# ADVANCED CLEAN TRUCKS: THE FACTS

Truck pollution is dangerous – killing, sickening, and endangering Americans, especially those who live along highway routes and near ports and warehouses.

The Advanced Clean Trucks (ACT) program ensures vehicle fleet consumer choice, reduced costs, and cleaner air for communities. It is the right of each state that has adopted this program to require the multi-billion dollar truck industry, which has already committed to electrification, to sell their zero-emission products in ACT states.

## THE BASICS

#### Q: What does the ACT program accomplish?

**A:** Diesel exhaust from trucks and buses is a leading cause of health-harming air pollution nationwide. The goal of the ACT program is to help the medium- and heavy-duty vehicle (MHDV) sector reduce its public health impact, clean up our air, and drive economic growth. The ACT program requires manufacturers to sell an increasing percentage of zero-emission MHDVs over time. Zero-emission MHDVs include battery-electric and fuel-cell electric trucks, buses, and vans. The sales targets will also drive investment in other zero-emission technologies and charging infrastructure. The standard does not affect used vehicles and does not stop the sale of fossil fuel vehicles, but rather sets supply targets for new electric vehicles. The ACT requirements only apply to manufacturers, and do not impose requirements on drivers, fleet owners, or truck dealers.

#### Q: Does the ACT program ban RVs?

**A:** The ACT program does not ban new diesel RVs, or new diesel vehicles of any kind. Even after implementation, new diesel-powered RVs will continue to be sold. Because the electric RV market is still in its infancy, manufacturers can find alternate pathways to comply with the program while still selling new, non-electric RVs. For example, companies that manufacture diesel RVs can achieve ACT compliance by earning credits for manufacturing zero-emission RVs, zero-emission MHDVs, near-zero-emission MHDVs, or by purchasing compliance credits from other manufacturers who have a surplus. Manufacturers are responsible for ACT compliance, not RV dealers or other customers.

#### Q: Does the ACT standard require 100% of new trucks sold to be electric?

**A:** No, the ACT sets gradually increasing sales targets with varying percentages to account for more difficult-to-electrify segments of the MHDV market. The standards <u>do not require 100%</u> electric truck sales in any category at any point in time.

# **FEASIBILITY**

#### Q: Are the sales requirements too ambitious?

**A:** There is a significant waiting period between ACT adoption and ACT implementation, giving manufacturers several years to prepare before supply requirements go into effect. The annual supply requirements start low and ramp up gradually while new types of electric trucks and buses continue to enter the market. The program includes measures to help manufacturers comply with the new requirements, such as rewards for early action and flexibility mechanisms to count excess compliance from one vehicle type toward meeting the requirements for another type. This allows manufacturers to achieve compliance even if one vehicle model is not progressing towards electrification as quickly as others. In California, where the ACT was first adopted, many manufacturers are already ahead of the ACT targets.

#### Q: Are electric trucks and buses available?

**A:** Yes, electric trucks and buses are available, and supply is rapidly increasing. The zero-emission MHDV market has undergone significant growth in the last two years, with fleets committing to electrification while vehicle manufacturers produce prototype vehicles and pilot fleets, announce commercial launch dates, and take commercial orders for electrified models. There are currently almost 200 different models of trucks from over 70 manufacturers already available on the U.S. market, covering virtually every truck class, duty cycle, and use case. By the time the ACT standard is fully realized, virtually all market segments would be fully mature, with rapid technological advancements made for even the most demanding duty cycles (e.g. long-haul).

#### Q: Have any states delayed ACT implementation?

**A:** Despite the misinformation being spread by polluters and other opposition voices, no ACT state has yet announced a delay to ACT implementation. Different states have different implementation dates because they originally adopted the program at different times.

