Cap-and-Trade Regulation and Mandatory GHG Reporting Regulation 2018 Amendments



DECEMBER 13, 2018

Cap-and-Trade Program Background

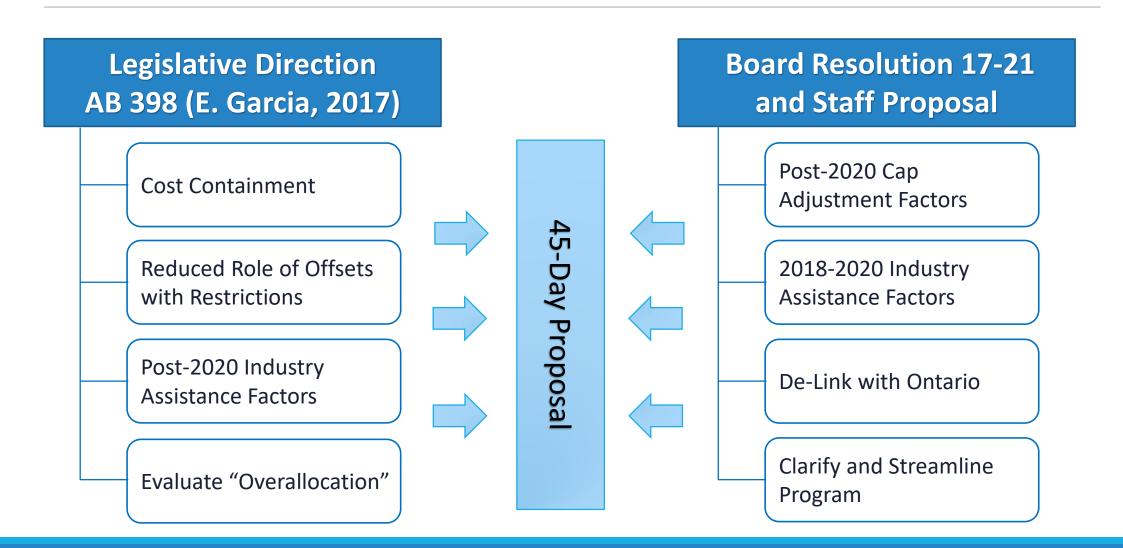
Declining Caps

Steadily Increasing
Price Signal

Targets Lowest Cost Reductions First Long-Term Price Signal for Clean Technology Investments

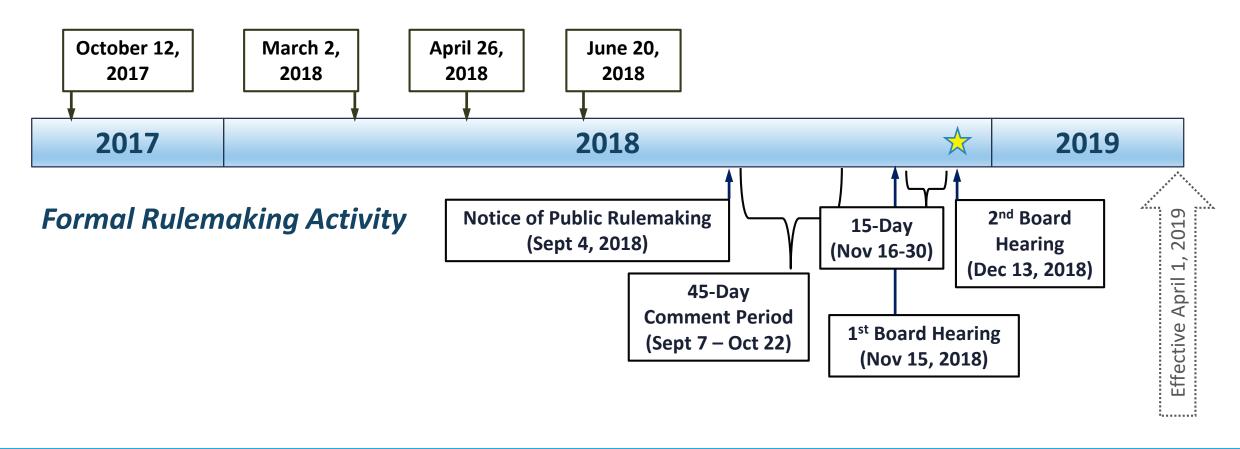
- Critical part of State strategy to achieve AB 32 and SB 32 GHG reduction targets
 - 2017 Scoping Plan that includes Cap-and-Trade is 4 times less costly than alternatives
- Covers ~80% of State's emissions and works in concert with other complementary air quality and climate policies
 - Cap-and-Trade designated in AB 398 to reduce GHG emissions for oil and gas extraction and refinery sectors
- Greater than \$8 billion generated for California Climate Investments
 - ~50% of investments are benefiting disadvantaged communities

