

## 02

### NDC financing and voluntary carbon markets

- 2.1 Determine finance needs for implementing the NDC
- 2.2 Identify financing instruments available for implementing the NDC
- 2.3 Facilitate finance for mitigation through VCMs

**Who should be included in these discussions?** Government agency responsible for NDC design and implementation, treasury/ ministry of finance, ministries involved in NDC sectors, existing private sector actors that play a big role in key mitigation sectors (e.g. energy, transport)

## 2.1 Determine finance needs for implementing the NDC

**To engage effectively with VCMs, policymakers in host countries must first determine funding needs and policy instruments for NDC implementation.**

Implementation of NDCs requires concrete policies and measures that are supported by a financing strategy. Policies for NDC implementation and a financing strategy must be developed concurrently. Policy priorities inform finance needs, and finance availability shapes regulatory design.

**Host country governments can then determine the role of voluntary carbon market (VCM) finance.** Once the host country government has evaluated different sources of available financing, and implications of such financing, it can consider how carbon finance – from compliance and/or voluntary carbon markets – can complement finance needs for NDC goals.

**Countries should make their financing needs as clear and specific as possible.**

Some countries have clear estimates of how much funding is required to implement their NDCs. For example, Bangladesh, Cameroon,

Ghana, Lao PDR, and Cambodia clearly specify the annual finance needed for mitigation and adaptation. They also break down funding allocation by Agriculture, Forestry, and Other Land Use (AFOLU), energy, transport, industry, waste, and other sectors. Other examples are Ghana and Papua New Guinea (PNG):

- Ghana provides a financing plan, noting that “US\$ 5.4 billion for the 31 conditional programs of action would be mobilized from the public, international, and private sector sources and carbon markets.”<sup>1</sup>
- PNG references market mechanisms and Article 6 in its plan, specifying that “implementing the proposed actions could deliver significant emission reductions that could be monetized through results-based payments under a range of mechanisms including the Green Climate Fund, bilateral, market or non-market mechanisms under Article 6 of the Paris Agreement and PNG is looking forward to enforcement of the Article 6 on the ground.”<sup>2</sup>

**Most countries lack specificity in NDC finance needs and strategies.** NDCs may mention the overall cost of NDC implementation, but may not specify funding allocations by sector.

Table 2 summarizes the main steps that lead to an NDC financing strategy.

Table 1: Steps to develop an NDC financing strategy

	Develop policies to achieve NDC goals	Financial considerations
<b>Step 1</b>	Assess the <b>emission reduction and removals potentials</b> of different sectors and activities.	Determine the reference price of reducing one tonne/sequester one tonne of CO <sub>2</sub> e, i.e., the <b>carbon price</b> . <b>Emission reduction potentials</b> are identified in relation to a reference carbon price.
<b>Step 2</b>	Identify <b>sustainable development benefits</b> and assess societal <b>acceptance</b> of possible implementation measures.	Identify <b>co-benefits of mitigation measures and vice-versa</b> . Assess the development benefits of investments in green infrastructure, clean transport, or climate-smart agriculture, among others. Assess the trade-offs of measures and challenges regarding their acceptability.
<b>Step 3</b>	Formulate concrete policies that mobilize the identified <b>emission reduction and removal potentials</b> while helping to support national <b>policy goals</b> .	Develop <b>measure-specific financing</b> plans that can be backed with budget lines, public-private partnerships, blended finance, or other means of finance. Effective cost analyses help to prioritize feasible policy designs over those that are too costly to sustain.
<b>Step 4</b>	Develop a financing strategy that backs the implementation of selected policies.	

