



CLIMATE
ACTION
RESERVE

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

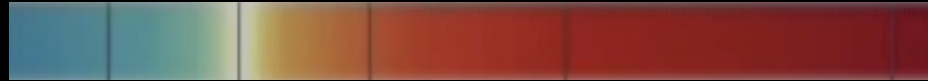
- Pioneered standardized GHG accounting, leading to robust, reliable, and transparent compliance and voluntary carbon markets
- 78% of North American offset credits used by companies and individual in 2017 in the voluntary market* are issued by the Reserve
- Design innovative GHG accounting frameworks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

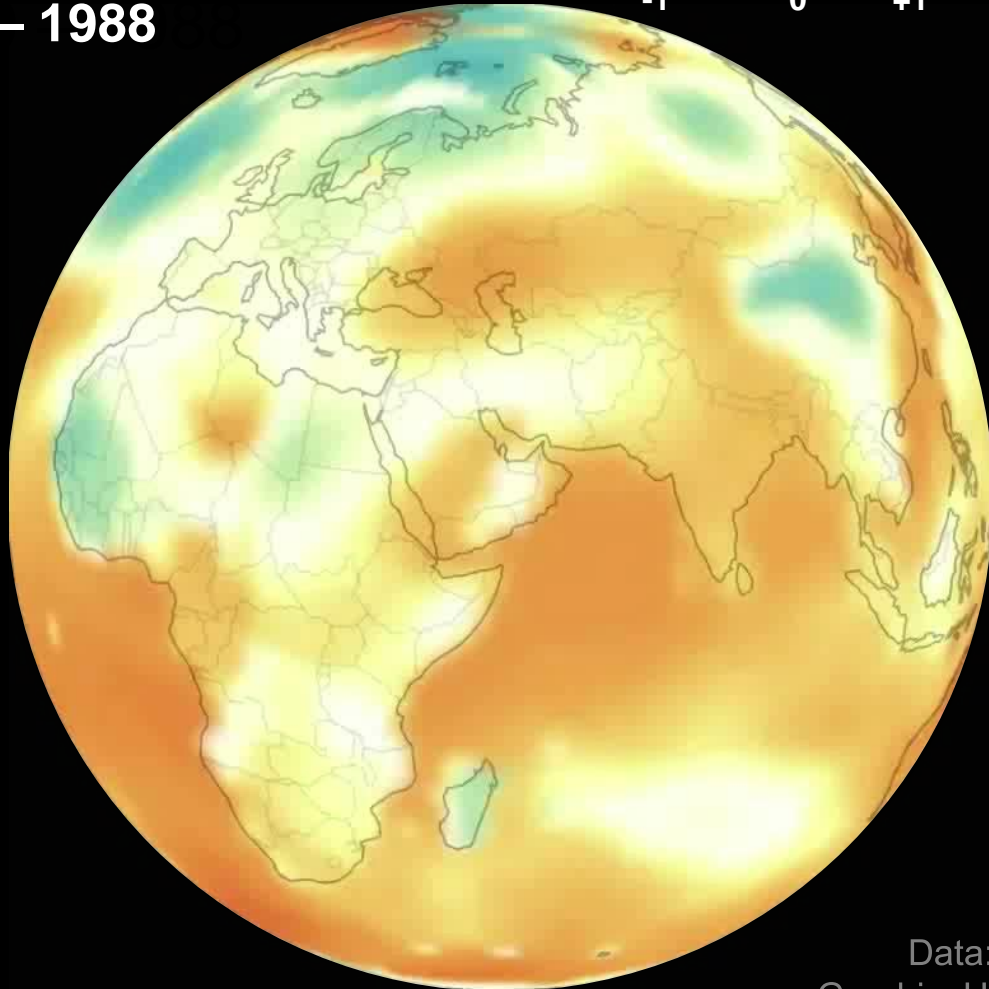
Global Temperature Anomaly

1901 – 2000 baseline (°F)



1959 – 1988

1988 – 2017



Data: NASA/GISS
Graphic: Harry Stevens/Axios



The world is running out of time to address climate change

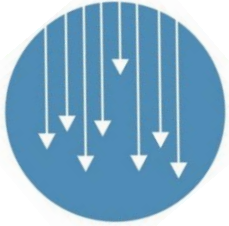
We need more strategies and investment in climate mitigation

