

# Introduction to the Climate Action Reserve and California Offsets

General Information Webinar



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Business Development Manager

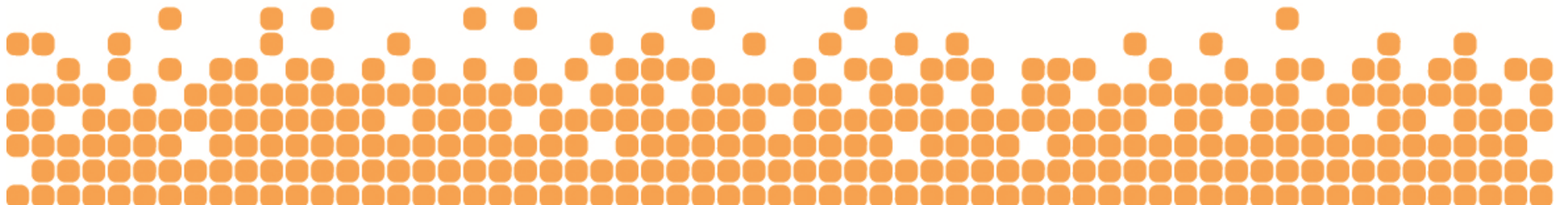
March 7<sup>th</sup> 2013



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# Agenda

- Introduction to the Climate Action Reserve
- Overview of California's Cap-and-Trade Program and the Reserve's role as an offset project registry (OPR)
- Question & answer session





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# Legal Disclaimer:

Some of the content of this presentation is based on the Climate Action Reserve's understanding of the California Cap and Trade Regulation. As the implementation of the Regulation is the responsibility of the California Air Resources Board, you should be aware that anything presented here may be interpreted or applied differently by the Board.

Moreover, this presentation does not constitute legal advice. Information presented here should be regarded as guidance and does not have a legally binding effect.





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Introduction

# CLIMATE ACTION RESERVE



# The Reserve: Who We Are and What We Do



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- Accredited offset project registry (OPR) under the California Cap-and-Trade Program
  - Mission: to promote the reduction of greenhouse gas emissions by pioneering credible market-based policies and solutions
- Serve compliance and voluntary carbon markets
- Reputation for integrity and experience in providing best-in-class registry services for voluntary and compliance offset markets



# Board of Directors



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- **Linda Adams,** California EPA (ret.) - Chairman of the Board
- **Peter Miller,** NRDC – Board Secretary
- **Jeff Kightlinger,** Metropolitan Water District – Board Treasurer
- **Randy Armstrong,** Shell Oil Company
- **Steve Corneli,** NRG Energy
- **Cynthia Cory,** California Farm Bureau Federation
- **Dr. Francisco Barnes,** National Institute of Ecology (Mexico)
- **Peter Liu,** New Resource Bank
- **James Mack,** British Columbia Ministry of Environment (Canada)
- **Nancy McFadden,** Office of the Governor of California
- **Betsy Moler,** Federal Energy Regulatory Commission (ret.)
- **Tim Profeta,** Nicholas Institute at Duke University
- **Jan Schori,** Sacramento Municipal Utility District (ret.)
- **Stephan Schwartzman,** Environmental Defense Fund
- **Jason Clay,** World Wildlife Fund (WWF)





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# Principle Objectives

- Ensure that offsets have true environmental integrity
- Demonstrate that offsets are a useful tool in addressing climate change
- Maintain registry that is rigorous, while streamlined and user-friendly
- Serve voluntary and compliance carbon markets
  - Provide registry services for California carbon market
  - Continue to develop regulatory quality offset protocols for voluntary market



# Serving Multiple Markets



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## Compliance Market:

- Compliance buyers under California's Cap-and-Trade
- Western Climate Initiative (WCI)
- CEQA compliance

## Voluntary Market:

- Voluntary corporate buyers
- LEED Certification (USGBC)
- Retail and individual buyers







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# Reserve Stats

**CRTs registered** 32.8 million

**ARB-Eligible CRTs  
registered** 12.1 million

*CRTs retired* 5.7 million (~ 17%)

