



3 of 6 in the series

Financing the Transitions the World Needs: Towards a New Paradigm for Carbon Markets

- ▶ Chapter 3: Embracing Government Participation

About the Author

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Acknowledgements

I am deeply grateful to the following people and organization for tremendously helpful comments on earlier versions of this report: Amy Bann, Ben Devine, Charlotte Streck, Donna Lee, Jen Stebbing, John Paul (JP) Moscarella, Pedro Moura Costa, Renat Heuberger, Ricardo Bayon, Siddarth Srikanth and the Association for Integrated Research and Development (AIDER, by its Spanish initials).

Published: 18th June 2024

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Summary of Previous Installments

Previous installments in this series have celebrated the impact carbon markets have had while also making the case that unless we think of carbon finance in a fundamentally different way, they will be unable to play a larger role in the fight to address climate change. Chapter 1 introduced the concept that some of the underlying requirements that govern carbon markets need to be redesigned in a way that the limited finance they provide can serve as a catalyst to enable the long-term transition of sectors of the global economy. Chapter 2 presented concrete suggestions for how we can rethink additionality to both unlock more finance for the kind of systemic change that is needed, especially for innovations that may be able to sustain themselves on their own after they have gained traction in new markets.

Background

This chapter considers how to ensure long-term transitions for those project types that may not have an underlying economic rationale to sustain them in the long run. Without a non-carbon source of revenue, these projects could end up shutting down once they can no longer issue carbon credits because there is no money to cover ongoing investment and operational costs. In many ways, these projects (e.g., those that destroy industrial gases) tend to be highly additional because without carbon finance they simply do not get implemented. Nevertheless, these projects are not likely to play a role in the green transition unless we figure out how to ensure they continue operating in the long run.

One of the obvious solutions is government intervention, and I strongly believe that the time has come to revisit the fact that carbon markets have never really embraced such participation. Under the CDM, project developers courted governments but only insofar as this led to the required Letter of Approval (LOA) needed to register a project with the United Nations Framework on Climate Change (UNFCCC); it is not clear whether that transactional approach will change much under the Paris Agreement. Under the VCM, project developers generally avoid engaging governments altogether for fear that they will interfere with project development and implementation.

This somewhat dysfunctional relationship has led to considerable pushback by some governments, and has resulted in proposed legislative and/or regulatory proposals that seek to address many of the existing concerns. For example, some governments have proposed or put in place regulations governing benefit sharing with local communities. Many other governments have put in place broader regulations, including taxes on transacted credits. If we are to consider carbon finance as a tool that could enable large-scale transitions within sectors of the global economy, the market would do well to consider embracing broader government participation.

Shifting Sands

There are several reasons for rethinking the role governments can play in respect of carbon markets.

- **Increasing pressure to act.** The landscape for government action on climate change, and carbon markets in particular, has changed drastically. When carbon markets first started to sprout, the Kyoto Protocol was the governing framework, and only industrialized countries faced pressure to control their GHG emissions. The Paris Agreement, with its bottom-up, all-hands-on-deck approach changed the underlying dynamics, creating pressure for all governments to step up. The continual updating of Nationally-determined Contributions (NDCs) and the Biennial Update Reports (BURs) required under the agreement are clear examples of how governments face pressure to take action. In addition, other international agreements such as the [2030 Targets](#) agreed under the [Convention on Biological Diversity](#) put additional pressure on governments to deliver tangible action in respect of biodiversity, much of which can be achieved through thoughtful carbon management (e.g., forest conservation and restoration).
- **What is the end game?** As outlined above, not all projects will be able to stand on their own once the carbon finance comes to an end, such as some of the LFG projects I developed under the CDM which have been mothballed. Unfortunately, this is the plight of numerous projects that depend on carbon finance for operational costs. Carbon finance is a great tool, but we cannot expect it to last forever, and therefore must prepare for the day this source of finance comes to an end.
- **Enforcement is key.** Government enforcement of laws and regulations may be one of our main hopes for effectively stopping some of the practices that are leading to massive emissions of GHGs, such as the wide variety of illegal activities (e.g., timber, mining, and agricultural production) that are destroying the world's forests. Carbon finance can certainly go a long way towards providing important resources that can help with underlying challenges (e.g., providing salaries for community members to patrol the forest), but projects will often run into situations where enforcement of laws is required. For example, only the government has the ability and authority to sanction people who are illegally tearing up the forest to look for gold. This is also true in more delicate situations, where, for instance, settlers who refuse to abide by project guidelines developed in conjunction with government requirements (e.g., to conserve a natural protected area) may need to be removed. Jurisdictional REDD has great promise to forge a model that embraces government participation.

