Chapter 173-423 WAC, Clean Vehicles Program rulemaking: industry focused meeting

Climate Pollution Reduction Program

January 30, 2025

Ecology staff introductions

- Nikki Harris, Climate Pollution Reduction Program Rulemaking Coordinator
- Joshua Grice, Policy and Planning Section Manager
- Josh Grandbouche, Zero Emission Vehicle Specialist
- Dustin Watson, Mobile Source Air Quality Specialist
- Rebecca Sears, Greenhouse Gas Inventory & Transportation Section Manager

Agenda

1. Clean Vehicles Program Overview
2. Scope of rulemaking
3. Advanced Clean Trucks amendments
4. Heavy-Duty Low-NOx Omnibus amendments
5. Public engagement
6. Rulemaking timeline

Ecology's Clean Vehicle Program History

- **2005**
  - Clean Car Law
- **2020**
  - Zero-Emission Vehicle (ZEV) Law
  - Revised greenhouse gas targets
- **2021**
  - Advanced Clean Cars and Advanced Clean Trucks rulemaking
- **2022**
  - Advanced Clean Cars II, Heavy-Duty Low-NOx Omnibus, and fleet reporting rulemaking
- **2023-25**
  - Implementing standards and Advanced Clean Trucks/Omnibus amendment rulemaking

Improve air quality in near-port communities and along transportation corridors

Improve consumer choice for ZEV models

Meet climate targets in RCW 70A.45.020, modelled after Paris Climate Accords, IPCC 5th Assessment

Weakening federal greenhouse gas standards

Clean truck regulations

Advanced Clean Trucks

Adopted in 2021

Heavy-Duty Low-NOx Omnibus

Adopted in 2022

Who do these rules impact?

- Manufacturers that offer new medium- and heavy-duty trucks and engines for sale in Washington
- The rules **do not** apply to Tribes, dealerships, or fleets

Scope of Rulemaking

- Ecology plans to adopt:
  - Technical amendments to Advanced Clean Trucks
  - Technical amendments to Heavy-Duty Low-NOx Omnibus
- These will give greater flexibility to manufacturers and address known concerns.
- To comply with Chapter 70A.30, Ecology is also inviting comment on additional California emissions standards the agency should consider adopting in the future