**Account holders** 346

**Projects submitted** 495

*Registered* 177

*Completed* 15

**U.S. States with  
Projects** 42

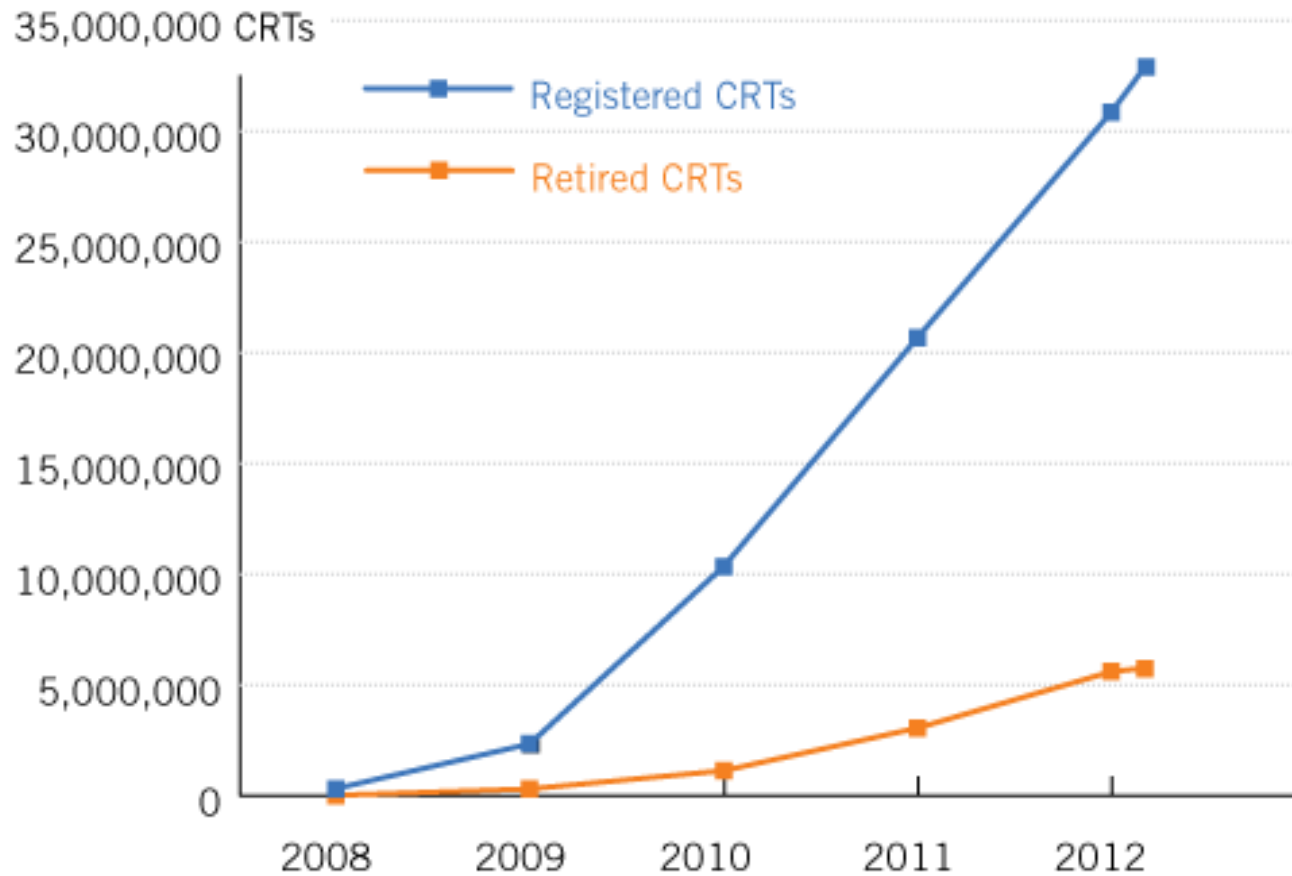


# REGISTERED AND RETIRED CARBON OFFSETS IN THE CLIMATE ACTION RESERVE PROGRAM

From 2008 through February 2013, the Climate Action Reserve registered 32,876,824 Climate Reserve Tonnes (CRTs) and retired 5,728,871 CRTs.



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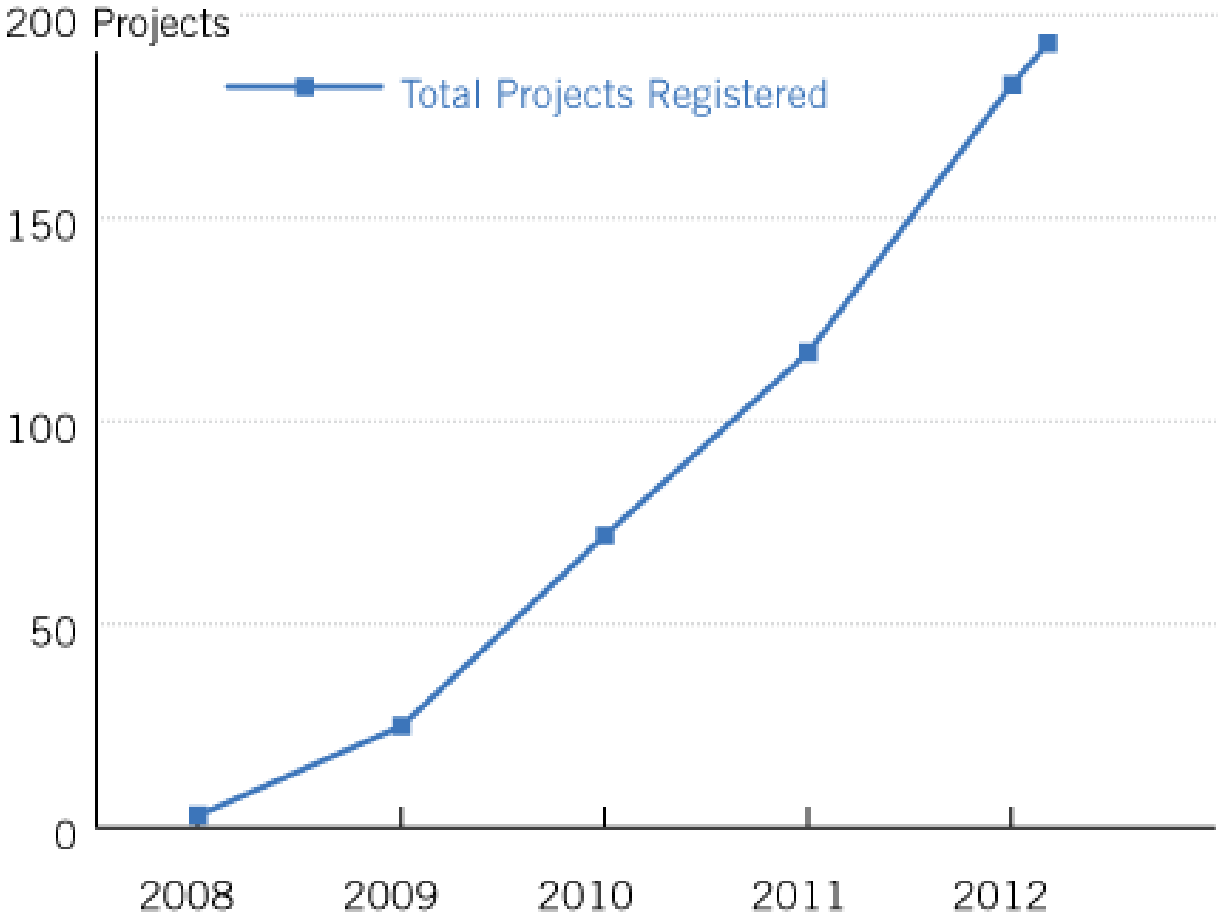


# TOTAL PROJECTS REGISTERED IN THE CLIMATE ACTION RESERVE PROGRAM

From 2008 through February 2013, the Climate Action Reserve registered 193 greenhouse gas emissions reduction projects.



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# Reserve Protocols



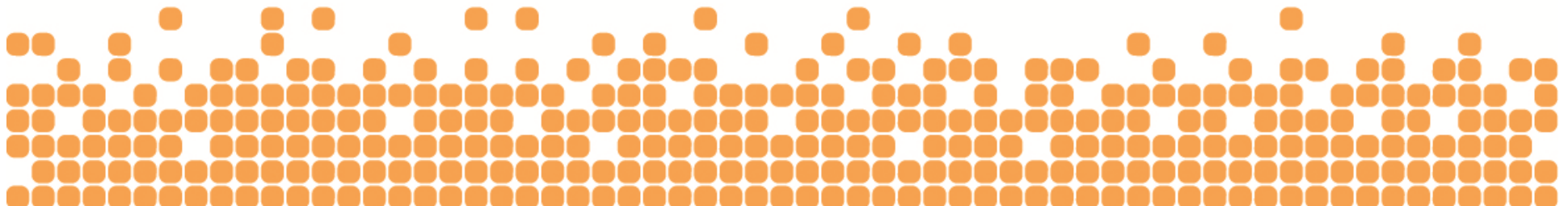
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- Forestry (Reforestation, Improved Forest Management, Avoided Conversion)
- Urban Forestry
- Livestock Methane Capture
- Ozone Depleting Substances (US)
- Landfill Gas Capture
- Organic Waste Digestion
- Coal Mine Methane
- Nitric Acid Production
- Organic Waste Composting
- Rice Cultivation
- Nitrogen Management
- International: Mexico Livestock and Landfill; Article 5 ODS