Show Me the Money

Calling on governments to take action on climate is easier said than done, especially considering that doing so tends to require resources. Developing country governments in particular face a particularly daunting challenge given they are called upon to increase their climate ambition while needing to support their populations' need for life's basics (i.e., food, shelter, health) with limited resources. This becomes even more challenging when they have to contend with increasingly severe impacts from climate change impacts they did not cause. That's a tall order, and carbon markets can help, if structured properly.

One of the missing ingredients in our current thinking about carbon markets is that we have not yet envisioned how they can truly help governments overcome key challenges they face when considering how to set and meet increasingly ambitious targets and be part of the green transition. Indeed, there are currently no frameworks that leverage carbon finance as a tool to build the infrastructure needed for a sustainable future that also recognizes governments have limited resources today. Even jurisdictional-based REDD programs, which are the most advanced form of collaboration between carbon markets and governments, are premised on governments putting capital at risk first, which belies the fact that they most often do not have extra money sitting around given the many pressures they already face.





One model that is worth exploring would entail governments taking on commitments to regulate GHG emissions in certain sectors of their economy in the future in exchange for investment through carbon markets today. This approach could address some of the key challenges governments face when considering regulating GHGs.

- **Reducing costs.** Much like I proposed in the previous chapter, carbon finance can help introduce new climate-friendly technologies and practices, reduce costs and build local capacity. However, recognizing that some projects may not be able to sustain themselves on their own after the carbon finance ends, early investments made through carbon markets could ensure lower costs to governments in the future. For example, carbon finance could pay for new equipment and the necessary training, and thereby enable governments to pick up the ongoing maintenance and operational costs which will be significantly smaller than starting from scratch.
- **Political cover.** From a political standpoint, imposing GHG regulations is never easy. However, a well-structured approach that allows governments to reap benefits in the short term (i.e., by encouraging foreign direct investment in the economy) while committing to future climate action in the future could establish a powerful formula for tackling this challenge.

In short, carbon markets have the potential to build the kind of foundation forward-looking governments could benefit from while accelerating action on climate change.

Limitations to the Paris Agreement

Despite the relative success and popularity of the Paris Agreement, it is important to recognize that there are some limitations to the architecture it sets out. For one, there is a desperate need for immediate action on climate change, particularly if we consider the time value of carbon emissions and the fact that putting in place measures to tackle GHG emissions today will have long-term climate benefits. Unfortunately, not all of the funding promised through the framework of the Paris Agreement has been delivered. Furthermore, because most of it will come from public sources, it will take a long time to deliver action on the ground given these resources will have to wind their way through complicated and time-consuming processes required by most governments and multilateral agencies.

In addition, there is an inherent contradiction between the expectation for countries to submit increasingly ambitious NDCs and the trading framework set out under Article 6 of the Paris Agreement. In particular, the rules set out under Article 6 require host countries to issue Corresponding Adjustments for each tonne of carbon traded. This is important to maintain environmental integrity (i.e., to avoid double counting), but at its core a Corresponding Adjustment represents an opportunity cost because in order to meet any targets it has set for itself the host country will have to find an emission reduction elsewhere in its economy. As a result, countries are disincentivized from taking on increasingly ambitious targets; doing so reduces any headroom they may have in their baseline and undermines their ability to make Corresponding Adjustments. In short, trading under Article 6 may not be the panacea many consider it to be.

This could be one of the reasons we continue to see a lack of ambition reflected in many NDCs. Even the flexibility that allows countries to set out both conditional and unconditional targets under their NDCs has resulted in muddled and unclear distinctions that continue to undermine efforts to increase ambition.



Ensuring Government Accountability

A framework that enables carbon finance to make early investments in exchange for long-term regulation by governments leads to the obvious question about how to ensure governments take the necessary action down the road. This is certainly not easy to ensure, but there are working models that could inform how to structure these interventions. Multilateral development banks, for example, have long supported governments with financial instruments in exchange for concrete action on policies and regulations. This approach is also a key ingredient for funding from organizations such as the [Green Climate Fund \(GCF\)](#).

