

SNAPFI STUDY

*Transformational change  
towards low-carbon development  
in emerging economies: insights  
from international climate  
finance cases*

# Cross Country

JULY 2020



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## About this report

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# Background

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This report is based on the insights from twelve case studies, as well as two further background reports, available at [www.diw.de/snapfi](http://www.diw.de/snapfi)<sup>1</sup>

- › **Amazon Fund**, Brazil, Camila Yamahaki, Gustavo Velloso Breviglieri, Annelise Vendramini
- › **Amazon Sustainable Landscape Programme**, Brazil, Camila Yamahaki, Gustavo Velloso Breviglieri, Annelise Vendramini
- › **KfW's Support for India's Green Energy Corridors**, India, Tamiksha Singh, Saumya Malhotra, Jalpa Mishra
- › **GCF Line of Credit for Solar Rooftop PV deployment**, India, Tamiksha Singh, Saumya Malhotra, Jalpa Mishra
- › **Green Sukuk and REDD+**, Indonesia, Djoko Suroso, Budhi Setiawan, Sita Primadevi
- › **Funding to set up the Renewable Energy Independent Power Producer Procurement Programme**, South Africa, Samantha Keen, Harald Winkler.
- › **Enhanced Direct Access finance: SANBI and the Adaptation Fund, South Africa**, Samantha Keen, Harald Winkler
- › **Self-Supply Renewable Energy NAMA**, Chile, Julie Emmrich, Lukas Kahlen, Katharina Lütkehermöller
- › **Implementation of the New Housing NAMA**, Mexico, Julie Emmrich, Lukas Kahlen, Katharina Lütkehermöller
- › **Sustainable Urban Transport NAMA**, Peru, Julie Emmrich, Lukas Kahlen, Katharina Lütkehermöller
- › **Refrigeration and Air-Conditioning NAMA**, Thailand, Thailand, Julie Emmrich, Lukas Kahlen, Katharina Lütkehermöller
- › **Transformative Change**, Cor Marijs, Alessa Widmaier, Imad Ahmed
- › **Climate finance interactions with national development and climate policy frameworks: review of current research status**, Heiner von Lüpke, Nils May

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# List of acronyms

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<b>AF</b>	Adaptation Fund
<b>BNDES</b>	Brazilian Economic and Social Development Bank Supervision
<b>EDA</b>	Enhanced Direct Access
<b>FC</b>	Financial Component
<b>Funbio</b>	Brazilian Biodiversity Fund
<b>GCF</b>	Green Climate Fund
<b>GEC</b>	Green Energy Corridor
<b>GEF</b>	Global Environment Facility
<b>GIZ</b>	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Corporation for International Cooperation)
<b>ICF</b>	International climate finance
<b>IPP</b>	Independent power producer
<b>KfW</b>	Kreditanstalt für Wiederaufbau (German public development bank)
<b>MRV</b>	Monitoring, Reporting and Verification
<b>NABARD</b>	National Bank for Agriculture and Rural Development
<b>NAMA</b>	Nationally Appropriate Mitigation Action
<b>NIE</b>	National Implementing Entity
<b>NDC</b>	Nationally Determined Contributions
<b>NSP</b>	NAMA Support Projects
<b>ODA</b>	Official Development Assistance
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>PPCDam</b>	Public Policy Action Plan to Prevent and Control Deforestation in the Legal Amazon
<b>TCCL</b>	Tata Cleantech Capital Limited
<b>SANBI</b>	South African National Biodiversity Institute
<b>SGF</b>	Small Grants Facility
<b>TC</b>	Technical Component
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change

# Executive summary

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**International climate finance (ICF) can support transformational change for achieving the goals of the Paris Agreement, as we analyse in twelve case studies from emerging economies.** This can happen under certain conditions, which are formulated in this report as propositions for effective ICF implementation. Donor countries committed to providing a total of USD 100bn per year as of 2020 to support the implementation of Nationally Determined Contributions (NDCs) of emerging and developing countries. This report studies how these means can be employed to achieve transformational change. We analyse twelve in-depth case studies where international climate finance supported policy implementation with a focus on achieving transformational change towards climate-compatible development. These analyses provide insights from around the globe: one Northern American, four South American, two South-African, two South Asian and three South-East Asian climate finance projects and programmes provide for comparative results. To maximize learnings, we selected projects which were already in implementation and demonstrated impacts, enabling us to derive learnings of commonalities and differences.

**This report finds that the interaction between the domestic level and international climate finance is multi-faceted: interaction takes place in both directions, the results of programmes often depending on local circumstances and pre-conditions, albeit being influenced and often shaped by international influences.**



Despite the large amounts of money committed for ICF, the interactions between the international sphere and domestic level policies have not yet been systematically studied previously. While the financial components of international climate finance are substantial and often most-easily quantifiable, additional elements like political visibility, stakeholder engagement and alignment in the interests between international partners and recipients are also crucial for achieving transformational change. Only when ICF targets specific domestic support needs can transformational changes be reached that go beyond marginal improvements of business as usual. This requires a differentiated and iterative analysis of support needs, given the oftentimes complex and unfinished processes of transformational change.

**In times of a global health crisis and subsequent economic crises, using international climate finance to address both economic recovery as well as just transitions towards low carbon development becomes ever more important.**

Countries around the world as well as the international community are hit hard by the havoc of Covid-19. Public stimuli packages can reduce some of the economic damages but increase the levels of public debt. Future spending, and especially international climate finance, should, therefore, not only address short-term needs, but support long-term solutions by addressing transformative changes.

**International climate finance aims to support transformational change in emerging and developing countries.** Four criteria define a more common understanding of transformational change. ICF should tackle relevant concerns such as reducing greenhouse gas emissions and increasing climate resilience of developing countries and usually will address development goals as well. Transformational engagements should lead to large-scale and in-depth change impacting both systems (e.g. institutions, policies, markets, etc.) and stakeholders at different levels. Finally, transformational change should be financially, economically, socially, politically and environmentally sustainable.

**While international climate finance can provide targeted support for specific domestic needs, it usually cannot transform sectors and policies entirely, such that its success depends on the identification of narrowly-defined support activities within the larger context of transformational change processes.**

International climate finance leads to transformational change if specific domestic needs are identified early on, yet programmes allow for dynamic planning (adaptive management) to respond to unforeseen events and developments and to reflect nonlinear processes of transformational change, as seen in **Peru's Sustainable Transport NAMA**, where initially-identified financing needs were adjusted over time, reflecting changes in support needs. The scope of individual projects is, naturally, limited, such that they must be targeted at specific, important activities and programmes which enable transformational policy implementation. For this to happen, domestic actors (private or public) must signal to international partners what and where their needs are, and international partners must be open to addressing those support needs in the partnership. While recognizing that during such processes, governments rarely speak with one voice and that typically various actor groups are involved, support needs can be clarified during ex-ante negotiations around programme designs or in less formal discussions before and during the programme set up.

**The effect of international climate finance goes beyond pure financial support.** The political visibility of programmes can create an environment in which high-level political backing supports transformational change, leveraging the effectiveness of the finance beyond the direct financial contributions. Participation in multilateral processes and agreements that are highly prominent like the Paris Agreement raises the visibility of policies developed in the wake of these agreements, for instance found in **India's Green Energy Corridor** benefitted from highest level government intervention, as well as **Brazil's Sustainable Landscape Programme** and **Indonesia's REDD+ programme**. Stakeholders from different interest groups might be more interested in programmes which have the visibility to engage interest from all sides, including civil society and the private sector.

**Alignment of the ICF contribution with government policies and programmes is necessary but should not preclude further engagement in policy development process. A common vision of transformational change among international and national partners is necessary for successful ICF outcomes.** In the case studies, bringing ICF contributions in line with corresponding national policies and programmes was an indispensable first precondition for achieving transformational change.

But to achieve transformational change, ICF should not only align with existing policies, but also support the further development of new transformational policies and programmes, as noted in **Indonesia's Green Bond ("Sukuk") programme**, where such interactions were limited. While, for example, international climate finance can be aligned with countries' NDCs, it can step up to aim at activities that go beyond the NDCs (ambition raising). To that end, donors and national governments should share a common vision of sectoral transformations.

**Institutional innovation is a crucial element of international climate finance when it enables the implementation of policies or programmes that are difficult to develop in existing institutions.** For example, while the overall programmes might be beneficial to a government, individual government entities might have counteracting mandates that do not put them in a position to support new programmes and funding lines. An example, in which institutional innovation supported transformative change is the creation of the independent power producer office (IPPO) for **South Africa's REI4P renewable energy auction programme**. Our analysis has found that targeted negotiations between donors and recipients of ICF for optimal support preceded implementation and the creation of the IPPO. Furthermore, multi-level governance is a determinant criterion for institutional innovation and needs to be included in the design of ICF projects.

**Stakeholder participation can inform improved policy development, provide legitimacy for policies and programmes, and can form coalitions driving transformational change if the involved stakeholders share a common interest in the success of the programmes.** The **Brazilian Amazon Fund** showcases that participatory processes, including the early and strategic involvement of different levels of government and civil society, have the potential to trigger transformational change. Project activities should be tailored to the needs of these actors. While all included stakeholders should have and feel a certain degree of responsibility, the overall functioning should be facilitated by an entity which has the ability and trust by others to manage the process.

**International climate finance requires political will to succeed and transparency as a basis for trust as prerequisites for effective implementation, but ICF can also help to shape such conditions.**

The case studies indicate that ICF is closely linked to conditions in host countries, which may foster political will, enhance ownership, and improve policy making processes. Preconditions in host countries can create productive working environments for donors when they are connected to political and institutional reform processes. Political will was found to be an important precondition in all cases. **However, diminishing political will to succeed in the cases of the Mexican New Housing Nama and Brazilian Amazon Fund also indicates how reliance on such will can threaten project success.** Besides, national systems for monitoring, reporting and verification (MRV) are important determinants of transformational change outcomes as they provide more legitimacy to the ICF instrument.

**Implementation modalities of international climate finance matter.** New modalities like (enhanced) direct access in as well as the successful combination of technical and financial components can increase the scope of international climate finance. These modalities can help extend the financing to, on the one hand, more local actors within any recipient country, as observed in **South Africa's SANBI and Adaptation Fund programme**, where financial outreach and capacity building reach well into rural populations, and **India's Solar Rooftop Programme** and, on the other hand, enable more potential recipients to use the financing effectively. However, there is a trade-off between increased national ownership and higher administrative costs and reporting requirements at the domestic level.

**In its final section, the report also discusses the relationship of official development assistance (ODA) with ICF based on the case study findings.** In particular, the established ODA principles of country ownership and alignment of donor assistance with existing country policies and systems might be revisited if the goal of ICF is to support transformational change processes. This is because the latter oftentimes implies rather radical departures from business as usual approaches, which are at times supported by selected stakeholders and not necessarily by the broad majority of actors.

**This report is based on twelve background reports on fourteen background papers and condenses their findings.**

The case studies have been carried out by research teams by The Energy and Resources Institute (TERI), India, the Center for Sustainability Studies of Fundação Getúlio Vargas (GVces), Brazil, the Institute of Technology Bandung (CCC-ITB), Indonesia, the University of Capetown, South Africa, New Climate Institute in cooperation with the NAMA Facility Support Unit, a background report on transformational change by Vivid Economics, and a literature review on the interface between international climate finance and national policy-making by DIW Berlin. All reports are available at [www.diw.de/snapfi](http://www.diw.de/snapfi).



CHAPTER ONE —————>

# Introduction

Finance is a central element to implementing national climate and development policies of developing countries. At the global level, it is estimated that USD 89 trillion in investments are needed to replace, upgrade and expand current infrastructure in urban, land-use, and energy systems over the next 15 years (New Climate Economy, 2014). Article 9 of the Paris Agreement highlights the role for climate finance in addressing these challenges and developed countries set a new collective goal of at least USD 100 billion per year, taking into account the needs and priorities of developing countries. Therefore, it is critical to gain a better understanding of how international climate finance can be used to achieve the goals of the Paris Agreement, as well as support developing and emerging countries' development needs

# 1.1

## Why does the linkage between international climate finance and national policies matter?

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Around 80% of developing countries communicate conditional targets and commitments in their NDCs– in most cases conditions related to financial or capacity building support (Weischer et al, 2016). 75 developing countries articulate finance needs in their NDCs, but data and information presented in the NDCs provide limited clarity on actual finance and support needs (Röser et al., 2016). This *de-facto* conditionality of some NDCs and the reference to climate finance in the Paris Agreement are the entry points and rationale for international cooperation in the field of climate action: the international community is prompted to provide support if more ambitious climate targets of developing countries are to be met.

With this first cross-country study of the IKI-project "Strengthen national climate policy implementation: Comparative empirical learning & creating linkage to climate finance" (SNAPFI ), we aim at addressing empirically some of the crucial questions of international cooperation that emerge while forms of climate finance are conceptualised and implemented by industrialised and developing countries. We look at the effects of international climate finance on the improvement of developing nations' climate change policy frameworks. This concerns also the effects of transformational changes as results of a transnational policy process involving (interactions between) donors and host countries. This process features, on the one hand, developing countries enacting and implementing climate policies, and, on the other hand, the international processes of making climate finance available, channelling it and implementing it.

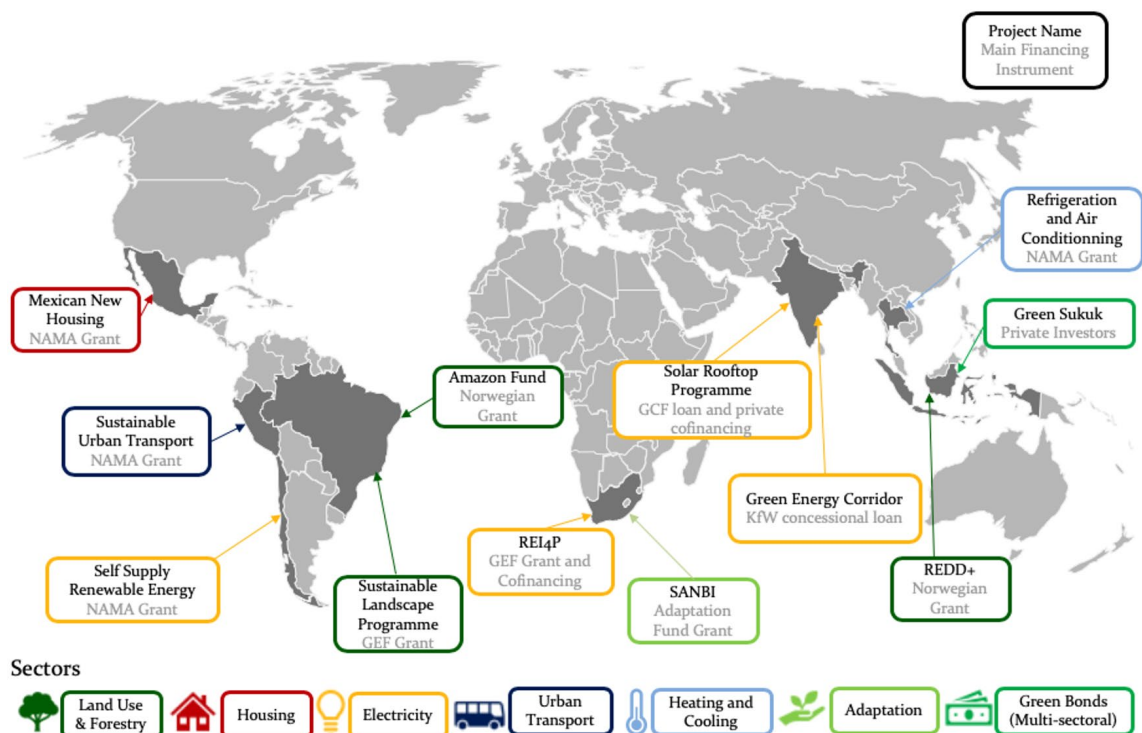


This raises the question how international climate finance can be used to support transformational change processes in developing and emerging economies.