Compliance

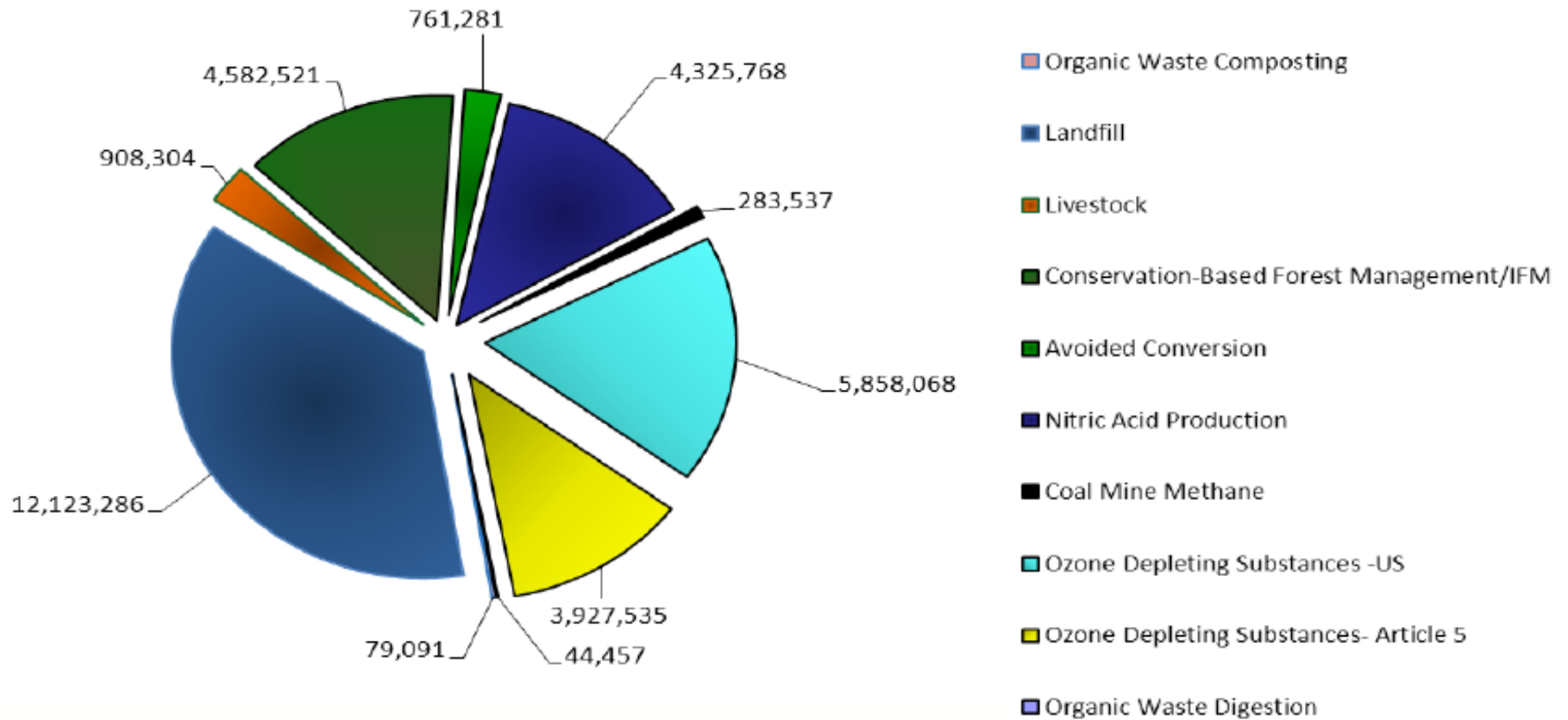
Protocols Under Development: Soil Carbon and Mexico Forestry