Visit the rulemaking webpage
Online public comment is open

November 2024

Rule announced

December 2024-Summer 2025

Public engagement

Summer 2025

Propose rule

Winter 2025

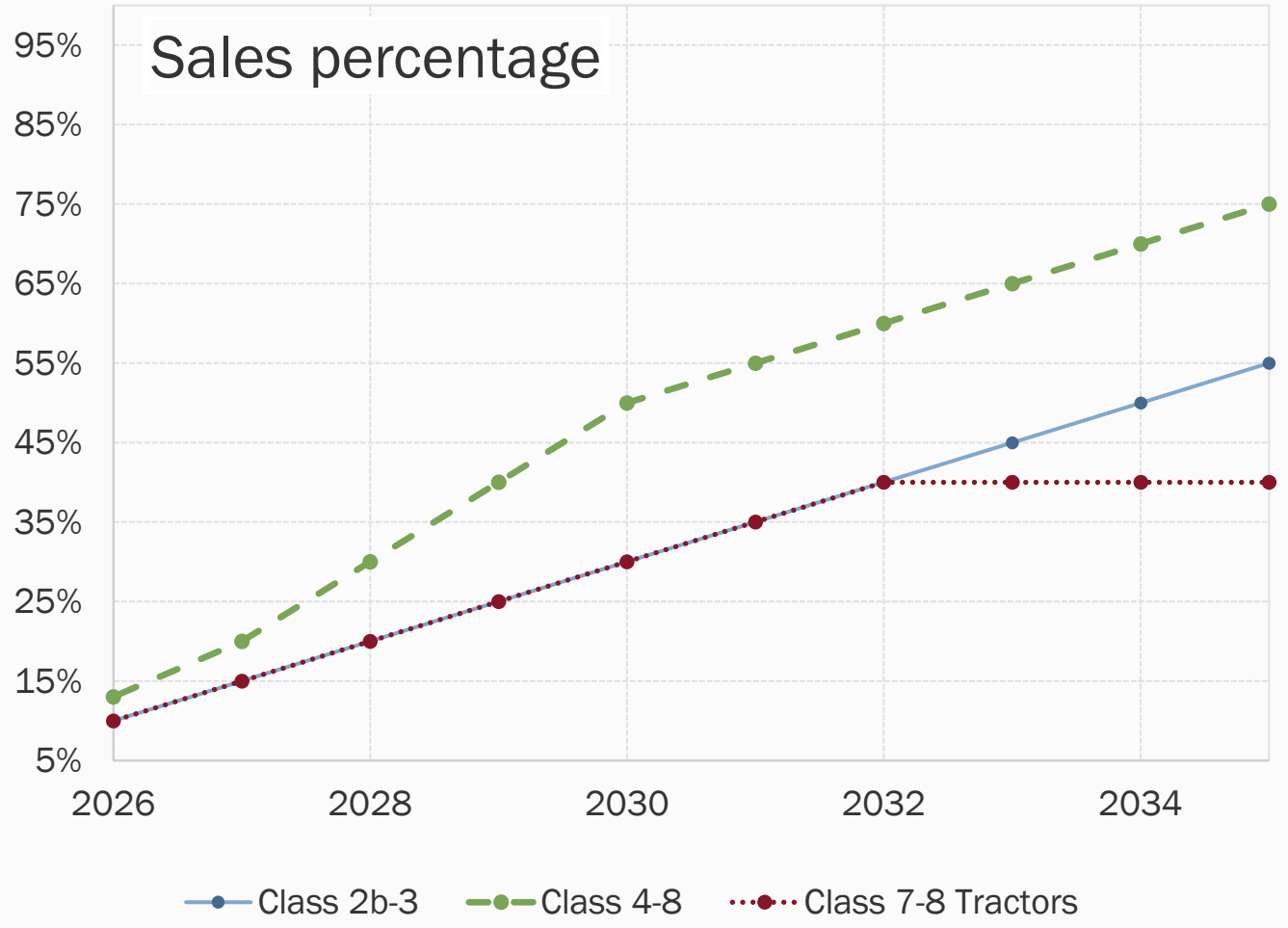
Adopt rule

Why is this rulemaking necessary?

- Transportation is Washington's **largest source of greenhouse gas emissions** (39%) and a **major contributor of air pollution.**
- Medium- and heavy-duty vehicles contribute ~30% of the state's transportation emissions
- The state's Transportation Electrification Strategy projects that zero-emission vehicles will reduce Washington's greenhouse gas emissions by 9.4 million metric tons of carbon dioxide annually by 2030.

