CLIMATE FORWARD

Pool Cover Project Forecast Methodology

Public Comment Webinar

October 10, 2019



PROGRAM OVERVIEW

Climate Forward





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 CO₂e 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?



Companies and organizations mitigating future emissions

Examples of future mitigation needs

- 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

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

Why Forward Crediting?



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*



THE POOL COVER PROJECT FORECAST METHODOLOGY

1 Methodology Introduction



Pool Cover Project Forecast Methodology accounts for GHG emission reductions associated with installation of pool covers on pools that will improve energy efficiency onsite, by reducing energy consumption needed to heat pools

Methodology provides: eligibility rules, methods to calculate expected reductions, performance-monitoring instructions, and reporting procedures

Projects receive independent confirmation by a Reserve-approved confirmation body selected by the project proponent

FMUs are awarded on an *ex ante* basis following the application of this methodology and confirmation of project implementation



Section 2

THE GHG REDUCTION PROJECT

2.1 Project Definition



The installation of pool covers on existing pools in CA that will reduce the need for natural gas consumption at the pool site for heating purposes

- The baseline scenario is the continued use of baseline natural gas to heat pools
- A project will typically involve the installation of a single pool cover at a single site
- With pool cover in place, the project scenario involves less fossil fuel usage to heat pools
- NOTE: Methodology allows for use of any fossil fuel at any location though locations outside of California would require a new quantification model
- To be eligible, pools must meet the following criteria:
 - Pools must already be operational at time pool cover project is proposed
 - Pools must be heated with natural gas
 - Pools must not be using cover at time pool cover project proposed or must be replacing an old ineffective pool cover

2.1 Project Proponent



An entity that has an active account on the Climate Forward registry, submits a project for listing and registration with the Reserve, and is ultimately responsible for all project reporting and confirmation

Required Attestations:

- Signed Attestation of Title form
- Signed Attestation of Legal Additionality form
- Signed Attestation of Regulatory Compliance form



Section 3

ELIGIBILITY RULES

3 Eligibility Rules

LOCATION

• California - any other region provided suitable quantification model approved by Reserve

II START DATE and CREDITING PERIOD

- Submit for listing within one year from installation of last pool cover in project
- Crediting period defined by documented pool cover lifetime

III ADDITIONALITY

- Meet performance standard
- Exceed regulatory requirements

IV ENVIRONMENTAL and SOCIAL SAFEGUARDS

- Must not cause negative environmental and social impacts
- Optional, voluntary reporting on non-GHG environmental and social benefits

3 Eligibility Rules (cont'd)



V REGULATORY COMPLIANCE

Compliance with all applicable laws

VI OWNERSHIP and DOUBLE COUNTING

No credits from other programs where GHG accounting boundaries overlap

VII PROJECT RESLIENCE MEASURES

Must address risks of failure and non-performance

3.1 Location



- Initially only projects located in CA are eligible for FMUs under the methodology
- Can be private or public land, commercial, residential or municipal
- Geographic scope limited due to use of SCG Model, developed for CA
- SCG Model relies on CA climate data

3.2 Project Start Date & Crediting Period



Start date: The date from which GHG emission reductions are forecast:

The date the pool cover becomes operational at the installation site

- Must be installed prior to initiation of confirmation activities
- Initial confirmation cannot commence until project submitted and approved by Reserve – must wait 3 months from start date until start confirmation activities
- Projects must be submitted no more than one year after the project start date
- Confirmation must be completed within two years after the project start date

3.2 Project Start Date & Crediting Period



Crediting period: The length of time over which emission reductions are quantified and forecast:

The lifetime of the installed pool cover

- Primarily talking about available warranty for the pool cover also look at Project Resilience Measures
- Reserve will approve crediting period prior to commencement of confirmation activities

3.3 Additionality



Projects must yield surplus GHG emission reductions "additional" to what would have occurred in the absence of the project

To be considered additional, projects must satisfy the following tests:

1. The Performance Standard Test

 Projects must meet a standard of performance that is better than "business as usual"

2. The Legal Requirement Test

 Projects must not be required by federal, state, or local regulations, or other legally binding mandates

Applied at the project start date and held for duration of the crediting period

3.6 Ownership & Double Counting



Evidence of transfer of rights of all emission reductions to the project proponent is required and must be confirmed by the confirmation body

