To Erin Pischke, LPRO Analyst

From Aeron Teverbaugh, Sr. Legislative Analyst DEQ

RE: Response to questions regarding Advanced Clean Truck from members of the House Committee on Climate, Energy and Environment

1. Incentives for MHD trucks

Oregon offers numerous incentives to help fleets make the transition to cleaner trucks. There is approximately \$34 million available to support medium and heavy-duty ZEV vehicle purchase and infrastructure installation:

- a. Medium and Heavy-Duty Zero Emissions Rebate Program (ZERO Fleet Program): Oregon's newest medium and heavy duty zero emission vehicle rebate program will launch in 2025. The 2023 Legislature authorized \$3 million for the program and Oregon received an additional \$14 million through EPA's Climate Pollution Reduction Grant (also known as Oregon's Climate Equity and Resilience Through Action or "CERTA" grant) for a total of \$17 million. Rebates will be offered between \$2,500 to \$120,000, depending upon the class size of the vehicle. 40% funding is committed to trucks located in communities disproportionately affected by diesel pollution.
- b. Diesel Emissions Mitigation Grant Program: This program was established in 2019 by Oregon Legislature to be funded with Oregon's portion of the Volkswagen Emissions Settlement. Supports scrapping old diesel equipment and replacing with cleaner alternatives. While the replacement vehicles are not required to be strictly ZEV, all projects are ZEV eligible. Funding for 2025 is ~\$8 million.
- c. Scrap and Replace MHD ZEV Grant Program: \$6 million will be available as part of Oregon's CERTA grant. This new program supports scrapping old diesel equipment and replacing them with ZEV alternatives.
- d. **Oregon Zero Emissions Fueling Program:** In 2022, the Oregon Legislature provided \$15 million to incentivize the purchase and installation of new MHD ZEV charging infrastructure. While those funds were all obligated, DEQ was awarded an \$3 million in federal funding through the CERTA grant. This will be available in 2025.
- e. **Clean Fuels**: While not a grant program, the Clean Fuels Program is a marketbased approach that provides credits for low-carbon transportation fuel used in Oregon. Owners of chargers servicing on-road (light, medium, and heavy-duty) and off-road vehicles can generate CFP credits based on how much reported

electricity is dispensed to EVs on a monthly basis. Credits can be sold to other participants of the program and is often used to purchase of additional EVs or charging infrastructure.

In addition to Oregon incentives, there are federal programs and tax credits to assist in the purchase of medium heavy-duty vehicles and charging infrastructure. This includes:

- f. The EPA awarded Oregon \$21 million to install two publicly accessible mediumand heavy-duty charging stations and one hydrogen fueling station. The charging stations will have capacity of 2.5 Mega watt minimum, with eight ports per station. This was a part of a \$102 million multi-state grant with California and Washington for the installation of public electric charging stations and hydrogen stations along Interstate 5. Work is expected to begin in 2026-2027.
- g. The EPA awarded Oregon \$65 million in funds over the next five years to develop charging as part of the National Electric Vehicle Infrastructure Program While the program is primarily focused on light-duty, public, fast charging every 50 miles on alternative fuel corridors, it also includes a minimum of four plugs of at least 150 kW each, which can charge some of the medium-duty vehicles.
- h. **Commercial Clean Vehicle Tax Credit:** Up to \$40,000 for businesses and organizations buying a medium or heavy duty zero emission vehicle above 14,000 lbs.
- i. Alternative Fuel Vehicle Refueling Property Tax Credit: Up to \$100,000 for businesses who install electric vehicle infrastructure charging.

Non- Residential (DCFC – CCS)	Non- Residential (DCFC – CHAdeMO & CCS)	Non- Residential (DCFC – CHAdeMO)	Non- Residential (Level 2)	On-road Heavy Duty EV Charging
29	2	2	30	42

2. Number of charging stations/ breakdown of existing charging infrastructure

The Clean Fuels Program has 68 actively registered heavy duty vehicle chargers; chargers are generally registered as heavy duty when they are made specifically for a given model of heavy-duty vehicle. Many heavy-duty vehicles can charge using the same slow and fast chargers as light duty vehicles. Reports filed with the Clean Fuels Program show 110 different chargers had heavy duty vehicle charging reported against them in the first three quarters of last year. The breakout of those chargers by the registered charger type is below. For the most part the Level 2 chargers are supporting school buses.

"Electric Island," the first public medium- heavy-duty charging facility is one of those counted above. Many medium and heavy-duty vehicles, such as those traveling 100 miles or less per day, can be served by Level 2 chargers because fleet managers can sequence charging to occur overnight when vehicles are not in use. Daimler's e-Cascadia truck (Class 8 tractor) can also be charged at a DC fast charger, such as those available through the public Electrify America DC fast chargers.

