

September 2025

CALIFORNIA ETS AT A GLANCE

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| Years in operation | <p>The California Cap-and-Trade program, renamed Cap-and-Invest in 2025, started operations in 2013, with the first compliance period covering 2013 and 2014, covering power generators (including imported power) and industrial sectors.</p> <p>Starting in 2015, fuel suppliers and natural gas distributors came under coverage with compliance periods expanding to last three years.</p> <p>The program originally was slated to be operational through 2020. The program was extended by the state legislature to 2030 in 2018. The program's life was then extended again via legislation through 2045 in 2025, with the program's name changing to California "Cap-and-Invest".</p> <p>The program is currently in the fifth compliance period, running 2024 to 2026.</p> |
| Overall cap and trajectory | <p>The 2025 cap is 267.4 million tCO₂e. Under the current regulations adopted, the cap declines by 13.4 million tCO₂e annually on average, reaching 200.5 million tCO₂e by 2030.</p> <p>A Program Review rulemaking was launched in 2023 whereby California is exploring updates to the cap trajectory based on the 2022 Scoping Plan and the most recent GHG Inventory update. Specifically, California is looking to remove allowances through 2030. Regulatory documents suggest the need to remove a minimum of 118 million allowances cumulative from the cap trajectory through 2030 to account for the updated GHG Inventory. This would still align with the state's 40% statutory reduction target for 2030. Should regulators also choose to adjust the program for a more ambitious 2030 target, the program could see removal of between 180 million and 265 million allowances in aggregate. In this case, regulatory documents suggest the 2030 cap could decline to between 160.6 and 126.4 million. Ultimately, the cap trajectory to 2030 will need to be clarified through the formal rulemaking process, expected to conclude in 2026.</p> <p>With the program's operations extended to 2045 through legislative action in 2025, regulators would have to establish the cap trajectory from 2031 to 2045, with the trajectory aligning to California's 2045 climate target. Regulators have floated a 2045 cap of 30.3 million.</p> |
| Target(s) | <p>The California cap trajectory is designed to coincide with the state's GHG reduction targets at different time intervals.</p> <p>California's first GHG reduction target from the landmark 2006 Global Warming Solutions Act (AB 32) was to reduce GHG emissions to 1990 levels by 2020. California was able to achieve this target four years ahead of schedule.</p> <p>California's next target from SB 32 legislation in 2016 is to reduce GHG emissions by 40% under 1990 levels by 2030. The program's 2030 cap is set to align with this target.</p> <p>The California legislature in 2022 then established a goal to achieve net-zero emissions by 2045, and at least an 85% reduction below 1990 levels by the same year. The 2045 cap would then be set to align with these targets.</p> <p>In addition to these targets, California's program regulators at the Air Resources Board (CARB) conducted modelling scenarios for 48% and 55% GHG emissions reductions below 1990 levels by 2030 as part of a Program Review initiated in 2023. These alternative 2030 scenarios are used to establish alternative cap trajectories for consideration in the rulemaking process, which has yet to conclude.</p> |

