

**CLIMATE FORWARD** ▶

A New Market Option to  
Accelerate Climate Action

June 18, 2019

## 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 individuals 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

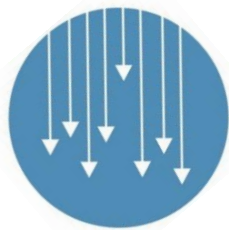




**WE ARE RUNNING OUT OF  
TIME**

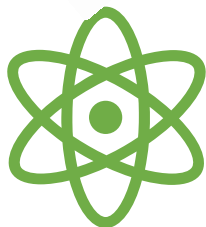
**MORE STRATEGIES AND  
INVESTMENTS IN CLIMATE  
MITIGATION IS NEEDED**

**ALL FUTURE PROJECTS THAT  
INCREASE GREENHOUSE GASES  
SHOULD BE  
*CARBON NEUTRAL***



Invest now in emissions reduction projects 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<sub>2</sub>e reduction, to counter anticipated GHG emissions**



Tracks FMUs and project activities in a publicly accessible database

- **A registry of forward-looking GHG reductions to balance against forward-looking GHG impacts**

# Who should use Climate Forward?

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## Companies and organizations mitigating future emissions

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- Any new investment creating additional GHGs
- Not appropriate for addressing current emissions in a compliance program
  - e.g., cap-and-trade
- Not appropriate for mitigating historical emissions
- Companies seeking CEQA compliance

## Examples of future mitigation needs

- New manufacturing facility
- New transportation projects
- New data center
- New retail complex
- New residential/commercial developments
- Future needs from current investments

# Why forward crediting?

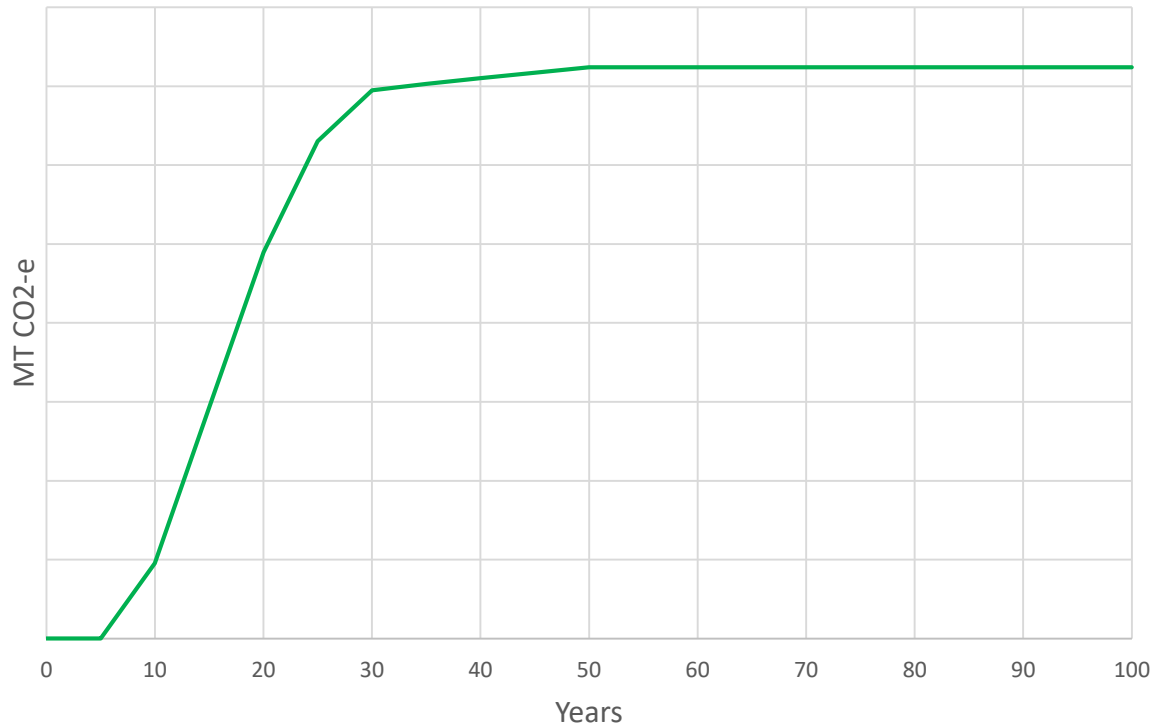
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A new paradigm, reducing barriers to entry for innovative, targeted climate solutions that can also achieve sustainability goals beyond climate impacts

