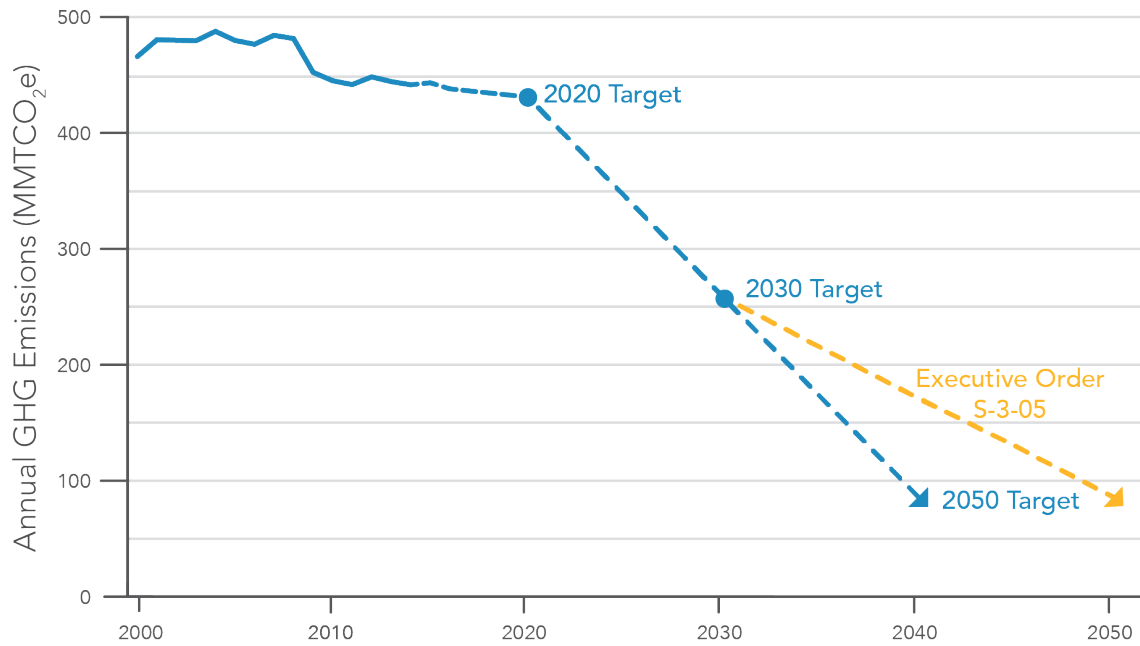


Overview of California Cap-and-Trade Program

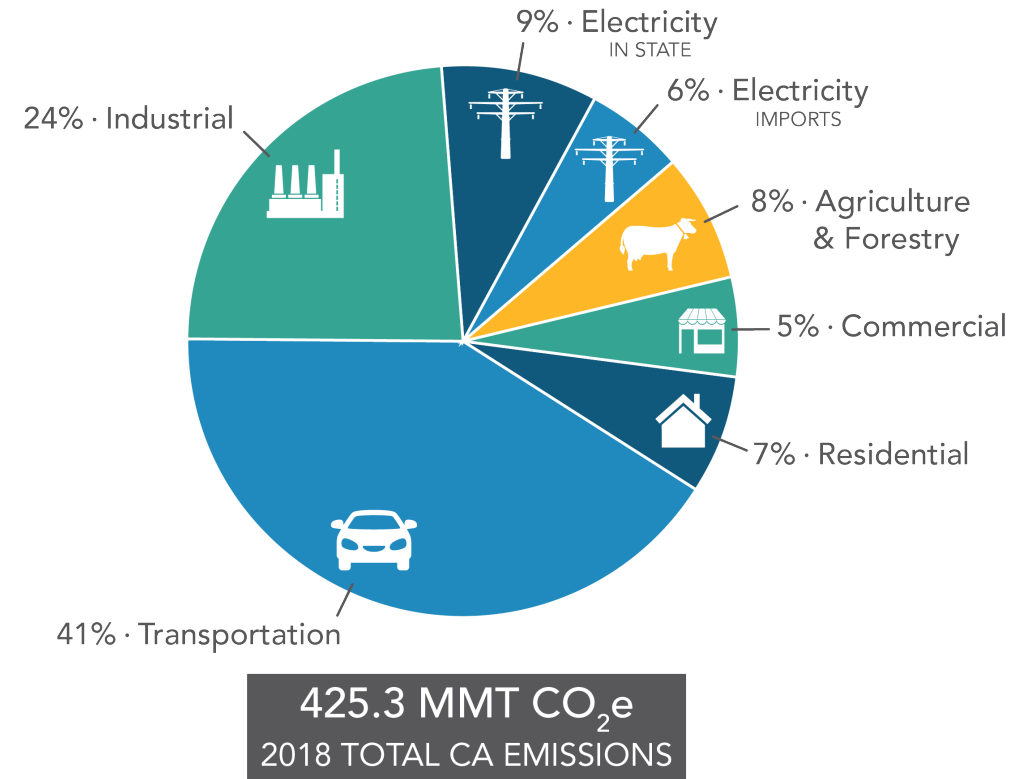
OCTOBER 2021



California GHG Reduction Targets



Source: CARB, 2017



CARB's Climate Portfolio for 2030 Target



Double building efficiency



60% renewable power



More clean, renewable fuels



Slash potent "super-pollutants" from dairies, landfills and refrigerants



Cleaner zero or near-zero emission cars, trucks, and buses



Cap emissions from transportation, industry, natural gas, and electricity



Walkable/bikeable communities with transit



Invest in communities to reduce emissions



Cleaner freight and goods movement



Protect and manage natural and working lands

Cap-and-Trade: Program Development

- Broad implementing legislation (AB 32) to achieve GHG reductions
- Multiple years of policy discussions as a member of the Western Climate Initiative helped shape the design of the Program
- Extensive communication and engagement with industry, government, academic, and public stakeholders
- Broad education and communication efforts to ensure the public was aware of opportunities to participate in the process
- Formal rulemaking culminating in approval of the Cap-and-Trade Regulation by CARB's Board in 2011

Public Participation

- Informal workshops and public meetings were used to:
 - Introduce new ideas to stakeholders
 - Have stakeholders explain special circumstances
 - Discuss the rationale for draft regulation changes
 - Explain implementation
- Expert advisory groups provided venues to understand and address a range of perspectives on economics, market design, technology, and environmental justice
- Formal participation in formal public rulemaking process

External Capacity Building

- Instantaneous distribution of information on CARB's website and through e-mail bulletins
- Easily accessible information on all aspects of the Program
- Publication of regulatory guidance
- CARB provides training and accreditation for verifiers in the Mandatory Reporting Program and for offset project verifiers
- CARB Help Desk provides stakeholder assistance through telephone and email

