How Jerry Brown can ensure his environmental legacy

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BY THE EDITORIAL BOARD

Gov. Jerry Brown’s announcement that he will host the world’s climate leaders in San Francisco was well-timed. Ensuring he will remain relevant as his days in office come to an end, the event will take place in September 2018, at the height of the campaign to replace him.

But for all the acclaim that Brown receives internationally for his leadership in the fight against climate change, the governor has work to do in Sacramento to cement his environmentalist legacy.

His aides wheel, deal and draft a compromise to extend the cap-and-trade program to reduce greenhouse gases and generate billions for years beyond his time in office, while forward-looking corporations are making clear how quickly the world is changing.

Tesla Motors founder Elon Musk tweeted the other day that the mid-market Model 3, an electric vehicle selling for a base of $35,000, would roll off the Fremont assembly line this month. Volvo, owned by China’s Geely Automobile Holdings, made the flashy declaration that, by 2019, all its new cars would have electric motors.

Though some of the vehicles will be hybrids, the notion that a venerable Swedish automaker, known for producing safe but not slick cars, is fully committing to an electric fleet should spur other companies to make the same commitment.

For most Californians, a $40,000 car is hardly affordable. Leases on lower-end EVs might make financial sense for moderate or low-income Californians, though not make practical sense. The state must ensure that charging stations are spread beyond the Silicon Valley and West L.A.

The California Air Resources Board is reviewing a plan by Volkswagen to spend part of its $800 million penalty for lying about diesel emissions to build electric charging stations in out-of-the-way locales, vital if the state is to reach Brown’s goal of having 1.5 million zero emission vehicles on the road by 2025, as detailed by The Sacramento Bee’s Alexei Koseff.

All that notwithstanding, the car culture California helped create is changing. With apps, ride-sharing and, soon enough, driverless vehicles, car ownership, we are told, will become passé. To get around, mass transit will be more popular. Buses and trucks powered by diesel are a source of much pollution. That’s changing, too.
The Los Angeles Metropolitan Transportation Authority is expected to award a contract to begin transforming its 2,200-bus fleet into electric buses this month, and intends to have an all-electric fleet in 13 years. An initial contract for 60 buses is expected to go to the Canadian-based company, New Flyer. We don't endorse protectionism, but there should be room for public agencies to reward companies that manufacture or assemble electric buses in California.

One such company, Proterra, moved to Burlingame from South Carolina, and operates a factory east of Los Angeles, recognizing that high costs of doing business here aside, California is committed to green energy. Its buses transport commuters in Stockton and Fresno, among other locales. It's the sort of green economy company that should be nurtured.

In an interview with an editorial board member, Ryan Popple, Proterra's chief executive officer, predicted that by 2019, electric buses will cost less than diesel-powered buses. By 2021, they will be on par with buses fueled by natural gas. Its factory can turn out 100 buses a year, with plans to increase production, and provide solid jobs for workers who don't have advanced degrees.

Musk built his massive battery factory outside Reno, in part because Nevada Gov. Brian Sandoval and the Silver State’s Legislature provided rich incentives, and because California could not guarantee that Tesla could get the permits needed to quickly construct the factory. That shouldn’t happen again.

Musk announced in April that he expects to unveil an electric semi-truck this coming September, to compete with those being developed by other truck makers, and hydrogen-powered trucks being developed by Toyota and others. The Brown administration should be engaged now to do ensure that zero-emission truck factories are located in California, especially fitting because much of the nation's goods are trucked from this state’s ports.

Brown sees the threat posed by climate change. He’s also a practical politician. As he strives to reduce greenhouse gases, there’d be no better environmental dividend for the state than the green that comes with a good job. It'd certainly be a greater legacy than any conference.

CaliforniaGeo Responds—
Transportation is currently our biggest greenhouse gas (GHG) emitter by category in California, so going electric with carbonless bus fleets is a good thing. But rolling stock only lasts so long, and its replacement will also cost in terms of recycling costs, new raw materials, labor, and energy for the replacements. There is a longer-lasting carbon reduction investment available.

Geothermal heat pumps are the cleanest HVAC equipment the planet has ever seen, and they, too, run on electricity. That electricity is increasingly renewable, sometimes at the same spot as the building itself. But geo heat pumps need a connection to the underground called a heat exchange loop. This is a perpetual source of free thermal energy for heating and a heat sink for cooling. The underground or underwater plumbing's installation is an upfront cost that many developments won't consider, both because it's high priced, and because conventional HVAC with carbon is simple and cheap to install.

This is another opportunity for the leverage of Cap and Trade auction proceeds. Take money and invest it in permanent renewable thermal capacity instead of burning more methane in furnaces, boilers, and water heaters. Even solar panels will age as of 25 years—underground geo loops will work ten times longer and are weather and vandal proof. That's a great thing!

—Bill Martin