- Customized climate projects with specific **co-benefits** tailored to align with organizational goals and values
- **Local** projects in communities directly affected by operations
- New opportunities: demonstrate climate **leadership**

# Case Study: Reforestation

Reforestation Carbon Accrual



High upfront costs due to labor intensive tree planting and site preparation

+

Many years before significant carbon recognition

=

**Project type is not financially feasible**



# Case Study: Reforestation

Project Cost Assumptions	
Project Area (acres)	20
Trees Per Acre	\$300
Cost for Planting per Tree	\$1
Planting per Acre Costs	\$300
Site Preparation	\$150
Ex Post Buffer Pool Contribution	20%

Project Revenue Assumptions	
CRT Price	\$10
FMU Price	\$10
Discount Rate	5%
<b>Net Present Value</b>	<b>Offsets: \$(48,821.99)</b>
	<b>Climate Forward: \$655.24</b>
<b>Net Present Value per Acre</b>	<b>Offsets: \$(2,441.10)</b>
	<b>Climate Forward: \$32.76</b>

*Unlike existing offset frameworks, reforestation projects under Climate Forward can be financially feasible*



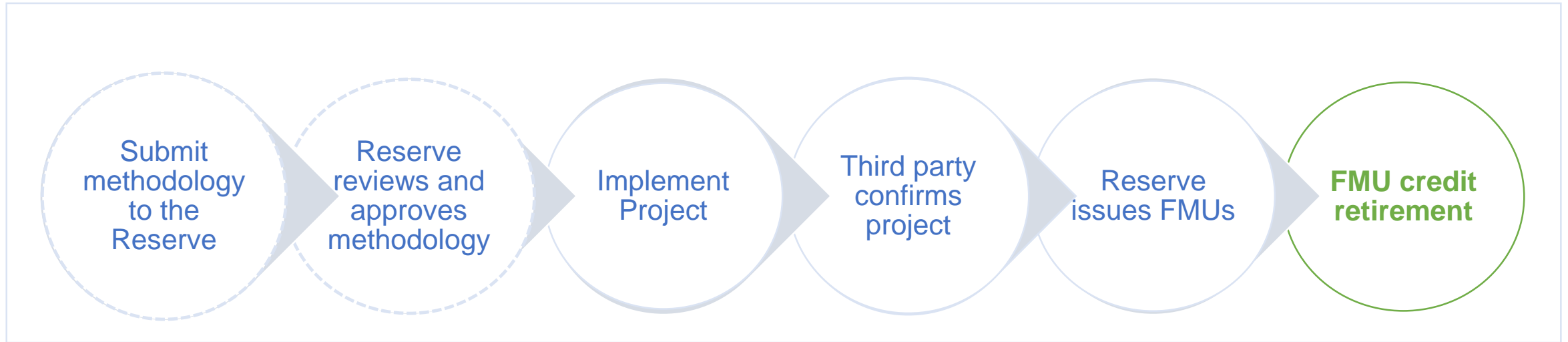
# Program Details

# Pilot Phase

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- Started in early 2017
- Began with a diverse batch of project ideas
  - Cook Stoves
  - Solar PV
  - Dairy Digester
  - Forestry
  - Pool Covers
- Informed design of critical program elements
- Current “Version 1.0” methodologies out for public comment based on methodologies developed in pilot phase

# Process Overview



- Project proponents can develop projects using existing methodologies
- Methodologies provide standardization across project type and can be customized to enable unique place based projects
- 1 FMU = one metric ton of anticipated CO<sub>2</sub>e reduction, to counter anticipated GHG emissions

# Environmental Integrity

<b>Program Level</b>	<ul style="list-style-type: none"><li>• Methodology Suitability Screening</li></ul>
	<ul style="list-style-type: none"><li>• Programmatic Risk Pool</li></ul>
	<ul style="list-style-type: none"><li>• Guidance on Appropriate Use of FMUs</li></ul>
<b>Methodology Level</b>	<ul style="list-style-type: none"><li>• Conservative Quantification Assumptions</li></ul>
	<ul style="list-style-type: none"><li>• Conservative Crediting Period</li></ul>
	<ul style="list-style-type: none"><li>• Performance Decline Deduction</li></ul>
	<ul style="list-style-type: none"><li>• Abandonment Deduction</li></ul>
<b>Project Level</b>	<ul style="list-style-type: none"><li>• Project Resilience Measures</li></ul>
	<ul style="list-style-type: none"><li>• Project Confirmation Timing</li></ul>

