



CLIMATE  
ACTION  
**RESERVE**

## ABOUT THE RESERVE

**The Climate Action Reserve is an environmental nonprofit organization that promotes the reduction of greenhouse gas (GHG) emissions through credible market-based policies and solutions.**

With deep roots in California and a reach across North America, the Reserve encourages actions to reduce GHG emissions and works to ensure environmental benefit, integrity, and transparency in market-based solutions to address global climate change.

A pioneer in carbon accounting, the Reserve serves as an approved Offset Project Registry (OPR) for the State of California's Cap-and-Trade Program and plays an integral role in supporting the issuance and administration of compliance offsets. The Reserve also establishes high quality standards for offset projects in the North American voluntary carbon market and operates a transparent, publicly-accessible registry for carbon credits generated under its standards.

The Reserve also supports GHG reductions at the scale and urgency necessary to meet the climate challenge with its Climate Forward program, which fosters proactive investment in future GHG reduction projects as a means to address emissions that are forecasted to occur, and its Climate Impact Score program, which provides quantification and assessment of the climate impact of projects financed by investments.

Additionally, the Reserve hosts the annual North American Carbon World conference, the premier event for climate and carbon professionals to learn, discuss, and network.

The Climate Action Reserve is a private 501(c)(3) nonprofit organization headquartered in Los Angeles, California.

## MISSION

**To develop, promote and support innovative, credible market-based climate change solutions that benefit economies, ecosystems, and society.**

## VISION

**A global economy that accelerates climate actions through full and accurate accounting of their costs and benefits.**

## VALUES

**Environmental Leadership • Integrity • Transparency • High Quality Customer Service**





## WHAT SETS US APART?

### Depth of Knowledge and Experience

Since 2001, the Reserve has been working to promote actions to reduce GHG emissions. The Reserve is a pioneer in creating comprehensive, regulatory-quality standards that quantify GHG emissions. The Reserve's depth of knowledge and expertise with GHG accounting, protocol development, and program implementation allow it to identify and resolve potential problems, ensure the environmental integrity of GHG projects and assessments, and bring confidence to market-based solutions to climate change.

### Integrity and Transparency

The integrity of the Reserve's programs is founded on its rigorous standards, unparalleled level of transparency, and regulatory-quality program operations. The Reserve employs conservative accounting methodologies in its protocols, requires strict documentation of project activities, continuously updates its performance standards to reflect industry practices and innovations, enforces environmental and social safeguards for all projects, and develops methodologies through a transparent, public process.

### Pioneering Multi-Stakeholder Support

The Reserve engages diverse parties that have a role in protecting our environment, including government, business, academia, and environmental organizations. Stakeholders from each sector play an integral role in our programs, from sharing insight as participants in protocol development workgroups to providing guidance as members of the Board of Directors. The Reserve's programs serve as crucial meeting points where diverse parties come together, collaborate toward a common goal, and produce significant results in the advancement of climate solutions.

### High Level of Customer Service

The Reserve prides itself on providing the highest quality customer service. Our well-designed and well-practiced program procedures support efficiency, confidence, and responsiveness during the project registration process. We offer user-friendly and practical accounting tools, training, and outreach to support project development and implementation. We work hard to understand the needs of our account holders and provide experienced guidance on protocols, quantifications, and other project-specific questions. The Reserve earns high ratings for responding in a timely manner and serving as an informational and educational resource to account holders.

### Market Value

Voluntary offset credits issued by the Reserve, called Climate Reserve Tonnes (CRTs), have consistently ranked among the highest valued offset credits since their first appearance in the carbon market. Buyers have confidence in knowing GHG emissions reductions from Reserve projects are real, additional, verifiable, enforceable, and permanent.



# RESERVE U.S. OFFSET PROTOCOLS

## Coal Mine Methane Protocol\*



Provides a standardized approach for quantifying, monitoring, and verifying GHG reductions from projects that destroy methane at active underground coal and trona mines. Methane is over 21 times more potent at trapping GHGs in the atmosphere than carbon dioxide.

## Forest Protocol\*



Provides guidelines for reforestation, avoided conversion, and improved forest management activities that permanently increase carbon sequestration and storage.

## U.S. Livestock Protocol\*



Provides guidance for the installation of a manure biogas (methane) control system for livestock operations, such as dairy cattle and swine farms.

