



Appendix A

Changes to California's Cap and Trade System under AB 398

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This Appendix summarizes the changes brought about by the passage of Assembly Bill 398 (referred to as AB 398), and provides some commentary on each of the new provisions. These changes will come into effect for the post-2020 cap and trade program, and are complemented by changes in AB 398's companion bill, AB 617.

A1 New considerations for the Air Resources Board before adopting regulations¹

Under AB 398, the California Air Resources Board (ARB) is required to satisfy a list of considerations prior to adopting regulations. These considerations include, but are not limited to, ensuring that:

- Activities undertaken to comply with the regulations do not disproportionately impact low-income communities; and
- Ensuring that activities undertaken pursuant to the regulations complement, and do not interfere with, efforts to achieve and maintain federal and state ambient air quality standards to reduce toxic air contaminant emissions.

Comment: These high level considerations help underscore that the cap and trade program is intended to be complementary to other regulatory measures to address air quality concerns in marginalized communities. In particular, AB 398 was a companion bill to AB 617, which addresses traditional air quality concerns in disadvantaged communities.

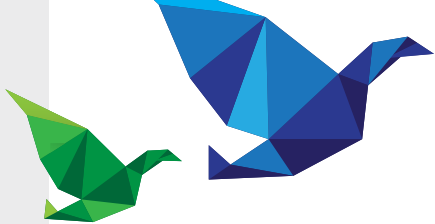
A2 A hard price ceiling²

The California ARB is now required to set a price ceiling under its new regulation, taking into consideration the social cost of carbon, among other considerations.

Under the new bill:

- Allowances remaining in the allowance price containment reserve (APCR) as of December 31, 2020, will be sold at the price ceiling;
- If the allowances from the APCR are exhausted, the ARB will offer additional metric tonnes in allowances at the price ceiling as needed for compliance;
- All funds generated by the sale of additional metric tonnes under this mechanism will be used by the ARB to achieve tonne-per-tonne reductions that are real, permanent, quantifiable, verifiable, enforceable and additional to any GHG reduction required by law or regulation or that would have otherwise occurred.

Comment: This is one of the most controversial elements of the new bill. These amendments affect the integrity of the cap; however, the ARB has yet to determine the ceiling price, and many commentators have suggested it is unlikely the price of allowances will ever reach the ceiling. The ARB has also indicated that the hard price ceiling will be set in collaboration with linked partners.



A3 Pricing “speed bumps”³

Under AB 398, the ARB must, as part of its new regulation, establish two price containment points (“speed bumps”) at levels below the price ceiling. At these junctures, the ARB must offer capped emitters two thirds, divided equally, of the allowances in the APCR as of December 31, 2017.

Comment: This provision will use existing California allowances in the APCR to soften the impacts of rising allowance prices.

A4 A requirement to address overallocation of allowances⁴

AB 398 authorizes the ARB to incorporate into its new regulation the requirement to evaluate and address concerns related to overallocation in determining the number of available allowances for the years 2021-2030, inclusive, as appropriate.

Comment: Giving the ARB the authority to address concerns about overallocation when deciding how many allowances to offer from 2021-2030 could be used to limit the amount of allowances offered, thereby increasing competition and demand for a lower quantity of allowances and bolstering the effectiveness of the cap and trade program to drive emissions reductions. However, the California Environmental Justice Alliance (CEJA) notes that industry lobbying may make it very difficult to get regulatory action on reducing overallocation.

A5 An adjustment to offset credit limits and prioritization of offsets that directly benefit California⁵

The new bill authorizes the ARB to establish, by regulation, two new offset credit limits, and prioritizes offset projects with co-benefits for Californians:

- From January 1, 2021 to December 31, 2025, a total of 4% of a covered entity’s compliance obligations may be met by surrendering offset credits of which no more than half may be sourced from projects that do not provide direct environmental benefits in California.
- From January 1, 2026 to December 31, 2030, a total of 6% of a covered entity’s compliance obligations may be met by surrendering offset credits of which no more than half may be sourced from projects that do not provide direct environmental benefits in California.

Comment: The decision to limit offsets is largely due to concerns about the interplay between offsetting and environmental justice issues. The new bill tries to address these concerns by specifying that half of all projects must now provide direct benefits to Californians in terms of reducing air and water pollution (the term *direct environmental benefits* means reductions or avoidances of emissions of any air pollutant in California or the reduction or avoidance of any pollutant that could have an adverse impact on waters in the state). The limited use of offsets post-2020 could put upward pressure on overall allowance prices. However, it is unclear whether this will affect the number of California offset credits supplied to Canadian entities. It is possible that the changes to offset limits in California could help Canadian offset proponents and drive more domestic abatement.