<sup>1</sup>Ghana (2021). *Ghana Updated Nationally Determined Contribution under the Paris Agreement (2020-2030)*, page 10. Available at: [https://unfccc.int/sites/default/files/NDC/2022-06/Ghana%27s%20Updated%20Nationally%20Determined%20Contribution%20to%20the%20UNFCCC\\_2021.pdf](https://unfccc.int/sites/default/files/NDC/2022-06/Ghana%27s%20Updated%20Nationally%20Determined%20Contribution%20to%20the%20UNFCCC_2021.pdf) (Accessed 4<sup>th</sup> April 2023)

<sup>2</sup>Government of Papua New Guinea (2020). *Papua New Guinea's Enhanced Nationally Determined Contribution 2020*, page 31. Available at: <https://unfccc.int/sites/default/files/NDC/2022-06/PNG%20Second%20NDC.pdf> (Accessed 4<sup>th</sup> April 2023)

## 2.2 Identify financing instruments available for implementing the NDC

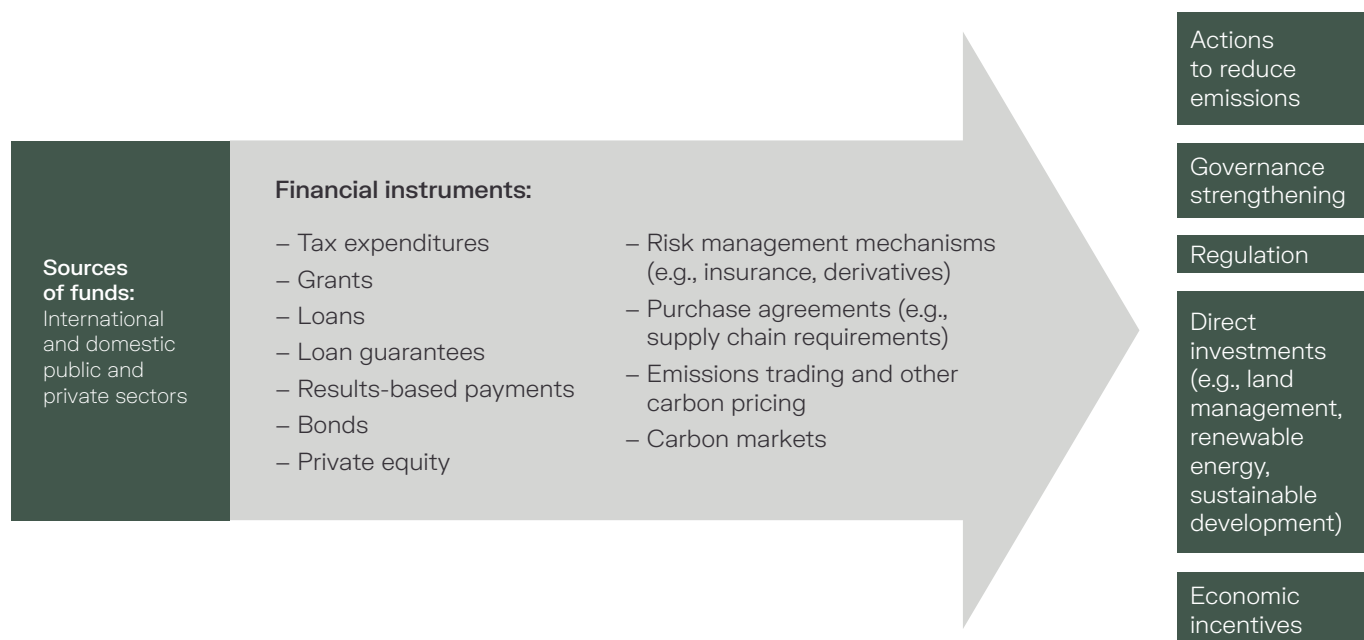
**Financing strategies for the implementation and achievement of NDCs draw on a range of funding sources and instruments.** Sources may be domestic or international funds, and private or public. Instruments include direct investments, taxes, loans, results-based payments, and carbon markets—compliance and voluntary. Different sources and instruments enable specific types of mitigation action, including direct investments, strengthened regulation and governance, and economic incentives (see Figure 1).

**Host countries may be limited in their ability to mobilize domestic revenues or private investment.** Public grants, loans, or loan guarantees come with different

conditions and financing terms than private sector investments. For example, loans have a direct impact on a country's ability to borrow for other purposes, and high levels of debt increases fiscal pressure and limit the government's ability to finance social programs.

**Donors offer finance using a range of financial instruments to support NDC implementation, but not all are suited to support the longer-term transition to sustainable economies.** Many instruments provide shorter-term support (e.g., through REDD+ results-based finance) but longer-term climate policies will depend on significant budgetary spending.

