

April 6, 2023

Supervisory Body
United Nations Framework Convention on Climate Change
Post Office Box 260124
D-53153 Bonn, Germany
Supervisory-Body@unfccc.int

Dear Supervisory Body:

The California Air Resources Board (CARB) has designed and implemented a greenhouse gas (GHG) crediting program to reduce or avoid GHG emissions as part of its economy-wide emissions trading program for over a decade. As such, CARB is glad to leverage this experience and submit comments regarding the requirements for the development and assessment of methodologies for the mechanism established by Article 6, paragraph 4, of the Paris Agreement.

California's emissions trading program is just one part of its portfolio of actions to achieve the State's climate targets. While California achieved its 2020 target of returning to 1990 levels several years before the legislative deadline¹, our targets going forward are much more ambitious. The 2030 target calls for reducing GHG emissions by at least 40 percent below 1990 levels by 2030,² and importantly, in recognition of the latest climate science, the Newsom Administration and Legislature codified in 2022 California's target to reach carbon neutrality no later than 2045 and reduce anthropogenic GHGs 85 percent below 1990 levels by 2045.³ The recently approved 2022 Climate Change Scoping Plan Update lays out an aggressive pace of actions to achieve the 2045 targets.⁴ Those actions involve dramatic reductions in the combustion of fossil fuels and production and deployment of clean technology and energy across all sectors. It also includes actions to avoid emissions from short-lived climate pollutants such as methane and hydrofluorocarbons, as well as carbon dioxide utilization, removal, and sequestration. We continue to believe in a three-pronged approach of incentives, regulations, and carbon pricing to ensure the avoidance and reduction in GHG emissions. Importantly, incentives and crediting often best address early scaling and market barriers for new technology, while enforced regulations for those same actions deliver and ensure maximum GHG benefits.

¹ Current California GHG Emissions Inventory Data is available online at: <https://ww2.arb.ca.gov/ghg-inventory-data>

² Senate Bill 32 (Núñez, Chapter 488, Statutes of 2006) is available online at: http://www.leginfo.ca.gov/pub/15-16/bill/sen/sb_0001-0050/sb_32_bill_20160908_chaptered.htm

³ Assembly Bill 1279 (Muratsuchi, Chapter 337, Statue of 2022) is available online at: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220AB1279

⁴ The 2022 Scoping Plan for Achieving Carbon Neutrality is available online at: <https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf>

The design of California’s crediting program is informed by legislative direction that all credited reductions be real, quantifiable, verifiable, enforceable, permanent, and additional. The Global Warming Solutions Act of 2006 (AB 32) also directs CARB to recognize early action to reduce emissions.⁵ In developing regulatory provisions to operationalize these requirements, CARB undertook a multiyear public process to engage project developers, regulatory purchasers of credits, academics, and other public members. Ultimately, CARB established its own unique program informed by experiences in the existing regulatory programs at the time, voluntary markets, stakeholder input, and the Clean Development Mechanism. In establishing the program, CARB had to weigh several considerations which will likely resonate with the Supervisory Body. The design of the program needed to be rigorous with credible results, reasonably implementable, contain objective criteria to avoid any biases or varying rule interpretations, support transparency, and attract private and public investment in GHG mitigation actions.

The compliance crediting program nested within CARB’s emissions trading system strikes a balance across the legislative direction and the above considerations. But, it is not without contention as not all parties at the time of development of the program, or the last decade of implementation, are wholly satisfied with the design. Project developers have continued to push for less stringent definitions for the legislative criteria. However, such an outcome would undermine the quantity of reductions needed according to the latest science. Other general critics of crediting programs have weighed in that the program lacks rigor and credits are not real. Their versions of theoretically perfect programs could miss cost-effective GHG reductions, costing more than necessary to reduce GHG emissions or screening out valid reductions. As a regulatory body, CARB’s charge is to design and develop a program responsive to all legislative direction and consider how to structure the program so that it functions in the real world to achieve the goals for which it was intended – reducing emissions to achieve the State’s climate targets.

It is also worth noting that courts have upheld the design of CARB’s program. In 2012, CARB was challenged in a lawsuit contending that the design of the Cap- and-Trade Regulation and Compliance Offset Protocols did not conform to statutory and regulatory requirements, particularly related to permanence and additionality.⁶ The trial court found CARB’s design and implementation met the requirements of AB 32, as did an appellate court. The California Supreme Court denied the petition for review of the case.

It is with this history of successfully designing and implementing a crediting program that CARB provides selected technical input to the Supervisory Body to help inform its deliberations. Given the relatively short response time and lengthy list of questions, some responses may be more general than what is contained within formal rulemaking documents

⁵ See note 2 above.

