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CEQA GHG Mitigation Program

January 12, 2018

AGENDA



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- Who We Are
- CEQA GHG Mitigation Program Overview
- CEQA GHG Mitigation Program Processes
- Questions



THE CLIMATE ACTION RESERVE

California Climate Action Registry



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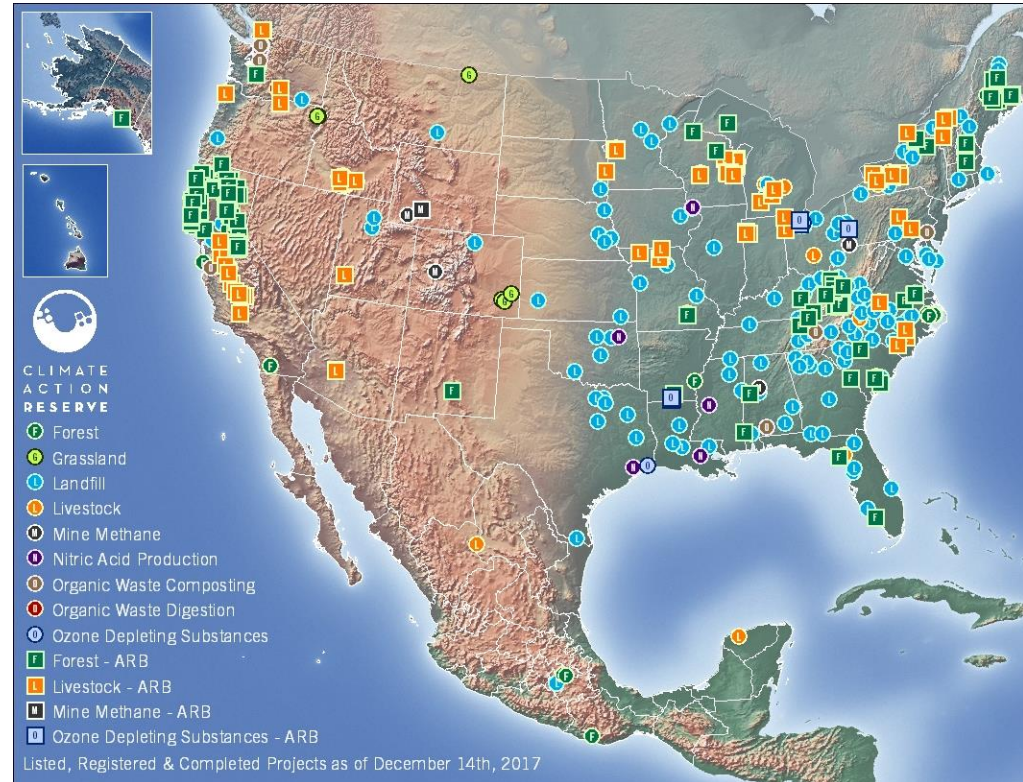
- Nonprofit created by state law in 2001 to set GHG accounting standards, oversee verification, and operate a public registry of emission inventories
 - Goal: establish needed infrastructure and encourage early action to reduce emissions in advance of climate legislation
- With AB32 in 2006, underlying law sunset and CCAR became Climate Action Reserve
 - Independent 501c3 nonprofit with an international scope and a focus on GHG offsets to support California, WCI and other regulatory Cap-and-Trade programs

Climate Action Reserve



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- Largest, most trusted offset registry in North America
 - >100 million offset credits issued
 - Developed 18 carbon offset protocols to date
 - Approved registry for CA cap-and-trade program
- Consult nationally and internationally on offset program design
- Board comprised of representatives of government, business, environmental, and academic sectors





Principal Objectives

- Encourage actions to reduce GHG emissions through market based mechanisms
- Maintain registry that is rigorous, while streamlined and user-friendly
 - Environmental integrity, but not burdensome to use
- Serve voluntary and compliance carbon markets
 - Accredited offset project registry (OPR) under the California Cap-and-Trade Program
 - Continue to develop regulatory quality offset protocols for voluntary and regulated markets