How Advanced Clean Trucks (ACT) works

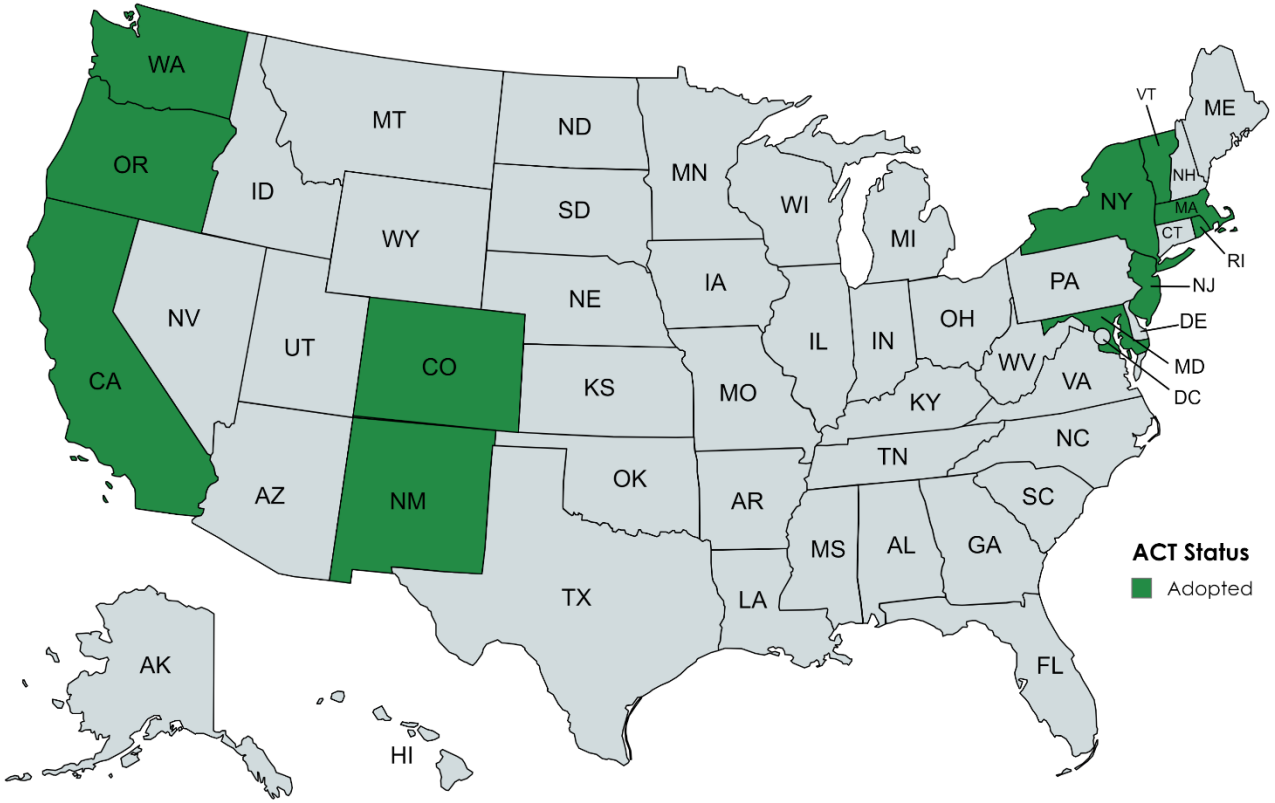
- Initially adopted by Ecology in 2021
- Requires Class 2b-8 truck and engine manufacturers to:
  - **Increase sales** of new zero-emission and plug-in hybrid vehicles each year in Washington
  - **Or purchase credits** from manufacturers who exceed the requirements



Where ACT has been adopted

ACT states represent approximately 25% of the heavy-duty market.

State	Applicable Model Year
California	2024
Colorado	2027
Maryland	2027
Massachusetts	2025
New Jersey	2025
New Mexico	2027
New York	2025
Oregon	2025
Rhode Island	2027
Vermont	2026
Washington	2025



Original Equipment Manufacturer (OEM) exemption:
Emergency vehicles, transit buses, motor coaches, and more

Rule language: WAC 173-423-075 (2) and here: ACT Title 13

Common ACT misconceptions

Myth	Fact
Manufacturers must sell a certain number of zero-emission vehicles before being allowed to sell diesel or gas-vehicles	Manufacturers have multiple compliance options
Fleets must purchase zero-emission vehicles starting next year	ACT only regulates manufacturers
ACT is banning the sale of [insert vehicle here]	ACT does not ban the sale of any kind of vehicle
There is not enough public charging to transition to EVs	ACT was designed to be feasible even without public charging, and public and depot charging are both being rapidly built out in Washington
There are not very many zero-emission vehicles out now	Over 190 Class 2b-8 zero-emission vehicles available for sale in the US

Reported model year 2021, 2022, & 2023 vehicle sales in Washington

Manufacturer	Class 2b-8 vehicles Total sales	Class 2b-8 vehicles Total ZEV sales	Class 7-8 tractors Total tractor sales	Class 7-8 tractors Total tractor ZEV sales
Autocar	46	0	0	0
Blue Bird	431	15	0	0
BYD	6	6	2	2
Daimler	2,005	30	1,593	4
Ford	18,041	977	0	0
GM	3,376	22	0	0
Isuzu	1,294	0	0	0
Lightning	11	11	0	0
Lion	3	3	0	0
PACCAR	2,387	5	3,140	3
Rivian	3,605	3,605	0	0
Stellantis	12,167	0	0	0
Tesla	0	0	0	0
Volvo	153	0	465	49
Total (percent of total)	**43,525**	**4,674 (10.7%)**	**5,200**	**58 (1.1%)**

- There were no plug-in hybrid medium- and heavy-duty vehicle sales reported to Ecology for model years 2021, 2022, or 2023.
- These sales were reported by manufacturers and represent the estimate of vehicles available to earn credits.
- 2024 and 2025 sales will be added to this total before reporting compliance begins.