⁶ *Our Children’s Earth Foundation v. California Air Resources Board* (1st Dist. 2015) 234 Cal.App.4th 870 (upholding *Citizens Climate Lobby and Our Children’s Earth Foundation v. California Air Resources Board* (2012) Case No. CGC-12-519554; 2013 WL 861396) (petition for review by California Supreme Court denied June 10, 2015)

posted on CARB's website. California supports the goals of the Paris Agreement to stabilize the climate and address the existential global threat of climate change. California also supports taking action in line with the pace and scale indicated by the latest climate science. We stand ready to make ourselves available for any further consultation or clarifications on our input.

If there are further questions, please do not hesitate to reach out to Sarah Jo Szambelan, International Liaison, at SarahJo.Szambelan@arb.ca.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "R Sahota".

Rajinder Sahota, Deputy Executive Officer for Climate Change and Research

Attachment A

Questions for Public Inputs

Below, CARB lists responses for the agreed questions listed on the UFCCC's Call for Input.⁷

(1) General Questions

The current inputs are rightfully focused on requirements for the development and assessment of methodologies at this time. However, it may be beneficial to consider all input in the context of implementation and resources to successfully administer any developed program. California's program design was also considered in the context of implementation ease for the agency and project developers / verifiers. Ultimate authorities and enforcement powers remain with the regulatory agency.

(2) Baseline Setting

- a) Update any inputs for baselines using the latest science and data every five to ten years, or other known interval (but not too often). New projects should be compared against a new landscape of action and options.
- b) Use examples from existing compliance programs that were established after the CDM. The voluntary programs provide important insights but with caveats since those crediting programs vary across a large range, and are not as accountable towards government established targets or the balancing of considerations common to regulatory-grade programs.
- c) Use performance standards such as those incorporated in CARB's crediting program for its methodologies. These standards should be data driven and made publicly available.
- d) Incorporate calculation factors into methodologies to address the potential for leakage, where possible. See CARB's Forestry Protocol.
- e) No comments offered.
- f) No comments offered.
- g) No comments offered.
- h) No comments offered.

⁷ Available online at: https://unfccc.int/sites/default/files/resource/Call-for-input-meth-requirements_questions.pdf

(3) Specific Literature

Definitions: Activity-shifting leakage, additional, conservative, crediting baseline, crediting period, market-shifting leakage, permanent, project baseline, quantifiable, real, reversal, unintentional reversal, and verifiable.

Examples of methodologies with performance standards that are approved for generating credits in the California program (with hyperlinks):

- [Livestock Projects](#)
- [Mine Methane Capture \(MMC\) Projects](#)
- [Ozone Depleting Substances \(ODS\) Projects](#)
- [Rice Cultivation Projects](#)
- [U.S. Forest Projects – June 25, 2015](#)
- [U.S. Forest Projects – November 14, 2014](#)
- [U.S. Forest Projects – October 20, 2011](#)
- [Urban Forest Projects](#)

(4) – (10) No comments offered

(11) Additionality

a) All final elements to be considered to determine additionality should be met to satisfy the additionality test for each project type.

b) Demonstrating elements:

i. Financial additionality is complex and was not determined to be a necessary test for the California program. There may be instances where one incentive is insufficient to motivate an action and given the pace and scale of action needed, California allows for financial stacking of incentives and excludes this element for ease of implementation of the overall program.

ii & iii. CARB's program includes both of these elements and integrates national and State legislation into a performance standard for project eligibility with additional requirements for verifiers to confirm compliance with new national, State, and local laws and regulations. The performance standard in the methodology is updated to reflect major national and State laws during periodic reviews of the methodologies.

iv. If additionality is determined through a performance test in the methodologies, as is the case with CARB's program, periodic updates to the methodologies would ensure older and now common technologies are no longer eligible as new project types.