Twelve case studies inform the analysis. Figure 1 shows the spread of them around the world. One case is from Mexico, four cases from South America, two from South African, two from South-Asia and three from South-East Asia. Eleven of the cases evolve around mitigation issues, whilst one South African case addresses adaptation. They focus on a variety of sectors with a focus on electricity production from renewable energy (four cases) and land use change and forestry (three cases). Besides, one case use ICF to support the heating and cooling sector, one to support the sustainable housing sector and one case to support the urban transport sector. Besides, unlike the others, the Indonesian Green Bond (Sukuk) does not look at international public climate finance, but at private investors.

**FIGURE 1**

## Overview of the twelve case studies



# 1.2

## Knowledge gaps around supporting transformational change

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This section is developed on the basis of an extensive literature review which investigated the status of research on the linkages between international climate finance and national policy frameworks. The ensuing parts is derived from this review and for further information it is referred to the respective document<sup>1</sup>.

The debate on the effectiveness of climate finance is largely based on principles of aid effectiveness such as contained in the 2005 Paris Declaration (OECD Development Assistance Committee, 2005). The Busan partnership (2012) formulated certain key principles for climate finance in the following way:

- › Partner countries' ownership: recipient countries should be able to use the finance according to their strategic objectives. Stand-alone projects should give way to integrated programmes with national policies and plans.
- › Alignment of donors with partner countries' systems: climate finance should be channelled through national systems and parallel systems should be avoided.
- › Harmonisation of donors' programmes: donors should ensure coherence of climate finance among their own programmes.

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<sup>1</sup> von Lüpke, May & Neuhoff (2020). Climate finance interactions with national development & climate policy frameworks: Review of current research status.

Interestingly, relatively few studies have used these principles, or the associated criteria and indicators, for analysing effectiveness of climate finance empirically. Apart from Halimanjaya & Barnard's (2014) assessment of the Scaling-up Renewable Energy programme and the Indonesia Climate Change Trust Fund, there are not many case studies of climate finance disbursement, impacts and effectiveness in developing countries. Nakhooda (2013) distinguishes broadly between effectiveness of spending (resource mobilisation, governance, allocation, disbursement and monitoring) and effectiveness of outcomes (scale, enabling environments, catalytic impacts, innovation and national ownership). Her framework is developed to analyse effectiveness of multilateral climate funds and addresses important questions such as what kinds of policy, regulatory and institutional changes were induced by the fund's spending. Overall, there are a few other publications on the effectiveness of ICF such as Bird et al (2013) and Lundsgaarde et al (2018) but, to the authors' best knowledge, very little got published which analysed effectiveness through empirical case studies as this report does.

Beyond these examples, the literature lacks an understanding under which domestic policy conditions and international implementation modes climate finance can produce the most impacts and trigger transformational change.

Given that little systematic research was carried out in the past to investigate linkages between finance and policies, this cross-country study takes an explorative approach through empirical case studies which describe and explain various applications of international climate finance in different institutional landscapes and policy frameworks and derives how transformational change outcomes could be achieved. This report is targeted at government representatives of both developing and developed countries, working on the interface of climate finance and development policies, policy advisors working with them, actors of the finance sector and donor community, as well as development practitioners engaged with the preparation and implementation of climate finance.

This report is structured as follows: We begin with an overview of the objectives of the report and a short summary of the literature on the interaction between international climate finance and domestic policy implementation.

Next, we describe existing concepts of transformational change and the methodology of the research and provide background over the twelve case studies. We split the results in two sections, one looking at how transformational the cases were and the other outlining the propositions that emerge from these cases. Lastly, we finish the report with a discussion of the learnings for international climate finance and a conclusion.



CHAPTER TWO —————>

## **Objective of the report and research questions**

This report centres around the guiding question “How has international climate finance interacted with national policy to contribute to transformational change?”. Such transformational change is often associated with changes in policy and institutional frameworks. Hence, “how” and “what” are especially pertinent questions.

- › The “how” (process) is answered by analysing the processes, which run through the interaction area between the international and national side, i.e., by asking which processes and financial mechanisms have led to certain outcomes.
- › The “what” (outcome) can be addressed by analysing how the situation on the outcome side has been altered due to the provision and effects of climate finance.

These aspects are further assessed with regard to the economic, political economy and governance context of the sectors and climate finance interventions in question. Based on these, we want to then understand how the cases compare to each other across countries, which we will do in subsequent steps.

We seek to bring together different elements of existing perspectives on transformational change to come to a working concept for the assessment that ensures applicability in various contexts. As suggested by Boodoo et al (2018), ‘a lack of clarity on transformational change [...] entails the risk of the term becoming rhetorical, ungrounded and representing a means to circumvent formal mitigation targets’. In finding common ground and accounting for the various contexts in which current definitions are set, we can develop a shared, clear understanding of the concept without constraining it to a single definition or setting. This allows us to apply it to the different settings they are looking at.

Moreover, the assessment framework assists the analyses in rating their case studies against various degrees of transformational change and supports the planning of climate finance projects. The spectral nature of the suggested assessment framework acknowledges that transformational change is not a binary observation. It provides the tools for evaluating case studies against each dimension, thereby allowing some comparability of climate finance projects on international scale. Furthermore, the assessment framework supports stakeholders in structuring climate finance projects from the outset in a way that paves the way for transformational change.



## CHAPTER THREE —————>

# **Summary Review interactions between climate finance and national development & policy frameworks**

This section seeks to explore how the interaction between domestic climate policy and international climate finance is conceptualised and assessed in recent literature in order to develop an analytical framework based on the findings. It addresses research on the types, influence, and effectiveness of international climate finance. Against the background of the decisive role attributed to climate finance in the Paris Agreement, its effect on domestic climate mitigation and adaptation efforts remains crucial to understand and assess. These linkages are referred to as the finance-policy interface in the following.



# 3.1

## Definitional and conceptual issues

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Up to now, there is no internationally accepted definition of climate finance, nor standards for climate finance accounting, i.e. addressing questions on what precisely counts as climate finance, what channels are used, and in which programmes it was disbursed in (Selin, 2016; Weikmans & Roberts, 2017). Others use broader definitions, such as the UNFCCC: Climate finance refers to the provision of financial resources by developed countries to assist developing country Parties in implementing the objectives of the UNFCCC. The sources of ICF are not limited to multilateral public finance but include bilateral public finance and, in some circumstances, private finance as long as these are assisting to meet national climate and development goals. Winkler et al. (2020) describe historical developments of the concept in more detail and derive that climate finance is linked to sustainable development, including poverty and a just transition.

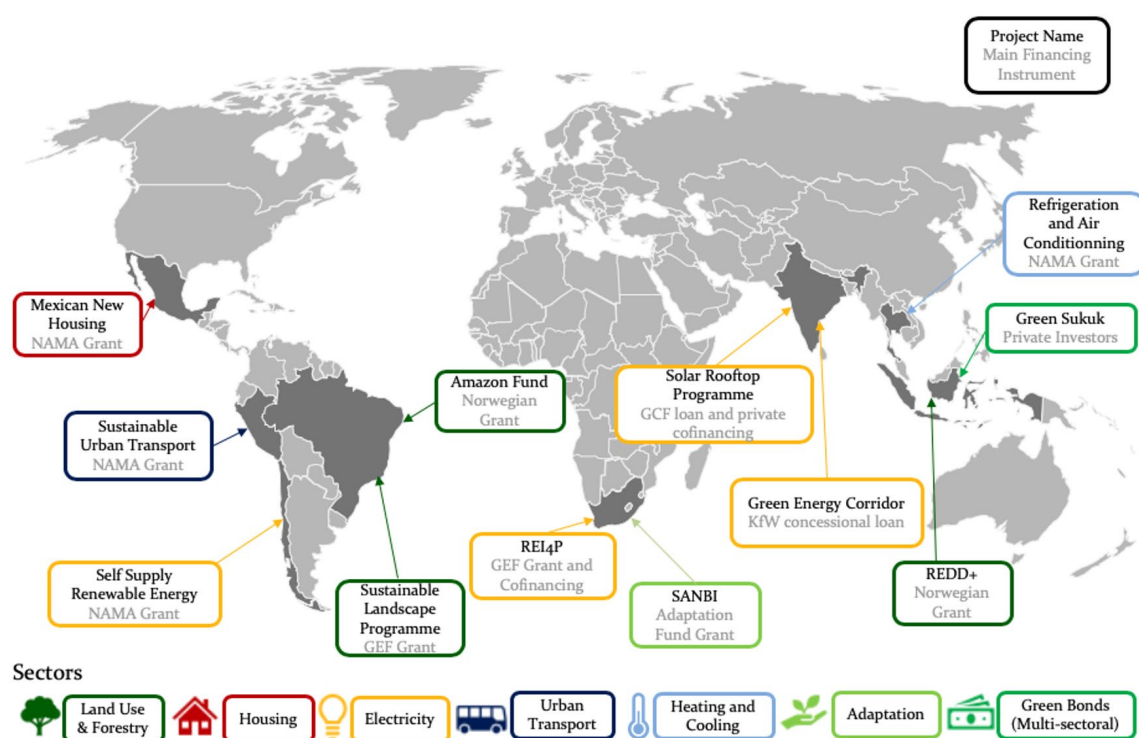
Furthermore, scholars disagree on whether to conflate or separate climate finance and official development assistance (ODA). The latter brings with it assessment frameworks on finance effectiveness and key principles of ownership, alignment, and harmonisation. However, it does not address the reversed conditionality of climate finance: rather than donor countries making their contributions dependent on governance reforms in host countries, developing countries make their national climate objectives dependent on financial aid. Another difference between ODA and ICF consists in the rather voluntary nature of ODA (developed countries typically pledge to spend a certain share of GDP for aid) and ICF, which is about meeting a shared commitment in the context of the Paris Agreement. Therefore, a look into recent literature shows several important specifications and particularities when the application of climate finance is analysed in the context of developing countries' policy frameworks.

## 3.2

# Expanding the analytical framework of ODA: climate finance specifications

FIGURE 2

*Summary of elements of an analytical framework to assess finance policy linkages, comprising international, national and interacting levels.*



**Note:** The elements are based on Steinberg (2003), Bernstein & Cashore (2012) and Jodoin (2017) and adapted based on the literature review findings.



CHAPTER FOUR —————>

## **Literature overview on transformational change findings**

Various types of ICF can be used to support recipients in implementing national policies, ranging from project and programme financing and technical assistance to result- and policy-based funding. ICF programmes also vary in the type of policies targeted, such as fiscal policies, non-price sector policies, trade policies and innovation policies.

According to the World Resource Institute (2016), 'responding to the scale of the climate change challenge will require a fundamental transformation in our political, economic, energy, and socio-technical systems'. Developing countries may find it more difficult to facilitate this transformation because a) they often rely more on emission-intensive sectors and non-renewable resources, and b) they may lack the resources and capacity to implement transformational climate action without forsaking economic growth. Hence, transformational climate finance constitutes a core pillar to support recipients in moving towards a greener and more resilient future.

Despite the need for a shared understanding of transformational change to assess ICF projects, stakeholders disagree on a common definition. Some sources, including the Green Climate Fund (2018), believe that the term is too multi-faceted in nature as to be described by a single definition. Moreover, organisations often define transformational change differently based on their target audiences or motivation. However, while 'intentional vagueness' and context-specific definitions may be useful from a theoretical point of view, they may also hinder progress in developing transformational climate action and ICF. Moving towards a shared understanding of what may or may not constitute transformational change is crucial in finding a common way of assessing the impact of the case studies, supporting cross-country learning, and the ability to derive insights on how to achieve transformational change.

To this end, we reviewed existing literature on transformational change and the broader body of work on the importance of context specificity in assessing development finance. Combining the World Bank's (2016) four-dimensional framework with context-specific elements of different perspectives, we arrive at the following shared understanding of transformational change:

- › **Relevance:** Transformational engagements should address a major global, societal, developmental, environmental or organisational concern. The World Bank (2016) adopts a high-level approach, considering a wide range of transformational goals including poverty reduction and women's empowerment. Environmental institutions, including the Global Environment Facility (2017) and the NAMA Facility (2019), define transformational change specifically in relation to the climate challenge, suggesting that transformational engagements should reduce emissions and/or advance climate resilience. In the context of management theory, transformational change focuses on resolving more micro-level, organisational concerns (for example, Anderson, 2015; Majid et al., 2011). Yet, the addressed challenges are still organisationally holistic and hence do not constitute a disagreement in the understanding of transformational change. **The transformational goal of ICF is to reduce greenhouse gas emissions, shift to a low-carbon development path, and increase the climate resilience of developing countries. Hence, ICF is relevant by design.**
- › **Depth of change:** Transformational change refers to a fundamental change in systems, markets, policies, norms, beliefs and/or behaviours. It may occur rapidly or slowly, and incrementally or through a one-off change. While ICAT (2018) utilises the term 'systemic change' synonymously with 'deep change', the general understanding of transformational change explicitly allows isolated – but impactful – changes in markets, policies or behaviours beyond changes in systems only (see, for example, Fridahl and Johansson, 2017; Angelsen et al., 2012; NAMA Facility, 2019; Climate Investment Funds, 2019; Saxer, 2017; and CARE India, 2017). Moreover, the broad consensus of definitions allows transformational change to be timeframe (rapid or slow) and continuity (incremental or one-off) agnostic. **To name but a few examples in the context of ICF, low-carbon innovation policies can transform markets, institutions and behaviours. Similarly, technical and financial assistance can help governments to 'climate-proof' their systems and to steer their policies towards a 'just transition'.** The depth of these changes is measured in terms of *actions*.

