

Potential Speed Bumps In Road To Calif.'s 2035 EV Target

By **Linda Chiem**

Law360 (September 13, 2022, 5:16 PM EDT) -- California's plan to phase out sales of new gasoline-powered vehicles by 2035 could usher in an electrification renaissance in the U.S. if policymakers and industry leaders can overcome supply-chain hurdles, plug gaps in electric-vehicle charging infrastructure and assuage consumer hesitancy.

The California Air Resources Board's unanimous Aug. 25 approval of the Advanced Clean Cars II program — which calls for all new passenger cars, trucks and SUVs sold in the Golden State to be zero-emission by 2035 — may fit neatly with the Biden administration's climate-focused agenda, but trying to make zero-emission vehicles the new kings of the road is rife with challenges, legal experts told Law360.

Major automakers have pledged to invest heavily in clean-vehicle technologies in the coming years, and there's been a spate of federal, state and local initiatives aimed at enhancing consumer purchasing incentives, building a reliable nationwide charging network, and expanding electric-vehicle manufacturing and supply chains in the U.S.

Such efforts have been buoyed by 2021's Infrastructure Investment and Jobs Act, better known as the Bipartisan Infrastructure Law, and the more recently enacted Inflation Reduction Act.

Shifting Political Winds

The Golden State has the unique authority to set stricter greenhouse gas emissions standards and run its own zero-emission vehicles program under a Clean Air Act waiver, which was revoked by the Trump administration in 2019 and reinstated by the Biden administration in March. California for decades has pursued more aggressive standards because of heightened air pollution problems courtesy of its sprawling geography, mountainous terrain and population growth.

It remains to be seen whether other states will embrace or shun the lofty targets in California's Advanced Clean Cars II program — the second phase of a program CARB initially adopted in 2012 — which still needs U.S. Environmental Protection Agency approval before it takes effect.

The first phase of the clean cars program sought to increase the rollout of zero-emission and plug-in hybrid vehicles with standards for model year 2015-2025 vehicles. The newly adopted standards in the Advanced Clean Cars II program address model years 2026-2035 vehicles.

Section 177 of the Clean Air Act allows states to adopt California's stricter vehicle emission standards

instead of the federal government's, and as of May, some 17 states have standards tied to California's, according to CARB.

"California's move, especially if the majority of Section 177 states go the same way, fits hand-in-glove with the Biden administration's broader climate goals and the administration's own efforts to move the U.S. to electric vehicles," Latham & Watkins LLP environmental partner Arthur F. Foerster said.

"Because such a large percentage of the U.S. car market will be impacted, the new California requirements are likely to pull everyone else along and drive solutions to the inevitable challenges. In doing so, the new requirements will assist the Biden administration in meeting its own goals," he added.

For example, New York and Massachusetts are expected to follow California's lead with a 2035 mandate, and Washington state earlier this year passed legislation setting an even more aggressive 2030 target for zero-emission vehicles.

"But a 100% zero-emission vehicle sales mandate, as California is mandating as of 2035, is a real game-changer, and I don't see all states embracing this mandate, at least not immediately," said Joel Eagle, a partner in Thompson Hine LLP's environmental and automotive industry practice groups. "Especially in 'purple' states or states with close political races this November, a 100% zero-emission mandate may be a tough pill to swallow."

Other states like Colorado, Pennsylvania, Minnesota and Virginia may not be inclined to go that far, experts say. For example, the Minnesota Automobile Dealers Association is spearheading a lawsuit challenging 2021 state regulations adopting California's clean cars standard, and Virginia's Republican leaders, including Gov. Glenn Youngkin, said they're working on repealing a 2021 state law that similarly tied the commonwealth's standards to California's.

Yet the recent momentum behind EVs may make it difficult for some of these states to divorce themselves from following California's lead, according to Shailesh Sahay, an attorney in Foley Hoag LLP's energy and climate group.

"The real question is whether the political dynamics will change if meeting the targets becomes challenging or adversely impacts new vehicle sales in a significant way," Sahay said. "In the event there are supply-chain or production issues with electric vehicles in the future, for example, it's difficult to imagine that states will not relax standards so that new vehicles are not prohibitively expensive."

Consumer Buy-In

Amid fluctuating energy prices and inflation, U.S. consumers have been more receptive to buying EVs as more makes and models hit the market. Tesla Inc. remains the dominant EV player, but legacy automakers such as General Motors LLC, Ford Motor Co., Stellantis NV, Volkswagen AG, Toyota Motor Corp. and others are making big leaps with accelerated EV development targets.

President Joe Biden's August 2021 executive order calling for 50% of all new cars and trucks sold in the U.S. be electric or hybrids by 2030 — alongside tougher federal vehicle emissions and fuel economy standards that were finalized this year — also served as a major catalyst.

That executive order "really was the first domino, and we've seen so many things happen in the last 13 months [to] speed up this train and this transition from internal combustion engine to electric or clean

vehicles," according to Morgan Lewis & Bockius LLP partner Levi McAllister, head of the firm's electric vehicles working group and energy commodity trading and compliance working group.

California's Advanced Clean Cars II program isn't an outright ban on gas-powered vehicles; it only applies to new vehicles sold in the state starting in 2035. Used gas-powered vehicles can still be driven, registered with the California Department of Motor Vehicles and sold as a used car to a new owner.

But cost remains an obstacle to getting more consumers on board with EVs, given the average price for a new electric vehicle in the U.S. is over \$66,000, according to the latest estimates from Kelley Blue Book. And the U.S. remains "deeply devoted to its cars, to cross-country trips and to larger concepts of 'independence,'" according to Thompson Hine's Eagle.

