



State of Oregon Department of Environmental Quality

Oregon Environmental Quality Commission Meeting

July 10-11, 2025

Rulemaking Action Item B Clean Truck Rules Update 2025

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Recommendation

The Oregon Department of Environmental Quality recommends the Environmental Quality Commission adopt the proposed rules in Attachment A as part of Chapter 340 of the Oregon Administrative Rules.

Language of Proposed EQC Motion:

"I move that the commission adopt the proposed rule amendments in Attachment A as part of chapter 340 of the Oregon Administrative Rules."

Overview

Short summary of proposed rule changes

DEQ is proposing rule changes to two regulations - the Advanced Clean Trucks Rule in OAR Chapter 340, Division 257 and the Emission Standards for New Heavy-Duty Trucks in OAR Chapter 340, Division 261. These changes would:

- Adopt by reference recent California amendments to the Advanced Clean Trucks Rule and Heavy-Duty Engine and Vehicle Omnibus Rules; and
- Delay the start of the Heavy-Duty Engine and Vehicle Omnibus Rules implementation from engine model year 2025 to engine model year 2027.

On Nov. 17, 2021, the Oregon Environmental Quality Commission acted to reduce emissions from new medium- and heavy-duty trucks sold in the state by adopting the Clean Truck Rules (CTR).¹ Under Section 177 of the federal Clean Air Act, states that choose to adopt vehicle standards that are more stringent than the federal standards for new vehicles may only adopt California's vehicle emission standards (if California has adopted more stringent standards). California's Advanced Clean Trucks Rules and Heavy-Duty Engine and Vehicle Omnibus Rules were two of the rules adopted under that 2021 rulemaking.

Advanced Clean Trucks Rule

The Advanced Clean Trucks Rule is being revised to incorporate commitments made between the California Air Resources Board (CARB) and the truck manufacturers in the Clean Truck Partnership.² The proposed changes include:

- Increased Deficit Makeup Period – Manufacturers now have three years instead of one year to balance their zero-emission vehicle (ZEV) deficits (deficits accrued due to insufficient sales of ZEVs under the rules).
- New definition for how credits are generated – Manufacturers can now generate a credit based on a vehicle delivered for sale rather than to the ultimate purchaser in Oregon.
- Additional flexibility in 2026 for the cleanest Heavy Heavy-Duty (HHD) Engines - Specific HD Omnibus certified engines would not generate deficits in 2026 under the ACT Rule, easing compliance for manufacturers of the subject heavy heavy-duty internal combustion engine (ICE) trucks.

In addition to these proposed rule changes, on May 15, 2025, DEQ issued enforcement discretion for model years 2025 and 2026 in response to federal uncertainty in Oregon's truck market.

Heavy-Duty Low NOx Omnibus Rule

¹ [417th Meeting of the Oregon Environmental Quality Commission. Clean Truck Rules DEQ Staff Report](#), accessed on 3/20/2025.

² [CARB and the Truck and Engine Manufacturers Association Agreement \(Clean Truck Partnership\), July 2023](#), accessed on 3/4/2025.

The proposed HD Omnibus rule amendments replace expiring temporary rules, adopted by the EQC in November 2024³, with permanent rules and extend the one-year delay adopted under the temporary rule for an additional year. DEQ is proposing an additional year of delay after reviewing public comments submitted in response to this proposal and ongoing and increased uncertainty regarding the status of the federal Clean Air Act waiver. If the proposed amendments are adopted, the Omnibus rules would go into effect with engine model year 2027. Even though DEQ is proposing to delay the HD Omnibus rule until 2027, DEQ is also proposing to incorporate other minor changes, including additional zero emission powertrain flexibilities that CARB recently updated, which directly connect to the ACT rule. Further changes would eliminate rule provisions related to trailers that were previously overturned in a court challenge.

Background of reasons for doing this rulemaking ACT amendments

The ACT rule requires manufacturers of medium- and heavy-duty vehicles to produce and deliver ZEVs, as a percentage of their overall sales. These requirements start with the 2025 model year in Oregon. The sales percentages begin with a 7% sales requirement for Class 2b-3 and Class 7-8 trucks and an 11% sales requirement for Class 4-8 straight trucks, increasing in percentages to 2035. In October 2024, CARB adopted amendments to the ACT rule incorporating additional flexibilities for manufacturers.

Oregon DEQ is proposing these changes and enforcement discretion for model years 2025 and 2026 based in part on the agency's understanding that vehicle manufacturers need more flexible compliance options under the Advanced Clean Trucks rule. Manufacturers face ongoing challenges with ACT compliance in 2025 and 2026. DEQ is proposing solutions that consider the current circumstances while still maintaining the long-term integrity of the ACT program. This is proposed to be accomplished through increased compliance flexibilities and the use of enforcement discretion in the short term. Adopting these rules would harmonize the existing Oregon rules with recent amendments made by California, maintaining identity as required.

HD Omnibus Amendments

The HD Omnibus Rules require manufacturers to deliver lower emitting conventionally fueled engines for sale in Oregon. During the transition period (2024-2026), certified compliant engines would be required to reduce oxides of nitrogen, or NOx emissions by 75% and to reduce particulate matter emissions by 50%. The HD Omnibus rules require further reductions in emissions from new medium- and heavy-duty engines starting in 2027.

The HD Omnibus Rules were originally intended to be implemented in Oregon beginning with engine model year 2024. A one-year delay was adopted by the EQC in November 2023. An additional year delay was temporarily adopted by the EQC in

³ [434th meeting of the Oregon Environmental Quality Commission. Temporary Clean Truck Rules Amendments DEQ Staff Report](#), accessed on 3/20/2025.

November 2024 due to concerns about the availability of HD Omnibus compliant engines, manufacturers placing sales restrictions on vehicle dealers that order new vehicles, manufacturers expressing intention to limit their use of available HD Omnibus-compliance flexibilities and delayed federal action on the CARB's waiver request to EPA that would allow enforcement of the rules in Oregon. The temporary rules expire on June 30, 2025. Ongoing concerns about availability of HD Omnibus compliant engines in 2026, especially in the medium-duty segment, along with recent federal action to disapprove the previously approved Clean Air Act Section 177 waiver prompted DEQ to propose an additional year of delay. In addition, recent CARB amendments to these rules, which allow more manufacturer flexibility to certify "complete" medium-duty vehicles, will need to be adopted in order to remain identical to California rules.

How this rulemaking addresses the reasons for doing the rulemaking

ACT rule

The current proposed rule would update Oregon's existing Advanced Clean Trucks Regulation to match revisions adopted by the California Air Resources Board, maintaining identical rules. The proposed Increased Deficit Makeup Period, which provides manufacturers with three years instead of one year to balance their ZEV deficits, will add needed flexibility for manufacturers, supporting their compliance with the rules. The proposed new definition for generating credits, which allows manufacturers to generate a credit based on a vehicle delivered for sale in Oregon rather than to the ultimate purchaser, will further increase compliance flexibility. Oregon DEQ's understanding from manufacturers is that they lack visibility into the end user's final registration location of vehicles that they make available for sale through Oregon vehicle dealers. This proposed amendment ensures that the point of compliance remains under the control of the regulated entity. Proposed rules also provide additional flexibility in 2026 for the cleanest Heavy Heavy-Duty (HHD) Engines, allowing that specific HD Omnibus certified engines not generate deficits in 2026 under the ACT Rule, easing compliance for manufacturers of the subject heavy heavy-duty internal combustion engine (ICE) trucks.

HD Omnibus Amendments

The proposed HD Omnibus amendments would delay the implementation of OAR Chapter 340, Division 261 (Emission Standards for New Heavy-Duty Trucks) by two years. This two-year delay would extend by one year the temporary rules previously adopted by the EQC in November 2024. The proposed rule amendments would also update the existing HD Omnibus rules to match revisions adopted by California in 2024 to increase zero emission powertrain certification flexibilities for medium-duty vehicles by allowing complete medium-duty ZEVs to be certified under the zero-emission powertrain certification (ZEP-CERT) program. The adoption of the ZEP-CERT amendments ensures that Oregon's rules remain identical to California's.

Affected parties

The proposed rulemaking applies statewide. Affected parties include:

- Medium- and heavy-duty vehicle and engine manufacturers
- Medium- and heavy-duty vehicle dealerships
- Medium- and heavy-duty vehicle purchasers
- The public

Outreach efforts and public and stakeholder involvement

DEQ announced the rulemaking and advisory committee process via GovDelivery. Through that announcement, DEQ invited the public to attend each of its three virtual advisory committee meetings. DEQ added advisory committee meeting information to DEQ's public meetings calendar and rulemaking webpage.

DEQ continued to engage with a variety of stakeholders about these rule updates. Following the EQC's adoption of temporary rules in November 2024 to adopt recent CARB ACT amendments and delay implementation of the HD Omnibus rules for one year, DEQ met with multiple interested parties. DEQ convened meetings with and delivered presentations to interested parties including:

- Fleet representatives
- A variety of trade associations
- Vehicle dealer and repair service representatives
- Vehicle and engine manufacturers
- Environmental advocacy groups

Brief summary of fiscal impact ⁴

Advanced Clean Trucks Amendments

The amendments, which provide additional flexibilities, could lead to lower costs for manufacturers, fleets, and dealers. Manufacturers could experience a reduction in short-term financial pressures by having additional time to comply with the rules. That extended time could lead to fewer financial penalties for noncompliance, reduced administrative costs by only needing to track sales based on delivery rather than final purchase, and additional options to certify complete medium-duty trucks. With a longer deficit makeup period, truck manufacturers can comply over three years rather than in a single year. Fleets and dealers could see reduced costs and the additional availability of trucks due to manufacturers not having to restrict availability of conventional vehicles in the market artificially.

HD Omnibus Amendments

The proposed rule amendments delay the implementation of the HD Omnibus rules for two years, until 2027, and adopt recent CARB amendments for zero emission powertrains by reference. This action would have a fiscal and economic impact. Compared to the status quo, manufacturers and dealers would continue to be able to sell federally certified engine model year 2025 and 2026 medium- and heavy-duty vehicles. Vehicle and engine purchasers can expect lower costs for new vehicles and

⁴ A full fiscal impact analysis is provided below in this notice.

engines through 2026 compared to the current status quo. Manufacturers and dealers can expect to see increased revenue compared to the current status quo. The amendments would reduce the risk of manufacturer temporary holds and excessive restrictions on medium- and heavy-duty vehicle sales in Oregon. Expected fiscal impacts include the effects of increased sales volumes of medium- and heavy-duty conventionally fueled trucks, as well as decreased demand for warranty repair services on vehicles with 2025 and 2026 engines.

Both the ACT and HD Omnibus proposed amendments may result in less emissions reductions than expected along all routes where medium- and heavy-duty vehicles travel and will impact members of the public – especially those living, working, and recreating close to major traffic corridors.

Statement of need

Advanced Clean Trucks

Proposed Rule or Topic	Discussion
Advanced Clean Trucks Rule Amendments	
What need would the proposed rule address?	Oregon DEQ understands that vehicle manufacturers need more flexible compliance options under Advanced Clean Trucks rule. Adopting these rules would harmonize the already existing Oregon rules with recent amendments made by California, maintaining identicality as required.
How would the proposed rule address the need?	The proposed rule would incorporate California's recent amendments providing additional flexibilities for manufacturers.
How will DEQ know the rule addressed the need?	DEQ will know the rule addressed the need when manufacturers avail themselves of the new flexibility provisions.

HD Omnibus

Proposed Rule or Topic	Discussion
Delay Implementation of HD Omnibus Rules for one year	
What need would the proposed rule address?	The proposed rule addresses the need to make permanent the previously adopted temporary rule for the remainder of 2025. In 2024 the EQC temporarily delayed implementation of the HD Omnibus rules due to uncertainty related to supply of Omnibus-certified compliant engine availability. The proposed rule also addresses ongoing concerns about availability of HD Omnibus compliant engines in 2026, especially in the medium-duty segment, along with recent federal action to disapprove the previously

Proposed Rule or Topic	Discussion
	approved Clean Air Act Section 177 waiver. Not adopting a delay risked creating significant restrictions to the supply of new medium- and heavy-duty conventionally fueled vehicles.
How would the proposed rule address the need?	The proposed rule would delay the implementation of the HD Omnibus rules for two full years. It will provide manufacturers and buyers with compliance certainty through 2026. If the proposed rules are adopted, the HD Omnibus rules go into effect with engine model year 2027 and/or vehicle model year 2028 depending on the specific rule section and context. The proposed rules provide more time for manufacturers to produce and deliver California Omnibus-certified compliant engines to the market and for legal questions around recent federal action to retroactively disapprove the Clean Air Act waiver to be settled.
How will DEQ know the rule addressed the need?	DEQ will know the rule addressed the need by monitoring the number of new conventionally fueled vehicles that are sold and registered in Oregon and by monitoring federal legislative and judicial actions.
Adopt recent CARB amendments	
What need would the proposed rule address?	Oregon adopted the CARB HD Omnibus rules by reference in 2021. Under section 177 of the Clean Air Act, Oregon can only adopt California emission standards if those standards are adopted identically. Periodically Oregon must adopt California amendments to remain identical. The recent California amendments increase the transition flexibilities available to manufacturers of complete medium-duty zero emission powertrains.
How would the proposed rule address the need?	The proposed rule would bring Oregon's rules into agreement with California's rules by

Proposed Rule or Topic	Discussion
	adopting the California amendments by reference.
How will DEQ know the rule addressed the need?	DEQ will know the rule addressed the need once the updated rules are published and manufacturers are notified about this additional available certification flexibility.

Federal relationship

ORS 183.332, 468A.327, and OAR 340-011-0029 require DEQ to attempt to adopt rules that correspond with existing equivalent federal laws and rules unless there are reasons not to do so. Adopting these rules would harmonize the already existing Oregon rules with recent amendments made by California. Under section 177 of the Clean Air Act, Oregon can adopt and enforce California's more stringent new engine and vehicle emission standards if those standards are identical to the California standards.

ACT Amendments

The ACT rules adopted by the EQC in 2021 require medium- and heavy-duty vehicle manufacturers to gradually increase the number of new plug-in hybrid and zero emission trucks sold as a percentage of their overall sales. This is unique to California's regulations and exceeds federal emissions standards, as allowed under Section 177 of the Clean Air Act. States that choose to adopt vehicle standards that are more stringent than the federal standards for new vehicles may only adopt California's vehicle emission standards if California has adopted more stringent standards. Oregon's proposed rules to increase flexibility and compliance options align with recent amendments from California, will improve program implementation in Oregon, and maintain identity of Oregon's rules.

Starting in 2027, the new federal regulation, "Greenhouse Gas Emissions Standards for Heavy-Duty Vehicles – Phase 3," requires heavy-duty vocational vehicles to meet stricter emission standards. The federal regulations are structurally different from Oregon's Advanced Clean Trucks regulation, yet begin to align in terms of emissions standards over time. The ACT specifically requires ZEV sales, whereas the GHG Phase 3 rule establishes fleet emissions standards, which are technology-neutral but likely include the increasing deployment of ZEV vehicles. Oregon's ACT regulations and proposed amendments can be understood as slightly more stringent than the federal standards in 2025 and 2026 with greater alignment between Oregon and federal standards beginning in 2027 and beyond.

HD Omnibus

The HD Omnibus rules adopted by the EQC in 2021 are more stringent than the current 2024-2026 federal standards for NOx and PM, as well as several other provisions,

including a low load testing cycle and longer warranty requirements. The rules are designed to reduce the primary and secondary impacts of NO_x emissions including ozone and secondary particulate formation, address the low speed and light load phases of the truck duty cycle, and reduce the impact of engine deterioration. New federal medium- and heavy-duty engine and vehicle emission standards were adopted in December 2022.⁵ California has announced its intention to adopt future amendments that would mostly align with these new federal rules beginning with engine model year 2027.⁶ DEQ plans to continue to recommend that the EQC adopt all future California HD Omnibus amendments to ensure that Oregon rules remains identical to the California rules and therefore expects to be mostly aligned with federal rules for medium- and heavy-duty engine and vehicle standards for engine model year 2027.

The current proposed rules will continue to impose requirements that differ from or are in addition to federal requirements. DEQ recommends that the commission approve the adoption of the proposed amendments, which delay the implementation of the HD Omnibus rules in Oregon for two years, and adopt recent California zero emission powertrain certification amendments. While these proposed amendments are more stringent than current 2024-2026 federal rules DEQ recommends that the commission approve adopting these amendments. Doing so ensures that Oregon rules continue to be identical to California rules, as is required under Section 177 of the Clean Air Act. Adoption also preserves the public health and environmental benefits of these rules as described and referenced in this notice based on the scientific, economic and technological analyses as described and referenced elsewhere in this notice.

Reasons for differing from applicable federal requirements

As mentioned elsewhere in this section, these proposed rules will ensure that Oregon maintains rules identical to those of California, which is a requirement under Section 177 of the Clean Air Act for states that choose to implement more stringent California standards.

Oregon's existing emissions standards, in the form of both Heavy-Duty Low NO_x Omnibus and Advanced Clean Trucks Rule, are more stringent than similar federal standards. The Environmental Quality Commission adopted these rules in 2021 to reduce emissions from medium- and heavy-duty trucks in Oregon at a faster pace than would be expected under the existing federal laws. The reasons for taking this approach are detailed in the original rulemaking materials and are related to improving public health and environmental outcomes for Oregonians due to decreased exposure to harmful diesel and climate pollution.

⁵ [Final EPA Standards for Heavy-Duty Vehicles to Slash Dangerous Pollution and Take Key Step Toward Accelerating Zero-Emissions Future, December 2022](#), accessed on 3/20/2025. Also see: [Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards – Final Rule, December 2022](#), accessed on 3/20/2025 and [U.S. heavy-duty vehicle NO_x standards: Updates to emission limits, testing requirements, and compliance procedures, July 2023](#), accessed on 3/20/2025.

⁶ [CARB and the Truck and Engine Manufacturers Association Agreement \(Clean Truck Partnership\), July 2023](#), accessed on 3/20/2025.

ACT Amendments

Oregon law establishes that it is the policy of the state to achieve reductions in climate emissions and is a key reason why DEQ is implementing the Advanced Clean Trucks Rule and proposing amendments to the program. Oregon Revised Statute 468A.205 establishes the goal that by 2050 Oregon achieve greenhouse gas levels that are at least 75 percent below 1990 levels. As of today, Oregon is forecast to reach only a 60% climate emissions reduction by 2050 as opposed to the statutory target. This forecast takes current state programs, policies and laws into account according to multi-agency emissions reduction information available on the [State of Oregon's website](#). For these reasons the proposed rules are more stringent than applicable federal requirements to create additional public health and environmental benefits.

HD Omnibus Amendments

The HD Omnibus rules are expected to yield environmental and public health benefits that begin with the year of implementation and continue. One study by the Manufacturers of Emission Controls Association predicted a 17.5% (2,570 tons/year) annual reduction in annual on-highway NO_x emissions and a 4% (29 tons/year) annual reduction in particulate matter by 2035. Another study by MJ Bradley concluded that Oregon fleet NO_x emissions reductions associated with the HD Omnibus rules are expected to be approximately 1,300 metric tons per year in the early years of rule implementation and 5,000 metric tons/year by 2040. The same MJ Bradley study reports the cumulative modeled incremental public health benefits of Oregon adopting the HD Omnibus rules are 77 avoided premature deaths, 55 avoided hospital visits, and 40,168 avoided cases of acute respiratory symptoms and restricted activity days through 2050.⁷ In addition, Oregon Revised Statutes 468A.793 directs the EQC to develop goals to reduce lifetime risk of cancer in Oregon to no more than one case per million.

The predicted benefits of the HD Omnibus rules as described above, as well as state goals to reduce exposure to diesel emissions, justified the original adoption of the HD Omnibus rules by the EQC and justified going beyond the federal medium- and heavy-duty engine standards. The current proposed amendments to delay the HD Omnibus rules for an additional two years are a reasonable balance when the economic and technological issues described in the fiscal and economic impact section of this notice are considered. Without an adequate supply of new 2025 and 2026 HD Omnibus-certified compliant engines available in the market, there is a high risk of severe supply restrictions for new medium- and heavy-duty vehicles. Uncertainty associated with recent federal action to revoke the Clean Air Act waiver also justifies this additional delay in implementation. Because the Clean Truck Partnership voluntary manufacturer commitment to comply with the rules applies to Section 177 states for 2027 and later model years,⁸ there is no justification for extending the delay past the end of 2026.

⁷ Oregon Clean Trucks Program, MJ Bradley and Associates, 2022

⁸ See Appendix D, part B of [CARB and the Truck and Engine Manufacturers Association Agreement \(Clean Truck Partnership\)](#), July 2023, accessed on 3/4/2025.

Preserving the HD Omnibus rules for 2027 and beyond is justified given the additional benefits that these rules are expected to deliver.

What alternatives did DEQ consider and why are you not pursuing them?

ACT Amendments

Separate from proposing to adopt California's recent amendment to expand compliance flexibilities for manufacturers, DEQ considered proposing a new optional credit program. Ultimately, after considering public comments, DEQ decided that the short-term credit program was insufficient to incentivize ZEV sales in Oregon for 2025 and 2026. To support Oregon's truck market amidst significant federal uncertainty from congressional action, tariffs, and a shifting incentive landscape DEQ finds it more effective to establish a more gradual transition from early-year ZEV delivery targets to higher targets that take effect beginning in 2027. This transition can be achieved by department action to exercise its discretion enforcing the regulation in the first two years.

HD Omnibus Amendments

DEQ considered only codifying the temporary rules previously adopted by the EQC and not including an additional year of delayed implementation to the end of 2026. However, after reviewing public comments submitted following the release of the public notice and ongoing and increased uncertainty regarding the status of the federal Clean Air Act waiver, DEQ modified its original proposal to delay implementation until engine model year 2027. The proposed rules delay the implementation of the HD Omnibus rules for two years and increase manufacturer flexibility for zero emission powertrain certifications. The two-year delay would mean that Oregon loses two model years of emissions reduction benefits. However, DEQ determined that the loss of two years of benefits was less harmful than losing benefits from the rule over the long term.

Rules affected, authorities, supporting documents

Lead division

Air Quality

Program or activity

Standards for medium- and heavy-duty engines and vehicles

Chapter 340 action

Amend OAR				
340-257-0050	340-261-0020	340-261-0040	340-261-0050	

Statutory Authority – ORS				
468.020	468A.025	468A.360		

Statutes Implemented – ORS				
468A.010	468A.015	468A.025	468A.360	

Documents relied on for rulemaking

Document title	Document location
2020 OGWC Biennial Report to Legislature	https://static1.squarespace.com/static/59c554e0f09ca40655ea6eb0/t/5fe137fac70e3835b6e8f58e/1608595458463/2020-OGWC-Biennial-Report-Legislature.pdf
Energy Innovation and UC Berkley's 2035 Report: Transportation	Download The 2035 2.0 Report from UC Berkeley 2035 The Report (2035report.com)
2024 Proposed Amendments to the Advanced Clean Trucks Regulation and the Zero-Emission Powertrain Certification Test Procedure Staff Report: Initial Statement of Reasons	https://www2.arb.ca.gov/sites/default/files/barcu/regact/2024/actzepcert/isor.pdf

Second 15-Day Changes to the 2024 Proposed Amendments to the Advanced Clean Trucks Regulation and the Zero-Emission Powertrain Certification Test Procedure, Appendix A-1	https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2024/actzepcert/2nd15daya1.pdf
CARB Heavy-Duty Engine and Vehicle Omnibus Rule Staff Report: Initial Statement of Reasons (ISOR)	https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2020/hdomnibuslownox/isor.pdf
CARB Heavy-Duty Engine and Vehicle Omnibus Rule Staff Report: Initial Statement of Reasons (ISOR), Appendix C-3: Further Detail on Costs and Economic Analysis	https://ww3.arb.ca.gov/regact/2020/hdomnibuslownox/appc3.pdf
CARB Initial Statement of Reasons for the Advanced Clean Trucks rule	https://ww2.arb.ca.gov/sites/default/files/classic/regact/2019/act2019/isor.pdf
Updated Costs and Benefits Analysis for the Proposed Advanced Clean Trucks Regulation	https://ww2.arb.ca.gov/sites/default/files/classic/regact/2019/act2019/30dayattc.pdf
Clean Trucks Analysis, Costs & Benefits of State-Level Policies to Require No- and Low-Emission Trucks (MJ Bradley & Associates study), 2021	https://www.erm.com/globalassets/documents/mjba-archive/reports/2021/clean-trucks-technical-report-final-09jun21.pdf
Oregon Clean Trucks Program: An Analysis of the Impacts of Zero-Emission Medium- and Heavy-Duty Trucks on the Environment, Public Health, Industry, and the Economy (MJ Bradley & Associates study), 2022	https://www.erm.com/contentassets/f3d6061dd8a04147a3f38b7db256ae44/or-clean-trucks-report.pdf
California's Advanced Clean Trucks regulation: Sales requirements for zero-emission heavy-duty trucks (ICCT study)	https://theicct.org/sites/default/files/publications/CA-HDV-EV-policy-update-jul212020.pdf
Zero-Emission Class 8 Truck Pricing Comparisons – EU & US, CARB 2024	https://ww2.arb.ca.gov/sites/default/files/2024-12/Zero%20Emission%20Class%208%20Tractor%20Pricing%20Comparisons_ADA.pdf
Analysis of Heavy-Duty Vehicle Sales Impacts Due to New Regulation (EPA 2021)	https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P101246N.pdf
The Concerns about Diesel Engine Exhaust, Oregon DEQ, 2015	Report - The Concerns About Diesel Engine Exhaust, Oregon DEQ
Portland Air Toxics Solutions Committee Report and Recommendations, Oregon DEQ, 2012	https://www.oregon.gov/deq/FilterDocs/PATS2012.pdf
California State Motor Vehicle and Engine and Nonroad Engine Pollution Control Standards; The "Omnibus" Low NOx	https://www.govinfo.gov/content/pkg/FR-2025-01-06/pdf/2024-31125.pdf

Regulation; Waiver of Preemption, Decision Document (EPA 2024)	
A Report on Actions for Medium- and Heavy-Duty Vehicle Energy and Emissions Innovation, (EPA & DOE 2024)	https://www.energy.gov/sites/default/files/2025-01/MHDV-Report-Actions-2024-12-19.pdf
Clean Truck Rules - Staff Report to Oregon's Environmental Quality Commission, Nov 2021	https://www.oregon.gov/deq/EQCdocs/111721_C_CleanTrucks.pdf
CARB Initial Statement of Reasons (ISOR) for Proposed Amendments to the Heavy-Duty Engine and Vehicle Omnibus Regulation	https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2023/hdomnibus2023/isor.pdf
California's Heavy-duty omnibus regulation: Updates to emission standards, testing requirements, and compliance procedures, International Council on Clean Transportation (ICCT), 2022	https://theicct.org/wp-content/uploads/2022/01/california-us-hdv-omnibus-reg-jan22.pdf
CARB Heavy-Duty Engine and Vehicle Omnibus Regulation and Associated Amendments: Final Statement of Reasons (FSOR)	https://ww2.arb.ca.gov/sites/default/files/barcu/board/rulemaking/hdomnibuslownox/fsor.pdf
Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards – Final Rule, December, 2022	https://www.epa.gov/system/files/documents/2023-01/new-motor-veh-air-poll-control-hd-eng-veh-stnd frm-2022-12-20.pdf
U.S. heavy-duty vehicle NOx standards: Updates to emission limits, testing requirements, and compliance procedures, ICCT, July 2023	https://theicct.org/wp-content/uploads/2023/07/us-nox-standards-update-jul23.pdf
CARB and the Truck and Engine Manufacturers Association Agreement (Clean Truck Partnership), July 2023	https://ww2.arb.ca.gov/sites/default/files/2023-07/Final%20Agreement%20between%20CARB%20and%20EMA%202023_06_27.pdf
Clean Truck Partnership Commitments – Status and Outcome	https://ww2.arb.ca.gov/clean-truck-partnership
Advanced Clean Trucks Memo to Board Re: California Truck Availability Analysis, CARB Executive Officer Steven Cliff (September 2024)	https://ww2.arb.ca.gov/sites/default/files/2024-09/240925_actmemo_ADA_0.pdf
In-use NOx and black carbon emissions from heavy-duty freight diesel vehicles and near-zero emissions natural gas vehicles in California's San Joaquin Air Basin	https://doi.org/10.1016/j.scitotenv.2023.168188

Ecommerce and environmental justice in
metro Seattle

[https://www.sciencedirect.com/science/
article/pii/S0739885923001221](https://www.sciencedirect.com/science/article/pii/S0739885923001221)

Rules summary

OAR chapter 340, Division 257 and 261

Rule Number	Rule Title	Explanation
257-0050	Incorporation by Reference and Program Review	Increased Deficit Makeup Period, New definition for how manufacturers can generate a credit based on a vehicle delivered for sale, and providing that specific HD Omnibus certified engines would not generate deficits in 2026 under the ACT Rule.
261-0020	Applicability	Delays rule implementation by 2 years; removes references to trailers
261-0040	Requirement to Meet California Vehicle Emission Standards	Updates the rules to reflect delayed implementation until the 2027 engine model year and the 2028 vehicle model year; removes references to trailers
261-0050	Incorporation by Reference	Includes revision to California Code of Regulations Section 1956.8, clarifying the certification options for medium-duty vehicles so that complete medium-duty ZEVs can now be certified under the zero-emission powertrain certification program; removes references to trailers

Fee analysis

This rulemaking does not involve fees.

Statement of fiscal and economic impact

Fiscal and Economic Impact Overview

DEQ anticipates that the proposed rulemaking will have a fiscal and economic impact. The scope of this fiscal and economic impact statement is to review changes attributable to the specific rule changes proposed in this notice, relative to the current ACT and HD Omnibus rules.

ACT Amendments

The proposed amendments to the Advanced Clean Trucks (ACT) rule introduce key flexibilities designed to reduce compliance burdens on vehicle manufacturers and ensure a smoother transition to zero-emission vehicles (ZEVs) in Oregon.