Examples of depth indicators are a) growth in the number of institutions and programs dedicated to supporting low-carbon growth and climate resilience, b) introduction of emission trading systems, and environmental taxes and subsidies, and c) shift in people's choice of transport, consumption and diets.

- › **Scale of change:** Transformational engagements should lead to large-scale impacts and involve multiple stakeholders at different levels. Definitions ranging in context from development (e.g. Feinstein, 2019) and environment (e.g. Climate Change Compass, 2018) to corporate social responsibility (e.g. Unilever Pakistan, 2016) and management (e.g. Alsher, 2018) agree that transformational change must involve a large-scale impact on the wider environment. ICAT (2018) elaborates by necessitating multiple actors and levels to be involved, which we consider a sensible requirement to avoid ambiguity of the term 'large-scale'. **ICF programmes, particularly those supporting mitigation action or low-carbon innovation, often have chain effects or positive externalities (for example through demonstration effects) leading to scale effects. Moreover, an alignment needs to exist between the objectives of the various stakeholders involved in ICF to ensure that both donors and recipients are fully onboard.** The scale of impact of international climate finance is measured in terms of *outcomes*. Examples of scale indicators are a) avoided emissions, b) number of green jobs created, c) growth in the market share of low-carbon technologies, d) ability to meet NDC targets, or more generally e) the number of individuals, markets or products that are directly affected by the systemic changes in the recipient region.
- › **Sustainability:** Transformational change should have long-term effects and be financially, economically, environmentally, politically and socially sustainable. The World Bank (2016) disaggregates sustainability into three building blocks: financial, economic and environmental. The Global Environment Facility (2017) extends this definition further by adding social and political sustainability in the list of attributes of transformational change. These two additional factors are backed by a variety of authors.

For example, Robins *et al.* (2019) argue for a 'just transition' to ensure that communities support transformational engagements. Moreover, the Center for Transformative Change (Gass, 2010), researchers (Kezar, 2013; Anderson, 2015), and a Pakistani journalist (e.g. Niazi, 2019) argue that political sustainability arises at the individual level and support lasting (transformational) change. Understanding and measuring sustainability is complex as it should not only be robust at one point in time, but also be resilient in a dynamic context (Vivid Economics, 2020). **ICF projects are environmentally sustainable by design. Regarding financial sustainability, the programmes should in general demonstrate the ability to transition from international public to domestic public and/or private financing. Moreover, ICF projects should not conflict with national development objectives (economic sustainability). Lastly, instead of 'imposing' measures on the national community, ICF should also create awareness of the climate emergency and foster public support for the programmes to ensure social and political sustainability.** This dimension is measured by the likelihood with which ICF can engender each of these five types of sustainability.

Borrowing from the ideas deployed in the realist evaluation framework<sup>2</sup>, the four dimensions of transformational change can be mapped into core elements of change: context, mechanism and outcome. The context in which ICF is implemented refers to the relevance dimension, i.e. whether the transformational goal is GHG reduction, low-carbon development or climate resilience. This element also includes various background conditions of the recipient country, such as economic, political, geographic and demographic factors. The outcome of ICF is usually enhanced environmental sustainability, although other forms of sustainability should also be reached, namely financial, economic, political, and social sustainability. The mechanisms through which ICF achieves outcomes are large-scale changes in systems, markets, norms, beliefs or behaviours and act through various stakeholders.

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2 The realist evaluation framework is a method of assessing programmes based on logical thinking. Building upon the observed pattern of context and outcome of a specific programme, the framework provides users with the necessary logical tools to narrow down the space of all possible mechanisms to a plausible set. It further classifies programmes by their four defining elements, namely context, mechanism, outcome, and context-mechanism-outcome configuration.

These transformational mechanisms fall within the depth and scale of change dimensions.

**We recommend adopting a spectral framework, similar to the one used by ITAD (2019), for assessing case studies against transformational change.** ITAD (2019) differentiates between advanced, interim, early and no signs of transformational change. The higher a case study performs against each of the dimensions, the more strongly can we recommend for it to be classified as transformational. We acknowledge that transformational change is not a binary observation by adopting this spectral assessment framework (Vivid Economics, 2020).





CHAPTER FIVE —————>

# Methodology

We study twelve examples of international climate finance in detail: two each from Brazil, India, Indonesia and South Africa, and four NAMA Facility Support Projects (NSP) projects from Chile, Mexico, Peru and Thailand. This broad approach aims to ensure high external validity, i.e. that findings from these cases apply also to a wider set of countries and circumstances and are not potentially random artefacts from individual cases. The examples concentrate almost exclusively on mitigation except for an adaptation project in South Africa. The covered sectors mostly deal with the energy sector, but also deforestation and transport.

The cases were identified according to a set of selection criteria. First, the projects (used interchangeably with programmes, unless stated otherwise) must have been at least partially implemented. This allows for concrete analyses based on experiences from the implementation processes and/or outcomes. This treads a middle ground between focusing on newest projects that have not started yet at all (most recent examples, but empirical assessment not possible), and choosing projects that have already been finished (empirical assessment possible, but insights potentially outdated). Second, information must be available, e.g. through existing databases and networks, or access appears possible to establish. This can, in particular, be the case when the project has been evaluated already. Third, the projects must address relevant sectors and questions that are potentially transformational for policy implementation. Whilst transformational change outcomes are not always known before detailed analyses, the projects must exhibit potential for transformational change, indicated by relevance to national policy processes and by supporting technological, behavioural and systemic change, possibly by mobilizing private capital.

Beyond bottom-up identification of cases, i.e. through the implementing partners in Brazil, India, Indonesia and South Africa, the OECD database was screened while following these criteria, to enlarge the pool of potential examples. For the cases outside Brazil, India, Indonesia and South Africa, the most relevant projects of the NAMA Facility were identified using the same set of criteria, with the additional constraint to focus on cases from non-least-developed-countries to increase comparability across cases. Indeed, the NAMA cases are picked from similar regions in terms of socio-economic development, with high and very high human development indices (HDIs) (0.76 for Peru to 0.85 for Chile).

The study entails a cross-country comparative approach. For that purpose, we compare cases that present projects in similar sectors and using similar approaches across countries. For instance, in the land use, land use change and forestry sector, we compare programmes in Brazil and Indonesia. Likewise, we compare similar projects on renewable energy from South Africa and India. Across the various cases, similar key concepts on the interface between international climate finance and domestic policy implementation as well as transformational change, outlined in the previous chapters, have been identified and agreed upon to ensure comparability across cases.

The twelve cases partially cover similar sectors and kinds of programs and cover a diverse set of topics. Therefore, we cannot necessarily compare specific, sector-specific instruments (e.g. “Does instrument X support transformative renewable energy investments?”), but rather broader, underlying mechanisms (e.g. “How do programs work that support transformative change?”). To ensure comparability of mechanisms, an understanding of the interface between international climate finance and domestic policy-making, as well as of transformative change, are developed and applied to the cases. As any research based on case studies, the selection of these case studies shapes the findings. While we aim to provide learning based on both positive and negative examples, most examples are not clearly one or the other, but positive elements transformational change (existence of evidence) are, naturally, easier to identify than negative elements (absence of change).

In order to get the most extensive understanding of each case’s characteristics, qualitative research was carried out in addition to the available quantitative data. Interviews with key stakeholders were conducted at both domestic and international level as shown in Table below. On the domestic side, each national country team reached out to local implementing partners such as representatives of local development banks, private sector actors (e.g. banks or local private financial institutions) and policy-makers (9 representatives from national or local governments). On the international side, interviews were held with members of multilateral development banks, international development agencies and financial institutes (classified in International Donors in Table 1 ). Our case studies also benefit from insights coming from academics and other experts (3 and 4 interviews respectively).

**TABLE 1**

## **Overview over interviews**

Actor groups	Government	Private sector	Intern. donors	Implementing agencies	Academia	Other experts	Total
Interviews	10	4	8	3	3	5	33

The analysis is based on a multidisciplinary approach from policy research, as well as international relations and economics to gain a broad understanding of the underlying mechanisms. Qualitative data was gathered from publicly available documents on the different programmes, like from existing evaluations. We additionally collected data from internal documents and analysed data, e.g. on investments into renewable energies.

Finally, we draw propositions on how international climate finance supports transformative change. For this, we first derive for each of the case studies how the underlying mechanisms worked there, compiling a list of potential propositions. Next, we then split this list into three parts: propositions that mattered in all of the cases, propositions that held in some of the cases, and propositions that only played a role in individual cases. We focus the analysis on the propositions that matter in all or at least several cases. For the latter, we identify patterns under which circumstances they mattered. Hence, we provide two sets of propositions: on the one hand, core propositions and, on the other hand, propositions that play a role under specific circumstances.



CHAPTER SIX —————>

# **Background on country examples**

This overview provides a shortened overview of the analysed case studies. For details on background and outcomes, please see the full case studies, referenced in the beginning of this report.

**TABLE 1**

## **Projected BAU and emission reduction from each sector category**

<b>Name</b>	Amazon Fund	Sustainable Landscape programme	Green Energy Corridor	Solar Rooftop programme
<b>Country</b>	Brazil	Brazil	India	India
<b>Sector</b>	Land use change & forestry	Land use change & forestry	Electricity (grid development)	Electricity (rooftop solar)
<b>Period</b>	2008-2020	2017-	2013-	2018-(expected 2023)
<b>Targeted/ implementing actors</b>	Brazilian Economic and Social Development Bank			
<b>Supervision (BNDES) as fund manager; public and civil society organisations</b>	The World Bank as the implementing entity. Brazilian Biodiversity Fund (Funbio) and Conservation International Brazil as executing agencies.	Power Grid Corporation of India Ltd and the State utilities in each of the eight project states are the implementing agencies.	National Bank for Agriculture and Rural Development (NABARD) as accredited entity under GCF monitoring and Tata Cleantech Capital Limited as the executive entity.	115.86
<b>Implementation logic</b>	Funding for projects that contribute to preventing, monitoring and combating deforestation, and to promoting the conservation and the sustainable use of the Legal Amazon region	Financing for improving integrated landscape management and conservation of ecosystems in targeted areas in the Amazon region	Financing for grid expansion to foster electricity trade across regions to integrate variable renewables	Enabling access to low-cost finance for solar rooftop installation projects in commercial, industrial and residential housing sectors, including vulnerable communities
<b>International climate finance type</b>	Norwegian grant of €1bn through NICFI + German grant €60m through KfW+ €6m of Petrobras + in-kind services from BNDES	Grant from GEF trust fund (US\$ 60.3 million + US\$ 19 million for the 2nd phase) for the Brazilian project	Bilateral support from Germany; KfW provided concessional loans of around 1 billion euros	Private senior loan financing of US\$100 m (by GCF) + Co-financing (60%- by TCCL and equity of project developer)
<b>Instrument (combination international – national)</b>	Results-based finance and technical assistances	Grants along parallel co-financing from federal and state budgets (more than 85% of the total project cost)	Concessional loans from KfW and ADB with central government grant. In addition, equity from State Governments and by the public power grid company	Loan assistance from GCF and TCCL, with equity share support from private developers.

<b>Name</b>	Green Sukuk	REDD+	REIPPPP	SANBI
<b>Country</b>	Indonesia	Indonesia	South Africa	South Africa
<b>Sector</b>	Green bond (multi-sector)	Land use change & forestry	Electricity (renewables)	Adaptation
<b>Period</b>	2018-	2012-	2010-	2014-
<b>Targeted/ implementing actors</b>	Government of Indonesia (Ministry of Energy regulation and states) as implementing actor.	Indonesian Government under Ministry of Environment and Forestry implement the project and the REDD+ management agency as the new fund management agency	IPP office and independent renewable energy project developers	SANBI as the accredited entity, dispersed small-scale actors for financing and knowledge creation
<b>Implementation logic</b>	Issuance of a Green Bond by the Indonesian government to support low-carbon investments, tied to some environmental criteria	Financing for a better management of land use and lowering of deforestation	Financing for setting up a renewable energy auction system and agency, through which support for renewable energy can be tendered	Development of EDA through grant funding, to finance water facilities for two of SA largest cities and a small grant facility that supports vulnerable communities to implement local adaptation responses
<b>International climate finance type</b>	Green bond complying with Sharia laws (Green Sukuk) for a total of US\$2bn in 2018 and 2019	Norwegian government promised US\$1bn. (result-based payment mechanism)	GEF provided a US\$6 million grant for IPP office + further loans and grants by GEF, KfW and UNIDO for renewable energy projects	Grant funding by the Adaptation Fund of US\$7.5m and US\$2.4m.
<b>Instrument (combination international – national)</b>	Sovereign funds are issuing green bonds for investors of which 10% are Indonesian	Technical assistance + promised results-based payments	Equity fund + grants + credit line+ National Treasury later offered R 100 million	Grant from the AF. Enhanced Direct Access approach.

<b>Name</b>	Self-Supply Renewable Energy NAMA	Sustainable Urban Transport NAMA Support Project	Mexican New Housing NAMA	Thailand Refrigeration and Air Conditioning NAMA Support Project
<b>Country</b>	Chile	Peru	Mexico	Thailand
<b>Sector</b>	Electricity & heat (renewables)	Urban Transport	Housing	Refrigeration and Air conditioning
<b>Period</b>	2015-present for technical component (TC)  2020-2024 for financial component (FC)	2015-2021 for TC 2015-2020 for FC	2013-2017 for TC 2014-2021 for FC	2016-2021
<b>Targeted/ implementing actors</b>	Chilean Ministry of Energy, the Ministry of Environment and two public implementing agencies, the Economic Development Corporation and the Chilean International Cooperation Agency.	Twelve implementing partners (TC). Peruvian Ministry of Economy and Finance (FC).	CONAVI (Mexican National Housing Commission) (TC). Sociedad Hipotecaria Federal (social housing development bank) (FC)	Office of the Natural Resources and Environmental Policy and Planning (ONEP), Department of Alternative Energy Development and Efficiency (DEDE), Electricity Generating Authority of Thailand (EGAT)
<b>Implementation logic</b>	Financing renewables energy systems in small and medium sized enterprises with the ambition to directly consume a major part of the transformed energy on-site, while possibly still maintaining a grid connection.	Reversing the trend of increasing road transport emissions by promoting integrated public transport systems, non-motorised transport, and modernisation of the vehicle fleet	Financing cost-effective and energy-efficient building concepts across the residential housing sector in Mexico.	Financing the transition towards climate-friendly and energy-efficient cooling technologies. Technical, financial and policy support.
<b>ICF type</b>	NAMA Facility grant of €17m (€3m for TC (GIZ) + €14m for FC (KfW)).	NAMA grant of €9m (€5m for TC (GIZ) + €4m for the FC (KfW))	NAMA grant of €14m (€4m for TC (GIZ) + €10m for FC (KfW)).	NAMA grant of €14.7m (€6.4m for TC (GIZ) + €8.3m for FC (KfW)).
<b>Financial mechanism(s) as part of the FC)</b>	The financial component is planned to include investment grants or a guarantee fund to support companies develop bankable projects).	Policy-based NAMA grant disbursed in Peru's national budget and policy-based concessional lending.	Financial incentives for SME housing developers through direct payments of investment grants.	Investment grants and a revolving fund to support production line conversion and market introduction of climate-friendly cooling technologies.





