THE INTEGRITY COUNCIL
FOR THE VOLUNTARY CARBON MARKET

OBSERVATIONS IN RELATION TO CATEGORY ASSESSMENT
AFFORESTATION, REFORESTATION AND REVEGETATION – PART VI
OCTOBER 2026

1. Purpose of these observations

The Governing Board (the Board) of the Integrity Council for the Voluntary Carbon Market (ICVCM), when considering the assessment of methodologies related to Afforestation, Reforestation and Revegetation (ARR) identified that it would be beneficial to make available their observations for the purpose of supporting the future development of methodologies in this Category.

These observations are non-binding and do not impact or form any part of the Assessment Framework, Assessment Procedure, or any Decision (as defined under the Assessment Framework) and are published by the Integrity Council for the purpose of information only.

The Integrity Council may, from time to time, publish other observations for other Categories where it considers this may be useful for CCP-Eligible Programs and other stakeholders and may update and revise its observations from time to time based on further assessment processes or information. Observations are not an exhaustive set of views of the Integrity Council, and not all aspects addressed in assessment processes are included. No reliance may be placed on observations, as they are for the purpose of information only, and observations published are without prejudice to other ongoing assessments.

The Governing Board would like to express its gratitude to the experts and other stakeholders engaged in the assessment process, who provided input to the ICVCM regarding this Category. It welcomes novel approaches to increase integrity and recognises that further research and empirical testing of such approaches in methodologies may identify new risks and will be attentive to these as part of general ICVCM ongoing assurance and oversight.

2. Observations relating to ARR methodologies

The Governing Board's observations regarding the assessment of ARR methodologies against the ICVCM Assessment Framework and its Core Carbon Principles generally relate to robust quantification and additionality.

The methodology considered by the Governing Board within this Category and to which these observations relate is M001 - Methodology for Terrestrial Forest Restoration, version 1.3, applied under Equitable Earth.

3. Robust Quantification

ICVCM notes that M001 version 1.3 relies on a dynamic baseline approach, under which baseline carbon stocks established at the project start date are reassessed and adjusted throughout the crediting period to reflect observed changes in the surrounding landscape. The methodology establishes control plots outside the project area and leakage belt that have similar ecological and socioeconomic characteristics, including comparable levels of degradation. These control

plots are selected from a study area extending between 5 km and 30 km beyond the project boundary, with the distance determined according to landscape characteristics and data availability.

The baseline is reassessed prior to each verification. Changes observed in the control plots are used through a corrective mechanism to adjust the initial baseline carbon stocks upwards or downwards, providing a counterfactual against which project outcomes and net GHG removals are assessed. By periodically retesting the baseline against observed changes in comparable areas without project interventions, the methodology seeks to account for changes in the conditions and external drivers affecting forest carbon stocks over the crediting period.

The Governing Board further notes the importance of robust quantification of above-ground biomass (AGB), given that this pool is expected to account for the largest changes in carbon stocks. Under M001 version 1.3, AGB is estimated using remote-sensing-based models. Equitable Earth applies criteria to assess potential AGB data providers and models, including the precision of AGB estimates and the treatment of uncertainty. ICVCM notes that the methodology incorporates uncertainties associated with the quantification of above- and below-ground biomass, including woody and non-woody components.

The Governing Board notes the novel nature of this approach and that it has been designed to increase robustness. Similarly to previous decisions on ARR category, the Governing Board also acknowledges that empirical testing has not yet been conducted and that remotely sensed data could become saturated, especially when full canopy cover is achieved, but that future advances in remote sensing technology are likely to address any such risk. It is further noted that the protocol leverages digital monitoring, reporting, and verification (dMRV) technologies – including GIS data, LiDAR-equipped drones, and peer-reviewed machine learning models – to automate data collection and analysis, improving both accuracy and transparency.

The methodology permits the use of a conservative global default value for the carbon fraction of dry biomass. The methodology provides that the global default value is derived from 2006 IPCC Guidelines for National Greenhouse Gas Inventories as confirmed by the 2019 Refinement to the 2006 IPCC Guidelines. The Governing Board notes that this parameter is an average that may be redefined in the future.

4. Additionality

An ARR mitigation activity is additional if the activity sequesters carbon dioxide at higher levels than would have occurred in its absence.

The Governing Board notes that there are potential additionality risks for large-scale commercial ARR mitigation activities, including monoculture plantations and plantations using non-native species. M001 version 1.3 mitigates these risks by prohibiting timber harvesting for commercial purposes, with exceptions limited to the removal of remnants of commercially managed forests and exotic or invasive species as part of site preparation.

The methodology further requires projects to restore degraded lands to native forest ecosystems through context-specific approaches that seek to re-establish ecosystem composition, structure, function and resilience in alignment with a reference ecosystem.

5. Environmental and Social Safeguards

The Governing Board underlines the importance of compliance with social and environmental safeguards throughout ARR projects and notes that robust oversight mechanisms are important components of effective social and environmental protections, particularly for large-scale activities involving non-native species in high-biodiversity areas.

In this context, M001 version 1.3 requires restoration using native species, promotes habitat recovery for native and threatened biodiversity, and prohibits commercial timber production and harvesting. Projects are intended to restore forests towards a native mature state while supporting ecological connectivity and long-term conservation outcomes.

It is also noted that the methodology also requires projects to actively engage Indigenous Peoples and Local Communities (IPs & LCs) and deliver tangible livelihood benefits throughout the project lifetime.