



CLEAN TRUCKS CLEAN AIR AMERICAN JOBS

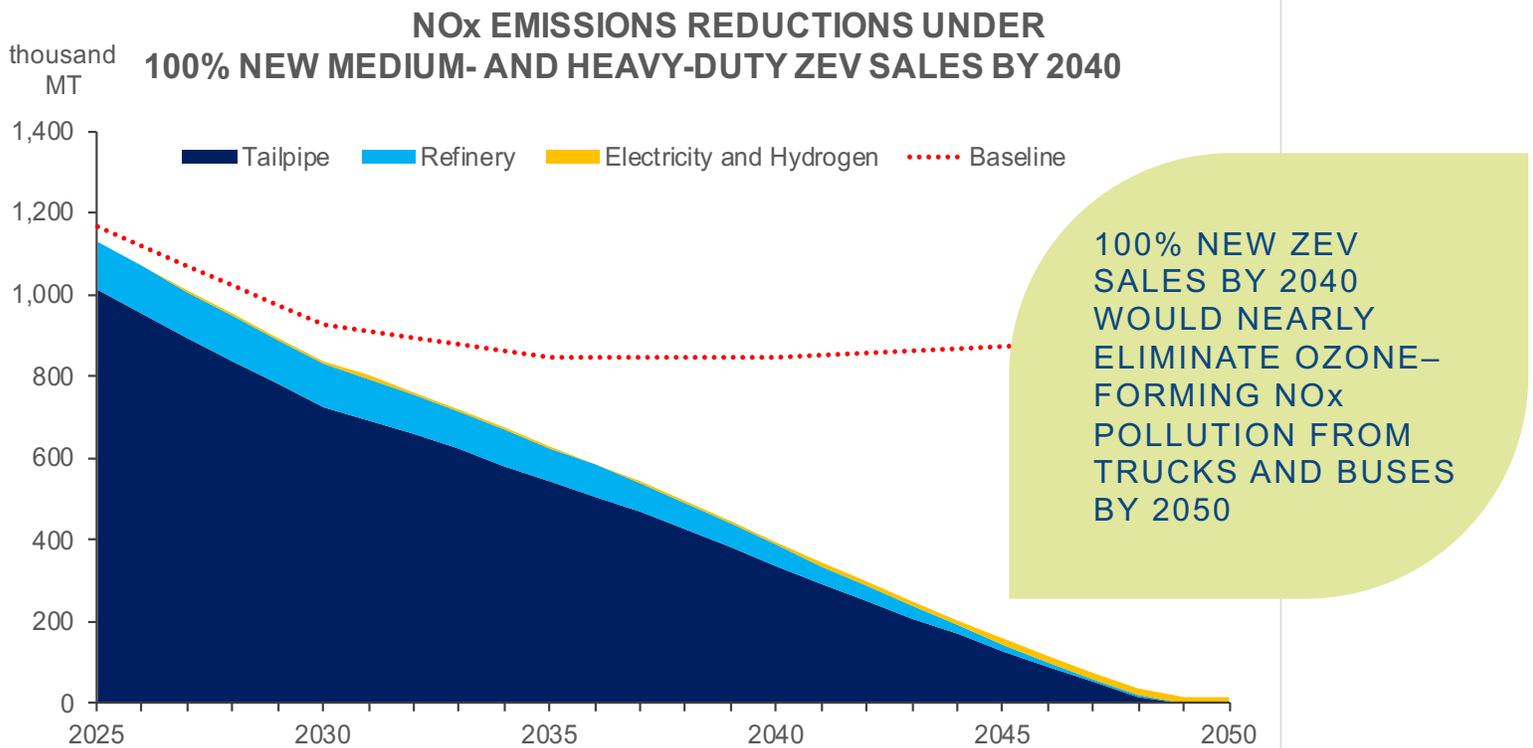
EPA IS EXPECTED TO SOON RELEASE NEW POLLUTION STANDARDS FOR MEDIUM AND HEAVY-DUTY TRUCKS AND BUSES (MODEL YEARS 2027 TO AT LEAST 2030). President Biden directed EPA to consider the role zero-emitting vehicles (ZEVs) can play in this rule. Swiftly deploying ZEV trucks and buses is feasible, will help grow domestic, well-paying jobs, and is critical to reduce harmful pollution in communities across the country, helping to meet our nation's climate goals.

