



31 January 2025

Dear members of the Independent Emissions Market Advisory Committee,

The Indigenous Environmental Network (IEN) submits this comment based on the call for input on the 2024 Independent Emissions Market Advisory Committee (IEMAC) Annual Report. IEN is a non-profit 501(c)3 Indigenous-led organization based in Minnesota, United States, with remote offices in California and other locations throughout North America, Turtle Island. IEN is an alliance of Indigenous Peoples whose mission is to protect the sacredness of Mother Earth from contamination and exploitation by strengthening, maintaining and respecting Indigenous teachings and natural laws.

We are writing to express our deep concern with the California cap and trade program and urge against its reauthorization. Our concerns include these three broad recommendations:

**(1) Urge to not reauthorize the California cap and trade program (2) ensure that carbon dioxide removals (CDR), including carbon capture and storage (CCS), bioenergy with CCS (BECCS) and direct air capture (DAC) strategies are not incentivized inside or outside the California cap and trade program and (3) build a program to phase out fossil fuels as part of a meaningful just transition led by Indigenous Peoples.**

**(1) IEN urges California to not reauthorize the California cap and trade program**

As the largest economy to endorse the Fossil Fuel Non-Proliferation Treaty,<sup>1</sup> California should be leading transformative measures to tackle the climate crisis by reducing emissions at source and phasing out fossil fuels. Reauthorizing the cap and trade program is misguided, and will not only fail to deliver real climate solutions but will expose Indigenous Peoples and environmental justice communities across the country to further harm.

Globally, cap and trade systems have failed on multiple fronts. Like other Emissions Trading Systems (ETSs), California's cap and trade program pays polluters to pollute and disincentivizes companies to directly reduce emissions at source, allowing states to bypass legislation that would regulate emissions. ETSs extend a lifeline to fossil fuel industries and other polluters by enabling industries to profit through the market based system. In this way, the California Air

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<sup>1</sup> "The State of California becomes the largest economy to endorse the call for a fossil fuel non-proliferation treaty." The Fossil Fuel Non-Proliferation Treaty Initiative. 1, Sept. 2023. <https://fossilfuel treaty.org/california-assembly>

Resources Board (CARB) is providing a subsidy for polluting industries to maintain power and influence over regulation.<sup>2</sup> As the impacts of climate change intensify throughout the state, it is imperative that both CARB and the California legislature protect Indigenous Peoples and frontline environmental justice communities by ending the California cap and trade system and creating direct regulation that would reduce greenhouse gas emissions at source.

California's cap and trade program has both incentivized pollution through the creation of trading allowances and by relying heavily on carbon offsets. Carbon offsets do not require polluting industries to make any actual emissions reductions. Through offsetting, heavy polluters extend their lifespan and can claim to be "green" or "carbon neutral" while undermining emissions reduction goals.<sup>3</sup> Moreover, offsets included in the cap and trade program face scientific scrutiny. Chapter 7 of the report demonstrates that carbon credits generally have not been additional to what would have occurred otherwise, baselines have been questionable in projects of avoided deforestation, permanent carbon storage is uncertain given escalating impacts of climate change, the risk of reversal is underestimated, and the amount of leakage in practice is substantially high, and so on. Further, researchers at USC and ProPublica separately found that emissions from oil and gas production have increased during the program's lifespan.<sup>4</sup>

Carbon trading increases pollution, especially at industrial sites and in environmental justice communities. Carbon trading and carbon offsets are mechanisms that deal with pollution after it has entered the atmosphere. Trading and offsetting carbon dioxide that results from burning fossil fuels does not make the environmental impact of pollution any less severe. **Research into California's cap-and-trade program has found that regulated facilities in the state are disproportionately located in communities of color, low income communities, and communities with low educational attainment.**<sup>5</sup> Further, under California's cap-and-trade program, GHGs and annual average co-pollutants, including air toxins, have actually increased in these areas.<sup>6</sup> California state data from 2022 reports the disproportionate impacts on environmental justice communities to be three times higher.<sup>7</sup>

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<sup>2</sup> Gilbertson, Tamra. "Carbon Pricing: A Critical perspective for community resistance." Indigenous Environmental Network. 2017.

<https://www.ienearth.org/wp-content/uploads/2017/11/Carbon-Pricing-A-Critical-Perspective-for-Community-Resistance-Online-Version.pdf>

<sup>3</sup> Trouwloon, Danick, et al. "Understanding the use of carbon credits by companies: a review of the defining elements of corporate climate claims." *Global challenges* 7.4 (2023): 2200158.

