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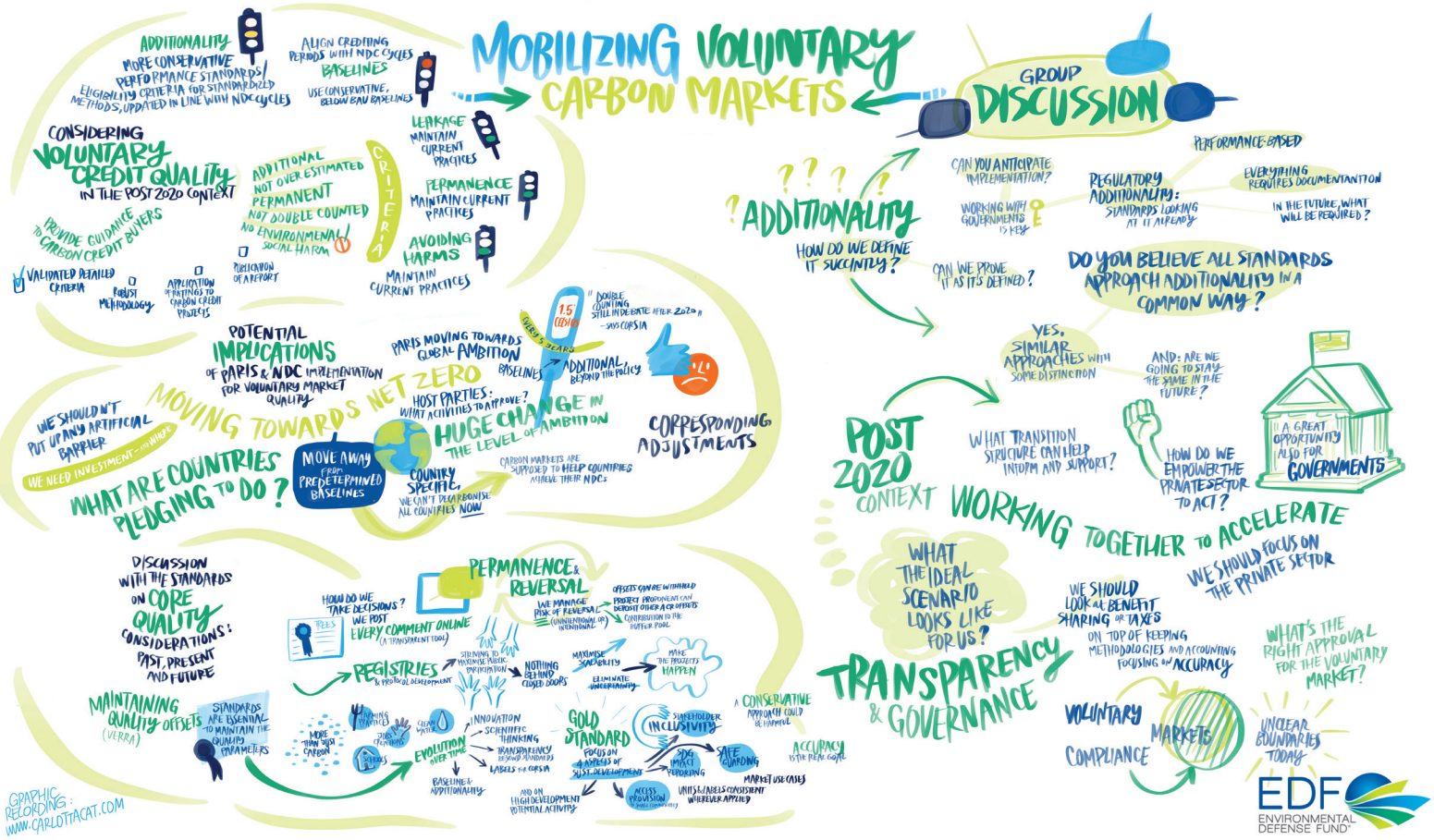

Mobilizing Voluntary Carbon Markets to Drive Climate Action:

Recommendations

Updated March 2021

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I. Acknowledgements

These recommendations were developed by **Environmental Defense Fund (EDF)** with expert support from **ENGIE Impact**, on the basis of six meetings and follow-up consultation of the Steering Group and its corporate observers, held under the Chatham House rule. The Steering Group was composed of stakeholders representing key players needed for a well-functioning voluntary carbon market including major NGOs, international organizations, voluntary carbon market standard-setting bodies and invited observers from the private sector. The facilitation team included Kelley Kizzier, Alexia Kelly, Kim Carnahan, Alexa Kleysteuber, Alex Hanafi, Elizabeth Sturcken, Kristen Mertens, Allison Dowd and Christa Ogata. This work was made possible by generous support from **High Tide Foundation**.