The amendments providing additional flexibilities could lead to lower costs for manufacturers, fleets, and dealers. Manufacturers could experience a reduction in short-term financial pressures by having additional time to comply with the rules. That extended time could lead to fewer financial penalties for noncompliance, reduced administrative costs through only needing to track sales based on delivery, rather than final purchase, and additional options to certify complete medium duty trucks. With a longer deficit makeup period, truck manufacturers can distribute compliance costs more evenly over three years rather than making steep, immediate price increases on ZEVs. Fleets and dealers could see reduced costs and additional availability of trucks due to manufacturers not having to make price adjustments or restrictions in the conventional vehicle market to offset deficits.

HD Omnibus Amendments

Medium- and heavy-duty vehicle and engine manufacturers, dealers and purchasers would continue to supply and be able to sell and purchase federally certified 2025 and 2026 engines if the proposal to start implementation with engine model year 2027 and vehicle model year 2028 is permanently adopted. The effect is likely to be experienced as lower costs for new vehicle or engine purchasers and/or increased vehicle and engine manufacturer and dealer revenue when compared to the status quo. The fiscal and economic impacts of all other elements of the proposed HD Omnibus amendments, including the adoption of the recent CARB amendments that increase manufacturer zero emission powertrain flexibilities and the elimination of trailer language that was overturned in a court challenge, are expected to be cost neutral to both manufacturers and purchasers.

General Assumptions

ACT Amendments

The proposed amendments to the Advanced Clean Trucks (ACT) rule introduce key flexibilities designed to reduce compliance burdens on vehicle manufacturers and ensure a smoother transition to zero-emission vehicles (ZEVs) in Oregon.

The amendments providing additional flexibilities could lead to lower costs for manufacturers, fleets, and dealers. Manufacturers could experience a reduction in short-term financial pressures by having additional time to comply with the rules. That extended time could lead to fewer financial penalties for noncompliance, reduced administrative costs through only needing to track sales based on delivery, rather than final purchase, and additional options to certify complete medium duty trucks. With a longer deficit makeup period, truck manufacturers can distribute compliance costs more evenly over three years rather than making steep, immediate price increases on ZEVs. Manufacturers may also experience financial relief by not having HHD Omnibus certified engines count toward their deficits in 2026, easing compliance concerns. Fleets and dealers could see reduced costs and additional availability of trucks due to manufacturers not having to make price adjustments or restrictions in the conventional vehicle market to offset deficits.

HD Omnibus Amendments

DEQ anticipates that the proposed rulemaking will have a fiscal and economic impact. Under the proposed HD Omnibus amendments medium- and heavy-duty vehicle and engine manufacturers and dealers would continue to be able to sell new federally certified engines and vehicles through the end of 2026. Vehicle and engine purchasers should see lower costs for new vehicles and engines compared to the status quo. Manufacturers and dealers should experience increased revenue compared to the status quo. Quantifying the specific fiscal impacts of delayed implementation on the affected parties was not possible given uncertainties about the extent of medium- and heavy-duty vehicle supply constraints.

The fiscal and economic impact of providing additional manufacturer flexibility to certify complete medium-duty ZEVs using the ZEP-CERT program is considered to be zero since the certification pathway remains optional for complete medium-duty ZEVs. Non-quantifiable manufacturer cost savings could be realized if manufacturers decide to utilize the additional certification pathway.

Impacts of greenhouse gas emissions

The overwhelming scientific consensus is that global warming is primarily caused by human activity, and that major reductions in GHG emissions are urgently needed across all sectors in order to avert the worst effects of climate change. In Oregon, the transportation sector accounts for 35% of GHG emissions.

Higher temperatures, changing precipitation patterns, reduced snowpack, drier summers, and more frequent and damaging fires are being experienced in Oregon. Increased GHG emissions exacerbates drought, tree mortality and the frequency and magnitude of wildfire events. In 2019 alone, Oregon experienced 2,000 wildfires that burned roughly 665,000 acres of forest and rangeland. It cost the state nearly half a billion dollars to suppress these fires. Depending on the extent of GHG emissions released, average temperatures in Oregon are expected to increase by 4°F to 9°F (2.2°C to 5°C) over the course of the century. Within the next three decades, most locations in Oregon are likely to have more frequent heatwaves, often measured as consecutive days above a particular high temperature threshold. (OGWC Biennial Report, 2020). With the higher temperatures, it can result in reduced snowpack thereby limiting the amount of hydropower available when demand for electricity is high in the summertime and causing reduced streamflow that could threaten commercial and tribal fisheries. Without actions to mitigate these effects, human health and safety, infrastructure, economic growth, crop production, water supplies, and fish and wildlife populations will continue to be at risk.

The impact of this proposed rule package on greenhouse gas emission in Oregon is described in the “Greenhouse gas emissions reductions” subsection of the “Statement of cost compliance section” below.

Impacts of truck and vehicle engine emissions

Gasoline- and diesel-powered vehicles harm human health and the environment via emissions of pollutants such as fine particulate matter, air toxics, sulfur oxides and oxides of nitrogen, a precursor to the formation of ground level ozone. These emissions disproportionately impact low-income communities and communities of color. Communities across Oregon, including the Portland-metropolitan area and the Rogue Valley have experienced increasing levels of ozone in recent years. Increasing levels of ozone – or smog – leads to a wide variety of health effects including aggravated asthma, decreased lung function and chronic obstruction pulmonary disease. Exposure to diesel engine exhaust is associated with a variety of effects, including increased risk of certain cancers, including lung and bladder cancers, cardiovascular effects including an increased risk of heart attacks, and pulmonary effects, such as upper respiratory system irritation and decreased lung functions. DEQ estimates 176 premature deaths, 24,910 lost workdays, and annual costs from exposure to diesel engine exhaust costs Oregonians \$3.5 billion every year.⁹ The ACT and HD Omnibus Rules reduce NOx and PM emission associated with diesel emissions. As a result of these reductions, a 2021 analysis done by MJ Bradley estimates Oregon can expect to see fewer premature deaths, reduced mortality, fewer hospital and emergency room visits and fewer missed days of work and school, resulting in over \$1.8 billion in reduced health costs by 2050.¹⁰ Proposed amendments to delay HD Omnibus Rule implementation and provide additional flexibility under the ACT Rule will lead to increased diesel exhaust emissions in the early years of the program.

⁹ The Concerns about Diesel Engine Exhaust, Oregon DEQ, 2015

¹⁰ Oregon Clean Trucks Program, MJ Bradley and Associates, 2021

Overall, and for the reasons described above, the fiscal impact of Oregon adopting these proposed amendments to the ACT and HD Omnibus Rules is expected to have a direct impact on truck manufacturers, fleet owners, dealers and indirect impact on the public.

Statement of cost of compliance

State agencies

ACT Amendments

The ACT rule requires vehicle manufacturers that supply trucks for sale in Oregon to deliver ZEV trucks for sale in Oregon, including flexibilities for how they meet their ZEV sales requirements. There is no direct impact on State agencies associated with these rules or proposed amendments.

HD Omnibus Amendments

DEQ anticipates that the impact to state agencies that purchase new medium- and heavy-duty vehicles will be similar to other local governments and businesses that purchase new medium- and heavy-duty vehicles. The proposed amendments will result in the elimination of any concerns over new vehicle supply associated with the HD Omnibus rules through the end of 2026. There are also indirect benefits that will likely be realized as cost savings on the purchase of each new medium- and heavy-duty vehicle through 2026 due to lower lifecycle DEF usage, lower warranty costs, reduced likelihood of vehicle surcharges and avoided market disruptions such as temporary sales stoppages of medium- and heavy-duty vehicles.

Local governments

ACT Amendments Impacts on local governments are expected to be the same as the impacts on state agencies.

HD Omnibus Amendments

There are no direct costs of compliance for local governments, however, local governments that purchase new medium- and heavy-duty vehicles, may experience indirect cost savings as described for non-DEQ state agencies on a per-vehicle basis.

Public

Benefits of the regulations

ACT Amendments

The ACT regulation will result in more medium- and heavy-duty ZEVs in use in Oregon. With more ZEVs on the road replacing conventional trucks, it will reduce emissions of greenhouse gases and other air quality pollutants. Overall, the increased ZEV availability and use furthers Oregon's goals to reduce greenhouse gas emissions to 45 percent below 1990 levels in 2035 and to an 80 percent reduction below 1990 levels in 2050.

The benefits of the proposed ACT amendments through providing more options for manufacturers to meet compliance could reduce the overall cost of ZEV adoption, leading to lower prices for businesses and, ultimately, consumers.

HD Omnibus Amendments

The proposed amendments ensure the stability of the new medium- and heavy-duty vehicle market through 2026 by permanently adopting a two-year delayed implementation of the HD Omnibus rule. The amendments would reduce the risk of temporary sales stoppages and additional market disruptions that may have broader economic impacts.

Greenhouse gas emissions reductions

One of the key benefits to these rules is the anticipated reduction in CO₂ emissions. As discussed earlier, impacts as a result of greenhouse gas emissions are significant and these rules will address some of the threats posed by increased GHG emissions. Overall, the estimated cumulative emissions reductions in Oregon as a result of the ACT rule is expected to be between 1.8 million metric tons ("MMT") and 2.4 MMT by 2040. This is based on CARB's analysis and other studies looking at the effects of the ACT rule in Oregon.¹¹ DEQ estimates the cumulative CO₂ reductions from 2024 through 2040 to be 2.4 MMT. An International Council on Clean Transportation (ICCT) study looked at modeling results for Oregon and determined it would result in avoided CO₂ emissions of 1.8 million tons total for the period of 2020-2040. This analysis also applied Oregon specific numbers on the anticipated sales of ZEV trucks in Oregon and the resulting benefits.

A study by MJ Bradley and Associates looked at the combined effects of adopting the ACT and HD Omnibus in Oregon. It estimated Oregon's reduction of GHG emissions would be 49.7 MMT amounting to a monetized value of \$8.1 billion over the next 30 years.¹² While these assumptions are higher than other analyses included in this fiscal analysis, the differences are likely due to the models used to run the assumptions including the how Oregon's electric grid mix was characterized and whether it factored in Oregon's decarbonization efforts as a result of HB 2021(2021).

¹¹ DEQ utilized CARB's extensive analysis, research and methodology to estimate emissions reductions when the rules were originally adopted in 2021. While CARB's information is California specific, DEQ determined a scaled approach to fit Oregon's demographics and vehicle usage was appropriate in characterizing the potential impacts in Oregon. Additional studies that evaluated Oregon-specific scenarios were used in combination with the CARB analysis to provide a range of potential anticipated reductions.

¹²Oregon Clean Trucks Program, MJ Bradley and Associates, 2021

Proposed amendments to provide increased flexibilities under the ACT rule and delay of the HD Omnibus rule until 2027 may result in deployment of fewer of the cleanest diesel engines through the end of 2026 and potentially fewer deployed ZEVs due to the increased deficit makeup period. This will erode the emissions benefits of the Clean Truck Rules in total, with the largest impact during the early years of the program. Indirect impacts associated with the adoption of the ACT amendments that increase the certification pathways for medium-duty zero emission vehicles are expected to be emissions neutral based on the CARB analysis.

Criteria air pollutant emissions reductions

For these rules, DEQ utilized CARB's analysis and methodology to estimate the emissions reductions and scaled them to fit Oregon's demographics and vehicle usage. Analyzing the impacts of the ACT rule only, DEQ estimates the NOx reductions in 2040 to be 3.9 tpd and 0.12 tpd in PM2.5 reductions. Based on Clean Fuels Program scenario modeling on the effects of the ACT rule, DEQ estimates the reduction from 2025 to 2035 is a PM reduction of 180 metric tons, reduction in NOx of 699 metric tons, based on the Greenhouse Gases, Regulated Emissions, and Energy Use in Technologies model (GREET) tailpipe emission factors. ICCT study estimates the reduction in NOx emissions from 2020-2040 is 12,506 tons per year and for PM2.5 is 130 tons per year.

The HD Omnibus regulation could result in a 17.5% reduction (2,570 tons/year) of on-highway NOx emissions and a 4% reduction (29 tons/year) in on-highway PM2.5 by 2035 in Oregon according to a report from the Manufacturers of Emission Controls Association. One model (Alpine Geophysics) predicted ozone in the Portland metropolitan area would be reduced by as much 3 parts per billion in 2028 if these rules were implemented.

The MJ Bradley and Associates study looked at the combined effects of adopting the ACT and HD Omnibus in Oregon. The study estimated it would reduce NOx emission by 223,200 metric tons and PM2.5 by 1,290 metric tons. It could result in potentially avoiding 156 premature deaths, 118 hospital visits, and 83,579 minor health complications, such as acute bronchitis and exacerbated asthma, by 2050.

As described in the CO2 emissions reductions section above, the proposed amendments will erode the criteria pollutant reductions and public health benefits associated with ACT and HD Omnibus by the degree to which vehicle manufacturers fail to hit ZEV deployment targets in 2025 and 2026 and to not deliver Omnibus-compliant engines through the end of 2026. These reductions in benefits are likely to occur and will hinge on the scope of vehicle manufacturers utilization of expanded flexibilities.

Environmental Justice

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, culture, education or income with respect to

the development, implementation and enforcement of environmental laws, regulations and policies. DEQ is committed to incorporating environmental justice best practices into its programs and decision-making, to ensure all people in Oregon have equitable environmental and public health protections.

If adopted, the proposal to delay implementation of the HD Omnibus rules mean that new, conventionally fueled trucks sold in Oregon in 2025 and 2026, will not be 75% lower NOx emitting as originally intended in the rules. Instead, the requirements for lower emitting medium- and heavy-duty vehicles would be delayed until engine model year 2027. DEQ recognizes that emissions from medium- and heavy-duty vehicles disproportionately impact some communities more than others. Those communities are typically lower income and have more people that identify as black, indigenous and people of color. However, due to manufacturer delays in delivering HD Omnibus compliant engines available for sale in both 2024 and 2025, Omnibus rule implementation in either of those years would not have brought significant tailpipe emission reductions. With HD Omnibus compliant engines becoming more available in 2026 DEQ expects that delaying implementation through the end of 2026 means that Oregon will not see maximum available tailpipe emission reduction benefits that were originally anticipated when the rule was first adopted in 2021. It is possible that lower polluting conventionally fueled vehicles with HD Omnibus certified engines could be sold in Oregon either in 2025 or 2026 even without the rule requirements being in effect since a number of these products will be available on the California market. But DEQ does not anticipate the volume of such sales to be high in Oregon during 2025 and 2026 given expected higher manufacturer retail prices on vehicles with HD Omnibus certified engines.

DEQ determined that delaying the HD Omnibus Rule and the risk of losing an additional two years of implementation was preferable to (1) having little to no new diesel engines available for purchase in the medium-duty vehicle segment, (2) reduced product availability in the heavy heavy-duty vehicle segment and (3) manufacturer sales restrictions due to uncertainty over the outcome of recent federal action revoking the previously approved California waiver for the HD Omnibus rules. Fleets retaining older, dirtier engines for longer due to product unavailability was not a preferred outcome and would be more likely if the delayed implementation was not adopted. DEQ determined that the pollution reduction benefits to be gained from the implementation of the rules starting with model year 2027 and beyond outweighed the loss of the 2025 and 2026 engine model years. The risk of losing the emissions benefit to environmental justice communities and the public as a whole beginning in 2027 and beyond was not a preferred outcome. DEQ determined that these proposed rule amendments represent the option that posed the least harm to communities suffering from disproportionate impacts associated with medium- and heavy-duty vehicle pollution.

The Advanced Clean Trucks Rule is designed to increase the penetration of lower emitting, zero emission heavy-duty technology and achieve NOx and GHG emissions reductions through advanced clean technology. The proposed amendments would still preserve these goals while also providing manufacturers additional flexibility in offsetting

incurred deficits for a given model year as well as other proposed changes that would assist with credit availability, reporting, and rule implementation. DEQ determined that failing to act to incorporate the Advanced Clean Truck amendments put these rules at risk of not meeting the identity requirements described in Section 177 of the Federal Clean Air Act.

DEQ sought input from representatives of environmental justice and clean air advocacy groups as participants on the rulemaking advisory committee as it developed these proposed amendments.

Other considerations

The ACT rule is expected to result in more ZEV trucks in Oregon. Because ZEV trucks require less maintenance than their diesel counterparts, there may be some associated job losses as diesel engine mechanics are less in demand over the long term, 10+ year time horizon. However, these job changes will be mitigated by the significant increase in new job opportunities in the clean technology sector. This includes the need for electric charging infrastructure providers and ZEV maintenance electricians.

Anticipated costs of the regulation

ACT Amendments

Under the ACT rule, there are no direct costs to the public, since the requirement is only on medium- and heavy-duty vehicle manufacturers to sell ZEV vehicles. However, there may be indirect costs on purchasers, dealers, and the public. Manufacturers could pass on the costs to truck purchasers who could pass those costs on to customers and costs of goods being transported. There may be some manufacturers who choose not to sell in Oregon as a result of the regulations. For truck purchasers the upfront purchase costs of ZEVs are higher than those of conventional vehicles due to the higher battery costs and the need to install charging infrastructure. These costs are described in more detail in the “Large businesses” section below. It is anticipated that the initial purchase price of medium- and heavy-duty ZEVs will fall over time as technology advances, battery costs decline, and an economy of scale is achieved. While the ACT regulation will result in more medium- and heavy-duty ZEVs in use in Oregon, these amendments incorporating additional compliance flexibilities may result in fewer ZEVs deployed in Oregon. These proposed amendments may result in a smaller reduction of air quality pollutants and greenhouse gas emissions than anticipated at the time DEQ implemented the original rule.

HD Omnibus Amendments

There are no direct costs to the public associated with the proposed amendments because they are focused on new medium- and heavy-duty engine and vehicle manufacturers. However, there may be indirect costs associated with the one-year delayed implementation as described in the environmental justice section above. It is possible that adoption of these proposed amendments could lead to increased tailpipe emissions compared to the status quo. Any increase in tailpipe emissions would be directly connected to the volume of HD Omnibus compliant engines that are made

available for sale in 2025. With a limited volume of HD Omnibus compliant engines available for sale on the market in 2025, manufacturers would have only been able to comply with the rules in Oregon in 2025 by limiting their sales of new conventionally fueled medium- and heavy-duty vehicles and engines. Because of the limited number of available HD Omnibus compliant engines, any increased emissions associated with the proposed amendments would not necessarily be expected to occur along vehicle travel routes.

Large businesses - businesses with more than 50 employees

ACT Amendments

Large businesses, specifically truck manufacturers and truck dealers selling new vehicles, are affected by ACT rules. Per CARB's analysis on the effect of the ACT rules on large businesses, it is anticipated Oregon's rules would affect the same entities. CARB estimates ten large truck manufacturers sell vehicles affected by the rules, and DEQ concludes that is also true for Oregon. Other businesses that could be affected include electric utilities, vehicle dealers, and fleets. Under the ACT rule there will be more electric vehicle deployment resulting in an increased demand for electricity and ultimately increased revenue for electric utilities.

Medium and Heavy-Duty Vehicle Manufacturers

The impacts outlined below reflect the costs of complying in Oregon as a result of adopting proposed ACT amendments. The proposed amendments providing additional flexibilities for manufacturers allow for additional compliance options, potentially resulting in an increase in credit availability, and will improve overall market conditions in the short term.

For medium and heavy-duty vehicle manufacturers the proposed amendments will reduce costs of compliance with the Advanced Clean Trucks rule in at least 2025 and 2026, with a potential to reduce costs in 2027 and beyond. Manufacturers will still be required to deliver zero emission vehicles over time. While they will bear the cost of developing the technology, supporting the market, and changing their business model to help Oregon move towards a zero-carbon transportation future, manufacturers will have significantly more time for this transition.

There is some risk to vehicle manufacturers in the event that they have to sell vehicles below cost to purchasers to meet the requirements of the regulation. Those costs could be passed on to conventional diesel or gasoline powered trucks in their manufacturing line and in effect result in higher costs to purchasers of those vehicles. Alternatively, manufacturers may not be able to pass on the costs to other vehicles classes or choose to absorb the costs themselves.

Medium and Heavy-Duty Vehicle Dealers

Oregon Medium and Heavy-Duty Vehicle Dealers could see immediate relief from the practice of manufacturers limiting the sale of diesel vehicles in Oregon. This means that the amendments and new program will reduce costs associated with lost or delayed sales right away. Longer term, dealers should not face additional costs associated with the increasing zero emissions vehicle delivery requirements that manufacturers face because the marketing, sale, and service of ZEVs can be a profitable business model. Incorporating ZEV sales alongside sales of traditional diesel vehicles will allow for a long and stable transition period, made longer and more gradual by amendments, for Oregon vehicle dealers to participate and profit from the zero-emissions vehicle industry in the future.

Businesses with Medium and Heavy-Duty Vehicle Fleets

Oregon businesses with fleets of medium and heavy-duty vehicles will not face increased costs as a result of proposed amendments. The ACT rule requires vehicle manufacturers to deliver ZEV trucks for sale in Oregon, including flexibilities for how they meet their ZEV sales requirements. There is no direct impact associated with these rules or proposed amendments on large businesses with fleets.

Fleets can purchase the vehicles that best suit their business needs which may or may not include ZEVs. However, the ACT regulation will result in an increased number of ZEVs for purchase and provide additional options for purchasers and fleets. Additionally, businesses that can transition to ZEV fleets more easily may want to take advantage of savings through the lower total cost of ownership for ZEVs or accumulating credits under Oregon's Clean Fuels Program as mentioned above.

Currently, medium- and heavy-duty ZEVs are more expensive to purchase than gasoline or diesel trucks, however, the overall total cost of ownership is less than conventional trucks due to reduced fuel and maintenance costs. According to CARB's analysis, model year 2024 ZEV trucks are approximately twice the price of a conventional vehicle.¹³ There are a number of costs included besides the vehicle and battery costs, but also costs to build out and install the infrastructure necessary to charge the vehicles, upgrade existing charging infrastructure to ensure it can meet charging capacity needs, fueling, workforce training, and maintenance.

The proposed amendments provide increased flexibilities, compliance options, credit availability, and other provisions easing the transition to zero emissions vehicles. Currently, vehicle manufacturers are not providing adequate supply of medium- and heavy-duty vehicles, either internal combustion engine or zero emissions, to the Oregon market. This may result in Oregon businesses with these vehicle types in their fleets to need to hold onto older vehicles longer than their useful life or planned retirement schedule. The proposed amendments will alleviate this situation by opening up more vehicle availability in the Oregon market, lessening any potential indirect impact.

¹³ [Zero-Emission Class 8 Truck Pricing Comparisons – EU & US, CARB, 2024](#), accessed on 3/15/2025.

Oregon businesses could experience positive impacts due to potentially increased volumes of available trucks to purchase.

HD Omnibus Amendments

Under the proposed rules, large businesses that manufacture medium- and heavy-duty engines are expected to experience increased sales compared to status quo. The predicted increase in sales would be due to avoided 2025 and 2026 market disruptions such as potential temporary sales stoppages of medium- and heavy-duty engines.

There are no direct costs of compliance for large businesses who are exclusively purchasers of new medium- and heavy-duty vehicles. However, these businesses may experience the indirect benefit of reduced costs under the proposed rules identical to those described for non-DEQ state agencies on a per-vehicle basis.

For large businesses that sell new medium- and heavy-duty vehicles, indirect benefits are primarily associated with increased sales compared to the status quo directly related to avoided 2025 and 2026 market disruptions. That is because adoption of the proposed rule amendments reduces the risks of potential temporary manufacturer sales stoppages of medium- and heavy-duty vehicles associated with the HD Omnibus rules in 2025 and 2026. For large businesses that planned, designed and produced HD Omnibus certified compliant engines to be sold in Oregon they may not realize expected returns on that product investment. That may be due to vehicle purchasers having alternative, lower cost federally certified engines available.

There are no direct costs of compliance for large businesses who are involved in carrying out warranty repairs on medium- and heavy-duty vehicles. However, if the proposed amendments are adopted, there could be indirect costs on these businesses associated with the increased number of federally certified engine sales that manufacturers would be permitted to sell in 2025 and 2026. An increase in federally certified engine sales would likely decrease the demand for warranty repairs over time since federally certified 2025 and 2026 engines would have shorter warranties.

Small businesses – businesses with 50 or fewer employees

a. Estimated number of small businesses and types of businesses and industries with small businesses subject to proposed rule.

ACT Amendments

Under the proposed ACT rules, no small businesses would incur compliance costs to sell MHD ZEV trucks because they are exempt from the requirements if they sell fewer than 500 vehicles in a year. Small businesses may see indirect impacts as a result of the rule if they choose to purchase ZEV trucks. DEQ estimates the same impacts as described for large businesses related to Oregon vehicle dealers and Oregon businesses with fleets. These impacts are described in the large businesses section above.

HD Omnibus Amendments

Under the proposed HD Omnibus rule amendments, there are no small businesses directly affected; therefore, no estimated number is provided. All the vehicle manufacturers subject to the requirements have more than 50 employees. However, small businesses that purchase new medium- and heavy-duty vehicles and vehicle dealers who sell these new vehicles may experience indirect cost savings if the proposed amendments are adopted.

For small businesses who purchase new medium- and heavy-duty vehicles, indirect costs are identical to costs described for non-DEQ state agencies on a per-vehicle basis.

For small businesses that sell new medium- and heavy-duty vehicles, indirect benefits are primarily associated with 1) cost savings related to avoided 2025 and 2026 market disruptions such as potential temporary manufacturer sales stoppages of medium- and heavy-duty vehicles and 2) increase in expected sales due to increased number of vehicles available to be sold in 2025 and 2026.

For small businesses that are involved in warranty repairs for new medium- and heavy-duty vehicles the indirect costs would be similar to those described for large businesses engaged in similar warranty repair work.

b. Projected reporting, recordkeeping and other administrative activities, including costs of professional services, required for small businesses to comply with the proposed rule.

Under the proposed ACT rules, no activities are required of small businesses to comply with the proposed rules, unless they are a manufacturer with more than 500 sales per year.

Under the HD Omnibus proposed rule amendments there are no anticipated direct increased costs to small businesses associated with reporting, recordkeeping and other administrative activities.

c. Projected equipment, supplies, labor and increased administration required for small businesses to comply with the proposed rule.

ACT Amendments

Under the proposed ACT rules, no additional activities are required of small businesses to comply with the proposed rules unless they are a manufacturer with more than 500 sales per year.

HD Omnibus Amendments

Under the HD Omnibus proposed rule amendments there are no anticipated direct increased costs to small businesses associated with equipment, supplies, labor and increased administration.

d. Describe how DEQ involved small businesses in developing this proposed rule.

DEQ included organizations that represented small businesses on the Clean Truck Rules 2025 Updates Advisory Committee. The committee advised DEQ on the cost of compliance for small businesses.

Documents relied on for fiscal and economic impact

Document title	Document location
2020 OGWC Biennial Report to Legislature	https://static1.squarespace.com/static/59c554e0f09ca40655ea6eb0/t/5fe137fac70e3835b6e8f58e/1608595458463/2020-OGWC-Biennial-Report-Legislature.pdf
Energy Innovation and UC Berkley's 2035 Report: Transportation	Download The 2035 2.0 Report from UC Berkeley 2035 The Report (2035report.com)
2024 Proposed Amendments to the Advanced Clean Trucks Regulation and the Zero-Emission Powertrain Certification Test Procedure Staff Report: Initial Statement of Reasons	https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2024/actzepcert/isor.pdf
Second 15-Day Changes to the 2024 Proposed Amendments to the Advanced Clean Trucks Regulation and the Zero-Emission Powertrain Certification Test Procedure, Appendix A-1	https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2024/actzepcert/2nd15daya1.pdf
CARB Heavy-Duty Engine and Vehicle Omnibus Rule Staff Report: Initial Statement of Reasons (ISOR)	https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2020/hdomnibuslownox/isor.pdf
CARB Heavy-Duty Engine and Vehicle Omnibus Rule Staff Report: Initial Statement of Reasons (ISOR), Appendix C-3: Further Detail on Costs and Economic Analysis	https://ww3.arb.ca.gov/regact/2020/hdomnibuslownox/appc3.pdf

Document title	Document location
CARB Initial Statement of Reasons for the Advanced Clean Trucks rule	https://ww2.arb.ca.gov/sites/default/files/classic/regact/2019/act2019/isor.pdf
Updated Costs and Benefits Analysis for the Proposed Advanced Clean Trucks Regulation	https://ww2.arb.ca.gov/sites/default/files/classic/regact/2019/act2019/30dayattc.pdf
Clean Trucks Analysis, Costs & Benefits of State-Level Policies to Require No- and Low-Emission Trucks (MJ Bradley & Associates study), 2021	https://www.erm.com/globalassets/documents/mjba-archive/reports/2021/clean-trucks-technical-report-final-09jun21.pdf
Oregon Clean Trucks Program: An Analysis of the Impacts of Zero-Emission Medium- and Heavy-Duty Trucks on the Environment, Public Health, Industry, and the Economy (MJ Bradley & Associates study), 2022	https://www.erm.com/contentassets/f3d6061dd8a04147a3f38b7db256ae44/or-clean-trucks-report.pdf
California's Advanced Clean Trucks regulation: Sales requirements for zero-emission heavy-duty trucks (ICCT study)	https://theicct.org/sites/default/files/publications/CA-HDV-EV-policy-update-jul212020.pdf
Zero-Emission Class 8 Truck Pricing Comparisons – EU & US, CARB 2024	https://ww2.arb.ca.gov/sites/default/files/2024-12/Zero%20Emission%20Class%208%20Tractor%20Pricing%20Comparisons_ADA.pdf
Analysis of Heavy-Duty Vehicle Sales Impacts Due to New Regulation (EPA 2021)	https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P101246N.pdf
The Concerns about Diesel Engine Exhaust, Oregon DEQ, 2015	Report - The Concerns About Diesel Engine Exhaust, Oregon DEQ
Portland Air Toxics Solutions Committee Report and Recommendations, Oregon DEQ, 2012	https://www.oregon.gov/deq/FilterDocs/PATS2012.pdf
California State Motor Vehicle and Engine and Nonroad Engine Pollution Control Standards; The “Omnibus” Low NOx Regulation; Waiver of Preemption, Decision Document (EPA 2024)	https://www.govinfo.gov/content/pkg/FR-2025-01-06/pdf/2024-31125.pdf

Document title	Document location
A Report on Actions for Medium- and Heavy-Duty Vehicle Energy and Emissions Innovation, (EPA & DOE 2024)	https://www.energy.gov/sites/default/files/2025-01/MHDV-Report-Actions-2024-12-19.pdf
Clean Truck Rules - Staff Report to Oregon's Environmental Quality Commission, Nov 2021	https://www.oregon.gov/deq/EQCdocs/111721_C_CleanTrucks.pdf
CARB Initial Statement of Reasons (ISOR) for Proposed Amendments to the Heavy-Duty Engine and Vehicle Omnibus Regulation	https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2023/hdomnibus2023/isor.pdf
California's Heavy-duty omnibus regulation: Updates to emission standards, testing requirements, and compliance procedures, International Council on Clean Transportation (ICCT), 2022	https://theicct.org/wp-content/uploads/2022/01/california-us-hdv-omnibus-reg-jan22.pdf
CARB Heavy-Duty Engine and Vehicle Omnibus Regulation and Associated Amendments: Final Statement of Reasons (FSOR)	https://ww2.arb.ca.gov/sites/default/files/barcu/board/rulemaking/hdomnibuslownox/fsor.pdf
Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards – Final Rule, December, 2022	https://www.epa.gov/system/files/documents/2023-01/new-motor-veh-air-poll-control-hd-eng-veh-stnd-frm-2022-12-20.pdf
U.S. heavy-duty vehicle NOx standards: Updates to emission limits, testing requirements, and compliance procedures, ICCT, July 2023	https://theicct.org/wp-content/uploads/2023/07/us-nox-standards-update-jul23.pdf
CARB and the Truck and Engine Manufacturers Association Agreement (Clean Truck Partnership), July 2023	https://ww2.arb.ca.gov/sites/default/files/2023-07/Final%20Agreement%20between%20CARB%20and%20EMA%202023_06_27.pdf
Clean Truck Partnership Commitments – Status and Outcome	https://ww2.arb.ca.gov/clean-truck-partnership
Advanced Clean Trucks Memo to Board Re: California Truck Availability Analysis, CARB Executive Officer Steven Cliff (September 2024)	https://ww2.arb.ca.gov/sites/default/files/2024-09/240925_actmemo_ADA_0.pdf

Document title	Document location
In-use NOx and black carbon emissions from heavy-duty freight diesel vehicles and near-zero emissions natural gas vehicles in California's San Joaquin Air Basin	https://doi.org/10.1016/j.scitotenv.2023.168188
Ecommerce and environmental justice in metro Seattle	https://www.sciencedirect.com/science/article/pii/S0739885923001221

Advisory committee fiscal review

DEQ appointed an advisory committee.

