

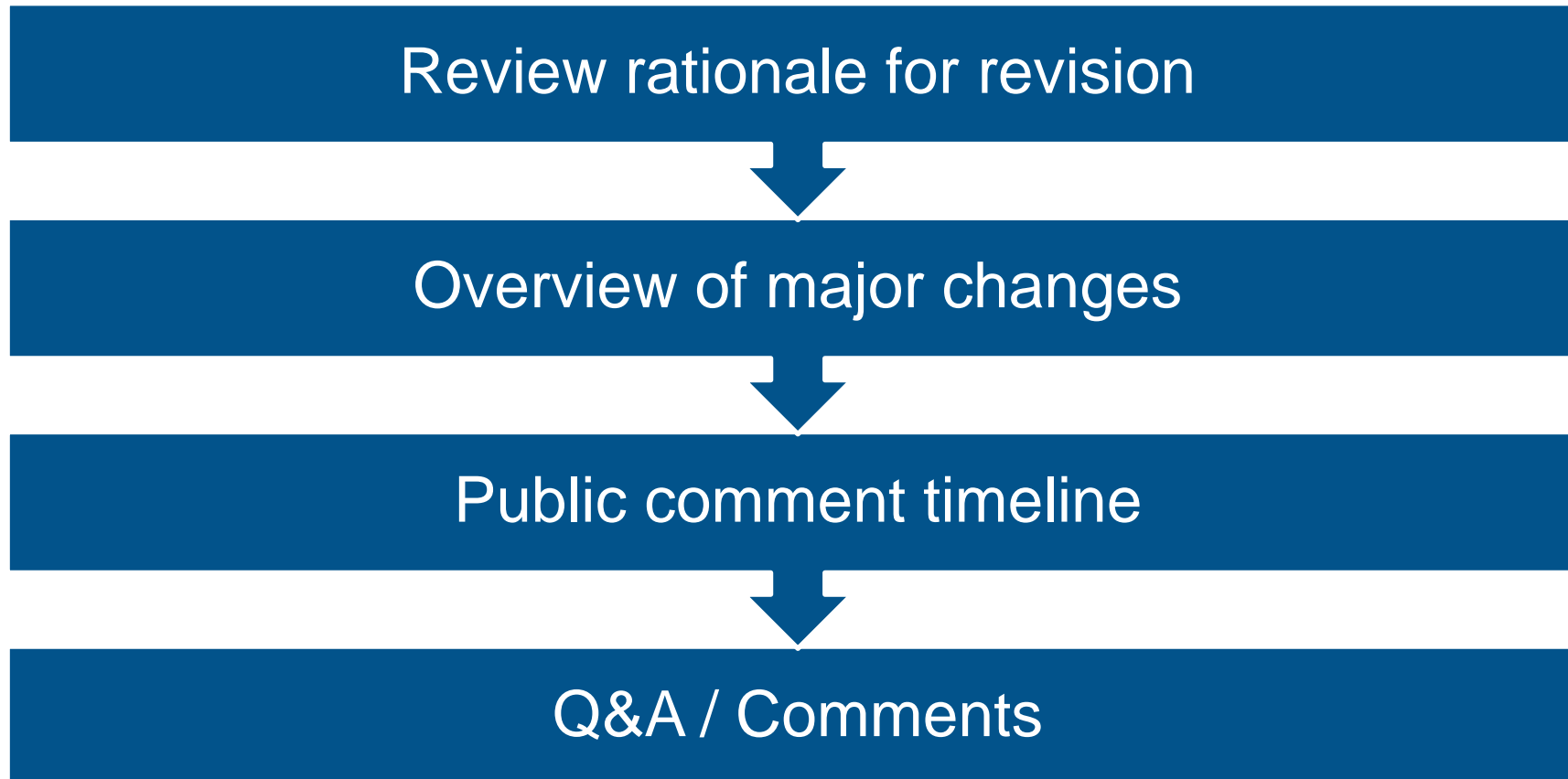
CLIMATE FORWARD ▶

**Reforestation
Forecast Methodology
Version 2.0
Public Comment Webinar**

February 3, 2022

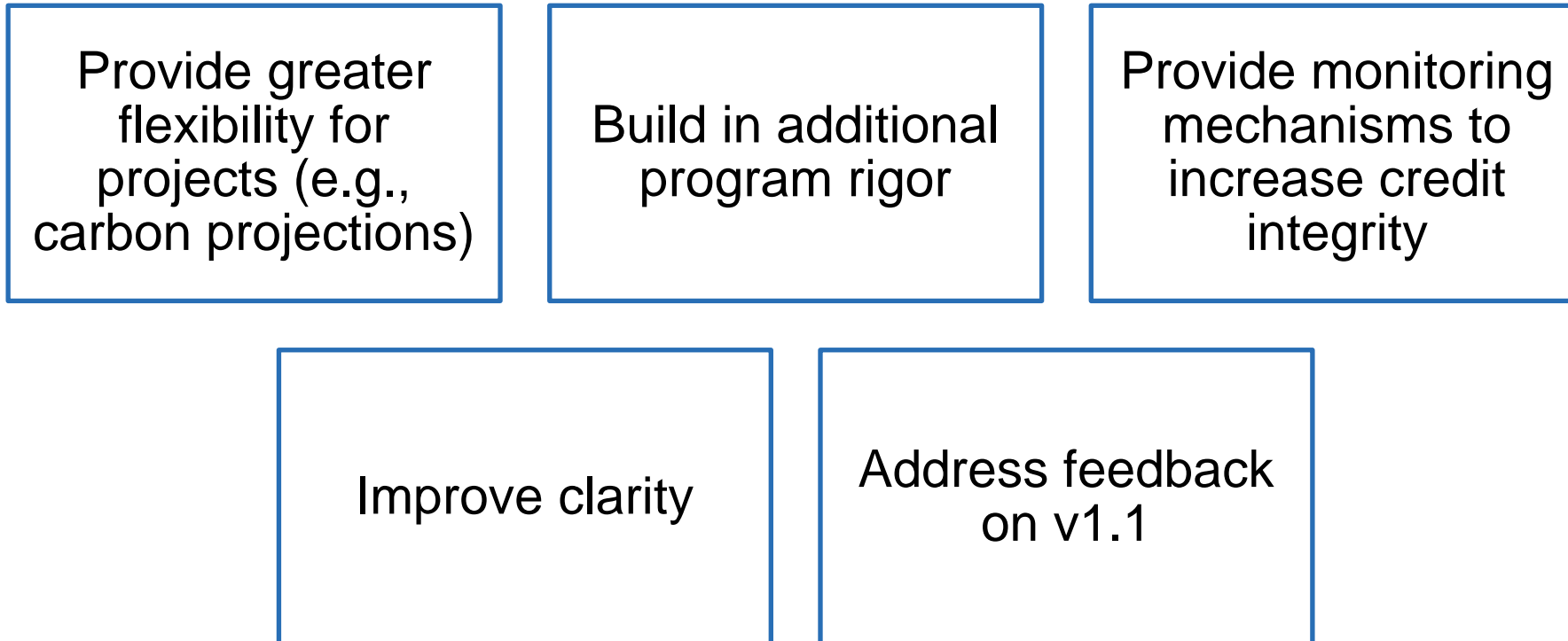
Housekeeping

- All attendees are in listen-only mode
- Please submit your comments and questions in the GoToWebinar question box and we'll try to address them at the end, time permitting. Alternatively, you may raise your hand in the GoToWebinar Control Panel and we will unmute you.
- We will follow up via email to answer any questions not addressed during the meeting
- The slides and a recording of the presentation will be posted online



Focus today is on updates proposed in v2.0. An overview of v1.0 of the methodology is available on the Climate Forward website.

Rationale for Revision



Overview of Changes

Major Revisions

- Introduction of programmatic monitoring and future voluntary monitoring options
- Guidance for selecting projections
- Increased clarity and flexibility around conservation easement-related provisions
- Guidance regarding stacking with ecosystem services payments
- Addressed effects of pre-existing trees/seedlings/shrubs on baseline quantification
- Incorporation of soil carbon increases (limited situations)
- Revisions to standardized discounting
- Adjustments for non-seedling-based planting projects

Minor updates and corrections

Major Revisions – Programmatic Monitoring

Climate Forward does not require ongoing monitoring, reporting and verification of projects beyond initial FMU issuance.

BUT the Reserve will be conducting programmatic monitoring of projects and, if deemed necessary to ensure the integrity of FMU issuances, making adjustments to the credits in the permanence risk pool (analogous to offset buffer pool) and modifying relevant methodologies.