The facilitation team expresses its sincere thanks to the Steering Group members and its observers for their dedication, insight and expertise throughout this process.

II. Steering Group and Corporate Observers

The initiative met six times over the course of seven months to address some of the major issues confronting the voluntary carbon market. During these meetings and through bilateral consultation, the Steering Group and its observers offered invaluable insight, expertise and guidance that informed the following recommendations. The recommendations are an initial response to substantial issues and represent the facilitation team's attempt to find consensus among divergent views. More work is necessary to further explore these issues, to resolve remaining divergence in views and to add precision.

The recommendations are the facilitation team's attempt to represent discussions among, and feedback from, the Steering Group members and its observers. They do not necessarily reflect the views of the Steering Group or its observers, and they do not serve as an indication of endorsement by the Steering Group or its observers.

III. Overview

EDF, in partnership with the High Tide Foundation and with expert support from ENGIE Impact, convened a Steering Group composed of stakeholders representing key players needed for a well-functioning voluntary carbon market, including major NGOs, international organizations, voluntary carbon market standard-setting bodies, and invited observers from the private sector. This Steering Group, with input from the observers, had discussed a range of issues with the intent of incentivizing credible and Paris Agreement-aligned climate action by companies, and to inform climate strategies and guidance for high-quality carbon markets that contribute to global climate goals. Further work is needed to develop more elaborate guidance related to how and when the voluntary carbon markets and activities under the Paris Agreement interact. These initial recommendations lay the groundwork for future efforts designed to accelerate climate action and ensure a meaningful and credible role for voluntary markets. These recommendations reflect discussions over the past seven months, but do not reflect consensus. Further work and analysis is required on these issues.

Illustration by Carlotta Cataldi

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IV. Background

According to the Intergovernmental Panel on Climate Change (IPCC), holding the global average temperature increase to 1.5°C above pre-industrial levels is consistent with achieving net zero anthropogenic carbon dioxide (CO_2) emissions around mid-century, with remaining emissions balanced by CO_2 removals, and a 45% decrease in CO_2 emissions by 2030 relative to 2010 levels. For major non-CO_2 climate pollutants, such as methane, the IPCC suggests a decrease in emissions around 35% below 2010 levels by around midcentury for paths consistent with a 1.5°C temperature target. Early action to reduce emissions of short-lived climate forcers is critical to slowing the rate of warming in the coming decades in addition to helping achieve long-term climate stability.

The overall amount of carbon dioxide that we can emit — the carbon "budget"— depends on the temperature target we want to stay below. All possible budgets to achieve Paris Agreement temperature targets require that CO_2 emissions be reduced drastically globally. It also requires that we achieve net zero CO_2 emissions during this century — where we do not emit any more than we can simultaneously remove. The timing of net zero corresponds to how much is emitted overall. In many cases, the later we achieve net zero emissions, the more CO_2 will be emitted overall, and the higher the maximum warming.

When we have emitted the full CO_2 budget, we must reach a point where no more CO_2 is emitted than can be simultaneously removed — this is considered net zero CO_2 emissions. Of various pathways considered by scientists to stay within a carbon budget consistent with the Paris Agreement temperature targets, net zero CO_2 emissions will need to be achieved sometime during this century, and likely around midcentury. The later the date when we reach net zero, the more CO_2 is emitted into the atmosphere. The more that we are eventually able to remove from the atmosphere relative to residual emissions, the lower the maximum rate of warming. Removal mechanisms will become essential in balancing residual CO_2 emissions in the future, but most technology-based removal strategies (e.g., Direct Air Capture) are not yet mature or cost-effective. It is critical that we avoid depleting our existing carbon stocks.