#### Q: Will pushing back implementation two years help OEMs meet the ACT standard?

**A:** Demands to temporarily delay implementation of ACT are a trojan horse. A delay would all but guarantee that OEMs will come back later and say that compliance is still not feasible (without having taken advantage of the various flexibilities available to them, or the progress in battery technology or infrastructure deployment). The ACT program is feasible, and OEMs need to honor their internal and external commitments to reducing toxic, cancer-causing exhaust. It's time to stop pretending that they are already trying their very best to comply with these standards.

# **ECONOMIC IMPACTS**

#### Q: Won't businesses just leave ACT states to avoid the requirements of the program?

**A:** The ACT rule has already been adopted in California, Oregon, Washington, Massachusetts, Colorado, New Mexico, New York, New Jersey, Vermont, Maryland, and Rhode Island. Connecticut, Hawaii, Maine, Nevada,



North Carolina, Pennsylvania, Virginia and DC also have signed on to an MOU committing to transitioning to a fully zero-emissions MHDV market.

Many manufacturers, dealers and fleet operators have taken the opportunity to make big, job-creating investments in ZEV truck and bus technology as states across the country make the shift to clean trucks. Major manufacturers like Daimler have made commitments; specifically they joined the <u>Clean Trucks Partnership</u> to agree to not oppose the ACT standard.

# Q: Aren't these trucks too expensive? Won't this cause job losses and raise the price of goods?

**A:** It's true that the up-front cost of an electric truck is higher today than comparable diesel models. However, over the lifetime of the vehicle, <u>electric trucks will cost less than diesel trucks</u> by saving on fueling and maintenance costs. Since batteries are the single most expensive components of a new electric truck, purchase costs are being driven down by <u>rapid innovation</u> in the technology and supply chains behind EV batteries.

### **INFRASTRUCTURE**

#### Q: Don't we need charging infrastructure first?

**A:** Early investments in zero-emission trucking will focus on short-haul vehicles, which currently account for roughly half of all daily freight movements. These have little to no reliance on public charging because fast-charging at depots (while trucks are being loaded and unloaded) is enough to recover most or all of a vehicle's range.

To service the long-haul sector, companies will continue building charging infrastructure to support a full transition to an electric truck fleet. There's <u>over \$7.5 billion in funding</u> from the federal Bipartisan Infrastructure Law dedicated to EV charging infrastructure across the country. Companies are interested too – Daimler, NextEra, and BlackRock recently announced <u>\$650 million in funding for a truck charging network</u>. <u>Truck stops are rapidly investing in infrastructure</u> to support battery-electric trucks (and cars too). Implementing the ACT standard on time will give ACT states leverage to continue to secure more private investment in charging infrastructure, especially higher-power charging stations that many heavy-duty trucks will need.

According to ICCT analysis, <u>long-haul truck electrification doesn't require ubiquitous heavy-duty charging infrastructure to be deployed overnight</u> — rather, a relatively small number of heavy-duty charging stations, strategically located along major long-haul trucking corridors, would be enough to support initial volumes of long-haul class 8 electric trucks.

# **COMPLIANCE**

#### Q: How does the ACT standard provide flexibility for manufacturers to comply?

**A:** The ACT standard is designed to help truck manufacturers easily attain compliance. The regulation uses a credit-and-deficit accounting system where manufacturers accrue deficits based on the total volume of on-road MHDV sales. These deficits must be offset with credits generated by the sale of zero-emission vehicles (ZEVs) or near zero emission vehicles (NZEVs). Manufacturers can store, trade, or sell ZEV/NZEV credits to ensure compliance. ZEV/NZEV credits can be earned even before the ACT program formally goes into effect.

#### Q: What happens if a manufacturer is out of compliance? Will penalties be enforced?

**A:** Each state that implements the ACT rule has their own specific civil penalty. Civil penalties are fines assessed against a responsible party for violation(s) of environmental regulations, and the law requires consideration of specific assessment factors by the assessor for each case.

Manufacturers that are facing headwinds in their electric truck production don't need to pay a fine to the government — instead, they can simply purchase compliance credit from manufacturers who have earned excess ZEV/NZEV credits by delivering more zero-emission MHDVs than the ACT program requires.

