



Cap-and-Trade Regulation 2016 Amendments

September 22, 2016

Introduction

- First of two Board hearings on proposed Cap-and-Trade Regulation amendments
 - Today's item is informational only with no Board action
 - Second Board hearing with Board action in spring 2017
- Ongoing Scoping Plan Update process to help inform the final regulatory amendments
- Staff will continue stakeholder engagement on the proposed amendments through early 2017

Program Background

- AB 32 requires California to reduce GHG emissions to 1990 levels by 2020, and to maintain and continue GHG emissions reductions beyond 2020
- Cap-and-Trade Regulation adopted in 2011
 - One of a suite of measures to achieve AB 32 goals
- Cap-and-Trade Adaptive Management Program
 - Board directed staff to develop plan to monitor for potential unintended localized increased criteria and toxic emissions due to compliance with Cap-and-Trade Program
 - Adaptive Management Plan presented to Board late 2016

Program Features

- Cap-and-Trade Program limits total GHG emissions from all regulated sources
- The cap declines over time to reduce emissions
- Provides compliance flexibility and reduced costs of compliance
 - Entities are allowed to trade State-issued GHG emissions allowances
 - Identifies most cost-effective emissions reductions
- Works together with command-and-control measures
- The price on emissions incentivizes change and spurs innovation in cleaner and efficient technologies
- GHG and market data published to ensure transparency

Proposed Amendments for the Third Compliance Period (CP3) & Beyond

- Streamline and clarify aspects of Program implementation in response to staff experiences and stakeholder concerns
 - Allowance allocation
 - Electricity sector provisions
 - Compliance obligations and exempt emissions
 - Compliance offset credits
 - Program registration
 - Administration of auctions and reserve sales
 - Market monitoring provisions
- Link with Ontario's cap-and-trade program and describe other potential types of linkage

Allocation to Industrial Entities (CP3)

- Eliminate and update some product-based benchmarks
- Update some product definitions
- Include leakage risk assessments and assistance factors for newly covered sectors
- Staff continues to engage with stakeholders regarding product-based benchmarks, product definitions, and leakage risks for new sectors

EDU and Natural Gas Supplier Use of Allocated Allowance Value (CP3)

- Align electrical distribution utility (EDU) and natural gas supplier requirements on returning proceeds to ratepayers in a non-volumetric manner
- Establish 10-year deadline for spending auction proceeds from allocated allowances to ensure timely expenditures
- Annual reporting on the use of allocated allowance value would be focused on total proceeds spent during the previous year instead of on proceeds from the previous vintage year's allocated allowances

Electricity Sector (CP3)

- Modify compliance obligation on imports of electricity under CAISO's Energy Imbalance Market to ensure all electricity serving California load has a compliance obligation to minimize emissions leakage and have accurate GHG accounting
- Eligibility requirements for the Voluntary Renewable Electricity Program would be modified to expand eligibility while ensuring program requirements and goals are met
- Remove the qualified export adjustment for electricity imports

Points of Compliance and Limited Exemptions (CP3)

- Compliance obligation for emissions associated with imported liquefied petroleum gas (LPG) would change from the consignee to the importer of the LPG to align with the Mandatory Reporting Regulation
- Proposed limited exemption from a compliance obligation for liquefied natural gas suppliers in the second compliance period to protect against emissions leakage
- Existing limited exemption from a compliance obligation for waste-to-energy facilities is proposed to be extended through the second compliance period
- Proposed changes to list of emissions without a compliance obligation

Compliance Offset Credit Program (CP3)

- Proposed amendments incorporate staff experience and stakeholder suggestions to simplify and clarify implementation
- Clarify regulatory compliance and reversals
 - Livestock and Mine Methane Capture projects would have ARB offset credits invalidated for a more limited time period instead of risk to the entire reporting period
 - Provide additional time for a verified estimate of carbon stocks after an unintentional forestry offset reversal to allow for salvage harvesting, reinventory, and verification
- Streamline and clarify requirements for offset project listing, reporting and verification, and issuance