NGOs too have developed useful models. One of the most sophisticated of these is [Project Finance for Permanence](#) developed by the [World Wildlife Fund](#). Under this approach, investors create a bridge fund designed to help the government gradually assume the full cost of conserving a particular forest or region over time. In order to draw on the fund, governments need to meet performance-based milestones.¹

Carbon finance could be leveraged to super charge efforts like these. As in the case of the Project Finance for Permanence approach, such a model would require agreed milestones for government actions that would be met over time. In the case of abandoned oil and gas wells leaking methane where projects might have a 10-year crediting period, one could envision governments committing to a timeline that set out, for example, the following:

- **Years 1-3:** Drafting legislation to require plugging;
- **Year 4:** Passing such legislation;
- **Year 5:** Designing the financial instruments (e.g., taxes, fees) that will support implementation of the new law;
- **Year 6:** Creating an institution to enforce the new law; and
- **Years 7-10:** Building the institution, which would develop the capacity to identify, test and track methane from leaky wells and entail gradually taking over much of the work being done by carbon projects, including undertaking new well-plugging activities that will no longer be covered by carbon finance.



¹ <https://www.weforum.org/agenda/2023/07/climate-finance-pfp/>



Similar commitments could be envisioned for other project types. In the case of forest conservation projects, these milestones could include building a cadre of forest rangers that would eventually take over the wide range of activities being undertaken by carbon projects, including patrolling the forest and building fire breaks. While these types of activities are often already being taken into account through jurisdictional REDD programs, a long-term government commitment to protect a certain area of forest would strengthen the case for further investment in REDD projects, thereby

strengthening forest conservation efforts and contributing to the proper nesting of individual projects within jurisdictional frameworks.

Of course, any government commitment will likely require resources, which would set up a constructive discussion about whether carbon credits should be taxed, and if so at what rate. While this discussion is already ongoing, it would benefit from considering whether the ultimate objective is to achieve a deeper transition. Certainly this would reframe the debate away from any tax as being purely punitive, and it would also foster a deeper discussion about how to use those revenues to achieve said transition.

Another option that is worthwhile exploring is the creation of trust funds managed by either governments or independent third parties to underwrite the project activities out into the future, after the revenues from the sale of carbon dry up. Such trust funds have been used effectively to fund long-term projects while also ensuring the resources are used responsibly. These two solutions (i.e., carbon taxes and trust funds) could work well together, with revenues from carbon taxes invested in trust funds that will backstop project interventions once carbon finance ends.