CEQA GHG Mitigation Program



Rationale for the CEQA Registry

- Organizations seek to tailor voluntary reduction strategies that align with their mission/values
- Organizations wish to make “direct investments” in reduction activities
- Organizations want to match ex-ante projection of emissions (required under CEQA) with a similar reduction product (consistent approach to timing)
- Current options often fall short
- CEQA GHG Mitigation Registry is a sub-component of the Reserve’s international Voluntary GHG Mitigation Registry program (under development)



CEQA GHG Mitigation Program

- Currently in **Pilot Phase**
- Provides option to mitigate GHG emissions through direct investment activities
- Third-party oversight and confirmation
- Clear and transparent issuance and retirement mechanism
- “Achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development. “ – California Air Resources Board, “California’s 2017 Climate Change Scoping Plan”, p. 101
 - Avoid legal uncertainty associated with level of GHG emissions reduction required under CEQA



Distinctions From Offset Program

- Intended to offer another option to offsets
 - Offsets recommended to address historical emissions
- Need for more mitigation options, both geographically and by source category
- Ex ante (projected) crediting—mitigation activities to address future emissions
- Forecast Methodology development process
 - Technical peer review
- One time implementation “confirmation” vs. periodic, ex post verification



Program Principles & Eligibility Criteria

- Program consistent with widely recognized GHG project accounting principles
- Project Eligibility Criteria
 - Be real, permanent, quantifiable, **additional**
 - Be unique
 - Be conservatively estimated—more conservative than offset criteria
 - Not cause adverse environmental, social or economic impacts



Key Elements

- Forecast methodologies to be developed by project proponent and reviewed/approved by Reserve
 - Expert review—internal or external depending on methodology
 - Public comment?
 - Board approval?
 - Broad applicability
- Require project implementation confirmation by accredited independent third party
 - Same accuracy threshold as CA Compliance Offset Program
 - Following ANSI standards
- Credits tracked in a publicly accessible registry



Initial Methodologies

- Reserve may develop own methodologies
 - Considering use/adaptation of existing ex ante methodologies (E.G., methodologies associated with California Climate Investments)
- Initial externally submitted methodologies to be considered
 - Livestock
 - Forest
 - Rooftop Solar
 - Pool Cover Energy Efficiency
 - Improved Cookstoves



Project Confirmation

- Third Party Accreditation through ANSI or CDM DOE + additional Reserve requirements
- Conflict of Interest between parties to be assessed for each project
- Must confirm the project has been implemented as described in approved forecast methodology
 - Desktop documentation review and a site visit assessment
- Project Resilience Measures
- Credit issuance contingent upon successful confirmation



Registry Services

- Banking/credit tracking function for account holders
- Transparency and disclosure for public
- Administrator functions for Reserve
- System architecture is highly scalable
 - APX