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| Regulated emissions reduced to date | Total regulated emissions in 2023 were 164.7 MtCO ₂ e, requiring compliance submissions totalling 20.1 MtCO ₂ e. |
| Sectors covered | <ul style="list-style-type: none"> Electricity generation (including imports) Large stationary sources (including refineries, oil and gas production facilities, food processing plants, cement production facilities, and glass manufacturing facilities) that emit more than 25,000 tCO₂e annually Since 2015, distributors of transportation fuels, natural gas, and other fuels were also covered. Fuels exclusively for aviation or marine use are not covered. |
| GHGs covered | <ul style="list-style-type: none"> CO₂ CH₄ N₂O SF₆ HFCs PFCs NF₃ Other fluorinated GHGs |
| Number of covered entities | Approximately 600 entities have reporting obligations, and approximately 400 of those have compliance obligations. |
| Allocation method | <p>California distributes allowances differently to each of the three covered sectors:</p> <ul style="list-style-type: none"> The industrial sector currently receives about 90% of its allowances for free based on output and efficiency, such that a producer is not penalised for making more goods and a producer who can make more goods with fewer emissions is rewarded. The utility sector receives free allowances but generally must sell those allowances at auction and use the revenue to benefit its ratepayers, primarily through a climate credit on utility bills. Natural gas suppliers receive free allocations but must consign an increasing portion of their allocations to the auctions. <p>The transportation fuel supplier sector does not receive free allowances and must purchase them, either via the quarterly state-administered auctions or the private secondary market.</p> <p>AB 1207 legislation from 2025 directs regulators to shift free allowance allocations away from natural gas suppliers and towards electricity distribution companies for the benefit of ratepayers. It also supports continued free allocations to industry to prevent leakage, along with the evaluation of a border carbon adjustment.</p> |
| Trading rules | The program imposes holding and auction purchase limits that limit the overall quantity of allowances that entities can hold or purchase. Third-party financial entities can also participate in trading if they meet certain prerequisites. |
| Use of offsets and linking | <p>Under AB 398 legislation from 2017, the use of offsets is limited to 4% of a covered entity's compliance obligation from 2021-2025, rising to 6% for 2026-2030.</p> <p>Starting with compliance obligations for 2021 emissions, no more than 50% of any entity's offset usage limit can come from offset projects that do not provide direct environmental benefits to the state (DEBS). The California Air Resources Board has established rigorous US forestry, urban forestry, livestock, ozone-depleting substances, mine methane capture, and rice cultivation compliance protocols.</p> |

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| | <p>The use of offset credits provide a mechanism for covered entities to lower their compliance costs.</p> <p>In the 2045 extension legislation, the offset usage limit is maintained at 6% for 2026 through 2045. The DEBS requirements are also maintained in the extended program.</p> <p>However, starting with 2026 emissions, offsets surrendered for compliance will see an equivalent number of allowances being removed and retired from the next year's allowance budget. With the compliance surrender for 2026 emissions taking place in 2027, this means allowances will be retired 1:1 according to offsets usage for the first time in 2028.</p> <p>AB 1207 calls for consideration of additional offset protocols, including carbon dioxide removal. SB 840 legislation from 2025 requires CARB to update all offset protocols by January 2029. Protocols must be reviewed every five years.</p> <p>The California program linked to Quebec's Cap-and-Trade system in January 2014. It was linked to Ontario in January 2018, but a de-linkage occurred in mid-2018 when the province abruptly scrapped its system following a change of governance. There have historically been discussions on the linkage with Oregon or Washington if they were to establish Cap-and-Trade systems. Washington launched a Cap-and-Invest Program in 2023.</p> <p>California and Quebec have been in discussion with Washington officials about linking their respective programs. Washington has introduced a number of changes to their regulations to better align their regulations with those of California and Quebec to facilitate linkage. The three jurisdictions are aiming for a linkage, expected by 2027 at the earliest.</p> |
| Other features | <p>California has a complex series of price controls, including an Auction Reserve Price, which started at \$10 per tCO₂e in 2012 and increases 5% annually plus inflation. The 2025 auction price floor is \$25.87.</p> <p>Starting in 2021, a portion of allowances is set aside in two cost containment reserves. The reserve will be triggered if the settlement of an auction reaches 60% of the first reserve trigger price. For 2025, the trigger prices for the two reserves are \$60.47 and \$77.77 per tCO₂e, respectively, increasing by 5% plus inflation annually.</p> <p>A price ceiling has also been set starting in 2021, starting at \$65 per tCO₂e and rising by 5% plus inflation (\$94.92 in 2025). If this threshold is triggered, units from the reserve will be offered at the price ceiling. The price ceiling is firm.</p> <p>The 2045 extension legislation provides for CARB to make adjustments to the price containment triggers, including the ceiling, if the regulator finds that the trigger price levels would have a significant adverse impact on consumers. Further clarity on this legislative direction for cost containment is expected during the current Program Review process.</p> <p>Banking is allowed and compliance instruments (allowances and offsets) do not expire; borrowing is not allowed.</p> |
| Penalties for non-compliance | <p>Annual Compliance Obligation: A covered entity must surrender allowances equivalent to 30% of emissions from the previous year within the current compliance period by 1 November annually.</p> <p>Triennial Compliance Obligation: A covered entity must surrender allowances equivalent to 100% of emissions for the compliance period, less allowances already surrendered.</p> <p>Failure to surrender on time results in an immediate surrender obligation equivalent to four times the missing balance.</p> |

