## In fighting climate change and oil dependence, California needs all its tools

By Thomas Lawson and Eileen Wenger Tutt

Now more than ever, California's pioneering energy policies are lights in the darkness for Americans who understand the threat posed by climate change and the urgent need for action. California must continue to curb greenhouse gas emissions while growing its economy, using all of the tools at its disposal. The California Air Resources Board has put forth a scenario in its proposed 2030 Scoping Plan that would do just that.

As the proposed plan suggests, an array of innovative policies—including the Low Carbon Fuel Standard (LCFS) and the Cap-and-Trade Program—are required to move us toward an advanced low-carbon economy effectively and cost-efficiently. Together, these policies are creating a low-carbon economic ecosystem, made up of many interconnected parts.

Now new research shows that the LCFS and Cap-and-Trade programs reinforce each other, ensure equitable costs per sector and lead to emissions reductions that no single policy could achieve on its own. The two programs are complementary – they work together to ensure both our greenhouse gas and petroleum reduction goals are met economically.

Transportation is directly responsible for 37 percent of California's greenhouse-gas emissions; 50 percent if you include refinery emissions. For most transportation needs, oil has a virtual monopoly on the market, leaving businesses, families, and institutions little choice but to pay whatever price is on the pump.

The LCFS encourages the development of new fuels for cars and trucks – including electricity, natural gas, hydrogen, and biofuels – and the infrastructure needed to support these new fuels. In the years to come, Californians will have choices about how to power their own mobility. That's especially true if CARB ramps up the LCFS's carbon intensity target from 10 percent to 18 percent after 2020, as suggested in the proposed Scoping Plan.

A new study from independent global consulting firm ICF shows that increasing the LCFS targets doesn't just cut emissions from fuels directly; it also eases compliance costs on the Cap-and-Trade side. By making the transportation fuel sector reduce emissions, the LCFS ensures that *all* industries subject to the Cap-and-Trade Program – such as fossil-fueled power plants, refineries and large factories – do their fair share to cut pollution, which helps keep carbon allowance prices low.

The ICF study looked at different carbon-intensity options for the LCFS and found that the stronger the LCFS is, the greater the benefits in terms of economics and emissions reductions. In fact, an LCFS with a carbon-intensity reduction target of 20 percent by 2030 would cut Cap-and-Trade allowance prices in half. The LCFS prompts innovation and investment in alternative fuels and can help buffer California's economy from spikes in oil prices.

ICF's projections suggest a 15 to 20 percent reduction in the carbon intensity of fuel along the lines of what CARB's Scoping Plan suggests—would reduce petroleum consumption by 18 to 26 percent when compared to the current 10 percent reduction target—all without raising Cap-and-Trade compliance costs. It would further broaden the mix of available fuels, bringing competition to what has been a monopolistic market, by replacing 11 to 17 percent of the gasoline Californians use, along with displacing 28 to 48 percent of the state's diesel demand.

You need a lot of tools to build an advanced low-carbon economy. Together, the LCFS and the Cap-and-Trade Programs get us there faster and cheaper. California should keep leading the fight against climate change by strengthening both these programs as suggested in this latest Scoping Plan.

Thomas Lawson is president of the <u>California Natural Gas Vehicle Coalition</u>, an association of natural gas vehicle and engine manufacturers, utilities, fuel providers and fleet operators. Eileen Wenger Tutt is executive director of <u>CalETC</u>, which promotes electric transportation as a means to reach California's clean-air goals