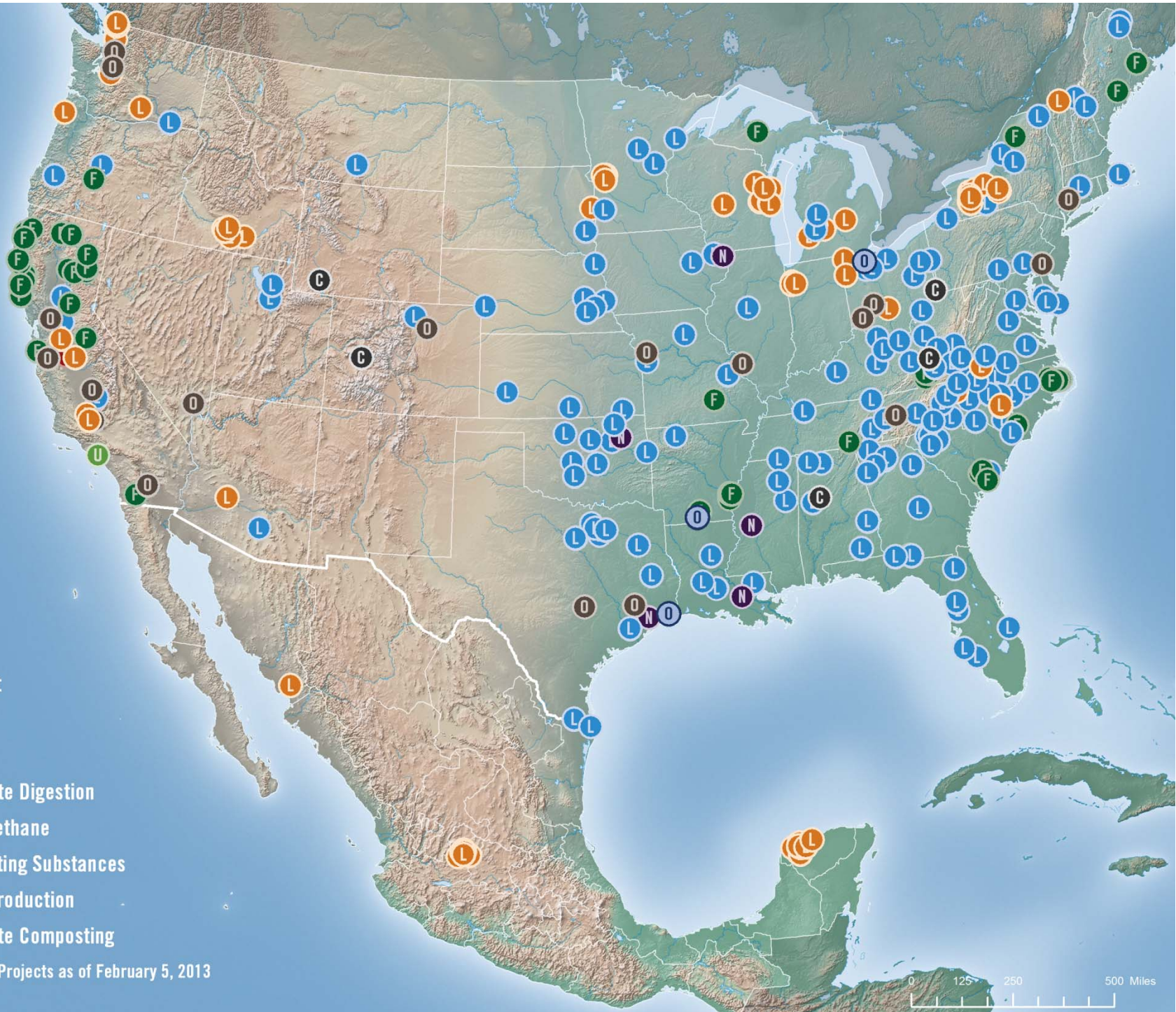
# CRTs by Project Type



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- F** Forest
- U** Urban Forest
- L** Livestock
- L** Landfill
- O** Organic Waste Digestion
- C** Coal Mine Methane
- O** Ozone Depleting Substances
- N** Nitric Acid Production
- O** Organic Waste Composting

Listed & Registered Projects as of February 5, 2013

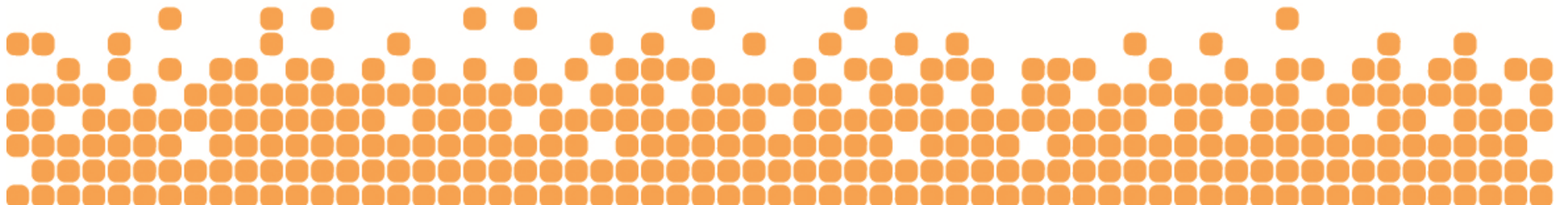




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California Cap-and-Trade Program

# ROLE OF OFFSETS AND OFFSET REGISTRIES

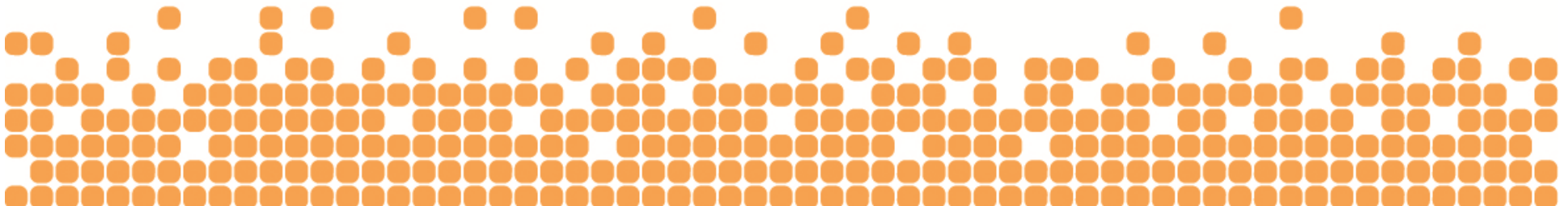




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# California Cap-and-Trade

- State-wide cap on GHG emissions
- Program began Jan 1, 2013 and runs through 2020
  - Divided into three compliance periods
  - **Narrow scope** for 1<sup>st</sup> period; **Broad scope** beginning Jan 1, 2015
- Must have compliance instruments equal to your emissions for each year
  - Allowances: most allocated at the beginning, but auctioned in future years; issuance reduced annually
  - Offsets: can be used in place of allowances on a limited basis



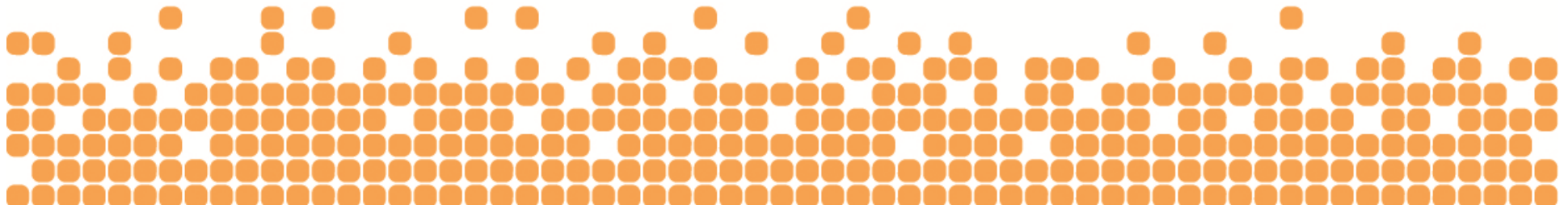




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# Offsets for Compliance

- Compliance obligation can be fulfilled with a mix of allowances and offsets
- Up to 8% of compliance obligation can be fulfilled with offsets
  - Example: If your emissions are 1 million mtCO<sub>2</sub>e, then you can use up to 80,000 offsets for that period
- Offsets must come from projects under CARB-approved protocols
  - Forestry, Urban Forestry, ODS, Livestock
- Project must be registered with a CARB-accredited offset project registry (OPR)



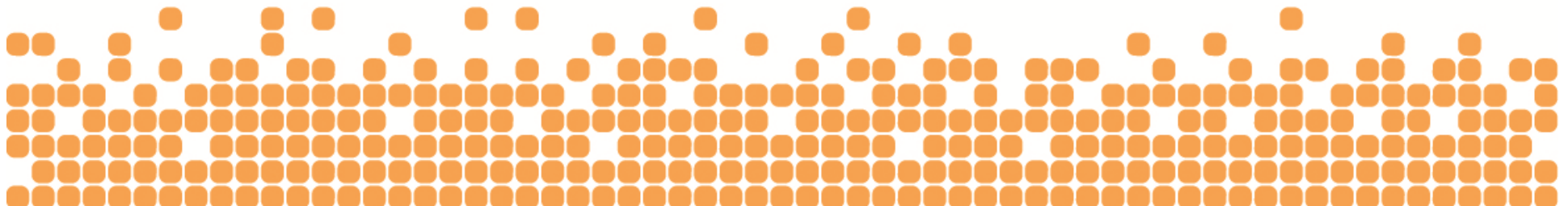
# California Carbon Market: 2013-2020



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\* Source: California Air Resources Board (CARB)

