



**ucsusa.org** Two Brattle Square, Cambridge, MA 02138-3780 t 617.547.5552 f 617.864.9405  
1825 K Street NW, Suite 800, Washington, DC 20006-1232 t 202.223.6133 f 202.223.6162  
500 12th Street, Suite 340, Oakland, CA 94607-4087 t 510.843.1872 f 510.843.3785  
One North LaSalle Street, Suite 1904, Chicago, IL 60602-4064 t 312.578.1750 f 312.578.1751

May 28, 2020

Chair Mary Nichols and Board Members  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

RE: Public Comments Supporting a Strong Advanced Clean Trucks Rule

Dear Chair Nichols and Board Members,

Attached are 36 public comments addressed to the CARB Board submitted to the Union of Concerned Scientists by California scientists, engineers, doctors, and public health experts urging for a strong Advanced Clean Trucks Rule. Thank you for your consideration.

Sincerely,

Joyce Xi  
Western States Campaign Coordinator  
Union of Concerned Scientists

I strongly urge CARB to move aggressively forward on behalf of the health and welfare of the CA population. Vehicle emissions play an important role in public health, and conversion to all-electric operations needs to happen as quickly as possible. At every turn, there will be excuses and reasons to 'go slow', 'take measured steps', and 'transition'. The science is clear that the health of the public has been and is being affected by the continued reliance on fossil fuels combustion for energy generation. There are measurable health impacts on various organ systems whether the emissions are close (alongside busy roads) or far (regional pollution impacts). The health of current and future generations rely on your steadfast courage and determination to move forward. On behalf of us all, please do so!

Ed Avol, MS  
Manhattan Beach, CA

Please adopt the strongest possible Advanced Clean Trucks rule. As you might know heavy duty trucks emit 20 percent of global warming emissions, 40 percent of NOx emissions, and 27 percent of PM2.5 emissions from the transportation sector.

Gary Bailey  
Sunnyvale, CA

Air pollution is a dire public health issue. Along with the physical burdens of lung disease, heart disease and other ailments related to noxious vehicle emissions, there is an immense psychological burden of attending to one's own health care needs along with caring for afflicted family members. The death of loved ones due to illnesses borne of toxic air conditions is devastating. We must do all that we can to combat the continued pollution of our air.

Willma Bass  
San Francisco, CA

California has been a leader in environmental efforts. We must continue to set the example. Electric trucks are a great step forward.

Gary Baxel  
Cathedral City, CA

Thank you for strengthening the standard by roughly doubling the sales percentages from the previous draft of the rule. This is a positive step, and we must adopt the strongest rule and continue doing more to achieve California's climate goals and protect public health. Now, please reject industry pressure to delay or weaken the ACT rule. Electrification is inevitable and required by SB 100. California should lead the nation. While heavy-duty vehicles make up only seven percent of vehicles in California, they are responsible for 20 percent of global warming emissions, 40 percent of NOx emissions, and 27 percent of PM2.5 emissions from the transportation sector. This is both a health hazard and global warming hazard. California cities have the nation's worst air quality. For example, in the California South Coast Air Basin, ozone levels have exceeded the 2015 national 8-hour standard (0.070 ppm) for more than 120 days each of the last four years. Studies have shown air pollution increases the risk of asthma, heart attacks, cancers, premature death, and more. Truck pollution disproportionately harms communities of color located near busy roads and freight hotspots.

Doug Bender, PhD  
Redondo Beach, CA

Clean air means fewer deaths from respiratory diseases and cardiovascular diseases.

Melvin D. Cheitlin, MD  
San Francisco, CA

We need to reduce air pollution from fossil fuels to improve multiple health issues. Electric trucks will help.

Margie Chen  
San Francisco, CA

Thank you for strengthening the standard by roughly doubling the sales percentages from the previous draft of the rule. This is a positive step, and we must adopt the strongest rule and continue doing more to achieve California's climate goals and protect public health. I strongly urge you to reject industry pressure to delay or weaken the ACT rule.

Ellie Cohen  
San Anselmo, CA

Dear CARB members,

Thank you for strengthening the standard by roughly doubling the sales percentages from the previous draft of the rule. This is a truly positive step to achieve California's climate goals and protect public health. Please reject industry pressure to delay or weaken the ACT rule, we must move forward on this issue. Heavy-duty vehicles make up only seven percent of vehicles in California, yet are responsible for 20 percent of global warming emissions, 40 percent of NOx emissions, and 27 percent of PM2.5 emissions from the transportation sector. California cities have some of the nation's worst air quality, with multiple adverse health effects especially to the vulnerable.

