

# VOLUNTARY CARBON MARKETS: CONSIDERATIONS FOR HOST COUNTRIES

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# Summary and key issues

01

## Context

The Voluntary Carbon Market Integrity Initiative (VCMi) seeks to facilitate countries' achievement of their climate targets by supporting their engagement with the voluntary carbon market. Uptake of the voluntary carbon market in many countries has thus far been hindered by informational as well as capacity barriers. This report summarizes essential issues surrounding governments' – particularly of developing countries – engagement with the carbon market, with a view to helping governments design appropriate and effective strategies that align with their policy priorities and national circumstances.

Governments can engage with carbon markets in a variety of ways; as regulators, activity proponents, or facilitators. Their responsibilities include designing regulations that ensure that projects align with national priorities and observe appropriate safeguards. Public agencies can also directly implement or finance programs or project activities. They can also put in place incentives that attract carbon investments and direct them into priority sectors.

In order to engage strategically, however, governments first determine their objectives for engagement, with regard to:

1. **Existing carbon market activities:** Policymakers should seek to understand the nature and context of private carbon market projects that are already under implementation or planned in the country. Better understanding of mitigation opportunities and costs in-country can increase the appropriateness and alignment of private investments with national climate priorities.
2. **Engagement in regulated vs voluntary carbon markets:** Policymakers should decide whether and to what extent the voluntary carbon market can complement or be linked to

regulated carbon markets. While such action has potential to blend private and public finance and incentivize mitigation action at the sectoral scale, it also requires greater capacities. Governments must therefore weigh up their level of engagement and costs against the expected benefit of each kind of market.

3. **Contribution of carbon markets to achievement of a country's Nationally Determined Contribution:** It is essential that the government decides whether – and to what extent – voluntary and regulated carbon market transactions will contribute to its Nationally Determined Contribution (NDC). Carbon market activities can help countries to increase their ambition and generate emission reductions and removals that go beyond existing NDCs, however, largely depend on government decisions around which activities will issue Internationally Transferable Mitigation Outcomes (ITMOs) and benefit from offset "use authorizations" issued under Article 6 of the Paris Agreement.
4. **Mobilizing finance through carbon markets:** Policymakers should understand their government's climate financing needs; in particular, whether achievement of NDCs depends on additional carbon and climate finance. This will enable them to map exactly where domestic and international finance can be allocated, and what proportion can or must be financed by carbon market investments.

Once countries have defined their strategic priorities in engaging with the voluntary carbon market, they must assess a number of regulatory and institutional needs that go along with any carbon market engagement strategy.

## Approvals and authorizations

Provided that they want to engage in Article 6 transactions, countries must formulate approvals for cooperative approaches and activities under Articles 6.2 and 6.4 of the Paris Agreement. These rules also apply to voluntary carbon market projects that seek corresponding adjustments for all or parts of their emission reductions or removals. Countries must also authorize public and private entities that wish to participate in Article 6 transactions. Defining approval and authorization requirements will involve defining, for each project and program: (ex-ante) eligibility criteria; criteria the project must meet throughout its operational time; and reporting requirements.

## Corresponding adjustments

Formal regulation (in most cases a law) will be necessary to establish: the right to receive corresponding adjustments from host countries; the authorities that can allocate these corresponding adjustments, the procedures to do so, the conditions for receiving corresponding adjustments, and the limits of these rights. They are also necessary to comply with competitiveness rules and national assets legislation, and to ensure predictable, equal, and fair rights of public and private entities in Art. 6 transactions.

## MRV and accounting

The integration of carbon market activities into national climate strategies necessitates robust and transparent carbon accounting and tracking systems. In many cases, this will require an enhanced effort to ensure that GHG inventories, NDCs, and Article 6 accounting (for ITMOs) are aligned, systems are linked, and measurement reporting and verification (MRV) is harmonized.

## Conclusion

It is essential to appreciate the challenges and opportunities the voluntary carbon market offers for governments, civil society, indigenous and local communities, and private entities from developing countries. They need to define their own priorities and decide how carbon market investments fit into their climate and sustainable development strategies. While the voluntary carbon market is no panacea for mitigation action, it can fast-track emission reductions while governments design, formulate, and adopt relevant strategies, policies, and laws to abate greenhouse gas emissions and mitigate climate change. The VCMI access strategies help governments to take a step towards realizing their carbon market vision.

# Introduction

02

The Voluntary Carbon Market Integrity Initiative (VCMi) seeks to support countries in their strategic engagement with the voluntary carbon market by allowing them to mobilize mitigation action that helps to achieve and exceed their nationally determined contributions (NDCs). Over the last year, the VCMi team has conducted interviews and reviewed policies and literature with the goal of supporting countries to address the most important issues around VCM engagement. By facilitating the “VCM Access Strategy”, VCMi enables countries to maximize the benefits and minimize the risks that come with voluntary carbon market engagement.

This report summarizes the main items that emerged from our discussions with government officials and stakeholders in developing countries. It examines concerns for host countries, with a view to helping governments design their strategies and understand their related capacity and institutional needs. This report seeks to guide decision-makers through main decisions without elaborating the various topics in detail. For more detailed background on the VCM, see [www.vcmprimer.org](http://www.vcmprimer.org).

**Context: The carbon  
market opportunity  
for host countries**

**03**

Over the last five years, corporate interest in achieving greenhouse gas (GHG) emission reductions and removals – certified under voluntary carbon market standards – has exploded (Figure 1). In 2021, more than USD 1 billion worth of carbon credits was transacted in the voluntary carbon market, representing almost 300 million tons of GHG reduced or removed from the atmosphere.<sup>1</sup> This is up from 63.4 million tons worth of carbon credits (valued at USD 193 million) traded in 2016.<sup>2</sup>

