

**Testimony of Dr. Danny Cullenward**  
Member, Independent Emissions Market Advisory Committee

Joint Legislative Committee on Climate Change Policies  
Hon. Eduardo Garcia (Chair) & Sen. Henry Stern (Vice Chair)

May 24, 2018

Chair Garcia, Vice Chair Stern, and Members of the Joint Committee:

Thank you for the opportunity to testify today about the AB 398 implementation process now underway at the California Air Resources Board (ARB). My remarks today draw on recent reports co-authored with my Near Zero colleagues Michael Mastrandrea and Mason Inman. For more information, I would refer you to our public Research Notes on offsets<sup>1</sup> and over-allocation.<sup>2</sup> I will address three important issues:

**1. Total limits on carbon offsets.**

AB 398 set new limits on the use of carbon offsets, which credit greenhouse gas (GHG) reductions achieved outside of the cap-and-trade program. AB 398 limits offsets usage to 4% of emissions over the period 2021 to 2025, and 6% of emissions over the period 2026 to 2030.<sup>3</sup> However, ARB has proposed interpreting these limits in a way that applies the higher 6% limit to most emissions in 2024 and 2025. This interpretation would authorize up to 8.5 million additional offset credits, relative to a scenario in which ARB interprets AB 398's limits on a calendar-year basis.

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<sup>1</sup> Near Zero, Interpreting AB 398's offsets limits (Mar. 15, 2018), <http://www.nearzero.org/wp/2018/03/15/interpreting-ab-398s-carbon-offsets-limits/>.

<sup>2</sup> Near Zero, Ready, fire, aim: ARB's overallocation report misses its target. (May 7, 2018), <http://www.nearzero.org/wp/2018/05/07/ready-fire-aim-arbs-overallocation-report-misses-its-target/>.

<sup>3</sup> Cal. Health & Safety Code §§ 38562(c)(2)(E)(i)(I)-(II).

## **2. Defining “direct environmental benefits” from carbon offsets.**

Under AB 398, no more than half of the offsets used in the post-2020 period may come from projects that do not generate “direct environmental benefits” to California air or water quality.<sup>4</sup> Some have suggested that offset projects could meet this standard by claiming that their project-level GHG reductions constitute “direct environmental benefits.” However, offset projects do not produce *any* climate benefits because project-level GHG reductions are zeroed out when regulated companies use offset credits to increase their own GHG emissions by an equivalent amount.

While I appreciate that ARB must make careful decisions about how to define “direct environmental benefits” under AB 398, Board staff have been unwilling to rule out the argument that project-level GHG reductions produce such benefits. If ARB were to accept this argument, the Board would effectively remove AB 398’s “direct environmental benefits” requirements because *all* offset projects would qualify, even though *no* offset project produces net climate benefits.

## **3. Allowance overallocation.**

AB 398 requires the Board to “[e]valuate and address concerns related to overallocation”<sup>5</sup>—the problem of having too many allowances in the program. As the Legislative Analyst’s Office has explained, excess allowances put the state’s 2030 climate target at risk because companies that bank today’s extra allowances for future use could, in so doing, emit more than total program limits in 2030.<sup>6</sup> Despite multiple reports from credible, independent analysts that identify a significant overallocation problem in California’s cap-and-trade program,<sup>7</sup> Board staff have so far dismissed these findings.

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<sup>4</sup> *Id.*

<sup>5</sup> *Id.* at § 38562(c)(2)(D).

<sup>6</sup> Legislative Analyst’s Office, Cap-and-Trade Extension: Issues for Legislative Oversight (Dec. 12, 2017), <http://lao.ca.gov/Publications/Report/3719>.