As ORS 183.333 requires, DEQ asked for the committee's recommendations on:

- Whether the proposed rules would have a fiscal impact,
- The extent of the impact, and
- Whether the proposed rules would have a significant adverse impact on small businesses; if so, then how DEQ can comply with ORS 183.540 reduce that impact.

ACT Amendments

Committee members agreed with Oregon DEQ's analysis that proposed rules could result in indirect costs to the public and Oregon public and private fleets. Committee members expressed concern about potential reductions in air quality benefits associated with the previously proposed Oregon Optional Credit Program. Others indicated a preference for delaying the Advanced Clean Trucks rule implementation date to 2027. Some committee members pointed out that zero emissions vehicle technology does not meet the needs of specific sectors such as logging and heavy-duty tow trucks. Committee members broadly supported the adoption of California amendments to the Advanced Clean Trucks rule.

HD Omnibus Amendments

The committee provided feedback on the overall draft fiscal and economic impact analysis provided by DEQ. Committee member concerns included interest in delaying the rules until 2027 to align with the federal requirements, the complexity of the rules, and the lack of vehicle availability for specific parts of the new medium- and heavy-duty vehicle market – specifically in the medium-duty engine sector since those products will not be available in 2026. There was a discussion about the meaning of both direct and indirect impacts as described in the draft fiscal impact document. Other concerns raised were about the previously proposed Oregon specific optional credit program under the ACT rules which would likely reduce NOx and particulate matter credits available to offset sales of engines under the HD Omnibus rules. As a result, Oregon should

consider a similar Oregon specific credit allocation program under the HD Omnibus rules, especially if California amends their rules to allow additional sales of legacy engines (those meeting federal emission standards) in 2026. Another committee member requested DEQ perform a specific analysis of how many Omnibus certified compliant vehicles would be delivered to Oregon in 2026 versus how many new federally certified diesel vehicles would not come into the state in order to quantify the specific emission reduction benefits from a 2026 implementation.

Housing cost

As ORS 183.534 requires, DEQ evaluated whether the proposed rules would have an effect on the development cost of a 6,000-square-foot parcel and construction of a 1,200-square-foot detached, single-family dwelling on that parcel. DEQ determined the proposed rules would have no direct effect on development costs because they only affect manufacturers of new medium- and heavy-duty vehicles and engines.

ACT Amendments

The Advanced Clean Trucks Rule is being revised to incorporate commitments made between the California Air Resources Board (CARB) and the truck manufacturers in the Clean Truck Partnership.¹⁴ The proposed changes include:

- Increased Deficit Makeup Period – Manufacturers now have three years instead of one year to balance their ZEV deficits.
- New definition for how credits are generated – Manufacturers can now generate a credit based on a vehicle delivered for sale, rather than to the ultimate purchaser in Oregon.
- Additional flexibility in 2026 for the cleanest Heavy Heavy-Duty (HHD) Engines - Specific HD Omnibus certified engines would not generate deficits in 2026 under the ACT Rule, easing compliance for manufacturers of the subject heavy heavy-duty internal combustion engine (ICE) trucks.

In addition to these proposed rule changes, on May 15th, 2025, DEQ issued enforcement discretion for model years 2025 and 2026 in response to federal uncertainty in Oregon's truck market.

These proposed amendments will increase compliance options and flexibility in addition to providing additional credits for manufacturers, reducing the total short-term delivery of zero emissions vehicles for sale in Oregon as required by the existing Advanced Clean Trucks Rule.

Any discussion of potential housing cost increases or impacts is necessarily focused on the indirect impacts on the cost of transporting of housing construction materials from the existing Advanced Clean Trucks Rule requirements to deliver and make increasing

¹⁴ [CARB and the Truck and Engine Manufacturers Association Agreement \(Clean Truck Partnership\), July 2023](#), accessed on 3/4/2025.

percentages of zero emissions vehicles available for sale in Oregon. And while the Advanced Clean Trucks Rule may in fact increase these indirect transportation costs and impacts, the proposed amendments will decrease these impacts in at least 2025 and 2026 and perhaps for longer. For these reasons DEQ estimates no increase in housing costs in Oregon associated with these proposed rules.

HD Omnibus Amendments

The proposed rule amendments would:

- 1) Delay implementation of the Emission Standards for New Heavy-Duty Trucks (HD Omnibus) in OAR Chapter 340, Division 261 by two years. The proposed rule would delay the start of these new regulations from engine model year 2025 to engine model year 2027.
- 2) Update the existing HD Omnibus rules to match revisions adopted by California in 2024 that allow complete MD ZEVs to be certified under the zero-emission powertrain certification program.
- 3) Eliminate certain rule references to trailers that were overturned in a court challenge.

If the proposed HD Omnibus amendments are adopted indirect impacts to transportation costs that are related to the supply of new medium- and heavy-duty vehicles are possible. DEQ is unable to estimate the extent of such an impact. However, that impact would likely be to avoid an increase in the price of new vehicles associated with supply restrictions and lack of market availability of HD Omnibus compliant engines for model year 2025 and 2026.

These indirect impacts to transportation costs could lead to an indirect effect on housing development costs because the rules could influence the price of materials and/or services used in housing construction. For example, manufacturers subject to the proposed amendments may not increase new medium- and heavy-duty truck prices as much or may offer more conventionally fueled vehicles for sale. Smaller price increases for and greater market availability of new medium- and heavy-duty vehicles could lead to housing related businesses that purchase these vehicles limiting price increases for their own products and services which may in turn moderate any associated housing development cost increases. Because these impacts are indirect and depend on the individual decisions of multiple businesses before resulting in housing cost fluctuations, DEQ is unable to estimate the amount of these indirect costs.

Racial equity

ORS 183.335(2)(a)(F) requires agencies to provide a statement identifying how adoption of the rule will affect racial equity in this state.

Medium- and heavy-duty engine and vehicle emissions disproportionately impact some communities more than others. Increased exposures to these sources of pollution can be due to working and living in close proximity to major transportation corridors, distribution centers and/or industrial facilities that typically concentrate medium-and heavy-duty truck traffic. Those communities are typically lower income and have more people that identify as black, indigenous and people of color and exposure to diesel emissions contributes to higher rates of respiratory diseases, heart conditions, and other serious health impacts.

ACT amendments

DEQ's racial equity analysis focuses on how the proposed Advanced Clean Trucks rules impact racial equity. The adoption of California's recent amendments to the Advanced Clean Trucks Rule, which provide additional compliance flexibilities for manufacturers, could slow the transition to zero-emission vehicles and hinder progress toward racial equity in Oregon. While these flexibilities may ease regulatory burdens for manufacturers, they also risk delaying the deployment of clean trucks that would significantly reduce pollution in frontline communities. Given that communities of color and low-income neighborhoods are disproportionately affected by diesel emissions, any slowdown in the adoption of zero-emission vehicles prolongs their exposure to higher levels of harmful pollutants. DEQ also determined that the pollution reduction benefits to be gained from the full implementation of the rules over the coming years outweighs the limited deployment of ZEVs in the early years of the program.

HD Omnibus amendments

A two-year delay in stronger emissions standards means continued exposure to elevated levels of NOx from new conventionally fueled medium- and heavy-duty vehicles, further exacerbating existing health disparities and environmental injustices. Action to delay implementation of the HD Omnibus rules until 2027 and incorporate recent CARB amendments are critical to ensuring that all communities, regardless of race or income, benefit from cleaner air and improved public health outcomes into the future. DEQ also determined that the pollution reduction benefits to be gained from the full implementation of the rules over the coming years outweighs the loss of the 2025 and 2026 engine model years.

Environmental justice considerations

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, culture, education or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. DEQ is committed to incorporating environmental justice best practices into its programs and decision-making, to ensure all people in Oregon have equitable environmental and public health protections.

Increased exposures to these sources of pollution can be due to working and living in close proximity to major transportation corridors, distribution centers and/or industrial facilities that typically concentrate medium-and heavy-duty truck traffic. People living, working, and playing near transportation infrastructure in Oregon experience disproportionate health and environmental impacts from exposure to diesel exhaust.

ACT amendments

The proposed amendments likely mean communities will not experience the benefits of lower healthcare costs and improved health care in the near term due to potentially fewer ZEVs deployed in Oregon. Overall, the rule provides requirements for increasing ZEV targets ensuring long-term improvements. The pollution reduction benefits to be gained from the full implementation of the rules over the coming years can help outweigh the potentially fewer ZEVs deployed in the early years of the program.

HD Omnibus amendments

DEQ recognizes that emissions from medium- and heavy-duty vehicles disproportionately impact some communities more than others. Those communities are typically lower income and have more people that identify as black, indigenous and people of color.¹⁵ If adopted, the proposal to delay implementation of the HD Omnibus rules mean that new, conventionally fueled trucks sold in Oregon through the end of 2026, will not be 75% lower NOx emitting as originally intended. Instead, the requirements for lower emitting medium- and heavy-duty vehicles would be delayed until engine model year 2027.

In addition, increased flexibilities for manufacturers to certify complete MD ZEVs under the CARB amendments are considered to be emissions neutral based on analysis by the CARB. DEQ sought input from specific environmental justice communities and clean

¹⁵ [Portland Air Toxics Solutions Committee Report and Recommendations, Oregon DEQ, April 2012](#), accessed on 3/20/2025. See also [“Inequity in consumption of goods and services adds to racial-ethnic disparities in air pollution exposure”](#), Tessum et al., March 2019, accessed on 3/20/2025; [“Space-Based Observational Constraints on NO2 Air Pollution Inequality From Diesel Traffic in Major US Cities”](#), Demetillo et al., Aug 2021, accessed on 3/20/2025; [“In-use NOx and black carbon emissions from heavy-duty freight diesel vehicles and near-zero emissions natural gas vehicles in California’s San Joaquin Air Basin”](#), Ma et al., Jan 2024, accessed on 3/20/2025; [“Ecommerce and environmental justice in metro Seattle”](#), Fried et al., Mar 2024, accessed on 3/20/2025

air advocacy organizations as it developed this rule proposal as part of its advisory committee process.

DEQ determined that:

- 1) Failure to adopt a two-year delay to the HD Omnibus rules risks creating significant challenges to implementation if (1) the rules only end up applying for a portion of engine model year 2025, (2) manufacturers restrict new vehicle supply due to limited HD Omnibus certified compliant engines and (3) uncertainty around the recent federal action to revoke the California waiver leads to manufacturers refusing to sell new engines and vehicles in Oregon in 2025 and 2026.
- 2) Failure to adopt the recent CARB amendments to the ZEP-CERT program puts the original rule at risk of not meeting the identity requirements described in Section 177 of the Federal Clean Air Act.
- 3) The pollution reduction benefits to be gained from the implementation of the rules starting with model year 2027 and beyond outweighs the loss of engine model years 2025 and 2026 alone.
- 4) The risk of losing the emissions benefit to environmental justice communities beginning in 2027 and beyond is not a preferred outcome.
- 5) The proposed rules related to delayed implementation pose the least harm to communities suffering from disproportionate impacts associated with medium- and heavy-duty vehicle pollution.

Land use

Land-use considerations

In adopting new or amended rules, ORS 197.180 and OAR 340-018-0070 require DEQ to determine whether the proposed rules significantly affect land use. If so, DEQ must explain how the proposed rules comply with statewide land-use planning goals and local acknowledged comprehensive plans.

Under OAR 660-030-0005 and OAR 340 Division 18, DEQ considers that rules affect land use if:

- The statewide land use planning goals specifically refer to the rule or program, or
- The rule or program is reasonably expected to have significant effects on:
- Resources, objects, or areas identified in the statewide planning goals, or
- Present or future land uses identified in acknowledge comprehensive plans

DEQ determined whether the proposed rules involve programs or actions that affect land use by reviewing its Statewide Agency Coordination plan. The plan describes the programs that DEQ determined significantly affect land use. DEQ considers that its programs specifically relate to the following statewide goals:

Goal	Title
5	Natural Resources, Scenic and Historic Areas, and Open Spaces
6	Air, Water and Land Resources Quality
11	Public Facilities and Services
16	Estuarine Resources
19	Ocean Resources

Statewide goals also specifically reference the following DEQ programs:

- Nonpoint source discharge water quality program – Goal 16
- Water quality and sewage disposal systems – Goal 16
- Water quality permits and oil spill regulations – Goal 19

Determination

DEQ determined that these proposed rules do not affect land use under OAR 340-018-0030 or DEQ's State Agency Coordination Program.

EQC prior involvement

The Oregon's Environmental Quality Commission:

- Adopted the original Advanced Clean Trucks rule and Heavy-Duty Low NOx Omnibus rule on Nov. 17, 2021.
- Adopted temporary rules amending these programs on Nov. 21, 2024, to incorporate recent rule changes by California and maintain identicality.
- Heard informational items from DEQ staff on March 13, 2025, and May 8, 2025, about the cost of vehicles, charging infrastructure and vehicle availability, and ongoing interested party engagement related to these rules.

Advisory committee

Background

DEQ convened the Clean Truck Rules 2025 Updates advisory committee. The committee included representatives from truck and engine manufacturers, environmental organizations, vehicle dealers, vehicle service providers, trade associations, and public fleets and met three times. The committee's web page is located at: [Clean Truck Rules 2025 Updates](#)

The committee members were:

Clean Truck Rules 2025 Updates Advisory Committee		
Name	Representing	Sector
Carrie Nyssen	American Lung Association - NW	Public Health Advocates
Ty Kelly	Beaver Coaches	Dealers – Heavy-Duty Vehicles
Ray Clayton	City of Portland	Public Medium- and Heavy-Duty Fleets
Brett Morgan	Climate Solutions	Environmental Advocates
Michael Graham	Columbia-Willamette Clean Cities Coalition	Clean Transportation & Alternative Fuel Coalition
Matthew Spears	Cummins	Engine Manufacturers
Sean Waters	Daimler	Vehicle & Engine Manufacturers
Don Emerson	FMI	Dealers – Medium-Duty Trucks

Jeremy Butzlaff	MTR Western	Private Medium and Heavy-Duty Fleets
Mary Peveto	Neighbors for Clean Air	Environmental Advocates
Tim Miller	Oregon Business for Climate	Business and Environmental Advocates
Jana Jarvis	Oregon Trucking Association	Trucking Industry Advocates
Jason Muggy	Pape Group	Dealers – Heavy-Duty Vehicles
Nancy Bennett	PGE	Utilities – Privately Owned
Tom Van Heeke	Rivian	Vehicle Manufacturers
John Barnes	TEC	Dealers – Heavy-Duty Vehicles
Zach Kahn	Tesla	Vehicle Manufacturers
Timothy French	Truck & Engine Manufacturers Association	Vehicle and Engine Manufacturers
Sam Wilson	Union of Concerned Scientists	Environmental Advocates
Xitlali Torres	Verde	Environmental Advocates, Low-Income and Minority Communities
Michael Ganny	Watt EV	Electric Charging Infrastructure Providers

Meeting notifications

To notify people about the advisory committee's activities, DEQ:

- Sent GovDelivery bulletins, a free e-mail subscription service, to the following lists:
 - Climate Protection Program
 - DEQ Public Notices
 - Diesel and Biodiesel
 - Greenhouse Gas Programs
 - Greenhouse Gas Reporting
 - Low Emission/Zero Emission Vehicle Program
 - Oregon Clean Fuels Program
 - Oregon Clean Vehicle Rebate Program
 - Rulemaking
 - Third Party Verification Program
 - Truck Efficiency/Reduced Idling
 - Vehicle Inspection Program Updates
- Posted meeting information and materials on the rulemaking web page.
- Added advisory committee announcements to DEQ's calendar of public meetings at [DEQ Calendar](#).

Committee discussions

In addition to the recommendations described under the Statement of Fiscal and Economic Impact section above, the committee was informed about the impacts of diesel pollution in Oregon¹⁶, background and context for the initial adoption of the rule in 2021 and the subsequent temporary rule adopted in 2024. Committee members discussed the goals and challenges of the proposed rules during all three advisory committee meetings. These discussions included detailed analysis, opinions, and experiences among members and their personal and professional networks. The following topics were discussed in more detail:

- The importance of the ACT and HD Omnibus rules for improving air quality and reducing the public health impact of pollution from the transportation sector
- Availability of new conventionally fueled medium- and heavy-duty vehicles for sale in Oregon
- Suitability of new medium- and heavy-duty ZEVs for different end uses
- Availability of ZEV credits
- Sales of medium- and heavy-duty ZEVs
- Maintaining rules that are identical with California
- Exemption of additional specific vehicles sectors

In addition, committee members provided their perspective on the anticipated impact of the existing rules and proposed amendments. Their input ranged from support for maintaining the current rule implementation schedule to support for delaying implementation for both the ACT and HD Omnibus rules until 2027, with a handful of opinions that Oregon DEQ pursue options in between these two opposing benchmarks. DEQ requested any additional committee comments or feedback be submitted in writing within five days of each advisory committee meeting. DEQ is proposing to adopt rules that reflect our best understanding of the appropriate path forward given the circumstances.

ACT Amendments

The committee discussed the proposal to adopt CARB's recent amendments to the ACT rule as well as the previously proposed Oregon's Optional Credit Program, providing an additional compliance pathway for manufacturers who choose to participate. Committee members shared a wide variety of comments on these proposals. Some members had questions about the applicability of California rules in various states of review and adoption as they pertain to Oregon. Others understood Oregon's proposed rules as directly in unison with California's current ACT rule and amendments.

Committee members pointed out acute needs for truck availability across the Oregon medium and heavy-duty market. They largely disagreed with each other on the best and most effective strategies to achieve this goal. Some argued that increased delivery of zero emissions vehicles from manufacturers was the most appropriate next step. Others

¹⁶ [The Concerns about Diesel Engine Exhaust, Oregon DEQ, 2015](#), accessed on 3/20/2025.

said that the new flexibilities and previously proposed optional credits should be sufficient to meet the need. Another group pushed back at the notion that Oregon DEQ support the truck market by providing optional credits to manufacturers, preferring delayed implementation, which DEQ issued on May 15, 2025.

The Rulemaking Advisory Committee spent a lot of time talking about the anticipated air quality and climate emissions impacts of the proposed rules. Committee members stated with equal confidence that emissions benefits would occur only if ACT rules were delayed and that they would only occur if ACT rules were fully implemented. Advocates for delay said new diesel vehicles are cleaner and would improve air quality outcomes. Advocates for zero emissions vehicles said that only zero emissions vehicles can address the air quality concerns in question. DEQ staff participated and listened to these divergent views and proposed rules accordingly.

HD Omnibus Amendments

The committee discussed the HD Omnibus proposed draft rules to permanently delay rule implementation by one year (codifying the previously adopted temporary rule). Some committee members expressed concern that further postponement of these rules would delay needed diesel emission reductions for front line communities that experience disproportionate harm. Some committee members expressed concern about a lack of available 2026 HD Omnibus compliant engines and vehicles especially for specific sectors which could lead to temporary new vehicle sales stoppages. Concerns were also raised about the increased vehicle costs associated with the improved technology that is required for Omnibus-certified compliant engines.

Public engagement

Public notice

DEQ provided notice of the proposed rulemaking and rulemaking hearing by:

- On March 28, 2025, Filing notice with the Oregon Secretary of State for publication in the April 2025 Oregon Bulletin;
- Posting the Notice, Invitation to Comment and Draft Rules on the web page for this rulemaking, located at: [Clean Truck Rules 2025 Updates](#);
- Emailing approximately 28,288 interested parties on the following DEQ lists through GovDelivery:
 - Rulemaking
 - DEQ Public Notices
 - Diesel and Biodiesel
 - Low Emission/Zero Emission Vehicle Program
 - Truck Efficiency/Reduced Idling
- Emailing the following key legislators required under [ORS 183.335](#):
 - Representative John Lively, Chair, House Committee on Climate, Energy, and Environment
 - Senator Janeen Sollman, Chair, Senate Committee on Energy and Environment
 - House Speaker Julie Fahey
 - Senate President Rob Wagner
- Emailing advisory committee members,
- Posting on the DEQ event calendar: [DEQ Calendar](#)

Public hearing

DEQ held two public hearings. DEQ received a total of 30 comments at the hearings. Later sections of this document include a summary of the 666 comments received during the open public comment period, DEQ's responses, and a list of the commenters. Original comments are on file with DEQ.

Presiding officers' record

Hearing 1

Date	Wednesday April 30, 2025
Place	Online
Start Time	2:24pm
End Time	3:05pm
Presiding Officer	Rachel Sakata

Date: Wednesday, April 30, 2025

Place: Online

Start time: 2:24 p.m.

End time: 3:05 p.m.

Presiding officer: Rachel Sakata, Air Quality Transportation Strategies Section

The presiding officer convened the hearing, summarized procedures for the hearing, and explained that DEQ was recording the hearing. The presiding officer asked people who wanted to present verbal comments to type their name in the meeting chat to indicate their intent to present comments. The presiding officer advised all attending parties interested in receiving future information about the rulemaking to sign up for GovDelivery email notices by signing up on the rulemaking website.

As Oregon Administrative Rule 137-001-0030 requires, the presiding officer summarized the content of the rulemaking notice.

53 people attended by webinar. 10 people commented orally, and 1 person submitted written comments at the hearing.

Hearing 2

Date	Tuesday May 6, 2025
Place	Online

Start Time	2:19pm
End Time	3:19pm
Presiding Officer	Rachel Sakata

Date: Tuesday, May 6, 2025

Place: Online

Start time: 2:19 p.m.

End time: 3:19 p.m.

Presiding officer: Rachel Sakata, Air Quality Transportation Strategies Section

The presiding officer convened the hearing, summarized procedures for the hearing, and explained that DEQ was recording the hearing. The presiding officer asked people who wanted to present verbal comments to type their name in the meeting chat to indicate their intent to present comments. The presiding officer advised all attending parties interested in receiving future information about the rulemaking to sign up for GovDelivery email notices by signing up on the rulemaking website.

As Oregon Administrative Rule 137-001-0030 requires, the presiding officer summarized the content of the rulemaking notice.

49 people attended by webinar. 19 people commented orally at the hearing.

Summary of public comments and DEQ responses

Public comment period

DEQ accepted public comment on the proposed rulemaking from March 28, 2025, until 4 p.m. on May 7, 2025.

For public comments received by the close of the public comment period, the following section organizes comments into 74 categories with cross references to the commenter number. DEQ's response follows the summary. Original comments are on file with DEQ.

DEQ changed the proposed rules in response to comments described in the response sections below.

Comment #1: General support for the Clean Truck Rules 2025 amendments

DEQ received 3 comments in this category from commenters 31, 43, 493 expressing general support for the proposed amendments to the Clean Truck Rules.

Response:

These amendments were designed to provide targeted short-term relief without undermining the long-term goals of the ACT and Heavy-Duty Low NOx Omnibus rules. By aligning with California's updates, Oregon ensures consistency across the West Coast, enabling manufacturers and fleets to plan and invest with greater certainty. For ACT and Heavy-Duty Low NOx Omnibus the use of enforcement discretion for model years 2025 and 2026 and the decision to delay reflects DEQ's recognition of early market challenges deploying new emissions-reducing technologies while preserving the long-term ZEV sales trajectory.

This approach helps mitigate near-term disruption while reinforcing the rules' public health and climate benefits. The amendments maintain all the California requirements and advance implementation with practical and temporary adjustments that allow manufacturers to continue delivering ICE trucks while ramping up ZEV production.

Comment #2: General opposition to the Clean Truck Rules 2025 amendments

DEQ received 3 comments in this category from commenters 240, 341, 472 expressing general opposition to the proposed amendments to the Clean Truck Rules.

Response:

DEQ acknowledges concerns about the 2025 amendments. The agency carefully considered these perspectives and sought a balanced path forward. The amendments do not change the overall structure or targets of the ACT or HDO rules. Rather, they temporarily ease early-year compliance through enforcement discretion on ACT, without weakening Oregon's long-term ZEV sales requirements. Similarly, they provide short-term flexibility regarding the delivery of HDO compliant engines through 2026.

This policy choice reflects DEQ's commitment to climate and air quality while responding to stakeholder feedback regarding market disruption, supply chain bottlenecks, and economic pressures. Oregon remains firmly on track to implement the full Clean Truck Rules in alignment with California over the next ten years.

Comment #3: General support for the Clean Truck Rules overall

DEQ received 308 comments in this category.

- Commenters 5, 13, 14, 15, 19, 27, 29, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 54, 55, 56, 57, 58-65, 66-87, 89-130, 197, 218, 240, stated that it makes sense to synchronize our policies with California.
- Commenter 15 states that they live on an arterial street and that they believe these rules will help with reducing particulate matter on and around their property, improving the breathability of the air.
- Commenter 19 describes both rules as "a crucial step in tackling diesel pollution."
- Commenter 277 supports the rules because we are at a climate tipping point, and we need to take every opportunity to reduce emissions. Trucks are a big part of the emissions footprint, and these rules complement other climate rules already in place.
- Commenters 16, 17, 20, 28, 30, 31, 45-53, 97, 135, 161, 167, 203, 218, 239, 275, 278, 280, 281, 282, 284, 285, 286-289, 291-293, 295, 296, 298, 299, 302, 304, 306, 308, 314, 323-462, 465, 469, 471, 473, 475, 476+, 479, 487, 488, 491, 493, 494, 496, 499, 645-648, 649, 657, 658, 664 support the rules.
- Commenter 479 stated that Oregon needs clean transportation policies to meet our state's climate and clean air goals.
- Commenter 469 stated that addressing pollution from heavy-duty trucks in Oregon is a win for the climate and a win for social justice.

Response:

DEQ believes the Clean Truck Rules are essential to reducing diesel pollution, improving public health, and addressing climate change. The ACT and Omnibus rules represent proven, science-based strategies to reduce harmful air pollutants and greenhouse gas emissions, particularly in communities overburdened by transportation-related emissions.

The rules' structure, including a gradual phase-in, flexibility for manufacturers, and alignment with other states helps ensure they are achievable while protecting Oregon residents and the environment. DEQ remains committed to using this policy framework to drive long-term emissions reductions and health improvements.

Comment #4: General opposition to the Clean Truck Rules overall

DEQ received 18 comments in this category.

- Commenters 2, 3, 4, 6, 7, 8, 9, 12, 21, 22, 23, 24, 32, 226, 322+, 480 expressed general opposition.
- Commenter 21 questions if carbon molecules truly affect climate and wonders if the proposed rules are for the purpose of mitigating climate change or are they for profit? Thinks that "adopting policy from any state having a fiscal track record like California is begging attention from trouble." Believes that fleet manufacturers are already doing the right things.

Response:

Some commenters expressed skepticism about the Clean Truck Rules' necessity or their economic impacts. DEQ understands that these rules, over the long term, represent significant changes. However, the proposed rules were carefully developed to ensure long lead times, available flexibilities, and pathways to compliance without banning diesel vehicles or imposing fleet mandates.

DEQ's obligation is to protect public health and implement effective emissions reduction strategies. The Clean Truck Rules were adopted following robust public process and analysis and remain central to Oregon's climate action and air quality improvement plans.

Comment #5: Clean Truck Rules – Delay implementation of the rules

DEQ received 181 comments in this category.

- Commenter 322+ requested that the rules be delayed for at least two years.
- Commenters 242, 245, 248, 251, 252, 255, 256, 258, 260-273, 300, 303, 305, 311, 315, 317-319, 464, 480, 486, 490, 492, 497, 501 ask for the rules to be delayed 10 years or more
- Commenters 97, 135, 161, 323-462 stated that manufacturers should commit to complying with the rules in good faith as a condition of adopting any delays.