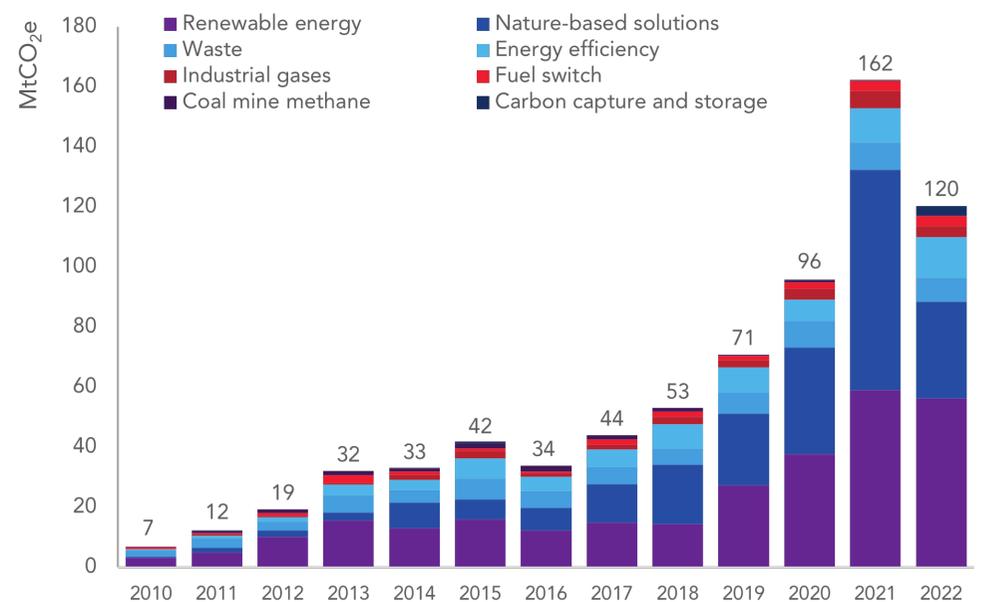
The interest in carbon markets trails a steep increase in corporate climate commitments. Companies feel increasing pressure from consumers, markets, and governments to demonstrate that they are making an active contribution to solving the climate crisis. As of February 2022, 5,235 businesses had joined the UN Framework on Climate Change’s “Race to Zero” campaign.<sup>3</sup> Under the Science Based Targets initiative (SBTi), 2,497 companies are listed as taking climate action, while 1,164 companies have approved science-based targets and 1,244 companies have commitments in line with the 1.5°C global temperature goal.<sup>4</sup> These targets differ in terms of time horizons, scope and coverage, but most companies have committed to become “net zero” or “carbon neutral” by 2050.

Credible targets require clear pathways towards reducing GHG emissions that are in-line with the Paris Agreement (PA), specifically, the goal of limiting global warming to 1.5°C or well-below 2°C compared to pre-industrial levels. These pathways must include decarbonization of company operations, as well as procured electricity, goods and services. Science-based net-zero or carbon neutrality GHG targets go even further, requiring companies to balance any remaining GHG emissions with carbon dioxide removals,

<sup>1</sup> Forest Trends' Ecosystem Marketplace initiative, [here](#)  
<sup>2</sup> Ecosystem Marketplace (2017), *Unlocking Potential, State of the Voluntary Carbon Markets 2017*, [here](#)  
<sup>3</sup> Race to Zero Campaign, [here](#)  
<sup>4</sup> Science Based Targets Initiative (SBTi), [here](#)

i.e., storing carbon in trees, soils and other biomass or using technological carbon removal solutions.<sup>5</sup> As companies begin to work toward these targets, most rely on voluntary carbon markets to offset some of their emissions, which has led to an unprecedented increase in demand for carbon credits in the last two years.

**Figure 1: Yearly volumes of retired voluntary carbon credits (VCS, GS, ACR, CAR).**



Note: Credits are retired when they are bought and put towards users’ climate goals. If more credits are retired over time, then there is a growing demand for credits. The data also includes retirements from Plan Vivo and Climate Forward.

<sup>5</sup> According to SBTi’s Net Zero Standard criteria, “The use of carbon credits must not be counted as emission reductions toward the progress of companies’ near-term or long-term science-based targets. It can only be considered an option for neutralizing residual emissions or as additional mitigation beyond science-based emissions target”, [here](#)

Offsetting cannot replace efforts to reduce emissions; however, it can complement operational and value-chain emissions, and in the long term, it can compensate residual, unavoidable emissions. Although the reliance on carbon offsets by individual companies will decrease as they near their climate targets, voluntary carbon markets are likely to retain an important role in climate mitigation in the short and medium term, in particular, if lack of government climate ambition and pressure on corporates to act persists.

While carbon market funds are ready to be deployed, public climate finance pledges fall short of what is required to put poorer countries on a low-carbon development pathway. There is no agreed metric to account for climate finance, but all sources – including OECD numbers – show that climate finance falls short of the pledged minimum of USD 100 billion per year.<sup>6</sup> In a 2020 report, the international-aid charity Oxfam estimated public climate financing at only USD 19–22.5 billion in 2017, while the OECD estimated more than USD 70 billion for the same time frame.<sup>7</sup> In the Glasgow Climate Pact adopted at the occasion at the 26th session of the parties to the U.N. Framework Convention on Climate Change (UNFCCC), governments noted “with deep regret” that developed countries failed to meet that goal in 2020 to mobilize the promised amount of climate finance.

As long as public climate finance remains insufficient, carbon markets can help to channel significant volumes of finance into developing countries. The majority of carbon credit supply – from implemented carbon mitigation projects – comes from developing countries, which can offer lower abatement costs and high sustainable development benefit opportunities. In 2021, 15 times more carbon credits were issued in developing than in developed countries (see Figure 2). Carbon investment in developing countries therefore offers a unique

opportunity for host countries that have limited access to (foreign) direct investment and struggle to otherwise finance ambitious mitigation action.

So far, however, very few governments have exposure to the voluntary carbon market and are often uninformed about the details of carbon market projects implementing on their territory. Exceptions exist where public agencies are sponsoring activities, when activities require a permit to operate, or when a link exists between domestic regulation and the voluntary carbon market. Consequently, few countries have developed strategies for effectively engaging with the voluntary carbon market. This means that the synergies between private action and public policies are unexplored and additional mitigation potential may remain untapped. This potential could be unlocked if governments better understood the carbon market opportunity in their country, and were better equipped with tools for strategic market engagement.