Example of Project Registry

ARB Compliance Projects																		
Project ID	ARB ID	Project Developer	Project Name	Offset Project Operator	Authorized Project Designee	Verification Body	Project Type	Status	ARB Project Status	Project Site Location	Project Site State	Project Site Country	Total Number of Offset Credits Registered	Project Listed Date	Project Registered Date	Documents	Data	Project Website
CAR1171	CAOD5185	Reclamation Technologies Inc.	A-GAS Americas 2015-1	Reclamation Technologies, Inc.	none		Ozone Depleting Substances - U.S. - ARB Compliance	Completed	Active ARB Project	Bowling Green	OHIO	US	134418	05/15/2015	10/05/2015	View	View	
CAR1236	CAOD5336	Reclamation Technologies Inc.	A-Gas Americas 2016-2	Reclamation Technologies, Inc. (dba A-Gas Americas, Inc.)	None		Ozone Depleting Substances - U.S. - ARB Compliance	Completed	Active ARB Project	Bowling Green	OHIO	US	181191	06/01/2016	08/23/2016	View	View	www.agasamericas.com
CAR1240	CAOD5340	Reclamation Technologies Inc.	A-Gas O'Hare	Reclamation Technologies, Inc. (dba A-Gas Americas, Inc.)	None		Ozone Depleting Substances - U.S. - ARB Compliance	Completed	Active Registry Project	Bowling Green	OHIO	US	111348	09/26/2016	12/06/2016	View	View	www.agasamericas.com
CAR1011	CAOD5018	Reclamation Technologies Inc.	A-GAS RemTec 2013-1	Reclamation Technologies, Inc. dba A-GAS RemTec	None		Ozone Depleting Substances - U.S. - ARB Compliance	Completed	Active Registry Project	Bowling Green	OHIO	US	135577	09/01/2015	01/30/2016	View	View	www.agasamericas.com
CAR1065	CALS5071	California Bioenergy, LLC	ABEC New Hope LLC	California Bioenergy LLC	None		Livestock - ARB Compliance	Registered	Active Registry Project	9547 New Hope Road, Galt, CA 95632	CALIFORNIA	US	7245	06/24/2014	08/02/2016	View	View	www.calbioenergy.com
CAR1187	CAFR5217	Mendocino Redwood Company, LLC	Albion	Mendocino Redwood Company	None		Improved Forest Management - ARB Compliance	Listed	Proposed Project	Mendocino County	CALIFORNIA	US		10/21/2015		View	View	
CAR1094	CAFR5095	Nisqually Land Trust	Ashford III	Nisqually Land Trust, Joe Kane	None		Improved Forest Management - ARB Compliance	Registered	Active ARB Project	Ashford	WASHINGTON	US	46876	09/23/2014	10/22/2015	View	View	
CAR1152	CALS5152	Aurora Ridge Dairy, LLC	Aurora Ridge Dairy	Aurora Ridge Dairy, LLC	Ag Methane Advisors, LLC		Livestock - ARB Compliance	Registered	Active Registry Project	Cayuga County	NEW YORK	US	24217	02/26/2015	11/09/2016	View	View	
CAR1110	CAFR5110	Sierra Pacific Industries	Backbone	Sierra Pacific Industries	None	SCS Global Services	Improved Forest Management - ARB Compliance	Listed	Proposed Project	Shasta County - East of Redding	CALIFORNIA	US		01/21/2015		View	View	
CAR1090	CAFR5085	Sierra Pacific Industries	Big Bend	Sierra Pacific Industries	None	SCS Global Services	Improved Forest Management - ARB Compliance	Listed	Proposed Project	Shasta County	CALIFORNIA	US		08/06/2014		View	View	



Example of Retirement Report

Retired Offset Credits																	
Vintage	Offset Credit Serial Numbers	Quantity of Offset Credits	Status Effective	Project ID	Project Name	Project Type	Protocol Version	Project Site Location	Project Site State	Project Site Country	Additional Certification(s)	Account Holder	Retirement Reason	Retirement Reason Details			
2016	CAR-1-US-639-30-449-TX-2016-2052-12941 to 234772	221,832	09/14/2016	CAR639	El Dorado Nitrogen, LP - Nitrous Oxide Abatement Project	Nitric Acid N2O-Secondary Catalyst	Version 2.1	Chambers County; near Baytown	TEXAS	US		LSB Industries, Inc.	On Behalf of Third Party				
2016	CAR-1-US-639-30-449-TX-2016-2052-12441 to 12932	492	08/29/2016	CAR639	El Dorado Nitrogen, LP - Nitrous Oxide Abatement Project	Nitric Acid N2O-Secondary Catalyst	Version 2.1	Chambers County; near Baytown	TEXAS	US		ClimeCo Corporation	On Behalf of Third Party	2016 Green Sports Alliance Summit			
2016	CAR-1-US-416-5-212-WA-2016-2103-1 to 9351	9,351	10/31/2016	CAR416	Farm Power Rexville Regional Digester	Livestock Gas Capture/Combustion	Version 2.0	Mount Vernon	WASHINGTON	US		The Climate Trust	Retail Program Requirements	Retired for NW Natural's Smart Energy Program			
2016	CAR-1-US-998-5-212-CA-2016-2093-1 to 2934	2,934	10/31/2016	CAR998	Maas Energy Works Van Warmerdam Dairy Digester	Livestock Gas Capture/Combustion	Version 4.0	Galt, CA	CALIFORNIA	US		The Climate Trust	Retail Program Requirements	Retired for NW Natural's Smart Energy Program			
2016	CAR-1-US-998-5-212-CA-2016-2093-2935 to 3247	313	10/31/2016	CAR998	Maas Energy Works Van Warmerdam Dairy Digester	Livestock Gas Capture/Combustion	Version 4.0	Galt, CA	CALIFORNIA	US		The Climate Trust	Compliance Requirements	Retired for PGE's Port Westward 2 Facility			
2015	CAR-1-US-807-4-592-TN-2015-2059-1 to 26302	26,302	09/14/2016	CAR807	Alcoa Landfill Gas Destruction Project	Landfill Gas Capture/Combustion	Version 3.0	Blount County; Friendsville	TENNESSEE	US		Alcoa Gas Producers, LLC	On Behalf of Third Party				
2015	CAR-1-US-888-4-666-TX-2015-2049-1 to 14174	14,174	08/30/2016	CAR888	Angelina County Landfill	Landfill Gas Capture/Combustion	Version 3.0	Lufkin	TEXAS	US		Element Markets, LLC	On Behalf of Third Party				
2015	CAR-1-US-574-4-234-SC-2015-2026-1 to 12997	12,997	08/29/2016	CAR574	Berkeley County Landfill Gas Project	Landfill Gas Capture/Combustion	Version 2.1	Berkeley County	SOUTH CAROLINA	US		Blue Source, LLC	On Behalf of Third Party				



