

bp America Inc.
1201 K Street, Suite 1830
Sacramento, CA 95814



January 7, 2022

Ms. Cheryl Laskowski, Chief
Transportation Fuels Branch
California Air Resources Board
Sacramento, CA 95814

Re: Public Workshop: Potential Future Changes to the LCFS Program

Dear Ms. Laskowski:

Thank you for the opportunity to provide comments following the California Air Resources Board's ("CARB") recent workshops to discuss potential changes to the Low Carbon Fuel Standard ("LCFS") program. With an ambition to become a net zero company by 2050 or sooner, and to help the world get to net zero, bp is actively engaged in advocating for policies that support this ambition. We look forward to continuing this engagement as CARB looks at making changes to the LCFS, as well as our continued engagement on the development of the 2022 Scoping Plan update.

In addition to our long-time support for California's market-based approach to reducing greenhouse gas ("GHG") emissions, bp is also actively supporting climate change policies throughout the U.S., including the expansion of the Regional Greenhouse Gas Initiative into Pennsylvania and Virginia and clean energy legislation in Illinois. bp also joined a diverse coalition of supporters who strongly and successfully advocated for the Washington state cap and invest legislation, which was enacted in 2021.

California's climate programs have created a model for other jurisdictions and a market in which bp is actively engaged, including our participation in the state's LCFS program through the production of low carbon fuels. In addition, LightSource bp, our joint venture solar company, is headquartered in San Francisco. bp also has an electric vehicle charging pilot program in Northern California.

On behalf of bp, I would like to offer the following specific comments in response to the workshop presentation and associated comments and discussion.

Incentivize Investment and Align with Long-term Climate Goals – Slide 12

Establish declining Carbon Intensity ("CI") compliance targets post-2030, and potentially strengthen interim pre-2030 targets

bp recommends that CARB take a measured approach and link to output from the Scoping Plan to inform future target setting and long-term market signals rather than react to near term market fluctuations as some stakeholders were advocating within the workshop.

It is important to consider all the options available when considering future program target setting. bp fully supports CARB's proposal to allow for book-and-claim accounting of new-or-expanded low-CI hydrogen injected into hydrogen pipelines. We would urge CARB to take this approach a step further to encourage broader use of a technology that is available today – renewable natural gas ("RNG").

CARB should also consider expanding RNG book-and-claim for hydrogen and process energy in liquid fuel pathways. There are many possible benefits in taking book-and-claim expansion a step further that could include, but are not limited to:



- Allowing RNG to make a greater contribution to support CARB target setting than through direct to transport on its own. As existing natural gas transportation becomes saturated with RNG and new categories of RNG become available, diversification into other end uses may be needed to support future project development.
- RNG offers the ability for liquid fuel producers to reduce carbon intensity that is not feedstock dependent. This will be an important factor as liquid biofuel demand grows. Ultimately, it may not be liquid fuel production capacity that is the limiting factor, but access to the low carbon intensity feedstocks. As such, RNG could mitigate risk associated with the forecasting of liquid fuel contribution to support CARB's ambitions under the LCFS.
- Taking advantage of a technology that is available now could support more ambitious target setting if CARB were considering pre-2030 adjustments.

Given the points above, bp strongly recommends that this be added to the list of Stakeholder Concepts for future consideration when developing post-Scoping Plan rulemaking.

Harmonize with Federal Policy – Slide 13

Petroleum Project Crediting

While bp is investing in a full spectrum of clean fuels and power activities as we transition to being a net zero company by 2050 or sooner, we are also working to reduce the carbon footprint of our fossil fuel operations.

Fossil fuels will be needed in the near to medium term during the energy transition. Project based crediting sends a strong signal to LCFS supply chain participants to prioritize fossil fuel life cycle carbon reduction, where appropriate. Market forces may decide the viability of fossil fuel activities more than access to project-based LCFS credits. We believe limiting this program design feature could be counter-productive to meeting long term GHG goals.

By casting doubt on future petroleum project crediting, CARB is sending mixed messages both to CARB program participants and to other LCFS jurisdictions. One example is the streamlining proposal for refinery hydrogen ("H2") proposed within the same presentation that puts such projects in doubt.

bp recommends that petroleum project crediting continue to be encouraged under the LCFS program.

Aviation Decarbonization

CARB response to federal emphasis on decarbonizing aviation sector by adding intrastate jet fuel as a required fuel:

bp supports measures that enable Sustainable Aviation Fuel ("SAF") to compete equitably with ground transportation decarbonization incentive structures. In principle, CARB's proposal would help close the gap between aviation and ground transportation, but how this would work in practice will be key. We look forward to working with CARB and other participants to ensure the changes will achieve the desired outcome.

Accelerate Transition to ZEVs – Slide 14

Support hydrogen refueling infrastructure for medium-and-heavy duty vehicles

In the field of Zero Emission Vehicles ("ZEVs"), bp urges CARB to support both hydrogen and electric vehicle MD/HD charging infrastructure when developing future rulemakings.



Define new energy economy ratios (EER) for emerging zero emission fuel-vehicle combinations

bp supports adopting new EERs and updating EERs to reflect the changes in technology and data. Given the pace of change, bp urges CARB to pursue an accelerated path for adopting and updating EERs outside the rulemaking process.

Streamline Implementation and Enhance Exportability - Slides 16-17

bp supports the following concepts that CARB solicited feedback on including:

- Developing a single CI benchmark for gasoline, diesel and substitutes
- Implementing third-party verification for additional fuel reporting entities
- Requiring validation of pre-project baseline data for petroleum projects
- Removing deemed-complete designation for fuel pathways
- Allowing for preferential allocation of low-CI hydrogen to specific pathways used for reporting
- Allowing hydrogen production facilities not co-located with refinery to generate credit under refinery investment provision

Stakeholder Concepts – Slide 18

In the spirit of reflecting changes in technology and data in Slide 15, bp supports CARB reevaluating both land use change and consideration of site-specific agricultural inputs. Taking on these concepts would also contribute to CARB's goal of making the program more exportable, and these elements could be particularly attractive for potential LCFS jurisdictions in agricultural states.

We support CARB's commitment to staying the course with its successful approach to reducing GHG emissions as it looks towards achieving carbon neutrality by 2045, while at the same time looking for ways to improve these programs. This provides the certainty necessary for making the kinds of investments that will drive carbon reductions.

As California and CARB continue to lead the way in policy development to advance the energy transition, bp looks forward to working with you on potential changes to California's pioneering GHG reduction programs, including the LCFS.

Sincerely yours,

A handwritten signature in black ink that reads "Michelle Orrock".

Michelle Orrock
West Coast Government Affairs
bp America Inc.