Response:

DEQ has responded to concerns about ACT implementation timing by issuing enforcement discretion for model years 2025 and 2026. This grace period allows manufacturers to continue delivering internal combustion engine vehicles to the Oregon market without penalty if ZEV sales do not meet early targets, provided there are no restrictions on diesel truck availability. In addition, DEQ modified the proposal to delay the implementation of the HD Omnibus rules until 2027. DEQ made the decision to propose delaying the rules for an additional year after reviewing comments submitted under this proposal and ongoing and increased uncertainty regarding the status of the federal Clean Air Act waiver. DEQ expects these steps will address compliance feasibility and dealer access without changing the design of the Clean Truck Rules or delaying their long-term requirements. DEQ believes this approach protects both Oregon's economy and environment by ensuring progress continues while recognizing near-term challenges.

Comment #6: Clean Truck Rules – Do not delay implementation of the rules

DEQ received 329 comments in this category.

- Commenters 197, 466, 479, 650, 656, 657 stated that the rules are long overdue and should not be delayed.
- Commenters 54-87, 89-166, 168-196, 198-202, 204-217, 219-220, 231, 241, 243, 249, 279, 290, 330, 331, 340, 341, 487, 495, 498, 500, 502-644 stated that DEQ should not change the rules adopted in 2021 just because local manufacturers spent the last four years failing to prepare for these new electric truck standards.
- Commenter 470, 476+, 479 stated that delaying clean truck policies will directly harm low-income communities and communities of color which are disproportionately exposed to harmful diesel emissions.
- Commenter 475 stated that when we delay rules like this, we are sending a clear message: corporate profits matter more than the health and lives of Oregonians.

Response:

DEQ agrees that action is needed to address the public health impacts of diesel pollution. One of the primary reasons that the EQC adopted these technology forcing rules in 2021 was to reduce diesel pollution from medium- and heavy-duty vehicles. The ACT and HD Omnibus rules are designed to reduce emissions from these major sources while allowing the market time to adjust.

The 2025 proposed amendments attempt to maintain the trajectory of Oregon's climate and diesel pollution reduction goals by reducing emissions over time. They also provide targeted enforcement flexibility in response to new economic and political uncertainty. DEQ remains committed to achieving the original rule's long-term ZEV adoption goals.

Comment #7: Clean Truck Rules – Costs to small businesses

DEQ received 7 comments in this category.

- Commenters 3, 8, 9, 25, that stated small and medium-sized businesses that are forced to comply with the Clean Truck Rules face substantial financial burdens associated with these technology-forcing mandates. Some of these burdens are said to directly contribute to layoffs, temporary and permanent, at dealerships and have a compounded effect on businesses when recent tariffs that were enacted at the federal level this year are considered.
- Commenter 25 states that implementing these rules now will have massive costs that will bury small businesses. Believes the small businesses that survive will be passing off these massive costs to consumers.
- Commenter 257 stated a concern that the trucks they have purchased within the last year may not pass emissions standards much longer and that they cannot afford to buy new trucks only to have them become non-compliant within 1-2 years.
- Commenter 322+ stated that the rules threaten small businesses that upfit and service diesel equipment. They also stated that the rules have effectively banned access to new clean diesel models, threatened American auto jobs by restricting engine manufacturers from Oregon markets and threaten livelihoods and the economy overall.

Response:

DEQ acknowledges concerns raised by small businesses and has structured the Clean Truck Rules to allow flexibility and support. Enforcement discretion, credit trading, exemptions for low-volume manufacturers, and state incentive programs are all intended to ease financial impacts. The rules would only apply to new vehicles sold and not to existing used vehicles that fail to pass emissions standards.

DEQ is also evaluating how future funding opportunities and incentive program adjustments can be better tailored to support small fleets and rural businesses. The agency is committed to an equitable transition that recognizes the needs of Oregon's small business community.

Comment #8: Clean Truck Rules – Economic impacts

DEQ received 14 comments in this category.

- Commenters 3, 22, 23, 26, 244 stated that the increased compliance costs associated with these rules will result in higher overall prices for goods and services when those costs are passed on to consumers. The costs have disproportionate impacts on low-income families which end up shifting costs of these rules to the individuals the Clean Truck Rules are trying to protect.

- Commenter 22 states that fire trucks for emergency response cost \$1 million and asks what happens when an EV battery for a fire truck dies. Questions if diesel backup generators would be used as the solution. Believes that “nothing can match a diesel truck.”
- Commenters 22, 23, 26 Say that manufacturers and dealers cannot sell diesel trucks because they are being forced to prioritize ZEV trucks that either underperform or don’t exist. State that blue collar jobs, truck drivers’ livelihoods, and overall economic stability are at risk. Think that “DEQ has created a patchwork credit system that is even more extreme than California’s standards—leaving Oregon businesses confused, burdened, and at legal risk.”
- Commenter 244 stated that being a CARB opt-in state is expected to have a negative impact on employment within the transportation industry in Oregon.
- Commenters 470, 476+, 479, 491 stated that the rules are projected to prevent premature deaths and yield over \$2 billion in net benefits annually through 2050 including avoided health costs. Commenter 294 shared a similar perspective with slightly different economic impacts.

Response:

DEQ’s rulemaking was informed by analyses demonstrating that long-term public health savings, reduced operating costs for fleets, and climate benefits outweigh initial expenditures. The ACT rules do not require fleets to purchase ZEVs and allow compliance through manufacturer targets and credits. And while the HD Omnibus rules require the newest ICE powered vehicles to have lower tailpipe emissions the estimated benefits of the rule outweigh any product development costs as described in the fiscal and economic impact statement and in the CARB Initial Statement of Reasons.

Federal and state incentives, utility investment, and workforce development efforts are in place to reduce burdens and create new opportunities. DEQ will continue to work with partners to manage impacts while securing lasting economic and environmental returns for Oregonians.

Comment #9: Clean Truck Rules – Market impacts

DEQ received 5 comments in this category.

- Commenters 3, 27 stated that these rules undermine the principles of free-market capitalism and that by forcing businesses to comply with these rules the state is stifling innovation and creating an environment where companies are not free to explore alternative solutions that could better serve their needs and those of their customers.
- Commenter 27 believes that the proposed rules will help with market certainty, affirming clean technology.
- Commenters 470, 479 stated that the rules provide ample flexibility, including multiple compliance pathways with no mandatory purchase requirements for

dealers or fleets ensuring that clean trucks are feasible and achievable without straining businesses.

Response:

The ACT rules allow manufacturers to retain discretion over how to meet sales targets, and fleets are not required to purchase any specific technology. Rather, the rule ensures zero emission trucks enter the market over time in areas where existing technology meets market needs. The HD Omnibus rules do not require any specific type of technology, engine or emissions control equipment design but instead require that manufacturers meet more restrictive and attainable emission standards with their newest engines.

DEQ believes that this structure fosters innovation, supports long-term investment, and provides regulatory certainty. While the shift may be challenging, it is necessary to meet Oregon's climate and health goals. However, despite the flexibilities built into these rules DEQ's announced ACT enforcement discretion along with the proposed delayed implementation of the HD Omnibus rules until 2027 are actions designed to provide relief to the broader industry during a time of significant federal and market uncertainty.

Comment #10: Clean Truck Rules – Alternative policy recommendations

DEQ received 56 comments in this category.

- Commenter 3 stated that what is needed are more flexible, market-driven approaches that allow for innovation and empower businesses to invest in sustainable solutions without the threat of government overreach.
- Commenter 11 stated that DEQ should incentivize 50mg NOx or better heavy-duty trucks either through a regulatory change, a fee structure, or other mechanism that does not require federal approval. They also stated that DEQ should work with CARB to develop an indexing of credits that would create a deficit for engines sold that are dirtier than 50mg NOx, a neutral credit for those engines that naturally meet the 50mg NOx standard, and a positive compliance credit for those engines that certify to lower than 50mg for the foreseeable future.
- Commenter 12 requested that DEQ and the EQC draft a letter to CARB asking that they amend their regulations so that section 177 states that would like to adopt identical rules would have the flexibility to make progress while infrastructure develops “and would make more progress with a focus on 2b-4 and incentives for Class 7 – 8 tractors – limiting the specialty use vehicles that do not have current ZEV options and insufficient credits in an opaque market.”
- Commenters 13, 14, 16, 17, 20, 28, 30, 31, 45-53, 167, 203, 218, 239, 275, 278, 281, 282, 284, 286-289, 291-293, 295, 296, 298, 299, 302, 304, 306, 308, 314, 465, 471, 473, 494, 496, 499, 645-648 suggested that a strong reliance on data is needed to make sure that voluntary credit over supply does not happen, that manufacturers have to demonstrate ongoing progress in ZEV truck sales to qualify for voluntary credits (and at least one ZEV annually), and that OEMs that

receive voluntary credits in years 2025/2026 commit to refraining from ratio-based limitations or any sales restrictions for at least 5 years.

- Commenter 320 stated that it would be simpler and more effective to phase out older trucks that are on the road which would cut more pollution than the ACT and is a more realistic approach similar to what is being done in the Portland Metro, but it could be expanded statewide.

Response:

DEQ appreciates constructive alternatives and will continue to explore complementary solutions. The current rule framework was adopted to ensure consistency with California, as required by federal law under Section 177 of the Clean Air Act. Flexibility within this framework exists and DEQ is proposing additional flexibility in this rule package.

DEQ is actively using the flexibility within the existing rule to support a smooth transition. This includes temporary enforcement discretion, investment in fleet incentive and infrastructure programs, and ongoing coordination with other states and CARB. DEQ welcomes ongoing dialogue and will continue evaluating complementary strategies, including those focused on legacy fleet turnover and specialized vehicle incentives, as part of Oregon's broader emissions reduction strategy.

Comment #11: Clean Truck Rules 2025 Amendments harms proactive engine manufacturers that planned delivery of cleaner ICE engines ahead of schedule

DEQ received 1 comment in this category from commenter 11 stating that delaying the ACT with optional credits while at the same time delaying the implementation of Omnibus regulations sends a negative message to proactive OEMs who made investments necessary to meet the more stringent standards.

Response:

DEQ recognizes and values the early action taken by some manufacturers to produce cleaner ICE engines. These engines contribute meaningfully to emissions reductions and the proposed rules do not restrict these engines from being sold in Oregon. DEQ understands that the proposed amendments may reduce the return on investment that manufacturers expected when delivering cleaner ICE powered vehicles and ZEVs.

The ACT temporary enforcement discretion for 2025 and 2026 along with the proposed delayed implementation of the HD Omnibus rules until 2027 are actions designed to provide relief to the broader industry during a time of significant federal and market uncertainty. DEQ's approach maintains fairness while ensuring the overall rules remain intact.

Comment #12: Clean Truck Rules 2025 Amendments should not allow the proliferation of diesel trucks

DEQ received 1 comment in this category from commenter 11 stating that DEQ should not allow the proliferation of diesel trucks under the proposal.

Response:

Diesel is the dominant fuel used by the commercial transportation sector and diesel engines offer fuel economy, power and durability. Despite the operational advantage of diesel trucks the pollutants that they emit are harmful. The Clean Truck Rules are designed to reduce the harmful pollution emitted from the newest medium- and heavy-duty vehicles but they do not ban diesel trucks. DEQ expects that reliance on diesel powered trucks will continue into the future especially in sectors where ZEV adoption is not available or impractical. Transitioning to cleaner methods of transporting goods will take time and that gradual process is reflected within the original ACT rule by the incremental year over year ZEV targets through 2035. In the meantime, the HD Omnibus rules will ensure that, once implemented, all new diesel powered medium- and heavy-duty vehicles sold in Oregon will be much less polluting.

Comment #13: Advanced Clean Trucks Rule – General support for rule

DEQ received 10 comments in this category from commenters 88, 239, 312, 381, 402, 482, 485, 491, 499, 659 expressing general support for the rule.

Response:

DEQ welcomes continued support for the ACT rule. The structure of the rule is carefully crafted to allow market adaptation while steadily increasing the availability of zero-emission trucks. The rule's benefits are especially important for reducing diesel exposure in environmental justice communities. DEQ remains committed to implementing the rule in a way that is transparent, achievable, and aligned with public health priorities.

Comment #14: Advanced Clean Trucks Rule – General support for adoption of CARB amendments

DEQ received 3 comments in this category from commenters 294, 484, 499 expressing general support for the adoption of the CARB amendments.

Response:

Proposing the CARB amendments ensures Oregon maintains legal consistency with Section 177 requirements and retains access to a broader regional market of ZEV vehicles. This decision protects Oregon consumers and manufacturers from regulatory fragmentation and supports ongoing compliance planning. DEQ's proposal of the CARB amendments reflects a commitment to a harmonized and effective regulation.

Comment #15: Advanced Clean Trucks Rule – General opposition to rule

DEQ received 21 comments in this category.

- Commenters 1, 4, 9, 10, 26, 223, 225, 226, 227, 229, 283, 313, 316, 319, 320, 474, 478+, 480, 661 expressing general opposition to the rule.
- Commenters 478+, 661 stated that the rule should be repealed.

Response:

DEQ understands that some stakeholders remain opposed to the ACT rule. However, the agency's responsibility is to protect public health and implement policies that meet Oregon's environmental mandates. The ACT rule is a key component of the state's emissions reduction strategy and offers structured flexibility for manufacturers to comply. Repealing or significantly weakening the rule would risk Oregon's alignment with other states, delay emissions reductions, and increase long-term costs to public health and the environment. The agency also recognizes that early implementation years have brought challenges due to federal actions related to tariffs, Congressional Review Act, and incentive programs which contribute to overall market uncertainty.

In response to these disruptions DEQ committed to enforcement discretion for model years 2025 and 2026. This directive temporarily relieves manufacturers from penalties related to ZEV sales shortfalls but requires continued availability of ICE vehicles in Oregon and encourages continued ZEV deployment. It is a pragmatic, short-term step designed to stabilize the market, protect Oregon's truck buyers, and maintain the integrity of the ACT program. The long-term ZEV targets remain in place and unchanged.

Comment #16: Advanced Clean Trucks Rule – Uphold and strengthen the rule

DEQ received 158 comments in this category.

- Commenters 246, 312, 443, 493 stating that DEQ should uphold and strengthen the ACT program.
- Commenter 254 stated that DEQ should not allow truck manufacturers to evade the ACT rule.
- Commenters 97, 135, 161, 312, 323-462 stated that DEQ should not reward manufacturer non-compliance.

- Commenters 276, 466, 470, 491, 499, 650, 659 stated that the ACT rule should not be delayed or further weakened.
- Commenter 294 stated that the ACT structure when you include the 2024 CARB amendments and the expected additional 2025 CARB amendments already include sufficient and meaningful compliance flexibilities.
- Commenter 294 stated that an effective delay of rule implementation will reduce the availability of ZE trucks and delay movement toward upfront price parity among ZE and ICE truck models.

Response:

DEQ agrees that the ACT rule is important from an environmental and public health perspective and includes a range of flexibilities. The proposed rule maintains the regulations from 2027 through 2035, ensuring the long-term integrity of the program. Oregon remains committed to implementing the ACT program in full alignment with California's standards.

Comment #17: Advanced Clean Trucks Rule – Delay implementation of the rules

DEQ received 85 comments in this category.

- Commenters 7, 12, 18, 23, 25, 43, 44, 222, 224, 235, 237, 244, 257, 301, 316, 320, 321, 463, 489, 661, 665 requested a delay in general.
- Commenter 7 stated ACT implementation should be at least 3 years.
- Commenters 8, 12, 43, 222, 224, 226, 229, 232, 233, 234, 236, 238, 253, 274, 283, 301, 313, 467, 468, 652, 660 requests delay of the ACT until 2027.
- Commenters 242, 245, 248, 251, 252, 255, 256, 258-273, 300, 303, 305, 311, 315, 317-319, 464, 480, 486, 490, 492, 497, 501 requested a delay of at least 10 years.
- Commenter 25 requests slowing down to give technology and infrastructure a chance to develop in a way that fully supports meeting the requirements of the proposed rules.
- Commenter 225 asks to delay the enforcement timeline for heavy-duty sectors with limited ZEV options.
- Commenters 477 asks to delay the ACT until at least 2027 and include an easy method for further delays.
- Commenter 43 requested enforcement discretion as the method to delay.

Response:

DEQ agrees that the new truck market dynamics in Oregon are not functioning properly. In particular, the preferred ACT compliance strategy of manufacturers not delivering internal combustion engine trucks to Oregon's market to avoid accruing any deficits is failing to meet the needs of dealers and fleets. Due to these factors, and the need to maintain identicality with California, DEQ has proposed rule amendments that increase compliance options and flexibilities for manufacturers. Additionally, DEQ will refrain from pursuing enforcement or assessing civil penalties against any manufacturer of medium- and heavy-duty vehicles (Classes 2b–8) who does not meet the specified ZEV sales percentages of ACT in Oregon for model years 2025 and 2026.

Comment #18: Advanced Clean Trucks Rule – Exemptions for specialized vehicles

DEQ received 6 comments in this category.

- Commenter 12 stated that some of these specialized uses should be exempt because of how difficult it is to acquire credits especially for secondary manufacturers and dealers.
- Commenter 225 stated that there should be clear exemptions or waivers for specialized vehicles such as fuel tankers.
- Commenter 271 stated that there should be an exemption or carve-out for small rural trucking companies or else the rules will threaten local economies and jobs.
- Commenter 283 stated that waste and recycling trucks should be exempt from the rule.
- Commenter 480 stated that DEQ is contradictory in exempting motor coaches and emergency vehicles because these carveouts validate that ACT is too impractical or expensive.
- Commenter 662 stated that recreational vehicles should be exempt from this rule because there are no options for ZE RVs.

Response:

The ACT rule allows flexibility for manufacturers to comply across different vehicle classes, with low initial sales targets, and credit trading mechanisms. The current ZEV sales percentage targets are intentionally modest, allowing manufacturers to continue providing internal combustion engine vehicles for vocational applications where ZEV technology may not yet be suitable, such as fuel tankers and specialized rural trucking. This, plus the proposed amendments and enforcement discretion from Oregon DEQ reduce the need for vocation-specific exemptions.

Comment #19: Advanced Clean Trucks Rule – Rule does not ban diesel vehicles

DEQ received 1 comment in this category from commenter 651 stating that even with cautious growth assumptions, Oregon can expect over 60,000 new ZE trucks on the road by 2036 while diesel sales continue.

Response:

DEQ agrees that ACT does not ban diesel vehicles or vehicle sales in Oregon at any point during the lifetime of policy implementation.

Comment #20: Advanced Clean Trucks Rule – Concerns regarding vehicle and technology feasibility

DEQ received 377 comments in this category stating that:

- ZEVs don't currently meet the needs of buyers of light- and heavy-duty trucks in the agriculture and long-haul sectors (4, 235, 237, 242, 245, 248, 251, 252, 255-273, 300, 303, 305, 307, 311, 315, 317-319, 321, 464, 474, 480, 481, 486, 489, 490, 492, 497, 501) and loaded log trucks (258, 259, 480) or in the medium-duty work truck sector (18, 259, 307, 474, 480)
- There are no viable medium- and heavy-duty ZEVs (313, 468)
- There are no electric vehicle options for the towing industry (652, 654, 655, 660)
- The technology for class 6-8 battery electric vehicles is just not ready (320)
- There is no current ZEV offered with a 4-axle truck option which is currently all we run in our fleet (236)
- ZE vehicle technology is not ready and has 25% less hauling capacity and half the range (7, 301) and doesn't meet the auxiliary power demands of a variety of specialized work trucks that have pumps, hoists and cooling units (18, 474)
- Electric trucks work well in certain applications like airport ground support services but are not easily adopted in other sectors (18)
- While ZE vehicles will be available to meet the needs of simple applications in two years, the more customized products are still years away from reality (234)
- For many applications ZEVs are simply not available (22, 23, 25, 26, 32, 242, 245, 248, 251, 252, 255, 256, 258, 260-273, 300, 303, 305, 311, 315-319, 321, 463, 464, 467, 474, 480, 481, 486, 490, 492, 497, 501, 661, 662).
- The rules do not account for the added engineering necessary to design, develop, and validate specialty vehicles (316)
- Smaller companies are overwhelmed by ZEV adoption because of high prices, long vehicle delivery and infrastructure installation timelines, charging and power needs and location specific issues (18)
- The sales percentage targets are unattainable in real world forest and farm industries (480)
- Charging times of up to three hours render EVs ineffective for our regular long-haul routes (237)
- Electric vehicles are limited in their range (8, 222, 224, 225, 226, 228, 233, 235, 236, 237, 238, 242, 245, 248, 251, 252, 253, 255-274, 300, 301, 303, 305, 311, 315, 317-319, 463, 464, 474, 478+, 480, 486, 489, 490, 492, 497, 501, 661, 663) with class 6-8 EVs having only a third of the range of the diesel equivalent (320)
- Electric garbage trucks have a range of about 100 miles whereas a diesel-powered model has a range in excess of 150 miles which is required for most of our more rural routes (227)

- Diesel trucks can travel 1500 miles before refueling while a comparable ZEV is limited to 200-250 miles. When considering grade, weather and congestion delays the range is reduced significantly which creates unreliable delivery expectations (474)
- Most of our class 7-8 customers are running their vehicles 500 miles a day (663)
- Electric vehicles do not have the power needed (233) or performance needed (22, 23, 26, 235, 242, 245, 248, 251, 252, 255, 256, 258, 260-273, 300, 303, 305, 311, 315, 317-319, 464, 478+, 480, 486, 490, 492, 497, 501)
- Electric vehicles have excessive refueling speed (225) taking a minimum of 8 hours to recharge (320, 663)
- Electric vehicles have long charging delays (242, 245, 248, 251, 252, 255, 256, 258, 260-273, 300, 303, 305, 311, 315, 317-319, 464, 480, 486, 490, 492, 497, 501)
- Electric vehicles do not perform as well in cold weather or when carrying heavy loads (271)
- Electric vehicles have reduced payload due to battery weight (8, 222, 224, 225, 226, 228, 237, 238, 242, 245, 248, 251, 252, 253, 255-258, 260-274, 300, 303, 305, 307, 311, 315, 317-320, 464, 474, 480, 486, 489, 490, 492, 497, 501) which can make it difficult, if not impossible, to interchange trailers within our existing fleet – a critical part of our operations (237)
- We can't even buy EV trucks that could haul 105,500 pounds (8, 9, 221) but even if we could an ZEV equivalent would cost three times a diesel-powered truck and weigh three times a diesel-powered truck (9)
- Companies have reported long lead times when attempting to acquire medium- and heavy-duty ZEVs (481)
- Companies that have purchased ZE garbage trucks discovered that they can only operate for 3-4 hours before requiring charging and therefore need to purchase several extra trucks to be able to operate all day long (10)
- The ACT will lead to more trucks on the roadways (238)
- Electric trucks require customers to buy twice the number of trucks and hire twice the number of drivers to cover an equivalent distance (301)
- It is widely recognized that it will conservatively take 4 ZEV trucks to haul what 3 ICE trucks haul today and increasing the number of commercial vehicles will lead to areas with bad congestion getting worse (474)
- Limited to no ZE truck models available (222) especially for Class 7-8 tractors (11)
- During a test run on I-5 from Grants Pass, OR to Yreka, CA over the Siskiyou pass, an EV truck failed to make the journey and had to be rescued. How might this affect commerce and essential supplies if EVs are used? (23, 26) This incident highlights the current limitations of EV technology for long-haul trucking especially in regions with challenging terrain. (235)
- Our trucks run 24 hours a day and we cannot afford to have trucks sit idle while charging. (257)
- Current diesel and gasoline trucks are better performing, easier to use and more adaptable in extreme weather conditions than a ZEV (259)

- Drivers are limited in the number of hours that they can work in a day and the time they would spend charging every 200+ miles would add time and cost to product delivery (474).
- ZEV repair parts supply chain is not available (242, 245, 248, 251, 252, 255, 256, 258, 260-273, 300, 303, 305, 311, 315, 317-319, 464, 480, 486, 490, 492, 497, 501)

Response:

These technical barriers are steep and DEQ recognizes current limitations in battery-electric vehicle technology, particularly in terms of vehicle range, upfront costs, and suitability for certain vocational uses. In response, the ACT rule starts with relatively low sales targets specifically to accommodate ongoing technological advancements. Proposed amendments increasing flexibility and issuing enforcement discretion for the first two years further acknowledges these challenges, allowing manufacturers to scale up ZEV offerings as technology matures and infrastructure expands.

Going forward, the role of ACT as a technology-forcing regulation seeks to improve these market conditions. By setting a small and increasing ZEV sales target all parties in the market can continue to pursue their specific priorities with enough flexibility to drive incremental change over time.

Estimated ZEV sales targets in 2027 represent between 1% and 2% of the total Oregon MHD fleet. While sales targets are higher as a percentage of vehicles delivered in a model year, these low percentages relative to the total fleet indicate how gradual this change will be on Oregon's roads and within the most suitable initial industries and vocations.

Comment #21: Advanced Clean Trucks Rule – Zero-emission trucks are ready for work

DEQ received 1 comment in this category. Commenter #294 described the variety of ZEV truck models operation in Oregon today and that models are available for purchase to meet the needs of many fleets and common duty cycles with 85% of medium- and heavy-duty vehicles traveling fewer than 100 miles per day. They also stated that given that ZEV percentage requirements for new tractor truck sales plateau at 40% a decade from now, it would be unreasonable to assert that the rule has wide-scale negative impacts on payload.

Response:

DEQ agrees that most of Oregon's medium- and heavy-duty trucks travel approximately 100 miles per day and return each night to the same location. Average mileage patterns of delivery trucks, garbage trucks, school buses, and local freight vehicles demonstrate they can perform their business in a day without relying on public chargers today.

Comment #22: Advanced Clean Trucks Rule – All vehicle sales do not have to be zero-emission

DEQ received 1 comment in this category. Commenter #651 stated that the rules do not require that all medium- and heavy-duty vehicles sold be zero-emission. That means that diesel tow trucks and other vehicles that may not meet the specification requirements for a ZEV can be sold. For example, if class 7 diesel tow trucks are sold other ZEVs in that same class segment like a transit buses or other straight body trucks can be sold which can allow compliance credits to be used for those tow trucks. In addition, the recent CARB ACT amendments have specific provisions related to tow trucks manufacturers and their ability to access credits.

Response:

DEQ agrees that the ACT rule allows ZEV credits in certain market segments to provide manufacturers with compliance options that do not require early electrification of heavier duty, longer haul, or specific vocational market segments. This flexibility is an important element of ACT's overall program design goals, promoting ZEV deployment in areas where the technology is suitable today and allowing continued ICE sales in areas that are not ready to transition well into the future.

Comment #23: Advanced Clean Trucks Rule – Comments on DEQ's fiscal and economic analysis

DEQ received 376 comments in this category.

- Commenter 294 stated that DEQ must better consider the significant economic, public health and environmental impacts of effectively delaying the ACT in these crucial early stages of transition to a clean, efficient, and modern on-road freight system. They also recommend that DEQ further analyze the impacts to compliance costs and benefits compared to the public health and climate change cost benefits of the proposed rules.
- Commenter 316 stated that small and specialty vehicle manufacturers will be disproportionately impacted by the proposed rule if they have less diverse product lines. If they do not build chassis for school buses, transit buses, delivery trucks and short-haul tractors then they would not get the perceived boost in ZEV demand and production that larger more diverse manufacturers would realize by selling those ZEVs.
- Commenter 316 stated that heavy-duty vehicle development is more costly for small business. Autocar's development and compliance costs will be concentrated within its current volume of approximately 3,000 vehicles annually. In contrast, our competitors will spread such costs across tens of thousands of vehicles and multiple product lines, and with vertical integration and robust purchasing power, the competition will gain a significant competitive advantage over its "small town" competitor.

- Commenters 13, 14, 16, 17, 20, 28, 30, 31, 45-87, 89-196, 198-220, 231, 239, 241, 243, 249, 275, 278, 279, 281, 282, 284, 286-293, 295, 296, 298, 299, 302, 304, 306, 308, 314, 340, 359, 465, 470, 471, 473, 476+, 479, 487, 491, 494-496, 498-500, 502-648 stated that by 2050 the rule will save fleet operators over \$1.1 billion annually in fuel and maintenance costs while creating clean technology jobs with wages estimated to be 85% higher than those they replace. Commenter #294 shared similar information on fleet operator cost savings.

Response:

DEQ carefully considered economic, environmental, and public health impacts in adopting the ACT rule. While upfront vehicle costs are higher there are significant long-term economic benefits of lower total ownership costs compared with diesel due to reduced fuel and maintenance expenses. These savings are paired with significant benefits across Oregon's climate goals, Clean Air Act responsibilities, and public health benefits associated with a significant reduction in tailpipe pollution, as referenced in the fiscal and economic impact statement.

Short-term enforcement discretion addresses immediate market pressures, supporting both economic stability and environmental goals. Additionally, DEQ is continuing to support Oregon fleets transition to zero emissions with multiple grant and incentive programs including the Diesel Emissions Mitigation grant, Oregon Zero Emission Fueling and Infrastructure grant, and the ZERO Fleet Rebate program.

Comment #24: Advanced Clean Trucks Rule – Excessive costs

DEQ received 80 comments in this category.