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| Use of revenue | <p>Some revenue is returned directly to utility ratepayers through the California Climate Credit on utility bills.</p> <p>The rest make up the Greenhouse Gas Reduction Fund (GGRF), which reduces greenhouse gas emissions through California Climate Investments (CCI), which emphasises benefits to low-income and disadvantaged communities. To date, the CCI has appropriated more than \$6 billion in investments.</p> <p>SB 840 legislation from 2025 provides additional direction of revenues. Emissions Reduction Alberta (ERA) administers funding competitions and grants sourced from the TIER fund.</p> |
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MAJOR DEVELOPMENTS

The California Cap-and-Trade program, now referred to as the Cap-and-Invest, has seen significant developments over the last year. Firstly, the Program Review, launched just after the publication of the 2022 Scoping Plan, has experienced significant delays. This review, being completed by CARB, primarily aims to reduce the allowance supply between the 2026 and 2030 compliance years to ensure the state's emissions are on a trajectory consistent with AB 1297 legislation from 2022 calling for carbon neutrality by 2045. Recall the 2022 Scoping Plan found a 48% GHG emissions reduction vs. 1990 in 2030 to be both cost effective and technologically feasible. To translate this finding through to the Cap-and-Invest, CARB held a series of workshops and webinars throughout 2023 and 2024, presenting proposals for the cap trajectory. This process is running parallel to Quebec's Program Review. In 2024, CARB presented two "smoothed" cap options that would lead to a significant decline in the total allowance supply. These options are both meant to align with a 48% emissions reduction target in 2030, but differ in the cumulative supply through 2030. However, the rulemaking is still active and there are a range of options explored in the Standardized Regulatory Impact Assessment (SRIA) for the rulemaking, released in 2024.

Adoption of a cap trajectory consistent with a 48% emissions reduction target in 2030 would exceed the SB 32 2030 statutory requirement of a 40% GHG emissions reduction vs. 1990 emissions. The 40% target is embedded in the current regulations adopted in 2018. However, note that CARB has indicated in the Program Review workshops that a minimum of 118 million allowances must be removed from the cumulative supply through 2030 to account for a technical update; namely, the updated GHG Inventory showing lower historic emissions. Therefore, even maintaining a 40% target from 2030 should still see a modification to the cap trajectory through 2030 from the current regulations to reduce the cumulative supply to 2030 by 118 million.

Table. 1: Proposed Cap Trajectories as part of the Informal Program Review Process

| Scenario | 2025-2030 Cumulative Supply Mt | 2030 Cap Mt |
|------------------------------------|--------------------------------|-------------|
| California Option 1 Cap | 1,223 | 160.6 |
| California Option 2 Cap | 1,139 | 126.4 |
| California Current Regulations Cap | 1,404 | 200.5 |

Originally, CARB was slated to complete the Program Review in 2024, with new caps implemented starting in the 2025 compliance year. In summer 2024, CARB then delayed the Program Review completion, to early 2025, shifting the new cap implementation to the 2026 compliance year. However, CARB again delayed the early 2025 completion target, citing the need to support the administration and state lawmakers who were concurrently pursuing an extension of the program's sunset from 2030 to 2045. It now appears most likely changes to the program caps will be implemented beginning with the 2027 compliance year. This could change the 2030 cap endpoints from Table 1 above. With the pause in Program Review activity in early 2025, there has been a distinct regulatory order of operations for California. First, the pursuit of a legislative extension, next the formal rulemaking to complete the Program Review, and then a rulemaking to link to Washington, likely to take effect in 2027 at the earliest.

