

## An Open Letter to California Air Resources Board Chairman Mary Nichols

The VW emissions scandal is mainly the result of physics meeting fiction. In the simplest terms, we have reached the point of diminishing returns in extracting performance from a gallon of diesel while reducing pollutants, at least at reasonable cost. Unsurprisingly, and despite having the greatest research and development program in diesel engines, VW had to cheat to meet current European and U.S. standards. Meeting future tighter diesel standards will prove even more fruitless.

For a significant fraction of the non-compliant diesel cars already in the hands of drivers, there is no real solution. Drivers won't come in for a fix that compromises performance. Further, solutions which result in net greater CO<sub>2</sub> emissions, a regulated pollutant, are inappropriate for CARB to endorse. Retrofitting urea tank systems to small cars is costly and impractical. Some cars may be fixed, but many won't and will be crushed before they are fixed.

A giant sum of money thus will be wasted in attempting to fix cars that cannot all be fixed, and where the fix may be worse than the problem if the cars are crushed well before the end of their useful lives. We, the undersigned, instead encourage the CARB to show leadership in directing VW to "cure the air, not the cars" and reap multiples of what damage has been caused while strongly advancing California's interests in transitioning to zero emission vehicles.

The solution we propose for VW and the CARB is to, in a legally enforceable form:

- 1./ Release VW from its obligation to fix diesel cars already on the road in California, which represent an insignificant portion of total vehicles emissions in the State, and which cars do not, individually, present any emissions-related risk to their owners or occupants
- 2./ Instead, direct VW to accelerate greatly its rollout of zero emission vehicles, which by their very nature, have zero emissions and thus present zero opportunities for cheating, and also do not require any enforcement dollars to verify
- 3./ Require that this acceleration of the rollout of zero emissions vehicles by VW result in a 10 for 1 or greater reduction in pollutant emissions as compared to the pollution associated with the diesel fleet cheating, and achieve this over the next 5 years
- 4./ Require that VW invest in new manufacturing plants and/or research and development, in the amounts that they otherwise would have been fined, and do so in California to the extent that California would have been allocated its share of the fines
- 5./ Allow VW some flexibility in the execution and timing of this plan by allowing it to be implemented via zero emission vehicle credits.

In contrast to the punishments and recalls being considered, this proposal would be a real win for California emissions, a big win for California jobs, and a historic action to help derail climate change.

The bottleneck to the greater availability of zero emissions vehicles is the availability of batteries. There is an urgent need to build more battery factories to increase battery supply, and this proposal would ensure that large battery plant and related investments, with their ensuing local jobs, would be made in the U.S. by VW.

A satisfactory way to fix all the diesel cars does not likely exist, so this solution side steps the great injury and uncertainty that imposing an ineffective fix would place on individual diesel car owners. A drawn out and partial failure of the process will only exacerbate the public's lack of trust in the industry and its regulators. By explicit design, this proposal would achieve, in contrast, a minimum of a 10X reduction in pollutant emissions as compared to a complete fix.

There is a precedent for this type of resolution. In the industry-wide 1990 diesel truck cheating scandal, the EPA chose not to require an interim recall but instead moved up the deadline for tougher standards to make up the difference. This proposal does the same for VW and ties the solution to a transition to zero emissions vehicles.

We strongly urge CARB to consider this proposal in resolving the VW cheating scandal.

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