Cap-and-Trade Program Background

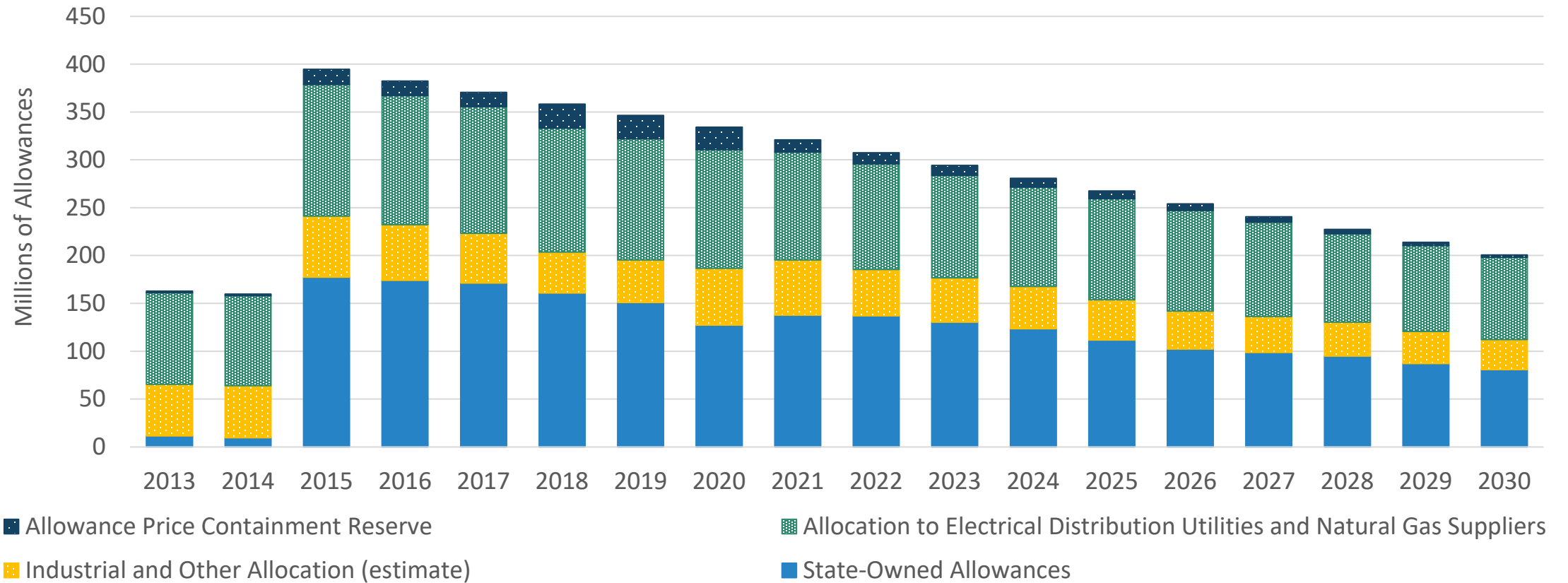


- Critical part of State strategy to achieve AB 32 and SB 32 GHG reduction targets
 - Ensure GHG reduction targets are realized through a strict limit
 - 2017 Scoping Plan that includes Cap-and-Trade is four times less costly than alternatives
- Works in concert with other complementary air quality and climate policies
- Provide compliance flexibility to achieve cost-effective reductions
- Facilitate integration of regional, national, and international GHG reduction programs
- Program linked with cap-and-trade system of Québec

Cap-and-Trade: Facts and Figures

- Covers ~80% of State's emissions
- ~450 covered entities in the Program
 - Based on annual, third-party verified reported GHG data
 - Large industrial sources & electricity generators with emissions $\geq 25,000$ MTCO₂e per year
 - Electricity importers, natural gas suppliers, and transportation fuel suppliers
- 32 auctions held to-date (24 joint-auctions)
 - First joint auction with Québec was held in November 2014
- Over \$13 billion generated for California Climate Investments
 - ~50% of investments are benefiting disadvantaged communities