CHAPTER SEVEN —————>

## **Results I: Transformational change outcomes of country examples**

**Advanced signals:** Strong evidence of signals of transformation related to the dimension

**Interim signals:** Evidence of transformational change underway

**Early signals:** Emerging evidence of transformational change  
No evidence of transformational change

This framework of evaluation and signals of transformational change are explained in a detailed additional report (Vivid Economics, 2020).

**TABLE ?**

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Conditions	Brazil - Amazon Fund	Brazil - Amazon Sustainable Landscapes Program	India - Green Energy Corridor
<b>Relevance</b>	Deforestation is the main driver of carbon emissions in Brazil and is a topic of critical importance globally. Hence, the Amazon Fund addresses a major environmental challenge.	Deforestation is the main driver of carbon emissions in Brazil and is a topic of critical importance globally. Hence, the Amazon Sustainable Landscapes Program addresses a major environmental challenge.	Aims at improving transmission infrastructure to facilitate flow of RE into the electricity grid. Connects and boosts RE project installations in the country by resolving power evacuation and transmission issues. The project addresses limitations of RE, such as variation in power quality, to support the energy transition.
<b>Depth of change</b>	The Amazon Fund did not directly support innovative approaches nor address the root causes of deforestation. Rather, it contributed to implementing existing policies. To our knowledge, there were no signs of a change in public perception of the impacts of deforestation caused by the Fund.	The projects financed by the Amazon Sustainable Landscapes Program are aligned with national public policies and contribute to their implementation, particularly the Forest Code. Yet, they did not initiate policy changes. There were no signs of a change in public perception of the impacts of deforestation caused by the program.	The project resulted in the introduction of new policies to supplement deployment of RE and strengthen the grid. The project is expected to result in behavioural changes by boosting RE project installations in the country. Introduction of new management centres for RE integration.
<b>Scale of change</b>	Significant in terms of resources thanks to the presence of a capable financial institution compared to the Indonesian project also financed by Norway. It further involves multiple stakeholders, including the Brazilian government (federal and the states), BNDES, and civil society. The Amazon Fund Committees bring all those actors together along with specialists in charge of measuring effective GHG reductions. It is estimated that 8.6k km <sup>2</sup> of deforestation were avoided.	With US\$ 60.3m funding, the Amazon Sustainable Landscapes Program is significant in terms of resources. It further involves multiple stakeholders, including the federal government, the Amazon states, small rural landowners and stakeholders from sustainable productive value chains. However, it is too early to assess the impacts of the Program.	Large scale project with 488 million € in funding, expected to have large impacts, especially in mainstreaming and making project financing in the green sector more competitive. The project involves a large number of stakeholders including key nodal government bodies, state-owned company Power Grid Corporation of India (PGCIL), the state utilities from the project states, and international entities like KfW development bank, GIZ and ADB.

Conditions	Brazil - Amazon Fund	Brazil - Amazon Sustainable Landscapes Program	India - Green Energy Corridor
<b>Sustainability</b>	Limited financial sustainability as it relied on three donors without prospects of better conditions. Changes in the Fund's governance and in governmental efforts to curb deforestation led to the two largest donors suspending their funding. Sustainability of the results-based payment mechanism is compromised by upward deforestation trends. The project is environmentally sustainable but neither socially nor politically sustainable as it did not lead to a change in public perception.	Limited financial sustainability as it depends on funding from the Global Environment Fund (GEF) and counterpart funding from federal and state budgets. For the second phase of the Program, GEF has reduced funding to Brazil due to changes in The World Bank's classification of developing countries. There are no signs that the Program's financing is transitioning to private funding. The project is environmentally sustainable but neither socially nor politically sustainable as it did not lead to a change in public perception.	The project is not financially sustainable but economically, politically, and socially sustainable. Although the project has demonstrated the potential for economic growth due to developments in RE sector, it is hard to determine the long-term impact.

Conditions	India - Green Climate Fund	Indonesia - Green Sukuk	Indonesia - REDD+
<b>Relevance</b>	Aims to provide long-term affordable financial assistance to private developers for construction of rooftop solar capacity in the commercial, industrial, and residential housing sectors in the country to add 250GW of capacity. India has a goal to reach 40GW solar rooftop energy by 2022.	Links up with targets from the General National Energy Plan that stipulates the provision of energy (considering that energy is the second largest sector that contributes to NDC). Green Sukuk was issued as a method and finance instrument to improve climate related investments with a focus on both mitigation or adaptation projects.  Green Sukuk enables, among other contributions, construction of new and renewable energy infrastructure issued from 2016 to 2019.	The goal is to create incentives for various countries to reduce greenhouse gas emissions caused by deforestation and forest degradation. According to Indonesia's first NDC, REDD+ will be an important component of Indonesia's NDC targets in the land-based sector. REDD+ financed capacity development resulted in the preparation of new policies.
<b>Depth of change</b>	Transformation of multiple segments of the solar rooftop market mostly through 'green subsidies'. Expected demonstration of the financial and technical feasibility of solar rooftop projects, with the aim to change people's energy consumption patterns. No change in institutions or policies.	Does not only promote the achievement of NDC targets, but also supports the realization of sustainable development goals. The Green Sukuk framework also fills the gap in the planning process of implementing energy programmes. It opens up financial opportunities to realize the NRE program. It causes a deep transformation of the energy sector with the development of green facilities.	The commitment value of the RI-Norway Letter of Intent, amounting to USD 200 mil, is used to develop various policies and new institutional arrangements to implement REDD+ programs, i.e. Presidential Decree on Establishing REDD+ Institutions, Financial Management Scheme, MRV Strategy, moratorium on land use management, etc.
<b>Scale of change</b>	Developers are expected to break into the sectors being targeted, especially the residential sector. MSMEs or developers looking at increasing solar rooftop capacity in vulnerable areas with poor or no grid connectivity are hoped to create a significant increase in the market size and easier entry with broader access to financing. Emission reductions will be limited as many customers were previously unconnected rather than shifting away from fossil fuels.	Green Sukuk is impactful because it involves the construction of a large variety of energy facilities including solar power plants, solar-diesel hybrid power plants, micro-hydro power plants, and mini-hydro power plants, as well as biogas facilities and photovoltaic street lighting, with locations spread across 34 provinces in Indonesia. There was a decrease in emissions, which amounted up to 1.3 million tonnes from NRE projects.	The economic impact has not yet been measured because the process of implementing REDD is still at an early stage and the evaluation of 2016-2017 is still in the making.  NGOs participated in the preparation of REDD+. The project led to the development of new institutions, rather than involvement from different ministries.
<b>Sustainability</b>	Financial barriers existed which are being addressed by the project, and the projects can act as a learning-by-doing program. Yet, financial sustainability is limited as the financial assistance will be provided long-term rather than gradually phased out. The program is helping to reach vulnerable societies with poor or no grid connectivity as well as small scale developers, but there is no indication whether it is politically and socially sustainable in the wider context.	Green Sukuk is environmentally and economically sustainable, as it incentivises sustainability without restricting economic growth.	Funding through REDD + is guaranteed by a Letter of Intent between Norway and Indonesia. The management of REDD + funds has the potential to be used sustainably because the acquisition of funds is used as green program investment funds in the future. Funds obtained go into the state budget, managed by BPDH to be earmarked on green projects in the region.

Conditions	SANBI	REI4P
<b>Relevance</b>	Provide urgently needed adaptation solutions, thereby building resilience to climate impacts. They are part of a broader strategy to enhance national ownership of climate interventions by empowering developing countries to 1.) access climate finance as well as 2.) identify and implement tailored projects directly through accredited local, national or regional (in GCF) institutions.	REI4P is a competitive tender process launched to facilitate private-sector investment into grid-connected RE generation. It directly supports the rapid expansion of RE supply, thereby addressing a global issue. REI4P also seeks to respond to South Africa's 'triple challenge', namely poverty, unemployment, and inequality, through socio-economic development investment requirements.
<b>Depth of change</b>	Direct-access innovation assists countries to effectively attract ICF and to manage all aspects of the project cycle, bringing decision-making 'to the ground' for urgently needed adaptation responses in the form of multiple small-scale projects. SANBI helped to establish early warning systems, climate-resilient infrastructure, and cooperatives, significantly improving food security and SGHs' opportunities. Yet, direct access seems to fail to reduce transaction costs.	Created institutional innovation and a significant transformation in public finance. REI4P made a key shift in the instrument of procurement, from feed-in tariffs to competitive tendering. Prices of RE technologies dropped dramatically through several bid windows, thus transforming the market.  However, rapid decarbonisation of electricity supply is not a fait accompli. REI4P also does not contribute to more decentralised forms of ownerships.
<b>Scale of change</b>	Experience fed into a Community of Practice for Direct Access and led to exchange visits fostering peer-to-peer learning and knock-on effects. Exceeds project beneficiary targets, especially for the number of farmers benefiting. Construction of the project from ground-up help include more stakeholders in the process. Both projects have spawned proposals for additional upscaling, hence show potential to further transform sub-national governance, livelihoods, and behaviour.	REI4P reported mitigation and adaptation effects by significantly reducing CO2 and water usage since inception creating a large-scale impact. REI4P also transformed the scale of renewable energy for electricity generation in SA and created opportunities for decommissioning of coal-fired power. However, dependencies on coal-fired generation still exist. Moreover, the job creation promised by local industrialisation does not materialise to the extent expected.
<b>Sustainability</b>	Potential to make enduring impacts lies within its institutional cooperation and the excellent working relationships catalysed. SGF cooperatives and peer-to-peer learning enhance uptake of climate agriculture beyond project communities, contributing to social sustainability. However, not yet financially sustainable as it is not accredited to carry out intermediate funding.	Financially sustainable as it sources its investment from the private sector. It brought private investment into South Africa, thereby demonstrating its economic sustainability. However, the experience of limited localisation suggests that more careful re-design may be needed. Social and political sustainability could be enhanced by extending socio-economic considerations to include local jobs, local black ownership, local content, and local community ownership.



CHAPTER EIGHT —————>

## **Results II: How can international climate finance support transformational change**

Several propositions on the interaction between international climate finance and domestic policy implementation emerge from the twelve case studies. Three of these propositions appear necessary for achieving transformational change in all cases. Other factors play major roles in some of the cases, but not all, such that we identify under which conditions these additional four hypotheses support transformational change.

# 8.1

## Core propositions

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Several factors are necessary for transformational change in close to all the cases. These include the identification of domestic support needs, alignment between ICF contributions and domestic policies and programs, and domestic prerequisites.

### 8.1.1 Proposition 1:

*International climate finance contributes to transformational change if specific domestic support needs are identified early on, yet programmes allow for dynamic planning (adaptive management) to respond to unforeseen events and developments and to reflect nonlinear processes of transformational change.*

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International climate finance projects must identify specific domestic support needs early on. The scope of individual projects is, naturally, limited, such that they must be targeted at specific, important activities and programmes which enable transformational policy implementation. For this to happen, domestic actors must signal to international donors what and where their needs are, and international donors must be open to addressing those support needs. This usually happens during ex-ante negotiations around programme designs or in less formal discussions before and during programme set up.



The case of the green Islamic bond has shown the importance of early identification of financial needs: a climate budget tagging, supported by technical assistance, as well as a related information sharing and indicator systems were introduced in 2017 and were vital for the assessments of needs and the subsequent development of financial mechanisms such as the Green Sukuk.

Transformational change requires the identification of specific, strategic support and negotiations for resources to meet such needs: International climate finance can provide targeted support for specific domestic needs rather than transform sectors and policies entirely on its own. Specific needs (resources in terms of technical assistance, finance, capacity development) are ideally identified by partner governments, communicated and negotiated for with ICF providers. But the identification and negotiating tasks include both parties involved, as it should be principally agreed upon what the target corridor is so as to set the limits of negotiable and non-negotiable items. Usually, actors on the domestic level identify and raise such support needs. The international side then needs to be open and reactive to support such domestic needs. Identifying specific, targeted activities stands in contrast to generic budget support programmes which do not address particular domestic support needs. While generic, un-targeted programmes can also be transformative when the domestic side successfully uses funds to address specific support needs, including such identification already at the outset renders successful implementation more likely, as supporting stakeholders and governance structures are supported directly. Generic programmes include climate change programme loans, which were controversially assessed by shortcomings in terms of missing to set the right and specific incentives for low carbon development (Bank Information Center, 2017). The case studies show that transformational change can be achieved when strategically-defined activities are identified and supported.

Such procedures may safeguard ownership as an important criterion of successful cooperation. The negotiation element is important as there can be situations where partner governments are also not yet confident about how a certain policy should be designed, although it should remain within the target corridors as suggested above.

Flexibility of the provided support was identified in a number of case studies as an important factor for an effective linking of climate finance with policy developments and transformational change. In particular, flexible planning as a response to dynamic sectoral transitions reflects the observation that barriers are dynamic and change over time.

## **Sustainable Urban Transport NAMA Support Project, Peru**

The Sustainable Urban Transport NAMA support projects in Peru shows that international climate finance addresses narrowly-defined, specific support activities, but also the advantages of staying flexible, even if it implies deviations from original planning. The TRANSPerú NAMA and its support project were based around a policy matrix, agreed by implementing partners before the start of the project, as shown in Figure 3. The goal was to reverse the trend of increasing road transport emissions by promoting integrated public transport systems, non-motorized transport and modernisation of the vehicle fleet.

