California Natural Gas Vehicle Partnership

California is running out of time to achieve clean air

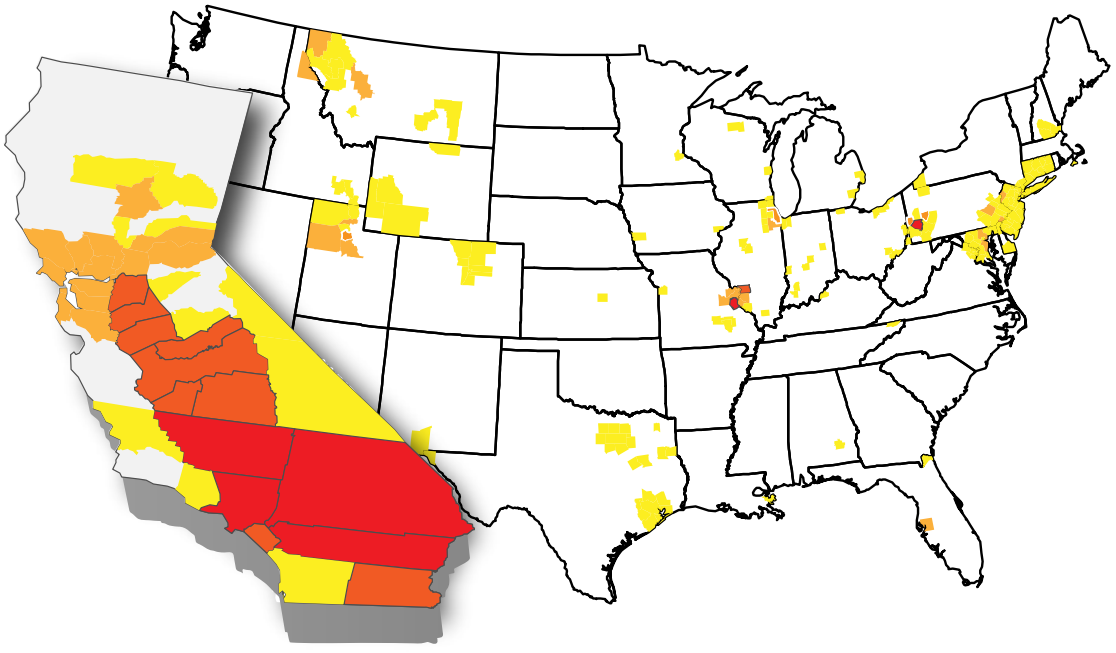
More than 35 million Californian's (>90%) live with unhealthy air, with numerous cities and towns topping U.S. charts for having the worst air pollution—including ground-level ozone and particulate pollution.

CA Cities with the Nation's Worst Air Pollution:		
Bakersfield	Los Angeles	San Diego
Fresno	Madera	San Francisco
Hanford	Oakland	San Jose
Long Beach	Sacramento	Visalia

To protect public health and the environment, the U.S. Environmental Protection Agency (EPA) set **National Ambient Air Quality Standards (NAAQS)** to monitor six pollutants in our local, or "ambient," air, including carbon monoxide, airborne lead, ground-level ozone, particulate matter (PM), nitrogen dioxide, and sulfur dioxide—also known as "criteria pollutants." The NAAQS for each criteria pollutant consists of two parts: 1) concentration of a pollutant; and 2) exposure time.

California has air monitors located throughout the state to measure the concentrations of these pollutants. If the NAAQS for a regulated criteria pollutant is exceeded, it means that the ambient air in that area is unhealthy and the area can be classified as a "nonattainment area." Depending on the level of pollution measured, a nonattainment area can be designated as marginal, moderate, serious, severe, or extreme.

California has the only extreme nonattainment areas for ozone in the nation.



Regions that are out of attainment are given deadlines to achieve clean and healthy air, which vary based on pollutant's severity level.

For regions of California that are in nonattainment, the Air Resources Board (ARB) must submit a state implementation plan (SIP) to the EPA that outlines the specific steps the state will take to reduce criteria pollutants and provide for healthy ambient air. Our regional air pollution control districts are required to develop Air Quality Management Plans (AQMPs) that are integrated into the SIP. In the interim, these California regions must demonstrate to the EPA that reasonable progress is being made toward improving the air quality in its nonattainment areas.

Some of the past due and fast-approaching attainment deadlines California is facing include:

Region	2006 PM2.5 24-Hour Standard	1979 Ozone 1-Hour Standard*	1997 Ozone 8-hour Standard
South Coast Air Basin (Greater LA)	**12/31/19**	2/6/23	6/15/24
San Joaquin Valley (Central CA)	12/31/24	**8/17/16**	12/31/23

Fines and Penalties

In addition to public health impacts, failure to meet NAAQS regulations can trigger fines and penalties, including withholding billions of dollars of federal highway funds.

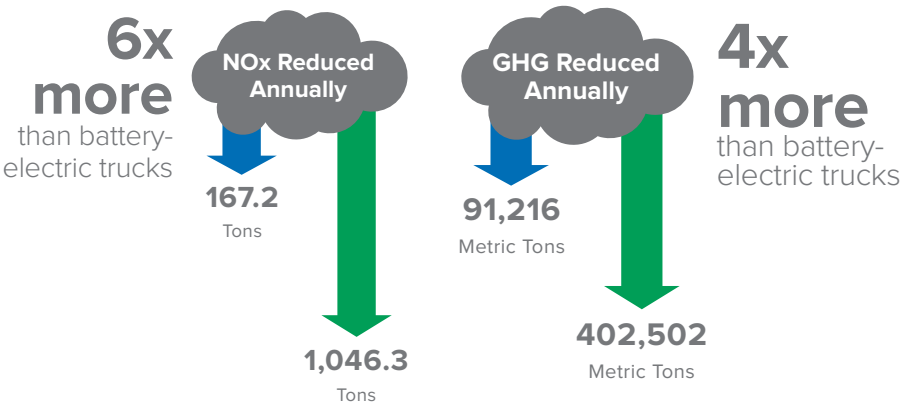
Heavy-duty (HD) diesel trucks are the state's largest single combined source of smog-forming NOx (oxides of nitrogen) and toxic diesel particulate matter (DPM), and one of the largest sources of climate-altering greenhouse gases (GHG) emissions. The state must find a way to get as many diesel trucks off the road as quickly as possible, while ensuring industry can continue to thrive and grow the economy.

The graphic shows what a $750 million public incentive could achieve. The funding amount is what the state's most polluted air districts and 23 of their state representatives have asked the Governor and Legislature to allocate out of the state's unprecedented budget surplus to immediately fund the clean trucks needed to get closer to NAAQS attainment.

Rapid reduction of diesel truck emissions is the only way California can achieve its NAAQS deadlines.

WHAT COULD $750 MILLION IN FUNDING BUY?

Number of trucks funded



Near-zero heavy-duty natural gas trucks and heavy-duty battery-electric trucks have comparable lifecycle emissions. But when factoring in the technology cost difference, natural gas trucks can provide considerably greater air quality and climate benefits.

In addition, near-zero HD natural gas trucks are the closest direct replacement for diesel trucks in terms of operational performance (range, hauling capability, fueling frequency and fueling speed).