Tony Crabb  
Healdsburg, CA

I appreciate that the current version of the proposed Advanced Clean Trucks (ACT) rule doubles the required percentage of new trucks that must be electric, but that only begins to address the emission problems from trucks. California has some of the most polluted air in the country, and heavy trucks produce a disproportionate share of that pollution. We know that air pollution increases the risk of asthma, heart attacks, cancers, premature death, and more. pollution from transportation disproportionately harms communities of color who tend to be live near busy roads and freight hotspots. Today electric powered trucks are more expensive to procure, but a strong requirement from California for electric powered trucks will spur development of technology as manufacturers seek to meet the resultant demand. If we are to avoid the worst outcomes from climate change, we need to make dramatic reductions in emissions within a few years. We cannot wait for the technology to evolve, and then begin to act, for it will be too late. Similarly, the children growing up today cannot wait for clean air. Children raised near freight yards and freeways suffer asthma and other pollution related disease at a much higher rate than children removed from transportation

pollution sources. To protect our children and our climate, I urge you to further stiffen the requirements, increasing the proportion of trucks sold in California that must be electric.

Richard Dawson  
Los Angeles, CA

I have chronic asthma, and for many years I have been aware that air pollution, and especially that from diesel fuel, adversely affects my ability to breathe. So I have a personal reason as well as professional reasons to want trucks to stop using fossil-based fuels. Air pollution from trucks is also deleterious to plant growth, from crops to trees and grass -- plants that we are dependent on for health and well-being. Hence, I am firmly in support of the proposed new CARB rule on electric trucks.

Anne Ehrlich  
Palo Alto, CA

I thank CARB for strengthening the standard by roughly doubling the sales percentages from the previous draft of the rule. This is a positive step, and we must adopt the strongest rule and continue doing more to achieve California's climate goals and protect public health.

Thomas English, PhD  
San Diego, CA

I am a retired electronic engineer. I drive an electric car and I have solar panels on my roof. I believe that electric trucks are feasible and are part of the solution to cleaning our air and reducing carbon emissions. Both of these goals are important to society and should be encouraged (i.e. required) by government. Studies have shown air pollution increases the risk of asthma, heart attacks, cancers, premature death, and more. Truck pollution disproportionately harms communities of color located near busy roads and freight hotspots.

Stephen Ferry  
Santa Barbara, CA

The pandemic's stay at home activity has shown how clean the air can and should be. Let's keep it that way by eliminating all pollutants.

Alvaro Garza, MD  
Modesto, CA

As someone who suffers from asthma and as an environmental scientist and hydrologist deeply concerned about the impacts of climate change, I am excited to see the positive developments in CA towards emissions reductions. I'd like to thank CARB and encourage you continue to lead in this direction. Others will follow! We actually can't afford not to do this and if strong and clear guidelines are put in place, industry will fall into line. The engineering and technical know how is there and economy will follow if there are no loop holes. Please do not sway to industry pressure to delay acting. We must adopt the strongest rule and continue doing more to achieve California's climate goals and protect public health. Heavy-duty vehicles make up only seven percent of vehicles in California, yet are responsible for 20 percent of global warming emissions, 40 percent of NOx emissions, and 27 percent of PM2.5 emissions from the transportation sector. California cities have the nation's worst air quality. For example, in the California South Coast Air Basin, ozone levels have exceeded the 2015

national 8-hour standard (0.070 ppm) for more than 120 days each of the last four years. Studies have shown air pollution increases the risk of asthma, heart attacks, cancers, premature death, and more. Truck pollution disproportionately harms communities of color located near busy roads and freight hotspots. Thank you for your leadership!

Julia Glenday, PhD  
Santa Barbara, CA

I am a pediatrician. My job is to work to protect the health of children. We know that the burning of fossil fuels leads to short-term harm from air pollutants (a remarkable number of ailments are clearly linked, not just asthma). We know that global warming is accelerating from ongoing CO2 and other pollutants associated with fossil fuels. We also know that trucks are a major contributor to these pollutants. Finally, we know that technology exists to replace our cars and trucks with electric and hydrogen-burning power that will markedly improve our air, our climate, and our children's future. Do the right thing for the long-term, not what may cost some people short term financial gain!

James Hanson, MD  
Oakland, CA

I urge the California Air Resources Board to pass a stringent Advanced Clean Truck rule. Air pollution from trucks exacerbates global warming and contributes to a variety of respiratory and other diseases. One of these diseases, asthma, affects children at higher rates. Along with COVID-19, pollution produces special risks for communities of color.