## Ozone Depleting Substances (ODS) Protocols (U.S.\* and Article 5 Countries)



Supports the destruction of eligible ODS with high global warming potential. Projects must collect, track, and destroy ODS refrigerants (also ODS foam blowing agents under the U.S. protocol) that have been phased out of production.

## Urban Tree Planting Protocol\*



Provides guidance to quantify and verify increases in GHG sequestration from tree-planting activities in urban communities conducted by utilities, municipalities, and educational institutions.

## Adipic Acid Production Protocol



Provides guidance on how to quantify, monitor, report, and verify nitrous oxide (N<sub>2</sub>O) emission reductions at adipic acid production facilities.

## Grassland Protocol



Provides guidance on how to quantify, monitor, report, and verify GHG emission reductions associated with the avoided conversion of grassland to cropland.

## U.S. Landfill Protocol



Provides guidance for the installation of a methane gas collection and destruction system at landfill operations.

## Nitric Acid Production Protocol



Provides an accurate accounting methodology for GHG reductions achieved from the installation of nitrous oxide (N<sub>2</sub>O) abatement technology. Due to its long atmospheric lifetime and heat trapping effects, N<sub>2</sub>O is nearly 310 times more potent than carbon dioxide.

### **Nitrogen Management Protocol**



Provides standards to account for nitrogen reductions from agricultural management practices that reduce the application of synthetic nitrogen fertilizer in crop production.

### **Organic Waste Composting Protocol**



Provides a standardized approach for projects that avoid methane emissions through the diversion and composting of food waste and food soiled paper waste that would otherwise have decomposed in a landfill.

### **Organic Waste Digestion Protocol**



Addresses GHG reductions achieved through the diversion of organic waste and/or wastewater streams from uncontrolled anaerobic storage, treatment, and disposal facilities to a biogas control system designed to capture and destroy methane.

### **Rice Cultivation Protocol\***



Provides a clear standard for how to reduce GHG emissions by changing water and residue management practices in rice farming.

### **Soil Enrichment Protocol**



Provides guidance on agricultural practices that enhance carbon storage in soils.

### **Urban Forest Management Protocol**



Provides standards for cities and urban areas to earn offset credits across an entire urban area by adopting activities that increase the total amount of carbon stored in the trees, such as managing healthy, vigorous trees that are well-spaced and avoiding tree removals.

### **Urban Tree Planting Protocol**



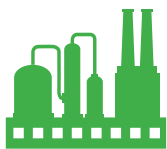
Provides standards for cities and urban areas to earn offset credits across an entire urban area by planting new trees to increase and/or conserve urban forest carbon stocks.

\* Protocols that have been adopted for use in California's Early Action Offset Program and/or that serve as the underlying protocols for California's Compliance Offset Program.



# RESERVE INTERNATIONAL OFFSET PROTOCOLS

## Mexico Boiler Efficiency Protocol



Addresses GHG emission reductions associated with energy efficiency improvements to commercial and industrial boilers in Mexico.

## Mexico Landfill Protocol



Provides guidance for the installation of a methane gas collection and destruction system at landfill operations in Mexico.

## Mexico Forest Protocol



Provides standardized guidance for carbon enhancement projects within a REDD+ framework and addresses eligibility, baseline, inventory, permanence, social and environmental safeguards, and measurement, reporting, and verification (MRV) requirements.

## Mexico Livestock Protocol



Provides guidance for the installation of a manure biogas (methane) control system for livestock operations, such as dairy cattle and swine farms, in Mexico.

## Mexico Halocarbon Protocol



Supports the destruction of eligible halocarbons sourced from Mexico and destroyed at facilities in Mexico.

## Canada Grassland Protocol



Supports the GHG emission reductions associated with the avoided conversion of grassland to cropland in Canada.





## COMPLIANCE OFFSET MARKET

The State of California's Cap-and-Trade Program is a key component of its strategy to meet emissions reduction targets under AB 32, which requires reductions in GHG emissions to 1990 levels by 2020, and AB 398, which requires reductions in GHG emissions to 40 percent below 1990 levels by 2030. Under the program, entities under the cap may use offsets for up to eight percent of their compliance obligation through 2020, four percent from 2021-2025, and six percent from 2026-2030.

As an OPR in California's program, the Reserve issues Registry Offset Credits (ROCs) under California Air Resources Board's (CARB) six Compliance Offset Protocols (ODS, Livestock, U.S. Forest, Urban Forest, Mine Methane Control, and Rice Cultivation). Several Reserve offset protocols underpin the compliance protocols developed for the program and served as a resource for guidance and groundwork during the protocol development process.