Registration and Auction/Reserve Sale Administration (CP3)

- Registration requirements would be consolidated and clarified in sections 95830 through 95834 of the Regulation
- A covered entity would be required to register in the jurisdiction(s) in which it incurs a compliance obligation
- Provisions on designating and changing account representatives would be streamlined
- Modifications are proposed to provisions describing the administration and format of auctions and Reserve sales to improve clarity, internal consistency, and implementation efficiency

Disclosure of Corporate Associations (CP3)

- Streamlined corporate association disclosure requirements include:
 - A registered entity would only be required to disclose a direct corporate association with an unregistered entity that operates in related markets upon request by ARB
 - A registered entity that only holds offset credits would not be required to disclose any corporate associations
- A registered entity would be required to disclose a direct corporate association with another registered entity if they employ the same account representative or consultant
- Some disclosure requirements for registered entities would remain unchanged

Linkage (CP3) (1 of 2)

- Linkage provides greater GHG reductions at a lower overall cost and improves market liquidity
- California's program is currently linked with the cap-and-trade system of Québec
- Proposed amendments would link the California and Québec joint programs with the emerging program in Ontario beginning in 2018
- Ontario is a member of the Western Climate Initiative (WCI) and collaborated on the development of the WCI cap-and-trade program design recommendations

Linkage (CP3) (2 of 2)

- Ontario is developing a new cap-and-trade program that would begin January 1, 2017
- Ontario-specific post-2020 annual allowance budgets and offset credit provisions are expected prior to ARB staff submitting the required SB 1018 findings for linkage
- International sector-based tropical forestry offset program linkage is not part of the proposed amendments
 - Staff held four workshops on the steps for linking with a tropical forestry program
 - Staff intends to propose regulatory standards and a linkage with Acre, Brazil in a subsequent rulemaking in time for compliance in the third compliance period

