Introduction to the Climate Action Reserve and California Offsets

General Information Webinar

September 6, 2012

CLIMATE ACTION RESERVE

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Legal Disclaimer:

Much 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.

Introduction

CLIMATE ACTION RESERVE

The Reserve: Background and History

- Chartered by California state legislation in 2001
  - Previously known as California Climate Action Registry
  - Mission is to encourage voluntary actions to reduce emissions and to have such emissions reductions recognized
- Balances business, government, and environmental interests
- Supporting the offsets component of CARB's cap and trade program

Board of Directors

CLIMATE ACTION RESERVE

- 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)

Principle Objectives

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- Ensure that offsets have true environmental integrity
- Demonstrate that offsets = useful tool in addressing climate change
- Maintain registry that is rigorous, while streamlined and user-friendly
- Link voluntary carbon markets with emerging compliance markets (CA C&T, WCI, RGGI…)
- Provide expertise on offset standards and policy

Offset Integrity

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- **Real**
  - Can be measured to a high degree of accuracy
  - Is based on an activity that has occurred, not one that is projected to occur in the future
- **Additional**
  - Occurs outside of any regulatory requirement
  - Would not have occurred but for the incentive provided by a GHG market
- **Verifiable**
  - Can be (and has been) independently verified
- **Enforceable**
  - Ownership is undisputed and enforcement mechanisms exist to ensure all program rules are followed
- **Permanent**
  - Is removed from the atmosphere for a minimum of 100 years

What We Do

CLIMATE ACTION RESERVE

1. Develop High Quality Standards
   - Convene stakeholders and lead development of standardized protocols for carbon offset projects

2. Manage Independent Third Party Verification
   - Training and oversight of independent verification bodies

3. Operate a Transparent Registry System
   - Maintain registry of approved projects
   - Issue and track serialized credits generated by projects (Climate Reserve Tonnes = CRTs)

Separation of Roles

- Is not affiliated with the State of California
- Reserve does not fund or develop projects
- Does not take ownership of offsets
- Is not an exchange
- Is a 501(c)3 not-for-profit organization
- Independent third-party verification
  - Consistent with international standards
  - Accreditation done by ANSI
  - Assiduous oversight of verifiers

Performance Standard

- Why a performance standard is different
  - The hard work is upfront
  - Assess industry practice as a whole, rather than individual project activities
- Less subjective determination to qualify
- More certainty in amount of credits
- Lower risk for developers and investors
- Faster project processing

Transparency

- Unparalleled transparency makes the Reserve unique
- Public reports include:
  - All protocols and associated documents
  - List of all account-holders
  - List of all projects and all project documents
  - List of all issued CRTs for every project
  - All retired CRTs

Organic Waste Composting (OWC) Project Submittal Form

What makes the Reserve different?

Linking Multiple Markets

CRTs are purchased by buyers in different markets for a variety of reasons:

- Compliance Market – California Cap-and-Trade
- Western Climate Initiative
- CEQA compliance
- Voluntary corporate buyers
- LEED Certification (USGBC)
- Retail and Individual buyers

Reserve Stats

CRTs registered	**28.3 million**
CRTs retired	*4.2 million (~ 14%)*
Account holders	**384**
Projects submitted	**487**
New	*114*
Listed	*211*
Registered	*153*
U.S. States with Projects	**45**