Project proponents may optionally undertake any of the following:

- Voluntary monitoring (reporting only)
- Voluntary ongoing monitoring incentive (verification for additional FMU issuance)
- Transition of FMUs and/or project to offset program for offset credit (CRT) issuance

Voluntary monitoring (reporting only)

- Project proponents can provide updates to the project status
- Provides transparency for interested parties
- Reserve will provide template reporting form for optional use
- Reported information reviewed by the Reserve for reasonableness, but no confirmation/verification involved
- No impact on credits previously issued
- No new credits issued

Voluntary ongoing monitoring incentive

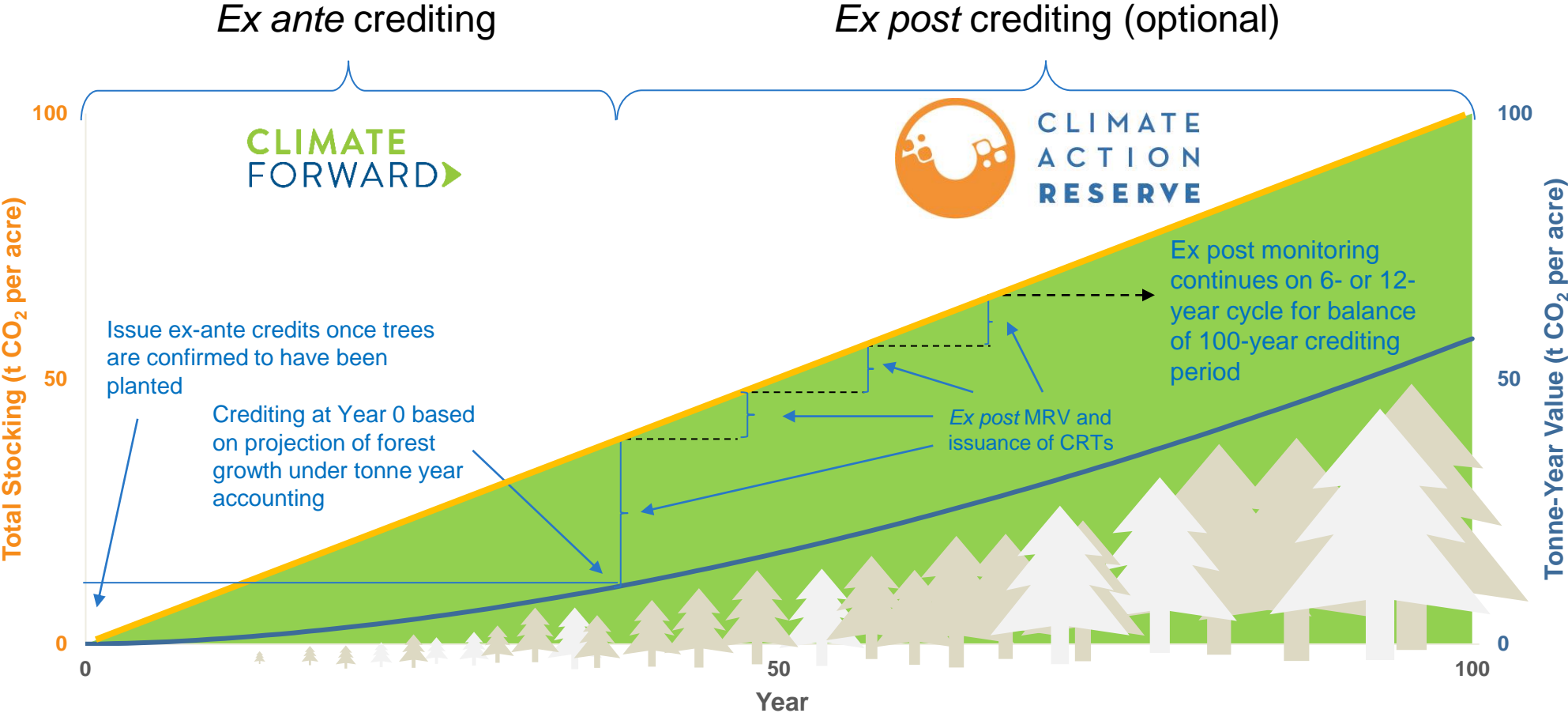
- Project proponent may conduct ongoing monitoring if they believe the project has outperformed relative to initial credit issuance, for example, if the forest on project area has continued to grow without being harvested or converted.
- Monitoring results are provided to the Reserve and undergo verification process
- Requires guidance and approval from the Reserve
- No impact on credits previously issued
- Can result in issuance of additional FMUs