EDF ANALYSIS – ELIMINATING TAILPIPE POLLUTION FROM NEW TRUCKS AND BUSES BY 2040 WOULD:

- ⦿ Avoid **224 million metric tons** of greenhouse gas (GHG) emissions every year by 2040 and eliminate **4.7 billion tons** cumulatively by 2050
- ⦿ Reduce ozone-forming nitrogen oxides (NOx) pollution by **450,000 tons** and particulate pollution by **9,000 tons** annually by 2040—pollution that disproportionately impacts people of color and low income areas
- ⦿ Provide our nation with up to **\$485 billion** in health and environmental benefits alone as a result of pollution reductions
- ⦿ Prevent a total of **57,000 premature deaths** by 2050

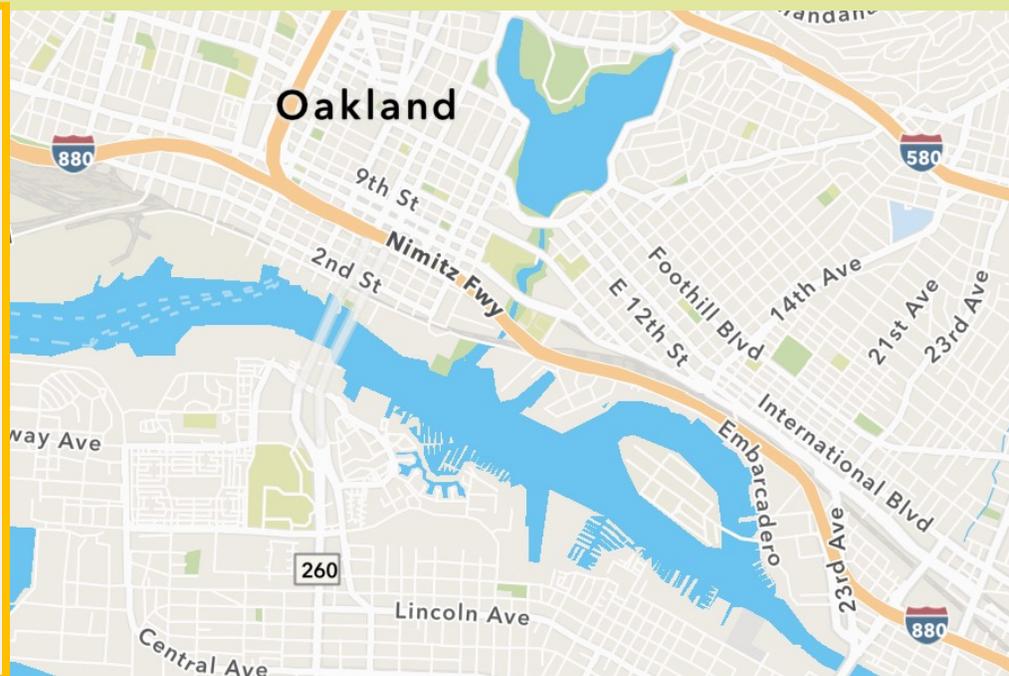
THE IMMENSE HEALTH BURDEN FROM TRUCK AND BUS POLLUTION

- CAUSES ADVERSE HEALTH IMPACTS IN UTERO, IN INFANTS AND CHILDREN, AND IN ADULTS AND THE ELDERLY
- THOSE WHO LIVE CLOSEST TO ROADS AND HIGHWAYS, PORTS, DISTRIBUTION CENTERS, FREIGHT DEPOTS FACE THE GREATEST HARMS