Reserve Protocols

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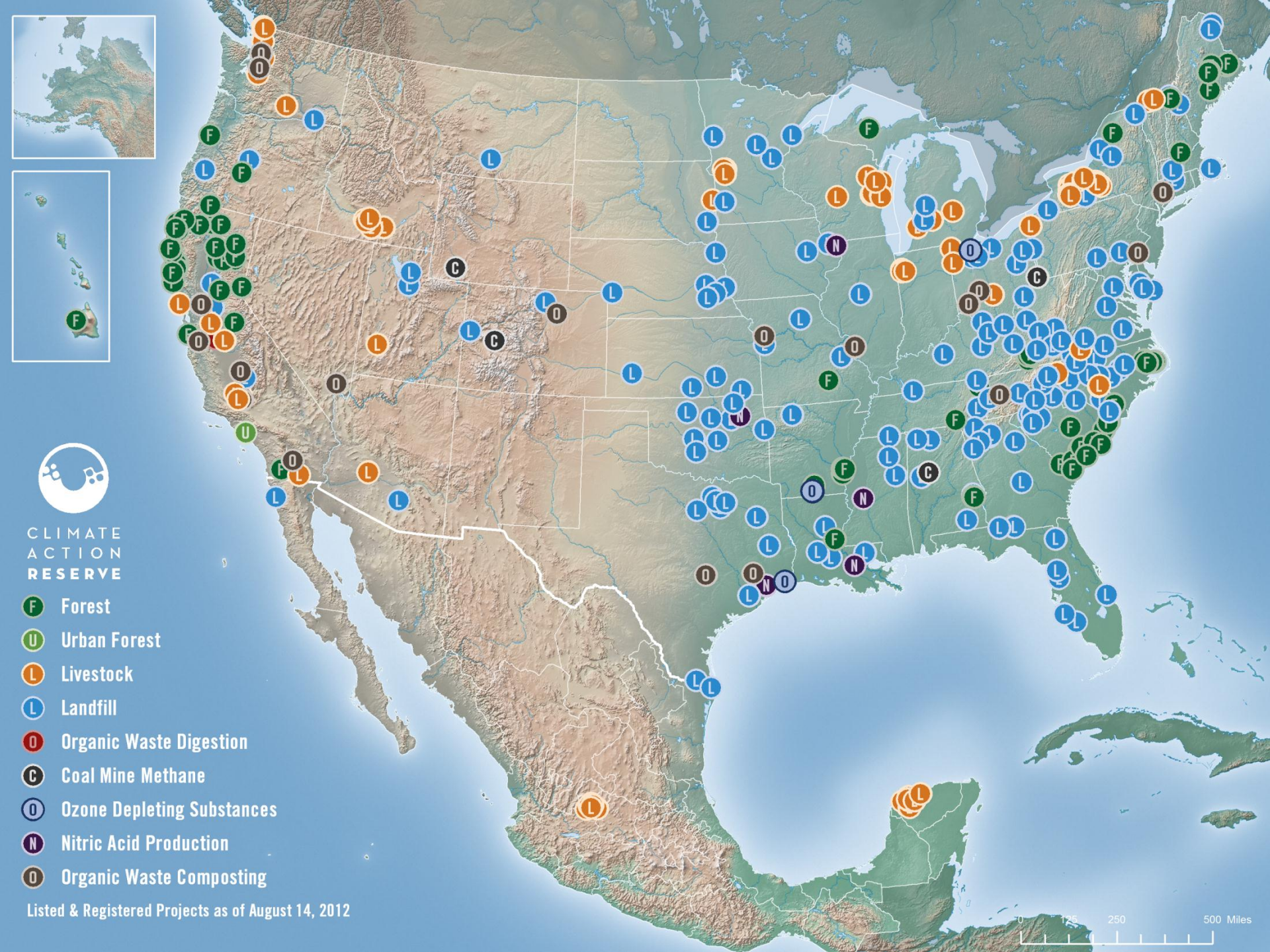
- **Forestry** (Reforestation, Improved Forest Management, Avoided Conversion)
- **Urban Forestry**
- **Livestock Methane Capture**
- **Ozone Depleting Substances (US)**

Compliance

- 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


CLIMATE ACTION RESERVE
Forest
Urban Forest
Livestock
Landfill
Organic Waste Digestion
Coal Mine Methane
Ozone Depleting Substances
Nitric Acid Production
Organic Waste Composting
Listed & Registered Projects as of August 14, 2012
0
125
250
500 Miles