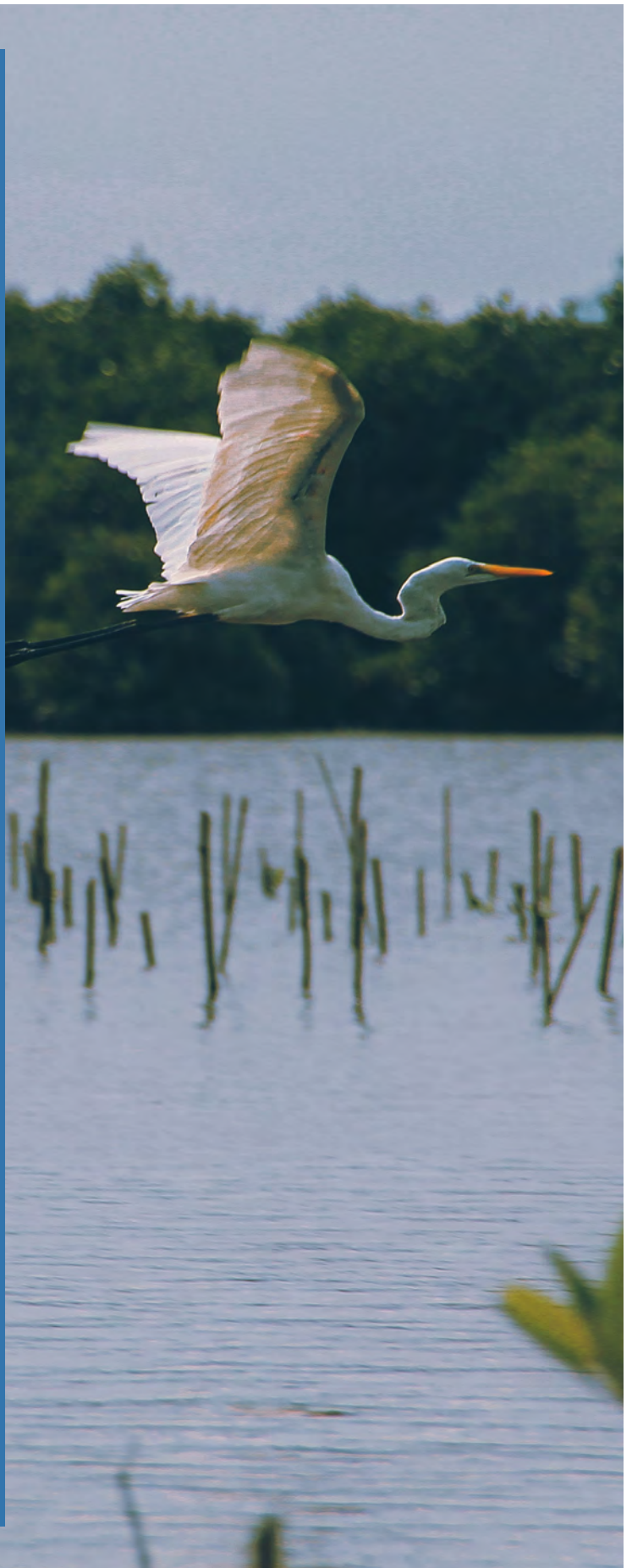
Implementing any of this will not be easy, nor is success guaranteed. There are plenty of examples where government involvement has led to failure, or changes in government have resulted in reversal of policies (e.g., Brazil and deforestation). This is always a risk, but I do not believe that we should shy away from trying this just because this risk (of reversal) exists, particularly if this can be managed by careful monitoring of commitments and agreed-upon milestones. In addition, the introduction of new technologies or practices, along with the employment and revenues they can generate, should build a constituency that will make future governments think twice before unwinding this progress.

Government Approvals and Positive Lists

A key consideration for implementing a plan like this relates to the approvals needed, which would be essential to ensuring such a plan works. Unfortunately, government approvals for carbon projects under the CDM were not always easy to obtain. For example, governments often lacked the resources to readily review individual projects. The higher stakes related to Article 6 transactions (given that agreeing to a Corresponding Adjustment means needing to find an emission reduction/removal elsewhere) will likely heighten the need for review and therefore increase the time needed to properly review each request.

One potential solution would mirror the proposal made in respect of relying on positive lists for determining additionality. Rather than having to approve every individual project, a government could instead indicate that certain project types are approved, as they would be under a positive list approach. For example, a government could welcome the development of all LFG projects in the waste sector, in exchange for committing to regulate that sector in the future. Likewise, a government could approve all projects that are implementing technologies to capture and destroy industrial gases.

This approach could also benefit natural climate solutions (NCS). For example, a government could designate a large area of tropical or mangrove forest that is both under threat and has been subjected to deforestation in the past as a candidate for a new national park, thereby encouraging individual project investments today that could contribute to the protection and restoration of the area over time, until the government is able to ensure its long-term protection.



Benefits of Long-term Government Regulation

To a large extent, government commitments to ensure the longevity of project interventions would put governments in the driver's seat, enabling them to structure frameworks for investments in their economies. As it stands, governments generally have little or no say in respect of project activities financed through the carbon markets, especially the VCM, which can create a random assortment of project investments that are not integrated into a broader development strategy. In an ideal world, all project investments should be aligned with the steering function only governments can provide.

Long-term government commitments to backstop project interventions could have tremendously beneficial impacts for natural climate solutions (NCS). Specifically, such commitments would:

- **Help address concerns about permanence.** By adding another structural element that would address permanence, this would provide market stakeholders with more confidence that the interventions are leading to long-term nature conservation and/or restoration. In a nutshell, this approach would alleviate the pressures for buffer mechanisms to do all of the heavy lifting.
- **Potentially reduce buffer contributions.** A government commitment to backstop project activities would likely reduce the risk rating for NCS projects, thereby reducing the volume of emission reductions or removals that need to be deposited into buffer accounts.
- **Strengthen project finances.** Freeing up emission reductions or removals that could then be sold on the market would generate extra revenues. Some of these revenues could, in turn, flow to trust funds (per above) meant to provide the financial support needed to ensure the ongoing implementation of project activities once the carbon finance ends. In addition, it is quite possible that projects with long-term government backing would fetch higher prices in the market given that buyers would have an extra layer of assurance in respect of permanence.



