## October 12, 2021 EJAC Meeting Draft Scenario Chat Questions from EJAC Members

See below for the questions that EJAC members asked that did not have a response in the chat. CARB pulled together short initial responses to meet the deadline requested by the EJAC members. Staff will be available to provide more detailed responses, or any follow-up, in working groups or noticed EJAC meetings where there is a deep dive on an issue.

• EJAC - Connie Cho (she, her): How does CARB define biofuels (types of feedstock = category)? Is it the same as the EPA Renewable Fuel Standard? (Where do HEFA biofuels fall?)

**Response:** Partial response provided at the meeting. HEFA biofuels include both renewable diesel and sustainable aviation fuel. Fuels produced using this process would likely be considered conventional biofuels.

• EJAC - Connie Cho (she, her): I'm interested in knowing what "conventional" and "advanced" biofuels means, mostly!

## Response:

- Conventional biofuels are the alternative liquid and gaseous fuels that are currently used in the transportation fuels sector. This includes things like ethanol, biodiesel, renewable diesel and biomethane from a number of sources.
- Advanced biofuels would be produced using technology that exists but isn't fully commercialized yet. This could include gasification of woody biomass (non-combustion) to produce hydrogen or liquid alternative fuels.
  - EJAC Neena (they/she) CEJA: Why is that? The decoupling? If you could elaborate please, Rajinder.

**Response:** Reducing demand for petroleum fuel does not guarantee reduced oil and gas extraction. Since we import most of our fuel, any reduction in demand could be reflected in a reduction in imports.

- Neena's question is in response to this exchange:
  - Kevin Hamilton, RRT (he, him, his): I see a heavy focus on appliances. Many of these have a life cycle of 20 years or more. Replacements are very expensive.
  - Rajinder Sahota: The whole transformation is expensive. How do we do this while protecting low income households?
- EJAC Connie Cho (she, her): How are technology innovation assumptions incorporated into these inputs?

**Response:** The modeling reflects what is known today as we have to meet the statutory criteria of "technologically feasible." But, the SP updates every 5 years allow us to consider any new technologies that were previously unknown or nascent.

• Georgette Gómez ~ she/her/hers: On VMT, does it include an increase on ridership for Transit?

**Response:** The methods to VMT will include increased transit share. This is the "How" that needs to be discussed for any VMT target we set.

• EJAC - Neena (they/she) - CEJA: I'd like to hear more from CARB about whether you feel you've explored various technological innovations/investments that can be made to green up & clean up sectors vs just phase them out? So much money is being invested into CCS, biofuels, etc. which we know increase pollution. What about other zero-emission solutions? How can we shift investments? There are other ways.

**Response:** We continue to explore options for decarbonization technology. But, we must consider what is known and emerging today as part of being responsive to statute on developing a "technologically feasible" plan. Once rules and regulations are being developed to support the SP, there is another opportunity to consider any new technologies and innovation that may have emerged since the SP was adopted.

- EJAC Connie Cho (she, her): Also, I know EJ communities have raised issues like pesticides but I don't think I saw anything in these slides on that? Can those be a part of the calculus or is PATHWAYS too limited?
  - EJAC co-chair Martha Dina Arguello PSR-LA, Co Chair: Yes Pesticides and chemical production what are the Green house gas impacts
  - EJAC Angel Garcia: Agricultural emissions like synthetic pesticides, specifically fumigant pesticides contribute to ghg contributions.

**Response:** PATHWAYS does not include an input for an end use such as pesticides. We did speak a little to pesticides in the GHG inventory document here: <a href="mailto:ghg\_inventory\_trends\_00-19.pdf">ghg\_inventory\_trends\_00-19.pdf</a> (ca.gov) page 30 The NWL and pesticides topics can be discussed in more detail in the working group, or at a deep dive in a noticed EJAC meeting.

- Georgette Gómez ~ she/her/hers: Also, how about incorporating complete communities development, so we can reduce VMT.
  - EJAC Dr. Catherine Garoupa White, they/she, CVAQ: There's a model developed by UC Davis called the Regional Opportunity Index that assesses jobs/housing balance that I'd recommend consulting. <a href="https://interact.regionalchange.ucdavis.edu/roi/">https://interact.regionalchange.ucdavis.edu/roi/</a>

**Response:** No question and we will share the model info with the VMT lead division.

• EJAC co-chair - Paulina Torres: How does cap & trade fit into this given the legislature's concern & overwhelming EJ concern about cap & trade as a "direct emission reduction"?

**Response:** We would like to save this topic for the working group. However, when the 2017 SP was adopted by the Board, there was considerable discussion by the Board on this topic. Here is a link to that board meeting transcript: https://www.arb.ca.gov/board/mt/2017/mt121417.pdf

• EJAC - Dr. Catherine Garoupa White, they/she, CVAQ: How will CARB ensure that carbon capture and sequestration and biogas production do not negatively impact the health of people living nearby?

**Response:** The detailed analysis of how and where technology is deployed is part of implementation that happens after a SP is completed. But, we also have to do a CEQA analysis of what is foreseeable action under the SP. There will be discussion of these considerations in the CEQA document, but detailed analyses are part of the development of any regulations or policies that will implement the outcomes called for in the SP.

• EJAC - Amee (she/her) APEN: I have a similar question to Paulina and Shayda in regards to how cap-and-trade fits into these scenarios and the underlying assumptions and projections about performance in meeting our 2030 emissions limit

**Response:** The scenarios represent technology and fuel changes over time. We are not modeling policies in PATHWAYS. Policies and programs are then reviewed to see how they deliver the outcomes called for in the SP. Supporting programs and policies may be adjusted to ensure they align with the SP, new ones may be implemented, but that is through a separate process with its own analyses and public workshops.

• EJAC - Connie Cho (she, her): Has CARB prioritized direct emission cuts within each of the technological mixes?

**Response:** The scope of the modeling is about the types of sources and emissions included in our inventory. So, everything modeled is about reductions in those sources.

• EJAC co-chair - Martha Dina Arguello PSR-LA, Co Chair: What happened to the early actions from the first scoping plan and hydrofluorocarbons?

**Response:** We spoke to all efforts on HFCs at the SLCP workshop and are happy to present on that at a future deep dive at an EJAC meeting. The SLCP workshop did go through early action measures described and implemented since the first scoping plan. <a href="2022 Scoping Plan">2022 Scoping Plan</a>
Update – Short-Lived Climate Pollutants (SLCP) Public Workshop Presentations | California Air Resources Board