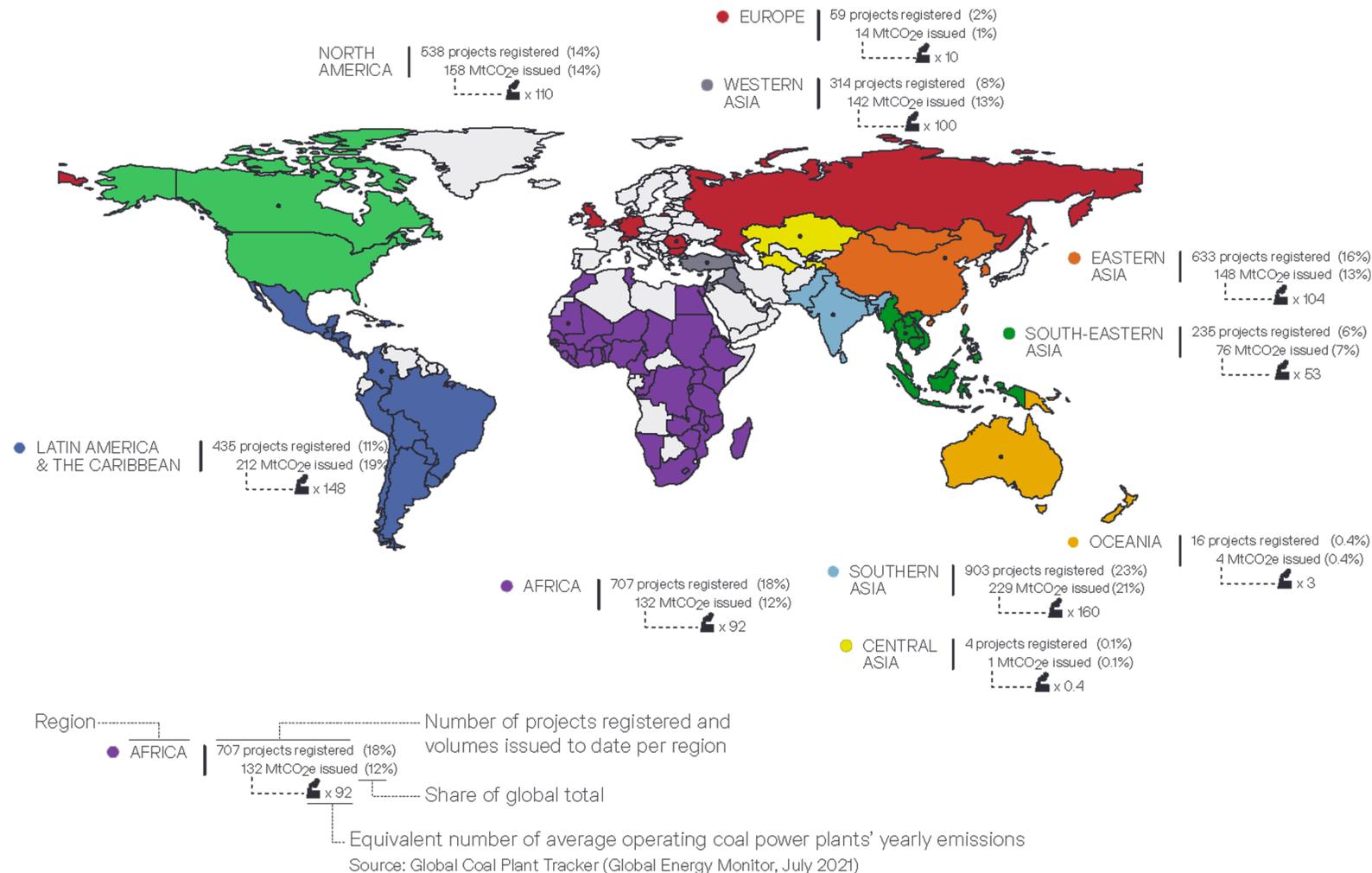
## What is carbon finance?

Carbon finance is a form of finance that links investment to the transfer of certified GHG emission reductions and removals. One ton of certified emission reductions and removals, calculated in carbon dioxide equivalents (CO<sub>2</sub>e) is represented by a single carbon credit. Carbon finance involves the issuance of tradable carbon credits, which are generated by activities that reduce or remove GHGs emissions from the atmosphere. Credits are certified by carbon ‘standards’ and can be sold by project or program proponents to raise finance for climate change mitigation activities.

<sup>6</sup> In 2009, developed countries committed to mobilize USD 100 billion a year by 2020 and through 2025 to support climate efforts in developing countries.

<sup>7</sup> J. Timperley (2021), The broken \$100 billion climate finance promise – and how to fix it. Nature, [here](#)

Figure 2: VCM credits issuance and registered projects for 2002-2022 (VCS, GS, ACR, CAR)



Note: Most of the supply of carbon credits is generated in developing countries and most of the demand for carbon credits is in developed countries. As of September 2021, there were 3,844 voluntary carbon market projects generating GHG emission reductions and removals equivalent to the average yearly emissions produced by about 690 coal plants.

**Strategic policy  
considerations for  
carbon market  
engagement**

**04**

Governments can engage with carbon markets as regulators, proponents, and facilitators. Policymakers institute regulations and safeguards that influence climate change mitigation activities and clarify how such activities will be treated under Paris Agreement rules, towards the fulfillment of NDCs. They can also adopt policies that create enabling environments for private sector engagement, to direct carbon finance towards priority sectors. Subnational entities (e.g., municipalities or states), public agencies (e.g., park authorities or investment agencies) or public utilities (e.g., municipal waste management or energy generating entities) can be sponsors of carbon projects. Depending on the nature and authority of the public actor involved, they can support programmatic or jurisdictional approaches, develop waste or energy projects, or design conservation or forest restoration projects. In the context of the framework for 'reduced emissions from deforestation and forest degradation, as well as the sustainable management of forests and the conservation and enhancement of forest carbon stocks in developing countries' (REDD+), governments can sponsor jurisdictional programs, and adopt rules for private sector engagement, in addition to ensuring fair access to benefits for Indigenous People and Local Communities (IPLC), and providing guidance for project developers on how to fulfill the national safeguard policies.

Before engaging with the VCM, host country policymakers should consider a number of issues:

**1. An inventory of activities:** Policymakers should seek to understand the nature and context of private carbon market projects that are already under implementation or planned in the country. Understanding ongoing or future activities, targeted sectors, applied methodologies, and certification carbon standards is essential for policymakers who seek to use the carbon market to mobilize finance for additional mitigation action. A mapping of projects and programs,

project developers and investors, provides important input for a government strategy, and enables an eventual alignment of private engagement with policy goals.

**2. Engagement in regulated vs voluntary carbon markets:**

Policymakers should decide whether and to what extent voluntary carbon market can complement or be linked to regulated carbon markets. Where a government is planning to achieve mitigation goals through regulated carbon pricing instruments (e.g. cap-and-trade programs or carbon taxes), it may contemplate whether voluntary carbon markets can supply offsets to such program. Voluntary carbon markets can also help to access mitigation options that are not covered by carbon pricing policies.

**3. Contribution of carbon markets to NDC achievement.**

In this context, it is essential that the government decides whether – and to what extent – voluntary and regulated carbon market transactions should contribute to a country's NDC. This decision requires an assessment of the mitigation potential of existing and planned policies, including the identification of potential mitigation gaps. The voluntary carbon market – and carbon markets in general – can also help countries to increase their ambition and generate emission reductions that go beyond existing NDCs. How international carbon markets contribute to a country's NDC depends on the decisions a government makes about which types of mitigation activities approved and use authorizations issued under Article 6 PA.

**4. Mobilizing finance through carbon markets.** Policymakers should understand their government's climate financing needs; in particular, whether achievement of NDCs depends on additional carbon and climate finance. Governments are advised to assess whether carbon market investments can cover some of their (conditional or unconditional) NDC financing needs and reduce the burden on governments

to mobilize budgetary or donor resources. Once they have established a carbon finance need, they can also map the types of international investors – both public and private – that might be interested in acquiring emission reductions or removals and the types of activities in which these actors typically invest.

The following section elaborates on these four considerations.