Example of Project Documents

Project Documents

Project ID: CAR

Project Name: Bunc

Vintage	Documents	Document Type
2016	2016 Attestation of Title.pdf	Attestation of Title
2016	2016 Attestation of Reg Compliance.pdf	Attestation of Regulatory Compliance
2016	2016 Attestation of Voluntary Implementation.pdf	Attestation of Voluntary Implementation
2016	CAR531 Buncombe County Verification Report 2016 Final.pdf	Verification Report
2016	CAR531 Buncombe County Verification Statement 2016 Final.pdf	Verification Statement

Program Development



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Category	Status	Materials
Program Guidelines	Complete	Program Manual
Confirmation Body Guidelines	Complete	Program Manual, General Training
Conflict of Interest Guidelines	Complete	Program Manual, NOCA/COI Form, Technical Expert COI Form
Forecast Methodology Guidelines + Procedures	Partially Complete/In Progress	Program Manual, Forecast Methodology Approval Manual, Forecast Methodology Submission Form (January 2018)
Programmatic Forms	Partially Complete/In Progress	Project Submission Form, Attestations (January 2018), Confirmation Statement (January 2018)
Registry Software	In Progress	APX Registry (February 2018)
Internal Guidelines	In Progress	Internal Operating Procedures (February 2018)