Regulatory order of operations

As of early 2025, the formal California regulatory process has been put on hold for the legislative extension



In September 2025, the California Legislature and the Governor reached a deal to extend the state's Cap-and-Trade program to 2045, rechristening the program as "Cap-and-Invest". The extension deal was passed with the required two-thirds majority in both Legislative chambers on the last day of California's 2025 Legislative session on 13 September. The extension deal came together with affordability top of mind for both the Legislature and the Governor. As such, the extension deal contains measures to help contain compliance costs, such as maintaining offset use with a 6% limit as an alternative compliance mechanism, and maintaining free allowance allocations to industry. Though the extension agreement does provide legislative direction requiring allowances equal to the total number of offset credits used for compliance obligations in the prior year to be removed from the next year's annual allowance budget and retired and allowing CARB to make adjustments to price containment triggers if they feel that the triggers would have a significant adverse impact on California consumers.

AB 1207 is now the leading vehicle expected to deliver the program's formal extension, with urgency provisions to take effect immediately upon passage.

Table. 2: AB 1207 Cap-and-Invest Extension

| Program Design Element | Legislative Direction |
|---------------------------|--|
| Extension | Cap-and-Invest authorised through 2045 |
| Free Allocations/ Leakage | <p>Transition of free allowance allocation from natural gas companies to electricity distribution companies</p> <p>Maintain 100% industrial assistance factors through 2030. Delete requirement for declining cap adjustment factor for industry. Regulatory discretion over industrial allocations to minimize leakage</p> |
| Offsets | <p>Offset usage quota at 6% from 2026 to 2045, with 50% DEBS requirements. Starting with 2026 emissions surrender in 2027, retire allowances 1:1 for offsets used from the next year's supply.</p> <p>Consider additional offset protocols, including for removals</p> <p>SB 840: Update all existing compliance offset protocols by 2029; look at Article 6 of Paris Agreement. Review protocols every 5 years.</p> |
| Cost Containment | Adjust the APCR/price ceiling if consumers not adequately protected. Funds raised via the ceiling sale will be used to compensate ratepayers |

The push to get the extension done in the current Legislative year is a reaction to attacks on California's Cap-and-Trade program from the current federal government administration. In early April 2025, President Donald Trump issued an Executive Order asking the US Attorney General to investigate and report on if state-level climate programs were hampering the country's fossil fuel production. California's Cap-and-Trade program was specifically referenced in the Executive Order as state overreach. Moreover, through the Congressional Review Act, California's Clean Air Act motor vehicle waivers were revoked in 2025. The federal One Big Beautiful Bill rolled back support for renewables and electric vehicles. The Trump EPA is also moving to revoke the federal Endangerment Finding that allows for federal GHG regulations under the Clean Air Act. While no further direct actions against the California Cap-and-Trade have been taken to date, these could emerge in the future. Even if the legal merit from federal attacks is flimsy, market sentiment will likely be affected as the court challenges play out.

PRICE COMMENTARY

Historically, WCI allowances have mostly traded close to the program's floor price. However, around May 2019, a massive injection of funds by financial investors pushed prices above historical averages, trading well above the floor. Towards the end of 2019 and the beginning of 2020, the coronavirus pandemic hit, causing investors to depart the program and allowance prices to plunge well below the floor. As the original panic subsided, prices began to recover towards the end of the year and went on an upward trend.