ELIMINATING TAILPIPE EMISSIONS FROM NEW TRUCKS AND BUSES COULD PREVENT **2,600 PREMATURE DEATHS** AND **140,000 LOST WORK DAYS** EACH YEAR BY 2040

COMMERCIAL DIESEL TRUCKS TAKE AN ESPECIALLY HEAVY TOLL ON NEIGHBORHOODS ALONG THEIR ROUTES. A [STUDY IN OAKLAND](#) FOUND THAT TRANSPORTATION-RELATED AIR POLLUTION WAS MUCH HIGHER (IN SOME CASES DOUBLE) ON A FREEWAY THAT IS A DESIGNATED TRUCK ROUTE (I-880) COMPARED TO ANOTHER FREEWAY IN THE SAME CITY WHERE TRUCKS ARE PROHIBITED (I-580).



MANUFACTURERS, SHIPPERS, AND FLEETS ARE COMMITTING TO A ZEV FUTURE



THE WORLD'S LARGEST MANUFACTURER OF CARGO VANS, ANNOUNCED A [MODEL YEAR 2022 ALL ELECTRIC TRANSIT CARGO VAN](#) FOR LAST MILE URBAN DELIVERIES BACKED WITH A MULTI-BILLION DOLLAR INVESTMENT



PLANS TO SELL ZEV VERSIONS OF ALL HD TRUCKS BY 2035. GM LAUNCHED [BRIGHTDROP](#), WHICH WILL PRODUCE THE EV600, A ZEV FREIGHT VAN FOR LAST MILE DELIVERY.



OWNER OF THE MACK TRUCK BRAND HAS SET A GOAL OF HAVING [100% OF ITS TRUCK AND BUS SALES BE FOSSIL FREE BY 2040](#)

DAIMLER

THE LEADING MANUFACTURER OF CLASS 8 TRUCKS IN THE U.S. HAS COMMITTED TO OFFERING ONLY [CARBON-NEUTRAL TRUCKS AND BUSES IN THE U.S. BY 2039](#) AND HAS ALLOCATED \$85 BILLION TOWARD THE GOAL



HAS ORDERED [100,000 ELECTRIC DELIVERY VANS](#) FROM RIVIAN



SAYS ITS ENTIRE GLOBAL PARCEL PICKUP AND DELIVERY FLEET WILL BE [ZEVS BY 2040](#)



ONE OF THE LARGEST PRIVATE FLEETS IN THE U.S. HAS COMMITTED TO [ZERO-CARBON OPERATIONS](#), INCLUDING LONG-HAUL TRUCKS, BY 2040

ZEV JOBS ARE ON THE RISE



INVESTING \$250 MILLION IN A SAN ANTONIO PLANT THAT WILL PRODUCE DIESEL AND ELECTRIC TRUCKS, THROUGH WHICH IT EXPECTS TO SUPPORT [600 NEW JOBS](#). ALSO ANNOUNCED A NEW FACILITY OUTSIDE DETROIT THAT WILL EMPLOY 50 eMOBILITY SPECIALISTS



WILL INVEST \$70 MILLION IN A NEW ILLINOIS PLANT THAT WILL CREATE [750 JOBS](#) OVER THE NEXT THREE YEARS.

[EDF SUPPLY CHAIN ANALYSIS](#): AS OF MID-2021 THERE WERE ALREADY 375 COMPANIES INVOLVED IN ZEV TRUCK AND BUS SUPPLY CHAIN ACROSS 44 STATES EMPLOYING NEARLY 336,000 WORKERS.

The Infrastructure Investment and Jobs Act (IIJA) – recently signed into law by President Biden – commits nearly \$100 billion toward accelerating the adoption of electric trucks and buses by making the vehicles and associated infrastructure more affordable and accessible. This historic investment will also deliver local air quality benefits while decarbonizing the transportation sector.

