

May 8, 2024

Ms. Rajinder Sahota Deputy Executive Office California Air Resources Board 1001 I Street Sacramento, CA 95814

Via electronic submission: Workshop Docket

Re: CARB Cap-and-Trade Informal Workshop on Market Rules & Compliance Offsets

As an active participant in the California Cap-and-Trade Program (the "Program"), Anew Climate, LLC ("Anew") appreciates CARB hosting the April 23rd informal workshop to discuss amendments to the Program, particularly related to compliance offsets and market rules. We value the opportunity to provide CARB with comments in strong support of the Program. We have organized our response into three sections. First, we provide general comments in support of the Cap-and-Trade Program ("the Program") and inclusion of offsets beyond 2030. Second, we respond to CARB's request to provide technical comments regarding some of the offset protocols and potential clarifications to the Cap-and-Trade Regulation that were presented on the slides. Third, we provide a few additional specific comments regarding items raised during the question & answer session.

Anew is one of the largest climate solutions companies in North America. We have a successful track record within the markets for voluntary and compliance carbon credits, renewable natural gas, low carbon fuels, electric vehicle credits, and renewable energy certificates. We have been active participants in California's Cap-and-Trade Program and its offset program since its inception, with a particular focus on forestry. To date, we have developed 20 compliance forest projects, which have generated over 18.6 million credits across 1.8 million acres, making us one of the most active forest carbon project developers. Over this time, we have seen radical changes in the behavior of forest landowners as a result of California's Program. By sending a strong carbon price signal that competes with traditional timber revenues, millions of acres of forestland are being conserved under California's offset program. Capital markets have taken note of forest carbon investment opportunities. In 2022, Anew helped mobilize \$ 1.8 billion for the conservation of industrially managed forestlands into carbon-first sustainably managed forests - which would not have been possible without carbon pricing incentives like those provided in the California offset program.

The April 23 workshop focused specifically on certain potential amendments to individual offset protocols, as well as on select provisions of the Cap-and-Trade Regulation. Before responding to these more specific issues, we would like to first reiterate more broadly the importance of retaining compliance offsets as a valuable and relevant tool in the post-2030 Cap-and-Trade program.

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1. General Comments:

Offsets are an important mechanism for containing the cost of compliance while also ensuring that the Program is as aggressive as possible. The cost savings that can be achieved by allowing a small percentage of compliance obligations to be met with offsets, some of which directly benefit California communities and consumers. The inclusion of compliance offsets in the California Capand-Trade Program has allowed the Program to be aggressive, helped protect California consumers from high prices, and helped California businesses remain competitive. We have previously observed that in 2023 alone, the use of compliance offsets translated into savings of \$115,722,217, i.e., a significant savings for California companies and consumers. We anticipate that toward 2030 and beyond, these savings will continue to increase as the cost of carbon allowances rises with the declining cap, and when the percentage of offsets rises back to 6% in 2026. Given that allowance prices are expected to continue to rise over time, additional saving could be achieved if CARB were to raise the offset limit back up to 8% after 2030.

In addition to these significant savings, offsets bring crucial environmental co-benefits. We are seeing these local environmental benefits first-hand around the forestlands managed by us and our partner, Aurora Sustainable Lands. Anew supports CARB's recognition in previous workshops and statements that many of the approved offset projects provide direct environmental benefits to California, including improvements in air and water quality, as well as conservation, biodiversity and local economic benefits that come with technological innovation and bring new jobs and skills to the state. We believe it is important to note that out-of-state offset projects also enable California to magnify its climate ambition and leadership through climate action in other jurisdictions (and these are often at a cost lower than those projects in California because of the state's comprehensive approach to climate policy).

2. Specific Comments in Response to CARB Presentation:

In response to the slides and comments presented by CARB staff during the workshop, we note upfront that there were multiple instances in which staff stated that they were seeking to "clarify the process" without providing more specific detail or suggested concrete revisions to existing compliance offset protocols or the Cap-and-Trade Regulation. We are happy to provide comments on some of the specific proposed changes and options but note that our ability to provide concrete feedback is somewhat limited by this lack of specificity; we look forward to additional opportunities to engage with CARB staff and provide additional comment in the future, as further specific detail is made available.

While our comments below follow the order in which the slides were presented during the April 23 workshop, we would like to especially highlight the importance our comments related to (a) clarifying compensation for reversals in relation to ARBOCs that have actually been issued in response to slide 42, and (b) the requirement that verification teams be different between the two verifications as proposed on slide 40.