## 4.1 An inventory of carbon market activities

Knowledge and information are essential for preparation and engagement. It is therefore critical that governments have a good overview of on-going and planned carbon projects and programs within their territories – including the emission reductions and removals that are being generated, traded, and used – to develop strategies and policies that engage the voluntary carbon market. Project and program information provides important input into policy making as it indicates which project types are feasible for project developers and favored by investors, and which are more difficult to realize. This information can help countries to tailor mitigation policies that complement and/or facilitate carbon markets. The technical information generated by carbon market projects – abatement costs, technical and regulatory barriers, and capacity needs – may also help governments better understand mitigation opportunities and costs, both of which can inform appropriate policy making.

Governments may collaborate with carbon standards, crediting programs, and local and international business associations to organize information about carbon projects and programs. Information can also be collected in dialogue with stakeholders that are developing or wish to develop carbon market activities to understand ongoing activities as well as interests, barriers, and

challenges. Such dialogues can inform policymakers and help them to identify the right policies, guidelines, incentives, and support that they can provide, and how else they can foster an active voluntary carbon market with various actors.

Once they have reviewed and organized this information, they may make it available in a public database. Host countries can also specify the type of information that carbon project developers should provide to the national carbon market database system. A proper inventory of voluntary carbon market activities and specific rules on the type of information to be submitted by carbon initiatives provides a first step towards effective regulation of carbon markets, either in support of activities or to ensure that they meet appropriate safeguards.

An inventory or database of carbon market projects – including locations, methodologies, and project proponents – may also serve buyers, investors, and project developers scoping the country for additional project opportunities. A national database on carbon projects and initiatives in countries with numerous carbon market activities may also serve to avoid overlapping carbon finance activities. Publicly available information also helps civil society organizations to monitor project activities, successes, and problems. In addition, information on the emission reductions and removals generated by carbon market activities will facilitate the host country's task of collecting the information required for different reporting obligations under UNFCCC rules.

Table 1 outlines the key actors and structure of the VCM. Compliance markets may share many of the same elements, but with additional restrictions or requirements on project developers, buyers, sellers, and mitigation activities or geographies.

**Table 1: Roles of private sector actors in carbon markets**

<b>PROJECT DEVELOPER</b>	Companies that develop VCM projects or programs. Often such companies have a particular mission—for example, wildlife conservation, reduction of indoor air pollution, or installation of renewable energy systems. However, project developers also expect to make a profit from generating and selling carbon credits. In the VCM project and program cycle, project developers are responsible for planning activities by choosing the VCM standard and the methodology for developing the project or program; conducting feasibility studies and stakeholder consultations; preparing appropriate project and program documentation for registering the project or program; as well as actual implementation and monitoring.
<b>INVESTOR</b>	Companies that provide up front capital to project developers in exchange for the receipt of carbon credits as their ‘return on investment’ and as a way to secure future delivery of credits at a predictable price.
<b>BUYER</b>	Companies or other private actors that buy carbon credits to trade or use to offset their emissions or that of their customers. Once a credit is used, it is retired, and cannot be sold or used for offsetting again.
<b>AUDITOR</b>	Independent third-party auditors, often known as Validation/Verification Bodies (VVBs), validate proposed projects or programs by auditing the activity design documents, which typically includes a site visit and consultation with stakeholders. Validation is required for the official registration of a project or program under a Carbon Standard. Auditors also verify the periodic monitoring reports that project developers are required to submit for their projects and programs under carbon standards. Verification is required for the issuance of carbon credits.
<b>CARBON STANDARD ORGANIZATIONS</b>	Carbon standard organizations provide and administer the rules and requirements for VCM projects and programs, certify and issue carbon credits, and facilitate the trade in carbon credits. They are involved in a variety of activities throughout the VCM project and program cycle. Carbon standard organizations register a project or program if it meets the rules and requirements of the standard. They verify the periodic monitoring reports that project developers are required to submit for their projects and programs under the standard. After the regulatory body of the carbon standard organization approves the issuance of carbon credits for a project or program, the carbon standard organization deposits carbon credits into the project developer’s account on the registry of the carbon standard.

## 4.2 Engagement in regulated vs voluntary carbon markets

Private organizations and individuals engage with carbon markets to voluntarily offset emissions or to meet requirements under regulated, compliance markets. This means that demand for carbon credits also comes from regulated compliance markets, where entities covered by carbon pricing instruments, such as carbon taxes or emissions trading instruments, are permitted to use carbon credits to meet their obligations. However, this source of demand often comes with limitations, as most systems allow only domestically-generated credits or limit the amount that can be used for overall compliance. Many countries have also developed their own domestic crediting mechanisms for meeting tax or emissions trading obligations; only five countries currently permit the use of carbon credits issued under independent carbon standards (Colombia's Carbon Tax, South Africa's Carbon Tax, China's regional and national emissions trading systems, Korea's emissions trading systems, and Mexico's Carbon Tax and pilot emissions trading systems).<sup>8</sup>

An additional source of demand comes from the market-based mechanisms elaborated under the Paris Agreement. In 2021, six years after the adoption of the Paris Agreement, negotiators finally completed the "Article 6 rulebook" and enabled carbon markets under the Agreement. The Article 6 rulebook defines how countries can cooperate in the implementation of their NDCs to allow for higher ambition in their climate actions and to promote sustainable development and environmental integrity. The decisions on "cooperative approaches" referred to in Article 6.2 and the market mechanism under Article 6.4 define new rules of the game for those that want to engage in Paris-sanctioned carbon market transactions.

The developers of climate change mitigation activities produce and sell carbon credits to generate finance for these activities. The majority of today's carbon crediting activities are certified under a voluntary carbon market standard. However, with the Paris Rulebook completed, future activities can also be developed under Article 6.2 or 6.4 PA.

These developments as well as the different sources of demand are important for governments to understand as they affect -positively or negatively - a country's ability to meet its NDC (see section 4.3). Engagement with regulated carbon pricing instruments demands also higher levels of regulatory and institutional engagement. Considering, in particular, the similarities between Article 6 and voluntary carbon market transactions, governments should seek to understand the operational, political, and economic differences between the distinct markets conceived under Article 6 PA. While both voluntary and Article 6 transaction markets show a lot of operational similarities, they differ in levels of government engagement and approval.

Table 2 provides some examples of private and public carbon crediting certifying programs as well as drivers of demand.

<sup>8</sup> The World Bank (2021) States and Trends of Carbon Markets 2021, accessible: <https://openknowledge.worldbank.org/handle/10986/35620>.