- The cost of replacing engines or vehicles is prohibitive to most trucking businesses, agricultural enterprises (4, 258, 261, 480, 489) and waste hauling services (227)
- Electric Class 8 trucks cost twice as much as diesel equivalents (7, 227)
- Electric options that do exist are cost-prohibitive (8, 222, 225, 226, 228, 233, 235, 236, 237, 238, 242, 245, 248, 251, 252, 253, 255, 256, 258, 259-274, 300, 303, 305, 311, 315, 316-319, 464, 474, 480, 481, 486, 490, 492, 497, 501, 661) or 2-3 times the cost of an ICE truck (229, 283, 301, 316, 320, 463, 474, 661, 663)
- Total cost of ownership of ZEV trucks and the use case of these vehicles pose significant challenges (43, 478+).
- Insurance costs for electric trucks is far more expensive than it is for diesel trucks (227)
- The charging infrastructure installation costs are more than our business could afford (663) – \$7.5 million for 5 charging stations in support of 5 trucks (258)
- The charging costs in rural small towns are more than twice what we pay with PGE so the costs to charge would be too high (259)
- Electric trucks often have higher upfront costs (271)
- When you add all EV truck costs up it is well over four times the cost of a diesel truck which would have to be spread over a fraction of the freight load (301)

- It is not a matter of if we pay for the consequences of truck pollution; it's a matter of who pays and when. Truck makers, now, through a clean truck transition, or our most vulnerable and disadvantaged communities through healthcare costs and climate impacts. It is important to select the most equitable option (312)

Response:

Electric trucks cost more upfront, but total ownership costs are often lower than diesel due to reduced fuel and maintenance expenses. Oregon provides substantial rebates and grants to offset higher initial costs, supporting businesses in making the transition affordable.

The initial price of battery electric trucks, in the heaviest class of vehicles, can be as much as 2.5 times the price of a conventionally fueled diesel vehicle. This price is a barrier to adoption and, for some unknown reason, generally higher in the United States than equivalent technology costs in other countries.

Adding to this cost is the need for depot-based charging infrastructure to support electric vehicle fleet deployments. Based on the information compiled in this staff report it is important to note for fleets that can charge at their home base, overnight, they will be able to rely on Level 2 chargers at an average cost of \$10,000 per installation, with variability based on specific site conditions. For those heavier duty applications and longer-range vehicles that require DC Fast Chargers the average cost is \$100,000 per installation. Both of these charger price estimates are based on DEQ's experience supporting these projects with the Oregon Zero-Emissions Fueling grant program.

Initial deployments indicate that the total cost of ownership for electric vehicles over time is lower due to the reduction in expenses for vehicle maintenance and fuel. Fleets can save up to 50% or more on fuel costs by switching to electric based on initial reports from Oregon fleets working with DEQ. Electric trucks also have fewer moving parts, resulting in lower maintenance costs over the lifespan of the vehicle. They don't require oil changes or other engine maintenance. It is these longer-term cost savings, and the expectation that the costs will continue to come down over time as manufacturers ramp up to scale while improving the underlying technology, that provides clear economic benefits to Oregon fleets that choose to go electric.

Comment #25: Advanced Clean Trucks Rule – Market impacts

DEQ received 142 comments in this category.

- The increased total costs of ownership of EVs will significantly raise annual costs for housing and transportation (1, 319) or increase prices on store shelves in general (22, 23, 26, 229, 301, 319, 320)
- Requirements for ZE garbage trucks will increase the prices for trash service (227)

- Additional trucks will be required to perform the same amount of work in a day (227, 257)
- Many smaller and independent trucking companies and agricultural producers will be driven out of Oregon or be forced to shut down operations (4, 258, 259, 283, 320, 474, 477, 666)
- This will reduce forest small business competitiveness and slow truck efficiency innovation (242, 245, 248, 251, 252, 255, 256, 258, 260-273, 300, 303, 305, 311, 315, 317-319, 464, 480, 486, 490, 492, 497, 501)
- Companies with multi-state operations are choosing to title and register their trucks elsewhere (463)
- Oregon carriers will lose business volume to carriers in other states that don't have these requirements (474)
- The rule will create major supply issues as businesses would not be able to deliver products (258, 320)
- The rule has brought our tow truck business to a complete standstill in Oregon because we cannot order any trucks from manufacturers (654, 655, 660)
- Manufacturers have simply said that they are not dealing with any of these CARB states that have adopted these rules, and they are just not allowing us to have class 6-8 vehicles. Class 6 is our biggest challenge (654)
- The additional cost burdens on businesses make it harder to compete with other states in the region like Idaho, Nevada and Wyoming (4, 320, 653)
- This rule allows the rich to get richer while leaving little for the rest of us (260)
- Manufacturers can continue to sell in other states, so Oregon families are bearing the economic impact (8, 224, 226, 229, 232, 238, 313, 468)
- The ACT regulations disproportionately impact working-class Oregonians who rely on diesel equipment to make a living (235) and rural forest communities (480).
- COVID-19 supply chain disruptions have strained resources needed for manufacturers to comply with the rules (7)
- The rules put local truck companies out of business and give companies outside Oregon a competitive advantage (9)
- All increased costs for these vehicles will be passed on to the consumer in higher costs for all the products that they buy (9, 10)
- Without an adequate supply of new trucks fleets will see increased maintenance costs as they try to keep older trucks on the road (320, 489).
- Dealer sales are down 60-80% in Section 177 states (11, 478+, 653)
- New truck sales have slowed to a near halt in 2025 and in some cases, businesses have been forced to close or lay off employees due to the drop in demand (8, 222, 224, 226, 230, 232, 233, 234, 238, 313, 320, 463, 468, 474, 478+, 654, 661, 663, 665)
- The mandate to sell 1 BEV to enable the sale of 13 ICE trucks is devastating to the truck dealer business and employees and would shut down our business (229)
- Dealers claim limited and sometimes no trucks available in inventory or on order (483)

- Staffing levels at Papé Kenworth have been reduced by 47 FTE year-to-date and we will be forced to consider further significant layoffs with no forecasted additional sales after April 2025 (468)
- Tying the ability to purchase new ICE-powered trucks to EV sales quotas and credit schemes limits the tools small businesses depend on to survive (271)
- Disproportionately impacts operators of Class 8 vehicles for which there are few, if any, viable ZEV alternatives that meet current needs (225)
- The ACT has created a shortage of modern, clean-burning ICE-powered trucks (283, 301, 663)
- We are unable to purchase or lease new vehicles because we can't get build slots unless we purchase an EV which will lead us to reduce our fleet size and harm our operations (235)
- We are unable to upgrade our fleet since we cannot purchase new replacement trucks which prevents us from remaining competitive (237, 489) or expanding our business (489)
- State and local government customers will see immediate impacts since there are no ZEV options available for specialized applications like snowplows, sewer vacuum trucks, street sweepers, utility trucks, garbage and refuse, bridge inspection and many others (244)
- The ACT will harm rural Oregon economies (259) and place an unfair and disproportionate burden on small rural trucking companies (271)
- The disconnect between manufacturer requirements and operator purchasing requirements makes the ACT goals nearly impossible to achieve (301, 316, 320, 468)
- Without fleet purchasing requirements Autocar may be forced to terminate or severely limit vehicle sales to Oregon to ensure compliance (316)
- The rules require manufacturers to subsidize ZEV sales (316)
- The rules are responsible for a recent weeklong shutdown of the Portland Daimler plant due to lack of orders, tow truck dealers and upfitters not being able to order new medium- and heavy-duty truck chassis and Peterbilt dealerships reporting zero new truck sales for Oregon customers this year translating to lost jobs for Oregon workers (463)
- Delays in securing compliant vehicles could stall critical infrastructure projects, increasing costs for taxpayers (467)
- Diesel trucks sales this year are down 50% compared to prior 3 years and Papé Kenworth will have lost essentially 6 months of truck sales before a decision is made. By the time the rulemaking concludes in July truck orders won't be able to be delivered until 2026 (468)
- Manufacturers and dealers are unable to sell diesel-powered vehicles (22, 23, 26)
- The secondary market for used trucks is tighter because companies that update their trucks annually are not able to do so and are holding on to their equipment longer (474)
- The lack of trucks will also cause backups in ports, causing port and logistics workers to be idled (478+)

- The lack of access to new trucks is putting state and local transportation authority free towing programs in jeopardy (478+)
- This is leading to reduced personal and corporate tax revenue for the state and increases the cost burden of unemployment benefits (474).
- With 80% of Oregon communities serviced by truck this rule will mean that there will be areas that won't be serviced and commodities that won't be moved (474).
- Clean trucks create jobs here in Oregon. Three members of my own family have been employed in various aspects of designing, supporting and manufacturing clean trucks and they see a work force ready to move forward with them (649)
- Small vehicle manufacturers would be forced to purchase credits from direct competitors, effectively subsidizing those competitors and that is not commercially practical (316)
- Falling battery prices and a robust credit-trading market make it likely that manufacturers will beat the rule percentage minimums by 2036, accelerating emissions cuts and cost savings for Oregon businesses (651)

Response:

DEQ acknowledges the market disruption caused by implementation challenges in 2025. The enforcement discretion announced for 2025 and 2026 model years is specifically designed to address these short-term market disruptions while maintaining long-term ZEV sales targets. This approach ensures stability for local businesses, dealers, and fleets while preserving the environmental benefits of the ACT program.

Despite the additional compliance flexibilities for manufacturers included in the adopted California amendments which are proposed to be added to the Oregon rules, the new truck market dynamics in Oregon are not functioning properly. In particular, the preferred compliance strategy of manufacturers not delivering internal combustion engine trucks to Oregon's market to avoid accruing any deficits despite other compliance options available to them is failing to meet the needs of dealers and fleets.

DEQ understands concerns embedded in vehicle manufacturers, dealers, and fleets comments. Oregon DEQ will refrain from pursuing enforcement or assessing civil penalties against any manufacturer of medium- and heavy-duty vehicles (Classes 2b–8) who does not meet the specified ZEV sales percentages of ACT in Oregon.

Comment #26: Advanced Clean Trucks Rule – Low customer demand for ZE trucks

DEQ received 14 comments in this category.

- Commenters 11, 43, 666 stated that there is low customer demand for ZE trucks and that CARB's withdrawal of the Advanced Clean Fleets waiver from EPA

consideration has eliminated private sector demand for ZE trucks since there is no natural demand without a mandate.

- Commenter 229 stated that their dealership sold more than 500 new ICE trucks last year and zero electric or battery electric trucks.
- Commenter 468 stated that Papé Kenworth dealerships have sold zero battery electric trucks in the state of Oregon.
- Commenter 234 state that in the two years since ACT has been in place in California our company has only sold six BEV units in California and one in Oregon.
- Commenter 244 stated that their dealership sold more than 700 new trucks last year and six ZE trucks. That resulted in their ability to sell 57 ICE powered trucks this year which is an 81.4% reduction in unit sales for 2025.
- Commenters 301, 666 stated that there is no customer demand for the current generation of ZE class 6, 7 and 8 trucks.
- Commenter 316 stated that customers have been reluctant to purchase ZEV trucks because of their high cost and lack of charging infrastructure.
- Commenters 320, 663 stated that their dealership has sold exactly zero battery electric trucks this year and it's not for lack of trying.
- Commenters 463, 468 stated that Papé Kenworth has substantial EV truck inventory that they haven't been able to sell due to range and infrastructure issues despite price reductions to meet or beat the cost of a diesel equivalent.

Response:

Truck manufacturers and dealers have raised concerns with DEQ regarding sufficient ZEV sales to meet these requirements. The limited number of ZEV sales in addition to the scarcity of available credits across the program will make it challenging for some manufacturers to meet compliance requirements for model years 2025 and 2026.

DEQ recognizes that current demand for ZEVs in some market segments is limited due to technology constraints and infrastructure availability. However, DEQ's investments in financial incentives and charging infrastructure aim to stimulate greater adoption as ZEV performance improves and operational costs decrease. Initial sales targets are modest, acknowledging current market conditions while progressively building towards higher demand.

Further, DEQ acknowledges the market disruption caused by implementation challenges in 2025. The enforcement discretion announced for 2025 and 2026 model years is specifically designed to address these short-term market disruptions while maintaining long-term ZEV sales targets.

This approach is designed to create stability for local businesses, dealers, and fleets while preserving the environmental benefits of the ACT program. DEQ's proposal takes consideration of the current market circumstances and keeps Oregon on a path to significantly reduce emissions from medium and heavy-duty vehicles, with increasing numbers of zero emissions vehicles, in the future.

Comment #27: Advanced Clean Trucks Rule – Reported manufacturer sales

DEQ received 1 comment in this category from commenter 7 stating that major manufacturers like Daimler Truck North America report insufficient ZE truck sales and likely won't meet the 2025 ACT targets

Response:

DEQ's enforcement discretion for model years 2025 and 2026 addresses concerns about low initial ZEV sales and limited credit availability.

Comment #28: Advanced Clean Trucks Rule – Unfair targeting of small businesses and those who use certain trucks

DEQ received 1 comment in this category from commenter 480 stating that the rule unfairly discriminates against businesses and workers who must use medium-duty and rigid class trucks by having higher sales percentage requirements. In addition, the rule discriminates against small businesses who lack a "fleet" because they would be left with no affordable truck options.

Response:

In a functioning truck market small business would not be directly impacted by ACT rule requirements of vehicle manufacturers. The rule does not include a purchase mandate for fleets, and vehicle dealers and fleets are not regulated in any way by the rule. If all configurations of relevant vehicles are actually available on the Oregon market, small businesses will enjoy a range of options to suit their needs.

Unfortunately, the new truck market dynamics in Oregon are not functioning properly. In particular, the preferred compliance strategy of manufacturers not delivering internal combustion engine trucks to Oregon's market to avoid accruing any deficits is failing to meet the needs of dealers and fleets. Going forward DEQ will provide enforcement discretion for model years 2025 and 2026 and manufacturers will need to open and maintain a supply of all vehicle types, as rules allow. This key dynamic, manufacturers earning both deficits and credits, is designed to alleviate fleet concerns due to a healthy and competitive truck market in Oregon that meets fleets' needs.

Comment #29: Advanced Clean Trucks Rule – Manufacturer pricing transparency

DEQ received 145 comments in this category.

- Commenters 97, 135, 161, 312, 323-462 stating that more transparency and accountability should be required of manufacturers regarding pricing.
- Commenter 475 stated that any flexibility in the rules must be paired with manufacturer transparency and accountability, particularly regarding product pricing.

Response:

DEQ agrees pricing transparency supports consumer decision-making and market fairness. While the rule does not require this information, manufacturers are encouraged to provide clear, accessible information on ZEV pricing, total cost of ownership, and available incentives, helping fleets make informed investment decisions.

Comment #30: Advanced Clean Trucks Rule – Charging infrastructure is not available

DEQ received 64 comments in this category.

- Commenters 3, 7, 8, 11, 22, 23, 26, 43, 44, 221, 222, 224, 225, 226, 228, 229, 232-238, 244, 247, 253, 258, 259, 274, 283, 301, 307, 313, 321, 463, 468, 474, 477, 478+, 480, 481, 653, 654, 663 stated that the charging infrastructure needed to support ZEV technology – specifically widespread availability of public charging stations – is not yet in place and doesn't meet the needs of heavy-duty vehicles and long-haul transportation.
- Commenter 4 stated that there is not enough wind or solar power capable of serving the needs of a commercial fleet of trucks anywhere in Oregon.
- Commenters 18, 463, 477, 478+ stated that the needed infrastructure for medium-duty ZEVs is not in place to meet the rule requirements.
- Commenter 227 stated that diesel fueling infrastructure is already in place while electric charging infrastructure is non-existent for commercial vehicles.
- Commenters 236, 283, 489 stated that putting charging stations at our place of business is not cost effective.
- Commenters 463, 480 stated that local companies cannot afford hundreds of thousands of dollars in charging infrastructure costs.
- Commenter 480 stated that it would be impossible to create enough ZEV charging infrastructure to power, park, connect, or maintain the medium- and heavy-duty vehicles needed in the Oregon forest industry.
- Commenter 244 stated that on-highway and municipal operators will not purchase EV units until sufficient infrastructure exists to assure their ability to operate them.
- Commenter 257 stated that the infrastructure in Northeastern Oregon does not currently exist and that because their agricultural operation is in mostly remote rural regions of the state interstate corridor charging infrastructure alone wouldn't be enough to support their use of ZEVs.

- Commenter 259 stated that the infrastructure in their rural community is inadequate to meet the needs of vehicle charging and that they lose electric power up to three weeks per year. Combined with the possibility of additional electric utility summer wildfire season pro-active power shutdowns there would be no way for us to charge these vehicles.
- Commenter 271 stated that unlike larger fleets in urban areas, small rural trucking companies lack access to the infrastructure needed to support electric trucks including reliable charging stations and adequate electrical grid capacity.
- Commenter 307 stated that there is a lack of charging stations that can accommodate vehicles that are from 20 ft. to 80 ft long and questions how soon they could be built.
- Commenter 463 stated that there is no clear plan for funding or building the infrastructure needed to support the ACT mandates.
- Commenter 477 stated that without charging infrastructure you won't have any vehicle sales.
- Commenter 663 stated that customers have great difficulty to even get a permit from their local PUD to add charging infrastructure.

Response:

DEQ acknowledges the limited public charging infrastructure for medium- and heavy-duty vehicles. Early ACT program targets primarily focus on vehicle types that rely on depot-based charging infrastructure, which is already being widely developed. Expansion of public charging will continue to meet the future needs of longer-range applications.

Oregon's shift to electric trucks in the early years of the Advanced Clean Trucks (ACT) program does not depend on widespread public charging along highways. For the majority of vehicle types, the average daily mileage needs can be accommodated by existing battery capacity technology. DEQ recognizes that many vocational uses, intense operations, and long-haul routes do not currently suit electric vehicles. The rule does not require the electrification of vehicles dependent upon these types of operations. It's not a 100% requirement nor does it require these sectors to electrify due to the flexibilities in the rule.

However, most of Oregon's medium- and heavy-duty trucks travel approximately 100 miles per day and return each night to the same location. Average mileage patterns of delivery trucks, garbage trucks, school buses, and local freight vehicles demonstrate they can perform their business in a day without relying on public chargers.

Based on the Environmental Protection Agency's National Emissions Inventory data in 2023, DEQ has the annual mileage driven by Oregon's existing fleet of medium- and heavy-duty vehicles. Using this data, assuming they are driven 5 days a week for 52 weeks of the year, DEQ can estimate average daily mileage for most vehicles. This estimate is in line with the current range of existing battery electric vehicle technology based on EPA's December 2024, "Report on Actions for Medium- and Heavy-Duty Vehicle Energy and Emissions Innovation".

Mileage estimates from Oregon's fleet paired with current battery electric vehicle technology ranges indicate that broad scale ZEV deployment is feasible in the short term and will improve over time as technology advances and fleets adjust their operations to match. Oregon fleets will need to continue to invest in home base, or depot, charging infrastructure in order to support these deployments.

Comment #31: Advanced Clean Trucks Rule – Hydrogen fueling infrastructure is not available

DEQ received 1 comment in this category. Commenter 482 stated that Oregon does not currently have any hydrogen fueling stations open to the public or available to independent truck operators. Hydrogen vehicle manufacturers have continued to indicate a need for hydrogen fueling stations in order to make their vehicles available. Targeted policy action on hydrogen fueled vehicles and hydrogen fueling infrastructure will be necessary for the durable success of the ACT.

Response:

DEQ agrees that Oregon lacks hydrogen fueling infrastructure at this time. Oregon DEQ's pilot program, the Oregon Zero Emissions Fueling grant, supports medium- and heavy-duty zero-emission vehicle charging and fueling infrastructure projects and can be utilized to support hydrogen fueling projects. Additionally, the Oregon Department of Transportation is currently pursuing the installation of one hydrogen fueling station in Oregon through the federal Charging and Fueling Infrastructure grant.

Comment #32: Advanced Clean Trucks Rule – Electricity supply and electric grid concerns

DEQ received 9 comments in this category.

- Commenters 10 stating that we are already facing an electricity shortage nationwide and an electric grid that is severely stressed and that electric vehicles are the biggest factor in why we have these problems.
- Commenters 222, 253, 274, 489 stated that there is not enough electric grid capacity.
- Commenter 257 stated that the grid would not support the additional draw of 50 trucks charging simultaneously.
- Commenter 283 stated that utility companies can't promise they can provide sufficient energy for charging stations.
- Commenter 301 stated that 100 battery electric heavy haul trucks consume the same amount of power to recharge as all of the homes in Eugene and their charging stations often require their own substations.
- Commenter 661 stated that businesses don't have this kind of power ready at their buildings and that Portland General Electric has issued a pause on new power feed requests.

Response:

According to recent modeling by the Oregon Department of Energy in their recent Oregon Energy Strategy, electric vehicles deliver efficiency gains compared to their internal combustion engine counterparts. Since electric vehicles are 2.5 times more efficient than internal combustion engine vehicles, they require less energy to travel the same distance. They estimate that electric cars and trucks will be responsible for reducing the size of the whole energy sector by 27% over 2024 loads during the lifespan of the Energy Strategy. Less energy demand means a smaller energy system that needs to be built to meet that demand. Additionally, managed charging, where software can optimize charging times to match electricity availability and price, can reduce the overall strain on the grid.

Comment #33: Advanced Clean Trucks Rule – Utility costs and revenue

DEQ received 2 comments in this category.

- Commenter 1 stated average costs of electricity for all consumers in California has surged by 58%. Funding needs in California for additional renewable generation capacity and to upgrade and expand electrical transmission and distribution infrastructure are large.
- Commenter 476+ stated that by 2050 the rule will generate \$128 million annually in additional revenue for Oregon utilities leading to meaningful savings for residential and commercial customers.

Response:

According to recent modeling by the Oregon Department of Energy in their recent Oregon Energy Strategy, electric vehicles deliver efficiency gains compared to their internal combustion engine counterparts. Since electric vehicles are 2.5 times more efficient than internal combustion engine vehicles, they require less energy to travel the same distance. They estimate that electric cars and trucks will be responsible for reducing the size of the whole energy sector by 27% over 2024 loads during the lifespan of the Energy Strategy. Less energy demand means a smaller energy system that needs to be built to meet that demand.

Comment #34: Advanced Clean Trucks Rule – Utility permitting

DEQ received 1 comment in this category. Commenter 301 stated that they are challenged by permitting and regulations that impede developing new fueling sites.

Response:

DEQ understands the extra effort required on behalf of fleets looking to electrify and install charging infrastructure. They must obtain documentation from their relevant local planning department's review of site-specific charging installation plans. This review by local planning departments can take some time to coordinate with local planning and permitting. This should be included in planning efforts to move towards zero emissions fleets over time.

Comment #35: Advanced Clean Trucks Rule – Overallocation of Oregon Optional Credits would curtail momentum toward charging infrastructure development

DEQ received 1 comment in this category. Commenter 294 stated that overallocations of optional credits under ACT will curtail charging infrastructure development by weakening the market signals ACT provides to utilities and private developers and could cause disruptions in planning efforts underway both inside the state and along interstate freight corridors.

Response:

Oregon DEQ does not propose advancing the Oregon Optional Credit Program proposal due to issuance of limited enforcement discretion for model years 2025 and 2026.

Comment #36: Advanced Clean Trucks Rule – Change Oregon Optional Credit Program credit allocation percentages

DEQ received 24 comments in this category.

- Commenter 11 stated that the implication of this program is that at some point there will be an immediate higher compliance schedule once the credits are terminated since Oregon would not be able to deviate from California's compliance schedule.
- Commenter 88 stated that there is no demonstrated technological feasibility or compliance challenge issues with class 2b-3 products and that introducing optional credits could have unintended consequences for the credit market by penalizing early movers and eroding the marginal value of excess ZEV sales potentially creating a disincentive for ZEV sales in the near-term.
- Commenter 88 stated that a proportional credit award for class 2b-3 manufacturers for model years 2026 and 2027 that would be based on California EV sales in those years and tied to an actual ZEV sales would be a better approach. This is similar to what has been done in the past with the Advanced Clean Cars regulation. An alternative would be to have a credit multiplier of 1.25 for model years 2026 or 2027 for class 2b-3.
- Commenter 88 asked for a more modest credit allocation for the class 2b-3 segment. Thinks “the approach currently proposed by DEQ is too generous and unlikely to deliver benefits that justify the costs.” Instead of 50%, commenter #88 suggests “that DEQ allocate optional credits in the Class 2b-3 segment equal to no more than 33 percent of deficits, or total sales in the case of EV-only manufacturers.”
- Commenter 294 stated that the proposal addresses the problem of credit availability, however, it is agnostic to the source of the problem and could reasonably lead to continued noncompliance after Model Year 2026. A sustainable solution would ensure that covered parties, acting in good faith, would achieve their requirement of 25 percent new Class 7 and 8 tractor sales by Model Year 2027. We suggest that DEQ structure optional credit allocations for tractor manufacturers considering both reported sales for the previous Model Year and the zero-emission vehicle (ZEV) sales requirements under the rule. Optional credit allocations should serve as a ramp back to compliance for covered parties while also ensuring that zero-emission tractors continue to be deployed in Oregon and preserve the vital market signals for infrastructure development that are inherent to ACT. We suggest that optional credit allocations for Model Year 2026 be limited to no more than 50 percent of the required credits to encourage manufacturers to come into compliance by the following model year.
- Commenters 470, 475, 476+, 479, 484 recommends a smaller allocation optional compliance credit allocation for class 2b-3 than is proposed for other vehicle segments since there has already been strong class 2b-3 ZEV sales.

- Commenter 475 stated that class 4-8 straight body truck manufacturer optional credits should be limited because unnecessary credits, in turn, lead to unnecessary emissions harming our most vulnerable populations.
- Commenter 476+ stated that if DEQ over allocates credits into the class 4-8 straight truck market it risks impacting the class 2b-3 market since credits can be traded through all non-tractor classes.
- Commenter 467 stated that expanding the credit program to cover 100% of deficits for all truck classes in 2025-2026 could provide equitable relief for all affected industries.
- Commenter 470, 476+, 479 stated that to receive voluntary credits manufacturers should show forward progress on their total number of ZEV sales by selling at least one zero-emission truck per year or a more aggressive target to ensure that manufacturers are on a path to compliance.
- Commenter 470 stated that manufacturers receiving voluntary credits in 2025 and 2026 should commit to avoiding ratio adjustments or sales restrictions for at least five years thereafter.
- Commenter 475, 476+ stated that manufacturers receiving voluntary credits in 2025 and 2026 should commit to no rationing or sales restrictions.
- Commenter 466 stated that DEQ should strengthen the proposed optional credit system to align with data showing where there is a demonstrated need for the credits. DEQ should not distribute free credits for all classes of trucks.
- Commenter 466, 475 stated that DEQ should condition optional credit distribution on demonstrated manufacturer commitments toward making ZEV sales progress and ending sales rationing of non-ZEV trucks.
- Commenter 475 stated that non-compliance and bad actors should not be rewarded.
- Commenter 484 stated that the 100% allocation for class 7-8 tractors goes beyond the Governor's direction and effectively pauses the program for these classes for at least two years and stalls progress for these classes. In addition, the 50% credit allocation for all other classes is not rooted in data or actual market conditions and will effectively stall much of the program, punishing early adopters and investors.

Response:

Oregon DEQ does not propose advancing the Oregon Optional Credit Program proposal due to issuance of limited enforcement discretion for model years 2025 and 2026.

Comment #37: Advanced Clean Trucks Rule – Modify the Oregon Optional Credit Program

DEQ received 17 comments in this category that stated that DEQ should redesign the proposed Oregon Optional Credit Program in the following ways:

- Manufacturers must agree to come into compliance with ACT requirements no later than MY 2027 (294).

- Restructure optional credit allocations so that they will be based on actual needs and data, such as credit generations and deficits under both ACT and ACC based on reasonable market and economic assumptions (294, 312, 657).
- End any Oregon Optional Credit Program allocations no later than the current MY in which CARB adopts credit flexibilities that address Oregon's programmatic issues (294, 476+).
- Include language that would pause the optional credit program allocations for tractor truck manufacturers at the end of the calendar year in which CARB adopts such flexibilities and DEQ determines that those flexibilities are sufficient (294).
- Prior to allocating optional credits, require manufacturers to agree to achieve sustainable compliance no later than MY 2027 and end dealer ratioing practices and related actions that undermine the success of the rule (294, 312).
- Clarify which model years the class 7-8 tractor credits apply to or provide an expiration date for those credits (484).
- Add factors for DEQ to consider on whether to continue to allocate class 7-8 optional tractor credits similar to those described in proposed OAR 340-257-0300(2)(c) (484).
- Clarify that participating manufacturers must enter into and continue to meet the terms and conditions of an agreement with DEQ described in proposed OAR 340-257-0300(1) (484).
- DEQ should remove proposed OAR 340-257-0300(2)(b) since other proposed provisions directed at class 7-8 tractors already offer 100% credits to offset deficits in these classes for model years 2025 and 2026 as well as additional optional credits for model years 2027 and beyond. This appears to provide an unnecessary and unilateral concession that will surrender any progress for class 7-8 tractors (484).
- Modify OAR 340-257-0300(2)(c) to allow DEQ to decrease the percent allocations of optional credits described in proposed OAR 340-257-0300(2)(a)(A)-(B) (484) and include a factor reviewing the national market for and availability of ZE trucks.
- We suggest DEQ modify proposed OAR 340-257-0300(1)(c) to require that participating manufacturers make ICE trucks available to Oregon dealerships as a condition of participating in the program. DEQ may also consider adding a provision that allows manufacturers to forgo this provision if these manufacturers can show, for example, that they do not have ICE models available in the U.S. market. The ACT does not mandate or prohibit sales of any vehicles and the final language of 340-257-0300(1)(c) should reflect this reality (484).
- The new proposed optional credit program reporting provisions should be strengthened to include at least twice-annual reporting, qualitative and quantitative information on ZEV sales progress, sales of ICE and ZE vehicles by class, marketing efforts and fleet support associated with ZE vehicles in Oregon and any other information DEQ believes relevant to assessing manufacturer progress towards ACT targets (484).
- DEQ should modify the rules in the following ways to clarify obligations and avoid undermining eligibility requirements (484):

- 340-257-0300(2)(b). If a Manufacturer's Class 7-8 Tractor Truck deficit balance resulting from the production and delivery for sale of trucks in Oregon exceeds the optional credit allocation provided for the model year, DEQ will provide additional credits to cover 100% of that Manufacturer's deficit obligations in Oregon, unless a Manufacturer fails to meet the terms and conditions set forth in the agreement it has executed with DEQ, in which case the DEQ may refuse to issue such credits consistent with the procedures described in OAR 340-257-0300(3).
- 340-257-0300(3). Forfeiture Provision. In the event a Manufacturer fails to meet the terms and conditions set forth in the agreement it has executed with DEQ, DEQ may rescind or refuse to issue the credits it has provided to the Manufacturer under these rules or would otherwise provide to the Manufacturer pursuant to 340-257-0300(2)(b). DEQ will provide a recission or refusal to issue notice to the Manufacturer in writing and will provide the Manufacturer with the opportunity for a hearing regarding the DEQ decision. The hearing will be conducted as a contested case hearing in accordance with ORS 183.413 through 183,470 and OAR chapter 340, division 11.

