Climate Forward
A new market option to accelerate climate action
Climate Action Reserve: a nonprofit dedicated to market based solutions to climate change

GHG Accounting Experts

- Pioneered standardized GHG accounting, leading to robust, reliable, and transparent compliance and voluntary carbon markets
- 78% of North American offset credits used by companies and individual in 2017 in the voluntary market* are issued by the Reserve
- Design innovative GHG accounting frameworks that are user-friendly, and financially feasible

Beyond Carbon Offsets

- **Climate Forward**
  - Climate Impact Score
  - GHG policy consulting
    - Mexico
    - Ontario
    - Quebec
    - World Bank, USDA, USAID
    - California agencies, and more

*Ecosystem Marketplace 2018 data
The world is running out of time to address climate change.

We need more strategies and investment in climate mitigation.

All future projects that increase GHG emissions should be carbon neutral.
Accelerating climate mitigation solutions: 
**Climate Forward**

Enables companies to invest now in emissions reduction projects with high environmental integrity to mitigate future emissions

- **Credits recognized today to address future impacts**

Expands the scope and scale of feasible climate action across the economy

- **Enormous potential for diverse, creative climate solutions**

Issues Forecasted Mitigation Units (FMU) to projects that follow Reserve-approved methodologies

- **1 FMU = one metric ton of anticipated CO$_2$e reduction, to counter anticipated GHG emissions**

Tracks FMUs in a publicly accessible database

- **Project activities are transparent and clearly documented**
Companies and organizations mitigating future emissions

Any new investment creating GHGs

Not appropriate for addressing current emissions in a compliance program
  - e.g., cap-and-trade

Not appropriate for any company or organization mitigating historical emissions
  - Cannot mitigate past emissions with future actions

Examples of future mitigation needs

New manufacturing facility

New data center

New retail complex

New residential/commercial developments

New transportation projects

Climate Forward audience
Climate Forward program components

Methodology Development

• Methodologies are developed by interested parties, then reviewed and approved by the Reserve

• The GHG benefits of the activity are rigorously and conservatively estimated (*ex-ante*)

• Ensures that the future performance of the mitigation project will meet expectations

• Methodologies must have broad geographic applicability

• Projects developed to align with methodologies

Public Registry

• FMUs are issued upon confirmation of project activities, based on conservative quantification methodologies

• Incentives provided to encourage ongoing monitoring and verification

• Transparent project administration

• Project listing, registration, monitoring, and confirmation review

• Conflict of interest assessment, audits, agreement execution
What is a conservative project methodology?

Methodologies are developed by interested parties, then reviewed and approved by the Reserve: expert review → public comment → Reserve approval

<table>
<thead>
<tr>
<th>Real</th>
<th>Additional</th>
<th>Permanent</th>
<th>Confirmable</th>
<th>Enforceable</th>
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<tbody>
<tr>
<td>• GHG accounting is conservative, comprehensive and scientifically credible</td>
<td>• GHG reductions would not have occurred in the absence of the FMU market incentive</td>
<td>• GHG reductions or removals persist for at least 100 years, accounting for any reversals</td>
<td>• <em>Ex-ante</em> third-party confirmation of project implementation prior to credit issuance</td>
<td>• No other parties may reasonably claim ownership of GHG reductions resulting from project</td>
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Permanence: Sequestration projects must incorporate appropriate discounts to account for the risk that a given GHG reduction will not remain out of the atmosphere for the 100-year permanence period.
What does conservative quantification mean?

- **Lower bound of future credits issued on an ex-ante basis**
- **Mechanisms that contribute to overall program conservativeness:**
  - To ensure the environmental integrity of FMUs, methodologies:
    - Account for the risk of reductions not being achieved as forecasted
    - Account for Performance Decline
    - Account for Abandonment Rates
  - **Ex-Ante Risk Pool Contribution:** an added layer of conservativeness
    - Contribution to project-specific risk pool
Climate Forward in action

SCENARIO A

1. PP submits project methodology to the Reserve
2. Reserve reviews and approves methodology
3. PP implements Project
4. Third party confirms project
5. Reserve issues FMUs
6. FMU credit retirement

SCENARIO B

1. PP selects Reserve approved methodology
2. PP implements Project
3. Third party confirms project
4. Reserve issues FMUs
5. FMU credit retirement

PP= Project Proponent
Methodology approval process

1. PP develops methodology, submits to Reserve
2. Reserve assesses methodology for adherence to program principles
3. Reserve consults with technical experts, if needed
4. Reserve provides finding to PP
5. Reserve posts methodology for public comment
6. PP revises methodology and resubmits to Reserve
7. Reserve either approves or rejects methodology

PP = Project Proponent
Project confirmation

• Third Party Accreditation through IAF member body + additional Reserve requirements
• Conflict of Interest assessment
• Confirm project is implemented following approved methodology
  o Desktop documentation review and a site visit assessment
  o Ensures project is operating as intended
• Project Resilience Measures
• Credit issuance contingent upon successful confirmation
Three stages for projects to receive credits

Stage 1: Upon confirmation of project implementation
- Initial issuance of FMUs following confirmation of activities

Stage 2 (optional): At the end of the initial crediting period
- To claim reductions not issued in the first stage, assuming sufficient ex-post monitoring and verification

Stage 3 (optional): After the end of the initial crediting period
- Assuming project proponent can demonstrate additional useful life
- Following successful ex-post monitoring and verification
**Voluntary monitoring incentive program**

In addition to ex-ante FMU issuance upon successful project implementation and confirmation, **projects may pursue additional FMUs issuance if they**:

- Monitor project activities identified in project-specific methodology
- Complete ex-post verification at the end of the project crediting period

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**Stage One**

1. Implement project activity
2. Confirmation of activity, issuance of FMUs

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**Stage Two**

1. Initial crediting period
2. OPTIONAL monitoring data submission
3. OPTIONAL ex-post verification of monitoring and reporting data; additional FMU issuance

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**Time**
Voluntary transition to ex-post credit issuance

- After completion of ex-ante crediting period, **projects may opt to receive ex-post credits** upon project renewal and ongoing monitoring, reporting, and verification.

- Projects that opt-in to the voluntary incentive program are eligible for this option.

**Stage One**
- Implement project activity
- Confirmation of activity, issuance of FMUs

**Stage Two**
- Initial crediting period
- OPTIONAL monitoring data submission
- Ex-post verification of monitoring and reporting data; additional FMU issuance

**Stage Three**
- Ex-post crediting period
- Periodic monitoring and reporting + ex-post verification by Confirmation Body = issuance of FMUs
How to take Climate Forward action

1) **VIEW** program documents available online at
   http://www.climateactionreserve.org/climate-forward/

2) **DEVELOP** innovative methodologies across multiple sectors

3) **INVEST** in creative projects NOW!

4) **SIGN UP** for our monthly newsletter to stay up to date on program developments by contacting Cindy Chiang at cchiang@climateactionreserve.org
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