Jerry Hokanson, MD  
Walnut Creek, CA

I support the UCS stand for encouraging the state to adopt more electric vehicles, especially trucks that are in great demand right now delivering merchandise to stay at homes.

Steve LaDochy, PhD  
Temple City, CA

I write to strongly urge the move to electric trucks in California. The move to electric vehicles should be encouraged in every manner possible. The move away from gasoline and diesel is in the public interest and a step in the direction required to minimize greenhouse gases, slow the progress of global warming, and act to preserve the frozen environments that are required for species diversity as part of a healthy world. The deleterious effects of global warming extend to all latitudes and in California the risk of drought, destructive wildfires, unpredictable and damaging weather patterns are a profoundly compelling incentive to push this transformation urgently and forcefully.

Marshall Lichtman, MD  
Playa Vista, CA

I am a native of California and want the strongest truck rule as possible.

John Livingston  
Redding, CA

Thank you for strengthening the standard by roughly doubling the sales percentages from the previous draft of the Advanced Clean Trucks (ACT) rule. This is a positive step, and we must adopt the strongest rule and continue doing more to achieve California's climate goals and protect public health. Please reject industry pressure to delay or weaken the ACT rule. Heavy-duty vehicles make up only seven percent of vehicles in California, yet are responsible for 20 percent of global warming emissions, 40 percent of NOx emissions, and 27 percent of PM2.5 emissions from the transportation sector. California cities have the nation's worst air quality. For example, in the California South Coast Air Basin, ozone levels have exceeded the 2015 national 8-hour standard (0.070 ppm) for more than 120 days each of the last four years. Studies have shown air pollution increases the risk of asthma, heart attacks, cancers, premature death, and more. Truck pollution disproportionately harms communities of color located near busy roads and freight hotspots.

John Manning, PhD  
San Francisco, CA

As a physician I urge you to act on every chance we get to move to 100% electric, run by renewable energy we MUST take in order to safeguard our children's health and safety-- and to immediately improve our air quality for our public health today. Please fight for as aggressive a transition to an all-electric fleet as humanly possible. Thank you for your leadership for the public good.

Ashley McClure, MD  
Berkeley, CA

For our health, and for the world's health, California needs an electric fleet of trucks.

Donald Miller  
Newbury Park, CA

Besides the benefit to the environment, studies are beginning to show that electric vehicles are less expensive to operate and maintain in over the life of the vehicle. This savings will more than offset any initial cost delta.

Henry Morgen  
Los Angeles, CA

I urge CARB to reject industry pressure to delay or weaken the ACT rule.

Carrol Nast  
Colfax, CA

This is very basic science; air pollution contributes significantly to morbidity and mortality from lung disease. It makes COVID-19 worse. Anything that contributes to air pollution harms people, hence, electric trucks make a lot of sense.

Janet Perlman, MD  
Berkeley, CA

The proven and growing success of electric cars in the last few years indicate strongly that the new developments in electric trucks also will result in success.

Gerald Popelka, PhD  
Redwood City, CA

Thank you, CARB for strengthening the standard by roughly doubling the sales percentages from the previous draft of the rule. This is a positive step, and we must adopt the strongest rule and continue doing more to achieve California's climate goals and protect public health. Do not cave to industry pressure to delay or weaken this important rule. Heavy-duty vehicles are only about 7% of vehicles in California, but they are responsible for about 20% of GHG emissions, 27% of PM2.5 emissions and a whopping 40% of NOx emissions. In other words, trucks disproportionately contribute to climate change and air pollution. I live in Los Angeles, which has the worst air quality in the nation. This has deep implications for the health of my community. Higher levels of air pollution increases the risk of many serious medical complications, such as asthma, cancer, heart attack and premature death. A lot of truck traffic passes through Los Angeles on its way to and from the Port of LA at the southern edge of the city. The noxious pollution coming out of their tail pipes has an outsized impact on those who, like me, live in close proximity to freeways and other major thoroughfares. Additionally, new research from Harvard suggests that higher levels of air pollution may increase COVID-19 mortality. Earth is the only planet we have to live on. Without environmental protections and responsible stewardship, Earth will be dramatically altered. So, please, adopt the strongest possible version of this rule as soon as possible!

Adam Resnick  
Los Angeles, CA

Our only hope for a livable future climate includes replacing most gasoline & diesel vehicles with electrics in the next 10-15 years. Heavy trucks are the least-efficient and most-polluting, so getting their replacement going is a good place to start.