Response:

Oregon DEQ does not propose advancing the Oregon Optional Credit Program proposal due to issuance of limited enforcement discretion for model years 2025 and 2026.

Comment #38: Advanced Clean Trucks Rule – Oregon Optional Credit Program doesn't go far enough

DEQ received 27 comments in this category.

- Commenters 8, 222, 224, 226, 229, 232, 233, 467, 474 stated that the Optional Credit Program would fall short of solving the problem because companies that utilize this program would only receive 50% of the credits needed for compliance. Without being able to restrict truck sales in any way manufacturers will not be able to meet the remaining 50% requirement given the current market dynamics and lack of medium- and heavy-duty ZEV demand.
- Commenter 43 stated that because of the way order cycles work and the timing of this rulemaking it is going to make it really hard for us as a manufacturer to take advantage of the optional credit program in 2025.
- Commenters 238, 253, 274, 283, 301, 313, 320, 321 stated that the proposed credit-based system is unworkable in the current market without ZEV demand.
- Commenters 463, 468, 474, 480, 655, 660 stated that the credit-based system is convoluted and unworkable.
- Commenter 467 stated that this approach risks prioritizing certain industries over other, leaving construction fleets with limited options.
- Commenter 474 stated that without credits to cover all sales, the industry will be subject to penalties and litigation therefore industry has chosen not to utilize this false flexibility by not accepting orders in Oregon.

- Commenter 480 stated that the amendments unfairly neglect to include medium class and rigid class trucks which comprise the majority of business deployed trucks in Oregon and that Governor Kotek's letter to DEQ unfairly failed to address these medium class and rigid class trucks.

Response:

Oregon DEQ does not propose advancing the Oregon Optional Credit Program proposal due to issuance of limited enforcement discretion for model years 2025 and 2026.

Comment #39: Advanced Clean Trucks Rule – Do not offer any optional “free” compliance credits

DEQ received 468 comments in this category.

- Commenters 54-87, 89-166, 168-196, 198-202, 204-217, 219-220, 231, 241, 243, 249, 279, 290, 340, 359, 362, 379, 380, 407, 487, 495, 498, 500, 502-644, 659 that DEQ implement the full strength of the ACT rule rejecting any proposals to allow free compliance credits.
- Commenters 97, 135, 161, 323-462 stated that credits should be used to reward the 66 manufacturers who have made 190 electric models available for sale.
- Commenter 246 stated that in order to meet the program's goals DEQ should eliminate optional compliance credits for vehicle classes for which Oregon has already seen strong sales (including class 2b-3) and for which models are already being manufactured.
- Commenter 294 stated that optional credit allocations are unnecessary for class 2b-3, and class 4-8 straight trucks given current and expected sales of ZEVs in these truck classes.
- Commenter 485 stated that providing credits free of charge undermines the truck manufacturers who are working to grow the market for ZEVs. We propose that DEQ charge a fee for these credits of no less than 1.25-times the highest price of ZEV credits that have been exchanged in that or the previous year (but no higher than any potential penalty). Funds generated through this fee could be used to further incentivize ZEV purchases. The South Coast Air Quality District Reclaim emission credit program is an example of how such interim bridge credits have been deployed. Commenter 294 also suggested that DEQ consider charging a similar fee for optional credits.

Response:

Oregon DEQ does not propose advancing the Oregon Optional Credit Program proposal due to issuance of limited enforcement discretion for model years 2025 and 2026.

Comment #40: Advanced Clean Trucks Rule – Manufacturers must show progress to receive optional credits

DEQ received 54 comments in this category.

- Commenters 13, 14, 16, 17, 20, 28, 30, 31, 45-53, 167, 203, 218, 239, 246, 275, 278, 281, 282, 284, 286-289, 291-293, 295, 296, 298, 299, 302, 304, 306, 308, 314, 465, 471, 473, 494, 496, 499, 645-648 stated that manufacturers should be required to show that they are increasing their sales of ZE trucks in order to qualify for voluntary credits because an oversupply of credits reduces the effectiveness of the program.
- Commenter 294 stated that the proposed optional credit program does not create and incentivize a clear ramp for regulated businesses to come into compliance under the rule by 2027 and that providing optional credits to non-tractors may encourage non-compliance, even as there is an ample supply of credits available in Class 2b-3 and Class 4-8 non-tractor categories.

Response:

Oregon DEQ does not propose advancing the Oregon Optional Credit Program proposal due to issuance of limited enforcement discretion for model years 2025 and 2026.

Comment #41: Advanced Clean Trucks Rule – Optional credit program just delays ACT implementation

DEQ received 1 comment in this category from commenter 11 stating that the proposed optional credits are essentially delaying ACT implementation in Oregon to 2027 or beyond by providing truck manufacturers 100% of Class 7-8 tractor deficits for 2025 and 2026.

Response:

Oregon DEQ does not propose advancing the Oregon Optional Credit Program proposal due to issuance of limited enforcement discretion for model years 2025 and 2026.

Comment #42: Advanced Clean Trucks Rule – General comments on credits

DEQ received 45 comments in this category.

- Commenter 301 stating that the credit market lacks transparency and that they do not support complicated half-measures that risk catastrophic failure of the truck markets in Oregon. They also stated that DEQ incorrectly advised that there are enough truck credits available for sale to cover the sale of diesel-powered trucks. However, despite the sale of ZEV trucks, qualifying credits are not currently available on the market. DEQ confirmed that companies in possession of credits have already obligated them. Therefore, purchasing credits as a way to sell a clean diesel truck is not an option at this time.
- Commenter 463 stated that diesel truck sales are restricted because there are no ZEV credits available which leaves businesses unable to serve their customers or maintain their workforce.

- Commenters 242, 245, 248, 251, 252, 255, 256, 258, 260-273, 300, 303, 305, 311, 315, 317-319, 464, 480, 486, 490, 492, 497, 501, stated that credits are unavailable, very uncertain, too costly, impractical and are an expensive de facto sales tax that would be passed on to truck buyers.
- Commenter 316 stated that the rules do not provide credits for very low emission CNG vehicles and therefore is not acknowledging the emissions benefit and substantial business investment into CNG vehicles and fueling infrastructure.
- Commenter 316 stated that its lack of product mix as a manufacturer denies Autocar the full benefit of averaging and aggregating credits. The low overall volume also denies Autocar the benefit of banking credits and prevents it from spreading development and compliance costs across many vehicles.
- Commenter 652 stated that when we need to order new tow trucks, we need to know that the credits are going to be there for our industry since we have no other options.
- Commenters 22, 23, 26 stated that the credit system leaves Oregon businesses confused, burdened and at legal risk.

Response:

DEQ acknowledges concerns raised regarding the credit market's transparency and availability. The Advanced Clean Trucks (ACT) rules establish a credit and deficit system designed to encourage manufacturers to sell increasing percentages of zero-emission vehicles (ZEVs) over time. Under this framework, each manufacturer accumulates deficits based on their overall sales of medium- and heavy-duty internal combustion engine (ICE) vehicles. Manufacturers can offset these deficits by generating credits through sales of ZEVs, banking credits for future use, trading credits with other manufacturers, or utilizing early-action credits earned from previous ZEV sales.

The system is intentionally flexible, allowing manufacturers to strategically manage their compliance across different vehicle categories. For instance, manufacturers producing large volumes of ZEVs in certain vehicle classes can generate surplus credits, which can then be traded or sold to manufacturers needing credits to meet their compliance obligations. This mechanism ensures that all vehicle types—whether ICE or ZEV—continue to flow into the Oregon market, meeting fleet and dealer needs while steadily advancing Oregon's long-term public health and environmental objectives.

DEQ recognizes current market challenges, including limited immediate availability of ZEV credits due to high demand and early market conditions. However, the rule's gradually increasing ZEV percentage requirements were specifically set low enough in initial years to account for limited ZEV availability and the continued necessity of certain ICE vehicle types. This approach helps stabilize the market, preventing undue disruption in vehicle sales.

Regarding comments on compressed natural gas (CNG) vehicles, DEQ understands the concerns about recognizing low-emission technologies. Currently, the ACT rule specifically targets zero-emission technologies, primarily battery-electric and hydrogen fuel cell vehicles, to achieve the greatest long-term emission reductions. While very low-emission vehicles like CNG offer environmental benefits over conventional diesel vehicles, they do not qualify for credits under the ACT rule due to the regulation's specific zero-emission focus. However, DEQ encourages manufacturers and fleets to continue leveraging low-emission vehicle technologies as part of broader emission reduction strategies.

Comment #43: Advanced Clean Trucks Rule – Extending time period for making up deficits

DEQ received 1 comment in this category. Commenter 316 stated that recovery from a deficit condition is challenging. For example, in 2026 if 13% ZEV sales are required and a manufacturer only sold 11% ZEV in 2027, they would be required to somehow increase ZEV sales in 2028 from 30% to 33%, in 2029 from 40% to 43% and in 2030 from 50% to 53%. The requirements don't take into account market fluctuations and

customer demand that can greatly affect truck purchases. Without a purchasing mandate solving the demand problem for these vehicles is a challenge.

Response:

The ACT rule includes a credit and deficit system designed to provide manufacturers with flexibility while maintaining progress toward targets. The adopted California amendments, which Oregon has proposed to adopt identically, already expand this flexibility. These amendments allow manufacturers to carry forward up to 30% of their deficit balance for three years to provide additional time to make up for shortfalls. This system is designed to accommodate year-to-year fluctuations in market conditions, product availability, and customer demand.

While there is no purchasing mandate in the ACT rule, DEQ acknowledges that early market development requires a supportive policy environment. That is why DEQ is implementing an enforcement discretion policy for MY 2025 and 2026 to reduce short-term compliance pressure. Over the long term, the ACT rule's gradual sales targets and built-in flexibilities ensure that manufacturers have multiple pathways to compliance and time to develop market demand. The percentage requirements increase slowly enough to allow manufacturers to continue selling internal combustion engine vehicles while increasing ZEV offerings as technologies and infrastructure mature.

Comment #44: Advanced Clean Trucks Rule – Proposed amendments don't meet identity requirements, waiver requirements, are outside of DEQ authority or are otherwise illegal

DEQ received 10 comments in this category.

- Commenter 7 stated that the rules risk legal challenges and could disqualify Oregon from federal infrastructure funding tied to realistic timelines.
- Commenter 11 asked whether Oregon could deviate from California's ACT only for compliance delay and enforcement? Can Section 177 states alter California's regulation as long as they don't create different engine standards?
- Commenter 44 stated that once all ACT amendments through CARB are final, they believe that CARB does not intend to send "those substantive amendments to EPA for a new preemption waiver or for a determination that the amendments are within the scope of EPA's original waiver for the ACT regulations, which EPA issued on April 6, 2023. CARB is likely (and perhaps rightly) concerned that EPA, under the second Trump Administration, would deny any additional waiver requests."
- Commenter 301 stated that the proposed amendments do not align with California's ACT waiver.
- Commenter 316 stated that Oregon's proposed action to adopt the CARB 2024 ACT amendments is premature because California has not officially adopted those amendments, because California has not received an EPA waiver for the CARB 2024 ACT amendments and because Oregon cannot adopt these amendments until California receives the waiver.

- Commenters 316, 474 stated that the proposed optional credit program doesn't align with the federal identity requirements.
- Commenter 316 stated that in past communications with DEQ the agency cited identity as a rationale for why it based its low volume exemption on California sales and not Oregon. DEQ cannot say that the adoption of the ACT must be identical and then arbitrarily change other substantial parts of the rule related to the optional credits. If DEQ considers the credit changes to the ACT as "identical" then it should also consider the low volume exemption using only Oregon sales as "identical".
- Commenter 480 stated that the rule interferes with interstate trade of trucks, vehicle manufacturing and business conducted across state lines and that DEQ lacks the legal jurisdiction to codify laws that impact interstate trade or the economy in such a significant way.
- Commenter 480 stated that State government is an incapable arbiter of market supply of new trucks made, sold or bought.

Response:

DEQ's proposal complies with the Clean Air Act's Section 177 identity requirements. Oregon's rule amendments are "by reference" directly to California's Advanced Clean Trucks rule amendments, effective May 9, 2025.

Comment #45: Advanced Clean Trucks Rule – Environmental and public health impacts

DEQ received 275 comments in this category.

- Commenters 3, 10, 247 expressed concerns regarding battery life cycle impacts associated with rare-earth mineral development, processing and disposal.
- Commenter 10 stated that due to the short life cycle of batteries frequent replacements are needed.
- Commenter 3 stated that the increased costs of unproven technologies divert capital investment from more effective environmental improvements such as improving fuel efficiency or exploring other sustainable practices.
- Commenter 18 stated that it is currently more effective in terms of emission reductions to focus on getting older diesel vehicles replaced with newer, cleaner diesel.
- Commenters 261, 480 stated that the rules provide insignificant climate benefits.
- Commenters 7, 8, 9, 222, 224, 226, 227, 228, 229, 233, 238, 313, 320, 322+, 463, 468, 474, 477, 480, 661, 665 stated that the rules could force fleets to retain older, higher emitting diesel trucks for longer as they try to avoid costly upgrades which undermines emission reduction goals.
- Commenter 7 stated that regulatory delays in similar contexts like the EPA mercury rules have historically prevented such unintended consequences.
- Commenter 665 stated that unlimited numbers of old trucks can come into your state, but you can't sell a new clean, low emission truck today.

- Commenter 10 stated that the majority of our electricity is produced using natural gas turbines that produce tons of emissions while wind and solar produce a small portion of our electricity needs and building and maintaining those systems creates more emissions than they will offset in their lifetime.
- Commenter 10 stated that homeowners and businesses are having to install backup generators (fueled by propane, natural gas, gasoline or diesel) to deal with electrical outages which creates emissions.
- Commenter 11 stated that regulatory uncertainty is limiting sales of new trucks which means older diesel trucks stay on the road longer or more businesses are buying used, more polluting trucks in the interim resulting in higher emissions and greater health impacts to Oregon's disadvantaged communities where these trucks operate.
- Commenter 475 stated that last year the American Lung Association gave a failing grade for air quality due to particle pollution to the majority of Oregon counties.
- Commenter 27 states that "The American Lung Association says the ACT will result in many billions of dollars of health cost savings," and that the same association "found that Klamath, Lane, and Jackson counties were among the 13th worst counties in the country for year-round particle pollution." Believes that the proposed rules are needed for public health.
- Commenter 656 stated that the American Lung Association estimates that the transition to ZEVs including medium- and heavy-duty trucks included in these rules could generate an annual public benefit of approximately \$355 million in Oregon.
- Commenter 330 stated that they have an autoimmune lung disease and needs the cleanest possible air to breathe.
- Commenter 352 stated that for adults with asthma this costs us more in medication and quality of life.
- Commenter 658 stated that the public health costs of diesel pollution end up being paid by us all through the Medicare and Medicaid system and that vehicle pollution from these trucks are basically like cigarette smoke for the whole population, so we need to move forward with a cleaner fleet.
- Commenter 659 stated that they see patients whose chronic illnesses were both originally caused by exposure to air pollution and made acutely worse when pollutant concentrations in the air increase even briefly
- Commenter 534 stated that highway engine created smog severely worsens their asthma related difficulty with breathing.
- Commenter 29 believes that "Manufacturers must be held accountable for cleaning up toxic diesel pollution in our communities."
- Commenter 30 lives in a mill town and states that the mill emits carcinogens into the air which create compounded health impacts when diesel truck emissions get factored in. Believes the rules are needed to reduce harmful emissions. States that hundreds of trucks visit their community daily.
- Commenter 312 describes healthcare costs due to diesel truck pollution, the health and economic consequences of air pollution, specific impacts on children, low-income and people of color populations and the linkage between truck

pollution and the climate crisis. They include that Oregon is only projected to reach 60% of emissions reductions by 2050 which is much shorter than Oregon statutory goals.

- Commenter 475 stated that the rule is one of the most powerful tools we have to protect public health. It will cut the pollution that causes asthma attacks, emergency room visits, and early deaths and it also means fewer children using inhalers and fewer families losing loved ones too soon.
- Commenter 475 stated that the rule is a step toward cleaner air for our most vulnerable populations, especially low-income communities and communities of color that are often located near highways and freight routes.
- Commenter 32 believes that ZEV trucks do not have zero-emissions because of the pollution that goes into producing them and because of the tare weight when driving them that will damage the roads causing pollution. States that a semi-truck with two exhaust stacks does not put out twice as much pollution because most motors have one exhaust pipe that comes off of the turbo and splits into the two different pipes. States that they have driven a “clean idle certified truck with two stacks.”
- Commenter 39 states that they have Parkinson’s disease and that it has been associated with air pollution. They also stated that what we burn into the air, we breathe.
- Commenters 33, 35, 36, 40, believe that the proposed rules are needed to support public health.
- Commenters 34, 36 state that “delaying HDO adoption to 2026 would have up to nearly \$300 million in monetized negative health impacts to Oregonians, and the significantly reduced stringency in ACT compliance proposed under this rule will also lead to meaningful losses in pollution reductions from the rule. The ACT and HDO rules are projected to prevent at least 150 premature deaths by 2050 and yield over \$2 billion in net societal benefits annually through 2050– including avoided health costs and savings to fleets in Oregon.”
- Commenters 54-87, 89-166, 168-196, 198-202, 204-217, 219-220, 231, 241, 243, 249, 279, 290, 340, 359, 487, 495, 498, 500, 502-644 stated that according to a Union of Concerned Scientists analysis, delaying the ACT to 2027 would cost Oregon \$75-93 million in negative health impacts related to unhealthy air exposure, while original implementation would provide over \$1 billion in net savings to businesses through 2050 through fuel and maintenance savings.
- Commenter 37 states that “Last time Oregon failed to keep up with California’s standards, Oregon became the dumping ground for California’s dirtiest big rigs, giving Multnomah County air filled with more diesel pollution than 98% of counties in the entire United States.”
- Commenter 130 states that these rules are needed because they live near a very busy bridge and freeway, as many people in Oregon do, and that “we all suffer when we have unhealthy air exposure.”
- Commenter 314 stated that the spinal cord injury community is disproportionately affected by air pollution because many in the community face serious respiratory complications related to their injury, so please help reduce their risk of harm by reducing the air pollution from these sources.

- Commenter 307 asked what would happen if the state decided to allow heavier loads with ZEVs to improve payload problems and the resulting potential environmental harm to bridges, creeks and rivers.
- Commenter 478+ stated that without access to new tow trucks motorists will experience longer traffic delays and increased emissions from idling traffic

Response:

DEQ acknowledges the wide range of views on the environmental and public health impacts of the ACT rule. There is strong evidence that diesel truck pollution contributes to serious health problems, especially in low-income and frontline communities near major freight routes. Public health experts have documented that implementing ACT will help prevent asthma attacks, reduce hospitalizations, and avoid premature deaths, while generating billions in public health benefits. DEQ's understanding is that the rule is essential to reducing harmful pollutants like GHGs, NOx, fine particulate matter from Oregon's transportation sector.

While battery production and electricity generation are not emission-free, lifecycle analyses consistently show that ZEVs produce significantly fewer greenhouse gas emissions than diesel vehicles. The ACT rule phases in ZEV adoption over time, allowing the electric grid to grow cleaner and vehicle technologies to improve. DEQ understands concerns about affordability and infrastructure readiness, which is why Oregon's approach includes grant funding, charging incentives, and temporary enforcement discretion to ease the transition. Ultimately, the ACT rule is one of Oregon's more powerful tools for achieving climate goals and protecting public health.

Comment #46: Advanced Clean Trucks Rule – Health and safety concerns

DEQ received 3 comments in this category.

- Commenter 463 stated that companies that are unable to replace the older diesel trucks are running them longer which is reducing safety.
- Commenter 478+ stated that ZEV technology does not provide the safety standards needed for towing and recovery trucks which are needed to prevent accidents and breakdowns and to keep the highways open. And without access to new tow trucks there is an increased risk of secondary crashes.
- Commenter 665 stated that without an adequate number of tow trucks there is a safety issue since most accidents occur within 15 to 20 minutes after a car is broken down or secondary crashes that follow primary accidents.

Response:

DEQ recognizes that truck safety and reliability are top priorities for the industry, especially for services such as towing and emergency response. While some vocational ZEV applications remain in development, others such as local delivery, refuse collection, and urban transit already have viable ZEV options in the market. The ACT rule does not prohibit the sale of internal combustion engine vehicles and includes flexibility in credit use, trading, and near-zero emission vehicle options to help manufacturers and fleets serve all applications.

It is true that battery-electric trucks may not yet be the best solution for every vocational use, and DEQ's enforcement discretion policy acknowledges this by providing relief in the early years of the program. However, safety and performance concerns are also a function of ongoing industry innovation, and the rule's gradual implementation schedule ensures that fleets can adopt ZEVs where feasible and continue to use diesel or alternative technologies where needed.

Comment #47: Advanced Clean Trucks Rule – Replacing road tax revenue

DEQ received 1 comment in this category from commenter 1 that asked how DEQ would plan to replace the revenue generated by taxes on petroleum products. The commenter also mentioned that DOT is already having to deal with a significant budget shortfall.

Response:

DEQ recognizes that the transition to electric vehicles has implications for how Oregon funds its transportation system, which currently relies on taxes on petroleum fuels. This question is beyond the scope of proposed rules and is being addressed in other State policy making venues.

Comment #48: Advanced Clean Trucks Rule – Truck repair shop capacity

DEQ received 5 comments in this category.

- Commenter 1 asked how many mechanic/repair shops in Oregon can work on a Class 7-8 ZEV.
- Commenter 227 stated that diesel truck mechanics are plentiful while electric truck mechanics are few and far between.
- Commenters 259, 481 stated that there is inadequate maintenance training and systems in place to support EV adoption.
- Commenter 301 stated that they will be forced to reduce hours for mechanics that are dedicated to preparing and delivering new trucks to our customers.

Response:

These implementation issues are outside the scope of proposed Advanced Clean Truck rule amendments. However, DEQ understands that the availability of qualified technicians for zero-emission trucks is critical to successful fleet adoption. The transition to ZEVs will require ongoing workforce development, and Oregon is investing in programs to train mechanics and service providers to work on electric drivetrains, battery systems, and charging infrastructure. These programs are already underway at community colleges and technical training centers.

At the same time, the ACT rule's gradual implementation means that ZEV adoption will occur over many years, allowing the support industry to scale accordingly. Fleets will continue to operate internal combustion engine vehicles alongside ZEVs for the foreseeable future, providing time for training and hiring. DEQ is committed to working with workforce development agencies and industry associations to make sure that the repair ecosystem evolves in step with the growing ZEV market.

Comment #49: Advanced Clean Trucks Rule – Truck driver training programs

DEQ received 1 comment in this category from commenter 228 stating that it will put our commercial driver license training school out of business along with other similar schools and that without these schools there won't be enough truck drivers.

Response:

DEQ appreciates the importance of truck driver training programs and understands the concerns raised about potential impacts to commercial driver license (CDL) schools. The ACT rule does not change CDL requirements or impose restrictions on training programs. Instead, it gradually increases the percentage of zero-emission trucks that manufacturers must sell, while fleets continue to operate a mix of diesel and electric vehicles.

As ZEV technology expands, Oregon will need a workforce that can operate and maintain these vehicles. This presents an opportunity for training schools to expand their offerings and provide instruction in new vehicle technologies, including battery-electric and potentially hydrogen fuel cell systems. DEQ supports workforce adaptation and is working with partners to ensure Oregon's drivers and technicians are equipped to succeed in the evolving industry.

Comment #50: Advanced Clean Trucks Rule – Grant funding

DEQ received 11 comments in this category.

- Commenter 4 stated that grants and loans to support the costs of replacing engines or vehicles does not offset the cost enough for most operators or small businesses.

- Commenters 11, 44, 234, 320, 468 stated that a lack of grant funding to support ACT keeps demand for ZE trucks low.
- Commenter 225 requested incentives and funding mechanisms to support infrastructure development and vehicle transition.
- Commenter 234 stated that even with grant funding being available in California that can fund well over half the cost of ZEVs there is limited customer acceptance of the product which is why they have had real difficulty selling ZEV units.
- Commenter 316 stated that even with grant funding available in several states ZEV Class 7-8 truck sales have been very low.
- Commenter 485 stated that while Oregon does currently offer a rebate program for medium- and heavy-duty ZEVs they encourage revising the program to more closely mirror a Voucher Incentive Program. These type of “cash on the hood” programs can be structured to avoid scrappage requirements which have historically limited program accessibility.
- Commenter 653 stated that Oregon has not spent enough time and money building up infrastructure and charging stations like California therefore Oregon is putting the cart before the horse.

Response:

DEQ acknowledges that zero-emission trucks come with higher upfront costs, especially for Class 7 and 8 vehicles, and that current grant and loan programs do not cover these costs for all operators. DEQ continues to expand its suite of incentive programs, including rebates and grants, to make ZEV adoption more accessible and affordable. In 2025, DEQ is offering more than \$30 million in funding through its Diesel Emissions Mitigation, Oregon Zero Emissions Fueling, and Clean Truck grant programs. And DEQ will launch a new cash-on-the-hood Zero Emissions Rebates for Oregon Fleets (ZERO Fleet) incentive programs to accelerate fleet electrification. DEQ is deploying this voucher-style incentives to provide cash at the point of sale, further advancing Oregon’s zero emissions transition.

Comment #51: Advanced Clean Trucks Rule – Technical assistance program

DEQ received 1 comment in this category. Commenter 485 recommended the creation of a technical assistance program to inform and educate fleets about electrification and to ease transition planning. This could include tying technical assistance to incentive programs such that those who participate are eligible to receive a higher percentage of incentive funding.

Response:

DEQ supports technical assistance in some of our incentive programs, however this issue is not part of the proposed rules.

DEQ agrees that technical assistance is a crucial component of a successful ZEV transition. Transitioning to electric trucks involves complex planning around vehicle suitability, charging infrastructure, facility upgrades, and financial forecasting. A well-designed technical assistance program can help fleets of all sizes understand their options and develop practical roadmaps for adoption.

Comment #52: Advanced Clean Trucks Rule – Actions in other States

DEQ received 29 comments in this category.

- Commenters 7, 11, 18, 43, 222, 224, 226, 228, 233, 238, 316, 463, 468, 474, 477, 652, 653, 665 stated that other states have already recognized the strain this rule places on their economies and have delayed their own implementation schedules and Oregon should do the same.
- DEQ should develop enforcement discretion similar to what has been done in other Section 177 states (12, 18, 43, 44, 301), specifically Massachusetts (12, 43, 316, 468, 474)
- Commenter 651 called into question whether states like Maryland and New Jersey had delayed their ACT compliance. They said that while those states have taken different enforcement and compliance pathways, they have not delayed their model year implementation or have any other states to their knowledge. In fact, some states are actively considering joining the ACT even right now.

Response:

DEQ's issuance of limited enforcement discretion for model years 2025 and 2026 mirrors actions in other Section 177 states.

Comment #53: Advanced Clean Trucks Rule – Alignment with neighboring States

DEQ received 1 comment in this category. Commenter 592 stated that if Washington and California have the same rule then it makes sense for Oregon to be in compliance with those states or we become the dumping ground for all the old non-complying trucks that are no longer legal in those states.

Response:

DEQ's decision to issue enforcement discretion for model years 2025 and 2026 brings Oregon out of alignment with the enforcement decisions of California and Washington in the short term. Oregon's action is within existing authority and maintains identical rules, as required, while acknowledging current truck market challenges and federal uncertainty.

Over the long term, Oregon's ACT rule is aligned with California's and Washington's implementation of the rule, which is a critical part of maintaining legal consistency under Section 177 of the federal Clean Air Act. This regional alignment also helps ensure that Oregon is not subject to a surge of older, high-emission vehicles displaced from neighboring states that have adopted stricter standards.

Comment #54: Advanced Clean Trucks Rule – CARB Low NOx certified engines only eligible to not generate ACT deficits in 2026

DEQ received 1 comment in this category. Commenter 11 stated that even though low emitting 50mg NOx certified engines are available now that the ACT amendments only allow for 2026 model year low NOx engines to not generate deficits. This situation unnecessarily constrains clean engine purchases encouraging the purchase or import of used diesel engines that were certified to dirtier, but compliant, engine standards.

Response:

DEQ thanks you for submitting comments on the proposed rules. The additional flexibility of allowing 2026 HD Omnibus 50 mg NOx certified engines was included with the recent CARB amendments and Oregon has proposed to adopt those California amendments identically. However, DEQ modified this proposal to delay the implementation of the HD Omnibus rules until 2027 based on the rationale described in the response to comment #62. In addition, DEQ recently issued enforcement discretion for the ACT rule for model years 2025 and 2026. For those reasons, if the rules are adopted as proposed, DEQ expects the constraints described in the comment will not exist.

Comment #55: Advanced Clean Trucks Rule – Industry communication

DEQ received 2 comments in this category from commenters 225 and 235 requesting transparent dialogue with industry to ensure feasible implementation.

Response:

DEQ values ongoing communication with industry partners and understands that successful implementation depends on continued transparency and engagement. The agency has held multiple advisory committee meetings, stakeholder listening sessions, and public comment periods as part of its rulemaking process.

Moving forward, DEQ will continue to provide updates, technical assistance, and opportunities for dialogue to ensure that the ACT rule and related programs are implemented effectively. DEQ encourages fleets, manufacturers, and dealers to participate in ongoing discussions and subscribe to GovDelivery notifications for updates.

Comment #56: Advanced Clean Trucks Rule – Rapid implementation timeline

DEQ received 8 comments in this category.