Transition of FMUs and/or project to offset program

- Project proponent may transfer the project to the Reserve's voluntary offset program
- Must undergo monitoring, reporting and verification required under the relevant forest offset protocol and satisfy all other protocol requirements
- Previously issued FMUs that are unretired may be transitioned
- The difference between the credits quantified under the offset protocol and the original FMU issuance is credited as offset credits (CRTs)

Major Revisions – Ongoing Monitoring

Transition of FMUs and/or project to offset program



Major Revisions – Guidance for Selection of Projections

Regional default projections do not always align with project conditions

Guidance added for how to select the appropriate projection

- Species composition:
 - Look at forest types for the region in which the project area (or a given portion of it) is located
 - If forest types associated within the region are not appropriate based on species composition, may look to forest types in neighboring region(s)
- Tree establishment conditions:
 - Determine if tree establishment conditions are similar to basis for default projections.

Major Revisions – Guidance for Selection of Projections

If a matching forest type is not available and/or tree establishment conditions are different:

- New modeled projection may be proposed
- Must be reviewed and approved by the Reserve
- Must use FVS to conduct modeling
- Must demonstrate how modeling is appropriate and conservative (e.g., justify site index, mortality function enabled with default settings)

Major Revisions – Provisions Related to Conservation Easements

Clarified that easements must be recorded within 1 year of start date (legal requirement test of additionality).

Modified required easement provisions that enable tonne-tonne accounting (TTA) for FMU quantification or an extended crediting period under tonne-year accounting

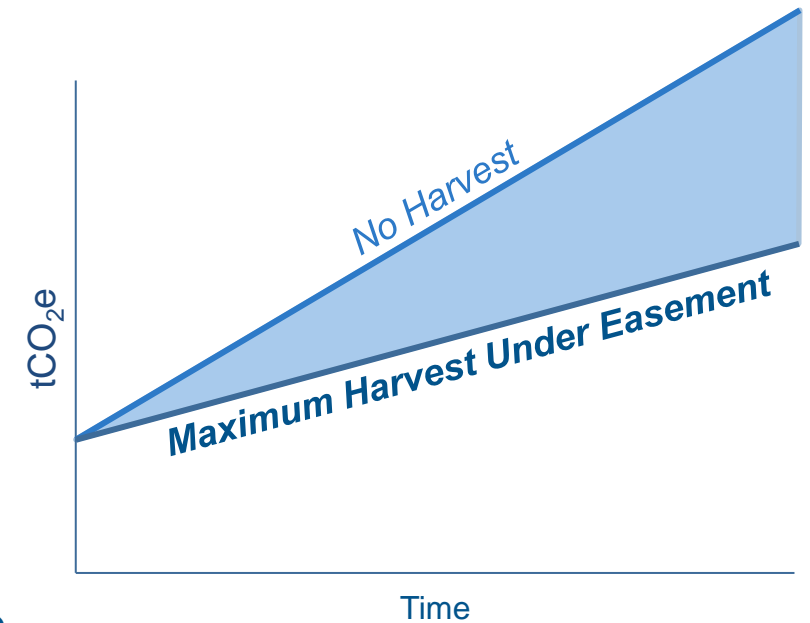
- Require Land Trust Alliance accreditation for non-governmental easement holders
- Specify minimum time limits for applicability of provisions
- Limit requirement to reforest after natural disturbance to only two occurrences

Major Revisions – Provisions Related to Conservation Easements

To use the regional default projections for quantification, easement must include harvest restrictions specified in the methodology.

Added new option to provide flexibility for landowners that want to tailor easement harvest restrictions more specifically to their own management goals but still use TTA or extend the crediting period under TYA

- Must include all other required easement provisions
- Must conduct modeling exercise using FVS to estimate changes to future live tree C stocks under the easement
- Must demonstrate how modeling is appropriate and conservative
- To further ensure conservative estimate of future C stock increases, modeling must be based on harvesting as aggressively as possible under the terms of the conservation easement



Major Revisions – Stacking with Ecosystem Services Payments

Added guidance regarding projects that are receiving environmental enhancement payments (e.g., cost-share grants):

- In general, such stacking is allowed as long as carbon credit value is critical for project implementation.
- Exception is if payments are made on a per ton of CO₂e basis.
- If stacking or even contemplating stacking, project proponents should contact the Reserve for guidance.
- Reserve will determine whether additional, as well as if any quantification adjustments may be required.