Cap-and-Trade Allowance Budgets

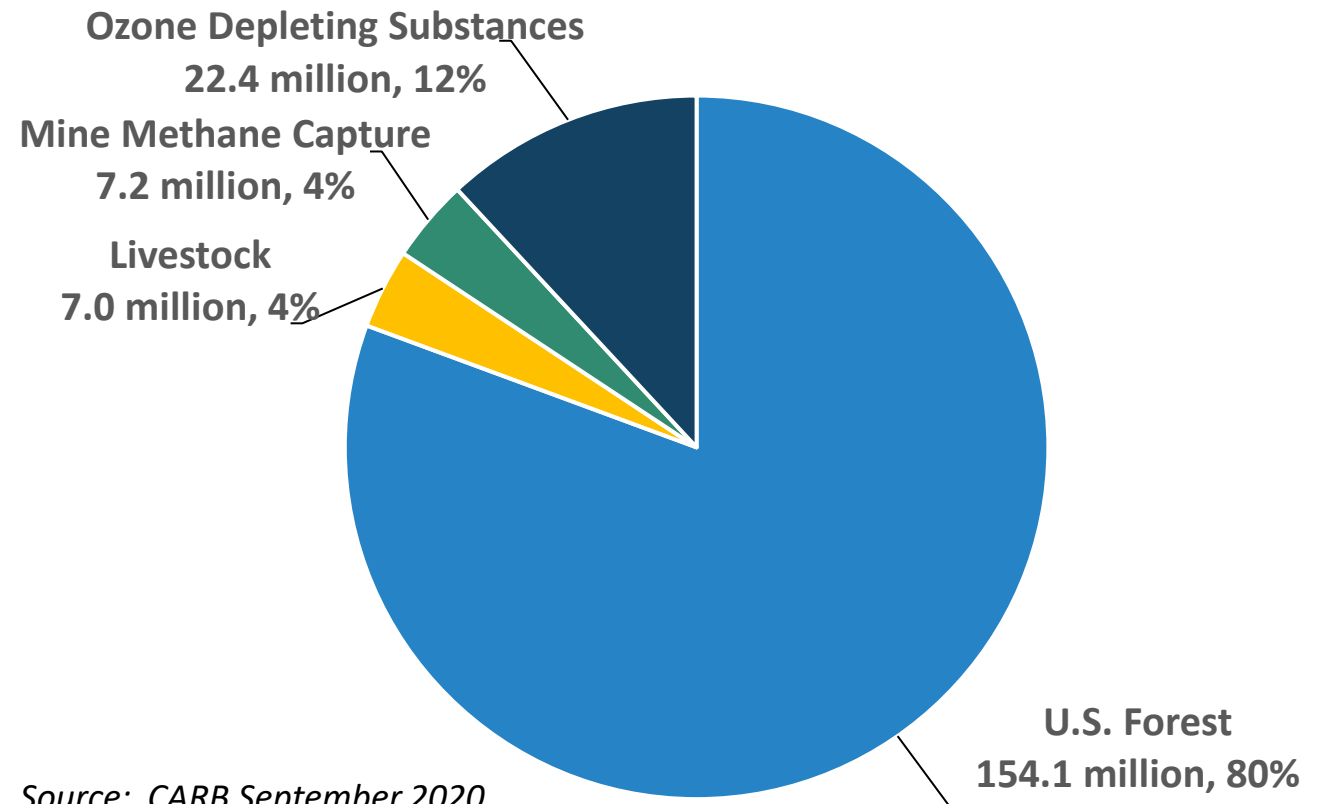


Source: CARB 2018

Compliance Flexibility

- Allowances never expire
- Limited Use of Offset Credits
- Banking subject to holding limits (hedging with protections from cornering the market)
- Multi-year compliance periods

