

CARBON MARKET BUSINESS BRIEF

CALIFORNIA

CALIFORNIA ETS AT A GLANCE

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| Years in operation | <p>First compliance period: 2013-14 Second: 2015-17 Third: 2018-20 Fourth: 2021-23 Subsequent compliance periods last three years.</p> |
| Overall cap & trajectory | <p>The 2022 cap is 307.5 million tCO_{2e}. The cap declines by 13.4 MtCO_{2e} annually on average, reaching 200.5 MtCO_{2e} by 2030.</p> |
| Target(s) | <p>California has a series of longer-term climate targets, including a 2030 state reduction target of 40% below 1990 levels and a carbon neutrality goal in 2045.</p> <p>Cap-and-trade is operational through 2030 and is expected to achieve 44Mt of emissions reductions by 2030 for California (per the 2022 draft Scoping Plan). The role of cap-and-trade beyond 2030 will be determined through a regulatory process that will follow the publication of the final Scoping Plan in late 2022.</p> |
| 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 tCO_{2e} 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 | <p>CO₂, CH₄, N₂O, SF₆, HFCs, PFCs, NF₃, and other fluorinated GHGs</p> |
| # of covered entities | <p>Approximately 600 entities have reporting obligations, and approximately 400 of those have compliance obligations</p> |
| 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 must sell those allowances at auction and use the revenue to benefit its ratepayers, primarily through a climate credit on utility bills. • The transportation sector does not receive free allowances and must purchase them, either via the quarterly state-administered auctions or the private secondary market. |
| Trading rules | <p>The programme imposes holding and auction purchase limits that limit the overall quantity of allowances that entities can hold or purchase.</p> <p>Third-party financial entities can also participate in trading if they meet certain prerequisites.</p> |

Use of offsets and linking The use of offsets was limited to 8% of a covered entity's compliance obligation for the first three compliance periods, reduced to 4% for the fourth compliance period, and 6% for the fifth and sixth compliance periods. Another change to the post-2020 offset rules is that half of the offset quota must come from projects that provides provide direct environmental benefit 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.

The programme linked to Quebec's cap-and-trade system in January 2014. It was linked to Ontario in January 2018, but a de-link occurred in mid-2018 when the province abruptly scrapped its system following a change of governance. There have been discussions on linkage with Oregon or Washington if they were to establish cap-and-trade systems. However, the difference in programme design does pose challenges to a linkage between the states' programmes.

Other features 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 2022 auction price floor is \$19.70.

Starting in 2021, a portion of allowances will be set aside in two reserves. The reserve will be triggered if settlement of an auction reaches 60% of the first reserve trigger price. The trigger price for the two reserves is \$46.05 and \$59.17 per tCO₂e respectively, increasing by 5% plus inflation annually.

A price ceiling has also be set starting in 2021, starting at \$65 per tCO₂e and rising by 5% plus inflation (\$72.29 in 2022). If this threshold is triggered, units from the reserve will be offered at the price ceiling.

Banking is allowed; borrowing is not allowed.

Penalties for non-compliance 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.

Triennial Compliance Obligation: A covered entity must surrender allowances equivalent to 100% of emissions for the compliance period, less allowances already surrendered.

Failure to surrender on time results in an immediate surrender obligation equivalent to four times the missing balance.

Use of revenues Some revenue is returned directly to utility ratepayers through the California Climate Credit on utility bills.

The rest makes up the Greenhouse Gas Reduction Fund (GGRF), which reduces GHG emissions through California Climate Investments (CCI), which emphasizes benefits to low-income and disadvantaged communities. To date, the CCI has appropriated more than \$6 billion in investments.

MAJOR DEVELOPMENTS

Lockdowns and other restrictions resulted in a large decline in emissions for 2020 (2020 verified emissions was published in December 2021). Most of the decline came from the fuel distribution sector, which saw 2020 emissions fall by 15%, while other sectors saw minimal (and some saw an increase) in emissions.

November 2021 also saw the compliance deadline for Compliance Period 3 (covering 2018-20), with all covered entities in full compliance. Participants submitted 63.3 million offsets for compliance, representing 7% of compliance obligation and the highest use of offsets in the programme's history.

California is currently going through the Scoping Plan update process. The CARB is required, under AB32, to update the Scoping Plan every five years. The draft of the Scoping Plan was released in early May with a final report, along with modelling results, expected sometime in late 2022. The plan includes an update on California’s climate mitigation efforts over the last five years, along with laying out a plan to further accelerate emissions abatement and achieve carbon neutrality by 2045.

Per the draft plan, the CARB has said that the ETS will play more of a backstop role for the state by providing additional emissions abatement that is not achieved through California’s other emission reduction programmes. The draft Scoping Plan did not propose any changes to the cap-and-trade programme; any proposed changes will come after CARB completes the final modelling later in the year.