Compliance Period	Year	Allowance Budget (mt CO <sub>2</sub> e)*	Max Offset Demand (8%)
First (narrow scope)	2013	162,800,000	26,800,000
	2014	159,700,000	
Second (broad scope)	2015	394,500,000	91,784,000
	2016	382,400,000	
	2017	370,400,000	
Third (broad Scope)	2018	358,300,000	83,104,000
	2019	346,300,000	
	2020	334,200,000	



# ARB Compliance Protocols



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- **Forestry:** biological sequestration in forests for 100 years
  - Improved Forest Management
  - Reforestation
  - Avoided Conversion
- **Urban Forestry:** CO<sup>2</sup> sequestration in urban tree plantings for 100 years
- **Livestock:** capture and destruction of methane from manure using anaerobic digestion
- **Ozone Depleting Substances:** destruction of potent GHGs from appliances and foams from U.S. sources

## Additional protocols for ARB consideration in 2013:

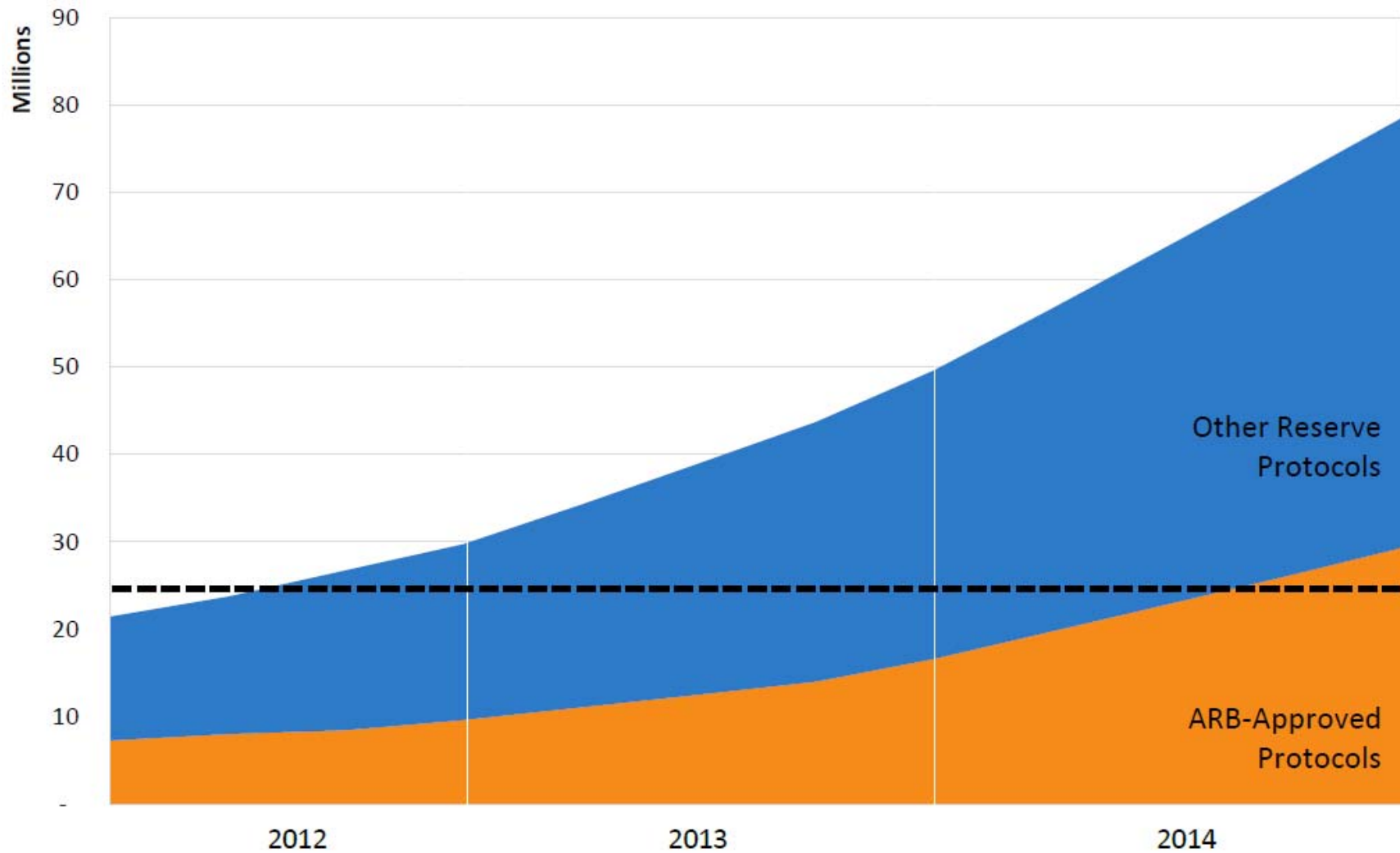
- Coal Mine Methane and Rice Cultivation - [ARB Workshop March 28<sup>th</sup>](#)