Key Objectives of 2018 Amendments



Rulemaking Timeline

Informal Public Process Workshops

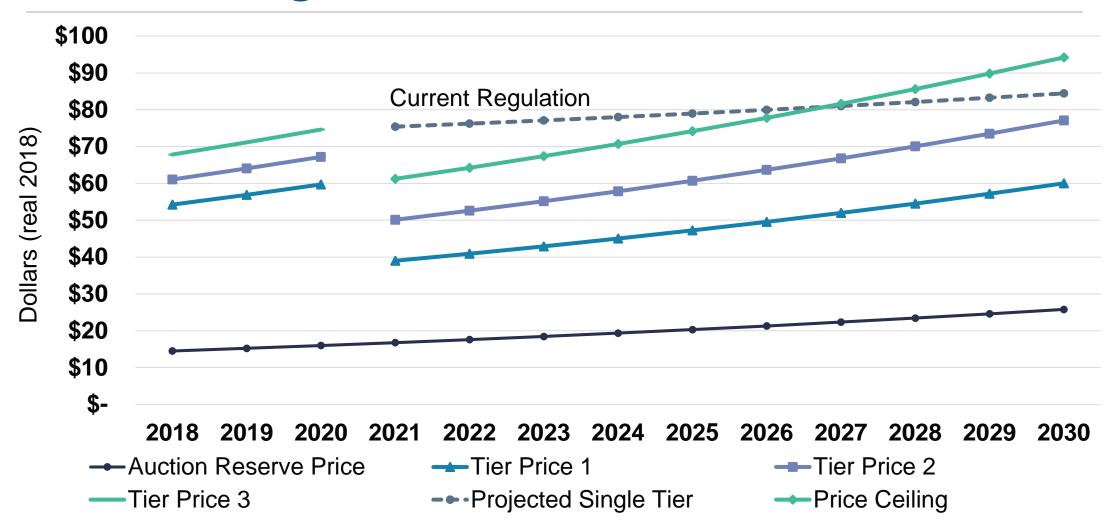


No Proposed Changes to Post-2020 Caps or Banking Rules

AB 398 directs CARB to evaluate concerns related to "overallocation" and banking rules

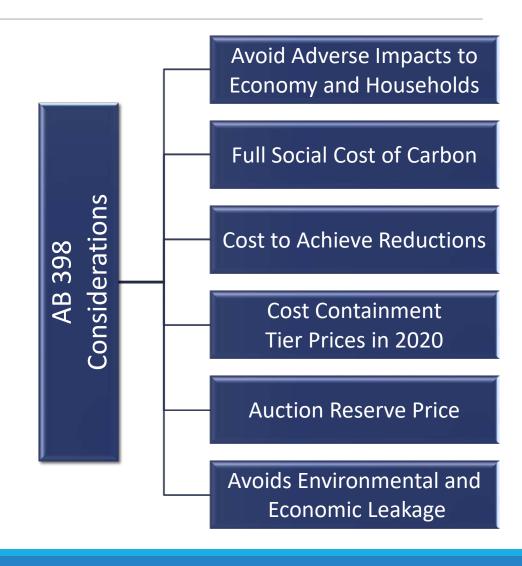
- Historical data shows gradually increasing price signal to incent reductions
- Caps for 2013 through 2030 are set to conform to AB 32 and SB 32 statewide
 GHG reductions targets
- From the beginning, Program has been designed with features to support gradually increasing carbon price signal
- Staff and third-party analyses show the caps are binding on emissions through
 2030
- Removing allowances would increase prices today and in the future