Major Revisions – Baseline Quantification

Previously, assumed baseline of 0 tCO₂e, with exclusion of areas with contiguous canopy cover

Updates include:

- Assessment of pre-existing trees
 - Account for trees and seedlings that would have contributed to future forest in the absence of the project
 - Discount applied to projected tree C stocking
- Estimate of pre-project shrub stocking
 - Intended as conservative safeguard
 - No credits awarded for increases in shrub stocks
 - Only projected losses (i.e., pre-project stocks exceed project future stocks) are included, resulting in lowered crediting.

Major Revisions – Baseline Quantification

Pre-existing trees

- Canopy cover assessment via remote imagery and i-Tree Canopy
- % deduction to project stocks based on % cover

Pre-existing natural regeneration

- Only for areas where no site preparation is performed
- Requires pre-planting photo plots
- % deduction to project stocks based on category of expected contribution of existing seedlings to future forest cover

Natural Regeneration Class	Maximum contribution of pre-existing natural regeneration to future forest cover over the next 30 – 50 years, absent management intervention.	Variable S_f
Very Low	10%	0%
Low	25%	20%
Medium	50%	50%
High	>50%	100%



Major Revisions – Baseline Quantification

Estimate of pre-project shrub stocking

- Pre-planting/-site prep photo plots
- Classify each plot using lookup table for biomass estimates (provided in Reforestation Communities Data File)
- Results compared to project shrub stock estimates
 - If pre-planting stocks > projected shrub stocks (based on default projections), then subtract difference from credit quantification
 - If pre-planting stocks < projected shrub stocks, then no adjustment made to credit quantification

Major Revisions – Soil Carbon

Added soil carbon as a sink that can be included for credit quantification

Only applicable under specific circumstances

- Initially, only mine reclamation sites where there is virtually no soil carbon at the start of the project
- Other situations may be eligible in the future

Conservative default sequestration rates incorporated in Reforestation Communities Data File

Major Revisions – Revised Discounting

Previously, a single resiliency discount was applied to account for potential project abandonment and underperformance (10% for projects using tonne-tonne accounting, 2% for all others)

Updates replace the resiliency discount:

	Programmatic Ex Ante Risk Discount	Permanence Risk Pool Contribution
Intent	Address risk of project being intentionally abandoned (e.g., harvest, conversion) or underperforming relative to projections	Address risk of unintentional reversals (e.g., wildfire), similar to buffer pool contributions for offset program
Scale of Applicability	Forest type	Forest type
Discount Applied	Maximum of 10%, scaled to length of crediting period relative to 100 years (e.g., 50yr crediting period → 5% discount)	Maximum of 10%, scaled to length of crediting period relative to 100 years; Maximum lowered to 5% if incorporating conservation easement minimum terms that help to secure ongoing forest cover

Calculations are automatically performed in the Reforestation Communities Data File

Major Revisions – Adjustments for Projects Planting Non-Seedlings

Original guidance was based on monitoring and confirming implementation of projects that involved the planting of seedlings.

Updates incorporated to accommodate projects performing direct seeding or planting non-seedlings:

- Confirmation of projects performing direct seeding must wait until trees reach an average of 6 inches in height
- Allowing project-specific modeling if tree establishment conditions (i.e., planting densities) are inconsistent with assumptions applied for use of default projections (as previously discussed)
 - Corresponding modifications to confirmation sample plot sizes
- Minor language adjustments to remove focus on only seedlings

- Added clarifying language indicating various sites may be aggregated into a single project as long as the project proponent necessary supporting documentation (agreements handing over claims to GHG removals, ownership documents)
- Updated guidance for areas to be excluded from projects based on no potential for tree establishment (e.g., rock outcrops)
- Adjustment to quantification of secondary effects from mobile combustion emissions
- Added third option for cases where confirmation sampling results in failure (i.e., insufficient tree stocking), allowing confirmation to pause while project proponent attempts to re-establish trees on the again project area.
- Revised Appendix B for canopy cover assessment methodology to incorporate guidance for estimating shrub cover and to remove i-Tree Canopy instructions to a separate companion document.

Public Comment Period

**Deadline for comments:
Monday, February 21, 2022**

Documents available for comment

- Reforestation Project Forecast Methodology V2.0
- Reforestation Communities Data File V2.0
(available soon)

Submit written comments to
info@climateforward.org



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QUESTIONS OR COMMENTS?

Contact Information

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Submit written comments on methodology updates to:

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