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CLIMATE ACTION RESERVE

The Most Trusted Source for High Quality
Carbon Offsets

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Policy Director



Montréal, Canada, February 8th, 2018



CLIMATE ACTION RESERVE

- Private non-profit, founded in 2001, focused on North America
- **What we do:**
 - Standardized carbon offset protocol development
 - **Voluntary offset registry (credit issuance & tracking)**
 - Compliance Offset Project Registry for California cap-and-trade
 - GHG policy support
 - Climate finance impact assessments
 - Voluntary GHG mitigation activity registry for use under California Environmental Quality Act (CEQA)



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104 million credits issued

- 31M used voluntarily
- 50M used for compliance

18 project protocols (US & MX)

Transparent and user-friendly registry system

Reserve credit marketplace

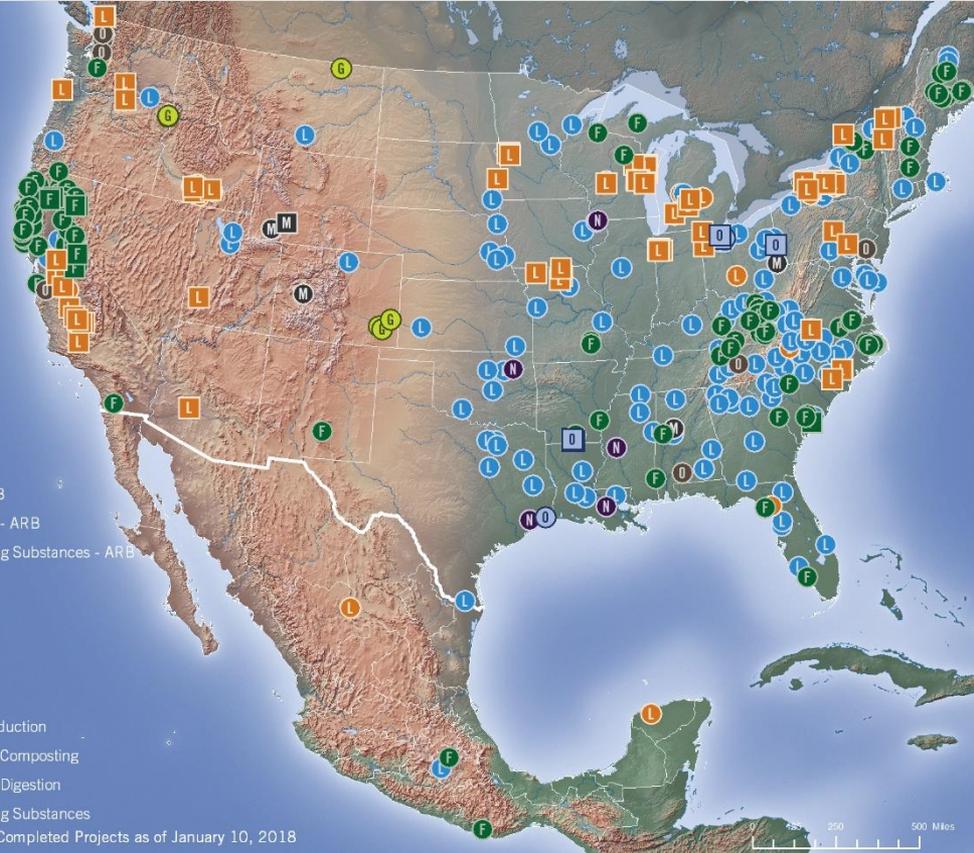
International consulting services for ETS development



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- F Forest - ARB
- L Livestock - ARB
- M Mine Methane - ARB
- O Ozone Depleting Substances - ARB
- F Forest
- G Grassland
- L Landfill
- L Livestock
- M Mine Methane
- N Nitric Acid Production
- D Organic Waste Composting
- D Organic Waste Digestion
- O Ozone Depleting Substances

Listed, Registered & Completed Projects as of January 10, 2018





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Part 1

**How are the emissions units
generated by your programme,
mechanism or project?**



PROJECT REGISTRATION PROCESS



Protocol development involves government, industry, academia, and technical stakeholders