ACT potential rule revisions

- Adopt California's ACT amendments:
  - Edits to clarify existing language
  - Allows manufacturers to certify Class 2b-3 vehicles to the zero-emission powertrain requirements
  - Clarifies vehicle and engine labelling requirements so that the vehicle is clearly marked for sale in the Washington/ACT market
  - Additional manufacturer reporting and record retention requirements

ACT potential rule revisions, continued

- Extends shortfall makeup period from one year to three years
- Compliance to be based on reported sales of vehicles delivered into the state instead of when vehicles reach the ultimate purchaser
- Allows secondary manufacturers to buy and sell ACT credits
- Exempts Omnibus-compliant engines in Class 7-8 vehicles from deficit calculations in model year 2026
  - Reduces the credits needed for Class 7-8 vehicle (tractor and non-tractor) compliance for model year 2026

ACT potential rule revisions, continued

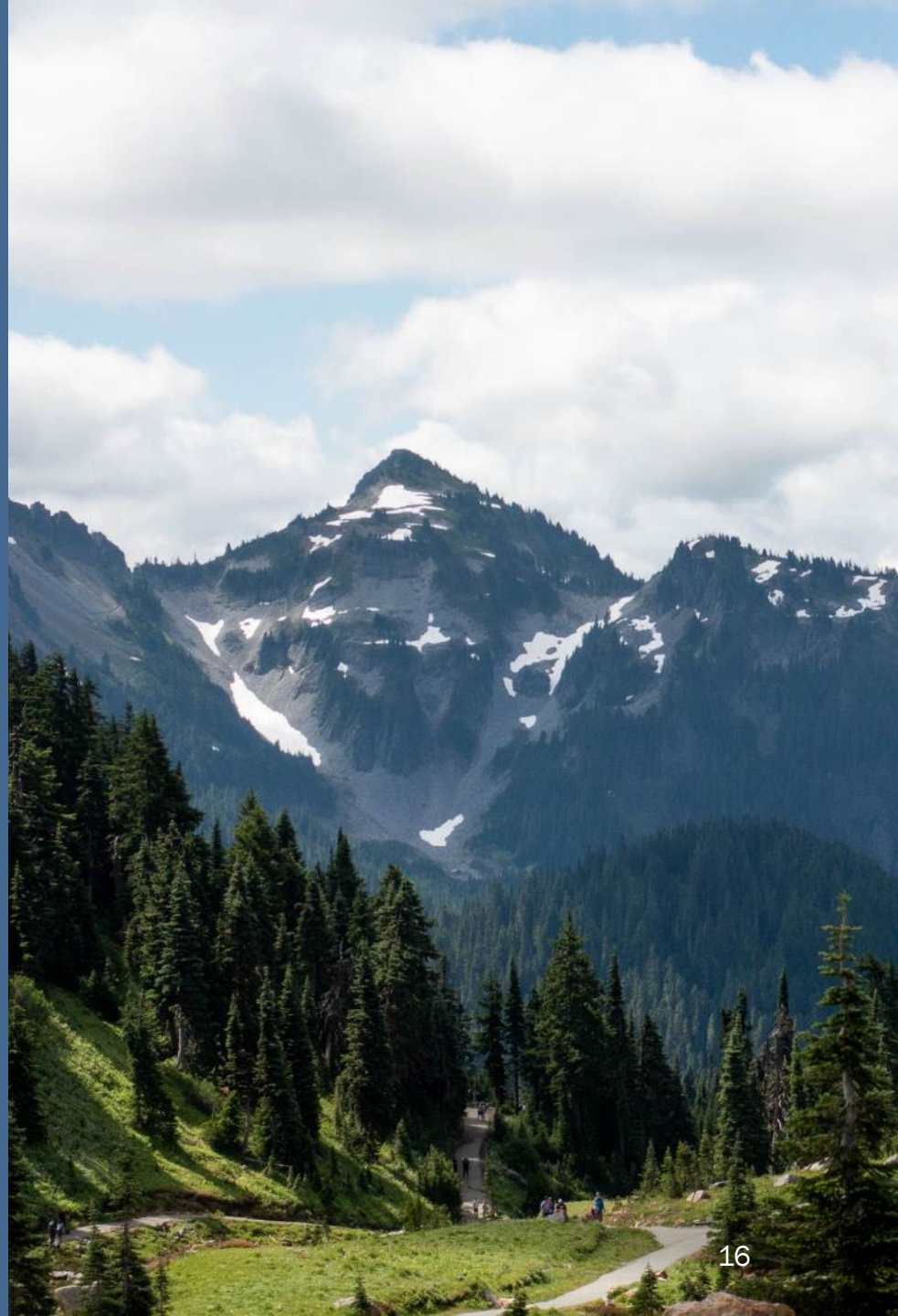
Taken together, these changes address industry concerns by allowing additional time for manufacturers to report and make up a shortfall; increase manufacturer flexibility to provide combustion and zero-emission models simultaneously; and ease requirements for zero-emission Class 7-8 tractor sales in the early years of the program.