A6 A new Compliance Offsets Protocol Task Force⁶

AB 398 establishes a Compliance Offsets Protocol Task Force to provide guidance to the ARB in approving new offset protocols. The new protocols will be aimed at increasing offset projects with direct environmental benefits in the state while prioritizing disadvantaged communities, Native American or tribal lands, and rural and agricultural regions. The ARB must appoint members to the Compliance Offsets Protocol Task Force to include a representative from each stakeholder group, including, but not limited to, all of the following:

- Scientists
- Air pollution control and air quality management districts
- Carbon market experts
- Tribal representatives
- Environmental justice advocates
- Labor and workforce representatives
- Forestry experts
- Agriculture experts
- Environmental advocates
- Conservation advocates
- Dairy experts

Comment: This new Task Force could add a lot of support for offsets in California, by including groups and experts with special knowledge of, and/or proximity to, future offset projects. However, the Task Force will also be faced with the challenge of ensuring California offsets meet the requirements for additionality. Almost all sectors are covered by the cap or regulations in California, making it difficult to expand offsets in the state.

A7 Sustained level of free allowances for industry⁷

The new bill authorizes the ARB to continue the allocation of free allowances (or industry assistance factors) commencing in 2021 at the levels used in the 2015-2017 compliance period. The ARB must apply a declining cap adjustment factor to the allocation of free allowances equivalent to the overall statewide emissions declining cap using the methodology from the 2015-2017 compliance period.

Comment: Continued free allocations for large final emitters will likely take pressure off Ontario and Quebec to move to full auction, making Ontario and Quebec's cap and trade programs more palatable from a political perspective. On the other hand, environmental justice groups have noted that the new provisions do not contain a sunset date, therefore extending free allowances to the end of the program (albeit at a declining rate). These groups have also drawn attention to the fact that AB 398 requires the ARB to use the methodology of the 2015-2017 compliance period, which means that it will be reverting to a higher starting point of free allowance calculation than will be used in 2018-2020.

A8 New allowance banking rules⁸

AB 398 authorizes the ARB to establish by regulation allowance banking rules to discourage speculation, avoid financial windfalls and consider the impact on compliance entities and volatility in the market.

Comment: Without further details about the banking rules themselves, it is difficult to determine what impact this new provision will have on overall functioning of California's cap and trade program. However, California has indicated it will work with its linked partners on this provision, as the rules are currently identical across linked jurisdictions.



A9 The option of establishing a border carbon adjustment tax⁹

Under AB 398, the ARB is authorized to create a regulation, under which it must report to the California Legislature by December 31, 2025 on the progress toward meeting GHG reduction targets and the risk of leakage. In its report, the ARB must include recommendations on necessary statutory changes to the program to reduce leakage, including the potential for a border carbon adjustment.

Comment: A former proposal under Senate Bill 775 (which ultimately did not pass) would have made a border carbon adjustment tax part of the cap and trade program design. Some commentators supported this approach, and were disappointed that AB 398 did not contain the same requirement. However, AB 398 keeps the door open to revisiting the issue if leakage concerns begin to impact on the success of the program.

A10 The requirement to assess the potential for prices to reach the ceiling¹⁰

Under AB 398, the ARB is authorized to create a regulation under which it would be required to report to the California Legislature, in consultation with the newly established Independent Emissions Market Advisory Committee, if two consecutive auctions exceed the lower of the price containment levels. The report must also assess the potential for allowance prices to reach the price ceiling for multiple auctions.

Comment: This requirement may help the ARB to adjust program design around price ceilings if modelling for allowance demand and pricing does not reflect reality in the post-2020 program.

A11 A priority List of Uses for Cap and Trade Monies¹¹

AB 398 specifies that monies collected from the auction or sale of allowances shall be used for priority actions, including those relating to:

- Air toxic and criteria air pollutants from stationary and mobile sources;
- Low and zero carbon transportation alternatives;
- Sustainable agricultural practices that promote the transitions to clean technology, water efficiency, and improved air quality;
- Healthy forests and urban greening;
- Short-lived climate pollutants;
- Climate adaptation and resiliency; and
- Climate and clean energy research.

Comment: Some of the funds could also be used for a dividend back to state residents.

A12 A new Independent Emissions Market Advisory Committee¹²

The new committee will consist of experts on emissions trading market design, will hold annual public meetings and will report to both the ARB and the Joint Legislative Committee on Climate Change Policies on the environmental and economic performance of the program design changes introduced into regulation by AB 398.