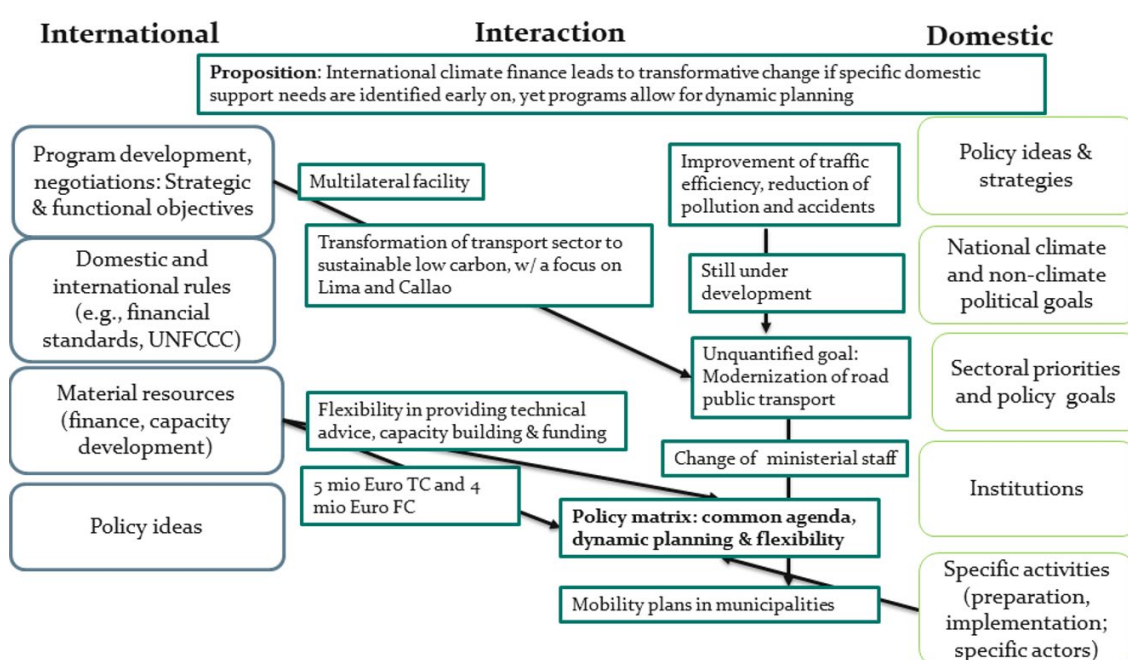
While there had been domestic goals for this, there were several institutionalized shortcomings that needed to be addressed. For example, private-sector involvement in public transport resulted in a fragmented urban transport offer, marked by inefficient minibuses and partly redundant concessioned bus routes. Municipalities generate income by awarding concessions for bus routes, which is an incentive to increase the number of licences granted for bus routes instead of increasing the efficiency of the system through avoiding, for instance, overlapping routes. Municipalities have no incentive in cooperating to offer integrated public infrastructure and services and there is no mandate for an institution to oversee urban planning and transport routes. To address these and other issues, a comprehensive policy matrix was developed, consisting of 67 action points related to three main action pillars: a strong institutional set-up, an improved regulatory framework and additional urban transport infrastructure. The project supports the implementation of the NAMA through technical advice, capacity building and funding to implement the policy matrix and set the necessary framework conditions for the transition to a sustainable lower carbon urban transport sector.

The project faced many changes in national structures over its implementation period, yet its support remained flexible to grasp and react to windows of opportunity. The policy matrix was the key foundation of international support and policy development, yet individual activities and deliverables changed over time, adapting to the needs and emerging barriers that came along the sectoral transition. For instance, the partner institution's staff changed extensively during project implementation and the project adapted to this by providing technical assistance on some of the previous work that had been conducted. Its flexibility allowed the continued work of the support project, contributing to continuity in policy development around the transition to sustainable urban transport. The project's technical assistance for policy processes and drafting of laws was able to spur new thinking and problem-solving in existing national processes.

**Green**

**FIGURE 3**

***Illustration of interactions of international and domestic elements in the context of the first proposition on basis of the Peruvian NAMA support project in the transport sector***



## Energy Corridor, India

The Green Energy Corridor programme in India highlights how the identification of domestic needs, combined with high political visibility, can support transformational change. India is adding substantial capacities of renewable energies like wind and solar power to its energy mix and has a target of 175 GW of renewable energy capacity by 2022. However, the Indian electricity grid struggles to manage large amounts of weather-dependent renewables. Therefore, grid development is a cornerstone of unleashing private sector investments into renewable energy. This also requires intensified cross-border electricity trading between states, which has been hampered by tariffs.

The Green Energy Corridor programme shows that the financial help needed for grid expansion exceeded the available sovereign financing sources through traditional multilateral and bilateral sources. The governments of Germany and India had established a formal agreement to collaborate on energy issues in India in 2013. In light of this early collaboration and given that grid expansion in India faced both financial and administrative hurdles, this specific support in the form of a soft loan of EUR 1bn, channelled through the German development bank KfW, was identified to be able to facilitate this narrowly-defined extension of the power grid. The KfW played an important role in combination with international agencies that provided capacity building, so that a transfer of specific knowledge, instruments and banking approaches could be implemented.

### SUMMARY AND POLICY RECOMMENDATION

The success of international climate finance hinges on the identification of specific domestic support needs. It can help sector transitions when the supported activities are transformational and difficult to overcome in the absence of ICF, for example due to required financing and triggered policy processes. To this end, providers of ICF must engage in close conversations and negotiations with stakeholders from developing and emerging countries before and at project start.

Further, international climate finance projects should allow a certain degree of flexibility during implementation with regard to the path without changing the final project goal. The essential precondition to this being successful is a prior agreement about the limits to flexibility and a common understanding of the principal target of the ICF based cooperation.

Dynamic planning of programmes supports implementation as projects may face many changes over their implementation periods such as government reshuffles or change in ministries' staffing. For instance, the overarching project goal may be set along flexible subcomponents, so that single activities and deliverables can be changed over time, adapting to the evolving needs, opportunities and often dynamic barriers that come along sectoral transition. Flexible technical and financial activities may bring continuity to transformational processes, for example by spurring new thinking and problem solving in existing national processes or through knowledge and capacity training to counteract losses of knowledge and skills due to staff changes. Financial barriers can be particularly difficult to anticipate, thus financial mechanisms need to constantly reflect sector dynamics admitting that there is no "one size fits all" solution. Hence, it is important that support remains flexible, for example by adapting the type of financial support provided or by financing those projects most needed at a given time.

## 8.1.2 Proposition 2:

*Alignment of the ICF contribution with government policies and programmes is necessary but should not preclude further engagement in policy development process. A common vision of transformational change among international and national partners is necessary for successful ICF outcomes, which, however, proves challenging when transformative change touches on vested interests.*

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The alignment of the international climate finance contributions with national policies and programmes is an indispensable precondition in the studied cases. In an ideal case, a government would have brought forward existing transformational policy initiatives, alongside with certain levels of resources and capacities for implementation, which then can attract ICF contributions. Given that this is rarely found in an ideal form, we assume that there is a rationale that ICF can go beyond mere alignment and make a contribution to the further development of transformational policies and programmes.

Several cases illustrate this proposition, relating to private sector investments in green bonds, institutional innovation in the renewable energy sector, the Brazilian Amazon Fund and projects of the NAMA Facility.

### **Green Islamic bonds (Green Sukuk), Indonesia**

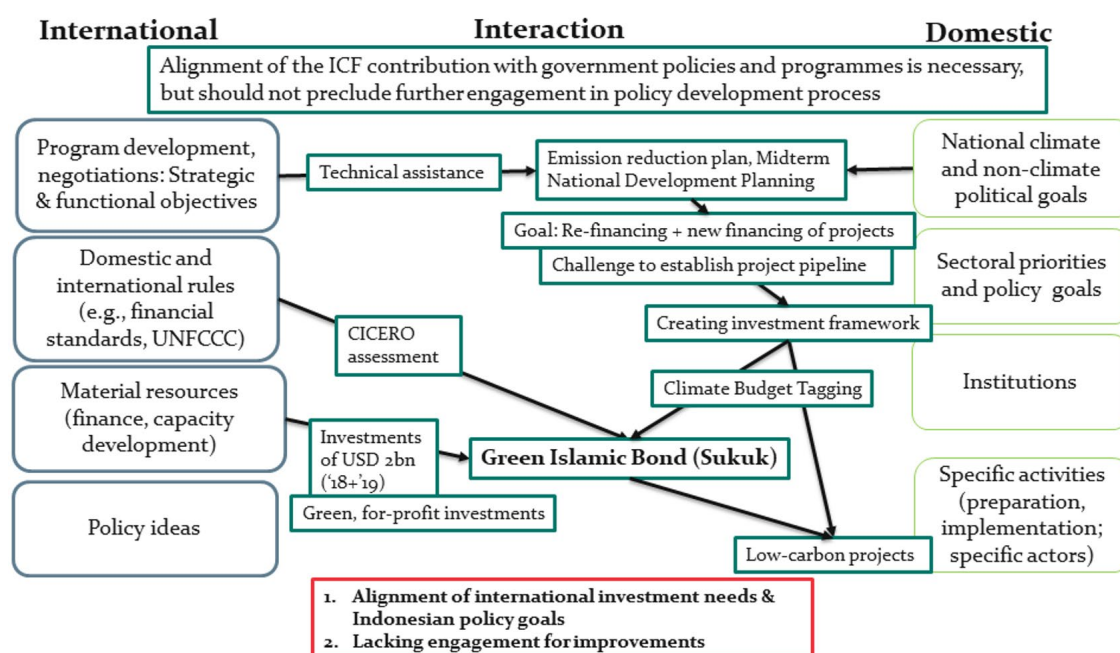
At the end of 2017, the Indonesian government issued a framework for Green Islamic bonds, the Green Sukuk. This framework regulates the issuance of green bonds and sukuk, and the criteria for green projects that can be financed in one of the eligible sectors; renewable energies, waste management, green tourism, sustainable transport and agriculture, disaster risk reduction, green building, energy efficiency, sustainable management of natural resources (Indonesian Ministry of Finance, 2018)<sup>3</sup>.

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<sup>3</sup> For this case study, we have considered the RE sector, as it is the second largest emitting sector in Indonesia and the case would juxtapose with the selection of REDD+ in the land use sectors as the second Indonesian case.

FIGURE 4

## Alignment of ICF with government policies using Green Sukuk



The Green Sukuk aligns the financing from international sources with domestic budget allocation rules. The selection procedure of the green projects that can be financed or refinanced by the Green Sukuk is based on the Indonesian Climate Budget Tagging (CBT), as shown in Figure 4. The CBT system is embedded into the government's national budget system and is established to track and identify expenditures of projects delivering environmental benefits in accordance with Indonesia's climate change targets (BKF Report, 2019). The result of this budget tagging exercise has enabled the government to better map the green financing needs across sectors and helps the planning and evaluation process of the projects. The green projects funded by Green Sukuk are selected from tagged projects that fall into one of the nine Eligible Green Sectors under the framework.. Funds derived from the sukuk will go to the state budget and be channelled to the ministry in accordance with the project fund stated in the climate budget tagging report. This framework has been through a review process by an international independent institution, CICERO, and gets the rank of a medium green value for the environmental quality of their bonds(BKF Report, 2019). In CICERO's methodology,



Medium green, which ranks in the middle of the scale, "is allocated to projects and solutions that represents step towards the long-term vision, but are not quite there yet " (CICERO, 2015). The Green Sukuk finances energy investments that are part of the Indonesian NDC with projects that fall under one of the eligible green sectors like renewable energy and energy efficiency. These are related to the improvement and equitable distribution of community access to energy through massive infrastructure development, sustainable energy availability (including increased regional self-sufficiency in energy), and the development of environmentally friendly energy while continuing to prioritise the economic capacity of the community to achieve equitable energy (Ministry of Energy and Mineral Resources, 2018).

The Green Sukuk faces limits in areas of improvement of the policies and programmes by the government to increase renewable energy utilisation. This is because international investors do not actively engage in policy reform or improvement processes but leave these tasks to the government and instead rely on such policy conditions to enable their investments. Currently, the government of Indonesia faces a shortage in the supply side of financeable projects in the renewable energy sector, and underlying reasons for this situation may have to be addressed in the energy sector directly, which is where the mechanism faces challenges.

### **Renewable Energy Independent Power Producer Procurement programme (REI4P), South Africa**

In cases such as the REI4P, the alignment with governmental policy developments and programmes is identified as the single biggest factor for an effective link of ICF with domestic transformational change processes. The implementation of the programme was supported by advisors supported by ICF and who were present in the IPP office and contributed through technical advisory roles in an institutionally integrated way, and which highlights the importance of capacity development in combination with provision of financial resources, which were anyhow minor in the case of the REI4P. In total, international finance only had a minor share in funding REI4P and its projects, and only supported the first two bidding rounds.



Nonetheless, it is important to stress the mobilizing effect of the special IPP unit of the department of energy coming in to provide expertise on setting up the bidding process. They engaged in informal government meetings beforehand and during the process and gained access to cabinet meetings.

## **NAMA Facility cases**

A common vision of sectoral transformation between international and domestic partners as well as between different international partners helps overcoming hurdles during implementation. This vision is crucial and, hence, highlights also the importance of donor coordination both internally (among donors) and externally (with other stakeholders).

The NAMA support projects show that some sectoral transitions, often in their early stages, require a system approach which is broad in scope and includes all stakeholders, based on a common vision. Technical component (TC) activities can support the coordination between various institutions, support policy planning and the drafting of new laws and regulations and help raise stakeholders awareness. In addition, embedding TC and financial component (FC) activities in a wider transition plan or vision, such as elaborated under larger NAMA projects, can trigger wider impact and offer a wider range of engagement areas. Nevertheless, the risk of such an approach is creating a “dependency” on national processes, for example a national subsidy scheme may be terminated or priority areas for a given sectoral transformation redefined after a change in government.

### **SUMMARY AND POLICY RECOMMENDATION**

Embedding international climate finance in the form of technical and financial activities in national institutions and national processes from the beginning raises ownership, helps to involve/convince other actors in the course of the project. Furthermore, anchoring activities in existing policy processes, such as adjusting renewable energy regulations and targets in existing legislation and plans can accelerate and facilitate sectoral transformation.

Comparably stronger alignment with government policies might be needed for private-sector-based forms of ICF such as green bonds.

Investors require the existence of long-term policy frameworks for motives of risk minimisation. Furthermore, alignment can be strengthened through improved monitoring, reporting and verification systems, which increase transparency and show which projects received financing. Aligning with national policies also implies that ICF providers identify and support fulfilment of specific needs (technical cooperation, finances, capacity development) and thereby are in a position of constant interaction with national policy actors. That way, this proposition connects to the first proposition and specifies that a sound diagnosis is done jointly with partner governments about status, direction and gaps of the policy frameworks, which build the basis for alignment. This is exemplified by all of the above cases and might strengthen arguments in favour of rather long-term personnel working in cooperation with partner governments.