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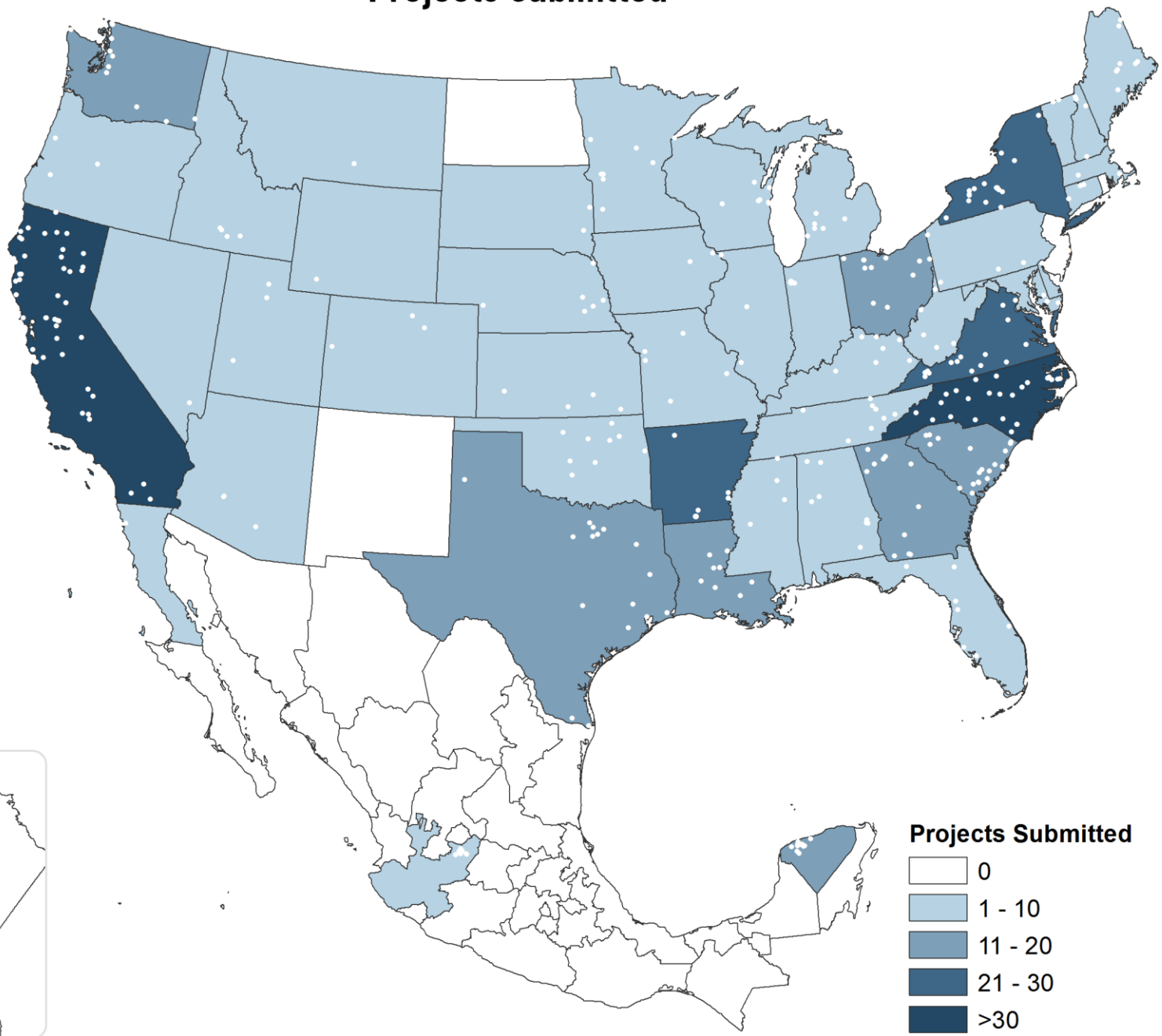