Market Rules

¹ Anew calculated these savings based on publicly available CARB auction data and included this in the Anew Climate comment letter dated December 15, 2023.

On slides 26 and 27, CARB seeks feedback on changes to compliance period lengths to align these compliance periods with GHG emission reduction target years (2030, 2035, 2040). While there are advantages and disadvantages to longer versus shorter compliance periods, Anew believes Option 2 is a better choice. Option 2 allows intertemporal flexibility such that firms can adjust their decarbonization strategies to reflect timing that works for them. In contrast, the four to five year periods proposed in Option 1 are too long and run the risk of inaction, which could be difficult to detect and rectify (and more costly) at the end of a much longer compliance window. Two-year or three-year compliance windows allow flexibility and reduced administrative costs while also ensuring that the state can continue to report its progress in meeting its goals.

Mine Methane Capture Protocol

On slide 34, CARB proposed to limit the duration of source test applicability to two years. The protocol refers to source testing in relation to the testing of destruction devices that use site-specific methane destruction efficiencies. While we understand that this change is intended to improve the reliability of source test data, requiring source testing every 2 years may place undue burden on the project developer. We recommend changing the duration to 5 years or, in the alternative, to require source testing after operating conditions of the destruction device have changed and based on the characteristics of the equipment it is reasonable to assume an impact has been made on the destruction efficiency.

Anew encourages CARB to consider updates that "remove or modify the prohibition on natural gas pipeline projects at active mines," as recommended by the Compliance Offsets Protocol Task Force.² Allowing natural gas pipe injection would increase the positive environmental impacts of compliance projects and promote the beneficial use of coal mine methane (CMM). We request CARB's consideration of the following topics during the MMC Protocol update process:

- 1. Pipeline injection as an end-use management option.
 - The number of CMM pipeline injection projects on active US mines has dropped from 15 in 2010 to three today.³ There are significant operational expenses and energy requirements associated with the transportation and processing the gas. These, combined with current natural gas prices and the lack of environmental attribute recognition, do not warrant investment in pipeline injection projects today.
 - Given current incentives under the Compliance Offset Program and lower project expenditures, Offset Project Operators are opting to flare CMM rather than utilize it as a resource that displaces natural gas.
- 2. Harmonization of existing pipelines with qualifying destruction device requirements.
 - Significant capital must be deployed on an ongoing basis to build infrastructure for CMM capture and pipeline injection. This new infrastructure can include miles of gathering and transmission pipelines, compression, processing stations, compression facilities, and interconnections to existing interstate pipeline systems.

³ US EPA Inventory of US Greenhouse Gas Emissions and Sinks 1990-2020; EPA CMOP presentation dated April 24, 2024.

² https://ww2.arb.ca.gov/sites/default/files/2021-03/offsets task force final report 030221.pdf

• Should pipeline injection become eligible under the MMC Protocol, the past destruction of CMM in an existing pipeline should not render future projects on new wells ineligible for crediting. Qualification of the structure device could be tied to new capture infrastructure construction rather than a common carrier pipeline.

ODS Protocol

On slide 36, CARB proposed adding to list of eligible ODS Refrigerants [Subchapter 2.2.1(b)] as recommended by the Offset Protocol Task Force. Anew endorses expanding eligible refrigerants/foams to include R-22 (an HCFC). While we welcome the potential expanded eligibility to several refrigerants with large existing banks, we note that those listed refrigerants (R-134a, R-125, R-32, and R-143a) are HFC-based with no ozone depleting potential. HFC refrigerants are not subject to the (total) phaseout management plans required under the Montreal protocol for CFC and HCFC - i.e., the total phaseout of HFC consumption in any current or future year is not required by law in the U.S. By including certain HFC as eligible refrigerants/foams without appropriate exposition or justification (which is not easily found in the Task Force's reports), there is a risk that CARB's protocol **is incorrectly** perceived as a moral hazard that incentivizes the production of HFC simply for destruction. Anew instead recommends that CARB include sufficient justification for the eligibility of HFC destruction, perhaps based on the text of the U.S.'s laws and regulations respecting the controlled production and consumption of HFC. To that end, CARB may find Yale's Carbon Containment lab⁴ HFC Destruction methodology informative.