Because of our knowledge, experience, and customer service, the Reserve has become the premier registry for ROCs. Our knowledge of and experience with the compliance protocols give project developers and buyers confidence in the credits issued. The Reserve's standing as the registry-of-choice for participants in California's Cap-and-Trade Program is evident in the large number of early action and compliance projects listed with it.

## VOLUNTARY OFFSET MARKET

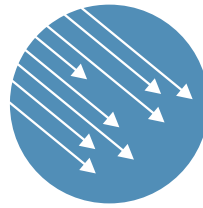
With 22 protocols adopted for use in the United States, Mexico, and Canada and over 400 offset projects registered across 45 U.S. states and 10 Mexico states, the Reserve offers buyers the opportunity to find the most meaningful offsets in various sectors and geographies to meet their sustainability goals.

The Reserve's rigorous protocols and program oversight ensure that offsets registered in its voluntary program are real, additional, permanent, verifiable, and enforceable. The value of and preference for Reserve offsets, called Climate Reserve Tonnes (CRTs) in the voluntary market is evident in the robust volume of offset credits registered, transacted, and retired. Companies can meet carbon neutral or net zero goals in a cost-efficient manner while also attaining local environmental co-benefits and investing in climate innovation and the low carbon economy.









**NACW**  
NORTH AMERICAN  
CARBON WORLD

The North American Carbon World (NACW) conference addresses the most pressing issues in climate policy and carbon markets to the largest gathering of climate professionals in North America. Since 2001, NACW has featured comprehensive and up-to-date information and analysis, key thought-leaders advancing innovative climate solutions, and the best networking opportunities with colleagues in the business, government, nonprofit, and academic sectors.

NACW has been honored to feature keynote remarks from distinguished climate leaders, including:

- Gov. Jerry Brown
- Gov. Arnold Schwarzenegger
- Gov. Gray Davis
- Gov. Bill Ritter
- Kevin de Leon, California Senate President pro Tem
- John Chiang, California Treasurer
- Catherine McKenna, Environment and Climate Change Canada Minister
- His Excellency Gérard Araud, Ambassador of France to the United States
- Christiana Figueres, UNFCCC former Executive Secretary
- Mary Nichols, California ARB Chair
- Peter Lehner, NRDC Executive Director
- Larry Schweiger, National Wildlife Federation President & CEO
- Diane Regas, EDF Executive Director

[www.nacwconference.com](http://www.nacwconference.com)



# CLIMATE FORWARD▶

Climate Forward® enables organizations to invest proactively in activities that will reduce GHG emissions. Climate Forward approves forecast methodologies for conservatively assessing the forecasted emissions reductions of projects, issues GHG emission reduction credits - called Forecasted Mitigation Units (FMUs) - equivalent to one metric ton of anticipated CO<sub>2</sub>e reduction on an ex ante basis, and provides a registry of forward-looking GHG reductions for organizations to balance against future GHG impacts. FMUs may be used to mitigate the GHG emissions impact of future projects that a company might undertake.

Climate Forward:

- Encourages early investment in GHG reduction projects that require early funding for project development
- Expands the scope and scale of diverse, flexible, and creative emissions mitigation actions that meet a company's emissions reduction goals
- Offers opportunities for local projects developed with community input to address environmental justice
- Mitigation actions often generate important co-benefits to the ecosystem, air quality, and socioeconomic equity of a community in addition to the climate change benefits

Climate Forward serves as a complementary companion program to the Reserve's offset registry.

[www.climateforward.org](http://www.climateforward.org)



Climate Impact Score uses a rigorous, standardized approach to quantify the estimated GHG impacts of financial instruments (e.g., bonds) and provide a high level of confidence and assurance in the climate impact an investment is supporting.

Our approach enables users to:

- Align environmental values with investment principles
- Report quantifiable results on the climate impact of an investment product
- Define clear environmental performance standards that align with investment strategies
- Demonstrate the competitiveness of investment products in a crowded marketplace
- Connect climate indicators to portfolio performance over time

[www.climateimpactscore.org](http://www.climateimpactscore.org)







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Founding President, California Climate Action  
Registry

**Ed Begley, Jr.**

Actor and environmental activist

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**Craig Ebert**

*President*

Climate Action Reserve





## CLIMATE ACTION RESERVE

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