# CRT Issuance Projections



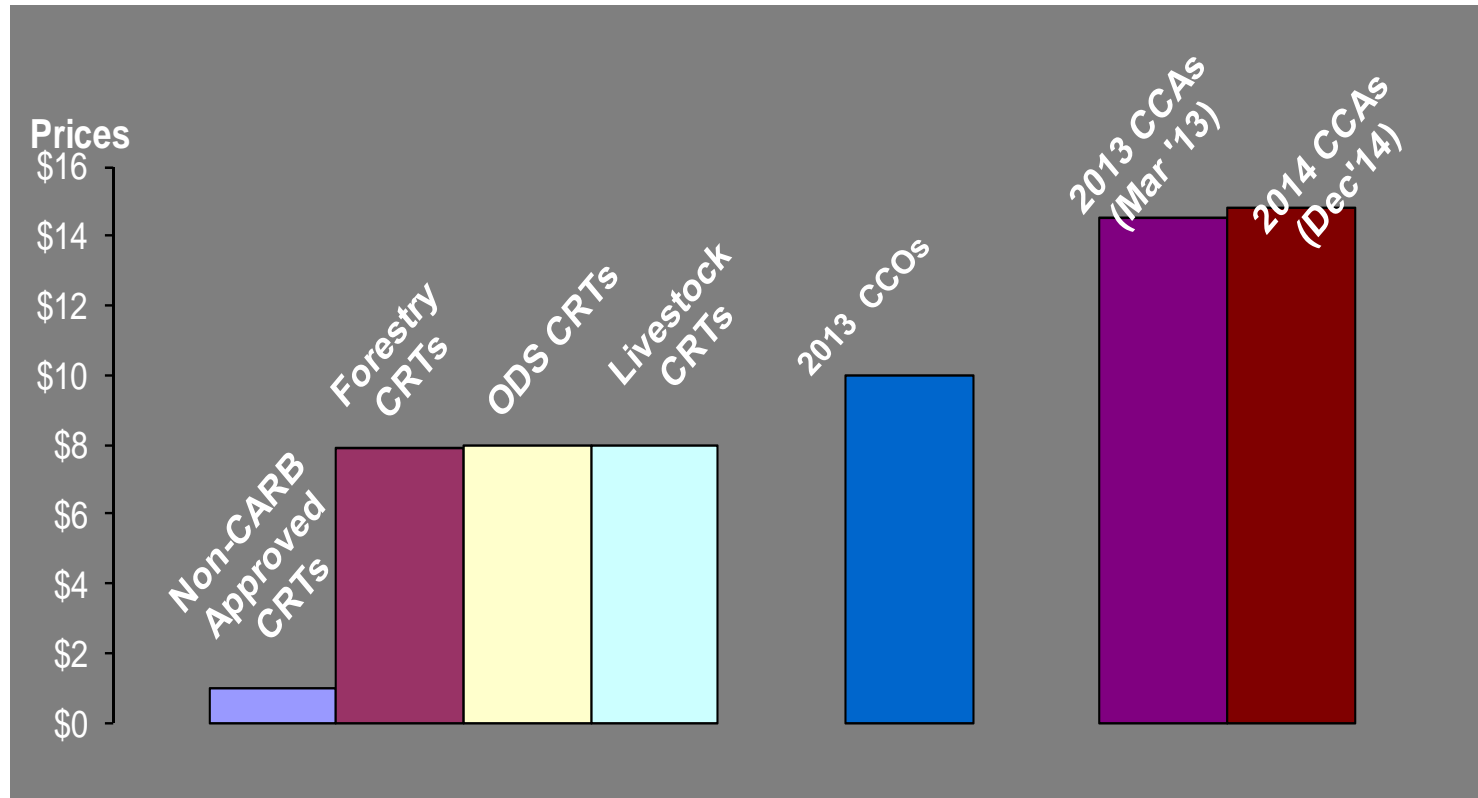
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# Pricing for California Compliance Instruments



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Source: BGC Environmental Brokerage Services

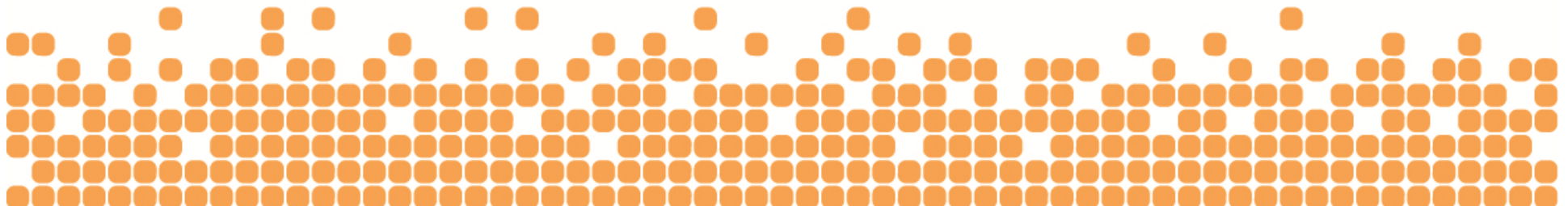


# The Role of Offset Project Registries (OPRs)



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- Climate Action Reserve is accredited by ARB as an Offset Project Registry (OPR)
- OPRs support ARB in the implementation of the cap and trade program by reviewing projects and issuing Early Action Offset Credits and Registry Offset Credits
- These credits cannot be used for compliance, but they can be converted to ARB Offset Credits, which can be used for compliance
- **Only** ARB has authority to issue ARB offset credits for compliance

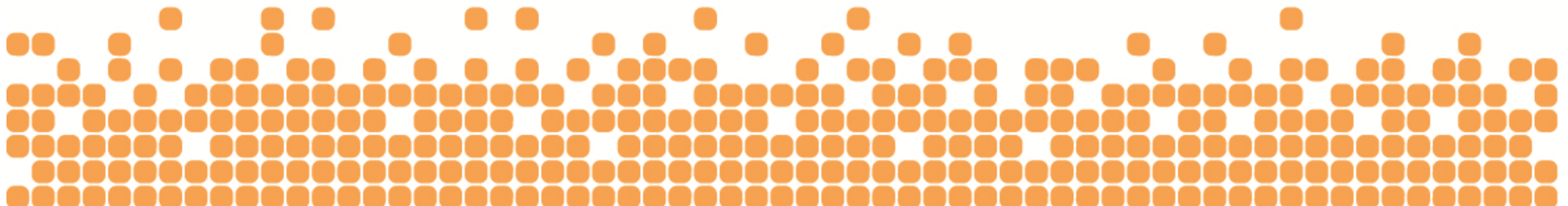


# Air Resources Board Offset Credits (ARBOCs)



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- ARB Offset Credit (ARBOC): Represents one metric ton of CO<sub>2</sub>e emissions reduction or removal
  - Are comparable to what the market currently calls CCOs—California Compliance Offsets
  - ARBOCS are only issued after the issuance and cancellation of a Registry Offset Credit (ROC) or Early Action Offset Credit (EAOC) by an (OPR) Offset Project Registry
  - Can only be held in an account on CITSS, ARB’s tracking system
  - Can only be issued by ARB into a CITSS account
  - Do not expire, but are subject to invalidation rules





# Early Action Offset Credits (EAOCs)



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- CRTs that are issued against approved CAR protocols are EAOCs if they meet all the requirements of the regulation
  - Vintage 2005-2014
  - Listed before January 1, 2014
- Approved CAR protocols for early action:
  - U.S. Livestock versions 1.0 through 3.0;
  - Urban Forest versions 1.0 through 1.1;
  - U.S. Ozone Depleting Substances version 1.0
  - U.S. Forest versions 2.1 and 3.0 through 3.2
- EAOCs can be converted to ARBOCs by applying to ARB