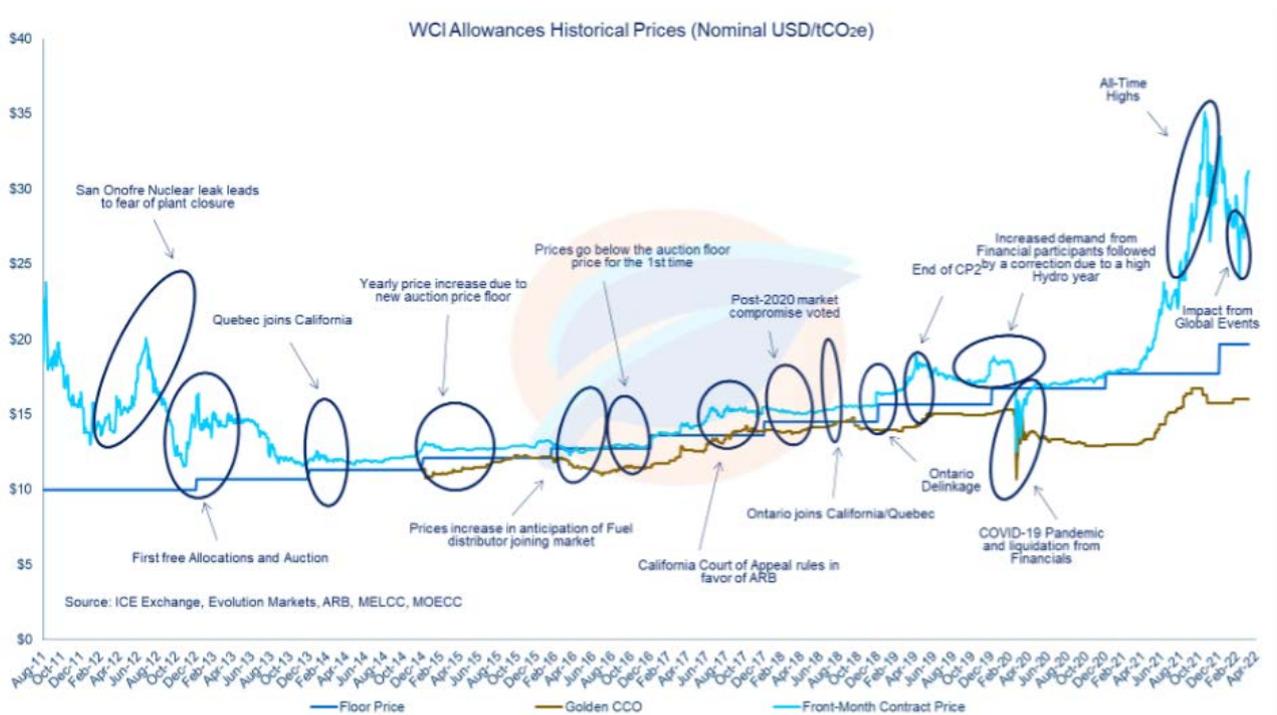
The CARB has received pressure from the Environmental Justice community and the Independent Emissions Market Advisory Committee (IEMAC) to address the oversupply in the ETS. The CARB has insisted through the draft Scoping Plan that the oversupply will be exhausted by end of the decade, although final modelling results may yield recommendations for a change to the structure of the programme. The final 2022 Scoping Plan is expected in November, with a separate rulemaking process expected to take place in 2023.

PRICE COMMENTARY

For most of WCI’s history, allowances have traded close to the program’s floor price. This was interrupted by an influx of funds from financial investors that lifted prices away from the floor level starting in mid-2019. However, the onset of the COVID-19 pandemic led to a liquidation leading to allowance prices dropping below the floor briefly. Allowance prices then recovered back to the floor, staying at that level for most of 2020.

2021 saw a return of financial investors who pushed WCI allowance prices to historical highs. Financial investors were attracted to the WCI allowances because climate-related investing has been gaining momentum. Furthermore, creation of new investment products, such as carbon allowance related ETFs, have allowed easy access to WCI allowances for many retail investors. All this has led to increased demand for WCI allowances.

WCI allowances started 2022 on a mixed note, with prices stagnating in the first months of the year. This is due to a volatile global situation with potential increases in interest rates and inflation. This has led to some de-risking of investor portfolios leading to some sell-off of risky assets. WCI allowances have recovered some of their losses coming into April. In May, WCI allowance price movements have been more muted as participants weigh potential impact to California’s programme from the Scoping Plan and changes to Quebec’s cap-and-trade rules.



USEFUL LINKS

[ICAP California ETS Fact Sheet](#)

[Use of Auction Revenue](#)

[IEMAC Home Page](#)

[California Environmental Justice Alliance Home Page](#)

REFERENCES

[California Air Resources Board Cap-and-Trade Home Page](#)

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