Comment: The establishment of the committee and the requirement to hold public meetings could increase public awareness of, and engagement in, the cap and



trade program. According to the ARB, the committee will provide *ex-post* analysis of the program's performance and will not be involved in program design in order to maintain the committee's independent review status.

A13 Reporting requirements on low carbon workforce development measures¹³

No later than January 1, 2019, the California Workforce Development Board, in consultation with the ARB, shall report to the Legislature on the need for increased education, career technical education, job training, and workforce development resources or capacity to help industry, workers, and communities transition to economic and labour-market changes related to statewide GHG reduction goals. Some of the specific items which must be addressed in the report include:

- Creating and retaining jobs and stimulating economic activity in the state;
- Imbedding workforce training and employment services in infrastructure investments so that services more directly connect to the jobs created;
- The use of community benefits agreements, community workforce agreements, and project labour agreements that connect workforce services and job training directly to jobs impacted or jobs created;
- Preparing the state's students with relevant career technical education that responds to business and industry demands;
- Developing worker retraining programs to assist the existing workforce with the necessary tools to upgrade their skills;
- Responding to the job creation and workforce needs of the state's new and emerging industries, including emerging technologies that will result in greater greenhouse gas emissions reductions;
- Developing job training programs to assist specific populations, such as at-risk youth, displaced workers, veterans, the formerly incarcerated, and others facing barriers to employment;
- Opportunities for community-based organizations to partner with local workforce agencies to improve the labour-market outcomes of targeted disadvantaged populations;
- Targeting workforce development programs and activities in disadvantaged communities, and communities that are located near entities regulated by the state board; and
- Identifying and leveraging state and federal funding resources to implement the recommendations made in the report.

Comment: This provision is forward-looking and designed to complement regulatory and market-based reductions to help assist California in its transition to a low-carbon economy.



A14 Limits on regulation of petroleum refineries and oil and gas production facilities¹⁴

The new bill instructs the ARB to update the scoping plan to designate the market-based compliance mechanism (i.e., cap and trade) as *the* rule for petroleum refineries and oil and gas production facilities to achieve their GHG emissions reductions. However, the bill text makes clear that this should not limit the ARB's authority to adopt, maintain, or revise any other measure, including, but not limited to, any of the following:

- Measures governing methane and fugitive emissions at refineries and oil and gas facilities;
- Advanced clean cars program adopted by the ARB;
- Low-Carbon Fuel Standard regulations;
- Regulations addressing short-lived climate pollutants; and
- Implementation of the sustainable freight action plan.

Comment: The California Environmental Justice Alliance (CEJA) notes that by specifying that cap and trade is *the rule* for regulating GHG emissions from the oil and gas sector, it eliminates the use of other, direct regulatory measures (other than those outlined in the bill). In keeping with AB 398, California has removed the refinery emissions reduction measure that was previously included in the ARB's 2030 Draft Scoping Plan.¹⁵

A15 Reporting requirements for the Legislative Analyst's Office¹⁶

AB 398 establishes a requirement that the California Legislative Analyst's Office report annually to the Legislature on the economic impacts and benefits of California's GHG targets.

Comment: The Legislative Analyst's Office is responsible for providing fiscal and policy advice to the California Legislature. It describes itself as the "eyes and ears" for the Legislature to ensure that the executive branch is implementing legislative policy in a cost-efficient and effective manner. This new reporting requirement could help ensure that the targets set are not having outsized negative impacts on the California economy.

A16 Limits on the authority of local air districts¹⁷

AB 398 states that a local air district shall not adopt or implement an emissions reduction rule for carbon dioxide from stationary sources that are also subject to a market-based compliance mechanism adopted by the ARB. The new legislation makes clear that other powers of local air districts are preserved, and these entities may adopt or implement any of the following:

- A rule, regulation, standard, or requirement authorized or required for a district to adopt under Division 26 for purposes other than to reduce carbon dioxide from sources subject to a market-based compliance mechanism adopted by the ARB;
- A rule, regulation, standard, or requirement authorized pursuant to a law affecting emissions associated with landfills, refrigerants, natural gas or methane, volatile organic compounds, or a rule required to comply with the federal *Clean Air Act* or regulations implementing that act;



- A rule, regulation, standard, or requirement authorized pursuant to a law to reduce vehicle trips, vehicle miles travelled, parking, or vehicular air emissions, including, but not limited to, a rule adopted pursuant to Chapter 728 of the Statutes of 2008;
- A rule, regulation, standard, or requirement established pursuant to the California *Environmental Quality Act*; and
- A rule, regulation, standard, or requirement adopted by any state agency.