**All future projects that increase GHG emissions
should be carbon neutral**

Accelerating climate mitigation solutions: Climate Forward

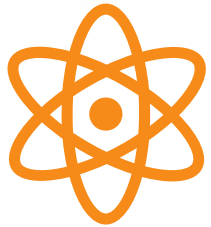


CLIMATE
ACTION
RESERVE



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 CO₂e 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 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 are then designed to fit a methodology

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**

Real	Additional	Permanent	Confirmable	Enforceable
<ul style="list-style-type: none">• GHG accounting is conservative, comprehensive and scientifically credible	<ul style="list-style-type: none">• GHG reductions would not have occurred in the absence of the FMU market incentive	<ul style="list-style-type: none">• GHG reductions or removals persist for at least 100 years, accounting for any reversals	<ul style="list-style-type: none">• <i>Ex-ante</i> third-party confirmation of project implementation prior to credit issuance	<ul style="list-style-type: none">• No other parties may reasonably claim ownership of GHG reductions resulting from project

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?

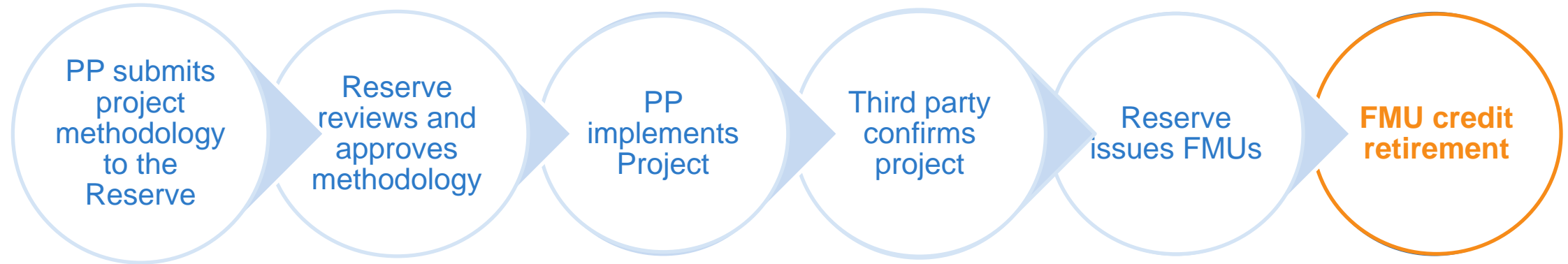
- **Lower bound of future credits issued on an ex-ante basis**
- **Mechanisms that contribute to overall program conservativeness:**
 - To ensure the environmental integrity of FMUs, methodologies:
 - Account for the risk of reductions not being achieved as forecasted
 - Account for Performance Decline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