### 8.1.3 Proposition 3:

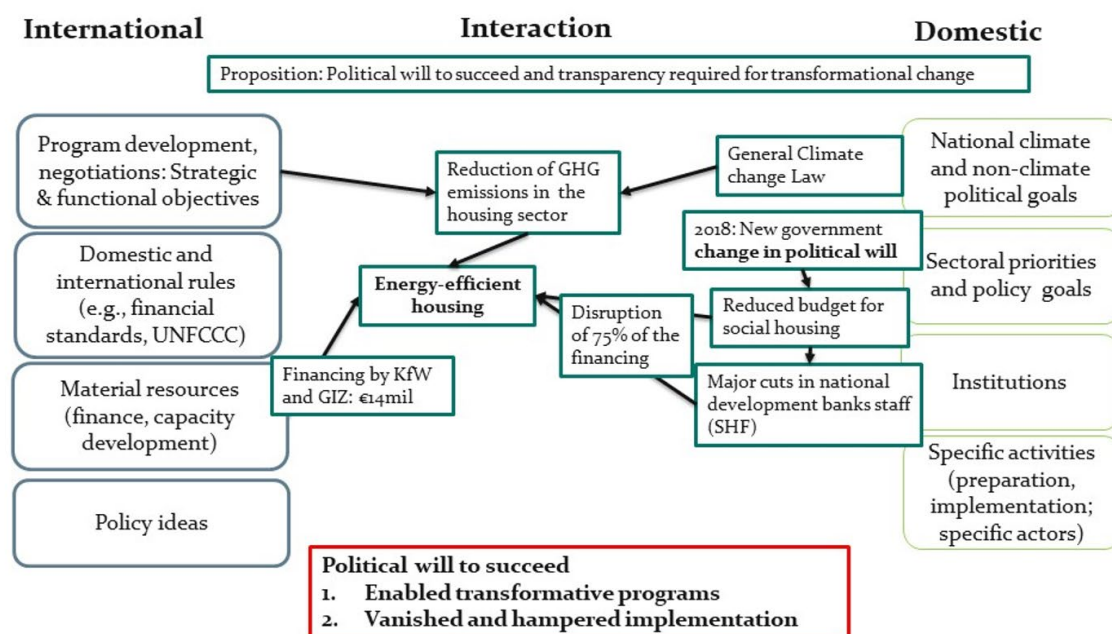
*International climate finance requires political will to succeed and transparency as a basis for trust as prerequisites for effective implementation, but ICF can also help shaping such conditions.*

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International climate finance operates in a close relationship with the conditions in host countries, and interactions take place which may foster political will to succeed, enhance ownership, and improve policy making processes. Preconditions in host countries we identified were connected to political and institutional reform processes, such as the case of the South African renewable energy programme REIPPP, which in turn enabled donors to find productive working environments. Other examples include the existence of strong institutions, such as the Brazilian development bank BNDES as the trustee for the Amazon Fund contributions by international ICF providers. We have found that an MRV system can build a valuable basis for trust building with donors, in particular with regards for results-based finance schemes.

In all cases, political will to succeed is an important precondition which can set the course towards successful implementation of ICF. For instance, in the case of the Green Sukuk, the Minister of Finance decidedly acted on new financing opportunities in the area of international sharia finance and provided the environment to develop innovative bond instruments. The opposite can also occur - political will to not succeed, endangering successful implementation. Political will to succeed can exist at many levels of stakeholders, for instance high-level government, but also local level administration. As international climate finance programs and projects usually necessitate higher-level government involvement, their political will is crucial.

## Mexican New Housing NAMA



The aim of this NSP developed in 2012 by the Mexican National Housing Commission, is to promote and support energy efficient buildings in the residential housing sector in Mexico, with an emphasis on low-income housing, in the context of their NDCs. The Mexican Government early identified the concept of supported NAMAs as an important means to comply with its voluntary commitments on climate change. The project received funding by GIZ and KfW amounting to 14 million € and was implemented by SHF which is a social housing development bank. The TC component of the project focuses on strengthening the political framework and standards in the housing sector while providing capacity building to small and medium housing developers.

On the other hand, the FC component of the project relies on financial incentives through subsidies for financial intermediaries and investment grants for housing developers. The integration of the project into a national programme initiated by the government has a significant impact on the scale and the sustainability of the project as it allowed sustainable changes in political processes and policy frameworks in the housing sector. Nevertheless, unpredictable political change can hamper a project that relies closely on governmental action. In 2018, a new government came to office with new political priorities which focused on urban development and reconstruction in areas affected by the 2017 earthquake. The social housing subsidy programme of the previous administration acted as a co-financier to the NAMA Project by providing subsidies to low-income housing owners. The change of government (and the elimination of the old social housing subsidy scheme) affected around 75 per cent of the NSP-financed houses, as the business model depended on the state subsidy. The new administration also weakened the national development bank SHF who is one of the main implementing institutions, as the austerity measures carried out by the new Ministry of Finance resulted in major cuts in SHF personnel (around 20 % of the staff were removed or resigned, among them, those who were implementing the NSP) and as the budget allocated for social housing shrank by about 70%.

In order to overcome the new barriers generated by the vanishing of political will to succeed, implementing entities need to conceive flexible project designs. In the Mexican case, the NSP had to adjust the focus of the project, allowing higher income households to become beneficiaries and medium sized housing developers to access the financial incentives. While the flexibility is welcome for such a large project, the results of this new targeting is yet unknown. It might be difficult to reach new targets, in the demand and in the supply side, under such time and resource constraints as the project is set to end in 2021.

## **Amazon Fund, Brazil**

The Brazilian Amazon Fund shows that ICF can support domestic activities when institutions and policies exist that can absorb and make use of the funds. However, this example also indicates that political will to succeed is critical and can change, threatening project success.

In Brazil, ample policies and plans were already in place to curb deforestation, which could be strengthened through international funds. Complementarity between the Amazon Fund and existing public policies was encouraged as projects financed by the Fund had to be aligned with the Public Policy Action Plan to Prevent and Control Deforestation in the Legal Amazon (PPCDam), the Sustainable Amazon Plan, the state plans to prevent and combat deforestation, and the National Strategy. The success rests on positive experiences with some of these instruments: Since its creation in 2004, the PPCDam has been successful in curbing deforestation. Between 2004 and 2008, deforestation rates dropped from 27,772 km<sup>2</sup> to 12,911 km<sup>2</sup>, a 54% decrease (INPE, 2019). These successful efforts have become a critical factor for international donors to support a results-payment mechanism like the Amazon Fund<sup>4</sup> (Garcia et al., 2019). As a result, the projects supported by the Fund have contributed to achieving the objectives of the above policies as deforestation would have been more pronounced without them (Fundo Amazônia, 2019d).

The success of the Amazon Fund was based on existing, reliable monitoring, reporting and verification (MRV) systems in place. This provides legitimacy and the basis for trust among stakeholders. For instance, the presence of a national monitoring system such as conducted by the Brazilian National Space Research Institute (INPE), which is internationally recognised, gave the Amazon Fund with reliable data on deforestation monitoring. A simple method to calculate donor disbursements brings transparency to results-based payment instruments. Also, the national development bank BNDES has strong selection and monitoring requirements, and regular reporting practices which helped for transparency and trust building. In the case of Indonesia's Green Sukuk, it was the climate budget tagging which provided additional transparency and clarity about finance requirements and flows, which is important for providers of ICF to develop a trustful relationship with partner governments.

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4 In this sense, Angelsen (2017, p. 254) states that "The Brazil–Norway agreement could be viewed as a reward for past performance".

However, the Amazon Fund has not spurred the development of innovative national strategies. Given the successful implementation of PPCDam and the consequent decrease in deforestation rates, in 2013, the government decided to change the responsibility for PPCDam coordination from the Chief of Staff (at presidential level) to the Ministry of the Environment, thereby reducing the ability of the government to work with other ministries (e.g. Ministries of Agriculture and Mining) to address the structural causes of deforestation. Aligned with PPCDam and reflecting this approach, the projects financed by the Amazon Fund have a more operational and less structural approach (Forstater et al., 2013). Indeed, the projects and operations of the Amazon Fund have failed to support innovative approaches or the development of a national strategy to continue reducing deforestation such as revising subsidy and pricing instruments that incentivise business as usual approaches, for instance, to infrastructure development in the region (Forstater et al., 2013; Nakhooda et al., 2014).

Recent changes to the Amazon Fund, particularly to its governance, have suspended its operations and have raised doubts about whether its activities will continue with donations from Norway and Germany. Moreover, deforestation trends since 2013 and a new reference level had already substantially decreased the monetary value of annual emissions reductions and, without measures to significantly reduce deforestation in the Amazon region, the fund already appeared unlikely to attract new, large donations.

## **NAMA Support Projects**

Pressure from civil society can lead to formation of political will. The Peruvian transport sector NAMA support project shows that pressure from civil society to transition to a sustainable urban transport sector is a key enabling factor. This is in part due to the link to co-benefits or impacts of climate-friendly mobility. Many citizens would like to turn away from colectivos and individual passenger vehicles (including taxis and mototaxis) running on polluting engines, which have strong impacts on noise levels, road congestions and, thus, travel duration, air quality and road safety. Pressure from voters and the media, enables political will to transform the sector, also on a national level. The last elections reflected this change as all parties addressed the need for a sustainable public transport sector.

Interesting is also the role of the private sector and market conditions in ICF projects which operate in such environments such as the Thai refrigeration and cooling sector. The existence of strong market actors and favourable market developments would have been ideal, but the case of the RAC NAMA support project has shown the importance of strategic engagement with private sector actors: for instance, it turned out to be more effective to facilitate the introduction of supply side companies as compared to boosting the demand side.

Hence, such an ICF contribution depends on markets and private sector actors, and interactions between the two groups might secure results.

#### SUMMARY AND POLICY RECOMMENDATION

It is an advantage for the contribution of international climate finance to understand and interpret political will early on: all too often, political will is depicted as a rather abstract force, but on a sectoral level, political will to transform sectors is much more tangible. A good understanding of the situation allows to tap policy windows, such as the political will by the Brazilian government to reduce deforestation rates in the early 2000s. Political will can also be used by ICF proponents on rather technical levels as demonstrated by the Indian Green Energy Corridor project, where technical advisors helped shaping the project documents to a fundable stage, upon which it ultimately was financed by international financial institutions. MRV systems can demonstrate progress of implementation of policies and is particularly important for results-based finance ICF types.

## 8.2

# Propositions that support transformational change under specific conditions

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A number of factors play major roles in some of the cases, but not in others. Hence, we describe these factors and mechanisms and derive the conditions under which they matter.

### 8.2.1 Proposition 4:

*The effect of international climate finance goes beyond pure financial support. The political visibility of programmes can create the environment in which high-level political backing supports transformational change.*

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High-level political visibility can improve the implementation of policies and create the backing needed for ambitious climate policies. International climate finance can increase political visibility, leveraging the effectiveness of the finance beyond the direct financial contributions. Such visibility can emerge from various channels: Participation in multilateral processes and agreements that are highly prominent like the Paris Agreement raises the visibility of policy processes. The Indian Green Energy corridor project and REDD+ in Indonesia are examples of activities that advanced in the light of the international processes. Bilateral agreements between countries can also grant such visibility, if high-level policy-makers have a stake in them.



Political visibility can enable several of the other success factors of achieving transformational change. Setting up new institutions, for example, is easier when it is backed by a prominent process or programme. Stakeholders from different interest groups might be more interested in programmes which have the visibility to engage interest from different sides, including civil society and the private sector. Further, when decision-makers see a benefit in terms of political visibility, they might more likely have the flexibility needed to adapt the programmes to facilitate their success. However, linked to changes in political will, political visibility at times can also have opposing effects when it encounters nationalistic sentiments (see Discussion).

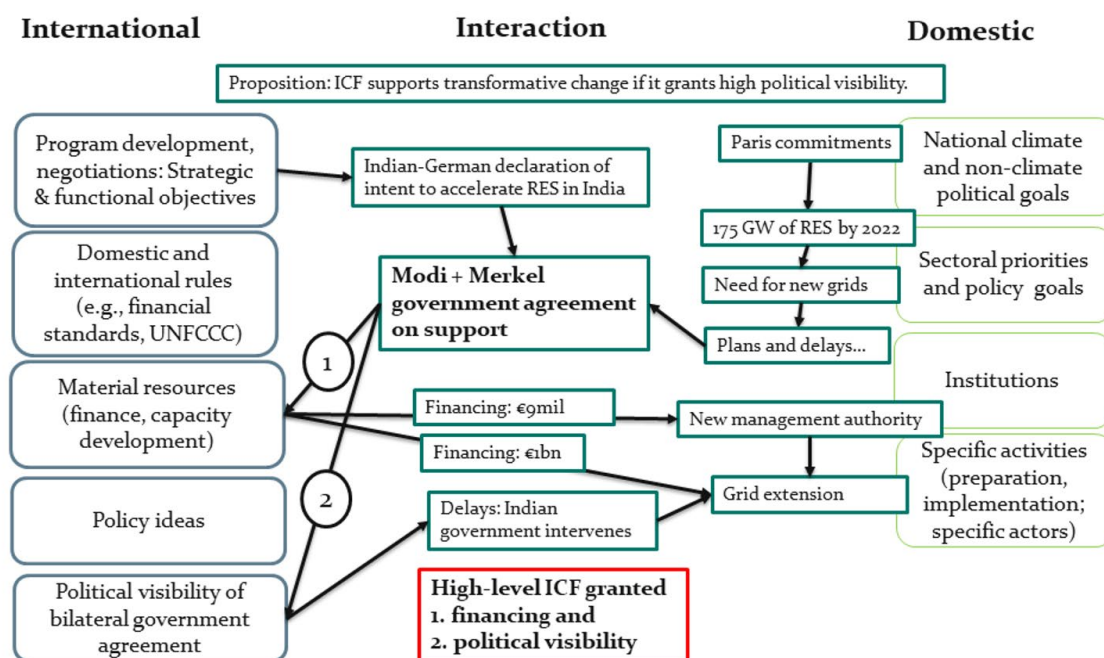
## **Green Energy Corridor, India**

The effects of international financial contributions went well beyond the provision of funding for grid expansion by the German development bank KfW as the programme secured high-level political visibility and interventions. While the initial Green Energy Corridor (GEC) programme to extend intra- and inter-state grids had already been established in 2013, the implementation turned out difficult. The required level of funds, legal questions on land rights and management of the project were serious barriers at the initial phase. A loan by the KfW of EUR 1bn was targeted to alleviate these barriers, enabling the further integration of renewable energies and, hence, large-scale investments by private actors. In addition, the involved states have abandoned charges for inter-state electricity trading and strongly increased their renewable energy capacities.

The disbursement of international climate finance happened with the highest levels of political visibility, as outlined in Figure 5: India and Germany, following wide-ranging discussions between India's Prime Minister Narendra Modi and Germany's Chancellor Angela Merkel, took a large step towards clean energy collaboration with the creation of long-term 'Climate and Renewable Alliance' on 5th October 2015. With a long-term vision and a comprehensive agenda of cooperation, the alliance resulted in Germany extending a lump sum assistance of over one billion euros for India's GEC and a new assistance package of over a billion euros for solar projects in India.

