

Overweight California Carbon Allowances/Underweight Global Equities

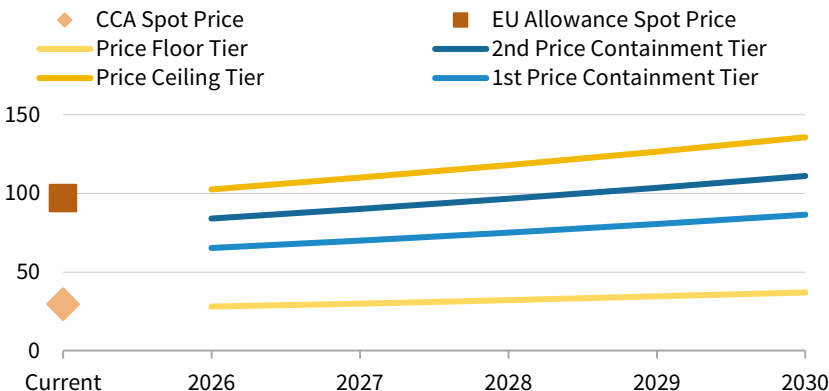
Recommended since October 31, 2021

Investment thesis: We believe California Carbon Allowances (CCAs) will outperform global equities, given our expectation that supply/demand fundamentals will drive CCA prices up toward their first price containment tier. With CCAs priced near the program's floor, they offer highly asymmetric return potential. We prefer owning physical allowances over futures implementation. Regulated entities are allotted free allowances for a portion of their emissions and must purchase additional credits to satisfy remaining obligations.

Key support 1: California projects that its cap-and-trade program will be needed to meet its emissions targets. Accordingly, the state must reduce CCA supply relative to demand. The California Air Resources Board (CARB) has provided more clarity on anticipated changes to tighten supply of allowances. CCA supply is expected to be cut by 118M between 2027 and 2030. These changes will increase expected CCA deficits, which in more mature carbon markets have typically led to price increases. CCA prices will receive an additional boost once it is joined with Washington state's program, which is expected by 2027.

CCA price compared to EU and price containment tiers

As of November 30, 2025 • US dollars



Sources: Bloomberg L.P., MSCI Inc., and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties. Notes: LHS - Spot prices use near-month futures. Price tiers rise 5% plus US TIPS 10-yr breakeven inflation annually. Price containment tiers trigger extra allowances to hedge higher costs. RHS - CCAs: Downside = 2029 price floor; Base case = halfway to 2029 1st containment tier; Upside scenario = 2029 1st containment tier. For Global Equities, Deflation bust: normalized P/E drops 50%, nominal normalized earnings growth averages -2% YOY. Inflation bust: Same P/E drop, 6% average growth. Base case: P/E unchanged, growth reflects recent averages. Upside: P/E rises by a decile (or to all-time max if >90th %ile), 6% average growth.

Key support 2: We anticipate that relative to equities, CCAs offer less downside risk with significantly more upside potential. The program includes a floor indexed by inflation plus 5% that limits downside risk, while reductions in supply relative to demand increase upside in contrast to global equities.

Key risks: Regulatory changes present the biggest risk to CCAs, although the program is well established and provides significant revenue to the state of California. As such, implementation delays and poor communication by CARB related to adoption of increased program stringency measures has put downward pressure on CCA prices. Therefore, we have extended the timeline by which prices are expected to increase in response to tightening supply as reflected in our return protections. Encouragingly, the program was extended from 2030 to 2045 in September. CCAs can also experience short-term volatility related to technical issues in the options and futures markets. Finally, global equity performance may exceed our expectations. From an implementation perspective, rolling futures cost an estimated 3%–5% annually, while options for owning physical allowances are limited.

Return projection scenarios: CCAs vs global equities

As of November 30, 2025 • 3-yr annualized average compound return (%)