ACT benefits

- Large trucks and buses make up just **10%** of on-road vehicles but **30%** of on-road greenhouse gas emissions
  - Even larger shares of particulate matter (PM) and nitrogen oxides (NO_x)
  - Total cost of ownership for some zero-emission vehicles is already lower than diesel counterparts
  - All zero-emission vehicle classes are projected to have models cheaper to own than diesel within the next 10 years

- Advanced Clean Trucks will help WA clean up:
  - **47 million metric tons** of CO_2 through 2050
  - **47%** of NO_x pollution
  - **43%** of $PM_{2.5}$
  - And help avoid **~100** hospital visits and premature deaths annually!

Questions?

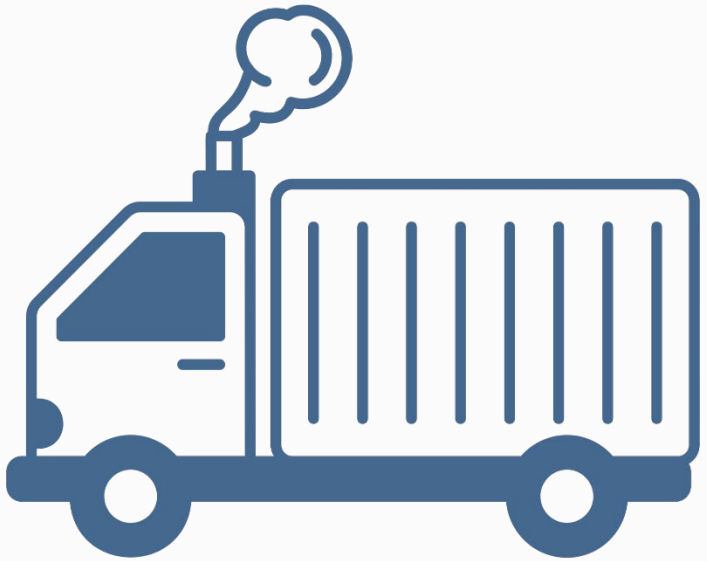


Heavy-Duty Low-NOx Omnibus

- Adopted in Washington in 2022
- Requires heavy-duty engine manufacturers to emit less:
  - nitrogen oxides (NOx)
  - particulate matter (PM)
- Requirements begin 2026
- Rule language: WAC 173-423-081
  - Also here: HD Omnibus Title 13 and HD Omnibus Title 17

Omnibus requirements

- NOx emission standards:
  - 75% reduction from current standards in 2026
    - Reducing from 0.2 to 0.05 g/bhp-hr
  - 90% reduction from current standards in 2027 and beyond
    - 0.02 g/bhp-hr
- PM emission standards:
  - 50% reduction from current standards in 2026 and beyond
    - 0.005 g/bhp-hr
- Reductions achieved mostly through improved after-treatment technologies
- Improved Warranty, Useful Life, and Emissions Warranty requirements
- Implements CARB Phase 2 greenhouse gas standards



Omnibus potential rule revisions

- Adopt the amendments currently under consideration in California:
  - Clarifies existing language in amendments
  - Addresses manufacturer plans to restrict the supply of new diesel engines by allowing “legacy” engines to be sold through 2026, up to 10%
  - Allows for sale of legacy engines before they receive approval for an Omnibus-compliant engine family

