

Independent Emissions Market Advisory Committee – meeting of September 28, 2021

All Committee Members were present: Dallas Burtraw, Chair; Danny Cullenward, Vice-Chair; Meredith Fowlie, Member; Katelyn Roedner Sutter, Member; Ross Brown, LAO Observer.

The meeting started with a presentation by Aleecia Gutierrez, California Energy Commission, on SB 100 Report Summary. The presentation is available at: <https://calepa.ca.gov/wp-content/uploads/sites/6/2021/10/2021-SB-100-Report-Summary-Slides.-a.pdf>

The meeting continued with a presentation by Craig Segall, California Air Resources Board, on Zero Emission Vehicle Programs.

- Both U.S. EPA and NHTSA have proposed legal actions rescinding their prior attacks on the California waiver program for light-duty vehicles. Both have proposed standards that would begin to catch up the emissions reductions lost due to the Trump standards. EPA has proposed its new standards beginning in model year 2023. CARB has commented positively on the EPA proposal. We expect to see federal proposals consistent with the voluntary pledges that the President secured from automakers, on the order of 40 to 50% electrification nationally in the next year or two.
- At the state level, we're continuing full speed ahead, on both battery and fuel cell electrics.
 - In the light-duty space perhaps the most important development is the Advanced Clean Cars 2 rule package. This is getting us out to model year 2035, as intended to do the regulatory work to get 100% new ZEV sales by that year. It is likely to be adopted by all the Clean Air Act Section 177 states as well as California. You can expect to get sales in the 70% range in the early 2030s, not just in California but all 177 markets that choose to adopt the program. We are also thinking about ways to reduce demand for battery materials. When finalized, the regulation will play a major part in supporting the national transformation for ZEVs and will have impact on fuel demand in any jurisdiction that adopts it.
 - On the heavy-duty side, we already have the Advanced Clean Truck regulation, requiring increasing amounts of ZEV sales through to 2035, also being adopted in other states. CARB is working on complementary regulations, such as the Advanced Clean Fleets Rule, which is a sales regulation, intended to drive both turnover and sales penetration into existing fleets. It will go to the Board next year. It focuses closely on a few things: on turning over and electrifying to 100% ZEV by 2035: the drayage

fleet, high priority fleets (bigger fleets with bigger capitalizations), public fleets and federal fleets operating in California. It also includes 100% sales mandate for the trucking market by 2040. All this provides a regulatory backstop to with the Governor's executive orders, while also focusing on fleets where zero emissions are really critical, especially drayage, which is a huge public health problem. That regulation is complemented by an array of actions at various levels, including what are called indirect source rules, which are essentially facility-level rules that the South Coast Air Quality Management District is proposing. The District already has in place a warehouse rule intended to electrify whole facilities. They propose similar rules for ports. South Coast and other air districts are pursuing a regulatory full court press. U.S. EPA is proposing a heavy-duty trucks rule that I expect to encourage electrification although it will not itself be as ZEV rule.

- CARB will be doing several rail rules, not pure ZEV rules but they will be encouraging real clean up. CARB is developing off-road standards and rules over the next few years. A rule on transportation refrigeration units is moving forward in phases, taking all of those to zero. Another rule applies to forklifts. CARB has a major push to electrify small off-road engines (SOREs) like leaf blowers and lawnmowers, which emit more conventional pollution now than cars do in many areas. A bill passed this year provides legislative guidance for moving those forward to zero as well.
- This is paired with broader work on incentives. The governor's budget has about \$15 billion in climate work, much of which is funded by the GGRF. It has major electrification components for vehicles and infrastructure. This year CEC and CPUC are working on many of the infrastructure components, and we work with them closely at the CARB level. We are taking a funding plan to our Board in November that will address the shape of the incentive programs over the next few years. It includes about \$1.5 billion in the first year, three billion over three years. The big picture is a wholesale transformation of the sector. For example:
 - Various forms of cash for clunkers efforts that address various market segments
 - New mobility components, such as \$10 million this year for E bikes
 - \$35 million proposed to focus on transportation systems redesigns to reduce the overall use of vehicles
 - Multiple incentives to speed up turnover of vehicles

The meeting started with a presentation by Jordan Ramalingan, California Air Resources Board, on Scoping Plan Update. The presentation is available at:

https://calepa.ca.gov/wp-content/uploads/sites/6/2021/10/2021_0928_CARB-IEMAC-Scoping-Plan-Update.a.pdf

The Committee has an obligation to produce a report every year. Here is the list of topics that the Committee chose for its focus in 2021:

- Danny Cullenward: Schedule of the Scoping Plan, information from Compliance Event in November about the extent of banking; role of offsets program
- Meredith Fowlie: Scoping Plan process; affordability; border carbon adjustment in electricity market; California as a source for abatement across the country
- Katelyn Roedner Sutter: Scoping Plan process; calibration of cap-and-trade to meet the 2030 goal; local air quality
- Ross Brown: cap-and-trade design issues; offsets; retrospective analysis of policies
- Dallas Burtraw: market design issues, potential reforms

These topics organize themselves into five general categories: compliance event; Scoping Plan process; border carbon adjustment; offsets; market design – air quality issues and potential adjustments to allowance supply. Affordability weaves itself into all these topics.

Katelyn Roedner Sutter provided some perspective on the features of the Washington State cap-and-invest program, regarding regular monitoring of criteria pollutants in communities and limitations on offsets.

Subcommittees can consist of two voting members of the IEMAC. Ross Brown is not a voting member, so he can serve ex officio on any of the subcommittees. In light of that, he is willing to participate in subcommittee discussions but will not be a co-author.

Subcommittees:

- Compliance Event: Danny Cullenward; Meredith Fowlie
- Scoping Plan: Katelyn Roedner Sutter, lead; working individually with Danny Cullenward and Dallas Burtraw
- Border Carbon Adjustment: Meredith Fowlie; Dallas Burtraw
- Offsets: Danny Cullenward; Dallas Burtraw
- Market Design: Dallas Burtraw, breaking the topic into subtopics for Committee engagement

Process for writing reports: by October 20, meet with subcommittee, make outline, share with Committee. Much of the report will have to wait until after the compliance event in November or December, so a draft of the report by mid-November.

Danny Cullenward has completed the Committee Handbook. The document is meant to be helpful for new members. It is a living document that the Committee can change at any time. Katelyn Roedner Sutter said, that as a new member on the Committee, that

she found the draft Handbook incredibly helpful. The Committee approved the Handbook.

The Committee concluded the meeting with a discussion about how to communicate the findings of the report to policymakers, in light of California's challenges to get to its 2030 goal.