► The Nissan Leaf ZEV: Coming Soon to a California Street Near You. Maybe.

Yesterday, the California Air Resources Board significantly toughened the state's regulations on carbon emissions from automobiles:

The package of Air Resources Board regulations would require auto manufacturers to offer more zero- or very low-emission cars such as battery electric, hydrogen fuel cell and plug-in hybrid vehicles in California starting with model year 2018. By 2025, one in seven new autos sold in California, or roughly 1.4 million, must

be ultra-clean, moving what is now a driving novelty into the mainstream. The board also strengthened future emission standards for all new cars, making them the toughest in the nation. The rules are intended by 2025 to slash smogforming pollutants from new vehicles by 75 percent and reduce by a third their emissions that contribute to global warming.

Two quotes from the article stood out. First, an analyst from Kelly Blue Book argued that "the added expense and lesser versatility of the 'environmental' vehicles" will continue to make them less desirable to consumers. Manufacturers might have to sell clean cars at a loss to meet the requirements, and "buyers of conventional cars will pick up the remainder of the tab." Assuming that he is right — and I think it is too early to know for sure — this would simply make the new rules a sort of privatized form of a carbon tax. Buyers of less-clean cars would pay a premium based on the greater emissions from their vehicles. The difference is that the beneficiaries of the levy are private automakers, not the government.

Second, the spokeswoman from the Alliance of Automobile Manufactuers complained that "[a]utomakers are mandated to build products that consumers are not mandated to buy. If the electric vehicle infrastructure is not in place, consumers may be reluctant to buy these technologies." My first reaction is to say: cry me a river. The reason why California is adopting a mandates approach stems in no small part from the anti-tax theology of the Republican Party, which the automakers have done nothing to stop. Even with their recent troubles (and more recent success), they remain some of the biggest and most influential businesses in the state and the nation. They have sat on their hands as the Jarvis hysteria gripped the state. So now CARB uses a mandate instead of a regular carbon tax, which would be easier for the automakers to adapt to. If they don't like these rather clunky

regulatory methods, then they should understand where they come from instead of whining.

That being said, there does seem to be a chicken-and-egg problem with developing zeroemission-vehicle infrastructure. If developing this infrastructure is costly, then developers will hesitate to do so unless they have some idea of how much demand there is. But demand, in turn, might lag until and unless consumers know that there is adequate infrastructure. Costly infrastructure would seem to require a government response. But of course we can't have that.

Electric car recharging infrastructure, however, might not be so costly. Perhaps recharging an automobile takes up less space and creates fewer localized impacts than, say, a gasoline service station. If that is the case, then the market might be able to handle the problem if it is allowed to operate. Since local land use is by far the most over-regulated sector in the economy, the state legislature — or CARB, if it has the authority — might move to pre-empt local restrictions on recharging infrastructure. CARB staff seems to have thought through many of these policies carefully: developing electric car infrastructure would figure to be the next phase.