Climate Forward in action

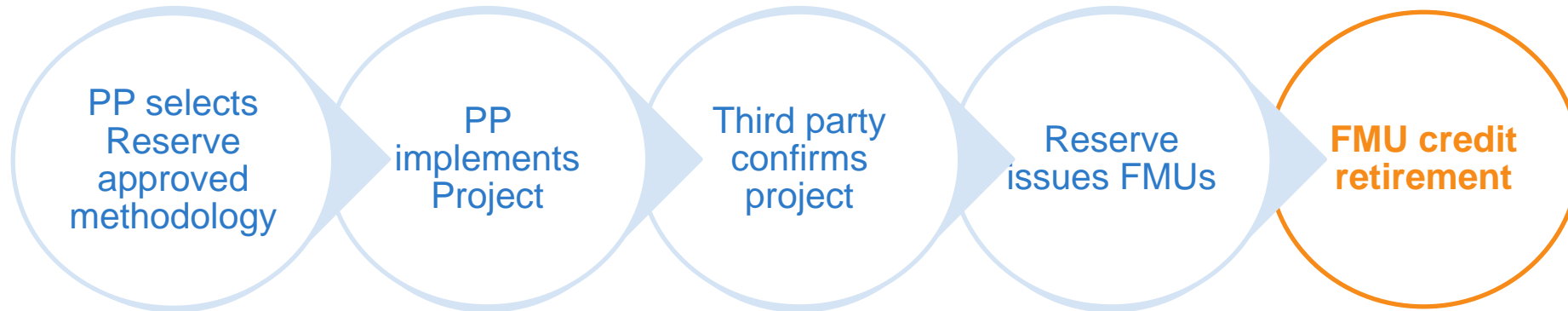


CLIMATE
ACTION
RESERVE

SCENARIO A



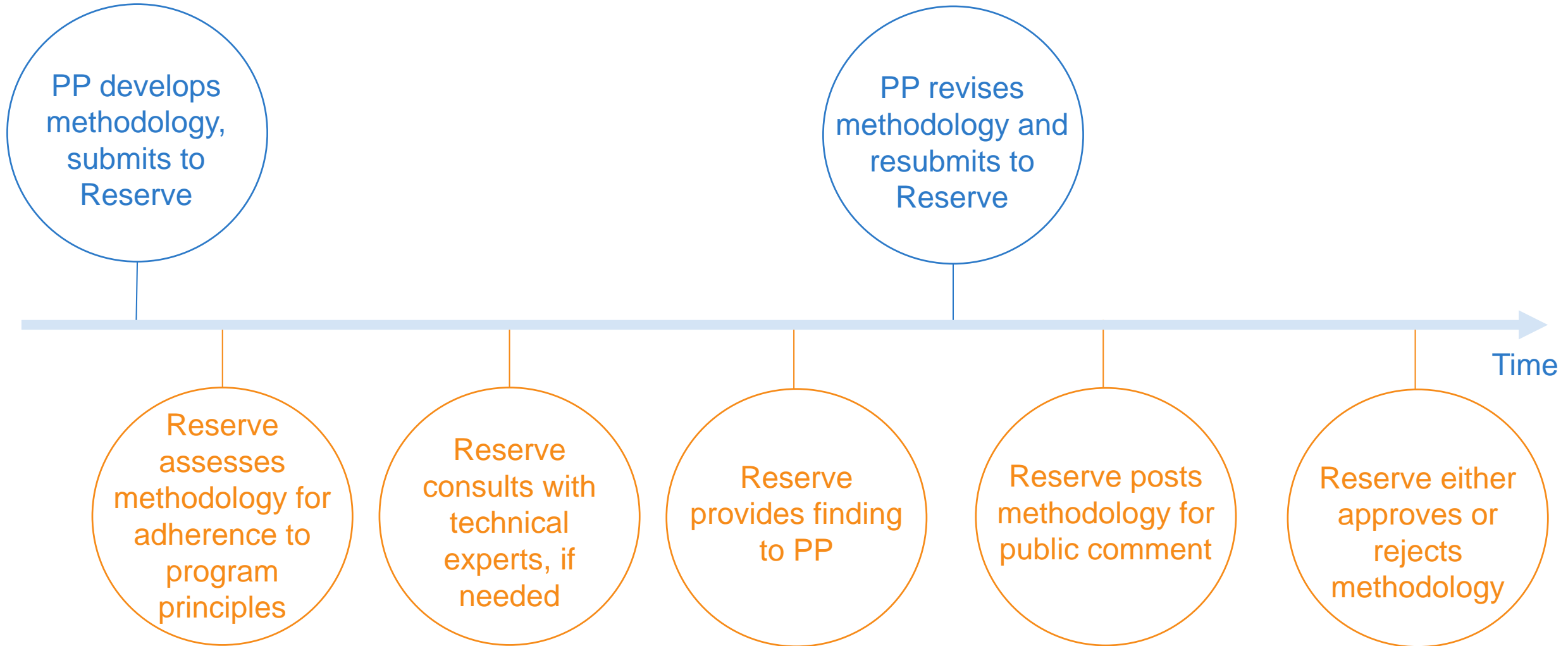
SCENARIO B



PP= Project Proponent



Methodology approval process



Project confirmation

- Third Party Accreditation through IAF member body + additional Reserve requirements
- Conflict of Interest assessment
- Confirm project is implemented following approved methodology
 - Desktop documentation review and a site visit assessment
 - 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