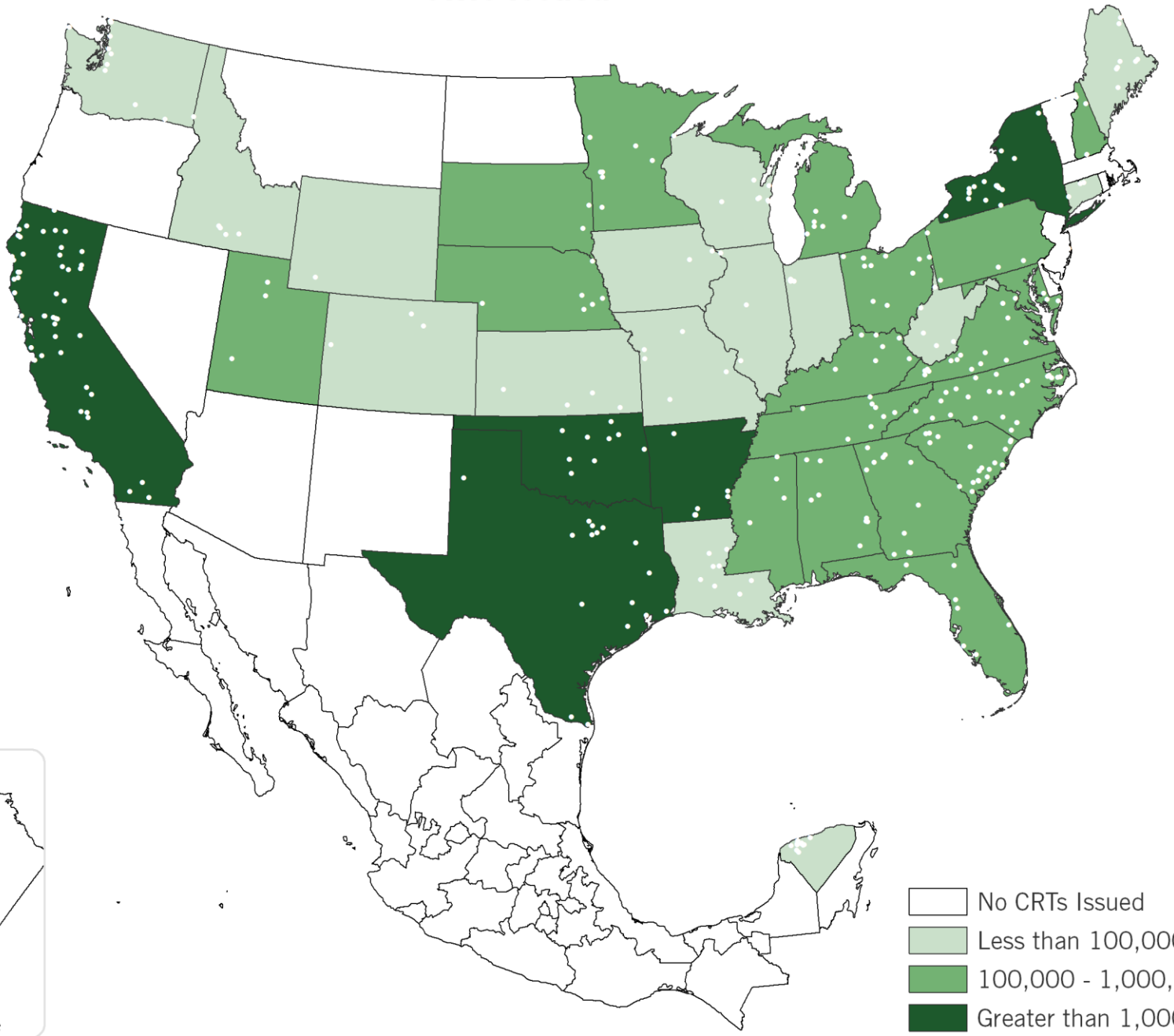
Projects Submitted