FIGURE 5

## International climate finance supporting transformational change through political visibility



The provision of international finance for the GEC project further facilitated high level political support when implementing the project. In November 2019, following project delays around issues of land, right of way and forest clearances, Prime Minister Modi tasked the Cabinet Secretary to work with the state governments and the Ministries to resolve the problems. According to The Economic Times (2019), the Cabinet Secretary found solutions to overcome barriers within ten days. The Prime Minister also directed the state governments to resolve such issues expeditiously and appealed to them and the Ministry of New and Renewable Energy to speed up execution for early completion of the project.

Moreover, to oversee the project further, the Indian Parliament's Standing Committee on Energy was given the mandate and is actively involved in evaluating the progress of the Green Energy Corridor project. This public intervention keeps up the pressure to advance the project.

## **Amazon Fund and the Amazon Sustainable Landscapes Programme, Brazil**

Beyond direct political visibility, donor institutions can also provide legitimacy to programmes and projects. This is underpinned in the Sustainable Landscape and Amazon Fund programmes in Brazil. The provision of ICF from recognised institutions like the GEF reinforced the importance of certain programmes/projects and the channelling of public funds to the same programmes and projects. The legitimacy and visibility are further extended when multiple domestic stakeholders like civil society and different interest groups are brought together for programme implementation.

## **Solar rooftops programme, India**

Funding from donors that are perceived as reliable in terms of financial capacity and monitoring requirements can increase the ability to implement transformational policies. The introduction of the solar rooftop programme in India through a high-profile international funder like the GCF is likely to further bring reforms, as well as increase the growth of this sector. Various regulatory bodies and stakeholders in India recognise that GCF is rather neutral, which gives it the ability to facilitate new initiatives and reforms in the country that other development partners cannot. This also gives project developers of the sector an umbrella under which to convene all the key stakeholders involved to identify the main barriers and deliberate on strategies for growing the sector. This shows how the GCF is assisting in changing the general landscape of the Indian solar rooftop sector.

## **REDD+, Indonesia**

The case study of REDD+ in Indonesia shows the high-level negotiations between international partners (in this case Norway) in conjunction with an increasing recognition of the deforestation problem and associated greenhouse gas emissions have created a favourable momentum for the development of new policies. This led the Indonesian government to issue the “One Map policy” as an important means to improve governance in the land use sectors. It also introduced a moratorium to prevent primary forest logging in selected areas of Indonesia.

This shows that a high level engagement with the political level can be an effective way to facilitate the issuance of new policies, if ICF is handled at the adequate level, including availability of a financial instrument, which in this case is the results-based finance mechanism to reduce emissions from deforestation and forest degradation.

#### SUMMARY AND POLICY RECOMMENDATIONS

High political visibility can enable the creation of policies needed to achieve climate friendly outcomes. Hereby, donors do not only play a financially supportive role, but can also contribute to legitimise domestic policy in host countries. ICF can contribute to moving climate action up in the agenda setting process. Whenever possible and adequate, donors and host country government should seek possibilities to move agreements on international climate finance to venues and occasions of high political visibility as it creates momentum and support for subsequent implementation.

### 8.2.2 Proposition 5:

*Institutional innovation (understood as forming new donor-induced organizations) can be a crucial element of international climate finance when it addresses specific issues that are difficult to address in existing institutions. However, it can come at the expense of ownership and institutional sustainability.*

Institutional innovation, i.e. creating new institutions, can leverage the effects of international climate finance if the implementation of policies or programmes in existing institutions is difficult. This can be the case if existing institutions' interests, instruments or working modalities do not entirely align with those of the programmes and / or policies. For example, while the overall programmes might be beneficial and in the interest of a government, individual government entities might have counteracting mandates that do not put them into a position to support new programmes and funding lines.

Supporting new industries like renewable energies might go against the interests of incumbents which might be able to exert political influence over existing institutions if ties have traditionally been close. Moreover, the effect of support of specific issues that cannot easily be addressed in existing institutional arrangements can well go beyond individual activities but contribute to larger processes at play. However, there are also limits of institutional innovation, e.g. when each donor builds their own implementing institution, thereby reducing authority of national institutions.

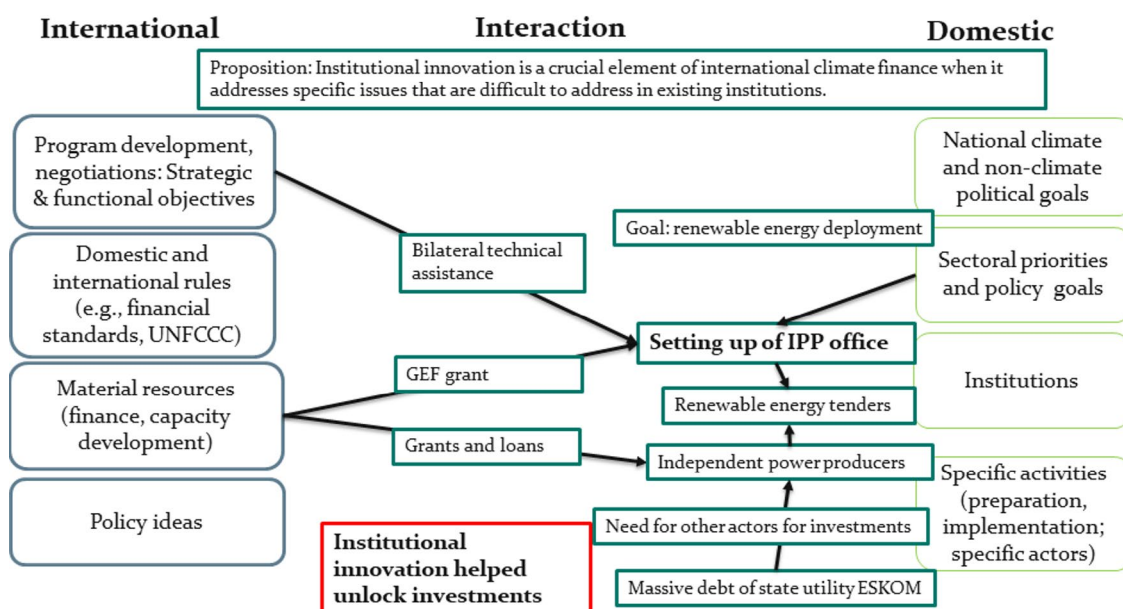
Institutional innovation is, however, not always necessary or preferable over innovation within existing domestic institutions. If new institutions are (perceived as) opposing national ownership, they can harm the legitimacy of programmes. Creating multitudes of donor-induced institutions can weaken existing governance structures, harming the sustainability of changes. Hence, institutional innovation regarding new institutions plays a key role primarily when it addresses specific challenges that are difficult to address in existing institutions.

### **Renewable Energy Independent Power Producer Procurement programme (REI4P) in South Africa**

The case of the institutional innovation of the South African IPP office shows that targeted and strategic support through international climate finance can create significant leverage. In South Africa, the state utility ESKOM was dealing with a dire budget deficit which was also threatening the financial position of the government. Simultaneously, the costs of renewable energies had decreased substantially and the weather resources in the country were fit for low-cost renewable energy deployment. The utility was barely in a position to invest on such a large scale. While international climate finance could not address the debt of ESKOM, it could enable other players, namely independent power producers, to invest into renewables.

FIGURE 6

## International climate finance supporting institutional innovation



The creation of the IPP office enabled the implementation of the Renewable Energy Independent Power Producer Procurement programme (REI4P), which placed the country in a position to attract large scale investments into renewable energies even though the major state utility ESKOM was in financial turmoil, as shown in Figure 6. The programme started a competitive tender process that was launched to facilitate private sector investment into grid-connected renewable energy generation. The South African government started an office that oversaw the procurement under the REI4P, the so-called “IPP office”. Targeted and strategic support through a GEF grant at the order of USD 6 million helped with the establishment of the IPP office by providing finance for the necessary expertise. In spite of its establishment by the government, the office operates as an agency and is physically located outside of government offices in Centurion rather than in Pretoria. Yet, the IPP office is still accountable to the government and mandated to meet strategic objectives. It established procedures for the confidential handling of bids, in a manner which gave confidence to independent project developers. Hence, new independent project developers could partake in the development of new renewable energy capacities. In the new tenders for renewable energies, the work of the IPP office interacted with further

international financing for specific renewable energy projects. This relationship between government and the private sector (in this case renewable energy project developers) and its running in a professional manner is a model that might be applied to other technologies in South Africa, and potentially may be of interest to other countries (ASSAf 2019). Supporting such processes of institutional innovation through ICF may prove to be a highly effective way to improve institutional linkages with renewable energy development, as was demonstrated by the REI4P case, but should require [sentence looks incomplete]

This case demonstrates that efforts by the government helped to identify and promote and regulate new streams of renewable energy financing as a consequence. The overall amount of ICF was small in comparison with domestic finances, but it was more important that the strategic niche was found for ICF in terms of supplying gaps towards institutional innovation.

## **Green Energy Corridor, India**

Institutional innovation fostered the implementation of the Green Energy Corridor in India. As many different states and states' grid companies had stakes in the electricity trading between these states, this needed coordination and management by a new institution whose mandate went beyond serving the interests of any one of the states. To respond to this need, Renewable Energy Management Centres (REMC) were partially funded by a EUR 9 million grant by KfW and technical assistance from GIZ. The centres are tasked with coordinating across the various involved state and national level load dispatch centres to manage renewable energies generation and are responsible for the stability of the power system. They are the focal point for renewable energy forecasting and dispatching and are responsible for real-time measurements and information flows. This provides the perspective to integrate large amounts of renewable energies in power production in the future. It goes well beyond the pure financial flows for grid expansion but aims to support it through these new institutions.



## **Sustainable Urban Transport NAMA Support Project, Peru**

In Peru, the Sustainable Urban Transport NAMA Support Project (NSP) supported efforts to set up new institutions and strengthen capacities, leading to optimised cooperation, enhanced governance structures and public sector capacities. For these ends, the NSP established working group and set up a steering committee together with the government in order to address issues in the transportation sector. For instance, the newly created Urban Transport Authority (ATU) acts as a central authority to coordinate the future development of public transport in Lima and Callao. The steering committee, which includes the participation of 24 existing institutions, will be acting as a “Multisectoral Commission” (GIZ, 2019b). Furthermore, the working groups have developed into institutions, for example the working group on homologation of vehicle and fuel efficiency standards became the Vehicle Homologation Committee.

Moreover, the NSP activities led to new planning processes emerging to foster the transition to sustainable urban transport. The NSP supported the development of the policy matrix, which describes a path for a sustainable transition. Public and private sector stakeholders can follow this path, and first developments can be seen such as coordinated bus and taxi services, the use of GPS for accurate public transport services, an integrated ticketing offer and large infrastructure investments in sustainable urban transport (GIZ, 2019a, 2019b).

## **Amazon Fund, Brazil**

Initiating new institutions is not always necessary for transformational change if existing institutions are capable of taking on new responsibilities and their interests are aligned with program success. Prior to acting as fund manager of the Amazon Fund, BNDES had until then no experience in selecting grant-financed projects in forest protection. Although fund disbursements were slow in the initial years, the team was found to quickly develop into an entity familiar with the environmental issues in the Amazon biome and possessing good contacts with many players in the Amazon region. The GIZ provided technical support to BNDES to adapt existing procedures and design new processes (e.g. calls for proposals, monitoring socioeconomic impacts) which were tailored to the objectives and target groups of the Amazon Fund.



The case of REDD+ in Indonesia has shown that institutional innovation is not easily an ideal solution. During 2011-2012, the distribution of funding from Norway through REDD+ helped Indonesia to set up new institutions regarding the implementation of REDD+ such as the REDD+ Management Agency, which were specifically designed for the job at hand, but showed fragmentation with the ministry of forestry. Hence, our case study findings suggest that this creation of new institutions has brought benefits (advancement of the REDD+ agenda), as well as challenges (institutional fragmentation). Subsequently, these institutions were merged into the Directorate General of Climate Change Control and into the Environmental Fund Management Agency (Badan Pengelola Dana Lingkungan Hidup) which aims to strengthen the governance of finance for REDD+ implementation. Learnings from the Indonesian REDD+ case include that the creation of new institutions should be preceded by a solid institutional analysis and assessment of benefits and challenges in order to reap most advantages from institutional innovation.

#### SUMMARY AND POLICY RECOMMENDATION

Institutional innovation can create significant leverage in terms of program implementation (REI4P in South Africa and Green energy corridor in India) and preparation of policies (transport NAMA Peru). Furthermore, such processes of institutional innovation highly depend on national ownership, strategies and leadership, which should be borne in mind during the design and implementation phase of ICF contributions. As a consequence, a careful analysis and assessment of added values of new institutions should be done as existing institutions might have the potential to be further developed for the purpose at hand (Amazon fund). To be avoided is a layering of institutional settings, when institutional innovation is supported without assessment if existing institutions are fit for the job.

## 8.2.3 Proposition 6:

*Stakeholder participation can inform improved policy development, provide legitimacy for policies and programmes, and form coalitions driving transformational change if the involved stakeholders share a common interest in the success of the programmes.*

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Engaging a wide range of stakeholders from different levels of government, civil society and implementing bodies, as well as private actors, can ensure broad participation in and legitimacy of programmes, supporting transformational change outcomes when actors share a common vision. This requires more than merely setting up multi-stakeholder platforms: these must have the mandate and possibility to facilitate the implementation of projects. The stakeholder groups can take over specific responsibilities in the project implementation process. The early identification, ideally in the preparatory phase or at the beginning of the project, of local partner institutions to develop a project's vision and of national and/or sectoral programmes to anchor project activities in, is essential to maximise (leverage) the impact of project activities, increasing the scale and sustainability of transformational change.

The careful selection of stakeholders is crucial. They must have a proven interest in the success of the programme, e.g. groups from civil society that are close to local implementing entities, or government actors that generally benefit from successful programme execution. Stakeholders from the private sector often play crucial roles in terms of investment volumes, e.g. when investing into renewable energies or by buying up green bonds. In other sectors and, depending on the vested interests of any stakeholders, one should be aware that strong lobby interests might prevent transformation when involving them into the stakeholder dialogue as their interests might oppose the goals of the overall programmes.

Calling together multi-stakeholder meetings requires the apt management of such groups, combined with clear ownership and mandates to address conflicts between the parties. While all included stakeholders should have and feel a certain degree of responsibility, the functioning of the body should be facilitated by an entity which has the ability and trust by others to manage the process. Coordinated technical cooperation can strengthen such capabilities where needed.