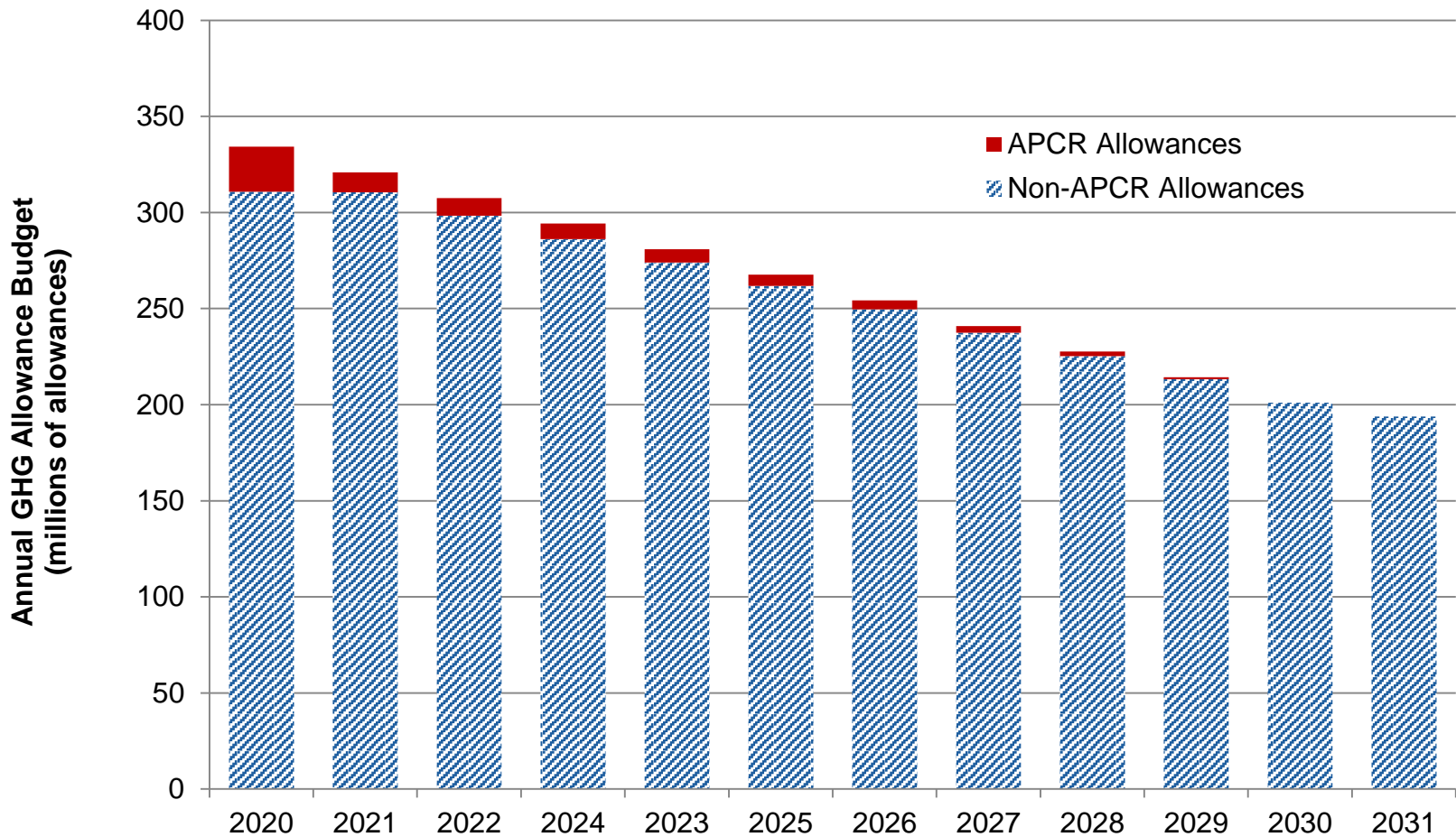
Other Linkages with External GHG Emissions Programs (CP3)

- Linkages such as with Québec, or that would occur with Ontario or a sector-based program, are governed by the existing Regulation
- Two new forms of engagement are described that would require less harmonization of operating rules
 - **Retirement-Only Limited Linkage:** Entities in California would be able to retire compliance instruments issued by another GHG program for compliance in California
 - **Retirement-Only Agreement:** Entities registered in a non-California GHG program would be able to retire California compliance instruments
- No such engagements are currently proposed, but amendments clarify how these could be implemented

Proposed Amendments for the Post-2020 Program

- Extend major provisions of the Program beyond 2020
 - Establish emissions caps for 2021 through 2050
 - Continue linkage with Québec and Ontario
 - Enable the future auction and allocation of allowances
 - Continue allowance trading and banking provisions
 - Continue compliance offset credits program
 - Continue market monitoring and enforcement provisions
- Enable California compliance with the federal Clean Power Plan

Post-2020 Emissions Caps



Allowance Price Containment Reserve (APCR) (Post-2020)

- 54.5 million allowances from the 2021 to 2031 budgets would be placed in the APCR
 - Less than 1.9% of the total budget
 - Recognizes that 2020 forecasted emissions are expected to be less than the 2020 limit
 - Any APCR allowances remaining from the pre-2020 phase of the program would roll over into the post-2020 APCR
- Post-2020 APCR would have a single price tier set at \$60 above the auction floor price (instead of three price tiers)
- Allowances that remain unsold at auction for more than 24 months would be transferred to the APCR
 - This amendment would apply in CP3 as well

Compliance with the Federal Clean Power Plan (Post-2020)

- Federal Clean Power Plan (CPP) is a set of requirements promulgated by U.S. EPA for GHG emissions from existing electricity generating units (EGUs) beginning in 2022
- Aggregate GHG emissions goals are established for existing EGUs in the State
- All affected EGUs would be required to participate in the Program regardless of emissions level
- The proposed amendments would allow for compliance by EGUs with the Cap-and-Trade Program to demonstrate the State's compliance with CPP