Price Ceiling and Reserve Tiers



AB 398 Bolsters Cost Containment

- Price ceiling
 - Firm limit on allowance prices
 - Available if needed, but very unlikely to be accessed
 - Current data shows actual prices to be near the floor
- More price containment allowances are available at lower prices
- Economic analysis shows negligible impact on growth of economy, employment, and personal income

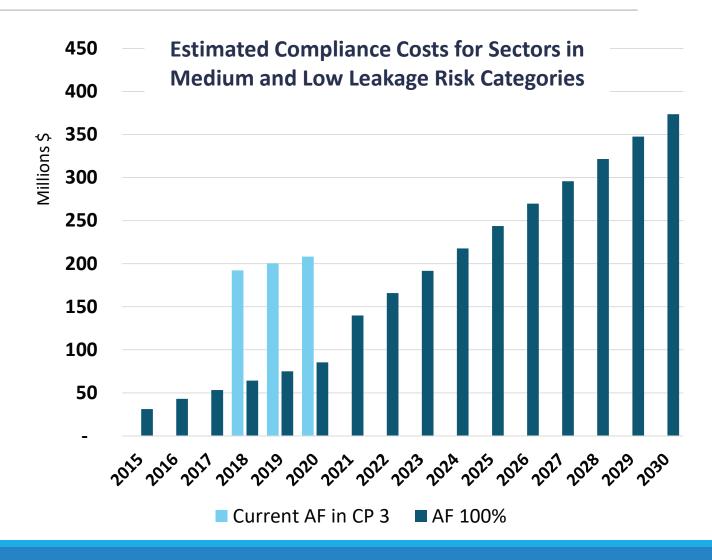


Offset Amendments

- Reduce compliance offset usage limits to 4% for 2021 to 2025 calendar year emissions and 6% for 2026 to 2030 calendar year emissions
- No more than one-half of the offset usage limit may be sourced from projects that do not provide direct environmental benefits in the state
 - Direct environmental benefits in the state defined as the reduction or avoidance of emissions of any air pollutant in the state or reduction or avoidance of any pollutant that could have an adverse impact on waters of the state
 - Performance standard for projects located in-state or sourced with gases from instate
 - Case-by-case review for projects located out-of-state or sourced with gases from out-of-state

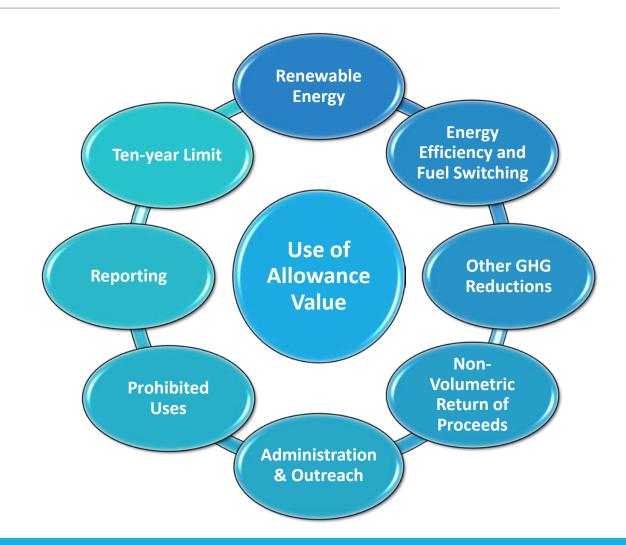
Industrial Allowance Allocation

- Set industry assistance factors to 100 percent 2018-2020 and 2021-2030
 - Without change, 2018 -2020 compliance costs more than double, only to drop later
 - Smooth path into more stringent post-2020 Program
- More slowly declining cap adjustment factors for certain sectors post-2020