Land use	Agriculture	Industrial sources	Organic waste
<ul style="list-style-type: none"> • Forest * • Urban forest • Grassland 	<ul style="list-style-type: none"> • Livestock manure * • Fertilizer management • Rice cultivation 	<ul style="list-style-type: none"> • Mine methane • Boiler efficiency ^ • Ozone depleting substances + • Nitric acid production 	<ul style="list-style-type: none"> • Landfill gas * • Composting • Anaerobic digestion

* US & MX

^ MX only

+ US, MX, and Article 5 countries





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LOCAL IMPACT: SAN JUAN LACHAO, OAXACA, MEXICO

Project Type	Improved Forest Management 2,388 hectares
Project Activities	Sustainable timber management, conservation, restoration
Market Type	Voluntary
Land Use Rights	Communal
Climate Benefit	15,000-20,000 MtCO ₂ e/year
Community Empowerment	Protocol safeguards land and revenue ownership rights
Initial Investment	~\$800,000 MXN
Buyer	City of Palo Alto: \$136,000 USD investment for 17,000 CRTs = 10% of City's annual emissions



50 COMMUNITY MEMBERS
EMPLOYED BY PROJECT



Part 2

What are the features and benefits of the emissions units generated by your programme, mechanism or project, including the means to ensure their quality?



OFFSET QUALITY

RESERVE PROTOCOLS PROTECT THE VALUE OF YOUR CARBON COMMODITY BY ENSURING THAT GHG REMOVALS ARE:

ADDITIONAL

- Beyond business as usual performance
- Beyond legal requirements

VERIFIABLE

- Standardized eligibility & quantification methodologies
- Third-party verification

REAL

- Conservative methods
- Prescriptive models and equations
- Minimize uncertainty

PERMANENT

- Monitoring & reporting procedures
- Any “reversal” is quantified & compensated

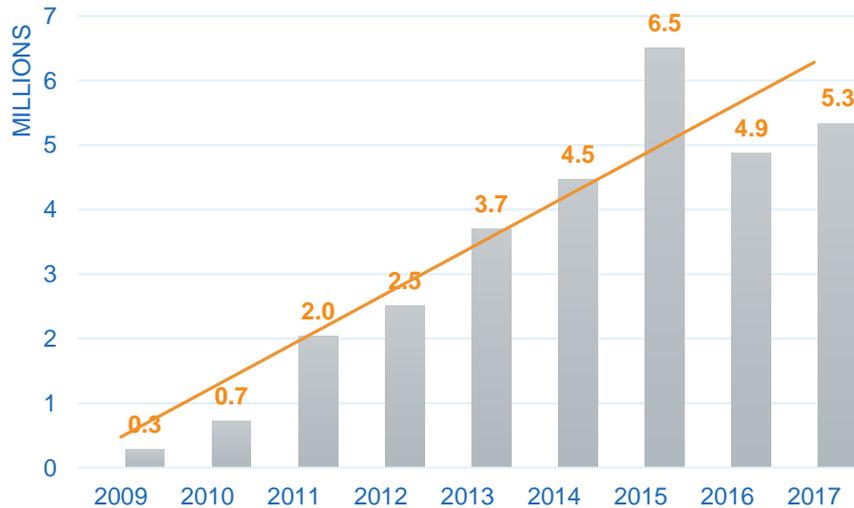
ENFORCEABLE

- Clear ownership
- Processes to ensure program compliance
- Accountability mechanisms



TESTAMENT TO QUALITY

Voluntary CRT Retirement Is Increasing



- Reserve standards adopted for use in **California's Cap-and-Trade** Program
- Leading protocol development for **Ontario and Quebec** markets
- Advancing **project development in Mexico** through training and new tools

4.4MtCO₂e

Transacted Volume in 2016

\$13million USD

Total Value in 2016



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Part 3

Where can potential buyers purchase the emissions units generated by your programme, mechanism or project?