Deforestation both eliminates the removal sink and emits CO_2. Current carbon stocks play an important role in preventing additional CO_2 emissions. In the event of massive deforestation, the environment will be entirely different and the world will be unable to transition back to where it was before. The benefits to the climate through reforestation, especially with regard to the timeframes being discussed in all political realms, are much smaller than avoiding the release of already stored carbon through avoided deforestation.

To avoid dangerous climate change, we need to limit max warming and slow the rate of warming because each are associated with a different set of damages and we need to limit climate change and its damages over all timescales. In order to do this we must urgently:

- Reduce emissions in line with a budget (cap) established for long-lived climate pollutants (e.g., CO_2, N_2O) to prevent build-up in the atmosphere beyond a certain level.
- Remove CO_2 to balance emissions that cannot be reduced.
- Protect current carbon stocks (e.g., tropical forests).
- Reduce the rate of short-lived climate pollutant (e.g., methane) emissions to slow the rate of warming.

The Paris Agreement establishes shared temperature goals in line with what the science requires to avoid catastrophic climate change, and requires all countries to maintain a Nationally Determined Contribution (NDC). It also requires all countries to pursue domestic mitigation measures to implement these NDCs and establishes a cycle of ambition over time — successive NDCs will represent a progression beyond the current NDC and represent each countries' highest possible ambition. The Paris Agreement consistently and throughout highlights the importance of enhanced transparency and accounting. To that end, it acknowledges the avoidance of double counting, robust accounting for NDCs and international cooperation as central to the Paris rulebook.

V. The Role of Carbon Credits in Robust Voluntary Climate Strategies

The IPCC calls for rapid and far reaching transitions in energy, land, urban and infrastructure (including transport and buildings) and industrial systems. These systems' transitions are unprecedented in terms of scale, and imply deep emission reductions in all sectors, a wide portfolio of mitigation options and a significant upscaling of investment. Companies have a clear and urgent role in the necessary transition to a net zero carbon economy and should adopt robust mitigation strategies in line with the science and the temperature goals set out in the Paris Agreement.

A robust and ambitious climate strategy calls for a variety of mitigation approaches and actions to be deployed in concert. Strategies should take into account the entire value chain and prioritize internal decarbonization efforts and action in order to smooth the necessary global low carbon transition.

Investment in carbon removals can be important to drive down the price of emerging removal technologies. Removal mechanisms — both technological and nature-based — will also become essential in balancing residual CO_2 emissions in the future. But, they cannot provide the full answer at this moment based on the potential supply, maturity and cost of these interventions. Drastic emissions cuts are needed now. Once currently stored (or sequestered) carbon stocks are re-released into the atmosphere, it takes decades to store that carbon again through natural means. Over time there may need to be an increased emphasis on removal activities as emission reduction and/or avoidance activities become more limited.

Ultimately, we need to continuously maximize investment in the most urgent and the most impactful activities: those that drive systemic change. The vital and growing role of the voluntary carbon markets in delivering emissions reductions, avoidance and removals should be recognized, enabled and accelerated.

Box 1

Corporate GHG Emissions Accounting, Voluntary Markets and the Paris Agreement. What's all the fuss?

NDCs under the Paris Agreement will be implemented from 2021 onwards. As all countries have these commitments, the Paris Agreement will fundamentally change the global greenhouse gas (GHG) accounting landscape, and with it the interaction between voluntary carbon markets and carbon markets regulated by governments (compliance markets). As both companies and countries seek to take more ambitious action to reduce global emissions and avert catastrophic climate change, ensuring that efforts by all parties are transparently and accurately reflected will be increasingly important.

Overlapping corporate and government GHG inventories and their treatment in international accounting systems.

Company emissions and the reductions, removals and avoided emissions implemented through climate strategies are essentially nested in the reported emissions of the country or countries in which the corporation and its value chain operate. Currently, there is no clear guidance that provides a methodology for the interaction between corporate GHG accounting systems, country-level GHG accounting systems and any use of carbon credits. There is no tracking and transparency infrastructure connecting the two. A single ton of CO_2 emitted by a factory may be reflected in multiple places including:

1) The direct emissions of the factory itself (Scope 1).
2) The indirect emissions of a company that purchases goods or services from that factory (Scope 2 and/or 3).

Box 1 continued

3) The national GHG inventory of the country in which the factory is located.