Figure 1: Flow of funds from source to use<sup>3</sup>



<sup>3</sup> Figure based on Streck, C., Murray, B., Aquino, A., Durschinger, L., Estrada, M., Parker, C., et al. (2015). *Financing Land Use Mitigation: A Practical Guide for DecisionMakers*. Available at: [https://climatefocus.com/wp-content/uploads/2022/06/Winrock-FinancingLandUseMitigation\\_7-22-2015.pdf](https://climatefocus.com/wp-content/uploads/2022/06/Winrock-FinancingLandUseMitigation_7-22-2015.pdf). (Accessed 4<sup>th</sup> April 2023)

**Article 9 of the Paris Agreement requires developed countries to take the lead on mobilising finance (Article 9.3).** The provision of financial resources should aim to achieve a balance between adaptation and mitigation (Article 9.4). Climate finance provided under Article 9 has to be distinguished from carbon finance that is deployed via carbon market instruments and involves the exchange of funds against certified emission reductions or removals.

**Carbon finance is a sub-category of climate finance that links payments to the generation of emission reductions and removals.** Article 6 of the Paris Agreement enables cooperative approaches that support countries to meet and go beyond their NDC, including through carbon markets. For voluntary projects and programs to meet the requirements of Article 6 of the Paris Agreement they need to be approved by the host government and meet a series of accounting requirements.

## 2.3 Unlocking NDC finance through VCMs

**VCMs provide an opportunity for host countries to channel finance into mitigation and adaptation action.** VCMs are growing, driven by increasing corporate demand for carbon credits. VCMs provide an opportunity to attract national and foreign direct investments into mitigation action without burdening national budgets or affecting debt ceilings. The private sector or foreign investors can complement governments' efforts to reduce or remove emissions by financing climate mitigation projects.

To attract strategic VCM investments, host country governments need to clarify their finance needs and develop capacity to approve, monitor, and track carbon market activities.

**Clearly defined mitigation projects are most likely to attract carbon finance.** Such projects are identified by the host country government to meet mitigation needs and depend on the additional income provided by carbon finance to become viable. Projects must also meet all other criteria of sound investments. This means they:

- Rely on tested technologies
- Are operationalized by credible local project developers
- Involve local expertise and have the support of local communities
- Implement environmental and social safeguards
- Risks are mitigated and managed by project developers and investors.

**Historically, investments in renewable energy and industry were preferred investment choices by the carbon market investors.** Investments in communal infrastructure, such as waste management, energy efficiency or district heating, can also offer attractive carbon finance opportunities. With larger-scale renewable energy VCM activities failing to pass required additionality tests,<sup>4</sup> investors are turning to investments in more complex projects that require the aggregation of a large amount of

point sources, such as clean cook-stoves or manure management projects. Over the last several years, investments in nature-based solutions have become increasingly popular.

**Host countries can attract carbon finance into priority sectors by removing risks that characterize such investments.** Host country governments can create an enabling environment for carbon investments, for example by:

- Making market-relevant information publicly available and enhancing transparency around investments. Data can include grid and dispatch data for the energy sector, market forecasts and production data for manufacturing and processing sectors, land-use and land tenure data for the land sector
- Participating in international and sector events promoting the country as welcoming carbon investments
- Adopting rules for the definition and approval of Article 6 activities
- Directly supporting larger investments through co-investments (see Box 1 for examples) and subsidize action (e.g., climate-smart agriculture) to lower investment barriers.

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## Box 1: Carbon market projects co-funded through public-private partnerships.

**The GuateCarbon Project** is a public-private partnership between the Association of Forestry Communities of Petén (ACOFOP) – a group of 23 community organizations that manage forest concessions<sup>5</sup> – and the National Council for Protected Areas (CONAP) – a government agency dedicated to sustainability and nature conservation<sup>6</sup> – in Guatemala.<sup>7</sup> The project grants concessions to local communities within the Maya Biosphere Reserve, which is land belonging entirely to the Guatemalan government.<sup>8</sup> By paying local communities to manage natural resources and extract resources under Forest Stewardship Council standard guidelines, GuateCarbon avoids deforestation through low-impact activities that improve living conditions and create jobs for local communities.