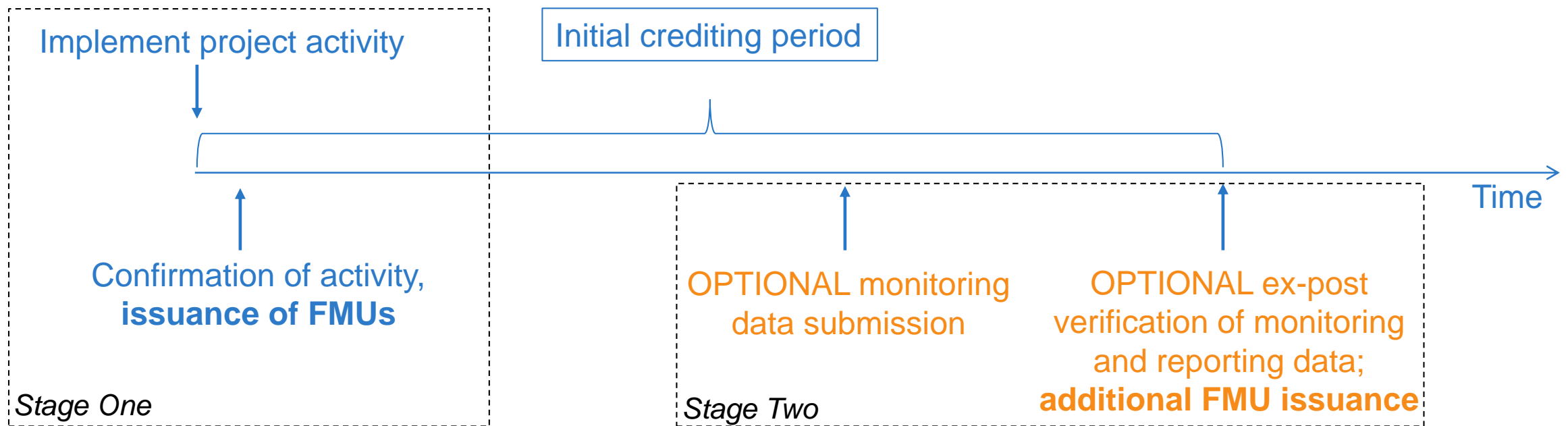
Stage 3 (optional): After the end of the initial crediting period

- 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 FMU issuance if they:**

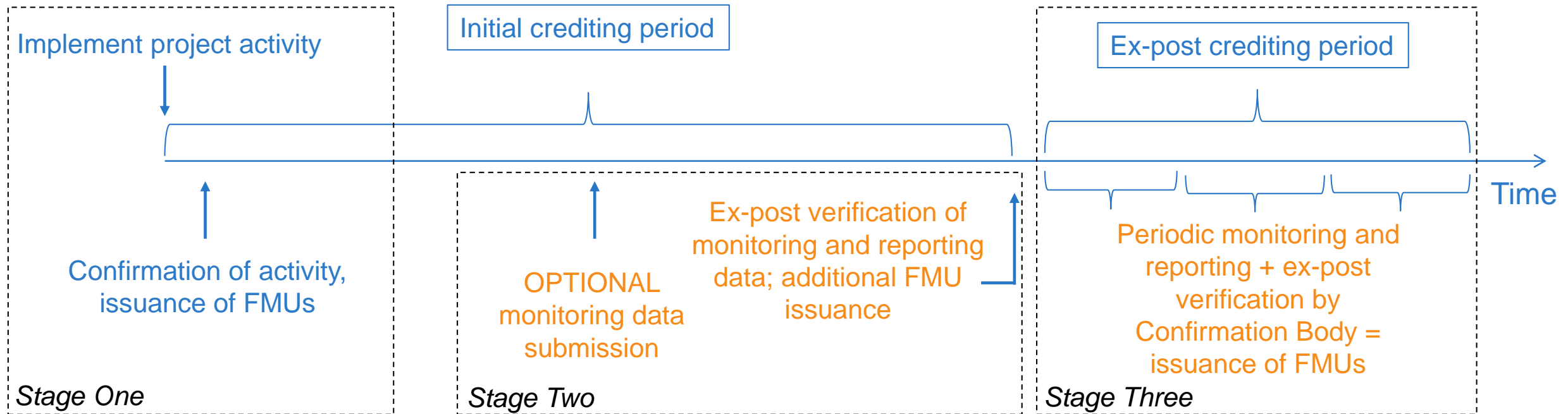
- Monitor and report project activity and data at a frequency identified in applicable methodology
- Complete ex-post verification at the end of the project crediting period





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



How to take Climate Forward action

- 1) **VIEW** program **documents available** online at <http://www.climateactionreserve.org/climate-forward/>
- 2) **SIGN UP** for our **monthly newsletter** to stay up to date on program news at <http://www.climateactionreserve.org/news-and-events/newsletter/>
- 3) **DEVELOP & SUBMIT** innovative **methodologies** across multiple sectors
- 4) **INVEST** in creative **projects** now

Thank you! Questions?



CLIMATE
ACTION
RESERVE

Contact us any time at:
info@climateforward.org