- Project proponent must provide a signed Attestation of Title document and any necessary supporting evidence for each project
 - Must attest they have exclusive claim to the project's GHG reductions
 - Must attest that no other entities are reporting or claiming the project's GHG reductions
- Confirmation bodies must review relevant contracts, agreements, and/or supporting documentation between project proponents, end users, utilities, and other parties that may have a claim to the FMUs generated by the project

Projects must not generate and hold or sell Renewable Energy Certificates (RECs)

3.7 Project Resilience Measures



Project proponents must provide evidence of Project Resilience Measures, which may include:

- Utility bills indicating a financial incentive to continue operation of installed pool cover
- A contract for continued operation and/or maintenance of the pool covers, as necessary
- Evidence of warranty coverage (five year minimum) for the pool covers
- Signage placed near pool describing proper use of covers critical importance of covering pool each and every night or when pool not in use
- Annual training for personnel responsible for maintaining pool cover concurrent with installation of covers and annual refresher training
- Distribution of training / maintenance procedures to responsible personnel
- Agreement with site owner confirming receipt of pool cover installation staff training –
 agreement to abide by resiliency measures will cooperate with Reserve re: project



Section 4

THE GHG ASSESSMENT BOUNDARY

4 The GHG Assessment Boundary



#	GHG Source	Gas	Relevant to Baseline (B) or Project (P)	Included/Exclu ded	Justification/Explanation
1	Emissions from natural gas- powered pool heater.	CO ₂	B, P	Included	This source is the main target of the project reduction
		CH ₄	B, P	Excluded	This exclusion is conservative as emissions will decrease from the baseline scenario, but limited data is available to estimate emissions.
		N ₂ O			
2	Pool cover manufacturing/t ransport	CO ₂	Р	Excluded	Highly uncertain
		CH₄			
		N_2O			
3	Indirect electricity emissions reductions - potable water transport and treatment	CO_2	B, P	Excluded	While there are benefits from this source, it is conservatively excluded in this methodology.
		CH₄			
		N ₂ O			
4	Filter and pump emissions reductions	CO ₂	В, Р	Excluded	While there are benefits from this source, it is conservatively excluded in this methodology.
		CH₄			
		N ₂ O			
5	Emissions reductions from the reduced chemical usage	CO ₂	B, P	Excluded	While there are benefits from this source, it is conservatively excluded in this methodology.
		CH₄			
		N ₂ O			

Delineates the GHG sources, sinks, and reservoirs (SSRs) that must be assessed and confirmed to determine the net change in emissions caused by installing pool covers

The only GHG SSRs are from reduced CO₂ emissions due to consuming less natural gas when heating pool



Section 5

QUANTIFYING GHG EMISSION REDUCTIONS

5 Quantifying GHG Emission Reductions (overview)



GHG emission reductions from each project are quantified by comparing modeled project emissions to baseline emissions at the installation site

- Baseline: the continued use of fossil fuels to heat pools
- Project: installation of pool covers at single pool or batch
- <u>Emission Reductions</u>: avoided GHG emissions from lower consumption of fossil fuels used to heat pools
 - Use SCG Model to estimate lower natural gas usage

Emission Reductions are quantified and confirmed at the time of project implementation

Most quantification done via use of SCG Model – external to tool need to apply 2 discount factors and extrapolate over the lifetime of the pool cover in question

5 SCG Model



- Run tool using pre-existing climate data file
- Key user-specified tool inputs include:
 - Pool surface area
 - Pool depth
 - Desired heating temperature
 - Climate zone
 - Pool operating hours (by season)
 - Pool heater
 - Pool cover



Section 7

REPORTING REQUIREMENTS

7.1 Project Documentation



Project proponents must provide the following documentation for listing and confirmation:

- General Project Submission form
- Signed Attestation of Title form
- Signed Attestation of Legal Additionality form
- Signed Attestation of Regulatory Compliance form
- Project Implementation Report (not public)

Confirmation bodies must provide the following documentation for listing and confirmation:

- Confirmation Report
- Confirmation Statement
- Confirmation List of Findings (not public)

7 Project Implementation Report



Must be established for all project monitoring and reporting activities, specifying how data for all relevant parameters will be collected and recorded

Serves as the basis for the confirmation body to confirm that the monitoring and reporting requirements have been met

Required Project Implementation Report (PIR) supporting information / documentation includes:

- Detailed description of both the baseline scenario and project for each installation site
- SCG Model output for each building and supporting documentation for project-specific inputs
- Warranties and/or contracts for maintenance of pool covers
- Project Resilience Measures agreement with property owner and other docs

