CARB’s cap-and-invest rulemaking

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DISCLAIMER

- I am speaking only in my personal capacity as a researcher
- I am not representing California's Independent Emissions Market Advisory Committee

A TALE OF TWO MARKETS

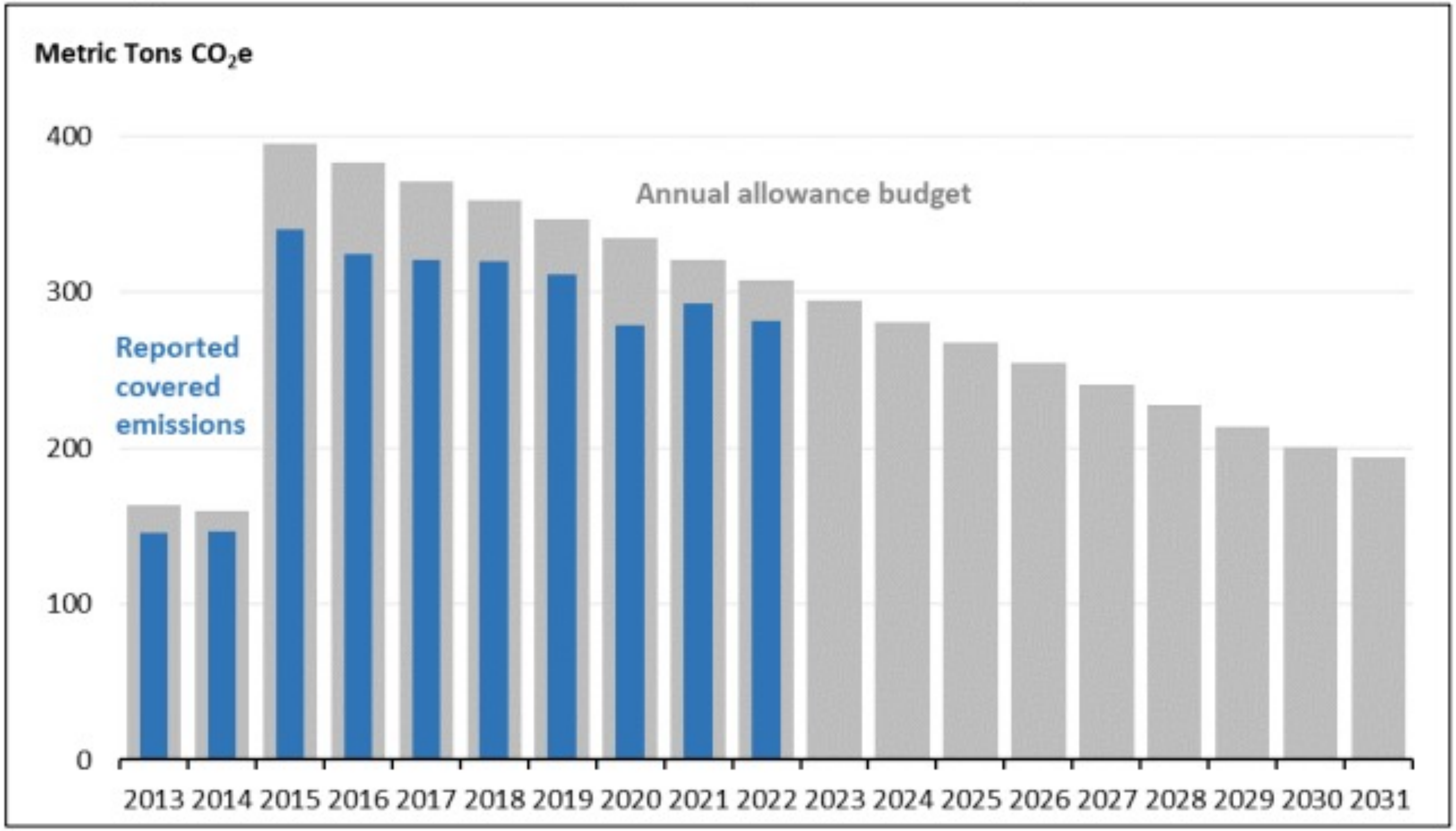
California

- Lax caps, low ambition
- Heavy use of low-quality offsets (historically, offsets expand market supply)
- Large "bank" of allowances
- Low market prices (~$30/tCO2e)