"And while the cost of electric vehicles has certainly decreased over the years, we are still not at a point where EVs are generally affordable for most income brackets in this country," Eagle said. "The trends suggest that as more auto manufacturers add EVs to their product lines and general supply increases, EV costs will become more competitive with gasoline options."

Foley Hoag's Sahay said automakers are proficient at making appealing cars for customers, and over time, consumers should become more accepting of EVs they find enjoyable to drive and reasonably priced.

"A big question remains, though, as to whether automakers will continue to innovate combustion engines to reduce their greenhouse gas emissions while they are producing more and more EVs," Sahay said. "For example, combustion engine fuel economy can be increased using higher octane fuels, and engines can be designed to accept lower carbon liquid fuels as standard inputs. It seems logical for automakers to work to minimize combustion engine GHG impacts in parallel with electrification, especially as a backstop in case electrification takes longer than anticipated."

Battery Supply-Chain Woes

The retooled EV tax credits, price caps and domestic sourcing requirements that were included in the sweeping Inflation Reduction Act that became law in August were meant to make EVs more widely available, and ideally, more affordable. The \$7,500 tax credit that applied to the purchase of brand new all-electric and plug-in hybrid cars is now available to consumers at the point of sale as a rebate. That means consumers don't have to wait until they file their tax returns to claim the credit.

But the IRA includes tough requirements concerning where battery materials are sourced and where EVs are ultimately assembled, which is problematic for automakers and suppliers that arrange supply-chain contracts several years in advance.

The Alliance for Automotive Innovation, the lead lobbying group for major automakers, said in August there are 72 EV models that are available for purchase in the U.S., including battery, plug-in hybrid and fuel-cell electric vehicles. But 70% of those would immediately become ineligible with the IRA's enactment, and none of them would qualify for the full credit when additional sourcing requirements go into effect, the group had said.

"Are there actual minerals available ... are there actual battery components available for us to secure from these [eligible] countries? And can we source in the contractual sense, meaning if I'm an automaker, and I'm in year two of a 20-year component contract with an arrangement to source from a

country that's not on the list, then I've got a problem," Morgan Lewis' McAllister said.

The IRA stipulates that starting in 2024, the \$7,500 tax credit would only apply to vehicles made with parts and components sourced from North America or from countries with which the U.S. has a free trade agreement. That credit is further carved up depending on where the critical battery materials come from and where "final assembly" of the vehicle occurs.

But most EV battery-making minerals and materials are sourced from China. According to the International Energy Agency, China produces three-quarters of all lithium-ion batteries and is home to 70% of production capacity for cathodes and 85% of production capacity for anodes — key components of batteries. The IEA said that over half of lithium, cobalt and graphite processing and refining capacity is located in China.

"At present, the U.S. does not have significant activity in the mining or refining of rare earth metals needed for the production of EV batteries," Blank Rome LLP litigation attorney Robert C. Levicoff said.

"Consequently, the U.S. is forced to heavily rely on foreign sources to produce EV batteries," he added. "This reliance has been affected by COVID-19, the war in Ukraine, the politics and conflicts with China, etc. While the supply-chain disruptions due to COVID-19 will hopefully lessen as time passes, the unpredictability of global conflicts and disputes with authoritarian regimes provides additional challenges to the adoption of EV mandates."

The U.S. Department of Treasury issued initial guidance in August on the consumer EV credit provisions in the IRA and is expected to offer further guidance by the end of the year to clarify the law's battery sourcing requirements.

"There is some hope and optimism in the industry that the Department of Treasury is going to give a little bit of an off-ramp perhaps in their guidance," Morgan Lewis' McAllister said. "Maybe this is the EV optimist in me, but I find it a little challenging to accept the belief that an administration that has been so very publicly bullish about the deployment of EVs would issue guidance that would effectively eliminate every vehicle from tax credit eligibility. I mean, that's very counterproductive to what they're trying to do."

Infrastructure Gaps

Currently, EV charging infrastructure remains scattered and inadequate in the U.S. because of different charging technologies and still-developing state and local regulations governing rates, project development and grid management. The Bipartisan Infrastructure Law allocated billions toward upgrading the resiliency of power grids and building out a national EV charging network.

The Biden administration is trying to standardize what it hopes will be the first-ever national network of 500,000 EV charging stations along America's highways — roughly five times the number of stations that are currently available nationwide — and bring uniformity to what so far has been a hodgepodge of charging options that are often proprietary and not easily accessible.

Another potential hurdle is ensuring that the nation's power grids can handle increased electricity distribution if EVs were to become more mainstream, and utilities are already investing billions of dollars in infrastructure and grid improvements to meet the demand.

Foley Hoag's Sahay explained that with transportation currently consuming more energy than electricity production, the U.S. may need to double its electric generation capacity in order to electrify the entire transportation fleet.

"While all of this capacity need not be online by 2035, we do need to see significant increases in electric generation and distribution infrastructure by that date to significantly move the needle towards electrification," he said. "On the distribution side, we again face a supply-chain constraint, namely the availability of copper for transmission infrastructure, among other issues."

Morgan Lewis' McAllister said there are projects and initiatives in the pipeline to address grid capacity and reliability, which is "a utility issue, a generator issue, a transmission and a distribution system issue."

"I don't want to call it a point of concern because we see study after study from various utilities that say they feel comfortable that they'll be able to handle it with existing infrastructure combined with long-term infrastructure development plans over the next 10 years, but it is something we should be mindful of," he said.

--Additional reporting by Keith Goldberg and Juan Carlos Rodriguez. Editing by Philip Shea and Kelly Duncan.