<sup>7</sup> See, e.g., Environmental Commissioner of Ontario, Ontario’s Climate Act: From Plan to Progress – Appendix G: Technical Aspects of Oversupply in the WCI Market (Jan. 2018), <https://eco.on.ca/reports/2017-from-plan-to-progress/>; Chris Busch, Oversupply Grows in the Western Climate Initiative Carbon Market, Energy Innovation Report (Dec. 2017), <http://energyinnovation.org/wp-content/uploads/2018/02/WCI-oversupply-grows-February->

In April 2018, Board staff published a draft response to AB 398's instruction to evaluate overallocation, presenting calculations that purport to show that overallocation would not affect the program's ability to deliver on California's 2030 climate target. However, the Board's analysis falls short on two critical grounds.

First, the Board's analysis does not examine the effects of overallocation on *annual* emissions in 2030. By instead examining *cumulative* emissions in the 2020s, the Board's analysis is non-responsive to the concern that LAO and others have raised with respect to overallocation.

Second, the Board's analysis makes a fundamental factual error—one that Board staff specifically and appropriately warned against in the original 2010 cap-and-trade rulemaking process. Once corrected for this factual error, the Board's April 2018 analysis indicates that overallocation will cause the cap-and-trade program to fall short of the role ARB identified in the 2017 Scoping Plan.

In my professional opinion, the Board's April 2018 analysis does not provide a reasonable basis for responding to AB 398's instruction to evaluate overallocation. A new and more serious analysis is essential because the Scoping Plan calls for cap-and-trade to deliver nearly 47% of the annual GHG reductions needed in 2030.<sup>8</sup> I urge the Board to review the available evidence and treat the overallocation problem with the care it deserves—just as ARB did in the original 2010 cap-and-trade rulemaking process.

Thank you for your time, and I would be happy to answer any questions.



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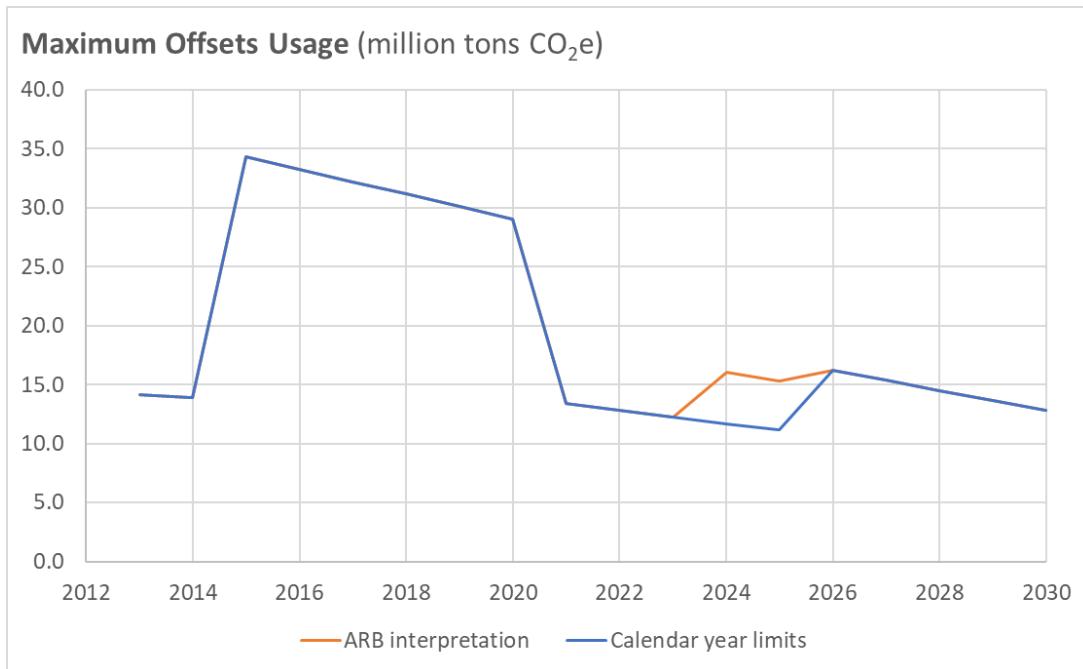
*Note: I am testifying only in my personal capacity today, not on behalf of my employers or associates.*

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[update.pdf](#); Legislative Analyst's Office, Letter to Hon. Christina Garcia regarding oversupply of allowances in the cap-and-trade program (June 26, 2017), <http://www.lao.ca.gov/Publications/Detail/3818>.