CPP Compliance (Post-2020)

- Proposed amendments establish interim and final mass targets for aggregate emissions from affected EGUs
- Cap-and-Trade Program compliance periods would be aligned with (mostly 2-year) CPP compliance periods for all covered entities
- Proposed amendments establish a federally enforceable backstop emissions standard
 - It brings aggregate EGU emissions into compliance with the federal target if the larger market underperforms
 - Backstop is very unlikely to be triggered

Allowance Allocation (Post-2020)

- ▣ Proposed to be completed during subsequent 15-day regulatory package
- ▣ General approaches to allowance allocation would be retained post-2020
 - ▣ Industrial covered entities
 - ▣ Electrical distribution utilities
 - ▣ Natural gas suppliers
 - ▣ Legacy contract generators
 - ▣ Public wholesale water agencies
 - ▣ Universities and public service facilities

15-Day Changes for Allocation to Industrial Entities (Post-2020)

- Proposed to be completed during subsequent 15-day regulatory package
- Staff plans to incorporate results of emissions leakage assessments and apply a new method to establish post-2020 assistance factors
 - Meets the Board direction to perform an updated leakage assessment and the AB 32 mandate to protect against emissions leakage to the extent feasible
- Though not part of this rulemaking, staff continues to explore recalculating all benchmarks to include emissions associated with purchased electricity before 2021

15-Day Changes for Allocation to EDUs (Post-2020)

- Proposed to be completed during subsequent 15-day regulatory package
- Post-2020 allocation to electrical distribution utilities (EDUs) would be based on expected Cap-and-Trade Program cost burden and would decline with the cap
 - Post-2020 allocation would exclude allowances allocated directly to industrial covered entities served by that EDU
- Staff has requested feedback from utilities about whether to continue the RPS adjustment post-2020 or to discontinue the RPS adjustment and instead allocate allowances to the utilities post-2020 to account for this cost burden

15-Day Changes for Allocation to Natural Gas Suppliers (Post-2020)

- Proposed to be completed during subsequent 15-day regulatory package
- Percentage of allocated allowances required to be consigned to auction would be increased post-2020
 - Change would ensure that a carbon cost is felt by all natural gas users to incentivize conservation and efficiency at the point of use, and will align EDU and natural gas supplier allocation requirements and incentivize moving away from fossil natural gas
- “But-for” exemption for operators of cogeneration facilities would be extended until natural gas suppliers are required to consign all allocated allowances to auction

Voluntary Renewable Electricity Program (Post-2020)

- No new allowances would be allocated to the Voluntary Renewable Electricity (VRE) Account
 - VRE program was intended to be transitional
 - Existing demand for VRE program has been low

Economic and Environmental Alternatives Analysis

- Staff assessed alternatives on emissions reduction, cost-effectiveness, and other AB 32 goals:
 - Proposed amendments
 - Facility-specific requirements: All covered entities must achieve onsite GHG reductions of 40%
 - Carbon fee: Set at social cost of carbon from US EPA (\$36/MTCO₂e in 2015)
- Results found in CEQA and Economic Appendices:
 - Proposed Amendments: Achieve reductions, cost-effective, allows linkage
 - Facility-specific requirements: Achieve reductions at much higher cost to consumers, does not allow linkage
 - Carbon fee: Does not ensure similar reductions or allow linkage

Environmental Analysis

- Draft Environmental Analysis (EA) released for 45-day public comment period Aug. 5 – Sept. 19, and staff will present responses to comments on Draft EA to Board in March 2017
- Environmental impacts expected to be generally consistent with prior analyses conducted for the Program

Next Steps

- ▣ Continued engagement with stakeholders
- ▣ At least one round of additional changes with a 15-day comment period
- ▣ Second Board Hearing in early 2017
- ▣ If the amendments are adopted, they would become effective October 1, 2017