- Commenter 227 stating that the ACT timeline of 75% class 4-8 trucks by 2035 is a nice goal to have but is out of touch with reality given that it can take up to 3 years to procure an electric garbage truck.
- Commenters 8, 224, 226, 228, 238, 253, 274, 661 stated that the implementation timeline is too short.

Response:

DEQ understands concerns that the ACT implementation schedule may feel aggressive, particularly given supply chain constraints and long vehicle procurement timelines. However, the rule was adopted in 2021 and includes gradual sales targets that begin at relatively low percentages and increase over more than a decade. The rule's structure allows fleets to continue purchasing and operating diesel trucks while preparing for a future with more ZEV options.

Estimated ZEV sales targets in 2027 represent between 1% and 2% of the total Oregon MHD fleet. While sales targets are higher as a percentage of vehicles delivered in a model year, these low percentages relative to the total fleet indicate how gradual this change will be on Oregon's roads and within the most suitable initial industries and vocations.

Additionally, DEQ's enforcement discretion for MY 2025 and 2026, along with proposed amendments provide additional near-term flexibility. These measures are designed to support a stable transition without altering the overall trajectory of the rule. The state remains committed to its long-term climate and air quality goals while responding to evolving market conditions.

Comment #57: Advanced Clean Trucks Rule – Alignment with federal regulations

DEQ received 40 comments in this category.

- Commenters 244, 321 stated that manufacturers and vehicle purchasers are forced to navigate a myriad of state and federal regulations that are not aligned and that the lack of alignment and clarity adds to the resistance to purchase ZEVs. Alignment with the federal EPA rules would give manufacturers time to finalize and properly test the electric options needed to operate the complex equipment mounted on state and municipal trucks. Alignment would also provide additional time to implement and support the needed infrastructure and grant funding programs.
- Commenter 467 stated that DEQ should explore aligning with the federal Greenhouse Gas Emissions Standards for Heavy-Duty Vehicles – Phase 3 in 2027
- Commenters 242, 245, 248, 251, 252, 255, 256, 258, 260-273, 300, 303, 305, 311, 315, 317-319, 464, 480, 486, 490, 492, 497, 501 stated that the lack of alignment with federal standards causes destructive complexity and uncertainty about future small business truck investment.

Response:

DEQ recognizes that state and federal regulatory frameworks may not always align perfectly. The ACT rule reflects California's approach under Section 177 of the Clean Air Act, while the federal government's Heavy-Duty GHG Phase 3 rule establishes different timing and targets. Oregon, like other Section 177 states, adopts California's standards to address local air quality needs more aggressively than federal minimums allow.

DEQ will continue to monitor federal rulemakings and implementation timelines. As federal policies evolve, Oregon may evaluate whether additional rulemaking is appropriate, particularly in light of infrastructure and incentive developments. However, maintaining ACT's current framework is essential to securing the health and climate benefits it offers.

Comment #58: Advanced Clean Trucks Rule – Uncertainty due to federal actions

DEQ received 4 comments in this category.

- Commenter 321 stated that with the current federal administration promising to rescind EV mandates the future remains uncertain causing chaos and confusion. There is a need for certainty.
- Commenter 468 stated that manufacturers are currently passing along \$3,000-\$7,000 in tariffs which will make the situation worse since we would also have to purchase ZEV credits. The tariffs could also lead to lower demand of Class 3 ZEV sales and therefore fewer credits available on the market.
- Commenters 474 and 483 stated that federally proposed tariffs will increase costs for both ZEV and ICE trucks.

Response:

DEQ acknowledges that recent federal actions and proposed tariffs have created uncertainty in the market. While these developments introduce challenges, Oregon remains focused on providing a clear, stable framework that businesses and manufacturers can rely on for long-term planning.

DEQ's enforcement discretion is one such response to this uncertainty. It offers additional flexibility during model years 2025 and 2026 without altering the rule itself or undermining the ACT program's integrity. Based on recent congressional action aimed at undermining the federal waiver that authorizes California's implementation of ACT, DEQ will continue to adjust outreach and compliance support as needed to help Oregon stakeholders navigate the evolving landscape.

Comment #59: Advanced Clean Trucks Rule – Regulate Credit Prices

DEQ received 1 comment in this category. Commenter 250 stated that ACT limitations can be overcome by reforming ACT to regulate credit prices, rather than regulating truck sales percentages. Manufacturers would make credit transactions directly with the regulatory agency at a mandated and stable allowance price, rather than through open market trading at a market-determined price.

Response:

Oregon DEQ must maintain ACT rules identical to California per the requirements of Section 177 of the Clean Air Act. Since California does not include this provision, DEQ will not propose this approach.

Comment #60: HD Omnibus Rule – General support for rule

DEQ received 2 comments in this category.

- Commenter 239 expressed general support for the rules.
- Commenter 499 expressed general support for the proposed amendments

Response:

DEQ thanks you for submitting your comments on the proposed rules.

Comment #61: HD Omnibus Rule – General opposition to the rule

DEQ received 1 comment in this category. Commenter 478+ stated that the rule should be repealed.

Response:

DEQ thanks you for submitting your comments on the proposed rules.

Comment #62: HD Omnibus Rule – Delay implementation of the rules

DEQ received 8 comments in this category.

- Commenters 12, 43, 44, 309, 483, 653 stated that the rules should be delayed until 2027.
- Commenter 234 requested a two-year delay to the implementation of the Omnibus rules.
- Commenter 477 requested to delay the rules until at least 2027 and include an easy method for further delays.
- Commenter 44 stated that it doesn't make sense for Oregon to implement the rules for just one model year (2026) before CARB aligns the rules with EPA's nationwide standards in model year 2027.

Response:

DEQ modified the proposal to delay the implementation of the HD Omnibus rules until 2027. DEQ made the decision to propose delaying the rules for an additional year after reviewing comments submitted under this proposal and ongoing and increased uncertainty regarding the status of the federal Clean Air Act waiver.¹⁷

Comment #63: HD Omnibus Rule – Do not delay implementation of the rules

DEQ received 5 comments in this category.

- Commenter 470 urged DEQ to reject the proposed one-year delay of the rules and maintain the original timeline.
- Commenters 466, 476+ urged DEQ to not delay the rule to either 2026 or 2027. Estimated per year costs of delay are approximately \$250-300 million in health impacts and could result in 15-18 additional deaths.
- Commenter 294 stated that delaying the rule to model year 2027 in Oregon would result in at least \$475 million in monetized negative health outcomes and 29 avoidable mortalities.
- Commenter 11 stated delaying the rules makes dirty diesel purchases a compliance option for the foreseeable future. They also stated that manufacturers who invested in cleaner engine technologies that meet the new standards are penalized by implementation delays and they also lose interest in investing in cleaner strategies in the future.

Response:

DEQ thanks you for submitting your comments on the proposed rules. DEQ has proposed to delay implementation of the HD Omnibus rules until 2027. Please see response to comment #62 for further explanation.

Comment #64: HD Omnibus Rule – Comments on DEQ's fiscal and economic analysis

DEQ received 2 comments in this category.

¹⁷ [California and the Clean Air Act \(CAA\) Waiver: Frequently Asked Questions](#), accessed on 5/28/2025

- Commenter 294 stated that DEQ must better consider the significant economic, public health and environmental impacts of delaying the HD Omnibus rules in these crucial early stages of transition to a clean, efficient, and modern on-road freight system.
- Commenter 44 stated that the rules are far more likely to do more harm than good in model year 2026 due to fleets either deferring purchases until 2027 or purchasing vehicles out-of-state. They also stated that there is no reasonable cost-benefit analysis that could support the retention of the separate and more onerous Omnibus for one single year and that DEQ has failed to prepare or present any quantitative analysis demonstrating the incremental net environmental benefits from this one-year deferral proposal.

Response:

DEQ thanks you for submitting your comments on the proposed rules. DEQ explained in the notice of proposed rulemaking that quantification of the specific fiscal impacts of delayed implementation on the affected parties was not possible due to uncertainties about the extent of medium- and heavy-duty vehicle supply constraints. DEQ also referenced reports that provided estimated emissions benefits associated with the rules overall. In addition, DEQ described how tailpipe emissions increases associated with the original proposal to delay implementation until 2026 was directly connected to the volume of HD Omnibus compliant engines that are made available for sale in 2025. Given that there is a limited supply of compliant engines available for sale and on the market in 2025, manufacturers would have only been able to comply with the rules by limiting their sales of new conventionally fueled medium- and heavy-duty vehicles and engines and by using excess emission offset flexibilities that do not necessarily result in direct tailpipe emissions. DEQ modified the proposal to delay the implementation of the HD Omnibus rules until 2027 based on the rationale described in the response to comment #62.

Comment #65: HD Omnibus Rule – CARB certified internal combustion engines will not be available to meet total market demand

DEQ received 2 comments in this category.

- Commenter 309 provided specific details about the compliant engines they expect to have available for MY 2026.
- Commenter 43 stated that when the rules go into effect in 2026 there will be substantial product blackouts in Oregon.

Response:

DEQ thanks you for submitting your comments. Based in part on comments received DEQ modified the proposal to delay the implementation of the HD Omnibus rules until 2027. Without an adequate supply of CARB certified Omnibus engines available for MY 2026 there is a greater risk of vehicle manufacturers severely restricting sales of ICE powered vehicles in Oregon in 2026 – especially those powered by medium-duty diesel engines.

Comment #66: HD Omnibus Rule – Legacy engine deficits and ZEV offsets

DEQ received 2 comments in this category.

- Commenter 477 stated that the main reason manufacturers can't comply with the rule is the inability to sell zero-emission trucks, since that governs the ability to sell 2023-compliant, or legacy, engines. They also stated that by limiting legacy engine sales Oregon may be limiting its collection of a \$9,000 or more per vehicle fee to fund environmental justice projects.
- Commenter 309 stated that as an engine manufacturer sufficient uncertainty remains which prevents them from determining how to comply with the legacy emissions credits and emissions mitigation requirements in Oregon.

Response:

DEQ disagrees with the commenters' interpretation of available legacy engine flexibilities and with their fundamental interpretation of how excess legacy engine emissions can be offset by targeted disadvantaged community projects.¹⁸ However, DEQ modified the proposal to delay the implementation of the HD Omnibus rules until 2027 based on the rationale described in the response to comment #62. If the rules are adopted as proposed and implementation is delayed until 2027 the legacy engine provisions of the rules would not apply since they are applicable to engines sold between 2024 and 2026 only.

Comment #67: HD Omnibus Rule – CARB enforcement discretion letters

DEQ received 1 comment in this category. Commenter 309 stated that Oregon has not issued enforcement discretion letters similar to California to ensure that Oregon's other laws do not create an unintended compliance liability for Omnibus legacy engines and ≥525 hp engines.

Response:

DEQ agrees that it has not issued HD Omnibus enforcement discretion letters like those issued by California. However, DEQ modified the proposal to delay the implementation of the HD Omnibus rules until 2027 based on the rationale described in the response to comment #62. If the rules are adopted as proposed and implementation is delayed until 2027 the need for DEQ to address similar issues through its own enforcement discretion is very likely eliminated. DEQ will continue to assess any ongoing manufacturer concerns on this issue to determine if any further agency action is needed.

Comment #68: Miscellaneous – State action is critical at this time

DEQ received 1 comment in this category from commenter 651 stating that actions at the federal level being taken to revoke the ACT, Advanced Clean Cars and other air

¹⁸ For details regarding legacy engine emissions offsets please see 13 CCR 1956.8(a)(2)(C)(3)(b)(iii) Procedure to Offset Deficit Balance.

quality regulations mean that Oregon needs to stand strong for clean air and for its right to improve air quality.

Response:

DEQ thanks you for your comments. DEQ recognizes that actions taken at the federal level are creating uncertainty. Despite that uncertainty, DEQ will continue to work to implement policies that will reduce harmful truck emissions in the long-term, despite modifying its approach in the short-term to reflect on-the-ground realities.

Comment #69: Miscellaneous – Actions to reduce truck emissions are long overdue and DEQ should do more

DEQ received 3 comments in this category.

- Commenter 312 stating that action to reduce emissions from trucks for the multi-pronged benefits of public health, climate mitigation and long-term cost savings is long overdue.
- Commenter 488 stated that more must be done to improve the air quality along the I-5 corridor in Portland as a matter of environmental justice including that there will be no federal support for this critical work.
- Commenter 366 asks for a ban on vehicular diesel engine emissions in Oregon.

Response:

DEQ thanks you for your comments. Neither the originally adopted rules nor the proposed rule amendments ban diesel emissions from vehicles. As described in this report under the General Assumptions section of the Fiscal and Economic Impact Statement, diesel emissions harm human health and the original adoption of the Clean Truck Rules in 2021 was to further reduce diesel pollution from new medium- and heavy-duty vehicles sold in Oregon.

Comment #70: Miscellaneous – Vehicle emissions testing

DEQ received 2 comments in this category.

- Commenter 5 stated that DEQ should be implementing emissions inspections on the current fleet of light-, medium- and heavy-duty trucks in Oregon in order to make sure these vehicles are in compliance with current laws and to improve air quality. The commenter also stated that it is common for vehicle pollution control equipment to be removed from light-duty diesel trucks and common to see heavy trucks belching soot and black smoke on Oregon's highways.
- Commenter 205 from Eugene stated that they cannot believe that there still aren't smog checks there.

Response:

DEQ thanks you for your comments. Vehicle emissions testing is outside the scope of this rulemaking action. The Clean Truck Rules and these proposed rule amendments are focused on emission standards for new medium- and heavy-duty vehicles and engines.

Comment #71: Miscellaneous – Oregon getting older California trucks

DEQ received 1 comment in this category. Commenter 448 stated that if California can ban dirty diesel, Oregon can ban dirty diesel and that all of the California trucks came to Oregon because of the lack of diesel regulation in Oregon.

Response:

DEQ thanks you for your comments. The sale of used vehicles is outside of the scope of this rulemaking. The Clean Truck Rules and these proposed rule amendments are focused on emission standards for new medium- and heavy-duty vehicles and engines.

Comment #72: Miscellaneous – Harm from smoking trucks

DEQ received 1 comment in this category. Commenter 310 described a situation where they were harmed by a large Dodge Ram truck “rolling coal” while eating at a restaurant. The person driving the truck was clearly intending to harm the people and families that were present. The commenter described their sensitivity to the smoke and how many other people are also sensitive. They stated that there is no reason why people should have these giant trucks and be able to put out huge amounts of pollution.

Response:

DEQ thanks you for your comments. Vehicle tampering is outside the scope of this rulemaking. The Clean Truck Rules and these proposed rule amendments are focused on emission standards for new medium- and heavy-duty vehicles and engines.

Comment #73: Miscellaneous – DEQ should share an updated Interstate 5 corridor particulate map

DEQ received 1 comment in this category from commenter 654 stating that DEQ should provide an updated chart of the I-5 corridor and the particulates since the last one shown was from 2019 because we have made huge inroads since that time and have been cleaning the air.

Response:

DEQ thanks you for your comment. DEQ shared a map that showed 2020 Willamette Valley diesel particulate matter cancer risk during the Feb. 21, 2025, rulemaking advisory committee meeting.¹⁹ The 2020 data comes from the EPA's 2020 AirToxScreen assessment and is the most recent data available.

Comment #74: Miscellaneous – Relax emissions regulations to 2009 standards

DEQ received 1 comment in this category. Commenter 8 stated that DEQ should relax medium- and heavy-duty truck emission standards back to where they were in 2009.

Response:

DEQ thanks you for your comment. Rolling new medium- and heavy-duty engine and vehicle emission standards back to what they were in 2009 is outside of DEQ's existing authority. Oregon can either opt-in to California new vehicle emission standards as described in Section 177 of the federal Clean Air Act or the federal new vehicle emissions standards would apply. As described under Section 177, Oregon cannot take any action that would have the effect of creating the need for a vehicle or engine that is different from either a California or EPA certified vehicle or engine.

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1	Mitch Byrnes	Byrnes Oil Company	15, 25, 33, 47, 48, 54	
2	Dave Ganslein		4	
3	Craig Neher	Ed Staub and Sons Petroleum	4, 7, 8, 9, 10, 30, 45	
4	Marvin Parker		4, 15, 20, 24, 25, 30, 50	
5	Weston Sanaee		3, 70	
6	Leo Birdsall		4	

¹⁹ See slide #5 of the [Clean Truck Rules 2025 Advisory Committee Meeting #1 presentation slides](#)

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7	Jason Cole		4, 17, 20, 24, 25, 27, 30, 44, 45, 52	
8	Dale Swanson	Space Age Fuel Inc.	4, 7, 17, 20, 24, 25, 30, 38, 45, 56, 74	
9	James Pliska	Space Age Fuel Inc.	4, 7, 15, 20, 25, 45	
10	Mark Sticklen		15, 20, 25, 32, 45	
11	Ryan Kenny	Clean Energy	10, 11, 12, 18, 20, 25, 26, 30, 36, 41, 44, 45, 50, 52, 54, 63	
12	Greg Hurner	Hurner Gov Relations & Advocacy, Miller Industries	4, 10, 17, 52, 62	1
13	Roger Knudson		3, 10, 23, 40	
14	Cecelia Hagen	Lane Audubon Society	3, 10, 23, 40	
15	Roger Ellingson		3	
16	Teresa Mueller		3, 10, 23, 40	
17	Brian Stewart	Electrify Now	3, 10, 23, 40	
18	Don Emerson	FMI Trucks	17, 20, 30, 45, 52	

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19	Annie Murai (Wissmiller)		3	
20	Patricia "Patty" Hine	350 Eugene	3, 10, 23, 40	
21	Robert "Robbie" Biffle		4	
22	Daniel Cummins ("Itcummins")		4, 8, 20, 25, 30, 42	
23	D. H. Klaus ("dhklaus")		4, 8, 17, 20, 25, 30, 42	
24	Rick Clark		4	
25	Lon French	North Lincoln Sanitary Service	7, 17, 20	
26	Jacquelin R Muro ("Renel Muro")		8, 15, 20, 25, 30, 42	
27	Brian Ettling		3, 9, 45	
28	Robert Kugler		3, 10, 40	
29	Pat Kaczmarek		3, 45	
30	Elizabeth "Liz" Fox		1, 3, 10, 23, 40, 45	
31	Andrew Simrin ("Drew Simrin")		3, 10, 23, 40	
32	Bill Libby		4, 20, 45	
33	Mark Puhlman		3, 45	
34	Pat DeLaquil	DecisionWare Group	3, 45	

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35	Darin Henry		3, 45	
36	Helena Birecki		3, 45	
37	James "Jim" Cavin		3, 45	
38	Gordon "Gordy" Molitor		3	
39	Melanie Plaut		3, 45	
40	Jeanne Roy		3, 45	
41	John Livingston		3	
42	Bridget Bayer	BNA Clean & Green Team	3	
43	Sean Waters	Daimler Truck North America	1, 17, 24, 26, 30, 38, 52, 62, 65	1
44	Timothy French	Truck & Engine Manufacturers Association	17, 30, 44, 50, 52, 62, 64	
45	Falyn Edwards		3, 10, 23, 40	
46	Antonio Forcellini		3, 10, 23, 40	
47	Noah Crowe		3, 10, 23, 40	
48	William Bauer		3, 10, 23, 40	
49	Timber Mavis		3, 10, 23, 40	

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50	Christopher Long		3, 10, 23, 40	
51	Rob Sheldon		3, 10, 23, 40	
52	Nesa Gilbert		3, 10, 23, 40	
53	Elaine Miller		3, 10, 23, 40	
54	Dennis Sweeney		3, 6, 23, 39, 45	
55	John Aviani		3, 6, 23, 39, 45	
56	Harry Freiberg		3, 6, 23, 39, 45	
57	Carla Williams		3, 6, 23, 39, 45	
58	Karen Springer		3, 6, 23, 39, 45	
59	Mary Beth Haines		3, 6, 23, 39, 45	
60	Tania V		3, 6, 23, 39, 45	
61	Erika Kane		3, 6, 23, 39, 45	
62	Craig Emerick		3, 6, 23, 39, 45	
63	Maurine Canarsky		3, 6, 23, 39, 45	
64	Benjamin Hauck		3, 6, 23, 39, 45	
65	Michael Wherley		3, 6, 23, 39, 45	

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66	Beth Levin		3, 6, 23, 39, 45	
67	Catherine Leach		3, 6, 23, 39, 45	
68	Robert Gibson		3, 6, 23, 39, 45	
69	Kathleen Devitt		3, 6, 23, 39, 45	
70	Heike M. Eubanks		3, 6, 23, 39, 45	
71	Steven Benner		3, 6, 23, 39, 45	
72	Janie Thomas		3, 6, 23, 39, 45	
73	Kevin Rooney		3, 6, 23, 39, 45	
74	Nathaniel Feyma		3, 6, 23, 39, 45	
75	Faye Rachford		3, 6, 23, 39, 45	
76	John Skillman		3, 6, 23, 39, 45	
77	Marilyn Stubbs		3, 6, 23, 39, 45	
78	Pat Knight		3, 6, 23, 39, 45	
79	Craig Marburger		3, 6, 23, 39, 45	
80	Jennifer Lippert		3, 6, 23, 39, 45	
81	Tamara Yunker		3, 6, 23, 39, 45	

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82	Russell Graham		3, 6, 23, 39, 45	
83	Robert Burch		3, 6, 23, 39, 45	
84	Tung Vu		3, 6, 23, 39, 45	
85	Carolyn Palermo		3, 6, 23, 39, 45	
86	John Bliss		3, 6, 23, 39, 45	
87	Richard Lehnert		3, 6, 23, 39, 45	
88	Tom Van Heeke	Rivian	13, 36	1
89	Elizabeth Willis		3, 6, 23, 39, 45	
90	Marilyn Adkins		3, 6, 23, 39, 45	
91	Barb Davis		3, 6, 23, 39, 45	
92	Corinne Brown		3, 6, 23, 39, 45	
93	Steve Garrett		3, 6, 23, 39, 45	
94	Dan Mckenzie		3, 6, 23, 39, 45	
95	Richard Felley		3, 6, 23, 39, 45	
96	Lyle Broschat		3, 6, 23, 39, 45	

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97	Emily Platt		3, 5, 6, 16, 23, 29, 39, 45	
98	Michael Ryan		3, 6, 23, 39, 45	
99	Christopher Luebke		3, 6, 23, 39, 45	
100	Patricia Oldham		3, 6, 23, 39, 45	
101	Russell and Mary Youmans		3, 6, 23, 39, 45	
102	Gayla Barrows		3, 6, 23, 39, 45	
103	Rebecca Picton		3, 6, 23, 39, 45	
104	Arakal Ramamurthy		3, 6, 23, 39, 45	
105	Susan McDonald		3, 6, 23, 39, 45	
106	Wayne Kelly		3, 6, 23, 39, 45	
107	Rogelio Sardina		3, 6, 23, 39, 45	
108	Elisabeth Hardy		3, 6, 23, 39, 45	
109	Terry Andrews		3, 6, 23, 39, 45	
110	Dean Shrock		3, 6, 23, 39, 45	
111	Mary Thiel		3, 6, 23, 39, 45	

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112	Robert Shotland		3, 6, 23, 39, 45	
113	Diana Schmidt		3, 6, 23, 39, 45	
114	Mark Rogers		3, 6, 23, 39, 45	
115	Greg Heinz		3, 6, 23, 39, 45	
116	Michael "Mel" Fish		3, 6, 23, 39, 45	
117	T Carey		3, 6, 23, 39, 45	
118	Akia Woods		3, 6, 23, 39, 45	
119	Robert Hammond		3, 6, 23, 39, 45	
120	Brittany Teodorski		3, 6, 23, 39, 45	
121	Heather Dale		3, 6, 23, 39, 45	
122	Carl Kincheloe		3, 6, 23, 39, 45	
123	Michelle Matthews		3, 6, 23, 39, 45	
124	Monica Gilman		3, 6, 23, 39, 45	
125	Jay Humphrey		3, 6, 23, 39, 45	
126	Becky Lippmann		3, 6, 23, 39, 45	
127	Brenda Gaines		3, 6, 23, 39, 45	

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129	Lynette Boone		3, 6, 23, 39, 45	
130	Marilyn Bergen		3, 6, 23, 39, 45	
131	Timothy Stinson		6, 23, 39, 45	
132	Linda Hendrix		6, 23, 39, 45	
133	Kenneth P. Kentch		6, 23, 39, 45	
134	Rob Burns		6, 23, 39, 45	
135	Joel Kay		3, 5, 6, 16, 23, 29, 39, 45	
136	Dennis Bone'		6, 23, 39, 45	
137	Stephen Kirby		6, 23, 39, 45	
138	Heidi Hartman		6, 23, 39, 45	
139	Crystal Poczynek		6, 23, 39, 45	
140	David Sweet		6, 23, 39, 45	
141	Jennifer Page		6, 23, 39, 45	
142	Richard and Ramie Streng		6, 23, 39, 45	

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144	Rebecca Richie		6, 23, 39, 45	
145	Jaci Harris		6, 23, 39, 45	
146	Bradley Holmes		6, 23, 39, 45	
147	William Babcock		6, 23, 39, 45	
148	Rita Finlay		6, 23, 39, 45	
149	Caitlin Williams		6, 23, 39, 45	
150	Don Ely		6, 23, 39, 45	
151	Jennifer McDaid		6, 23, 39, 45	
152	Lise Hull		6, 23, 39, 45	
153	Annie Chilla		6, 23, 39, 45	
154	Zahran Austin		6, 23, 39, 45	
155	Chistine Sinclair		6, 23, 39, 45	
156	Roselyn Shammasian		6, 23, 39, 45	
157	Nels Laulainen		6, 23, 39, 45	
158	Ana Capestany		6, 23, 39, 45	

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160	Gregory Pozovich		6, 23, 39, 45	
161	Paul Keady		3, 5, 6, 16, 23, 29, 39, 45	
162	Karen Adams		6, 23, 39, 45	
163	Stephen Still		6, 23, 39, 45	
164	Philip Ratcliff		6, 23, 39, 45	
165	Thomas Polatty		6, 23, 39, 45	
166	Kathy Robinson		6, 23, 39, 45	
167	Franklin Kapustka		3, 10, 23, 40	
168	Arthur Harold		6, 23, 39, 45	
169	Kristy Giles		6, 23, 39, 45	
170	Alisha Stireman Beyer		6, 23, 39, 45	
171	Kimberly Kelley		6, 23, 39, 45	
172	Barbara Bennett		6, 23, 39, 45	
173	James Bochenek		6, 23, 39, 45	

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175	Amanda Robinson		6, 23, 39, 45	
176	Patricia Desmond		6, 23, 39, 45	
177	Sean Martin		6, 23, 39, 45	
178	Joyce Phelps		6, 23, 39, 45	
179	Rebecca Humble		6, 23, 39, 45	
180	Tavia Glass		6, 23, 39, 45	
181	Nancy Marshall		6, 23, 39, 45	
182	Alicia Schubert		6, 23, 39, 45	
183	Steven Weinberg		6, 23, 39, 45	
184	Paul Handover		6, 23, 39, 45	
185	Mary Elizabeth Braun		6, 23, 39, 45	
186	Judy Wilcox		6, 23, 39, 45	
187	Holly Dodson		6, 23, 39, 45	
188	Jude Eda		6, 23, 39, 45	
189	Donna Sharp		6, 23, 39, 45	

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191	Paul Hanau		6, 23, 39, 45	
192	Steve Campbell		6, 23, 39, 45	
193	Adam Kauffman		6, 23, 39, 45	
194	Carol Verga		6, 23, 39, 45	
195	Jill Wyatt		6, 23, 39, 45	
196	John Bisset		6, 23, 39, 45	
197	Jane Hickman		3, 6	
198	Ann Bergmann		6, 23, 39, 45	
199	Lyndell Wilken		6, 23, 39, 45	
200	David Klingensmith		6, 23, 39, 45	
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203	James Smith		3, 10, 23, 40	
204	Jeanne Nyquist		6, 23, 39, 45	
205	Lucy Mead		6, 23, 39, 45, 70	

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207	Mitch Cooper		6, 23, 39, 45	
208	Usha Honeyman		6, 23, 39, 45	
209	Timothy Sullivan		6, 23, 39, 45	
210	Darlene Chirman		6, 23, 39, 45	
211	Dennis West		6, 23, 39, 45	
212	Douglas Maccomb		6, 23, 39, 45	
213	Barbara Rizzo		6, 23, 39, 45	
214	Susan Birge		6, 23, 39, 45	
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217	Tom Civiletti		6, 23, 39, 45	
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219	Guy Berliner		6, 23, 39, 45	
220	John Stewart		6, 23, 39, 45	
221	Brant Boyer	Terrain Tamers	20, 30	

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223	Donny Lamance	TEC Equipment	15	
224	Charles Ireland	Thomas H. Ireland Inc.	17, 20, 25, 30, 38, 45, 52, 56	
225	Dawn Vandewarker	Arrow Logistics	15, 17, 18, 20, 24, 25, 30, 50, 55	
226	Donnie Jenck		4, 15, 17, 20, 24, 25, 30, 38, 45, 52, 56	
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228	Steve Culbertson		20, 24, 30, 45, 49, 52, 56	
229	Denny Drennan	Freightliner Northwest	15, 17, 24, 25, 26, 30, 38, 45	
230	Andy Greshock	Peninsula Truck Lines, Inc.	25	
231	Brittany Barker		6, 23, 39, 45	
232	Jason Mikkelsen	Wilco	17, 25, 30, 38	
233	Ryan Hutchens	F.V. Martin Trucking Co.	17, 20, 24, 25, 30, 38, 45, 52	

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235	Melissa Dockery	TP Trucking & Logistics	17, 20, 24, 25, 30, 55	
236	Mark House	Lemmons Trucking, Inc.	17, 20, 24, 30	
237	Kara Marshall	Oldland Distributing, Inc.	17, 20, 24, 25, 30	
238	Scott Schriber	Tillamook	17, 20, 24, 25, 30, 38, 45, 52, 56	
239	Raevyn Thompson	Beyond Toxics	3, 10, 13, 23, 40, 60	2
240	Tuck Wilson		2, 3	
241	Michael Thor		6, 23, 39, 45	
242	Allen Zwemke		5, 17, 20, 24, 25, 42, 57	
243	Mike Higgins		6, 23, 39, 45	
244	Ron Long	Premier Truck Group	8, 17, 25, 26, 30, 57	
245	Bruce Zuber		5, 17, 20, 24, 25, 42, 57	
246	Leah Jay		16, 39, 40	
247	Pat Beggs		30, 45	