This overlap creates added complexity, in particular, as it relates to the avoidance of double counting, a long held and fundamental imperative in the carbon market world. The problem is that in this overlap, in these nested systems, emissions — and potentially emissions reductions/removals — are counted by more than one entity. For example, if the factory puts energy efficiency measures in place, it will reduce their Scope 2 emissions, but it will also reduce the Scope 1 emissions of the power generator. Depending on the level of granularity, it might also reduce the GHG totals in the relevant national inventory. This is made more complex because companies have varying degrees of control over their Scope 3 emissions, and might not even be able to attribute some of these emissions to a specific source. Multinational companies have emissions in more than one and potentially in several countries adding further complexity. How should the use of carbon credits to offset these emissions be accounted at the company level and at the national level? Who should be able to claim the underlying avoided emission or emission reduction/removal? How is double counting avoided? Further assessment and analysis is necessary to address these complex issues.

For countries and for other international commitments, the Paris Agreement is clear that double counting is to be avoided on the basis of a corresponding adjustment (see Box 2).

Recommendations: The Use of Carbon Credits

The Use of High-quality Carbon Credits can Make a Legitimate Contribution to Voluntary Climate Action and Net Zero Carbon Goals

Where carbon credits are used, they should:

- Be used in addition to and in concert with science-aligned decarbonization strategies, and accelerate the scale and pace of decarbonization recommended by scientists.
- Contribute to the most urgent and impactful opportunities to stabilize global atmospheric concentrations of GHGs and drive systemic change. These include approaches that address short-lived climate pollutants (e.g., methane), the protection of existing carbon stocks and those that accelerate the adoption of cost-effective, low carbon and carbon removal technologies and actions.
- Avoid locking in emissions or long-term fossil fuel consumption.
- Be of the highest quality, reflecting reductions, avoidance or removals that are additional to those that would occur in the absence of demand for carbon credits; are measurable and verified; and are generated from activities and programs that have measures in place to address material risks of non-permanence and leakage.
- Be associated with a recognized and credibly governed standard-setting body that provides transparent and robust processes for registration, validation, monitoring, verification, methodology assessment and approval, and unit transaction and retirement tracking.

VI. Quality

Carbon credit quality is essential to delivering environmental and climate impacts and ensuring that emission reductions, removals and avoidance are real. As the Paris Agreement is implemented and its scope and ambition increases, the voluntary and compliance markets will interact more and have implications for quality.

Significant progress has been made over the past two decades in advancing systems and approaches in the voluntary carbon market for addressing core offset quality elements, though further work and continuous improvement is necessary. Additional resources should be devoted to evaluating the efficacy of key offset quantification methodological decisions including approaches, assumptions and calculations related to leakage and permanence. The scale of reductions and level or urgency needed globally to limit the rate of change and the maximum temperature increase, and to achieve the Paris Agreement's goals, will require a concerted effort by all voluntary carbon market actors to enhance offset quality, in order to ensure that long-term, additional reductions are taking place. Improvements to key quality parameters should continue and should take into account the potential impacts of Paris Agreement rules and NDC implementation decisions.

The standard-setting bodies should continue to have a primary role in ensuring the quality of voluntary credits and should seek to continuously improve their approaches to key quality assurance through regular and predictable assessment and updates, and through independent third-party review and evaluation. Key quality parameters such as baseline methodologies, additionality assessments and measures to address non-permanence and leakage should be consistently and rigorously reviewed and updated to reflect necessary improvements and the most recent science. Quality criteria should build upon existing best practice, the guidance elaborated by independent experts and reviewers, U.N. bodies and other international organizations.

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Recommendations: Quality

Carbon credits should:

- Result in additional, measurable and verified reductions, avoidance or removals of GHG emissions generated from activities that have measures in place to address material risks of non-permanence and leakage.
- Represent mitigation that is additional to any that would have taken place in the absence of the added incentive created by the carbon credits.
- Be associated with a recognized and credibly governed standard-setting body that provides transparent and robust processes for registration, validation, monitoring, verification, methodology assessment and approval, and unit transaction and retirement tracking.
- Be generated from projects with robust environmental and social safeguards that enable conditions for a just and sustainable low carbon transition and do no harm.