ZEV COSTS ARE QUICKLY REACHING PARITY WITH DIESEL

NEW ANALYSIS BY ROUSH COMPLETED FOR EDF:

- 🔴 LOOKED AT UPFRONT VEHICLE COST AND TOTAL COST OF OWNERSHIP OF ELECTRIFICATION ACROSS A NUMBER OF CLASS 3-8 TRUCK AND BUS SEGMENTS TYPICALLY USED IN URBAN APPLICATIONS WHERE POLLUTION IMPACTS ARE GREATEST AND TRIP DISTANCES ARE SHORTEST
- 🔴 IN ALL SEGMENTS, THE COST OF OWNING AN EV PURCHASED IN 2027 WILL BE LESS THAN A DIESEL OVER THE LIFE OF THE VEHICLE.
- 🔴 IN NEARLY EVERY CASE, EVs WILL HAVE LOWER UPFRONT COSTS THAN THEIR DIESEL COUNTERPARTS AS EARLY AS 2027

[UCS](#) [ICF](#) [MCKINSEY](#) [BLOOMBERG](#) [CALSTART](#) AGREE: NEARLY ALL BATTERY-ELECTRIC TRUCKS AND BUSES, INCLUDING LONG-HAUL TRUCKS, WILL HAVE LOWER TOTAL COST OF OWNERSHIP THAN DIESEL VEHICLES WHEN PURCHASED WITHIN THE NEXT 10 YEARS.

HEAVY-DUTY ZEVs ARE ALREADY HITTING THE ROADS



ACCORDING TO [CALSTART](#) AND [MJ BRADLEY](#), THERE WERE **145 MEDIUM AND HEAVY-DUTY ZEV TRUCK MODELS** IN 2021 (UP FROM 20 MODELS IN 2019) WITH 165 MODELS EXPECTED BY 2023, AND **MORE THAN 60 ZEV BUS MODELS**.

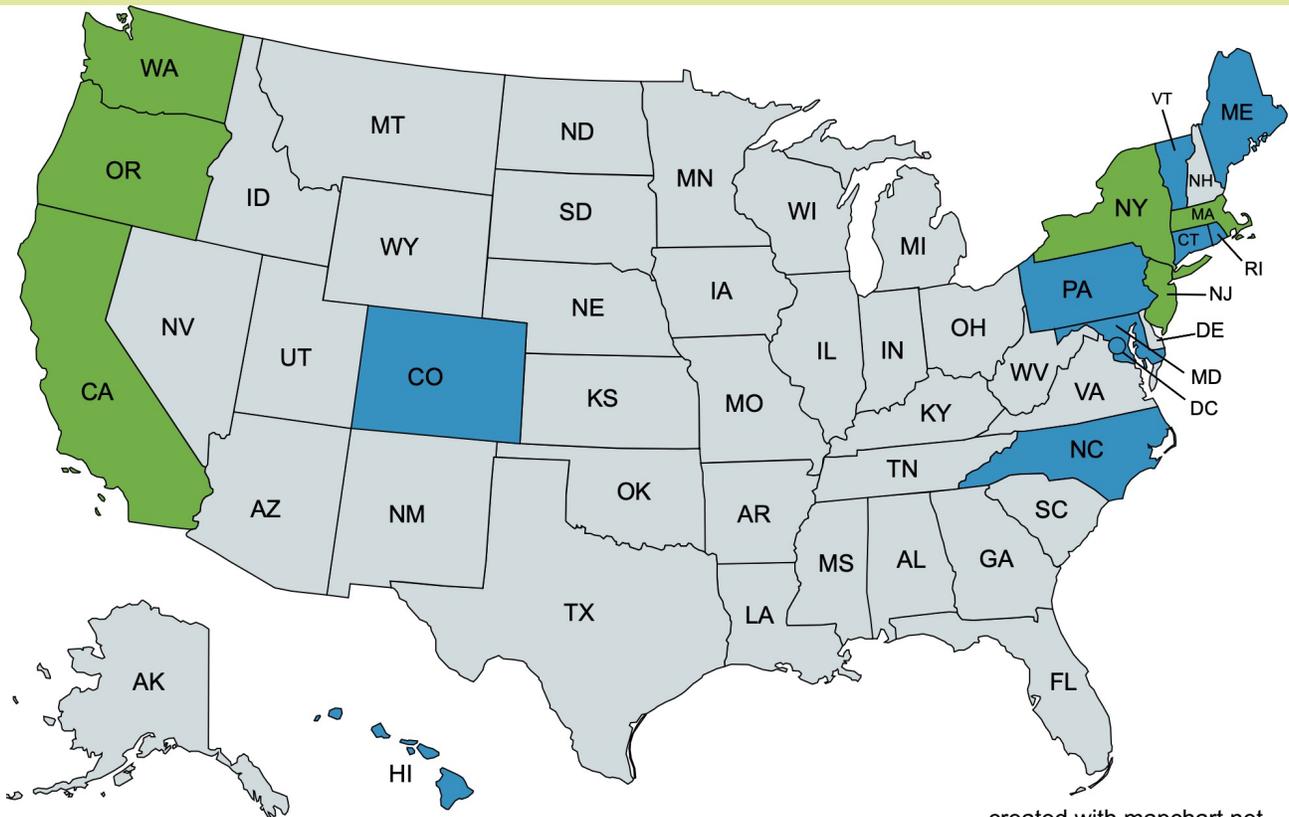
EDF TRACKS DEPLOYMENT: TRUCKING FLEETS ARE EMBRACING ZEVs. THERE ARE OVER 1,000 ELECTRIC TRUCK DEPLOYMENTS IN THE U.S. WITH NEARLY 150,000 ON ORDER.