Offset credits issued, Sept. 2020

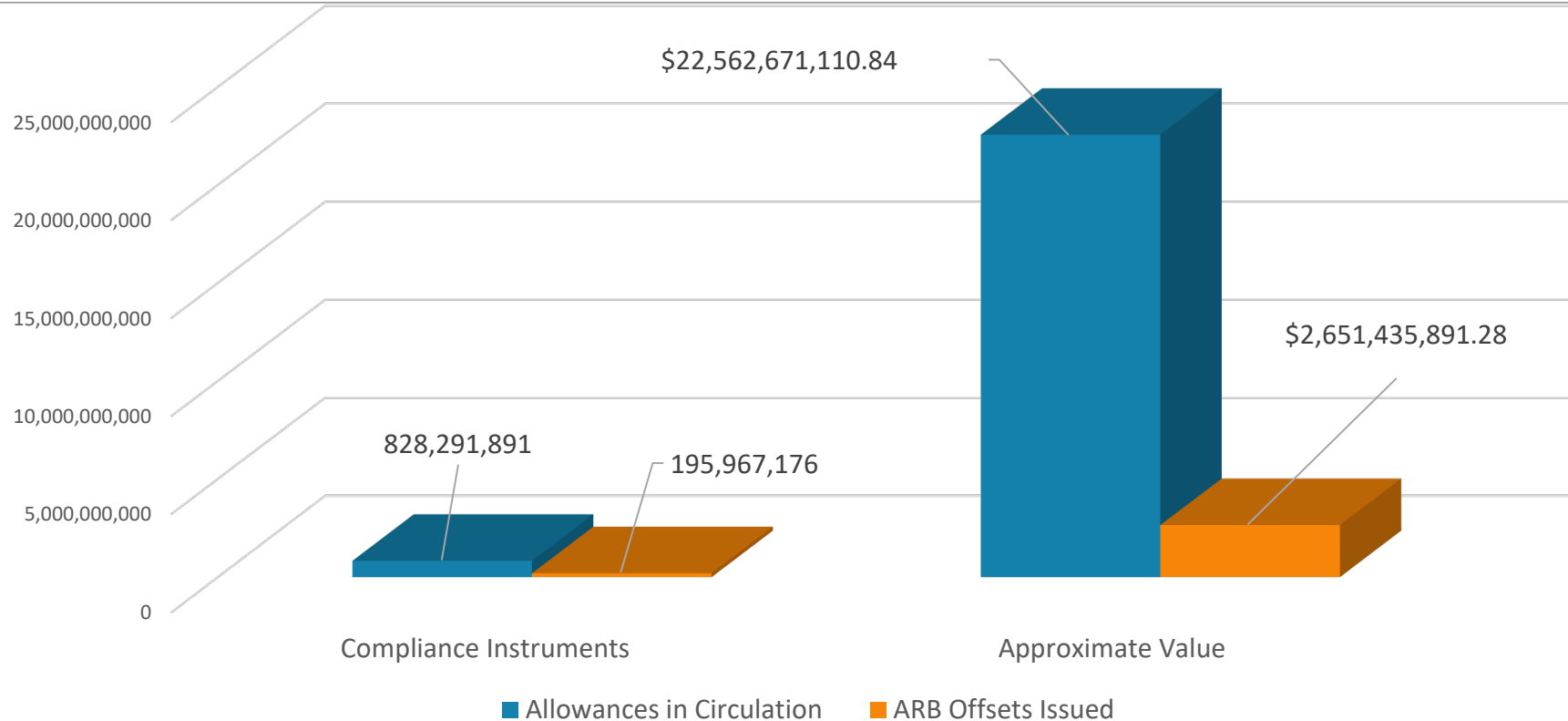


Source: CARB September 2020

Cap-and-Trade: Market Integrity

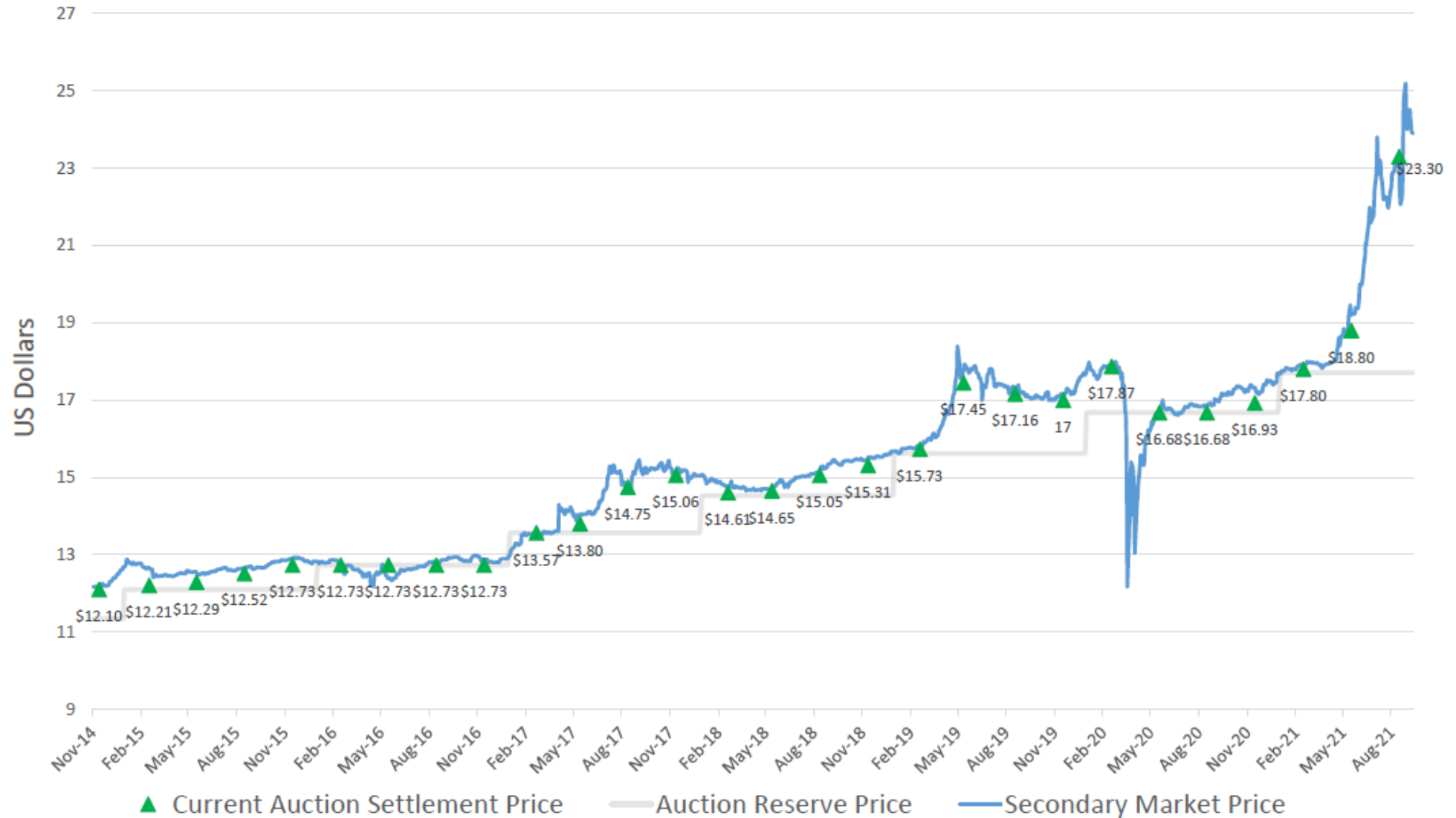
- Mechanisms for ensuring market integrity
 - Auction purchase and account holding limits
 - Registration and relationship disclosure requirements
 - Tracking system (CITSS)
 - Financial penalties
- Oversight
 - Coordinate with the U.S. Commodity Futures Trading Commission (CFTC) and Federal Energy Regulatory Commission (FERC)
- Enforcement
 - Coordinate with California Department of Justice

Approximate Value of Compliance Instruments in the Cap-and-Trade Program



- Compliance instrument quantities are from the [Q3 2021 Compliance Instrument Report](#).
- For this slide, allowance quantities in circulation include those in entity general and limited use holding accounts. The allowance price of \$27.24 is the ICE Current Vintage Settlement Price for December delivery on October 8, 2021, as publicly published at [theice.com](#). The offset quantity reflects total ARB offset credits issued, minus those that those in the forest buffer and invalidation accounts. The offset price (\$13.53) is the weighted average price as reported in the [Q2 2021 Summary of Market Transfers Report](#).

California and Québec Carbon Allowance Prices



Secondary Market Prices are a composite of commodity exchange futures contract prices for near month delivery and a survey of OTC brokered transactions for California Carbon Allowances. Secondary market prices are provided with permission of [Argus Media Inc.](#)

Resources

- Cap-and Trade Website:

<https://ww2.arb.ca.gov/our-work/programs/cap-and-trade-program>

- Mandatory Reporting Website:

<https://ww2.arb.ca.gov/our-work/programs/mandatory-greenhouse-gas-emissions-reporting>