**Table 2: Crediting programs that generate or accept carbon credits (public programs in light blue)**

**Supply of carbon credits**

UK Woodland Carbon Code	Moor Futures in Germany	Thailand Voluntary Emission Reduction Program
Article 6 Paris Agreement	Verified Carbon Standard (VCS)	Gold Standard (GS)
American Carbon Registry (ACR)	Climate Action Reserve (CAR)	ART/Trees

**Demand for carbon credits**

Corporate climate commitments	Colombian Carbon Tax	South African Carbon Tax
	California Compliance Offset Program	CORSIA

While governments can act opportunistically in the context of the voluntary carbon market, participation in carbon markets contemplated under the Paris Agreement imply higher levels of engagement, as well as government capacity. Even where governments do not actively sponsor carbon finance projects or programs, they must have in place the abilities to approve projects and programs developed by private actors; authorize the participation of such actors; authorize the use of internationally transferrable mitigation outcomes (ITMOs); and account for emission reductions and removals achieved under approved activities. Governments must therefore weigh up their level of engagement against the expected benefits from carbon markets, and must also decide to which extent they want to participate directly in market transactions and where they want to rely on private activity under voluntary carbon markets. They must also decide whether and how carbon market projects should contribute to their NDC.

Engagement in Article 6 transactions, in particular Article 6.2 cooperative approaches, have the advantage of allowing governments to proactively shape sectoral mitigation programs that involve carbon finance. Larger sectoral programs could, therefore, combine different sources and modalities of carbon finance, such as a jurisdictional program that combines government-to-government financial support with integrated (“nested”) voluntary carbon projects developed under the voluntary carbon market.

While voluntary carbon market transactions have been, and are likely to continue to be, developed alongside Article 6.2 cooperative approaches or Article 6.4 activities, some voluntary carbon market project developers and investors have already signaled interest to also receive approvals under one of the modalities of Article 6. This implies that voluntary carbon market projects must also meet the requirements of either Article 6.2 or 6.4 and receive the necessary government approvals. Governments can also decide to actively support voluntary carbon market projects by including them in an Article 6.2 cooperative approach. Governments will also have to

decide when and under which conditions they are willing to convert voluntary carbon market credits to ITMOs and back them with ‘corresponding adjustments.’

### 4.3 Contribution of markets to NDC achievement

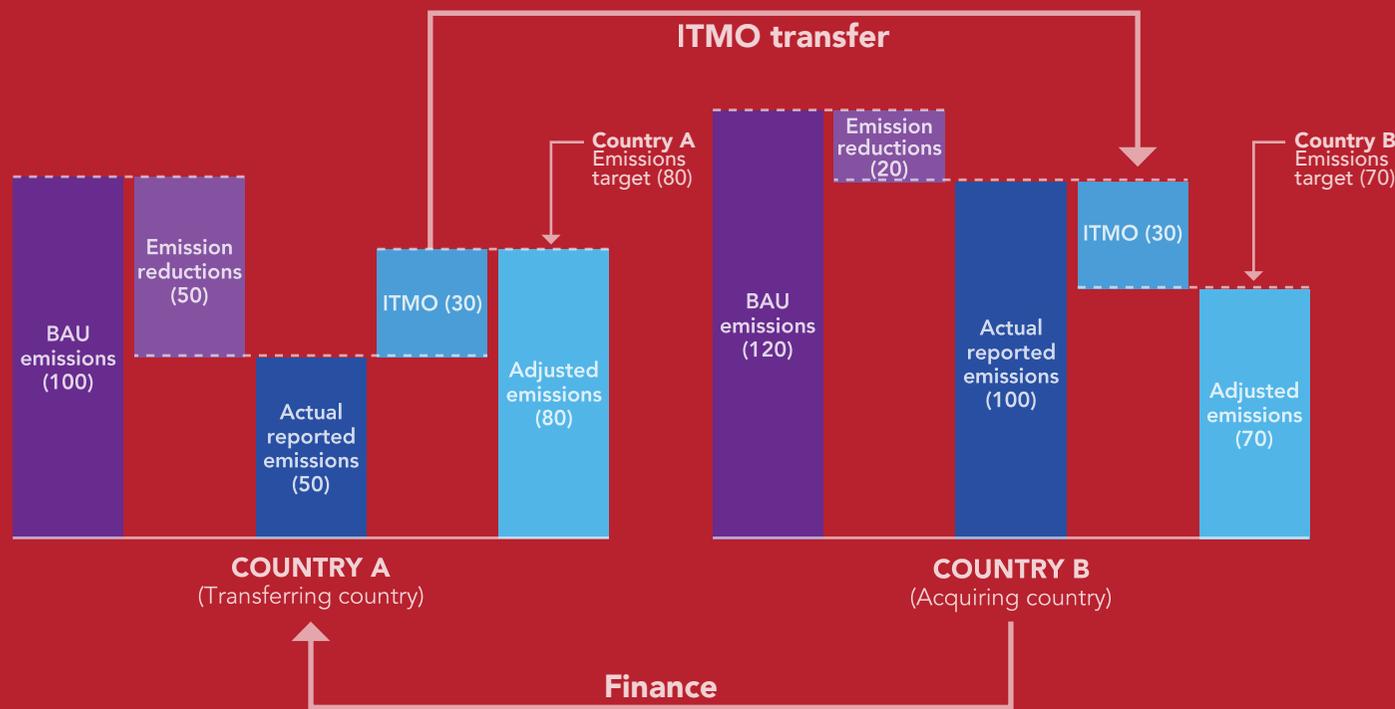
The decision of whether and how to engage in activities under Article 6 PA is closely related to a country’s strategy on how to achieve or go beyond its NDC. If a country authorizes “corresponding adjustments” for a carbon market activity, it can no longer account for the transferred emission reductions and removals under its NDC. If it promotes voluntary or Article 6 PA carbon market activities without a corresponding adjustment, the generated mitigation benefits may be counted towards its NDC.

#### What are corresponding adjustments?

If countries approve the use of Art. 6.2 or 6.4 emission reductions or removals as ITMOs to contribute to the NDC of another country or for other “international mitigation purposes” (e.g., CORSIA), those ITMOs must be backed by “corresponding adjustments.” Corresponding adjustments ensure that there is no double counting of emission reductions or removals under the Paris Agreement or in other international accounting systems. If an emission reduction or removal is transferred as an ITMO and backed with a corresponding adjustment, the receiving country can account for this emission reduction or removal against its NDC, while the host country forgoes the right to claim the emission reduction or removal towards its own NDC (See Figure 6).

However, countries do not have to authorize all GHG emission reductions generated under the Articles 6.2 or 6.4 of the Paris Agreement (Art. 6.4 ERs and Article 6.2 mitigation outcomes) for transfer as ITMOs. Not-authorized mitigation outcomes are counted towards host countries' NDCs and, under the Article 6 rules, may be applied to results-based payment schemes, national carbon pricing systems, or voluntary carbon market transactions.