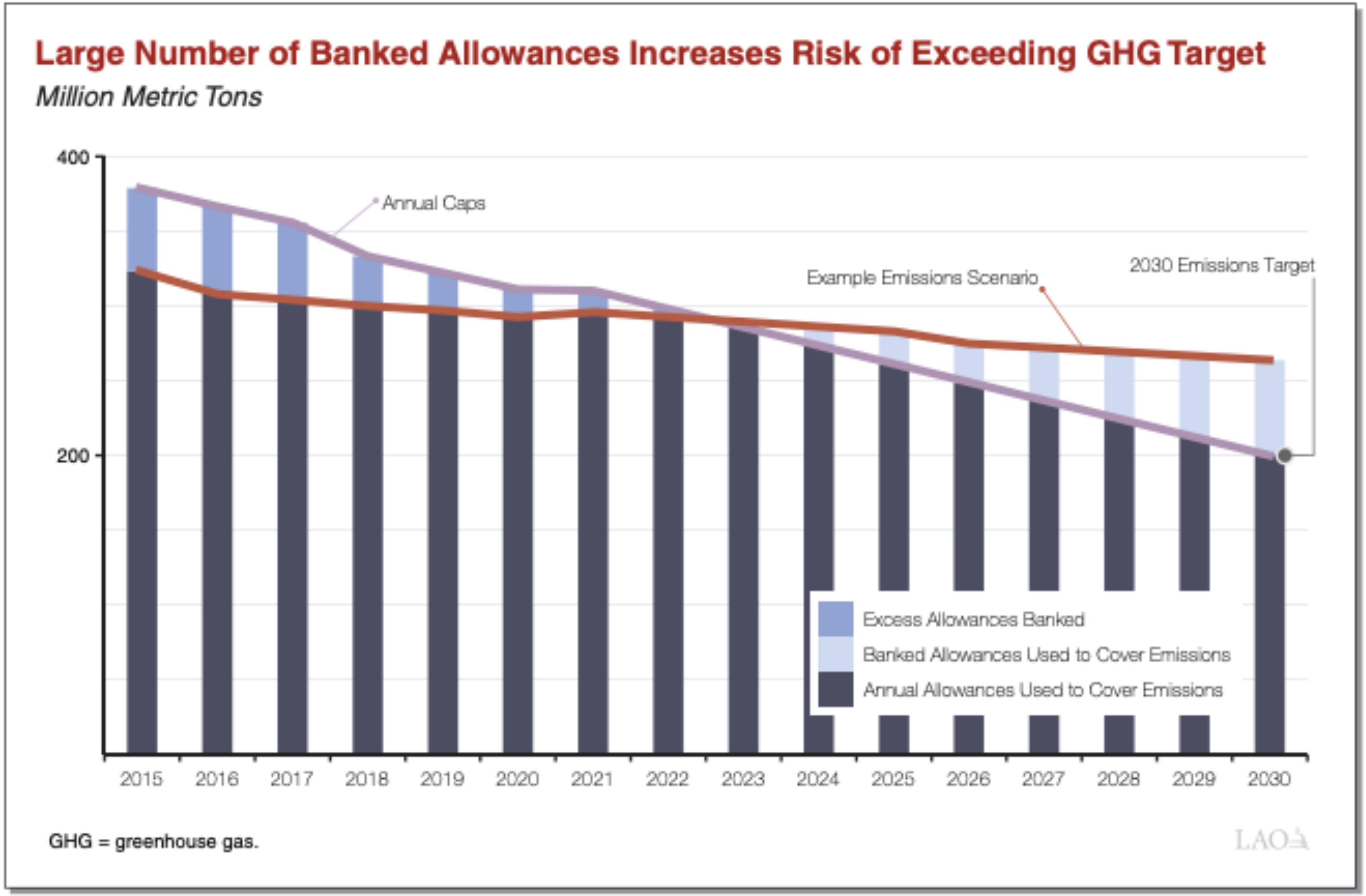
Washington

- Strict caps, high ambition
- Allows heavy use of low-quality offsets (offsets do <u>not</u> expand market supply)
- No large "bank" of allowances
- High market prices (~$55/tCO2e)

Figure 1. California Emissions Cap and Reported Emissions, 2013-2031



[Congressional Research Service (2024)]


Large Number of Banked Allowances Increases Risk of Exceeding GHG Target
Million Metric Tons
400
200
Annual Caps
Example Emissions Scenario
2030 Emissions Target
Excess Allowances Banked
Banked Allowances Used to Cover Emissions
Annual Allowances Used to Cover Emissions
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
GHG = greenhouse gas.
LAO

LAO (2024)

TWO REAUTHORIZATIONS

2016-2017

- Program only authorized through 2020
- Short horizon and slack caps
- Auction collapse
- Re-authorization through 2030 (AB 398)
- Direction to address large allowance bank
- CARB ignored direction, faked numbers

2025-2026

- Program only authorized through 2030
- Short horizon and slack caps
- Policymakers acted early
- Re-authorization through 2045 (AB 1207)
- Direction to address large allowance bank
- CARB ignored direction, expanded allowance supplies to industry (MDI)

CARB'S NEW MATH

Nominal 2030 reduction (% below 1990 levels)	Allowance reductions required for 2030	Total allowances 2021-45
40% (minimum per SB 32)	118 million	4,125 million
48% (2022 Scoping Plan)	264 million	3,793 million
55%	392 million	3,503 million

CARB ISOR, Table 3. Note that numbers do not account for allowance banking (~379 million as of December 2024).

CARB'S NEW MATH

Nominal 2030 reduction (% below 1990 levels)	Allowance reductions required for 2030
40% (minimum per SB 32)	118 million
48% (2022 Scoping Plan)	264 million
55%	392 million

- Standardized Regulatory Impact Assessment (April 2024) selects 48%
- Initial Statement of Reasons (January 2026) selects 40%
- Final package (April 2026) selects 40%, but will also give up to 118 million extra allowances to industry for free

CARB ISOR, Table 3. Note that numbers do not account for allowance banking (~379 million as of December 2024).

OPEN QUESTIONS

- Why did CARB not address the large bank of allowances in the program when designing program caps through 2045? Wasn't that required by AB 398?
- Why did CARB not align its program design with the current scoping plan (48% target)? Wasn't that required by AB 398?
- What does it mean for CARB to have consistently weakened the ambition of the program design across its economic analysis in April 2024 (48%) and initial staff proposal in January 2026 (40%), and then to propose to make potentially no net allowance removals in its final regulatory package from April 2026?

WILL A LINK WITH WASHINGTON FIX CALIFORNIA'S PROBLEM?

- Market links operate by making allowances in one program eligible for compliance in the other. This causes prices to align somewhere in the middle of ex ante prices in each market (currently ~$55 in WA vs. ~$30 in CA).
- A link could modestly increase allowance prices but is unlikely to make a significant difference to close the expected shortfall in the Greenhouse Gas Reduction Fund.
- Although Washington has a well-designed program, it is much smaller than California's and will thus be affected much more by our problems than we are by their solutions.

For more discussion of market links, see Green (2017); Cullenward and Victor (2020)