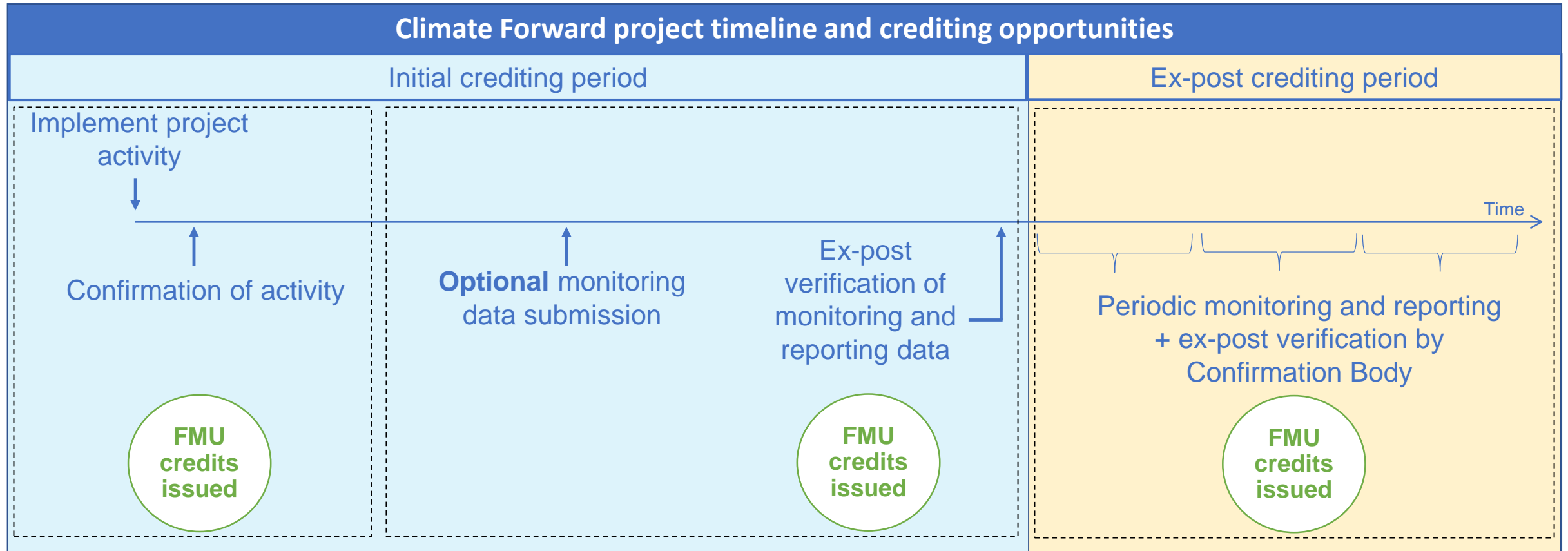
# Project Monitoring and Confirmation

- **No** ongoing monitoring requirement
  - Voluntary monitoring incentive
- One time “Project Implementation Report”
  - Project inputs, project information, and quantification
- One time project “Confirmation”
  - Confirmation Bodies: ISO14065 accredited VVBs + additional Reserve requirements
  - Confirmation against approved methodology and program rules



# Voluntary Transition to Ex Post Credit Issuance **CLIMATE FORWARD** ▶

- After completion of ex-ante crediting period, **projects may opt to receive ex-post FMUs** upon project renewal and ongoing monitoring, reporting, and verification
- Projects that opt-in to the voluntary incentive program are eligible for this option



# How to take Climate Forward action

1. **COMMIT** to mitigating your future emissions
2. **VIEW** program documents available online at <http://www.climateactionreserve.org/climate-forward/>
3. **DEVELOP & SUBMIT** innovative methodologies
4. **INVEST** in projects now. Contact the Reserve to explore and be connected with project opportunities
5. **SIGN UP** for our program newsletter at <https://climateforward.org/sign-up/>



# Thank you!

Contact us: [info@climateforward.org](mailto:info@climateforward.org)

## Upcoming methodology webinars

- **Improved Cook Stove Forecast Methodology v1.0 Public Webinar**  
Thursday, June 20, 2019  
9:30 am - 11:00 am PT
- **Dairy Digester Forecast Methodology v1.0 Public Webinar**  
Wednesday, June 26, 2019  
9:30 am - 11:00 am PT
- **Solar PV Forecast Methodology v1.0 Public Webinar**  
Thursday, June 27, 2019  
9:30 am - 11:00 am PT

All webinars will be recorded and posted on <https://climateforward.org/resources/presentations/>