<sup>4</sup> Tigue, Kristoffer. "Why Do Environmental Justice Advocates Oppose Carbon Markets? Look at California, They Say." *Inside Climate News*. 25, February, 2022.

<https://insideclimatenews.org/news/25022022/why-do-environmental-justice-advocates-oppose-carbon-markets-look-at-california-they-say/?t>

<sup>5</sup> Cushing, Lara, et al. "Carbon trading, co-pollutants, and environmental equity: Evidence from California's cap-and-trade program (2011–2015)." *PLoS medicine* 15.7 (2018): e1002604.

<sup>6</sup> Cushing, Lara, et al. "Carbon trading, co-pollutants, and environmental equity: Evidence from California's cap-and-trade program (2011–2015)." *PLoS medicine* 15.7 (2018): e1002604.

<sup>7</sup> Plummer, Laurel, Budahn, Amy, Chen, Annie I., Wu, K. Lily, and Álvaro Alvarado.

"Impacts of Greenhouse Gas Emission Limits Within Disadvantaged communities: Progress toward reducing Inequities." California Office of Environmental Public Health Hazard Assessment. February 2022.

<https://oehha.ca.gov/media/downloads/environmental-justice/impactsofghgpoliciesreport020322.pdf>

On a global scale Indigenous Peoples are among the hardest hit by climate change.<sup>8</sup> In the United States, this holds true.<sup>9</sup> Indigenous Peoples are negatively impacted by carbon offset programs. Carbon offsets fuel climate change by allowing fossil fuels to be extracted and burned, damaging communities and ecosystems. Carbon offsets are not climate solutions. Instead, they threaten the sovereignty, rights and health of Indigenous Peoples and environmental justice communities, while continuing to fund large oil and gas companies. For Indigenous Peoples, privatizing the air by financializing Mother Earth's breath is a violation of the sacred.

Forest-based carbon credits account for 81% of the California cap and trade credits. For forest-based offsets at large, Indigenous Peoples have historically been removed from ancestral lands, and have been prohibited from practicing cultural and spiritual activities in these places. When dealing with outsider interests in Indigenous lands, Indigenous Peoples face lack of free, prior and informed consent (FPIC), which can lead to undermining of customary rights and right to self determination and sovereignty. In the California cap and trade program, Indigenous Tribal governments must sign waivers of limited sovereign immunity in order to participate in California's compliance offset program.<sup>10</sup> As CARB, carbon traders, and third parties engage with Indigenous Peoples for forest-based carbon offsets, it is paramount that FPIC and anti-predatory behavior are upheld and respected.

## **2) Ensure carbon capture and storage (CCS), bioenergy with carbon capture and storage (BECCS), and other carbon dioxide removal (CDR) technologies and carbon management strategies are not included in the California cap and trade program**

IEN emphatically recommends that there be no interaction between carbon management strategies and the California carbon market. There is no environmental, social, or economic argument for any interaction between the cap and trade program and CDR, including CCS, bioenergy with carbon capture and storage (BECCS) and direct air capture (DAC), or other such carbon management strategies. If CARB is earnestly interested in exploring carbon management, the most responsible, logical, and effective carbon management strategy is to stop emissions at source. The path is clear and simple – California must begin to develop a swift fossil fuel phaseout that does not include carbon trading and offsets.

These technologies are more controversial and unreliable than the report makes it seem. The United Nations Framework Convention on Climate Change (UNFCCC) writes that “engineering-based removal activities are technologically and economically unproven, especially

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<sup>8</sup> Reyes-García, Victoria, et al. "Indigenous Peoples and local communities report ongoing and widespread climate change impacts on local social-ecological systems." *Communications Earth & Environment* 5.1 (2024): 29.

<sup>9</sup> “Climate Change and the Health of Indigenous Peoples.” United States Environmental Protection Agency. 21, Jan. 2025. <https://www.epa.gov/climateimpacts/climate-change-and-health-indigenous-populations>

<sup>10</sup> “Offset Project Listing Requirements for Native American Tribes.” California Air and Resources Board. <https://ww2.arb.ca.gov/our-work/programs/compliance-offset-program/listing-requirements-tribes?>

at scale, and pose unknown environmental and social risks.”<sup>11</sup> In addition, permanence, additionality, and leakage remain problems with these technologies. More than uncertainty about the scientific legitimacy of these technologies, they are fundamentally flawed as they allow for, and are in fact dependent on, the continued extraction of fossil fuels. The solution to the climate crisis lies in cutting emissions at source, not creating new technologies that falsely claim to seek to compensate for carbon pollution after the fact.