A structure that generates immediate benefits for host country governments (in the form of direct foreign investment which translates into technology, jobs and training) would provide a strong incentive for them to step up. Such an approach is not likely to work everywhere, especially considering some governments may be too skeptical of the carbon markets to use them constructively. Others may not have the capacity to engage. However, there very well may be some forward-looking governments that will be able to appreciate the potential for leveraging carbon markets to help transition sectors of their economy, and in the process improve the lives of their people. In a way, this could create a “race to the top” with leading countries – the ones setting out commitments to regulate certain sectors of their economies – likely to secure the most investment.

With this framing, one could envision that host countries could make commitments to enforce and/or enact laws or regulations to stop GHG emissions, or promote removals, once carbon projects have worked through to the end of their crediting periods. Such commitments could apply to both VCM and Article 6 projects, and would mean governments can reap the benefits of investment today (for example, new technology, new practices, green jobs) while having time to both line up the resources and build the capacity and institutions they need to ensure regulation in the long run. In short, such commitments would enable host country governments to crowd in investment into sectors they are keen to address, but for which they currently do not have resources or know-how.

Government Commitments Would Be Helpful All Around

This chapter has been focused on projects that do not have an underlying economic value other than the generation of carbon credits. However, the concept laid out here (i.e., securing a government commitment to regulate a sector of the economy in the future in exchange for investment through carbon markets today) would likely be very beneficial for all project types, including those that do have potential for being economically self-sustaining. For example, in the case of regenerative agriculture projects, a government commitment to require farmers to undertake a certain number of practices in the future would super charge early efforts to scale the market and thereby accelerate the process of reaching the Positive Tipping Point (PTP) in this particular sector.



Corresponding Commitments to Complement the Paris Agreement

In an [article I wrote for Quantum Commodity Intelligence](#) published right before COP28 in Dubai, I proposed the creation of a new concept, the Corresponding Commitment, which would entail the types of commitments outlined in the section above and serve as a complement to the current tools in the arsenal of the Paris Agreement. The idea behind government involvement is central to the success of the Paris Agreement, so why not allow for a new tool that bridges the funding gap currently bedeviling, on the one hand, the establishment and implementation of increasingly ambitious NDCs, and, on the other, the early financing that could be provided through carbon markets?

There are a number of benefits to creating Corresponding Commitments.

- **Help bridge the funding gap.** Corresponding Commitments could be structured to help meet the massive funding gap that exists in respect of the transfer of resources from the global north to the global south, and which is necessary for the green transition. Let's recall that in Copenhagen in 2009 developed countries famously pledged to contribute US\$100 billion annually towards climate finance starting in 2020, a figure that continues to be incredibly challenging to meet on a regular basis. What if investments in project activities that are backed by Corresponding Commitments could count towards climate finance pledges made by industrialized countries? In addition to helping bridge the funding gap, this could turn into a powerful stream of investments that could be deployed rather quickly, especially when compared to the long processes required for most public sources of climate finance.
- **Incentives to support carbon projects backed by governments.** Industrialized country governments could also do their part. If investments in carbon projects backed by Corresponding Commitments count towards industrialized country pledges (per above), those governments would then be incentivized to support (e.g., through tax breaks) companies that purchase and retire carbon credits (in line with, for instance, ICVCM and VCM guidance), essentially supercharging mitigation efforts. And, while this would not necessarily be easy politically, securing a one-time approval for new legislation may be much more achievable considering the wrangling that yearly appropriations are subject to.



The details behind all of this would of course need to be worked out. For example, fees and profits made by brokers would likely need to be stripped out of the accounting so that only on-the-ground investments are counted as pledges. In addition, any Corresponding Commitments would probably need to live on a public registry, with key milestones and progress against them set out clearly. Nevertheless, that could provide a robust platform for sharing information about commitments made and policies and regulations either designed or implemented already.