Comment: This provision (referred to as the *pre-emption provision*) has been criticized by environmental justice advocates and some legal scholars. In response to the pre-emption provision, the Bay Area Air Quality Management District abandoned plans to adopt a refinery GHG emissions cap in fall 2017. Environmental justice groups, such as the California Environmental Justice Alliance (CEJA), have stated that refinery-specific caps would have set a total limit on refinery GHG emissions, rather than a sector-wide cap that doesn't limit emissions from specific facilities. These interventions go to the policy question of whether a sector-wide cap is more effective than a facility-specific approach to targeting GHG emissions, and whether multiple "caps" can function simultaneously. California has sought to address the concerns of the environmental justice community by requiring community air quality plans under AB 617. This latter bill also requires all cap and trade stationary emissions sources to be subject to best available technology retrofits. These changes go directly to addressing air pollution concerns, alongside the GHG emissions reductions measures contained in AB 398.

A17 A new approach to fire prevention funds¹⁸

Effective July 1, 2017, the fire prevention fee previously in place was suspended. AB 398 instead states that monies derived from the auction or sale of allowances pursuant to cap and trade shall be used to replace the monies that would have otherwise been collected under the old fire prevention fee scheme.

Comment: This change affects residential development in forested areas. According to Eric Biber of Berkeley Law, increasing development in the "wildland-urban interface" puts increased pressure on firefighters to suppress fires, which in turn produces long-term harm to forest and human health, as fire suppression increases the risk of worse fires in the future.¹⁹ By removing the fire prevention fee levied against residential developments in forested areas, the changes in AB 398 allow the owners of these homes to benefit from cap and trade expenditures to protect them from fire risks to which they have contributed.²⁰

A18 Significant tax breaks²¹

AB 398 extends tax breaks for manufacturers and research and development activities in California, and expands them for electricity production. The reduction in state revenue from the extension and expansion of tax breaks will be backfilled by cap and trade revenues.

Comment: This change reduces the amount of cap and trade money available for further GHG reduction efforts.



Endnotes

1. AB 398 Section 4, amending Section 38562 of the Health and Safety Code.
2. AB 398 Section 4, amending Section 38562 of the Health and Safety Code.
3. AB 398 Section 4, amending Section 38562 of the Health and Safety Code.
4. AB 398 Section 4, amending Section 38562 of the Health and Safety Code.
5. AB 398 Section 4, amending Section 38562 of the Health and Safety Code.
6. AB 398 Section 7, added as Section 38591.1 to the Health and Safety Code.
7. AB 398 Section 4, amending Section 38562 of the Health and Safety Code.
8. AB 398 Section 4, amending Section 38562 of the Health and Safety Code.
9. AB 398 Section 4, amending Section 38562 of the Health and Safety Code.
10. AB 398 Section 4, amending Section 38562 of the Health and Safety Code (note: AB 398 Section 5 adds the amended Section 38562 to the Health and Safety Code).
11. AB 398 Section 6, added as Section 38590.1 of the Health and Safety Code.
12. AB 398 Section 8, added as Section 38591.2 of the Health and Safety Code.
13. AB 398 Section 9, added as Section 38591.3 of the Health and Safety Code.
14. AB 398 Section 10, added as Section 38592.5 of the Health and Safety Code. This provision has to do with limiting the Air Resources Board's ability to enact additional regulations for GHG reductions at petroleum refineries and oil and gas production facilities. In contrast, the provision discussed under bullet 16 of this Appendix deals with limits on the ability of local air districts to develop regulations for reducing GHG emissions on stationary sources covered by cap and trade.
15. The "refinery emission reduction measure" previously included in the ARB's Draft 2030 Scoping Plan would have allowed the ARB to develop regulations in addition to the cap and trade regulation, to effect a 20% reduction in refinery GHG emissions. See California Air Resources Board, *The 2017 Climate Change Scoping Plan Update: The Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target* (January 20, 2017), online: https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf. [Accessed October 18, 2017]
16. AB 398 Section 11, added as Section 38592.6 of the Health and Safety Code.
17. AB 398 Section 12, amending Section 38594 of the Health and Safety Code (AB 398 Section 13 adds the amended section to the Health and Safety Code).
18. AB 398 Section 14, added as Section 4213.05 of the Public Resources Code.
19. Eric Biber, "Thoughts on AB 398: New bill to extend state's cap-and-trade program is a compromise worth making" (July 14, 2017) *LegalPlanet*, online: <http://legal-planet.org/2017/07/14/thoughts-on-sb-398/>. [Accessed October 18, 2017]
20. *Ibid.*
21. AB 398 Section 15, added to Chapter 1.5 of Part 2 of Division 4 of the Public Resources Code.