On slide 36, CARB proposed expanding the protocol to allow ODS sourced from U.S. federal government [Subchapter 2.2.1(d)]. Anew supports this inclusion and recommends that CARB adopt the language used by ACR in its ODS destruction methodologies: "For projects destroying ODS sourced from government stockpiles or inventories, the project proponent must maintain documentation that the ODS is not required to be destroyed or converted."

Also on slide 36, CARB proposed revisiting the point-of-origin determination threshold [Subchapter 6.2(b)(1)-(2)]. Anew supports this revision, as the existing POO requirements are quite burdensome to project developers. We recommend that CARB adopt the requirements of the ACR's Destruction of ODS and High-GWP Foam methodology (Section 6.1 & 6.2), which eliminated the approach of differing proof of origin and chain of custody requirements based on recovered quantities.

On slide 37, CARB proposed incorporating the foam handling procedure from the ACR protocol for Destruction of Ozone Depleting Substance and High-GWP Foam (version 2.0, Appendix B), as well as other updates included in that ACR v2.0 protocol. Anew supports these revisions and endorses CARB's approach to incorporate existing foam handling procedures from ACR's methodology. Anew recommends that CARB adopt the baseline scenario for high-GWP foams and blowing agents applied under ACR's Destruction of ODS and High-GWP Foam methodology. This baseline corresponds with the assumption that the total quantity of ODS and/or high-GWP

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⁴ yale-cc-lab-hfc-methodology-may-2023-draft.pdf; carboncontainmentlab.org

substances extracted from and/or contained in disposed foams is emitted to the atmosphere and is well-justified in Appendix D of the ACR methodology.

Amendments to the Cap-and-Trade Regulations Related to Offsets

On slide 39, CARB proposed updating the timeline to apply for renewed crediting period [95975(j)], noting that it is currently unclear. While additional CARB guidance could be useful, Anew recommends that with any revisions, CARB aim to maintain the flexibility currently built into the renewal option.

On slide 40, CARB proposed a number of changes to Conflict-of-Interest Requirements for Verification Bodies. While Anew appreciates the importance of verifications that are free of any conflicts-of-interest, we have significant concerns about and oppose the proposed revision as written that "all members of the verification team must be different between the two verifications" [95977.1)(a)(1)]. This requirement could further hamper the ability of project developers to find and hire a verifier for a given project, and limit verification bodies' abilities to provide offset verification services to compliance projects. Currently, there is a very limited number of verifiers and verification bodies that have the proper expertise and accreditation to verify CARB compliance projects under each of the respective protocols. Given the shortage of verifiers, such a restriction will limit the ability of experienced verifiers to switch between firms as that could result in their new firm being disqualified from the project. Additional CARB verifier certification trainings would be helpful. In addition, the restriction could be limited to the lead verifier on each team.

On slide 42, CARB proposes initial concepts for amendments to the regulation pertaining to Forest Project Reversals. CARB states that it would like to "expand and clarify reversal definitions and provisions" under three subpoints. In the first subpoint, CARB proposes to clarify the discovery date for unintentional reversals [95983(b)(1)] and "first occurrence" date for intentional reversals [95983(c)(1)]. Anew agrees clarification is needed to better accommodate the range of specific situations (e.g., pests, disease, other factors) and balance the realities facing project owners in discovering such situations, taking into consideration reasonable efforts to ensure safety and other important factors in forest management. For example, even when following industry management standards of practice, it is common and reasonable that forestry projects will often not discover a reversal on a project until AFTER the reporting period ends because project owners need to (1) account for remaining growth and long-lived wood products during the reporting period, and (2) safely revisit areas affected to be able to survey impacted areas. As such, Anew recommends the following definitions:

- "Discovery date" should be clarified as: the date upon which an OPO or APD determines an intentional reversal has occurred based on reasonable efforts to (1) account for remaining growth and long-lived wood products during the reporting period, (2) safely revisit areas affected to be able to survey impacted area, and (3) complete the modeling update process.
- "Occurrence date" should be clarified as: the date upon which an OPO or APD determines an unintentional reversal has occurred based on reasonable efforts to (1) safely revisit areas affected to be able to survey impacted area or assess using remote sensing technologies and (2) complete the modeling update process.

In the Second subpoint, CARB proposes clarifying what is included in a verified estimate [95983(b)(1) and 95983(c)(2)]. While Anew welcomes additional clarification here, we are unable to provide feedback on this clarification without additional detail from CARB on the proposed revision.