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249	Robin Esterkin		6, 23, 39, 45	
250	Ken Johnson, Adam Sweeney & Dan Galpern	The Climate Reality Project: Silicon Valley Chapter & Climate Protection & Restoration Initiative	59	
251	Terry Neuenschwander		5, 17, 20, 24, 25, 42, 57	
252	Rick Kriege		5, 17, 20, 24, 25, 42, 57	
253	Kami Forslund		17, 20, 24, 30, 32, 38, 56	
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256	Kathy Ballard		5, 17, 20, 24, 25, 42, 57	
257	Lance Jones	Northwest Beef Express	7, 17, 20, 25, 30, 32	
258	Jami Vito		5, 17, 20, 24, 25, 30, 42, 57	
259	Claire Turner	Turner Logging	17, 20, 24, 25, 30, 48	

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261	John Garland		5, 17, 20, 24, 25, 42, 45, 57	
262	Harry Carson Johnson		5, 17, 20, 24, 25, 42, 57	
263	Dan Lundy		5, 17, 20, 24, 25, 42, 57	
264	Geoffrey Stathos		5, 17, 20, 24, 25, 42, 57	
265	Randy Skeans		5, 17, 20, 24, 25, 42, 57	
266	Milton Moran Jr.		5, 17, 20, 24, 25, 42, 57	
267	Dean Rowan		5, 17, 20, 24, 25, 42, 57	
268	Joel Root		5, 17, 20, 24, 25, 42, 57	
269	Don Arndt		5, 17, 20, 24, 25, 42, 57	
270	Sheila Gobel		5, 17, 20, 24, 25, 42, 57	

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272	Rex Storm		5, 17, 20, 24, 25, 42, 57	
273	Nate Montgomery		5, 17, 20, 24, 25, 42, 57	
274	Kyle Forslund		17, 20, 24, 30, 32, 38, 56	
275	Pat Kaczmarek		3, 10, 23, 40	
276	Robin Woolman		16	
277	Diane Hodiak	350Deschutes	3	
278	Kristopher Fortin Grijalva	Oregon Environmental Council	3, 10, 23, 40	2
279	Annette Simonson		6, 23, 39, 45	
280	Ryan Beam		3	
281	Jean Lofy		3, 10, 23, 40	
282	davemult@aol.com		3, 10, 23, 40	
283	Mark Gibson	Siskiyou Transportation, Inc. & Timberland Helicopters, Inc	15, 17, 18, 24, 25, 30, 32, 38	

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285	Catherine Mushel		3	
286	Bryce Donovan		3, 10, 23, 40	
287	cherinel@comcast.net		3, 10, 23, 40	
288	Kathleen Boylan		3, 10, 23, 40	
289	Martha Vest		3, 10, 23, 40	
290	Nancy Hiser		6, 23, 39, 45	
291	Diane Luck		3, 10, 23, 40	
292	Nina Rollow		3, 10, 23, 40	
293	Jason Lewis		3, 10, 23, 40	
294	Sam Wilson & Guillermo Ortiz	Union of Concerned Scientists & Natural Resources Defense Council	8, 14, 16, 21, 23, 35, 36, 37, 39, 40, 63, 64	1
295	Mallory J Pratt		3, 10, 23, 40	
296	Peter Kokopeli		3, 10, 23, 40	
297	Wayne Buma		Comment unreadable	
298	Cheryl Bristah		3, 10, 23, 40	

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300	Michael Zanona		5, 17, 20, 24, 25, 42, 57	
301	Jordan Papé	The Papé Group & Pacific Clean Fuels	17, 20, 24, 25, 26, 30, 32, 34, 38, 42, 44, 48, 52	
302	John Ardner		3, 10, 23, 40	
303	Paul Zolezzi		5, 17, 20, 24, 25, 42, 57	
304	John Wadsworth		3, 10, 23, 40	
305	Katie Zolezzi		5, 17, 20, 24, 25, 42, 57	
306	Glyn Thomas		3, 10, 23, 40	
307	Scott Sauer	Papé Kenworth	20, 30, 45	
308	West Livaudais		3, 10, 23, 40	
309	Jackie M. Yeager	Cummins Inc.	62, 65, 66, 67	
310	Wendy E. Ridgway		72	
311	Garrett Burris		5, 17, 20, 24, 25, 42, 57	

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312	Xitlali Torres	Verde	13, 16, 24, 29, 37, 45, 69	1
313	Greg Galbraith	Market Express/MX Solutions LLC	15, 17, 20, 25, 30, 38, 45	
314	Jessica Waller	Oregon Spinal Cord Injury Connection	3, 10, 23, 40, 45	
315	Robert Byers		5, 17, 20, 24, 25, 42, 57	
316	Appie Theron & Kevin P. Collins	Autocar Trucks	15, 17, 20, 23, 24, 25, 26, 42, 43, 44, 50, 52	
317	Becky Burris		5, 17, 20, 24, 25, 42, 57	
318	Becky Rundell		5, 17, 20, 24, 25, 42, 57	
319	Richard Spring		5, 15, 17, 20, 24, 25, 42, 57	
320	Ben Arnold	Papé Kenworth	10, 15, 17, 20, 24, 25, 26, 38, 45, 50	
321	Megan Chuinard	Oregon Seed Council	17, 20, 30, 38, 57, 58	
322	Heroes on the Highway		4, 5, 7, 45	
323	Andrew Hogan	Neighbors for Clean Air	3, 5, 16, 29, 39	

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324	Mackenzie Springer		3, 5, 16, 29, 39	
325	Alex Macdonald		3, 5, 16, 29, 39	
326	Dan Jaffee		3, 5, 16, 29, 39	
327	Chris Smith		3, 5, 16, 29, 39	
328	Kiel Johnson		3, 5, 16, 29, 39	
329	Stanley Penkin		3, 5, 16, 29, 39	
330	Tamara Olcott		3, 5, 6, 16, 29, 39, 45	
331	Susan Campbell		3, 5, 6, 16, 29, 39	
332	Beth Levin		3, 5, 16, 29, 39	
333	John Nettleton		3, 5, 16, 29, 39	
334	Philip Selinger		3, 5, 16, 29, 39	
335	Tony DeFalco		3, 5, 16, 29, 39	
336	Krista Hofmeister		3, 5, 16, 29, 39	
337	Niharika Panjala		3, 5, 16, 29, 39	
338	Soeren Johnson		3, 5, 16, 29, 39	
339	James Shelstad		3, 5, 16, 29, 39	

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340	Marna Herrington		3, 5, 6, 16, 23, 29, 39, 45	
341	Stephanie LaMonica		2, 3, 5, 6, 16, 29, 39	
342	Kathryn Sheibley		3, 5, 16, 29, 39	
343	Treothe Bullock		3, 5, 16, 29, 39	
344	Judy Seubert		3, 5, 16, 29, 39	
345	Ross Wheeler		3, 5, 16, 29, 39	
346	Meg Bowman		3, 5, 16, 29, 39	
347	Diana Talcott		3, 5, 16, 29, 39	
348	Catherine Miller		3, 5, 16, 29, 39	
349	Lenny Dee		3, 5, 16, 29, 39	
350	Jan Zuckerman		3, 5, 16, 29, 39	
351	Susan Upton		3, 5, 16, 29, 39	
352	Gitanjali Hursh		3, 5, 16, 29, 39, 45	
353	Megan Petrucelli		3, 5, 16, 29, 39	
354	Stacey Schroeder		3, 5, 16, 29, 39	

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355	Julie Granger		3, 5, 16, 29, 39	
356	Caroline Skinner		3, 5, 16, 29, 39	
357	Jean Trygstad		3, 5, 16, 29, 39	
358	Joseph Stenger		3, 5, 16, 29, 39	
359	Debra Rehn		3, 5, 16, 23, 29, 39, 45	
360	Laura Feldman		3, 5, 16, 29, 39	
361	Wesley Ward		3, 5, 16, 29, 39	
362	Dawn Smallman		3, 5, 16, 29, 39	
363	Annette Stanhope		3, 5, 16, 29, 39	
364	Jimmy Radosta		3, 5, 16, 29, 39	
365	Susan Mates		3, 5, 16, 29, 39	
366	Bobbee Murr		3, 5, 16, 29, 39, 69	
367	Carol Moore		3, 5, 16, 29, 39	
368	Theodora Tsongas		3, 5, 16, 29, 39	
369	Mel Scott		3, 5, 16, 29, 39	
370	Jen Davis		3, 5, 16, 29, 39	

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#	Name	Organization	Comment Number	Hearing #
371	K Paule		3, 5, 16, 29, 39	
372	David Pedersen		3, 5, 16, 29, 39	
373	Jim Yang		3, 5, 16, 29, 39	
374	Elianne Lieberman		3, 5, 16, 29, 39	
375	Estee Segal		3, 5, 16, 29, 39	
376	Bianca Salerno		3, 5, 16, 29, 39	
377	Kate Walker		3, 5, 16, 29, 39	
378	Mary Lou Soscia		3, 5, 16, 29, 39	
379	Troy Winslow	Portland Harbor Community Coalition	3, 5, 16, 29, 39	
380	York Collective	York Collective	3, 5, 16, 29, 39	
381	Susan Harris		3, 5, 13, 16, 29, 39	
382	Winter Brown		3, 5, 16, 29, 39	
383	Diana Bright		3, 5, 16, 29, 39	
384	Terrance Hohner		3, 5, 16, 29, 39	
385	Hiram Lucke		3, 5, 16, 29, 39	
386	Bruce Hellemn		3, 5, 16, 29, 39	

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#	Name	Organization	Comment Number	Hearing #
387	Erica Lurie		3, 5, 16, 29, 39	
388	John Carr		3, 5, 16, 29, 39	
389	Kainalu Bailey		3, 5, 16, 29, 39	
390	Dana Visse		3, 5, 16, 29, 39	
391	Sandra Joos		3, 5, 16, 29, 39	
392	Corey Adkins		3, 5, 16, 29, 39	
393	Monique Smiley		3, 5, 16, 29, 39	
394	Lyn Neeley		3, 5, 16, 29, 39	
395	James Plunkett		3, 5, 16, 29, 39	
396	Cass Martinez		3, 5, 16, 29, 39	
397	Helena Wald		3, 5, 16, 29, 39	
398	Kate Hibschan		3, 5, 16, 29, 39	
399	Heather Holden		3, 5, 16, 29, 39	
400	Leela Devi		3, 5, 16, 29, 39	
401	Ineke Deruyter		3, 5, 16, 29, 39	
402	Alison Colman		3, 5, 13, 16, 29, 39	

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403	Annie Ray		3, 5, 16, 29, 39	
404	Alison Hardin		3, 5, 16, 29, 39	
405	Lynn Handlin		3, 5, 16, 29, 39	
406	Johanna King		3, 5, 16, 29, 39	
407	Geri Abere		3, 5, 16, 29, 39	
408	Tiffany Slottke		3, 5, 16, 29, 39	
409	Tanya Schaefer		3, 5, 16, 29, 39	
410	Bethany Shetterly Thomas		3, 5, 16, 29, 39	
411	Neil Brandt		3, 5, 16, 29, 39	
412	Toby Hodges		3, 5, 16, 29, 39	
413	Gun Denhart		3, 5, 16, 29, 39	
414	Skye Moret		3, 5, 16, 29, 39	
415	Stephen Gomez		3, 5, 16, 29, 39	
416	Lily Burnett		3, 5, 16, 29, 39	
417	Flora Lippert		3, 5, 16, 29, 39	
418	Duane Mecham		3, 5, 16, 29, 39	

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#	Name	Organization	Comment Number	Hearing #
419	Karl G. Anuta		3, 5, 16, 29, 39	
420	Kaylee Asai		3, 5, 16, 29, 39	
421	Annie Veatch		3, 5, 16, 29, 39	
422	Susan Bladholm		3, 5, 16, 29, 39	
423	Renee Hackenmiller-Paradis		3, 5, 16, 29, 39	
424	Nina Barone		3, 5, 16, 29, 39	
425	Joe Dolan		3, 5, 16, 29, 39	
426	Aaron Babbie		3, 5, 16, 29, 39	
427	Julie DiLeone		3, 5, 16, 29, 39	
428	Haile Peveto		3, 5, 16, 29, 39	
429	Lucia Peveto		3, 5, 16, 29, 39	
430	Zohreh Armin		3, 5, 16, 29, 39	
431	Theodore Skyler		3, 5, 16, 29, 39	
432	Rylee Giannone		3, 5, 16, 29, 39	
433	Rosalie McDougall		3, 5, 16, 29, 39	
434	Margaret Shannon		3, 5, 16, 29, 39	

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435	Nataliya Toronjo		3, 5, 16, 29, 39	
436	Ed Rosney		3, 5, 16, 29, 39	
437	Bonnie McKinlay		3, 5, 16, 29, 39	
438	Thomas Karwaki		3, 5, 16, 29, 39	
439	Valko Sichel		3, 5, 16, 29, 39	
440	Brenda Smith		3, 5, 16, 29, 39	
441	Dennis Poklikuha		3, 5, 16, 29, 39	
442	Troy Winslow		3, 5, 16, 29, 39	
443	Duane Fickeisen		3, 5, 16, 29, 39	
444	Michael Heumann		3, 5, 16, 29, 39	
445	Pamela Eros		3, 5, 16, 29, 39	
446	Jody Bleyle		3, 5, 16, 29, 39	
447	Lisa Manning		3, 5, 16, 29, 39	
448	Cynthia Yee		3, 5, 16, 29, 39, 71	
449	Jill Fuglister		3, 5, 16, 29, 39	
450	Gilly Lyons		3, 5, 16, 29, 39	

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451	Lauren Nathe		3, 5, 16, 29, 39	
452	Oscar Edwards-Hughes		3, 5, 16, 29, 39	
453	Ashley Henry		3, 5, 16, 29, 39	
454	Alison Buttafuoco		3, 5, 16, 29, 39	
455	Kim Brown		3, 5, 16, 29, 39	
456	Mark Coleman		3, 5, 16, 29, 39	
457	Chris Eykamp		3, 5, 16, 29, 39	
458	Jaq Kunz		3, 5, 16, 29, 39	
459	Deb Weekley		3, 5, 16, 29, 39	
460	Kate Miller		3, 5, 16, 29, 39	
461	Monicka Koneski		3, 5, 16, 29, 39	
462	Theresa Mare		3, 5, 16, 29, 39	
463	Shelly Boshart Davis	Oregon State Representative District 15	17, 20, 24, 25, 26, 30, 38, 42, 45, 46, 52	2
464	Harold Burris		5, 17, 20, 24, 25, 42, 57	
465	Ilene Moss		3, 10, 23, 40	

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466	Damon Motz-Storey	Sierra Club	6, 16, 36, 63	2
467	Tanner Lloyd	Associated General Contractors	17, 20, 25, 36, 38, 57	
468	Jason Muggy	Papé Kenworth	17, 20, 25, 26, 30, 38, 45, 50, 52, 58	
469	Alan Journet	Southern Oregon Climate Action Now	3	
470	Sue Gander	World Resources Institute Electric School Bus Initiative	6, 8, 9, 16, 23, 36, 63	
471	Betty Shelley		2, 3, 10, 23, 40	
472	Melinda Fleming		2	
473	Sarah Lochner	Oregon Coalition of Local Health Officials	3, 10, 23, 40	
474	Jana Jarvis	Oregon Trucking Association	15, 20, 24, 25, 30, 38, 44, 45, 52, 58	
475	Mackenzie Springer	Neighbors for Clean Air	3, 6, 36, 45	2
476+	Brett Morgan	Climate Solutions	3, 6, 8, 23, 33, 36, 37, 63	
477	Josh Lovelace	Miller Industries & Safe Roads Coalition	17, 25, 30, 45, 52, 62, 66	1
478+	Safe Roads Coalition		15, 20, 24, 25, 30, 45, 46, 61	

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479	Phil Barnhart	Emerald Valley Electric Vehicle Association	3, 6, 8, 9, 23, 36	
480	Rex Storm	Associated Oregon Loggers	4, 5, 15, 17, 18, 20, 24, 25, 28, 30, 38, 42, 44, 45, 45, 57	2
481	Vonnie Mikkelsen	Springfield Area Chamber of Commerce	20, 24, 30, 48	
482	Erin Childs	Renewable Hydrogen Alliance	13, 31	
483	Craig Campbell	Oregon Refuse & Recycling Association	25, 58, 62	
484	Jamie Johnson	Green Energy Institute at Lewis & Clark Law School	14, 36, 37	2
485	Alissa Burger	CALSTART	13, 39, 50, 51	
486	Brandon Bowers		5, 17, 20, 24, 25, 42, 57	
487	Mary Addams		3, 6, 23, 39, 45	
488	Michelle Graas		3, 69	
489	Mitch Seal		17, 20, 24, 25, 30, 32	
490	Thomas Kincheloe		5, 17, 20, 24, 25, 42, 57	

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491	Max Hanley	350PDX	3, 8, 13, 16, 23	
492	Buck Henry		5, 17, 20, 24, 25, 42, 57	
493	Deborah Clark		1, 3, 16	
494	Jess DePew		3, 10, 23, 40	
495	Blythe Clark-McKittrick		6, 23, 39, 45	
496	Bob Rossi		3, 10, 23, 40	
497	Raymond Grant		5, 17, 20, 24, 25, 42, 57	
498	Jay Richards		6, 23, 39, 45	
499	Joseph Stenger	Mobilizing Climate Action Together	3, 10, 13, 14, 16, 23, 40, 60	1
500	Esther Friedman		6, 23, 39, 45	
501	Delani Kincheloe		5, 17, 20, 24, 25, 42, 57	
502	Lee Schondorf		6, 23, 39, 45	
503	Anne Ackley		6, 23, 39, 45	
504	Mark Galbraith		6, 23, 39, 45	

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505	Melissa Ryan		6, 23, 39, 45	
506	Jacqueline Begemann		6, 23, 39, 45	
507	Sara Smith		6, 23, 39, 45	
508	Adama Hamilton		6, 23, 39, 45	
509	Dan Clapsadle		6, 23, 39, 45	
510	Georgeann Courts		6, 23, 39, 45	
511	Linore Blackstone		6, 23, 39, 45	
512	Cynthia Chrystal		6, 23, 39, 45	
513	John Barger		6, 23, 39, 45	
514	Allison Everitt		6, 23, 39, 45	
515	Donald Clay		6, 23, 39, 45	
516	Dinah Fedorow		6, 23, 39, 45	
517	Sunny Tabino		6, 23, 39, 45	
518	Mary Anne Morrison		6, 23, 39, 45	
519	Pamela Yates		6, 23, 39, 45	
520	Shira Fogel		6, 23, 39, 45	

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521	P Bryer		6, 23, 39, 45	
522	Veena Singwi		6, 23, 39, 45	
523	Katherine Fredricks		6, 23, 39, 45	
524	Coyote Marten		6, 23, 39, 45	
525	Sagen Smith		6, 23, 39, 45	
526	Colleen Wiley		6, 23, 39, 45	
527	Nancy Perkinson		6, 23, 39, 45	
528	Kyle Haines		6, 23, 39, 45	
529	Bruce Raffety		6, 23, 39, 45	
530	Jordon Porter		6, 23, 39, 45	
531	Suzanne Fernstrom		6, 23, 39, 45	
532	Tascha Babitch		6, 23, 39, 45	
533	Nicola Dandelion		6, 23, 39, 45	
534	Connard Rasmussen		6, 23, 39, 45	
535	Sharon Burge		6, 23, 39, 45	
536	Diane Ensign		6, 23, 39, 45	

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537	Laura Stice		6, 23, 39, 45	
538	Larry Narlock		6, 23, 39, 45	
539	Jack West		6, 23, 39, 45	
540	Amy Roberts		6, 23, 39, 45	
541	Cam Wolff		6, 23, 39, 45	
542	Laura Hoyes		6, 23, 39, 45	
543	Donna Timmerman		6, 23, 39, 45	
544	Stacy Moranville		6, 23, 39, 45	
545	Duncan Baruch		6, 23, 39, 45	
546	Sally Maish		6, 23, 39, 45	
547	Satya Vayu		6, 23, 39, 45	
548	Laurel Triplett		6, 23, 39, 45	
549	Trudy Turley		6, 23, 39, 45	
550	Jennifer Cooper		6, 23, 39, 45	
551	Susan Heath		6, 23, 39, 45	
552	Nikolaus Matheis		6, 23, 39, 45	

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553	Eileene Gillson		6, 23, 39, 45	
554	Carolyn Latierra		6, 23, 39, 45	
555	Daniel Kuperus		6, 23, 39, 45	
556	Brian Yorgey		6, 23, 39, 45	
557	Peggy Coffman		6, 23, 39, 45	
558	James Greathouse		6, 23, 39, 45	
559	Sherry Friedman		6, 23, 39, 45	
560	Sue Lundquist		6, 23, 39, 45	
561	Michael Flaningam		6, 23, 39, 45	
562	Sarah Welte		6, 23, 39, 45	
563	Samuel Carl		6, 23, 39, 45	
564	Luanne Alomair		6, 23, 39, 45	
565	Linda Skonberg		6, 23, 39, 45	
566	Paul Norup		6, 23, 39, 45	
567	Wendy McGowan		6, 23, 39, 45	
568	Adrian Bergeron		6, 23, 39, 45	

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569	Michael Noack		6, 23, 39, 45	
570	Patricia Bowman		6, 23, 39, 45	
571	Ray Neff		6, 23, 39, 45	
572	Nancy Anderson		6, 23, 39, 45	
573	Ann Nowicki		6, 23, 39, 45	
574	Linda Voci		6, 23, 39, 45	
575	Nancy Vermeeren		6, 23, 39, 45	
576	Kim Wick		6, 23, 39, 45	
577	Debra Spies		6, 23, 39, 45	
578	Robert Thornhill		6, 23, 39, 45	
579	Maureen O'Neal		6, 23, 39, 45	
580	Gayla Leopard		6, 23, 39, 45	
581	Marion Hadden		6, 23, 39, 45	
582	Mary Beth Pattyn		6, 23, 39, 45	
583	Luke Bryan		6, 23, 39, 45	
584	Anna Cowen		6, 23, 39, 45	

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585	Jane Bartosz		6, 23, 39, 45	
586	Cherine Bauer		6, 23, 39, 45	
587	Brent Rocks		6, 23, 39, 45	
588	Carol Wagner		6, 23, 39, 45	
589	Martha Stevens		6, 23, 39, 45	
590	Gay Hall		6, 23, 39, 45	
591	Larry Morningstar		6, 23, 39, 45	
592	Blaine Ackley		6, 23, 39, 45, 53	
593	Rue Oseas		6, 23, 39, 45	
594	Elyce M Benham		6, 23, 39, 45	
595	Donna Bonetti		6, 23, 39, 45	
596	Tracy Richards		6, 23, 39, 45	
597	Penny Salus		6, 23, 39, 45	
598	Carol Nieh		6, 23, 39, 45	
599	Sandra Romito		6, 23, 39, 45	
600	Marney Reed		6, 23, 39, 45	

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#	Name	Organization	Comment Number	Hearing #
601	Patricia Pomeroy		6, 23, 39, 45	
602	Robin Bochsler		6, 23, 39, 45	
603	Alton Roundy		6, 23, 39, 45	
604	John Duggan		6, 23, 39, 45	
605	Lyric Apted		6, 23, 39, 45	
606	Cheryl Trosper		6, 23, 39, 45	
607	Marjorie A Nafziger		6, 23, 39, 45	
608	Kathy Jones		6, 23, 39, 45	
609	Michael Hoover		6, 23, 39, 45	
610	Michael Simon		6, 23, 39, 45	
611	Diane Chavez		6, 23, 39, 45	
612	Mike Workman-Morelli		6, 23, 39, 45	
613	Susanna Askins		6, 23, 39, 45	
614	Melodie Gingras		6, 23, 39, 45	
615	Joseph Breazeale		6, 23, 39, 45	
616	Lydia Felley		6, 23, 39, 45	

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#	Name	Organization	Comment Number	Hearing #
617	Dana Petre-Miller		6, 23, 39, 45	
618	Ian Shelley		6, 23, 39, 45	
619	Nina French		6, 23, 39, 45	
620	Pete and Jeanie Barkett		6, 23, 39, 45	
621	Judith Lienhard		6, 23, 39, 45	
622	Lilith Gist		6, 23, 39, 45	
623	Susan Wechsler		6, 23, 39, 45	
624	Czora Pagsolingan		6, 23, 39, 45	
625	Scott Harker		6, 23, 39, 45	
626	Charles Fillipucci-Arnett		6, 23, 39, 45	
627	Austin Sumpter		6, 23, 39, 45	
628	Ann Watters		6, 23, 39, 45	
629	Micki Selvitella		6, 23, 39, 45	
630	Blanche Hill		6, 23, 39, 45	
631	Steven Schafer		6, 23, 39, 45	
632	Marsha Sleeth		6, 23, 39, 45	

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#	Name	Organization	Comment Number	Hearing #
633	Kathleen Barnebey		6, 23, 39, 45	
634	Marguerite Eliasson		6, 23, 39, 45	
635	Amy Carter-Kemp		6, 23, 39, 45	
636	Jess Kimball		6, 23, 39, 45	
637	Aranea Push		6, 23, 39, 45	
638	Joe Frascone		6, 23, 39, 45	
639	Debbie Lehwald		6, 23, 39, 45	
640	Mitchell Hall		6, 23, 39, 45	
641	Sally Keller		6, 23, 39, 45	
642	Janna Piper		6, 23, 39, 45	
643	Norah Renken		6, 23, 39, 45	
644	Marie Wakefield		6, 23, 39, 45	
645	chloe@ravennastrategies.com		3, 10, 23, 40	
646	gail@chickfactor.com		3, 10, 23, 40	
647	John Newlin		3, 10, 23, 40	

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#	Name	Organization	Comment Number	Hearing #
648	Amanda Duncan	The Climate Reality Project: Portland Chapter	3, 10, 23, 40	
649	Elizabeth Graser-Lindsey		3, 25	
650	Rebecca Jaffer Jay		6, 16	
651	Brett Morgan	Climate Solutions	19, 22, 25, 52, 68	2
652	Kevin Baker	Oregon Tow Truck Association	17, 20, 42, 52	1
653	John Barnes	TEC Equipment & Oregon Trucking Association	25, 30, 50, 52, 62	1
654	James Walsh	Fleet Sales West	20, 25, 30, 73	
655	Mike Wagner		20, 25, 38	1
656	Carrie Nyssen	American Lung Association	6, 45	2
657	Eliza Walton	Oregon League of Conservation Voters	3, 6, 37	2
658	Dr. Erika Moseson		3, 45	2
659	Dr. Christopher Hale		13, 16, 39, 45	2
660	Paul Mahnken	Miller Industries Towing Equipment	17, 20, 25, 38	2
661	Ted Croce	Summit Truck Body	15, 17, 20, 24, 25, 32, 45, 56	2
662	Ty Kelly	Beaver Coach Sales and Service	18, 20	2

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#	Name	Organization	Comment Number	Hearing #
663	Steve Graham	Jackson Group Peterbilt	20, 24, 25, 26, 30	2
664	Stuart Leibowitz	Douglas County Global Warming Coalition	3	2
665	Greg Hurner	Safe Roads Coalition	17, 25, 45, 46, 52	2
666	KJ Hibbard	Jackson Group Peterbilt	25, 26	2

Implementation

Notification

The proposed rules would become effective upon filing on approximately July 10, 2025. The affected parties are medium- and heavy-duty vehicle and engine manufacturers, dealerships, purchasers and the public. DEQ would notify affected parties by GovDelivery notification, direct emails to industry contacts and by updating its web page to reflect the changes. Depending on the need, DEQ may also hold webinars to share information about rule updates and answer questions.

Compliance and enforcement

Affected parties would be notified by GovDelivery, direct emails to industry contacts and separate emails from membership organizations.

Reporting

Vehicle manufacturers subject to the regulation will be required to report information such as early action credits accrued and annual sales. Manufacturers must use the California Air Resources Board Advanced Clean Trucks Reporting System (ACTRS) for reporting, available here: <https://main.d1ntyzcfnem94j.amplifyapp.com/sign-in>

Systems

Website

Update web page, FAQ sheets and other guidance information on rule amendments.

Database

ACT sales reporting will continue to be centralized through CARB's ACTRS reporting tool.²⁰ Early action credit reports will continue to be posted to [DEQ's ACT Early Credit Reporting webpage](#).

Training

²⁰ See the [CARB ACT Reporting webpage](#) for more information on reporting.

DEQ will continue to provide technical assistance to affected parties to implement the provisions of the rules and rule amendments including how to submit credit and debit information and how to submit sales information.

Five-year review

Requirement

Oregon law requires DEQ to review new rules within five years after EQC adopts them. The law also exempts some rules from review. DEQ determined whether the rules described in this report are subject to the five-year review. DEQ based its analysis on the law in effect when EQC adopted these rules.

Exemption from five-year rule review

The Administrative Procedures Act exempts some of the proposed rules from the five-year review because the proposed rules would:

- Amend or repeal an existing rule. ORS 183.405(4).

Rules exempt from five-year review				
340-257-0050	340-261-0020	340-261-0040	340-261-0050	

Five-year rule review required

No later than July 11, 2030, DEQ will review the newly adopted rules for which ORS 183.405 (1) requires review to determine whether:

- The rule has had the intended effect
- The anticipated fiscal impact of the rule was underestimated or overestimated
- Subsequent changes in the law require that the rule be repealed or amended
- There is continued need for the rule.

DEQ will use “available information” to comply with the review requirement allowed under ORS 183.405 (2).

DEQ will provide the five-year rule review report to the advisory committee to comply with ORS 183.405 (3).

Rule subject to five-year review				
340-257-0300				

Non-discrimination statement

DEQ does not discriminate on the basis of race, color, national origin, disability, age or sex in administration of its programs or activities.

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