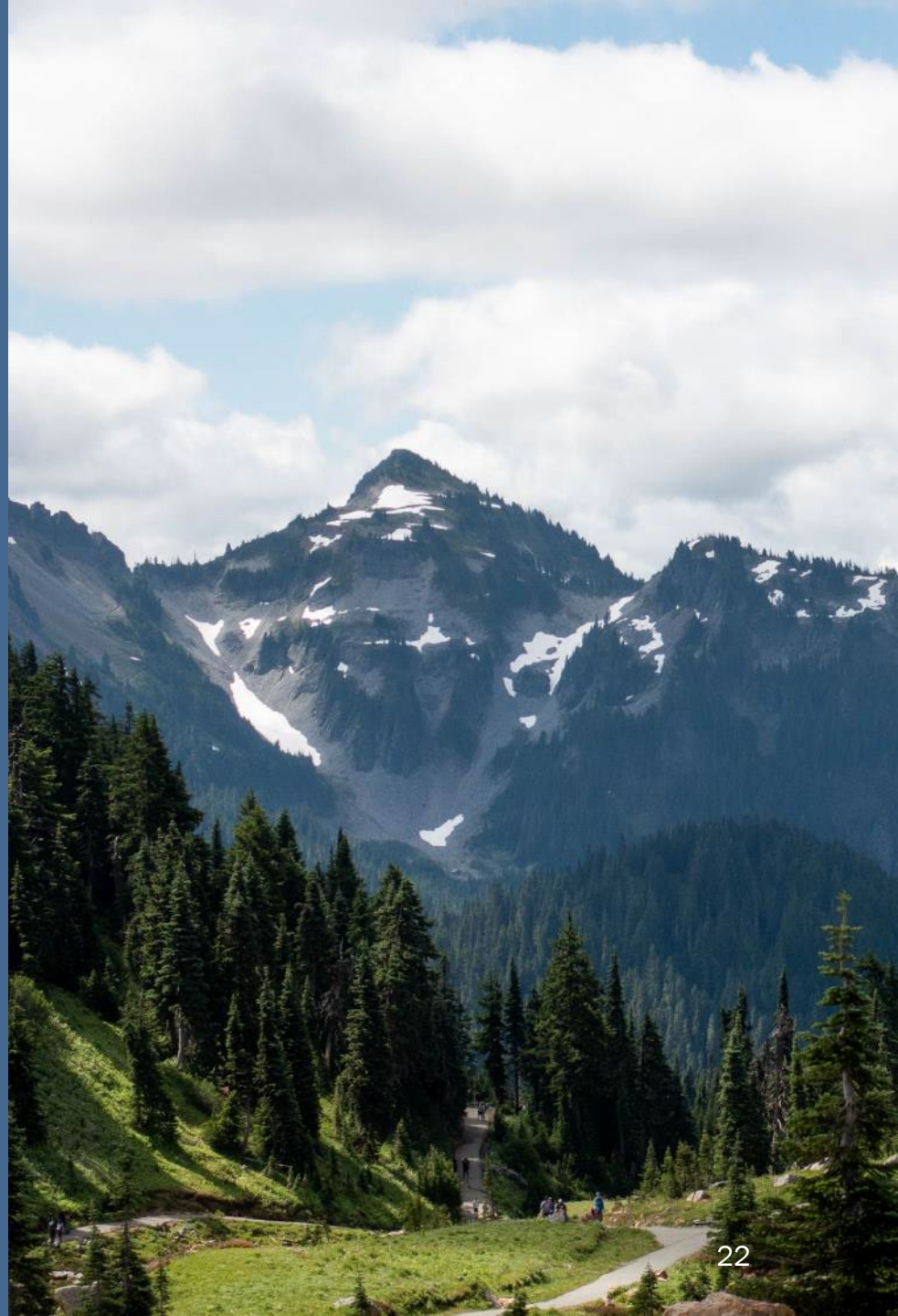
Omnibus potential rule revisions, continued

Taken together, these changes allow time for more Omnibus-certified compliant engines to reach the market while maintaining emissions reductions through offsets to legacy engine sales