CCS in particular, not only depends on fossil fuel production, but is a greenwashing tool shamelessly used by the fossil fuel sector. In fact, out of the 41 operational CCS facilities, at least 75% are used for enhanced oil recovery (EOR) and other non-geological storage purposes,<sup>12</sup> and as much as 83% of captured CO<sub>2</sub> is used for enhanced oil recovery.<sup>13</sup> CCS is also inefficient and expensive. Despite being funded by the Department of Energy for the last 25 years, many facilities are cancelled due to construction delays and insufficient financial support.<sup>14</sup> Additionally, most CCS plants capture significantly fewer emissions than they advertise (many between 30-50% capacity), making their energy intensive operation even more inefficient.<sup>15</sup> Adding CCS technologies to bioenergy facilities (BECCS) amplifies the complex problems between deforestation, logging, pollution and risky CCS technology and is a false solution to climate change. With this history of underperformance, excessive cost, and the fact that CCS is dependent on the continued extraction of fossil fuels, it is not an adequate solution to the climate crisis and therefore should not be incentivized by the state of California.

### 3) Fossil fuel phaseout within an Indigenous-led just transition

Environmental justice is fundamental to all environmental policy. Indigenous Peoples and frontline communities, particularly those living in proximity to fossil fuel facilities and infrastructure (including CDR) are the experts on environmental justice and thus it should be their insights that are prioritized in shaping policy decisions. Placing the interests of industry over the wellbeing of frontline communities is dangerous protocol—**environmental justice is not one of many competing interests, but rather a necessary starting point from which to build policy.**

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<sup>11</sup> “Information note on Removals according to the article 6.4 mechanism.” UNFCCC. 2022.

<https://unfccc.int/sites/default/files/resource/a64-sb005-aa-a09.pdf>

<sup>12</sup> “Global Status of CCS Report.” Global CCS Institute. 21, February, 2023.

<https://www.globalccsinstitute.com/wp-content/uploads/2024/01/Global-Status-of-CCS-Report-1.pdf>

<sup>13</sup> “Supply, Underground Injection, and Geologic Sequestration of Carbon Dioxide.” United States Environmental Protection Agency. 14, January, 2025.

<https://www.epa.gov/ghgreporting/supply-underground-injection-and-geologic-sequestration-carbon-dioxide>

<sup>14</sup> Chalmin, Anja. “The current state of CCS in the US after 100 years of CO<sub>2</sub> capture and 25 years of extensive federal funding.” Geoengineering Monitor. 2, December, 2022.

<https://www.geoengineeringmonitor.org/the-current-state-of-ccs-in-the-u-s-resume-after-100-years-of-co2-capture-and-25-years-of-extensive-federal-funding?t>

<sup>15</sup> Chalmin, Anja. “The current state of CCS in the US after 100 years of CO<sub>2</sub> capture and 25 years of extensive federal funding.” Geoengineering Monitor. 2, December, 2022.

<https://www.geoengineeringmonitor.org/the-current-state-of-ccs-in-the-u-s-resume-after-100-years-of-co2-capture-and-25-years-of-extensive-federal-funding?t>

As an environmental justice organization with ties to California, IEN would like to express deep concern over the IEMAC's approach to environmental justice, both substantively and procedurally. Although the report claims that Tribes and Alaska Native communities are among the groups that benefit the most from the current program, we strongly disagree. In terms of process, it is especially clear from Chapter 5 of the report that the Committee's attempts to address environmental justice concerns are misguided at best. Two key examples stand out.

The first arises from the following passage of Chapter 5:

*We note that EJAC has asked that their recommendations not be “taken piecemeal”, but rather as a holistic set of reforms that work together. However, we focus below on the subset recommendations that pertain directly to the GHG cap-and-trade program because of the limited scope of IEMAC.*

This is a direct—and dismissive—contradiction of EJAC's demand to be included as full partners. This not only undermines EJAC's work, but also signals to Indigenous Peoples that IEMAC does not understand or value the depth of environmental justice in Indian Country, eroding any trust that may have been built between environmental justice communities and the Committee. While it may be true that IEMAC has a limited scope, if the current process or organizational infrastructure within the California EPA does not allow for EJAC's recommendations to be considered holistically, then a change in the system (for example, the narrow scope of IEMAC) is called for. Moreover, the fact that environmental justice is separated in its own chapter is indicative of the Committee's attitude towards environmental justice as something to be considered after the fact or in competition with market design considerations.