This level of transparency would address some of the shortcomings of the current system that relies only on NDCs, which can lack the specificity needed to mobilize capital at scale. In addition, if Corresponding Commitments were allowed to be submitted at any one point (as opposed to the five-year cadence of NDC submittal), they could help provide a useful stepping stone towards delivering on the promise of the Paris Agreement.

I am currently trying to put together a research effort that would look at how government commitments to backstop projects could work, including how to structure financial tools (e.g., trust funds) to ensure the longevity of project interventions. On the government side, this could include identifying countries interested and willing to make Corresponding Commitments, and preparing detailed case studies of commitments some countries may be willing to make (e.g., sectors to be regulated, milestones to be met over time, impact on GHG emissions). This could also entail preparing a formal proposal (to the UNFCCC) in respect of adding Corresponding Commitments as a tool to promote ambition and accelerate the green transition. Appendix B sets out a brief concept note for this work, including how it could link up with the architecture of the Paris Agreement.

Appendix B

Corresponding Commitments

Accelerating NDCs Through Carbon Markets

June 2024

Context

The architecture established under the Paris Agreement (PA) does not adequately support the rapid deployment of capital to ensure the green transition, which depends highly on financial support for developing countries. Despite significant pledges to provide finance, very little of what is needed has been delivered. In addition, most of the climate finance is coming from public sources, which means it will take a long time to deliver action on the ground given it will have to wind its way through complicated and time-consuming processes (e.g., the Green Climate Fund).

In addition, there is an inherent conflict between the expectation for countries to submit increasingly ambitious NDCs and the trading framework set out under Article 6 of the Paris Agreement, which means the latter is not the panacea many consider it to be. First, any trading under Article 6 means a host country has to issue a Corresponding Adjustment, which at its core represents an opportunity cost. Second, making emission reductions/removals available for trading is in direct conflict with taking on increasingly ambitious Nationally Determined Contributions (NDCs). Finally, delays in getting the Article 6 rules in place further delay the potential use of this particular mechanism.

These limitations highlight the daunting challenge developing country governments face when considering long-term commitments, such as regulating entire sectors of their economies. As a result, it should not be surprising that developing country governments have not set out overly ambitious targets. Even the flexibility that allows countries to set out both conditional and unconditional targets under their NDCs has resulted in muddled and unclear distinctions.

The Voluntary Carbon Market (VCM) is a promising source of financing. However, the VCM, nor any carbon market for that matter, has yet to fully address concerns about the longevity of the interventions it supports. There is mounting evidence that projects implemented with carbon finance may simply stop operating once carbon revenues dry up. Such an outcome would severely undermine any efforts to ensure a green transition.

Potential Solution

The PA and the VCM could be formally linked in a way that strengthens ambition, supports the green transition, and addresses some of the shortcomings of both. Because project activities implemented through the VCM do not require CAs, host countries do not have to worry about giving up their “lowest hanging fruit”. Consequently, host countries could be encouraged to commit to long-term regulation of sectors of their economies in exchange for private investment today, which could be used to introduce new technologies and practices, reduce costs, and generate the necessary capacity needed to ensure smooth operations in the long run. Such “Corresponding Commitments” would enable host governments to crowd in investment into sectors they are keen to address, but for which they currently do not have resources or know-how.

Corresponding Commitments could support the full spectrum of projects currently being developed under the VCM. For example, landfill gas projects are a great example of how governments could enable investment in technology and training today and set the stage necessary regulation in the future. Forest conservation efforts could also benefit. Governments may not be able to commit to protecting all of their forests today, but could use support from the VCM to stem deforestation and start to build the capacity needed to do so in the long run.

Proposal

This work would:

- Identify countries interested and willing to make Corresponding Commitments.
- Prepare up to five detailed case studies of countries willing to make Corresponding Commitments, setting out the details of the commitments (e.g., sectors to be regulated, milestones to be met over time, impact on GHG emissions).
- Prepare and present a formal proposal (to the UNFCCC) in respect of adding Corresponding Commitments as a tool to promote ambition and accelerate the green transition.

Future Chapters

Chapters 4-6 of the series will be published on a weekly basis as follows:

Chapter 4: Integrating Natural Climate Solutions 25 June 2024

Chapter 5: Lessons for the Energy Transition 2 July 2024

Chapter 6: Towards a New Paradigm 9 July 2024