CLIMATE ACTION RESERVE

CRTs Issued



How it all works

THE RESERVE PROCESS

Reserve Fee Structure

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Open an Account	**$500**
Annual Account Maintenance	**$500**
Submit a Project	**$500**
CRT Issuance	*$0.20/CRT*
CRT Transfer	*$0.03/CRT*
CRT Retirement	*No Charge*

Verification

- Third-party Verification bodies (VBs) must get accredited to ISO standards by American National Standards Institute (ANSI)
- Lead Verifiers must take protocol-specific and general Reserve training
- VB submits NOVA/COI form and receives approval from Reserve to proceed
- Developer hires accredited and trained VB
  - VB makes determination as to the accuracy of reported CRTs
  - Project documents, verification report and verification opinion submitted to the Reserve

Buying & Selling CRTs

- Must have an account with the Reserve to hold CRTs
- No financial transactions within the system, only CRT transfers
- How to trade?
  - Purchase directly from a Project Developer
  - Purchase through a Trader/Broker/Retailer
  - Purchase futures on an exchange
- Forward sales are very common
- **www.climateactionreserve.org/how/crt-marketplace**

California Carbon Market

CAP-AND-TRADE & CALIFORNIA OFFSETS

Cap-and-Trade in California

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- State-wide cap on GHG emissions
- Program begins Jan 1, 2013 and runs through 2020
  - Divided into three compliance periods
  - **Narrow scope** for 1st 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

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 $mtCO_2e$, then you can use up to 80,000 offsets for that period
- Offsets must come from projects under approved protocols
  - Forestry, Urban Forestry, ODS, Livestock
- Project must be registered with a CARB-accredited Offset Project Registry (OPR)
  - Offset credits transferred into CARB's **Compliance Instrument Tracking System Service (CITSS)** to be used for compliance
  - Registry Offset Credits (ROCs) & Early Action Credits (EAOCs) → ARBOCs

Compliance Protocols

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- **Forestry**: biological sequestration in forests for 100 years
  - Improved Forest Management
  - Reforestation
  - Avoided Conversion
- **Urban Forestry**: CO^2 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 consideration in 2013:

- Coal Mine Methane (CMM), Rice Cultivation and Nitrogen Management

California Carbon Market: 2013-2020

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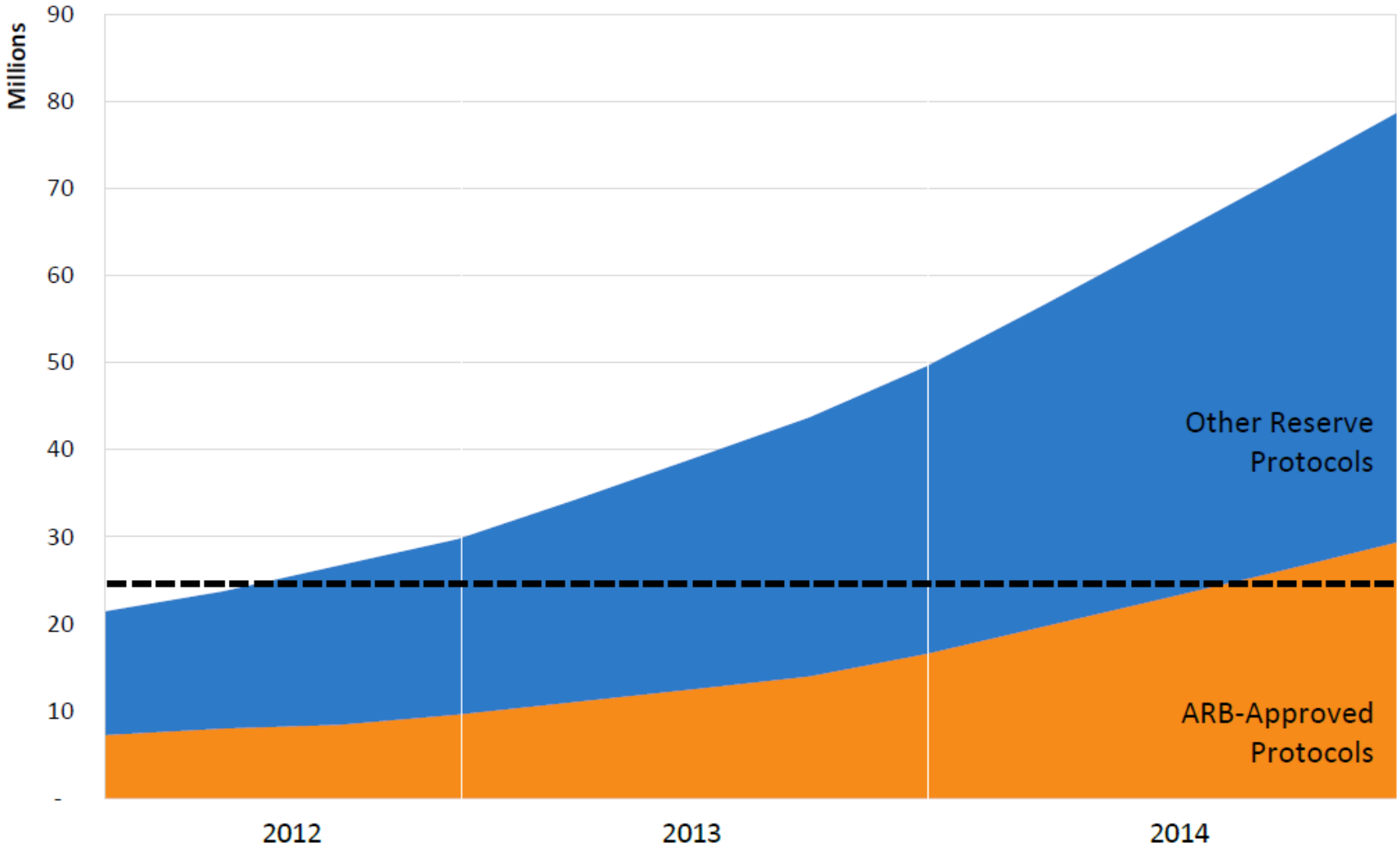
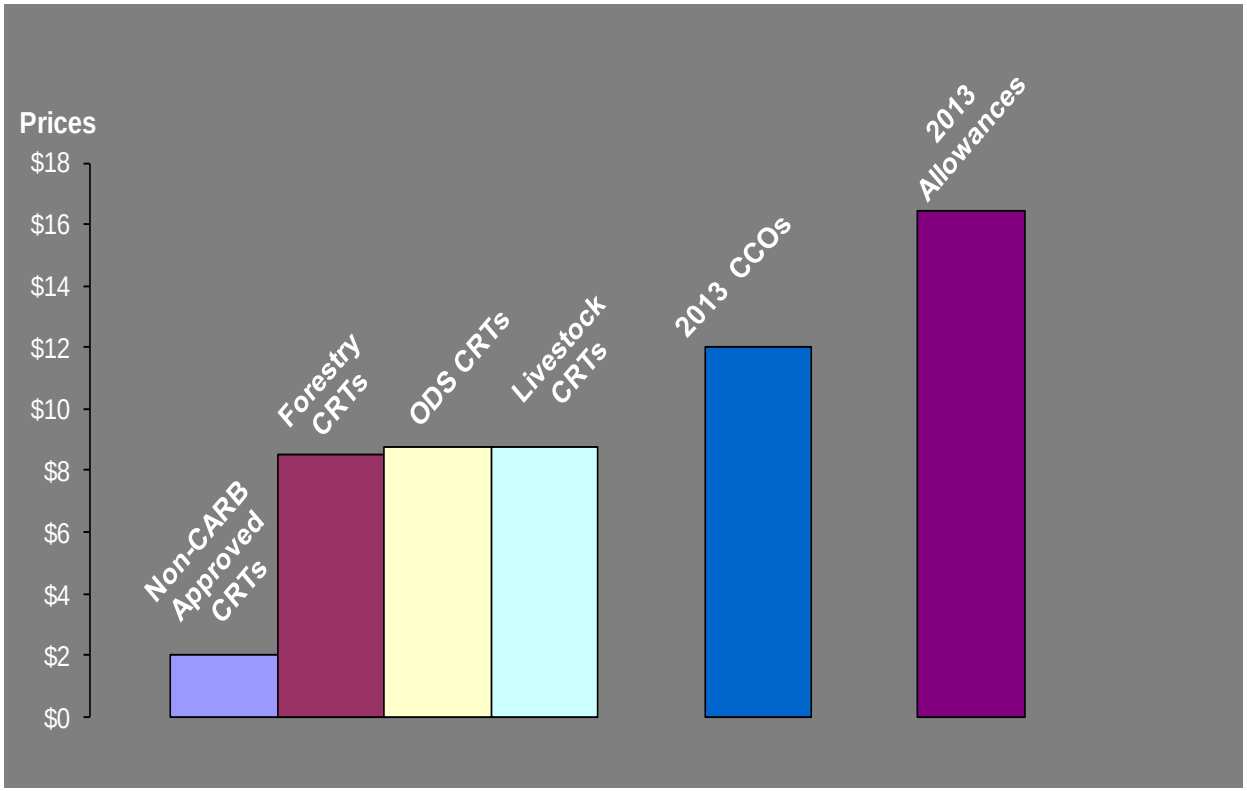
Compliance Period	Year	Allowance Budget (mt CO_2e)*	Max Offset Demand (8%)
First (narrow scope)	2013	162,800,000	**26,800,000**
	2014	159,700,000	
Second (broad scope)	2015	394,500,000	**91,784,000**
	2016	382,400,000	
	2017	370,400,000	
Third (broad Scope)	2018	358,300,000	**83,104,000**
	2019	346,300,000	
	2020	334,200,000	