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POLICY DIRECTOR

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Reserve.org



CINDY CHIANG

BUSINESS
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MAX DUBUISSON

PURCHASING CREDITS

Climate Action Reserve Marketplace
www.climateactionreserve.org/how/crt-marketplace

RETAIL	WHOLESALE	BROKERS	EXCHANGES
Reserve account holders who are willing to sell small quantities of CRTs and transfer them or retire them on behalf of a third-party purchaser. In this case, the buyer does not need to have their own account with the Reserve.	Reserve account holders who are interested in selling larger quantities of CRTs to other account holders.	Organizations that provide brokerage services for buyers and sellers interested in transacting larger quantities of CRTs. They may or may not be Reserve account holders, but the CRT transfers still occur within the Reserve system, so the buyer and seller would each need to have a Reserve account.	Platforms for financial transactions tied to trades in CRTs or derivatives contracts associated with CRTs. The actual transfer of CRTs still occurs within the Reserve system, so the buyer and seller would each need to have a Reserve account.



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Part 4

**How does your programme,
mechanism or project track the
use of emissions units?**



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CREDIT TRACKING

- CRTs (Climate Reserve Tonnes) have unique serial numbers
- All projects and CRTs are tracked in a public registry
- “Usage” is tracked through public retirement reports





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CRT ISSUANCE

Project Offset Credits Issued

Date Issued	Project ID	Cooperative ID	Project Name	Project Developer	Project Owner	Project Type	Protocol Version	ARB Eligible	Vintage	Total Offset Credits Issued	Offset Credits Currently in Reserve Buffer Pool	Offset Credits Intended for ARB Buffer Pool	Offset Credits Converted to VQUs	Canceled for ARB Compliance	Canceled	Project Site Location	Project Site State	Project Site Country
01/17/2018	CAR1066		Buck Mountain ARB002	Sierra Pacific Industries	Sierra Pacific Industries	Improved Forest Management - ARB Compliance	ARB Compliance Offset Protocol U.S. Forest Projects, October 20, 2011	Yes	2017	41967		8075				Siskiyou County	CALIFORNIA	US
01/13/2018	CAR1213		Finite Carbon - MWF Adirondacks IFM	MWF Adirondacks, LLC	MWF Adirondacks, LLC	Improved Forest Management - ARB Compliance	ARB Compliance Offset Protocol U.S. Forest Projects, November 14, 2014	Yes	2017	1104787		212562				Franklin, St. Lawrence, & Lewis Counties	NEW YORK	US
01/12/2018	CAR1056		T&M Herrema Dairy	ClimeCo Corporation	ClimeCo Corporation	Livestock - ARB Compliance	ARB Compliance Offset Protocol Livestock Projects, October 20, 2011	Yes	2017	15018						Fair Oaks, Indiana	INDIANA	US
01/12/2018	CAR1041		Sacramento Canyon ARB001	Sierra Pacific Industries	Sierra Pacific Industries	Improved Forest Management - ARB Compliance	ARB Compliance Offset Protocol U.S. Forest Projects, October 20, 2011	Yes	2017	83571		16080				Shasta County	CALIFORNIA	US
01/10/2018	CAR866		Cedar Grove - Maple Valley OWC Composting Project	ClimeCo Corporation	ClimeCo Corporation	Organic Waste Composting	Version 1.1	No	2016	28633						King County	WASHINGTON	US



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VOLUNTARY CRT RETIREMENT (31M)

Corporate Sustainability

DFW Airport

ATL Airport

UPS

Chevrolet

C&S Aviation

United Airlines EcoSkies

21st Century Fox

CB Richard Ellis, Inc.

Citigroup

Kohl's

Walt Disney Company

Adobe Systems

NYSE Group, Inc.

Live Nation

ESPN

Interface Carpets

TransAlta Corp.

Salesforce

Retail Programs

SFO Kiosks

TerraPass

Green-e Climate

Colorado Carbon Fund

ClimateSmart (PG&E)

NW Natural

Green Mountain Energy

Just Energy Income Fund

XOOM Energy





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Central American
and Caribbean
(NACC) Office
Mexico City

South American
(SAM) Office
Lima

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Headquarters
Montréal

Western and
Central African
(WACAF) Office
Dakar

European and
North Atlantic
(EUR/NAT) Office
Paris

Middle East
(MID) Office
Cairo

Eastern and
Southern African
(ESAF) Office
Nairobi

Asia and Pacific
(APAC) Sub-office
Beijing

Asia and Pacific
(APAC) Office
Bangkok



THANK YOU