In its third subpoint, CARB proposes clarifying that an OPDR must be submitted after a reversal [95983(b)(1)]. Anew would be supportive of such a clarification. However, Anew also notes that such a clarification would be in direct conflict with previous guidance provided by CARB that states an OPDR is NOT due for a reporting period following a reversal until a verification body has confirmed the reversal. If the new regulation language contradicts this guidance, we ask that CARB also explicitly clarifies that any regulatory updates supersede protocol guidance previously provided.

In addition, slide 42 proposes amendments to the Regulation pertaining to Forest Project Reversals. CARB states that it would like to "address compensation for a reversal that occurs during the post-crediting monitoring phase of a forest project." Anew welcomes amendments to both the post-crediting monitoring phase AND for reversals within the crediting period, as the current language includes ambiguities that are causing problems for participating in the Cap-and-Trade Program. In particular, Anew strongly encourages CARB to clarify that the requirement to compensate for any reversal be assessed only in relation to ARBOCs that have been issued from the project. Making this clarification will help ensure the system's integrity by only requiring permanence for credited GHG reductions.

For additional context to our recommendation, as currently implemented, the Regulation incentivizes forest owners to maximize the issuance of credits in all years rather than enhancing the overarching health of the forest and ecosystem. For example, a forest owner may not wish to have ARBOCs issued in a particular Reporting Period (RP X) if there is a high likelihood that they will conduct significant wildfire mitigation harvests in a future Reporting Period (RP Y) that would likely reduce the total forest stocking below the stocking level at the end of RP X. Under CARB's current approach, however, a reversal penalty would accrue for the loss of carbon based on ARBOCs that could have been issued from RP X, and not on what ARBOCs the project actually issued. Requiring reversal compensation in this way directly incentives a landowner to maximize ARBOC generation every year even if that owner would rather take a conservative approach and not generate ARBOCs in a particular year or years. Anew welcomes additional opportunities to provide CARB with further clarification and examples on this issue.

3. Additional Specific Comments

In addition to our comments above, we would also like to take this opportunity to comment on a few select issues that were either raised during the question & answer session of the April 23 workshop, or which were not raised explicitly but which we believe should be included in future CARB consideration.

During the Q&A session, CARB staff noted that an update regarding the Global Warming Potentials (GWPs) for methane and other gases to address the Sixth Assessment Report values

would be an AB 32 program-wide update. This is a topic of interest to Anew because it has significant implications for project crediting and value. We recommend that CARB provide additional information about what such an update would encompass. We are particularly interested in timing and any considerations regarding the process of such an update.

Additionally, despite one specific reference in the context of ODS Protocol updates, the recommendations made by the Offset Protocol Task Force in 2021 were notably absent from CARB's presentation. That report included many recommendations (as we noted previously) that are well worth considering in future rulemakings, including for the benefit of tribal and environmental justice communities. We recommend that CARB explicitly address how it intends to make use of this report and incorporate a greater number of its recommendations.

Conclusion

In the context of our comments above, Anew strongly supports CARB's efforts to strengthen the Cap-and-Trade Program itself, as well as its compliance offset program. We appreciate CARB's track record in defending the use of high-quality compliance-grade offsets within the Program to contain costs, sustain ambition toward California's net zero goals, and to provide environmental and economic co-benefits to California's communities. We support all updates to the program that maintain these benefits and goals.

In addition, we appreciate engaging in a robust and transparent public consultation process that provides all stakeholders visibility into important changes, including with respect to technical details. We therefore view the April 23 workshop as a starting point for considering changes to the Cap-and-Trade program and urge CARB to release additional details and sufficient redlined text for discussion before an official 45-day package and proposed rule changes are released. As a developer of compliance-grade offsets and key stakeholder in the Program, we cannot overstate the importance of active engagement and dialogue, to continue to build trust between stakeholders and prevent surprises. We are particularly interested in changes to the Forestry Protocol in the coming years and wish to maintain an open dialogue through that process.

We appreciate the opportunity to submit these comments and would welcome your feedback and questions. I am available to discuss these comments and our experience with compliance offsets at your convenience. Please feel free to reach me via jstrauss@anewclimate.com

Sincerely,

Josh Strauss, President, Environmental Products

⁵ https://ww2.arb.ca.gov/sites/default/files/2021-03/offsets task force final report 030221.pdf