

Despite ongoing federal rollbacks to environmental regulations, California has the right to set its own clean air standards because it is truly extraordinary. Truth be told, the compelling circumstances that first set in motion California's vehicle emissions standards remain entirely valid. And there are four recent conditions, related to California's oil supply, production, and refining, that bolster California's case against the Administration's threat to [strip](#) California of its clean car clout.

In [1967](#), then governor Ronald Reagan adopted statewide vehicle emissions regulations to address California's severe air pollution. Shortly thereafter, when the federal Clean Air Act was adopted, California was granted a waiver to set its own tougher vehicle emissions standards. Over the decades, California has repeatedly ratcheted up these regulations to also include greenhouse gas (GHG) emissions. In order to maintain its waiver, California's emissions standards must be deemed necessary to meet "[compelling and extraordinary conditions](#)." Historically, these referred to the state's unique meteorology, geography, population, and air pollution levels.

All of these still hold true: the sun shines strong, the weather is warm, mountains wall in emissions from cars and other sources, [one in eight](#) American drivers reside here, and the air is still very dirty.

But there are four more extraordinary circumstances, all relating to California's oil resources, that need to be factored into the case for preserving and strengthening California's clean car program.

These circumstances are bolstered by the fact that California's gasoline and diesel markets are geographically isolated from other locations in the United States that produce refined products. As such, California is essentially [self-sufficient](#), refining its own transport fuels. Little, if any, gasoline and diesel are obtained from outside the state to balance out supply with demand.

All of the oil California produces ends up in its own refineries, and this is not an environmentally-friendly affair, especially in a state that has taken the lead on clean air and climate change. According to the [Oil Climate Index](#) (OCI)—an open source tool (developed by Gordon and her partners at Stanford and the University of Calgary) that compares the climate impacts of global oils—extracting and refining oil in California is dirtier than anywhere else in the United States. Weakening California's vehicle emissions standards will force Californians to consume more of the state's dirty oil longer into the future. This will increase pollution levels and elevate risks to public welfare in the state with the nation's [worst](#) air pollution—[69 percent](#) of counties had unhealthy air on 33 days last year.

*California's oil resources are extraordinarily strained*

As Texas, North Dakota, New Mexico, and overall U.S. oil production [rises](#), California production is in decline. Since 1985, California's crude oil production [has dropped](#) steadily: the state now produces under 500,000 barrels per day, less than half of its output 30 years ago. California's aging oil fields, unstable seismic geology, and tight environmental rules all work to limit oil production. Successfully running its oil refineries at their current capacity of 2 million barrels a day to meet Californians' gasoline and diesel demands requires the state to feed the entirety of its domestic oil into its refineries and then import 70 percent more oil. If realized, Trump's plan to weaken the state's clean car standards would increase gasoline and diesel demand, exacerbating the state's already-strained oil resources and further pressuring security of its energy supplies.

*California's oil resources are extraordinarily dirty*

California's oils have some of the largest carbon footprints worldwide. Producing, refining, and consuming a barrel of California oil emits more GHGs than other global barrels. For example, the state's largest oilfield, [Midway Sunset](#), is estimated to be more carbon intensive than Canada's oil sands. California's [South Belridge](#) and [Wilmington](#) fields are also among the highest-emitting in the nation. Trump's plan would increase California's GHG footprint, countering the state's climate goals.

*California's oils are extraordinarily energy intensive*

[Aging oils](#) in California require significant amounts of energy to extract and refine, much more than newer resources in North Dakota, the Gulf of Mexico, and elsewhere. Fossil fuels, like natural gas and diesel, provide these extra energy inputs. A barrel of California's Midway Sunset oil, for example, uses one-third of its total energy just to extract and refine it into petroleum products like gasoline and jet fuel. Likewise, California's complex refineries consume nearly five times more energy to turn the state's oil into marketable products than simpler refineries. Much more manpower and money are spent bringing California oil to market than elsewhere in the country.

*California's oils are extraordinarily undocumented*

Unlike other states and countries, California does not document its oil quality. The problem is that California's oil resources are more dangerous to handle than most global oils. In 2011, for example, a California oil field worker was [buried alive](#) when the ground gave way as steam was being cycled through the oil field. California's complex oil was documented

long ago by the [federal government](#), but [recommendations](#) for oil data transparency have gone unheeded for over a century. These large information gaps introduce new environmental risks for California.

California's [30 million](#) motor vehicles that far outnumber any other state are a major source of air pollution. Clean car rollbacks are a threat to the state's environmental progress—and energy security. The state needs to fight hard to preserve its pioneering vehicle emissions standards on behalf of itself and several U.S. states and international provinces that have already adopted them. Beyond preserving the standards in place, state policymakers should also consider tightening their emissions standards if they are going to make real headway addressing climate change. In this historic fight, California can draw on its extraordinary status—namely its exceedingly dirty, depleting oils that are unusually energy intensive and fundamentally unknown.

*[Deborah Gordon](#) is the director of the Energy and Climate Program at the Carnegie Endowment for International Peace and a senior fellow at the Watson Institute for International & Public Affairs at Brown University. Frances Reuland is Carnegie's James C. Gaither Junior Fellow in the Energy and Climate Program.*