Omnibus benefits

- 35,640 tons of reduced NOx emissions in Washington through 2050
- Improved health outcomes for people living near truck traffic:
  - Fewer premature deaths
  - Fewer hospital admissions for asthma and other breathing difficulties
  - Reduced health care costs for air pollution-related issues

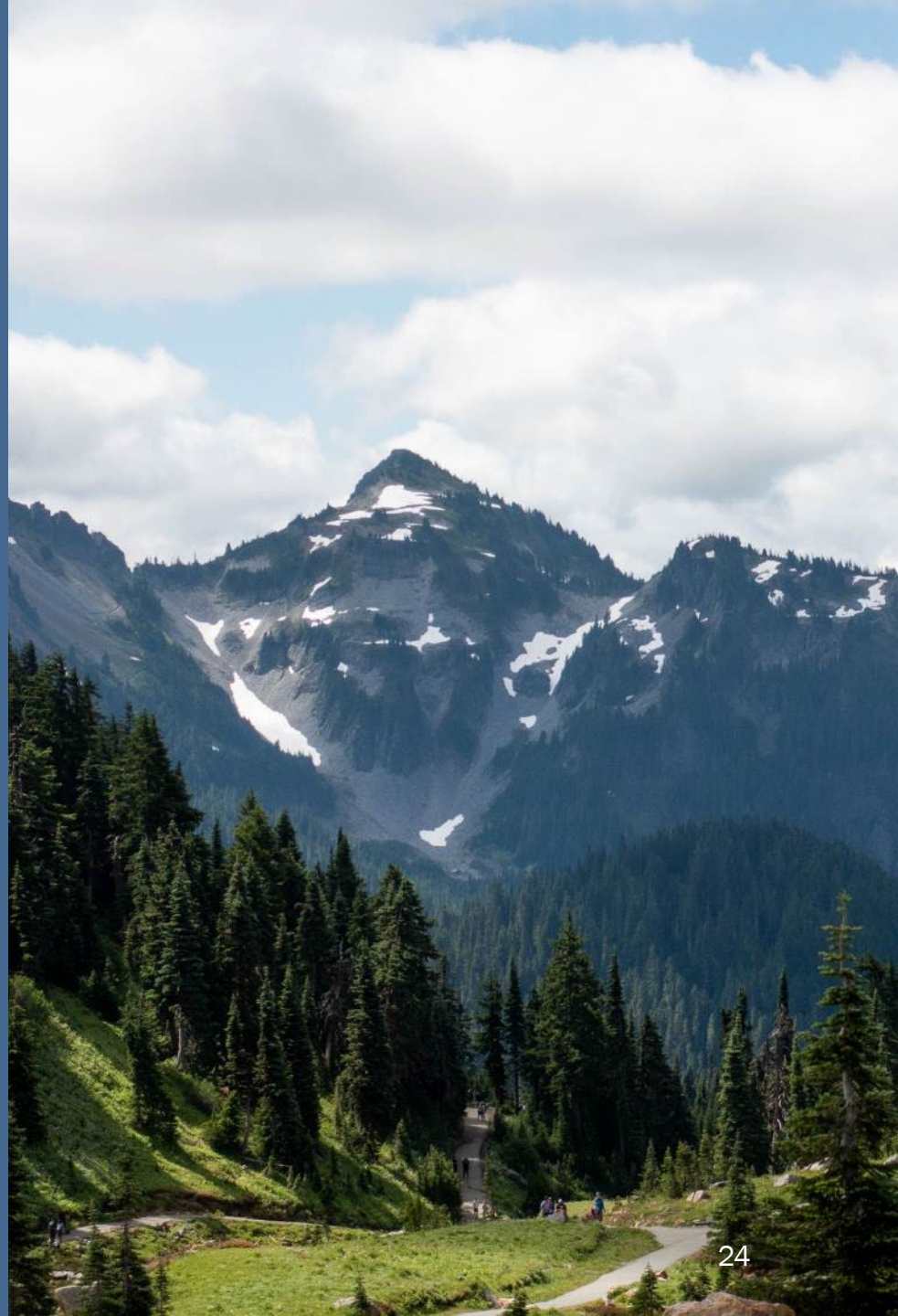
Questions?



Environmental Justice Assessment

- We will be conducting an Environmental Justice Assessment to support this rulemaking as required by the HEAL Act.
- We plan to engage with Tribes, overburdened communities, and others who may have insight into the impacts of this rulemaking on Washington's communities.