CEQA GHG Mitigation Program Processes

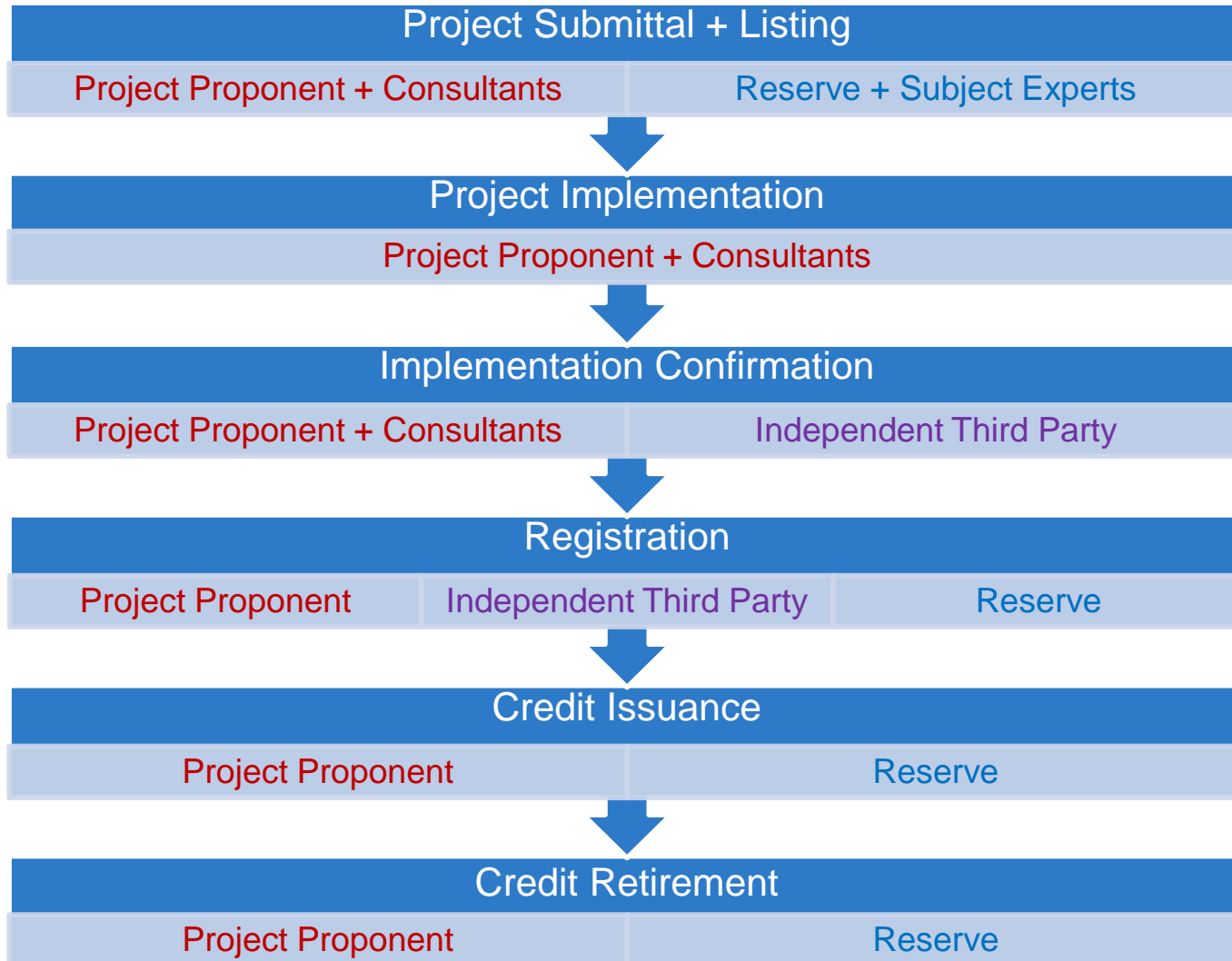


Methodology Process





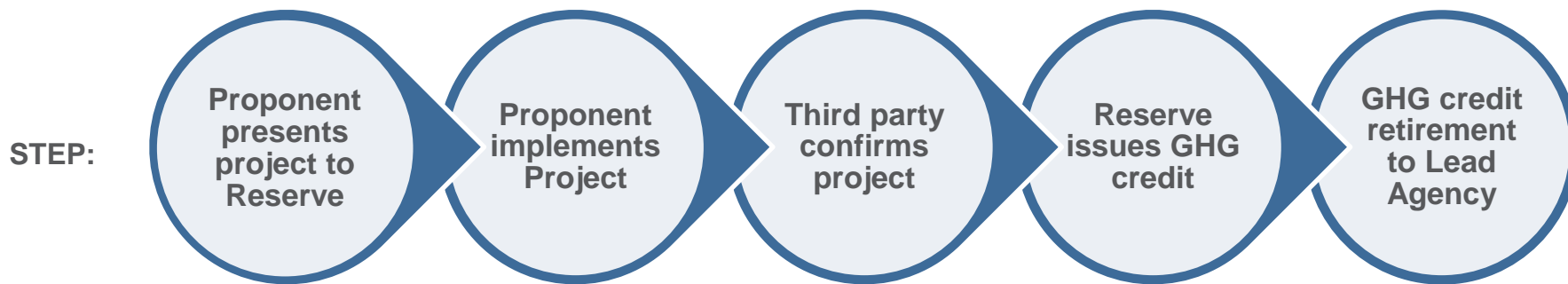
Project Cycle



In Action



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Fee Structure

GHG Mitigation Registry Fees	Fee Amount
Forecast Methodology Submission Fee	\$5,000
Forecast Methodology Peer Review Fee	Variable
Account Setup Fee	\$500
Account Maintenance Fee	\$500
Project Submittal Fee	\$500
Credit Issuance Fee (per credit)	\$0.25
Transfer Fee (per credit)	\$0.05
Retirement Fee	No Charge

Contact



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Please send any additional comments or questions regarding this program to:

CEQAregistry@climateactionreserve.org

Craig Ebert, President

Robert Z. Lee, Program Director



Questions?