Oregon is continuing to expand the network of available chargers for medium and heavy-duty vehicles with available grant funding. 12 different public and private medium and heavy-duty charging projects are in the planning stages including:

- A publicly available medium and heavy-duty charging facility, near Salem. Once operational (anticipated in 2026) it is expected to support the charging needs of 40,000 trucks annually.
- Charging to support public works fleets, buses, shipping yard equipment, refuse trucks, warehouse fleets, and electric snow groomers

3. How does this law impact towing? Rep Deihl indicated that it would impact towing. He also said it would cost jobs. What jobs are at risk? What jobs are created?

The ACT regulation offers manufacturers significant flexibility on how to meet their requirements and no specific type of vehicle needs to be sold as a ZEV. The rule does not require 100% ZEVs, rather manufacturers can continue to make diesel tow trucks. If a manufacturer makes multiple vehicle types, they can focus on truck types that have seen strong uptake, alternately, they can purchase credits available from those sectors where electrification is advanced, such as school buses.

While analyses of vehicle electrification show job growth in EV support, (such as EV mechanics, charger installation and maintenance) DEQ cannot determine what jobs may be at risk because the rules do not prohibit the purchase or use of any vehicle type.

4. How many years does DEQ project it will take and what investments are needed to build the infrastructure for long haul trucking?

Deployment of infrastructure has begun and will continue to ramp up over the next 10-15 years along major freight corridors and high traffic areas. In addition to the depot charging, Oregon's public charging island will be joined by two publicly accessible medium- and heavy-duty charging stations and one hydrogen fueling station in 2026-27 thanks in part to a \$21 million Charging and Fueling Infrastructure grant. The Oregon Zero Emission Fueling Infrastructure Grant project with Watt EV to establish a large publicly available medium and heavy-duty charging facility in Salem will also support long-haul trucking beginning in 2026.

According to an analysis by the International Council on Clean Transportation (ICCT), long-haul truck electrification doesn't require ubiquitous heavy-duty charging infrastructure to be deployed overnight — rather, a relatively small number of heavyduty charging stations, strategically located along major long-haul trucking corridors, are enough to support initial volumes of long-haul class 8 electric trucks. The ACT rule acknowledges the timeframe needed to support the transition to Class 7-8 long-haul trucks, by incrementally increasing ZEV requirements in the early years and keeping them constant at 40% of new sales (not 40% of the in-use fleet) from 2032-2035.

The federal government provided a roadmap indicating the deployment of medium and heavy-duty vehicle charging infrastructure focused on regional hubs and linking corridors creating a national network. With private development of charging filling in the gaps, we will see an integrated charging network to support heavy duty vehicles.

5. Which states have delayed or are taking action to delay? We heard Rep Boshart Davis and Brett from Climate solutions say different things.

No states have delayed implementation of the Advanced Clean Trucks Rule. Under the Clean Air Act, states must provide at least two years notice of a change to vehicle emission standards. Oregon, Washington, New Jersey, New York, and Massachusetts undertook rulemaking to adopt the regulations in order to begin with the 2025 model year. Other states adopted the rule later and therefore have a later implementation year. These states include VT, which begins implementation in 2026 and Colorado, Maryland, New Mexico and Rhode Island in 2027.

6. How do I access the "F" grades that Mary Peveto referred to for air quality in our counties?

DEQ believes that Mary Peveto was referring to the American Lung Association's State of the <u>Air Report for 2024</u>, indicates the number of counties with a failing grade for particulate matter pollution. (The link for Oregon is provided for your convenience) Medium and heavy-duty diesel vehicles emit significant amounts of nitrogen oxides (NOx) and particulate matter (PM), which are linked to respiratory illnesses, cardiovascular disease, and premature deaths.

7. What is the "Public Charging Project" that DEQ said is underway?

Watt EV, received \$6.5 million from the Oregon Zero Emission Fueling Infrastructure grant for installation of a medium and heavy-duty charging facility, near Salem. It is anticipated to be completed in 2026, and support the charging needs of 40,000 trucks annually

8. Rule bans people from owning diesel vehicles, nor does it require them to replace existing trucks with new EVs or to purchase an EV. (cite rule)

The Advanced Clean Trucks Rule does not ban ownership or sale of a diesel vehicle. There are no purchasing or replacement requirements under the regulation. The rule is a requirement on manufacturers to produce and deliver for sale an increasing percentage of zero emission vehicles. Oregon's rule cites who this requirement applies to under <u>340-257-0020</u>.