**The Chyulu Hills REDD+ Project (CHRP)** – located in south-eastern Kenya’s Tsavo-Amboseli ecosystem – is a public-private partnership between nine organizations, including the Kenyan Government’s Forest and Wildlife Services and several Kenyan trusts, group ranches, and international NGOs.<sup>9</sup> This array of organizations from public, private, and civil society sectors comes together as the Chyulu Hills Conservation Trust, serving as the primary project proponent of the CHRP. Over its 30-year crediting period, the CHRP aims to prevent the emission of over 37 million tCO<sub>2</sub>e through grassland conversion and the reduction of deforestation and forest degradation.<sup>10</sup> These goals will primarily be accomplished through initiatives such as employing forest rangers, facilitating more rigorous environmental law enforcement, improving employee motivation, and developing additional employment opportunities for communities.<sup>11</sup>

**Tukiwasi – Pleasant Homes is an improved cookstoves project** developed as a public-private partnership between the Swiss Government and Microsol, a Peruvian project developer. The project is developed in the context of a bilateral agreement between Switzerland and Peru under Article 6.2 of the Paris Agreement. Within this framework, Microsol, together with the Swiss foundations Climate Cent and KliK, signed an agreement to create the first commercial agreement for the purchase of internationally transferable mitigation outcomes (ITMOs). It is expected that other governments will promote similar public-private transactions under Article 6.

<sup>4</sup> Additionality tests demonstrate that the GHG emission reductions and removals associated with a carbon credit would not have taken place without the incentives and investment provided by VCM activities. Carbon credits must demonstrate additionality to be considered credible and high-quality.

<sup>5</sup> Abieodun Lamptey, E., Atwell, E., Blackman, T., Clay, J., Corcoran, J., Currado, L., et al. (2012). *Association of Forest Communities of Peten, Guatemala*. Available at: [https://www.equatorinitiative.org/wp-content/uploads/2017/05/case\\_1348068795\\_EN.pdf](https://www.equatorinitiative.org/wp-content/uploads/2017/05/case_1348068795_EN.pdf). (Accessed 4<sup>th</sup> April 2023)

<sup>6</sup> Misión y Visión del CONAP. (n.d.). *Gobierno de Guatemala: Consejo Nacional de Areas Protegidas*. Available at: <https://conap.gob.gt/>. (Accessed 11<sup>th</sup> October 2022)

<sup>7</sup> Reduced Emissions from Avoided Deforestation in the Multiple Use Zone of the Maya Biosphere Reserve in Guatemala (GuateCarbon). (n.d.). Verra. Available at: <https://registry.verra.org/app/projectDetail/VCS/1384>. (Accessed 11<sup>th</sup> October 2022)

<sup>8</sup> UNFCCC (n.d.). *GuateCarbon Payment for Environmental Services in the Maya Biosphere Reserve*. Available at: <https://unfccc.int/climate-action/momentum-for-change/activity-database/momentum-for-change-guatecarbon-payment-for-environmental-services-in-the-maya-biosphere-reserve>. (Accessed 11<sup>th</sup> October 2022)

<sup>9</sup> Verra (2017). *Project Story: Collaboration and Restoration in Maasai Territory*. Available at: <https://verra.org/project-story-collaboration-and-restoration-in-maasai-territory/>. (Accessed 11<sup>th</sup> October 2022)

<sup>10</sup> Verra (2015). *Project Description: The Chyulu Hills REDD+ Project*. Available at: [https://registry.verra.org/myModule/ProjectDoc/Project\\_ViewFile.asp?FileID=45890&IDKEY=n98klasmf8jflkasf8098afnasfkj98f0a9sfsakjflsakjf8df63282310](https://registry.verra.org/myModule/ProjectDoc/Project_ViewFile.asp?FileID=45890&IDKEY=n98klasmf8jflkasf8098afnasfkj98f0a9sfsakjflsakjf8df63282310). (Accessed 11<sup>th</sup> October 2022)

<sup>11</sup> Ibid.

The Voluntary Carbon Markets Integrity Initiative is a multistakeholder platform to drive credible, net zero-aligned participation in voluntary carbon markets.

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