

# MANAGING OFFSET RISK

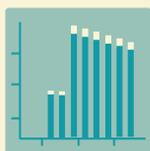
in California's cap-and-trade program

## Offsets in California

Offsets are emissions reductions made in uncapped sectors which are used to compensate for emissions under the cap.



The cap and trade program covers about 350 large businesses, representing 600 facilities



The cap was set in 2013 at about 2% below the emissions level forecast for 2012, and declines 2-3% annually through 2020

8%

Regulated entities in California can use offsets for up to eight percent of their compliance obligation



Offsets help contain compliance costs as they are generally less expensive than allowances

California has adopted offset protocols for emission reductions from ozone depleting substances (ODS), mine methane, forest, urban forest and livestock projects.



**ODS:** Destruction of eligible ozone depleting substances with high global warming potential



**Mine methane:** Recovery and destruction of methane at coal and trona mines



**Forest:** Increase carbon sequestration through reforestation, improved forest management, and avoided conversion projects



**Urban forest:** Planned set of tree planting and maintenance activities that increase carbon storage

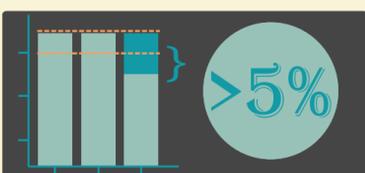


**Livestock:** Capture and destruction of methane gas from livestock waste management systems

## Buyer liability

Under California's cap-and-trade program, the ARB has the authority to invalidate offset credits for a period of time after issuance under certain circumstances. Any such invalidated credits will be removed from the credit holder's account which is known as buyer liability as the buyer is responsible for replacing any invalidated credits that have been used for compliance. The intent of buyer liability is to ensure the environmental integrity of the offset program by allowing the state to remove any invalid credits from the system.

Grounds for invalidation:



**Overissuance:** Overissuance of the amount of GHG reductions or GHG removals by more than five percent. Affects the quantity of California Air Resources Board offset credits (ARBOCs) equal to the overissuance.



**Noncompliance:** The offset project activity and implementation of the offset project was not in accordance with all local, state, or national environmental and health and safety regulations during the reporting period. Affects all ARBOCs for the applicable reporting period.



**Double issuance:** Offset credits have been issued in another voluntary or mandatory program within the same offset project boundary and for the same reporting period. Affects all ARBOCs for the applicable reporting period.

Not grounds for invalidation



**Protocol revisions and updates:** The compliance offset protocols may be revised and updated on a regular basis, and the revision process is not grounds for invalidating offsets that were issued under previous versions of the protocol.



**Unintentional reversal of forest carbon stocks:** Forest carbon stocks that decrease due to an unintentional reversal such as wildfire, disease, flooding, wind-throw, insect infestation, or landslides are not subject to invalidation. Such unintentional reversals are addressed using a buffer pool of credits.

Timeframe for invalidation



**Eight years:** Under the cap and trade regulation, ARB may invalidate an ARB offset credit within 8 years of issuance. The invalidation timeframe for California Compliance Offsets with an 8-year invalidation timeframe (CCOg) may be reduced if it meets the conditions below.



**Three years:** The invalidation timeframe for a California Compliance Offset can be reduced from eight years to three years or three reporting periods (CCO3) if the emission reductions (for ODS) or subsequent emissions reductions (for forest, urban forest, livestock, coal) are reverified by a different verification body within 3 years of ARBOC issuance.

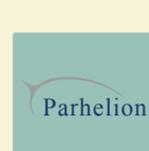
## Managing invalidation risk

Buyer liability has led the market to create contract structures and financial instruments to help manage the risk of invalidation.

Strategies to address invalidation risk



**Contractual protections:** Include contractual protections for the purchase of compliance offsets requiring that the seller replace invalidated offsets with either allowances or replacement offsets.



**Insurance:** Some specialty insurers, such as Parhelion Underwriting, now offer insurance against invalidation by covering the replacement cost of any invalidated credits.



**Expired invalidation period:** Purched offsets where the invalidation period has passed (eg. CCO3s that are more than three years old) such that they are no longer subject to invalidation.



**Due diligence:** Due diligence is an important strategy to address buyer liability. The compliance entity should review project documents, check for compliance against invalidation risk, ensure that contractual obligations are in place, and research the experience of the project developer, verification body and offset project registry.

For more information, please visit:

California Air Resources Board cap-and-trade program webpage:  
<http://www.arb.ca.gov/cc/capandtrade/capandtrade.htm>

Climate Action Reserve presentation on managing offset risk:  
<https://vimeo.com/71289867>

Parhelion Underwriting:  
<http://www.parhelion.co.uk/>