Standard-Setting Bodies should:

- Undertake and make public regular retrospective evaluations of programmatic impact.
- Undertake regular review to improve methodologies including baseline determination, additionality assessment and monitoring and quantification protocols to reflect the latest science, economic and technological advances or changes in domestic regulation.
- Establish protocols to avoid crediting activities that are cost-competitive in the absence of the crediting activity.

Paris Alignment:

Voluntary carbon market standard-setting bodies and project/program participants should:

- Continuously review law, regulation and legally binding mandates put in place to implement the NDC and take these into account in baseline determination and additionality assessment in order to avoid crediting policy created absent the incentive provided by the crediting activity. *The presence of an NDC in and of itself does not impact the baseline determination and additionality assessment, but the implementation of NDCs will require regular evaluation and adjustment as policies and measures are put into place to implement NDCs unless these are a result of the crediting program.*
- Regularly review baselines to reflect law, regulation and legally binding mandates put in place to implement the NDC.
- Consider the impact of crediting period lengths and crediting period renewal on NDC progression in scope and ambition over time; *If crediting periods span two or more NDC implementation periods, crediting can create a disincentive to implement or expand policy (because the activity would potentially not be credited under a baseline revised to take into account policy) and the scope and ambition of the NDC.*
- Enhance host country engagement, in particular with regard to activity, crediting period length and methodologies.

VII. Corresponding Adjustments

We are in a transition period. In the absence of international rules and domestic and international infrastructure, carbon credits associated with corresponding adjustments will be limited, if available at all. The current NDCs do not collectively put us on a path consistent with the Paris Agreement temperature goals, and many of the current NDCs are not yet being implemented. The Article 6 rules and the international accounting and transparency structures need to be agreed and implemented. A carbon credit used only by a company and counted towards a host party NDC is not double counted at a country/NDC level because it is only counted towards the NDC of the host country. At the same time, in the absence of a corresponding adjustment, it is possible that an emission reduction/removal/avoidance is used by both a company towards its net zero carbon goal and by the host country towards its NDC.

Historically, voluntary carbon markets have operated in sectors that are NOT required by policy or regulation to reduce their emissions. If a project is required by law to occur, then the project or program is not "additional" — it would have occurred even in the absence of the incentive derived from the demand for credits. The concept of "additionality" is core to ensuring that emission reductions, removals and avoidance activities that generate carbon credits are legitimate — that they are essentially "additional" to what would have occurred under a "business-as-usual" scenario. In the absence of additionality, there is no net benefit to the atmosphere because the project would have occurred with or without the demand for carbon credits. Under the Kyoto Protocol, carbon credits used towards U.N. climate targets were largely sourced from countries that did not also have a legally binding obligation to reduce their emissions (e.g., developing countries) and voluntary markets only operated in sectors where a legally binding obligation to reduce emissions from that sector did not exist. Under the Paris Agreement, nearly all countries in the world have committed to reducing their emissions and many NDCs represent "economy-wide" emission reduction commitments. This changes the context considerably.

Over time, emissions should be increasingly covered by compliance obligations as new policies and regulations for NDC implementation are put in place. This means that the coverage of regulation and policy will expand and voluntary and compliance systems will increasingly interact over time. Establishing quality standards for voluntary carbon markets that are weaker than those established for compliance markets will not service integrity over the long term. Emerging tracking and transparency systems and accounting approaches must enable voluntary and compliance markets to collectively advance meaningful progress towards Paris Agreement goals. Further analysis is necessary to understand how and whether international accounting should interact with corporate GHG accounting and the domestic use of voluntary credits, and the extent to which thresholds should be defined below which a corresponding adjustment would not be necessary. Nonetheless, we cannot afford to delay climate action. Further investment and enhanced mitigation is urgently required and the voluntary market can continue to be an important channel for those investments.

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Box 2

Everything You Ever Wanted to Know about Corresponding Adjustments

What is 'Corresponding Adjustment' and Why do I care?

Article 6 of the Paris Agreement makes clear that the double counting of authorized international transferred mitigation outcomes (ITMOs) used towards NDCs or for other international mitigation purposes is to be avoided on the basis of a "corresponding adjustment." A corresponding adjustment is essentially a system of double entry bookkeeping for national GHG accounting. In its simplest form, the rules require that the transferring country add the reduction/removal/avoidance of authorized carbon credits to its GHG totals from its national GHG inventory and the acquiring country subtracts an equivalent amount. Only one country gets the benefit of the reduction/removal/avoidance, so double counting is avoided. A corresponding adjustment was conceived as a simple way to operationalize accounting for international transfers of carbon credits or mitigation outcomes. The corresponding adjustment ensures that transferred mitigation is not counted towards the achievement of more than one NDC or international goal.

