeling. These provisions will help ensure all electric vehicle owners can successfully replace their gasoline vehicles with new or used vehicles that meet their needs. These measures are particularly important for consumers in lower-income and underserved communities where used vehicle sales are a critical step in the transition to cleaner vehicles. Giving

consumers additional assurance that their used zero-emission vehicle purchase meets minimum requirements is key for broader market uptake.

Meeting the ZEV compliance targets

In 2021, ZEV sales in Oregon made up almost eight percent of the total new car sales. Over the past few years this percentage has been accelerating. Most vehicle manufacturers have announced plans to shift production to all or mostly zero emissions technologies by 2035 to 2040, and California and the manufacturers have been in close communication about the feasibility of meeting the ACC-2 requirements. Advances in battery technology, and compliance flexibilities will help manufacturers meet their obligations. The industry has rapidly responded to evolving market pressures, consumer demands, and regulatory requirements across the United States, and around the globe. Overall, these improvements have reduced costs for batteries, the main driver of battery electric vehicle and plug-in hybrid electric vehicle costs. Based on public announcements, it is expected that nearly 120 ZEV and plug-in hybrid electric vehicle models will be available to consumers before the 2026 model year.

Low-Emission Vehicle requirements for gasoline vehicles

While the regulations move the vehicle fleet to all electric vehicles by 2035, many of the gasoline vehicles sold before that model year will continue to be utilized well beyond 2035. The proposed Advanced Clean Cars II rule includes emissions requirements, known as low-emission vehicle requirements on gasoline vehicles. These include new standards to address the increased emissions associated with aggressive driving and cold-starts, require more stringent exhaust and evaporative emissions standards, and changes to the fleet average requirements.

Equity considerations

The pollution reductions from the proposed rule, taking into account the cleaner gasoline vehicles as well as greater availability of ZEVs, will reduce exposure to vehicle pollution in communities throughout Oregon, including in low-income and disadvantaged communities that are often disproportionately exposed to vehicular pollution. Additionally, the durability and warranty requirements support more reliable ZEVs in the used vehicle market, which makes the cost of ZEVs become more affordable to lower-income households. The proposed rules encourage manufacturers to take actions that improve access to ZEVs for disadvantaged, low-income, and other frontline communities, including investments in community car share programs, producing affordable ZEVs, and keeping used vehicles in Oregon to support the existing Clean Vehicle Rebate Program.

Equitably transitioning to a zero-emission transportation system requires a coordinated and collaborative approach. This involves the development of a comprehensive recharging and refueling network and implementation of a suite of incentive programs for clean cars, funding for charging, and fueling options.

DEQ is working closely with the Oregon Department of Transportation to ensure public charging is accessible for everyone, particularly those who do not have access to home charging.

Next steps

DEQ plans the following actions for this proposed rulemaking:

- June and July 2022: Listening sessions with the public and key stakeholder groups
- August 2022: Convene an Advisory Committee to discuss the proposed rulemaking and solicit feedback on the fiscal and economic impacts
- August and September 2022: Public comment
- November or December 2022: Propose rules to EQC for action

Supporting materials and links

1. California Air Resources Board, Advanced Clean Cars II regulation reference materials, available at:
<https://ww2.arb.ca.gov/rulemaking/2022/advanced-clean-cars-ii>

Prepared from Air Quality Division information