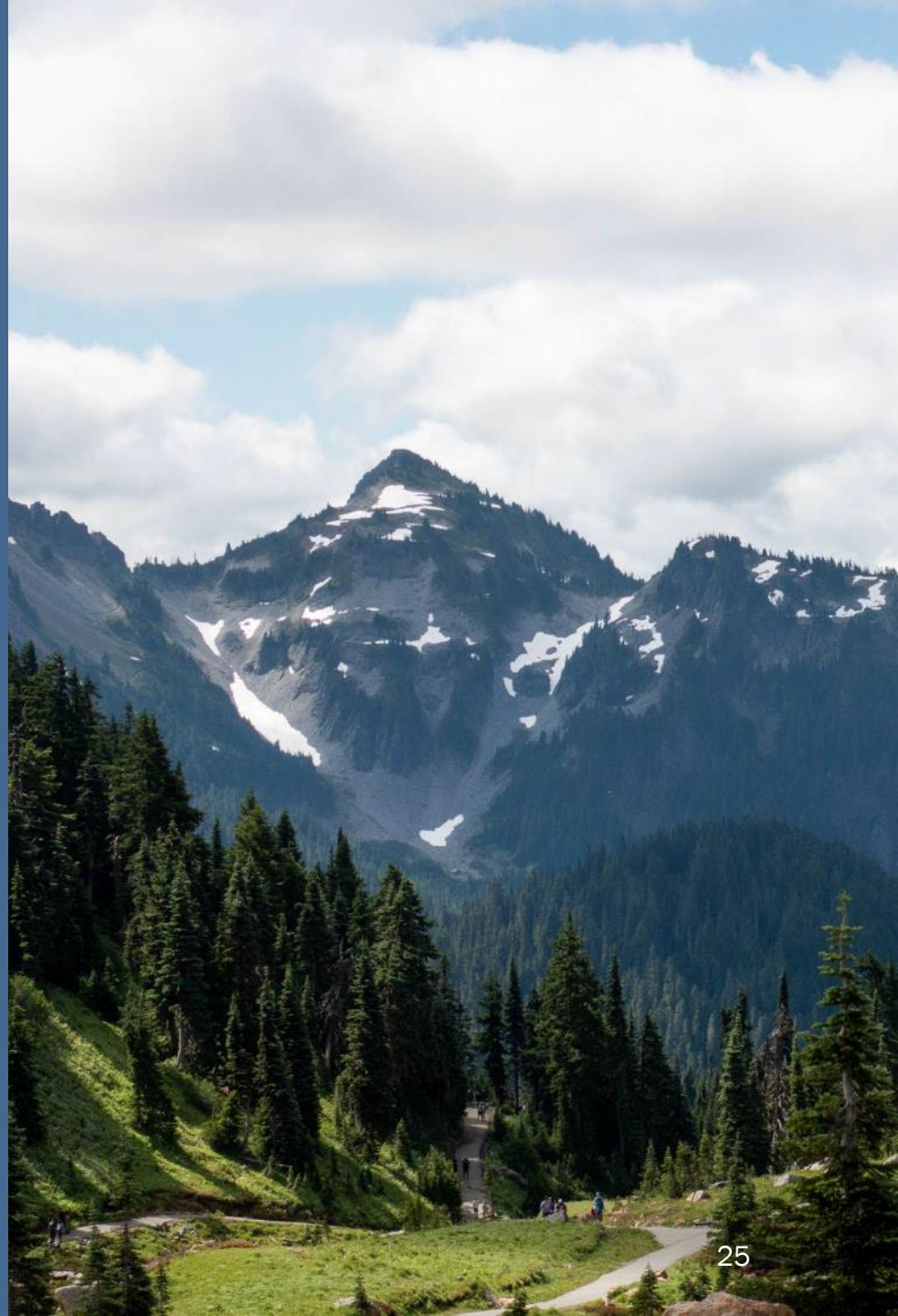
Questions & Comments



Comment online:

December 2, 2024 @ 12:00AM-
February 9, 2025 @ 11:59 PM

https://ecology.commentinput.com?id=FSWdBhRsP



Thank you

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