** Source: California Air Resources Board (CARB)*

CRT Issuance Projections



Pricing for California Compliance Instruments



Trading Volume = 900,000+ contracts cleared by ICE for 2013 CCAs in August

Offsets for Compliance with California Cap-and-Trade

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- CARB will accredit third-party offset project registries (OPRs) to issue compliance offsets and provide registry services
- CARB accepting applications and providing trainings for offset registries and third-party verifiers
- Reserve submitted OPR application and expects formal accreditation in early Fall 2012
  - Currently accepting compliance projects that are listed according to CARB protocols

Listing Compliance Offset Projects with the Reserve

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- Submit eligible projects as compliance projects
  - Generate "Registry Offset Credits" (ROCs)
- Why? Ensure adequate supply of offsets for the first compliance period of California Cap-and-Trade
  - Project registration lead time – registry/verifier accreditation
  - Streamlined verification process (One-step)
  - Lower transaction costs
  - Obtain an initial eligibility review to ensure acceptance by CARB

Transferring Existing Projects to Compliance Listings

- Project Operator (OPO) Must Re-List Project under ABR Compliance Protocol
  - No new project submittal fees
- Submit Compliance Offset Project Listing Information form to the Reserve
- Once approved, project re-listed as a "Pre-ARB Offset Project Submission"
- Early Action Offset Projects (already issued CRTs)
  - Early Action Offset Credits (EAOCs) are CRTs that become ARBOCs when OPO transfers to CARB (CITSS) account

Early Action Offset Credits (EAOCs)

- CRTs that are issued against approved CAR protocols are EAOCs. No conversion is required.
  - 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 CARB according to the procedures described on next slide.

How to convert EAOCs to ARBOCs:

- Open a CITSS account
- Submit attestation to CARB
- Submit project information to CARB:
  - Project name
  - Project location
  - Name of OPO or APD
  - Specific early action protocol
  - Date of project registration and commencement
  - Verification body

Desk Verification:

CARB-approved verification body to conduct a desk review of the project

- Must be different from original VB
- Verifier must submit attestation to CARB

Key Dates for California Cap and Trade Regulation

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- CITSS Website
  - https://www.wci-citss.org/
- September 15: Allowance Allocation
  - Distribution of free allowances to public utilities (POUs)
  - Official notice of auction
- Reserve Compliance Buyers Webinar'
  - https://www1.gotomeeting.com/register/792750344
- November 14: First Auction for Allowances
- January 1, 2013: Program launch

Contact & Information

CLIMATE ACTION RESERVE

www.ClimateActionReserve.org

Program help: help@climateactionreserve.org

Technical help: policy@cilmateactionreserve.org

Phone: (213) 891-1444

http://www.arb.ca.gov/cc/capandtrade/capandtrade.htm