STATES ARE TAKING THE LEAD

CA 🌱 IN 2020, ADOPTED THE [ADVANCED CLEAN TRUCKS REGULATION](#), REQUIRING AN INCREASING ANNUAL PORTION OF MEDIUM- AND HEAVY-DUTY ZEV SALES, BEGINNING IN 2024 THROUGH 2035. THE STANDARDS COULD SAVE THE STATE ECONOMY UP TO [\\$12 BILLION](#) OVER THE NEXT 20 YEARS. 🌱 ANNOUNCED A [BOLD PLAN](#) THAT ALL MEDIUM AND HEAVY-DUTY TRUCKS OPERATING IN DRAYAGE APPLICATIONS IN CALIFORNIA BE ZEVS BY 2035 AND TRUCKS OPERATING ACROSS ALL APPLICATIONS BE ZEVS BY 2045. 🌱 ADOPTED THE [HEAVY-DUTY ENGINE AND VEHICLE OMNIBUS REGULATION](#), WHICH WILL REDUCE OZONE-FORMING NO_x POLLUTION FROM HEAVY-DUTY ENGINES BY 90% IN 2027.

OR IS THE FIRST STATE TO ADOPT CALIFORNIA'S ADVANCED CLEAN TRUCKS (ACT) RULE AND LOW-NO_x RULE.

MA, NJ, NY, OR, AND WA HAVE ALL ADOPTED CALIFORNIA'S ADVANCED CLEAN TRUCK (ACT) RULE; 4 OTHER STATES HAVE ANNOUNCED PLANS.



FIFTEEN STATES AND THE DISTRICT OF COLUMBIA LAUNCHED A [VOLUNTARY INITIATIVE](#) TO ACCELERATE THE MARKET FOR ELECTRIC MEDIUM- AND HEAVY-DUTY VEHICLES, WITH A TARGET OF 30 PERCENT OF NEW TRUCK AND BUS SALES BEING ZEV BY 2030 AND 100 PERCENT ZEV SALES BY 2050 WITH AN EMPHASIS ON THE NEED TO ACCELERATE DEPLOYMENT IN DISADVANTAGED COMMUNITIES.