Are the Rules for Corresponding Adjustment Agreed?

Not quite. The requirement for a corresponding adjustment is already agreed and some rules for its implementation have also been agreed to. Unfortunately, the rules elaborating the detailed international accounting rules under Article 6, including those for corresponding adjustments, are not yet agreed, and the systems and infrastructure necessary for their operation have not yet been implemented. As a result, carbon credits associated with corresponding adjustment are not currently available.

Is the Corresponding Adjustment only for Country-level Accounting?

No. The rules of the Paris Agreement were expanded to take into account the use of carbon credits under the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). The Paris Agreement rules ensure that international rules include those related to corresponding adjustments are applied to avoid double counting when an airline uses a carbon credit to comply. The CORSIA rules require the program (i.e, the standard-setting body) to secure an "attestation" from the host country (the country where the emission reduction/removal/avoidance takes place) confirming that it will account according to international rules.

Does the Corresponding Adjustment Always Correspond (i.e., does it always happen on both the transferring and acquiring side of the transaction?)?

No. The emerging rules under the Paris Agreement are clear that the corresponding adjustment by the host country of authorized carbon credits is required upon international transfer regardless of use. This means that if a carbon credit authorized by the host country is internationally transferred but never used (i.e., it is cancelled or banked by the buyer), the host country must still make a corresponding adjustment. In this way the rules ensure the most conservative result.

Was the Corresponding Adjustment Designed to Address Quality Beyond Double Counting?

When a host country adjusts for internationally transferred carbon credits, it cannot also count the reduction/removal/avoidance towards its NDC. This means it is generally in a host country's interest to only authorize the transfer of mitigation that is surplus to what it needs to meet its NDC. This is different than additionality, but parallels are often drawn because the corresponding adjustment, in principle, incentivizes international transfers that are additional to the NDC.

Box 2 continued

Do the Article 6 Rules apply to Carbon Credits Used for Voluntary purposes?

The Paris Agreement does not address the interaction between and among voluntary and compliance carbon markets and the international rules will not regulate the voluntary carbon market even when they are agreed unless a country chooses to implement these domestically.

Recommendations: Corresponding Adjustments

Urgent Action Should not be Delayed

In order to contribute to the goals of the Paris Agreement — in advance of agreed international guidance and international and domestic systems and infrastructure for accounting, tracking and transparency — companies, project/program participants and standard-setting bodies should:

- Continue to invest in high-quality carbon credits through voluntary carbon markets.
- Continue to support robust activities that reduce and avoid emissions and enhance removals, and facilitate countries in achieving their NDCs.

Facilitate the Transition

In the transition period standard-setting bodies, project/program participants, companies, international organizations and civil society should:

- Work with governments to ensure that appropriate administrative systems are put in place for host country engagement and robust accounting, while ensuring that these systems are efficient and fair and do not create a barrier to high-quality projects and programs.
- Work together to create an infrastructure to facilitate the transparency and accounting of voluntary credits and carbon market activities in line with emerging international guidance.
- Work to clarify claims, thresholds, and the interaction between company- and country-level accounting to mobilize robust action and investment through the voluntary carbon market consistent with the goals of the Paris Agreement.

***Recommendations: Corresponding Adjustments** continued*

Alignment and Continuous Improvement is Necessary Over Time

Where doing so will accelerate the objectives of the Paris Agreement, once international guidance and international and domestic systems and infrastructure for accounting, tracking and transparency are in place, standard-setting bodies, project/program participants, companies, international organizations and civil society should:

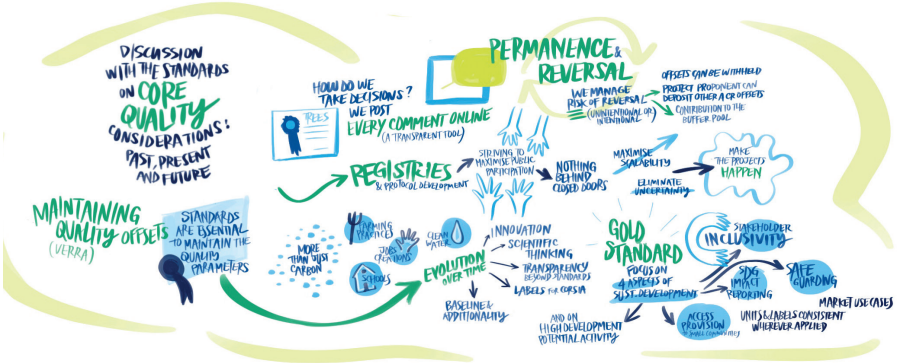
- Invest in voluntary credits associated with host county corresponding adjustments in line with relevant international guidance.
- Take into account additionality in light of progress made and actions planned in implementing the host country NDC and ensure that the activity is consistent with NDC progression in scope and ambition over time.
- Utilize emerging infrastructure for the transparency and accounting of carbon credits and carbon market activities. Over time, this enhanced transparency and accounting infrastructure can enable more accurate claims by all actors.
- Continue to work with governments to improve host country engagement and the robustness, fairness and efficiency of systems in place.

Clarity and Review are Essential

- Recognized standard-setting bodies should facilitate the transparency of international voluntary market transactions and make clear which credits are associated with corresponding adjustments.
- Recommended good practice and processes should be regularly reviewed and updated as international guidance, mitigation strategies, NDCs and their implementation and national policies and regulations evolve over time. Review should reduce risks associated with regulatory uncertainty to the extent possible.

VIII. Transparency

Infrastructure, public disclosure and reporting systems that reflect climate action by a wide range of stakeholders and voluntary market participants will facilitate ambition. New systems and approaches for tracking and transparency, as well as addressing core offset quality elements and GHG accounting across targets and systems, will be needed across voluntary, national and international markets to ensure delivery of robust environmental outcomes and meaningful progress towards global mitigation and temperature goals.



Recommendations: Transparency

Enhanced Transparency is Crucial

In order to facilitate enhanced transparency and accountability across systems, companies, standard-setting bodies and project/program participants should:

- Enhance transparency and data availability wherever possible.
- Improve standardized reporting systems for tracking progress towards company decarbonization targets and improve alignment with emerging systems and tracking and transparency infrastructure developed with respect to the Paris Agreement, including information on carbon credits used towards voluntary climate goals.
- Publicly disclose information related to climate goals including: measurement, reporting and accounting practices; and any voluntary use of credits specifying the host country, vintage, project or program type, standard-setting body, whether they are associated with a corresponding adjustment and whether they are eligible under any international schemes (e.g., CORSIA).
- Consider ways to enhance transparency through a central data repository.

In addition to the information already made public and that required by international processes, the voluntary market standard-setting bodies should:

- Work together to standardize reporting across the different registries, including by aligning terminology for communicating monitoring and/or verification periods and concepts.
- Improve access to information in the registries including crediting period dates and information currently contained in design and verification documents in order to facilitate coherent analysis and comparison at scale.
- Provide an enhanced framework for reporting on progress related to non-GHG impacts, so that co-benefits can be better tracked.
- Extend the public consultation period and undertake enhanced comment review, in particular for methodologies that represent significant proportions of credit volumes issued.

IX. Areas for Future Work

These recommendations represent a start. More work is necessary to further unpack complexity, to bridge remaining divergence in views and to add precision in further iterations. The discussions of the Steering Group and its observers identified some areas ripe for further exploration, including the following:

- The interaction between accounting systems for companies and countries and the accounting within the supply chain in light of the use of carbon credits (the interaction between and accounting for emissions and carbon offsets related to Scopes 1, 2 and 3 emissions). Who claims what?
- Analysis of the impact on supply, demand and price of the application of a corresponding adjustment and the continuum between investment and enhanced global ambition on the one hand, and the level of development of the host country on the other, as well as the extent to which materiality thresholds could be developed to support credible action.
- The impact of NDC implementation and progression on additionality assessment, baseline determination, and their review and materiality thresholds.
- Approaches to enhance host country engagement while ensuring that it is fair and efficient.
- Establishment of central data repositories and linked international tracking and transparency.