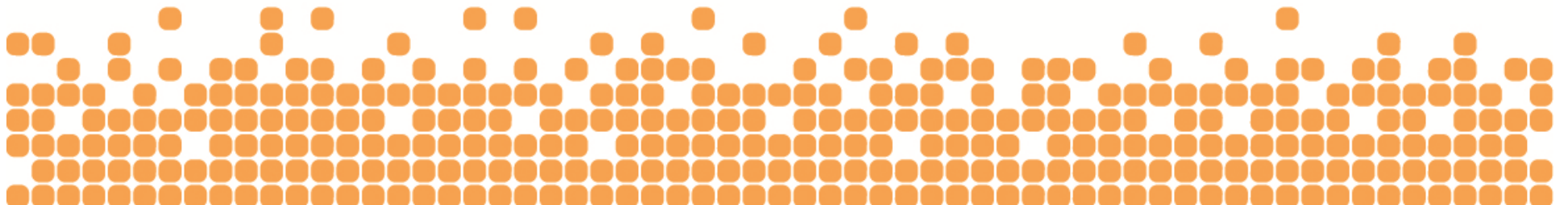


# Transitioning Early Action Projects



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- All projects must transition from using the early action protocols to the ARB compliance protocols no later than February 28, 2015.
  - Forestry projects must subtract out the optional pools
- The good news: The crediting period for the project starts over from the point it begins using the new protocol.

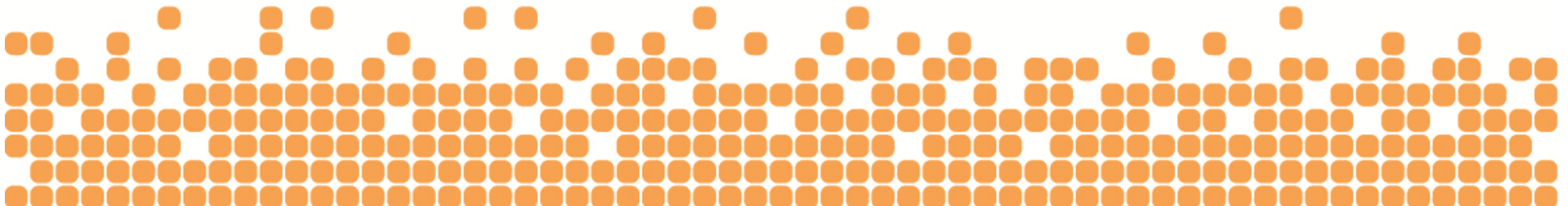


# Registry Offset Credits (ROCs)



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- ROCs are issued by an OPR and can only be held in an account at the OPR
- An account at the Climate Action Reserve can hold both ROCs and CRTs
  - ROCs will have a unique serial number
- CAR projects listed and verified according to existing protocols will continue to generate CRTs. Those listed and verified according to CARB compliance protocols will generate ROCs
  - There is no conversion between ROCs and CRTs
- ROCs are tradable between accounts





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# Issuance of ROCs: Listing with an OPR

- As with registration of projects on the Reserve today, the first step is getting your project listed with an OPR.
- Steps for listing (to be done only by OPO or APD):
  - Register with CARB
  - Submit attestations to CARB and OPR
  - Submit all documents required by the compliance protocol
- Once all documents are submitted, the OPR must respond within 30 calendar days
  - The Reserve generally responds within 10 business days.





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# Issuance of ROCs

- Project should undergo verification by a CARB accredited verification body and receive a positive verification statement.
  - Verifier does a conflict-of-interest review
  - Verification Statement is submitted to OPR
- Within 45 days of receipt, OPR should approve or deny issuance of ROCs or request additional information.
  - Reserve generally does this within 10 business days.



# How to convert ROCs to ARBOCs:



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- Once ROCs have been issued, OPO should provide the following information to CARB:
  - Attestations
  - Listing information from OPR
  - Offset Project Data Reports
  - Offset Project Verification Statements
- CARB will notify OPO and OPR of determination within 60 days.
  - Can approve, deny or request more information
  - If denied, OPO has 10 days to petition for review
  - Final determination within 30 days

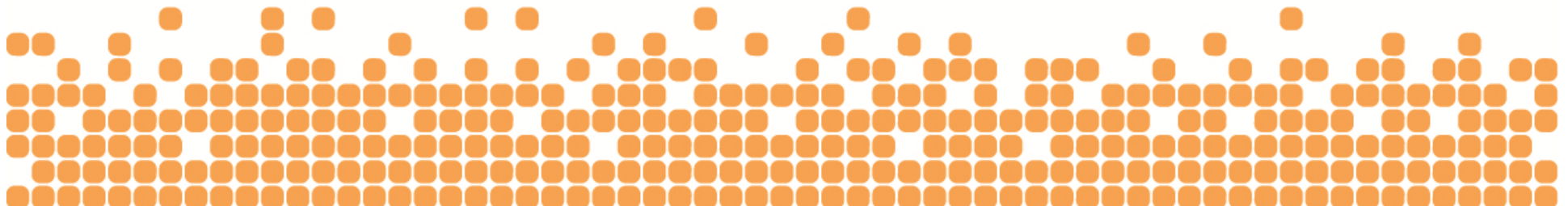




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# Who can receive ARBOCs?

- ARBOCs will generally be issued into the account of the OPO or APD who registered the project with ARB.
- OPO may pre-assign ownership rights to any third party with a CITSS account.
  - In such case, a specified number of ARBOCs will be issued directly to that account





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# Invalidation

- CARB may find that an offset is invalid if
  - Amount of credits is overstated by more than 5%
  - Project is not in accordance with all local, state, and national environmental, health and safety regulations during reporting period
  - Credits have been issued by another program for the same period
- If found invalid, CARB will remove the offsets from the account where they are currently located, whether retired or active
  - Except forest projects, for which forest owner is required to replace any retired credits—not the credit holder





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# Invalidation Time Frame

CARB can find credits invalid within eight years, except for the following:

- For Livestock, Forest and Urban Forest, liability is only for three reporting periods if the project is verified by a different verifier within three years.
- For ODS, liability is only three years if it is re-verified by a second verifier within that time.
  - ODS projects have only a one-year crediting period





# Does it matter where your offset credits come from?



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- YES! In a system with buyer liability, compliance buyers need to understand what they are buying.
  - Buyers need to conduct due diligence on the verifier and OPR.
- The careful work of the OPR in scrutinizing projects helps to protect buyers from invalidation risk later on
- Buyers should be sure their project has been registered through the Reserve.