William Schoene  
Santa Monica, CA

Thank you CARB for strengthening the standard by roughly doubling the sales percentages from the previous draft of the rule. This is a positive step, and we must adopt the strongest rule and continue doing more to achieve California's climate goals and protect public health. Heavy-duty vehicles make up only seven percent of vehicles in California, yet are responsible for 20 percent of global warming emissions, 40 percent of NOx emissions, and 27 percent of PM2.5 emissions from the transportation sector. Studies have shown air pollution increases the risk of asthma, heart attacks, cancers, premature death, and more. Truck pollution disproportionately harms communities of color located near busy roads and freight hotspots. I strongly urge CARB to reject industry pressure to delay or weaken the ACT rule.

Shaun Snyder  
Carpinteria, CA

As a nurse and concerned citizen, I want to add my support for the ACT rule, and encourage the goal of zero emissions truck standards in California. I have personally witnessed the repercussions of air pollution and climate change on my patients, in the form of high rates of childhood asthma, high rates of cancer, worse outcomes for COVID patients. The health disparities between people who cannot escape high air pollution (i.e. inner city communities and communities housed near highways), who are often people of color or other minorities,

and those who can afford safer neighborhood housing makes this problem even more disturbing. As a health care provider concerned about my communities current and future health outcomes, I am joining my fellow scientists and fully endorse the ACT rule.

Nadia Stanis  
Kensington, CA

Anything to lower atmosphere contamination will promote health, and decrease disease effect on a myriad of disorders.

Gerald Telep, MD  
Rancho Cordova, CA

The California Air Resources Board is applauded for taking strong action in shifting our transportation fuel sources from fossil fuel to electric. Doubling the sales percentage of electric trucks is commendable. Your work has spurred to production and development of electric engines and storage devices. Please hold the line and resist industry attempts to prevent the transition to zero emission trucks. During the coronavirus lockdowns, we have observed cleaner air, which translates to healthier air. It also results in cleaner water, as fewer particulates are available to be washed into our waterways. I am a civil engineer, having worked with water quality issues in the Central Valley for 20 years. Reducing diesel emissions from trucks by encouraging production and purchase of electric vehicles will help people breathe better and help reduce the pollutant load to waterways.

Amy Terrell  
Citrus Heights, CA

I am thankful for CARB strengthening the standard by roughly doubling the sales percentages from the previous draft of the rule. We should strive for the strongest possible rule and continue doing more to achieve California's climate goals and protect public health. I hope you can reject industry pressure to delay or weaken the ACT rule. Heavy-duty vehicles make up about 7% of vehicles in California, but are responsible for 20% of global warming emissions, 40% of NOx emissions, and 27% of PM2.5 emissions from the transportation sector. The latter emission are the tiny particles that are very damaging to lung tissue. Being in California, I am very aware that my state has the nation's worst air quality. For example, in the California South Coast Air Basin, ozone levels have exceeded the 2015 national 8-hour standard (0.070 ppm) for more than 120 days each of the last four years! I am so happy I do not have to live there. It is common knowledge that air pollution increases the risk of asthma, heart attacks, cancers, premature death, and more. Truck pollution disproportionately harms communities of color located near busy roads and freight hotspots. These health impairments are thought to be the reason that the fatality rate from COVID-19 is abnormally high in this portion of the population.

Lawrence Thompson, PhD  
Livermore, CA

I want to thank you for your work on the Advanced Clean Truck Rule (ACT). Please resist industry attempts to delay or weaken the ACT rule. We need to move beyond the barbaric use of heavy duty diesel trucks. I live in the port city of Oakland and smell first hand the disgusting use of diesel trucks. The particulates and nitrogen oxides diminish health in our



city. Electric trucks are a proven technology for increasing the health of our residents. A bonus is that we also can reduce production of climate change gases by using electric technology.

Stephen Weitz, PhD  
Oakland, CA

I would like to thank the CARB for aggressively pursuing clean air initiatives, which protect the health of Californians and the environment, and set an important example for the rest of the Nation and the World. I encourage support of the Advanced Clean Trucks (ACT) rules, and encourage CARB to resist industry pressure to weaken these rules. Promoting electric trucks in particular (as well as hybrid/electric vehicles in general) not only improves our air quality, but also has the potential to promote growth in California businesses supporting new electric vehicle technologies, and to save truck operators over the long run through reduced fuel costs and reduced maintenance. As California has in the past, we should continue to lead the way in new, cleaner technologies.

Mark Wollen  
Poway, CA