**Figure 3: Corresponding adjustment between two countries**



*Note: Under the Article 6 rules, when Internationally Transferable Mitigation Outcomes (ITMOs) are exchanged between countries, they must be backed by corresponding adjustments. The corresponding adjustment means that credit for the emission reductions or removals represented by the ITMO is counted toward the NDC of the country that acquired the ITMO and not towards the NDC of the country that generated the ITMO.*

Whether voluntary carbon market transactions should be backed by corresponding adjustments remains contested. Voluntary carbon market engagement does not carry any risk of 'double counting' against two NDCs. Emission reductions or removals generated by a voluntary carbon market project or program are included in the GHG inventory of the host country and do not show in the inventory or accounting system of the country where the carbon credits are used. However, since voluntary carbon market carbon credits may be used to meet corporate climate targets, there is a risk of 'double claiming' of emission reductions and removals. Double claiming may occur where non-state actors – mostly corporates, but also public agencies, NGOs, or individuals – use carbon credits generated and certified under the voluntary carbon market to offset emissions while the same emission reductions or removals represented by the credits are counted toward the host country's NDC. The accounting for mitigation action and emission reductions or removals generated by corporate action or investments is regularly also claimed by the host country – corporate action is often a core pillar of national climate action. However, if carbon credits are transferred internationally, some market actors, including the VCMI claims guidance, demand that ideally any international transactions of carbon credits should be backed by corresponding adjustments and argue that corresponding adjustments enhance the quality of corporate claims.

However, providing corresponding adjustments for voluntary carbon credits comes at significant cost to the host country. First, a host country needs the institutional and technical capacities to make a corresponding adjustment. Second, and more importantly, a corresponding adjustment neutralizes the climate effect of a carbon credit for the host country. The country that hosts the project or the program cannot count the resulting climate benefit against its NDC – which in effect may disincentivize countries from supporting VCM activities. The situation is further aggravated if the credits are generated by activities not covered by a host country's NDC, as a country needs to perform a corresponding adjustment for an ITMO regardless of whether the activity that generated this mitigation

outcome was within or outside the NDC. In this case, the country will need to achieve an extra emission reduction or removal from the sectors and activities covered by its NDC for each corresponding adjustment made. In such a case, the voluntary carbon market puts additional mitigation burden and costs on the host country.

It is important to note that the choice of applying corresponding adjustments to carbon market activities belongs uniquely to host countries and should not be a decision for the carbon standard or the buyer. A government needs to carefully evaluate when and under which conditions approve corresponding adjustments for voluntary carbon markets. Considerations include:

1. whether or not the underlying project or program is covered by the country's NDC;
2. whether the mitigation action is in the short and medium-term additional to a country's policies, i.e., the country will not access the mitigation opportunity through public policy;
3. Closely related, how costly the mitigation activity and resulting emission reductions and removals are; and
4. whether the projects or programs come with significant sustainable development or technology transfer benefits.

The government can also decide to offer corresponding adjustments only to a small percentage of emission reductions or removals generated by a project. Offering corresponding adjustments to, for example, 10-50 percent of the generated emission reductions and removals, can ensure that most of the mitigation benefits can still be accounted towards the host country NDC. The exact percentage that a country authorizes for corresponding adjustments may depend on how well aligned the mitigation action is with host country priorities or on the co-benefits that the projects or programs generate.

In any event, the decision on corresponding adjustments needs to be predictable and fair, which means that it – in all likelihood – will need to be made on the basis of a formal law. The government can also set a fee that reflects the administrative costs of issuing the required approvals and authorizations. It can also demand an ‘adaptation’ or ‘mitigation’ fee that reflects the increase of value that a corresponding adjustment assigns to the associated carbon credit, and allows the government to mobilize funds for additional climate action.

## 4.4 Mobilizing finance through carbon markets

Carbon markets can enable governments to mobilize finance for mitigation, thus offer an important tool for countries to finance and go beyond their NDCs. In 2020, Ecosystem Marketplace’s annual State of the Voluntary Carbon Market found the total value of the market tracked with USD473 million the highest annual value since 2012. As of August 31, 2021, last year’s market transactions had already exceeded USD748 million, making that year the highest annual value ever tracked.<sup>9</sup> If used well, carbon market projects and programs can draw significant amounts of investments into climate change mitigation in developing countries, often in the form of foreign direct investment that comes in hard currency.

Voluntary carbon markets – driven by corporate players that are leading climate actions through pledges – provide access to catalytic capital that can assist countries in their transition to low-carbon economies.<sup>10</sup> Blending public and carbon finance also enables

<sup>9</sup> Ecosystem Marketplace (2021), Markets in Motion, Volume 1, [here](#)

<sup>10</sup> Miltenberger et al (2021), The Good Is Never Perfect: Why the Current Flaws of Voluntary Carbon Markets Are Services, Not Barriers to Successful Climate Change Action, Front. Clim., 2021, [here](#)

countries to implement larger programs and combine different financial instruments. This is particularly important for larger mitigation activities, e.g., seeking to transform the land use or power sector of a country.<sup>11</sup> In these cases, carbon markets can also help governments to directly access funds by engaging in projects or in larger sectoral or jurisdictional programs. REDD+ jurisdictional programs that are sponsored by governments provide one example of host countries’ direct engagement with markets. Broader sectoral programs can also be developed, with government guidance, under voluntary carbon market standards or Article 6.2 Paris Agreement cooperative approaches.

Finally, carbon markets also help to make climate change a societal concern, rather than just a concern for governments. In turn, this can mobilize local actors (e.g., project developers and investors, but also NGOs and municipalities) and harness their ingenuity and knowledge of local circumstances for the implementation of mitigation activities.

A well-designed VCM can drive economic, environmental, and social benefits to host countries, and accelerate and enhance mitigation ambition by creating standardized mitigation assets in the form of carbon credits.<sup>12</sup> Whether benefiting from carbon finance directly or via private investments, governments should assess their needs for additional investments, both in the context of unconditional or conditional parts of the NDC. Based on such assessment, they can decide on their strategy on whether, how and where to promote carbon markets (voluntary and regulated).

<sup>11</sup> The blending of climate and carbon finance may require the attribution of emission reductions to climate finance and carbon markets. See: Spalding-Fecher, R., Kohli, A., Fallasch, F., Brown, P., Fuessler, J., Broekhoff, D. and Schneider, L. (2021). Attribution: A practical guide to navigating the blending of climate finance and carbon markets. Carbon Limits, [here](#)

<sup>12</sup> Verra (2021), The Voluntary Carbon Market as Catalyst for Climate Ambition in Developing Countries. Vision and Action Agenda, [here](#)

# Regulatory and institutional issues

05

Once countries have defined their strategic priorities in engaging with the voluntary carbon markets, they need to consider their regulatory and institutional implications. A proactive engagement with carbon markets by governments demands the adoption of rules that guide authorizations and approvals, the formulation of safeguards and standards, as well as the definition of potential support and incentives for carbon market developers. Governments should assess the regulatory needs that go along with any carbon market engagement strategy.

Regulatory issues include:

1. **Approvals and authorizations:** Adoption of rules that govern the authorizations of entities participating in carbon activities, approvals of such activities.
2. **Corresponding adjustments:** Adoption of a legal basis for corresponding adjustments.

Countries can also demand carbon market activities to periodically report on their activities, and formulate additional safeguarding requirements where existing environmental and social guidelines for investment projects are not sufficient.