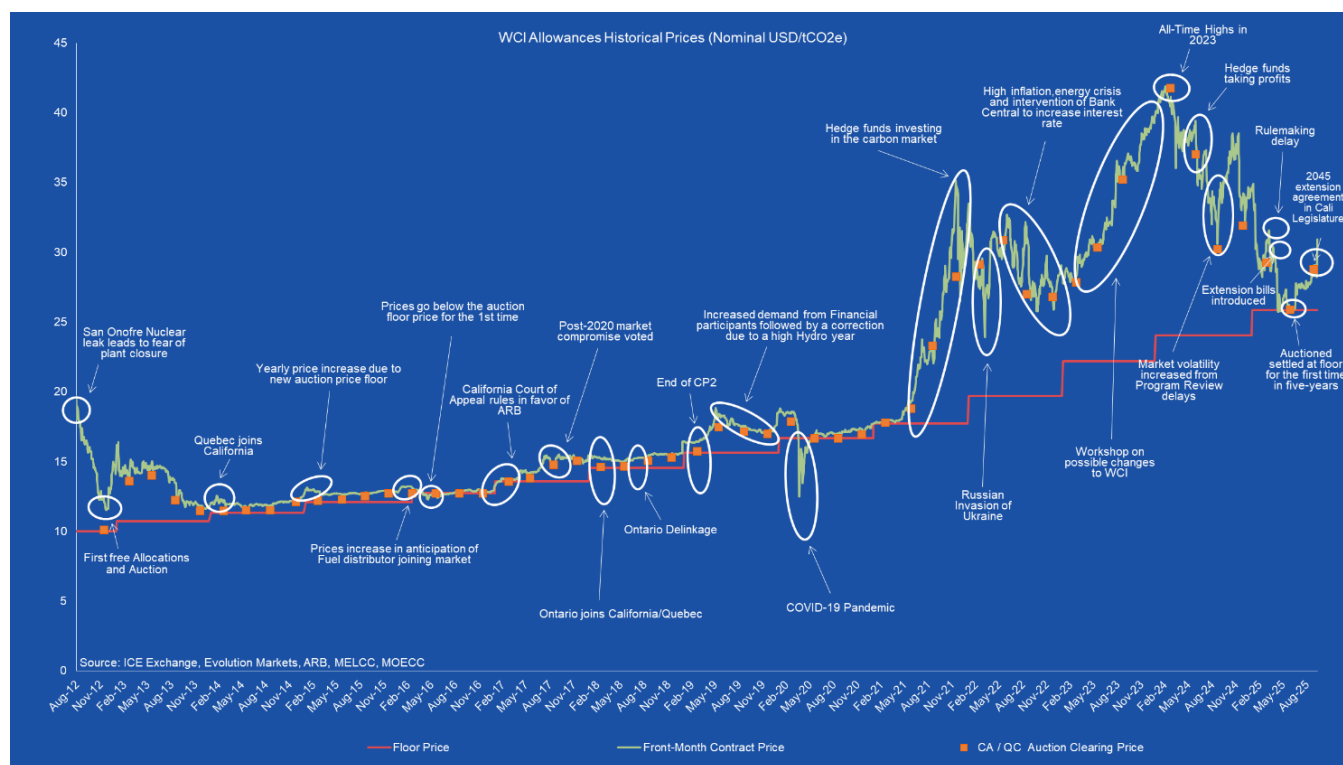
In 2021 and 2022, an influx of financial investors pushed WCI allowance prices to historical highs at the time. Investors expected declining caps to lead to higher demand for allowances, a conviction further supported by the ongoing Program Review, with expectations of increased cap decline rates leading to a further shrinking of the allowance bank.

WCI allowances continued to climb in 2023 and 2024, reaching a high of USD 41 in early 2024, as excitement around the Program Review led to bullish sentiment. Thereafter, WCI allowances began a long decline through 2024 as Program Review delays were announced. The prospect of delays in cap implementation led many financial investors to exit the market, ultimately causing WCI allowances to end 2024 at USD 34, down 17% from their peak.

Prices continued to decline into 2025 as further delays to the Program Review were announced. Pressure on prices increased after the publication of the April Presidential Executive Order, as questions were raised about the long-term viability of the program. The order caused WCI allowances to fall below the program's floor price before recovering to just above the floor. This culminated in the May 2025 auction failing to sell out and settling at the floor, for the first time in half a decade.

Allowance prices then stabilised somewhat after the May 2025 auction, with the secondary market price trading between the 2025 and expected 2026 floors, as participants awaited updates from the California Legislators on the extension. The stabilisation led to a recovery in auction settlement in the August 2025 auction.

The passage of the extension bills in California's Legislature led to exuberant market trading, with the secondary market price advancing above the USD 30 level. However, further price movements will now shift to when the regulators can restart the Program Review process, while allowance prices will remain extremely sensitive to any adverse action from the federal government.



USEFUL LINKS

[ICAP California ETS Fact Sheet](#)

[Use of Auction Revenue](#)

[IEMAC Home Page](#)

[California Environmental Justice Alliance Home Page](#)

REFERENCES

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