7.2 Record Keeping



Project proponents must keep all information for a period of 7 years after confirmation

Will not be publicly available, but may be requested by the confirmation body or Reserve

Examples include:

- All data inputs for the calculation of project emission reductions, including all required sampled data
- Copies of all permits, formal notices of regulatory violations
- Executed Attestation forms
- Results of emission reduction calculations
- Confirmation records and results
- All evidence relating to continued implementation

7.3 Reporting and Confirmation Period



Project proponents must report forecasted GHG reductions from the project for the entire crediting period

Confirmation Period: period of time over which forecasted GHG reductions are confirmed

- Begins at start date ends when final Confirmation Report submitted to Reserve
- End date may not extend past the project crediting period end date

Confirmation activities cannot commence until the project is submitted and approved by the Reserve – and until at least 3 months have passed since start date

Confirmation must conclude, and a Confirmation Statement must be issued, no later than two years after the project start date

Successful confirmation fixes the start and end dates of the project crediting period

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7.4 Ex post Verification

OPTIONAL verification at the conclusion of the crediting period for *ex post* issuance of additional FMUs

Requirements:

- Data from each year of the crediting period submitted in a Project Monitoring Report
- Site visit at the conclusion of the crediting period

At this time the methodology does not prescribe detailed *ex post* verification procedures; **guidance must be sought from the Reserve** *prior to* commencement of any *ex post* verification



Section 8

CONFIRMATION GUIDANCE

8 Confirmation Guidance



Confirmation guidance supplements the Program Manual and Confirmation Manual and describes confirmation activities specifically related to pool cover projects listed or registered under the methodology

CBs trained to confirm pool cover projects must be familiar with the following:

- Climate Forward Program Manual
- Climate Forward Confirmation Manual
- Pool Cover Project Forecast Methodology
- SCG Model and related white paper guidance document

8.1 Standard of Confirmation



The standard of confirmation for pool cover projects is:

- Climate Forward Pool Cover Project Forecast Methodology
- Climate Forward Program Manual
- Climate Forward Confirmation Manual

CBs must apply the guidance in the Confirmation Manual and Section 8 of the methodology to the standards in Sections 2 – 7 of the methodology

An accredited CB must confirm:

- The project has been implemented as described in the methodology;
- The forecasted emission reductions have been calculated accurately; and
- Whether the measures specified in the have been undertaken to ensure continued implementation of the pool cover project for the duration of its crediting period

8.2 Confirming the PIR



PIR serves as the basis for CBs to confirm that monitoring and reporting requirements have been met

CBs must do the following:

- Confirm that the PIR covers all aspects of monitoring and reporting contained in the methodology and specifies how data for all relevant parameters were collected and recorded
- Assess the compliance of the PIR with the requirements of this methodology and Climate Forward Program Manual
- I.D. the list of parameters required by the methodology and confirm that the PIR accounts for all necessary parameters
- Assess the means of implementation of the project data capture, including data management and quality assurance and quality control procedures, and determine whether these are sufficient to ensure the accuracy of forecasted GHG ERs to be achieved by the project

8.3 Core Confirmation Activities



Core confirmation activities incorporate both a desktop documentation review and site visit assessment of the mitigation project as follows:

1. Reviewing GHG management systems and estimation methodologies

 Review and assess the appropriateness of the methodologies and management systems that the PP uses to gather data and calculate baseline and project emissions

2. Confirming emission reduction estimates

- Investigate areas that have the greatest potential for material misstatements and then confirms whether material misstatements have occurred
- Recalculate a representative sample of the performance or emissions data for comparison with data reported by the project proponent in order to verify the GHG emission reduction calculations

8.3 Core Confirmation Activities



3. Undertaking site visits

- Visit to inspect the pool cover and establish whether reported existence and use of the pool cover is as recorded in the PIR
- Review and discuss with the project proponent evidence of implementation of resilience measures, including those elements listed below

4. Confirming evidence of implementation of project resilience measures

- Utility bills
- A contract for continued use and maintenance of the pool cover
- Evidence of warranty coverage for the pool cover
- Signage
- Evidence of training
- Contract with site owner



QUESTIONS?

Public Comment Period



September 25 – October 25

- Please submit comments, preferably in Word format, to info@climateforward.org
- Comments due by COB on Friday, October 25
- Reserve will review, summarize, and respond to all submitted comments
 comments will be made available on the Pool Covers webpage
- This presentation recording will also be posted on the Pool Covers webpage:

https://climateforward.org/program/methodologies/pool-covers/

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