- (12) Please see materials listed under (3) for examples of how CARB operationalized additionality in its regulation and currently approved methodologies through a performance standard approach. These may provide helpful examples for the Supervisory Body.
- (13) Once a methodology is established, a minimum of 5-10 years crediting should be provided. That ensures investment return lock-in and after that time period, a reassessment of the technology and actions for remaining eligible projects could be pursued to ensure higher emissions technologies are not locked in for a long time. The classes of projects best suited for shorter time periods would generally include non-biological projects, except for those that remove and sequester carbon. Carbon dioxide removal and sequestration, whether mechanical or biological (forestry) should be considered with longer timeframes of up to 25 years as those actions can also help address legacy emissions already in the atmosphere and recognize the longer timeframes for meaningful benefits such as forest growth.
- (14) Anything that avoids combustion of fossil fuels and emissions of short-lived climate pollutants should be on the positive list pending any additionality and permanence criterion being satisfied. If the project type only partially avoids combustion of fossil fuels or emissions, it will be important to re-evaluate the technology or actions periodically to ensure there is continued progress towards moving completely away from combustion of fossil fuels and drastic reductions in short-lived climate pollutants. Carbon removal should be on a positive list.
- (15) CARB provides one example here, but there are others that could be considered as well. If the technology is deemed as emerging with little deployment globally, or potentially regionally, those could be positive for additionality pending all other tests for additionality are satisfied. For the protocols adopted by CARB, there was data on the deployment of actions and technology that was less than ten percent at the time of the adoption of the protocols.
- (16) Regulations that are being enforced should only be considered at the renewal of a crediting period. Investors will want some confidence in the return of their investment. Hence crediting periods should be guaranteed until such time as a renewal if enforcement occurs in the middle of a crediting period.
- (17) A crediting period should at least test for additionality based on any updates for new laws and regulations coming into force since the previous crediting period began. The crediting period should also reflect any technical updates to the protocols, such as updates to protocols to no longer recognize older technology in favor of newer less GHG intensive technologies that serve the same function.
- (18) Crediting periods of less than 5 years only make sense if there is an analysis that demonstrates the technology or action will pay back on any capital investment in the project and that there would be ongoing financial paths to continue to pay for the maintenance and operation of the technology. This would prevent stranded assets and backsliding on emissions reductions. It is also important to provide space for

regulations to be implemented once costs suggest the technology or action is cost-effective. Regulations are designed to deliver all reductions where applicable, while seeking credits is voluntary. We can not lose sight of the need to push crediting especially where there may be some market or scaling barriers. Once those are addressed, regulations are a direct tool available to governments to deliver the maximum reductions for a project type.

- (19) There should be no requirement for a demonstration of enforcement actions. If the rule or law exists, it should be considered enforced. That puts the local regulator on point to follow through on their laws and rules and makes implementation cleaner for additionality tests.

General Questions on baseline and additionality

- (20) CARB has considered how to apply baselines and additionality in various regions and practices in its own protocols and believes there is sometimes a case to do so. The key in setting up these requirements is a data focused approach to show why an additional type of screen for application is needed to support projects in a region or of a specific type. We offer our forestry and rice cultivation protocols as examples of how we have operationalized these types of screens.
- (21) We believe there can be a role for these types of nested projects within a larger approach. We offer the California Tropical Forest Standard as one example.⁸
- (22) In our experience, these types of external agencies may have key data to inform the evaluations needed to conduct assessments for establishing performance standards for baselines and additionality. These agencies are not necessarily the appropriate ones to make the final decisions on crediting methodologies as they often have different charges and less familiarity with the implications for specific decisions.
- (23) Host countries should publicly provide robust data, where available, to set up any screens specific to their regions.

Leakage

- (24-25) Please see definitions in CARB regulation as provided in response to Question 3 and the Forestry Protocol.
- (26) CARB incorporates leakage as part of its quantification of the credits. See Forestry Protocol.
- (27) Leakage should be considered at a regional, sub-national, and national scale where data is available. Ultimately, host countries/sub national regions must show their reductions are real from the perspective of the atmosphere.
- (28) Construction emissions should be project emissions as that allows for project specific calculations with third party verification.

⁸ Information about the California Tropical Forest Standard is available online at: <https://ww2.arb.ca.gov/our-work/programs/california-tropical-forest-standard>

- (29) Please see CARB protocols, specifically Forestry. Leakage should be addressed in all situations where robust data is available to incorporate the potential in the crediting calculations.

Non-permanence and reversals

- (30) Please see CARB Regulation definitions for permanence in response to Question 3. We believe all projects should strive for permanence. In general, anything that stores carbon can lead to a reversal—intentional or unintentional. CARB uses a 100 year permanence test.
- (31) CARB has adopted two approaches for permanence in situations where there could be a potential reversal. All projects in this category contribute to a buffer pool. For intentional reversals, the party that surrendered a credit is obligated to replace any reversed credits to maintain environmental integrity. For unintentional reversals, the credits are replaced from the buffer pool to maintain environmental integrity. Please see the CARB regulation provided in response to Question 3 for additional details.

Standardized Baselines

- (32) If the data supports a standardized baseline across host Parties in a specific region, it may make sense to provide them all with the same standardized baseline. CARB provides a standardized baseline for rice growing states in the Midwest.

Policies, measures, and circumstances

Developing methodologies requires considerable resources and data with expertise across multiple disciplines. CARB recommends identifying the types of questions that should be posed to help build all the elements of a methodology with guidance that any decisions be supported by the best data available for that region and that the data be made publicly available. Crediting will be an important part of addressing climate change and private capital will be critical to realizing the reductions needed. Public transparency with robust methodologies and accounting will be critical to building public confidence in any reductions claimed. Ultimately, crediting for actions should reach a point where the costs and scalability allow for regulation to support maximum reductions in that situation. We need all tools and all reductions to achieve the Paris Agreement.