Use of Allowance Value

- CARB allocates allowances to electrical distribution utilities and natural gas suppliers
 - Ratepayer benefit
 - Consistent with AB 32 goals
- Amendments clarify how allocated allowance value can be used
- 15-day changes further clarify allowed use of value for wildfire risk reduction, educational programs, and reducing hydrofluorocarbon emissions



Other Proposed Revisions

De-link from Ontario

Clarify aspects of compliance offset program

Update allocation provisions to provide transition assistance and minimize leakage

Address emissions
leakage from Energy
Imbalance Market (EIM)
imports

Update registration and auction procedures, requirements, and processes

Extend the application deadline for the "But-For" CHP exemption

Enhance CARB's ability to implement and oversee the Regulation

Environmental Analysis

- Draft Environmental Analysis (EA) completed
 - Environmental impacts were determined to be consistent with prior analyses conducted for the Program
- Released for 45-Day public comment period: September 7, 2018 October 22, 2018
- CARB prepared Final EA and written responses to comments received on the Draft EA
 - Released on December 3, 2018

Mandatory Reporting Regulation Amendments

- The Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (MRR) requires California's largest emitters to annually report and verify greenhouse gases (GHG) and product data
- Minor emissions and product data clarifications
- Reporting and verification cessation clarifications for specific facility and entity types
- Adjustments to support Cap-and-Trade on EIM related emissions

Aligning CARB GHG Accounting and the EIM

- Under AB 32, CARB must account for total annual GHG emissions from the generation of electricity delivered to and consumed in California
- The Energy Imbalance Market (EIM) design does not account for all imported electricity emissions and results in emissions leakage
 - As a temporary solution, CARB is currently retiring unsold allowances from the state's pool of allowances to account for the emissions leakage
 - Staff is proposing to place the obligation for emissions leakage on the electricity sector who benefits from the EIM
- Staff proposal will only address EIM transactions, not day-ahead market transactions or regionalization

15-day Changes

Cap-and-Trade Regulation

- Revised the approach to address EIM emissions leakage
- Updated allowance allocation provisions
 - Revised waste-to-energy allocation calculation to increase transition assistance
 - Combustion emissions from non-organic feedstocks, such as plastics, have a compliance obligation
 - 15-day proposal increased allocation from about 65% to about 90% in the third compliance period
 - Added third compliance period allocation for legacy contract generators
 - Classified leakage risk for newly eligible sectors
- Removed the true-up allocation related to CPUC decision on natural gas pricing
- Revised conformance and invalidation provisions for U.S. Forest offset projects
- Clarified text to ensure clarity on application of "Direct Environmental Benefits"

MRR

 Revised "EIM Purchaser" definition and calculation of entities' share of EIM Outstanding Emissions

Staff Recommendation

- Approve both proposed Resolutions, including:
 - Approval of written responses to environmental comments, certification of Final EA, and making the required CEQA findings for the Cap-and-Trade Amendments
 - If adopted, these amendments will be in effect April 1, 2019

Future Cap-and-Trade Rulemaking Activities

- Updating electricity sector allocation for 2021 through 2030 to reflect 60 percent Renewable Portfolio Standard per SB 100
- Providing additional allowance allocation to industrial covered entities to minimize the potential for leakage resulting from higher energy costs
- Exempting from a compliance obligation fuel cells that meet certain criteria until there is full carbon cost pass-through in natural gas prices
- Updating existing Compliance Offset Protocols
- Annual progress reports to Board on Program implementation

Thank You