The challenges with respect to internal procedures and guidelines relate to how to ensure that national public entities at various levels – ministries, agencies, municipalities, regions – act coherently in the implementation of carbon market policies. This may relate to:

1. ensuring full understanding across all horizontal (different ministries and agencies) and vertical (local, departmental, state, national) on how carbon markets work and their potentials for the country's sustainable development;
2. formulating the procedures so that they are robust to apply to a wide range of cases but also sufficiently detailed and specific

to provide clear guidance to the implementation agencies and staff;

3. providing continuity and full integration of carbon market into the existing legal framework for a country and avoid those procedures are changed and re-done with each program, donor cooperation or engagement with each carbon market crediting program.

The institutional coordination for the implementation of carbon market approvals and authorizations implies an assignment of regulatory and oversight responsibilities.

## 5.1 Approvals and authorizations

Provided that they want to engage in Article 6 transactions, countries must formulate approvals for cooperative approaches and activities under Articles 6.2 and 6.4 PA. These rules also apply to voluntary carbon market projects that seek corresponding adjustments and, hence, must meet the formal requirements of Article 6.2 or 6.4.

Countries must authorize public and private entities that wish to participate in Article 6 transactions. If the transferred certified emission reduction or removal is to be applied against another country's NDC or another international mitigation scheme, countries must provide a "use" authorization that converts certified emission reductions and removals into ITMOs and links the ITMOs to corresponding adjustments. Governments can also decide to authorize emission reductions or removals for 'other' uses and offer corresponding adjustments to VCM projects. VCM projects that seek corresponding adjustments must meet the formal requirements of Article 6. When defining approval and authorization requirements,

governments must decide on the following for each project and program:

- (ex-ante) eligibility criteria
- criteria the project must meet throughout its operational time
- reporting requirements

Criteria may vary from a blanket and unlimited approval for certain project types to specific project criteria. Project approval criteria can also include check on policy alignment, full compliance with national laws and regulations, and additional safeguards.

## 5.2 Corresponding adjustments

Formal regulation (in most cases a law) will be necessary to establish and define the right to receive corresponding adjustments from host countries. Corresponding adjustments are valuable state assets that are assigned to projects in the legal form of government grants, services against fees, or tradable permits. This means that if corresponding adjustments are promised or allocated outside of a formal process, they may constitute illegal state aid that violates competitiveness rules or might imply an illegal selling of national assets whose transactions should be/are regulated under national law.

In the context of corresponding adjustments, any decision on when to authorize the use of ITMOs accompanied by corresponding adjustments would require a formal regulatory act. Such acts are necessary to formally establish the right to receive a corresponding adjustment, the authorities that can allocate the corresponding adjustments, the procedures to do so, the conditions for receiving

corresponding adjustments, as well as the limits of such rights. They are also necessary to comply with competitiveness rules and national assets legislation, and to ensure predictable, equal, and fair rights of public and private entities in Art. 6 transactions.

The authorization of an activity to receive corresponding adjustments may be conditional on time (e.g., the current NDC cycle or the first crediting period), on quantity (e.g., a certain portion of mitigation outcomes must be retained for NDC-achievement), and/or on quality (e.g., only particular types of activities located in certain sectors and within certain thresholds of abatement cost may obtain corresponding adjustments).

When governments decide on the conditions for a corresponding adjustment, they may want to assess different mitigation opportunities and decide which ones are unlikely to be accessed without additional assistance. Such opportunities may either be particularly costly or otherwise hard to realize for the government with public policies (e.g., in a region with weak institutions or in areas with contested land titles). Projects or programs covering those opportunities may be prioritized for corresponding adjustments. The government may also issue “use authorizations” that include corresponding adjustments for other projects and programs and link this approval with a fee that supports additional mitigation in the country.

## 5.3 Capacity and institutional needs

Governments must assess the costs of a carbon market engagement strategy. The key question when deciding on specific measures is whether the relative costs associated with the implementation strategy lead to a justifiable level of enhanced outcome, compared to a non-carbon market strategy. The development of new institutions and

regulatory frameworks is only justified if they lead to corresponding benefits. Governments need to carefully evaluate which activities are likely to lead to significant returns and where costs outweigh the benefits of an interventions. Equally, governments need to identify which public institutions are best equipped to fulfill certain market functions and where private sector entities can most effectively and efficiently engage.

These steps will require a capacity needs assessment which analyzes the ability of the relevant institutions and ministries to implement the proposed policies for carbon market engagement. This assessment is an essential step towards a full capacity development strategy, which may include internally organized and self-financed staff training. Such assessment can also inform a country's requests for donor support and funding.

A capacity needs assessment can be complemented by an institutional needs assessment that analyzes the set-up, mandates, and capacities of existing institutions to design, implement and track results of planned interventions. Examples of institutions for which a carbon market needs assessment would be relevant are: environmental and climate change related ministries and specialized agencies; national planning institutions; sectoral and line ministries; and investment agencies.

# Additional policy issues

06

## 6.1 Corporate claims and the voluntary carbon markets

To mobilize the full mitigation potential of voluntary carbon market, it is important to establish a common understanding of the accounting measures that back different carbon credits. Governments and companies should clarify when and how they use greenhouse gas emission reductions and removals towards their targets. Transparency around the use of carbon credits to offset emissions and associated corporate claims allows an assessment of double claiming and displacement risks. An harmonized understanding of accounting approaches --i.e. offset claims with or without corresponding adjustments and non-offset claims – would enable civil society to hold corporates accountable and enhance market integrity.

In most countries, corporate claims around climate action, i.e. carbon neutrality, carbon positive (or negative) or net-zero emissions are not regulated, which leads to the risk of greenwashing and spurious corporate claims. The activities, inputs, or processes upon which claims are based are often internal to a company's operations and largely unobservable to outsiders. Although an increasing number of companies make environment- and climate-related disclosures following the formats of one of the many disclosure initiatives,<sup>13</sup> gaps and inconsistencies in these disclosures limit comparability of data and performance assessment.

There are various efforts to fill this regulatory gap and provide guidance on claims. The VCMi, among other initiatives, is currently developing guidance for corporate claims. The resulting VCMi Claims

<sup>13</sup> The UN Global Compact, OECD guidelines for multinational enterprises, ISO 26000, Global Reporting Initiative (GRI), and the International Integrated Reporting Council (IIRC), among others.

Code of Practice is likely to impact the voluntary carbon market countries in two ways:

1. it will influence corporate actors with climate targets operating from and in the country
2. it will influence whether and when corporate actors demand corresponding adjustments

One important consideration when regulating corporate claims relates to indirect and secondary effects of such regulation. These are particularly relevant for developing countries. The VCMi Claims Code of Practice stresses the need for business activities and activities financed by carbon credits to support healthy, inclusive, socially just, and resilient livelihoods and economies. It also highlights the importance of enabling full and effective participation of Indigenous Peoples and local communities, and equitable access to the voluntary carbon market.