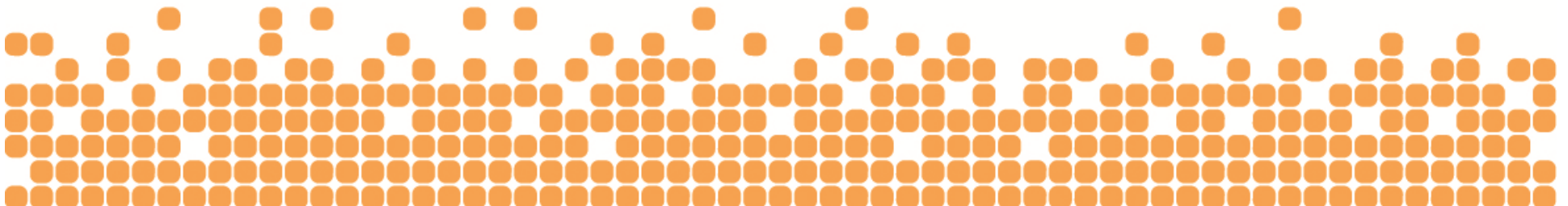


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## Why buy Reserve offsets?

# 1. Meticulous oversight of projects

- The Climate Action Reserve is known for its careful scrutiny of every project in our system.
  - The care we take with every project reduces the oversight burden on buyers and the risk of invalidation.





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## Why buy Reserve offsets?

# 2. Experience

- The Climate Action Reserve has been working on carbon accounting in California for over ten years.
  - We were created for this role by a state law in 2000.
  - Carbon accounting is all that we do.
  - We have years of experience working in close collaboration with California state agencies.
  - We have reviewed 245 projects and issued more than 31 million CRTs overall
  - We have a team of 30 staff dedicated to this program.
  - We are insured against mis-issuance by our staff.
  - We have a well-established process for project review that minimizes delays.



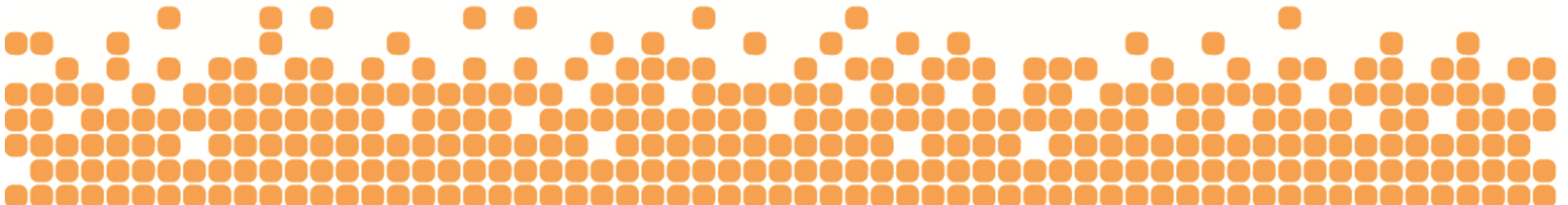


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## Why buy Reserve offsets?

### 3. Responsiveness

- We place a high priority on customer service
- Help desk for all questions available everyday 9-5pm
  - Response to all calls within one business day.
- Ten business day response time on all document submissions.
- Your project will be reviewed promptly, but carefully



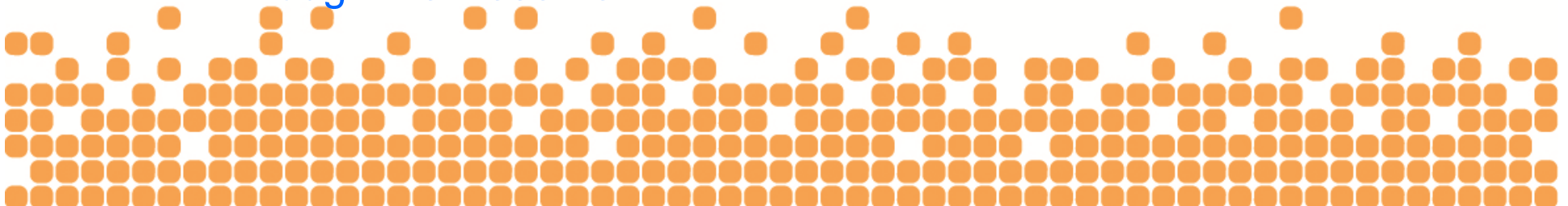
Why buy Reserve offsets?

## 4. We know the protocols and we have the credits



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- We wrote the documents that were the basis for all four of the CARB protocols. We know them better than anyone
- We have years of experience using them with real projects
  - We have reviewed 245 projects with these protocols
- We have issued more than 12 million CARB-eligible CRTs
  - ALL early action-eligible credits to date have been issued through the Reserve



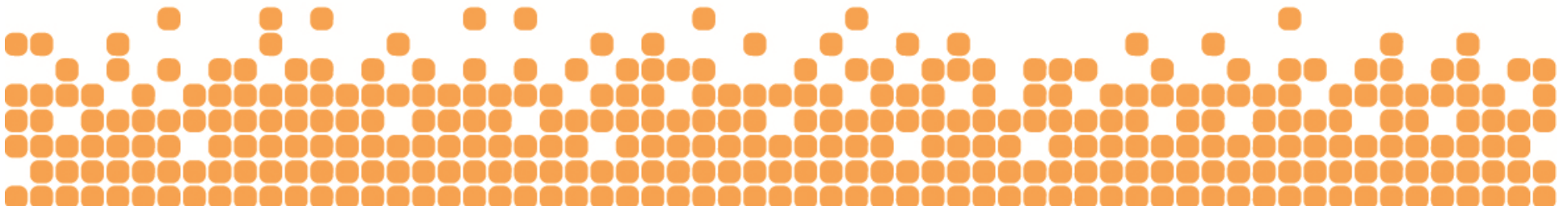


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Why buy Reserve offsets?

## 5. Our goal is 100%

- We are striving for:
  - 100% of CRTs submitted to CARB are successfully converted to ARBOCs.
  - 100% of ROCs issued by the Reserve are successfully converted to ARBOCs
  - 0% of ARBOCs from our projects are invalidated.
- That is what we are focused on!





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# Future Workshops & Webinars

- **Webinars:**

- *The Role of an Offset Project Registry* - March 2013
- Understanding Invalidation Risk - May 2013
- Preparing for Your Desk Review: Forest Projects – June 2013

- **Workshops**

- California Compliance Offset Workshops:
  - April 3<sup>rd</sup>, 1-4pm, Los Angeles
  - April 16<sup>th</sup>, 9-11:30am, San Francisco

Register at: [www.events.climateactionreserve.org](http://www.events.climateactionreserve.org)





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# Questions?



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**Scott Hernandez**  
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February 7<sup>th</sup> 2013

# Contact Information



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