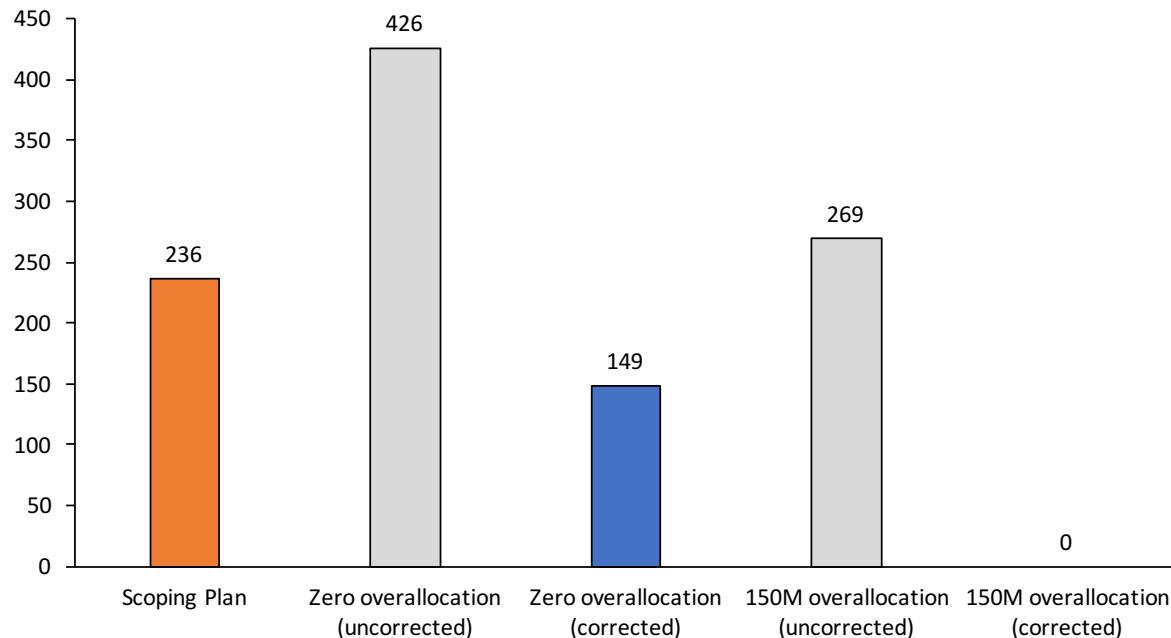
<sup>8</sup> ARB, California's 2017 Climate Change Scoping Plan (Nov. 2017) at 26 (see Table 2), [https://www.arb.ca.gov/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf)

## Topic #1: Total Offsets limits



	2023	2024	2025	2026	2027
<b>Calendar Year Limits</b>	4%	4%	4%	6%	6%
<b>ARB Interpretation</b>	4%	5.4%	5.4%	6%	6%

### Topic #3: Overallocation / oversupply



#### Projected reductions from cap-and-trade, 2021 through 2030 (MMtCO<sub>2</sub>e)

ARB's uncorrected April 2018 analysis suggests that whether or not there are 150M overallocated pre-2021 allowances, the cap-and-trade program will deliver at least as many reductions as called for in the 2017 Scoping Plan on a cumulative basis over the period 2021 through 2030. Once corrected for ARB's error, however, the Board's analysis indicates that the status quo market design is expected to fall short of the 2017 Scoping Plan's requirement—with or without 150M overallocated allowances.

Note that ARB's analysis does not address whether or not emissions in 2030 will achieve the state's 2030 climate target; instead, it focuses only on *cumulative* reductions over the period 2021 through 2030. The primary concern with overallocation is that excess allowances will cause *annual* emissions in 2030 to exceed the state target. As a result, ARB's analysis does not address the primary concern with overallocation.