The second example is in the following passage of Chapter 5:

*EJAC has requested that environmental justice groups be included in conversations regarding these recommendations as full partners. However, we view this annual report as an opportunity for IEMAC to offer a perspective on those recommendations that pertain directly to market design issues. For this reason, we focus on a small subset of EJAC recommendations articulated in the document titled ‘Environmental Justice Priorities for an Extension of the Cap-and-Trade Program’.*

Once again, IEMAC is directly contradicting EJAC's recommendations as well as alluding to a misunderstanding of what environmental justice means and looks like. Market design must be contingent upon environmental justice, not the other way around. In the same vein, there is no good market design that allows for public health risks, land theft, quantification of spiritual values and Indigenous relationship to ecosystems and biodiversity, and human rights abuses.

In addition to these procedural justice issues, IEN would like to raise other environmental justice concerns arising from the California cap and trade program. **Importantly, environmental justice is about more than just pollution.** Land and ecosystem health are central to Indigenous Peoples' cultures, languages, spiritual practices, livelihoods, and sovereignty. Carbon trading mechanisms, particularly through the use of land-based carbon offsets, have been a tool for land grabs of Indigenous lands and therefore threaten the wellbeing of Indigenous Peoples. Since the California cap and trade program includes offsets from projects outside of California, the program's associated harms have a much wider footprint than the state of California alone. If IEN's recommendations aren't incorporated moving forward, Indigenous Peoples, both within and outside California are certain to continue experiencing the harms associated with land grabs at the hands of land-based offsetting projects.

The 2024 IEMAC report states that Tribes and Alaska Native communities are key beneficiaries of the cap and trade program.<sup>16</sup> While some Tribes or Indigenous Peoples may decide to participate in the program, Indigenous Peoples are not a monolith and the Alaska Native Corporations and other Tribes that decide to partake in the program do not speak for all Indigenous Peoples nor do they reflect the experiences of the communities and Tribes that IEN works with to oppose similar programs and offsets. Moreover, no token payments to a small number of federally recognized Tribes can justify or compensate for the historic and ongoing suffering of other Indigenous communities and/or environmental justice communities at the hands of the fossil fuel industry, including its carbon management programs and facilities.

An Indigenous-led just transition away from fossil fuels and in pursuit of restorative and respectful relationships with all of life is the best solution to the climate crisis. By separating and quantifying Mother Earth's cycles, functions, and resources into "credits" and "units" that can be sold in financial and speculative markets, cap and trade programs violate the cosmovision and spiritual lifeways of many Indigenous Peoples. [Indigenous Principles of a Just Transition](#) calls for an end to the "financialization of Nature" that continues to exploit and degrade communities and the sacredness of Mother Earth and Father Sky. As the California EPA examines its cap and trade program, Indigenous Peoples and frontline/fenceline communities must be present and active in directing California's climate change policy.

In conclusion, IEN would like to reiterate our recommendations: **(1) non-reissuance of the cap and trade program (2) CDR, including CCS, BECCS and DAC, and other carbon management strategies should not be incentivized inside or outside the California cap and trade program and (3) a program to phase out fossil fuels as part of a meaningful just transition led by Indigenous Peoples should be organized.** These policy recommendations

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<sup>16</sup> Cullenward, Danny and Dallas Burtraw. "Carbon Offsets." Chapter 7, 2024 IEMAC Annual Report. California Environmental Protection Agency. <https://calepa.ca.gov/wp-content/uploads/sites/6/2025/01/Chapter-7-Carbon-offsets.pdf>

must be weighed more heavily than recommendations from private actors whose primary concern is market design. We implore the state to honor its commitment to the Fossil Fuel Non Proliferation Treaty by phasing out fossil fuels at source and ending the California cap and trade program that prolongs extraction and pollution. It is crucial that Indigenous Peoples, including spiritual leaders and traditional knowledge holders, are listened to and represented throughout the policy-making process. Upholding the Rights of Indigenous Peoples and honoring Indigenous Peoples' self determination and traditional Indigenous knowledge are key climate solutions that must inform California's climate policy.<sup>17</sup>

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<sup>17</sup> Whyte, Kyle, et. al. "Ch. 16. Tribes and Indigenous Peoples." Fifth National Climate Assessment, *U.S. Global Change Research Program*. 2023. <https://doi.org/10.7930/NCA5.2023.CH16>