## 6.2 Support to projects and programs

Corresponding adjustments are one way that governments can support carbon market activities. In most cases, such support measures – at least if they involve direct economic transfers to private entities – will also require a formal legal basis.

Governments can actively encourage and support carbon market investments via dedicated programs that facilitate projects, for example, by making available project-relevant information, such as grid data (for energy projects) or local and regional deforestation rates (for avoided-deforestation programs). They can also directly support projects and programs by supporting the development of

methodologies or by integrating voluntary carbon market projects into broader cooperative approaches developed under Article 6.2.

When equipped with an understanding of ongoing activities and domestic carbon market potentials, governments are better placed to attract investment, both through existing investment agencies or through the creation of new institutions that operate exclusively as a carbon market investment promotion agency. Such an agency could help a country to attract private investment into carbon markets and support national climate objectives. Whether as branch of existing investment agencies or new institutions, they could help countries to attract additional investments and support national climate objectives by linking carbon market opportunities to measures that create an enabling environment for private investments.<sup>14</sup>

Through private investment or by linking carbon opportunities with donor programs, governments could also facilitate up-front investment into high-quality projects. The ex-post nature of carbon finance – financial flows occur once the emissions reductions or removals are generated – creates barriers for projects that require a longer investment horizon (e.g., forest restoration) or have high-up front costs (e.g., in the case of new and innovative technologies or projects that require extensive community consultations). By communicating domestic climate and development priorities to donors, governments can help project categories that have the most significant development benefits to be prioritized; donors are better informed to design appropriate finance instruments, and these projects will in turn have improved access to advance finance and private investment.

<sup>14</sup> Verra (2021), The Voluntary Carbon Market as Catalyst for Climate Ambition in Developing Countries. Vision and Action Agenda, [here](#)

## 6.3 MRV and accounting

The integration of carbon market activities – voluntary and regulated – into national climate strategies means that governments need to implement robust and transparent carbon accounting and tracking systems. For many countries, participation in Article 6 transactions will require an enhanced effort to ensure that GHG inventories, NDCs, and Article 6 accounting (for ITMOs) are aligned, systems are linked, and monitoring, reporting and verification (MRV) is harmonized.

Lack of consistency between national climate change reports and other national reports is a longstanding issue. GHG inventories included in developing countries' Biennial Update Reports and National Communications; forest reference levels submitted to the UNFCCC; and NDC targets often do not align, calling into question their validity. There are a variety of reasons for this. In some cases, it may result from a lack of institutional coordination. In others, reports may rely on different calculation assumptions, or vary in their compiling and reporting periods, making consistency difficult. A final explanation may relate to the sets of rules that have been applied – for example, the requirements to access carbon markets via Article 6, versus in the context of REDD+.

Lessons learned about consistency and alignment between national reports and project-level accounting can be extrapolated to inform the use of domestic MRV systems in the context of carbon market engagement. Aligned MRV systems are necessary for accounting under the Paris Agreement, particularly if a country intends to engage in Article 6 transactions or other finance opportunities that require integration with national accounting (e.g., CORSIA transactions). In such cases, a country may want stronger alignment between systems to optimize the way in which projects, or subnational programs, contribute to the country's emission reductions – particularly since such transactions would require a deduction from national accounts (and, thus, against achievement of NDCs).

When contemplating carbon market engagement, governments need to assess their MRV capacities, in particular in the context Article 6.2 cooperative approaches. They must also consider how to align GHG reporting of corporates and the measurement of project GHG reductions and removals with the country's GHG inventory.

## 6.4 Sectoral VCM programs

To drive more ambitious climate action, voluntary carbon markets also offer tools that go beyond supporting individual projects; they provide a platform for programmatic efforts to mitigate GHG emissions across programs or regions. By linking public policy goals with programmatic carbon finance opportunities, voluntary markets can maximize their transformative potential. Governments may partner with investors, civil society organizations and private carbon buyers to do this. In the context of such partnerships, carbon credits provide incentives to measure, report and account for emissions and establish a link to private finance.

Governments may design sectoral carbon programs that involve budgetary and donor finance and create private investment opportunities. Private projects could be embedded in cooperative approaches under PA Article 6.2, or be developed as grouped project activities. Blended finance could support such programs that could be recognized as carbon finance and collaboration under Article 6 of the Paris Agreement, or be developed exclusively under private standards, which may face lower engagement thresholds, and be more feasible in the short term.

Public-private partnerships – in contrast to those under Article 6.2 or 6.4 of the Paris Agreement – would not involve the transfer of an international carbon credits, but would solely benefit the NDC of the

host country. They would build on the support of relevant state and non-state actors to address a clearly defined mitigation challenge, such as the development and dissemination of a particular technology or enhancing the sustainability of defined global supply chains. Such public-private cooperation would require subnational and nonstate actors to balance potential transboundary problems with ensuring that voluntary action is embedded in government strategies.

# Conclusions

07

It is essential to appreciate the challenges and opportunities the voluntary carbon market offers for governments, civil society, indigenous and local communities, and private entities from developing countries. They need to define their own priorities and decide how carbon market investments fit into their climate and sustainable development strategies. While the voluntary carbon market is no panacea for mitigation action, it can fast-track emission reductions while governments design, formulate, and adopt relevant strategies, policies, and laws to abate greenhouse gas emissions and mitigate climate change. The VCMI access strategies help governments to take a step towards realizing their carbon market vision.

The information generated by carbon market projects – abatement costs, technical and regulatory barriers, and capacity needs – may also help governments formulate these policies. While laws and policies are in the making, carbon markets may channel investment into developing countries and achieves early emission reductions and removals. Voluntary action can also help governments better understand abatement opportunities and costs that create the basis for policy making. As public policies start to mandate action, fewer projects will pass the additionality test, and carbon markets will be increasingly less relevant. The role of carbon markets will fade with time, as climate policies become mainstream. But even then, the voluntary carbon market can continue to provide a platform testing new technologies as governments are unlikely to ever catch up with the capacity of the private sector's drive for innovation.

Climate Focus is an advisory company committed to the development of policies and projects that reduce greenhouse gas emissions. Our international and multidisciplinary team works closely with companies, governments and non-governmental organizations on reducing emissions in energy, households, industry, transport, agriculture and forestry.

Climate Focus is an independent expert in international and national climate law, policies, project design and finance. We have been pioneering carbon markets ever since their inception. We aim to find a creative and unique solution for every single client, ranging from the development of policies to protect the rainforest to structuring greenhouse gas mitigation projects in the energy sector. Our advice is rooted in a profound knowledge of climate change policies, emission trading schemes and project development.

Climate Focus has offices in Amsterdam, Rotterdam, Washington DC, Berlin, and Bogotá. Our core team is complemented by a broad network of in-country and specialized partners.

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