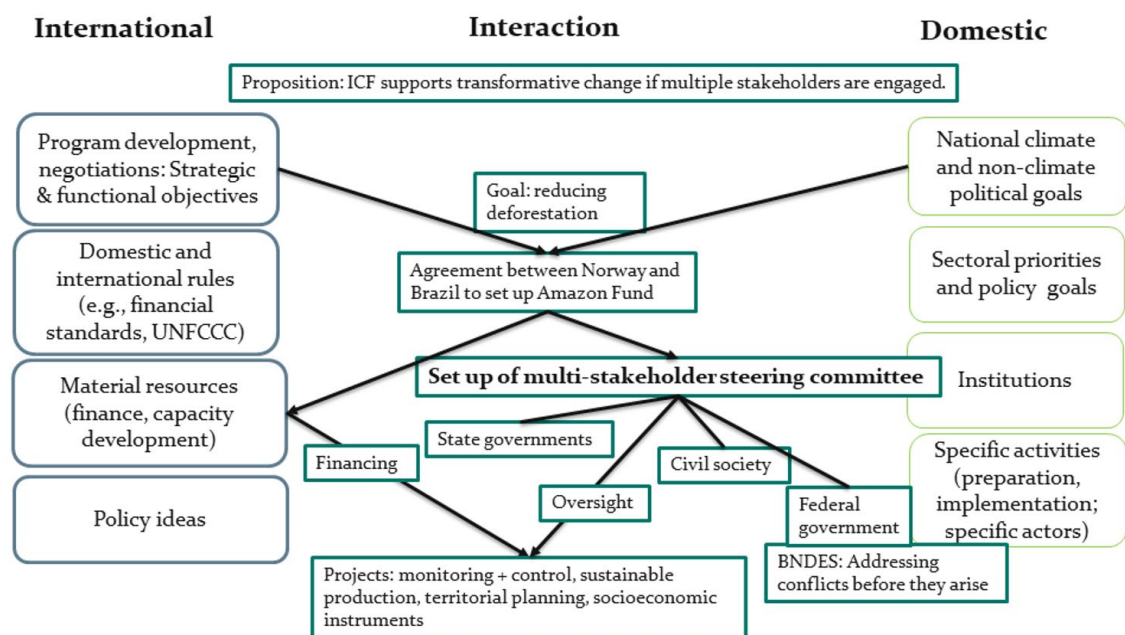
## Amazon Fund, Brazil

The Brazilian Amazon Fund is an example where involving multiple stakeholders led to positive outcomes. The Fund's Steering Committee comprised the federal government, state governments and civil society. This multi-stakeholder nature added to the legitimacy of the Amazon Fund by gathering a diverse group of stakeholders from different sectors. Its composition reflects the understanding of the Fund that the responsibility to combat deforestation must be shared by different sectors of society.

In the first years, the wide range of interests, the lack of trust in each other, and the fact that different stakeholders (e.g. civil society, BNDES, the Ministry of the Environment) claimed ownership of the Fund made interactions between members challenging. At a later stage, relationships improved, in part because BNDES organised meetings with each sector (federal government, the state governments and civil society) prior to the Committee's meetings, facilitating the reach of consensus (Garcia et al., 2019). Thus, the Steering Committee was found to be an important space for stakeholders to discuss and express their views, opinions and disagreements.

**FIGURE 7**

### **International climate finance can support transformational change through stakeholder engagement**



The decision-making process of the Steering Committee has helped to ensure equality between the three groups that compose the Committee, as indicated in Figure 7. According to regulations from the Steering Committee, decisions must be approved by consensus by all three groups, contributing to balance dominant government representation (Garcia et al., 2019). Not only was the Steering Committee responsible for high-level monitoring of the Fund, but it also participated in project selection. When there were calls for proposals, the Steering Committee established a Technical Selection Committee, with representatives from the Ministry of the Environment, the states, civil society and BNDES, to select the projects. This represented a cultural change for BNDES, which, for the first time, engaged with external agents in project assessment and selection. A criticism sometimes voiced is the absence of representatives from the private/productive sector, especially considering that sectors like agriculture and mining contribute to drive deforestation in the country and, therefore, could also be part of developing solutions. This lack of private sector engagement, however, is not a unique feature of the Amazon Fund as most climate funds have struggled to involve the private sector (Nakhooda et al., 2014).

The evenly balanced participation of different sectors of society in the decision-making and project implementation processes contribute to providing legitimacy to the ICF and to widen its field of action. The civil society organisations have acted as intermediary agents which then supported subprojects, helping the Amazon Fund to reach smaller organisations and distant locations. Such intermediary agents with the capacity to channel funds to smaller institutions contribute to widen the ICF's field of action.

## **Green Energy Corridor, India**

The Indian Green Energy Corridor programme shows how stakeholder engagement improves the implementation of international climate finance. The Indian Ministries of Power and New and Renewable Energy were closely engaged, as was the Power Grid Corporation of India Limited and the state utilities from the project states. These distinct bodies rarely get together to address their common issues which may not directly fall under the mandate of one of these entities alone. The access to affordable finance and the direct benefits these actors were able to foresee also ensured their active participation.

Through a separate project component, the State Load Despatch Centres (SLDCs) and the National Load Despatch Centres (NLDCs) were also involved in the project, with a focus on ramping up their capacity and establishing uniform processes, which allowed smoother interactions going forward. The enlistment of these separate entities acted as a catalyst for this large public infrastructure project.

## **SANBI project, South Africa**

The importance of stakeholder participation can also be seen with respect to the formulation of project proposals to international funding providers. Such engagement can lead to proposals characterised by high ownership and legitimisation as it was shown by the South African case of direct access to the Adaptation fund. Under leadership of the South African national biodiversity institute (SANBI) two projects were developed that explicitly seek to facilitate scaling up and sustaining of their interventions (SANBI, 2014a, 2014b). To this end, they aim at driving national and sub-national policy development and revisions for the inclusion of adaptation considerations into spatial planning (SANBI, 2018c). The projects will, where relevant, develop policy recommendations to inform South Africa's processes of climate finance establishment, with a view to replicating successes and creating a long-term small grant facility for supporting climate change adaptation in vulnerable communities (SANBI, 2014a, 2014b),

SANBI's status as a national institution makes it well placed to build country ownership and ensure that project proposals respond to national development priorities. The Steering Committee of the National Implementing Entity (NIE) helps assess project proposals and determine which project ideas to put forward for international funding (Masullo et al., 2015).

### **SUMMARY AND POLICY RECOMMENDATIONS**

The engagement of stakeholders is an indispensable condition for enhancing legitimacy and broader participation in processes of transformational change, which is especially relevant due to the multi-actor, institutional and sectoral complexity of such processes.

This is highlighted in the case of the Amazon fund, the green energy corridor and in the case of enhanced direct access, which all have different but yet formalized ways of stakeholder engagement. That way, stakeholder engagement is an essential instrument for the design and implementation of ICF contributions, provided that there is a genuine interest by the partner governments and that there is an agreement about stakeholder selection criteria and the establishment of engagement mechanisms.

## 8.2.4 Proposition 7:

*Implementation modalities matter: Direct access can enable transformational change but can also increase transaction costs if local capacities are not sufficient.*

**The modalities of international climate finance implementation matter. New modalities like (enhanced<sup>5</sup>) direct access as well as the successful combination of technical and financial components can increase the scope of international climate finance by, on the one hand, reaching more local actors within any recipient country, and on the other hand, enabling more potential recipients to use the financing effectively.**

Direct access can lower the transaction costs of international climate finance, such that a wider range of domestic actors can benefit from it. Since 2010, multilateral funds, such as the Adaptation Fund and the Green Climate Fund, have implemented direct access to finance. programme. The goal of such direct access is, among other things, to reduce transaction costs and enhance national ownership over available financing (Masullo and other authors, 2015).

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5 Enhanced direct access is a further development of the direct access modality, which includes the use of locally devolved approvals on funding decisions by local intermediaries (Murray, Mueller & Gomez-Echeverri, 2015. Enhanced Direct Access: A Brief History (2009-2015). European Capacity Building Initiative [www.europacity.org](http://www.europacity.org).

Through this modality, National Implementing Entities (NIE) receive financing directly from the donor and manage all aspects of their projects, from design through implementation to monitoring and evaluation without any interference/involvement from international institutions (e.g. World Bank) usually in charge. This way, more and smaller domestic actors can access international funding directly.

The main drawback of direct access is the costs of compliance and adaptation for national institutions, such that it can also lead to higher administrative and financial burdens if recipient countries are not provided with sufficiently strong systems to support financial, environmental and social risk management. While the transaction costs for individual national actors can decrease, costs increase at the (sub-)national level for managing the direct access. Indeed, national implementing entities need to understand complex requirements and provide proof of compliance (Wang 2015). Accredited institutions may undergo serious reconfiguration to comply with the fund requirements and get sufficient absorption capacity. Coping with project reporting requires significant learning by doing and preparation prior to the implementation of the project. Both the Adaptation Fund and the Green Climate Fund have put in place readiness programmes including institutional strengthening in the accreditation process to encourage a positive cycle of application success. Efforts carried out by developing countries to meet AF or GCF criteria are rewarded by easier access to funding and opportunities to upscale projects in the future given their new legitimacy as reliable and efficient institutions (Wang 2015). For example, the implementation of enhanced direct access requires constant contact and involvement, and human resources to overcome barriers of initially low capacity and to practice adaptive management (Soal and Diedericks, 2018). This level of relational commitment should be accounted for in project planning.

A precisely coordinated implementation of technical activities and financial support components (TC and FC) is another modality that can have a significant impact on the success of projects. There is no “one rule fits all”, but each project should carefully assess the potential synergies and mutual support between technical and financial international support.

Depending on the sectoral transformation characteristics, phase and associated barriers, technical component and financial component activities may work well as separate work streams, yet one alone will not be able to address all barriers to a sectoral transformation. This is, for example, indicated by the projects under the NAMA Facility, as well as REDD+ in Indonesia, the Green Energy corridor in India: Technical assistance and financial support worked together to support the implementation of NDCs. Moreover, interest in the financial component can increase the pressure to successfully implement technical components. For example, under a project of the NAMA Facility, Peru's Ministry of Finance kept track of the policy matrix for a EUR 4 million grant and repeatedly enquired progress updates from ministries

## **SANBI, South Africa**

In South Africa, direct access to the Adaptation Fund as well as the Green Climate Fund ensured local ownership of programmes and projects. Such access is based on a well-established institute that serves as a National Implementing Entity. The South African National Biodiversity Institute (SANBI) has more than two decades of experience as an Executing Entity of the Global Environment Facility (GEF), a relationship that has fostered capacity for project finance and management dealings with multinational funders. SANBI has been a National Implementing Entity (NIE) for the AF since 2011 (SANBI, 2019a). SANBI's status as a national institution makes it well placed to build country ownership and ensure that project proposals respond to national development priorities.

Direct access has reached small, rural projects in South Africa and has increased the likelihood of scaling up by increasing the number and type of actors engaged in adaptation intervention implementation and by increasing the interplay (including local municipalities communities, and other sub-national actors) in the climate action landscape. For example, under the Community Adaptation Small Grants Facility (SGF), most small grant projects involve radically changed practices and/or the acquisition and maintenance of infrastructure (Soal & Diedericks, 2018). Peer-to-peer learning and sustainability plans may drive more widespread and enduring benefits.



Through SGF's empowerment of local level beneficiaries to determine how international climate finance is used, the Adaptation Fund and SANBI have transformed the notion of direct access to enhanced access, with both significantly more localised buy-in through the process, and arguably more transformational outcomes through the adaptation interventions. In their 'enhanced' direct access approach, SANBI support 12 small grants of approx. USD 0.1 million each so that communities could run projects that deliver tangible and sustainable benefits. These communities are encouraged to share the lessons they learn over the course of the process, so that their projects and the way the SGF finances them, might be rolled out on a larger scale around the country. Therefore, the benefits of the programme extend beyond the direct financial contributions, but also serve to spread knowledge on sustainable practices into rural communities that, with conventional modalities of international climate finance, would be tough to reach.

### **Solar Rooftops programme, India**

Similarly, direct access allowed the Indian National Bank for Agriculture and Rural Development (NABARD), in its role as the National Implementing Entity and in its capacity as Direct Access Accredited Entity of GCF, to disburse financing for medium-scale solar rooftop programme which extends well beyond the classical, large-scale project size of international climate finance. The programme provides financial assistance to private developers in the solar rooftop market. It is a private sector- driven initiative designed to private sector investment through enabling bankable solar projects. Helping solar rooftop awardee projects secure long-term debt financing, to allow them to timely reach financial close and advance to construction and operation, and thus, assisting these project developers overcome the financial barriers and challenges that exist in the installation of solar rooftop capacity. The programme funding acts as a validation for other lenders as well as other investors that fund such projects with relatively small, and, thus, lesser known, project developers. The specific programme allows these projects to be set up giving sponsors, service companies, lenders the required guarantee about the feasibility and viability of the projects and help encourage future investments and developers.

## SUMMARY AND POLICY RECOMMENDATION

Direct access enhances local ownership and allows a wide range of stakeholders to benefit from international climate finance. It decreases their transaction costs and helps spreading knowledge especially to smaller stakeholders. However, its benefits must be weighed against the additional local requirements and costs for conducting the monitoring, reporting and verification of projects domestically.

Especially in the earlier stages of a transition, both TC and FC activities are required and can be effective when running in parallel. For instance, the FC can support technical project implementation through a policy-based grant to be disbursed by the completion of policies. Even when small, such a grant can be enough an incentive for local entities, such as a country's Ministry of Finance, to track and push for the implementation of the TC supported activities. Often, the TC can prepare the "groundwork" by supporting the development of a policy and regulatory framework and by enhancing awareness and capacities to unlock financial flows and/or trigger momentum. The FC can build onto TC activities and overcome financial barriers for example through financial subsidies, a guarantee fund or policy-based concessional lending.



CHAPTER NINE —————>

# Discussion

# 9.1

## Propositions on ICF in the light of ODA principles

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Many propositions confirm principal criteria of official development aid of the importance of country ownership over policy processes, the need for alignment of donor activities with host country systems and approaches, and the harmonisation of approaches between donors (OECD, 2005). The insights from the case studies fit well into these internationally-agreed principles but indicate that international climate finance is particular in regard to several aspects.

The provision of ICF cannot act as a neutral broker but takes sides with pro-transformational stakeholder coalitions and connects frequently with political levels. This implies that political neutrality is not always feasible. Rather, the question is whether political neutrality is desirable after all. This is particularly relevant in situations where host countries do not speak with one voice and where different stakeholder groups pursue individual interest and strategies. This also implies that within one country, there might be political will for and against transformative changes. Thus, while political will for success at the domestic level is necessary, this does not imply that all stakeholders must or realistically will showcase such political will. These are situations where only certain stakeholder groups might be engaged in a struggle pro transformational change and, henceforth, might be rather the natural partner of ICF donors as opposed to expectations of a unified host government.

The alignment between donors and domestic political actors, their oftentimes diverse ideas, interests and institutions of recipient countries can be understood as a continuum between total mismatch of donors’ and recipient actors objectives and strategies and the complete alignment. In the case of complete alignment, the common goal is to pursue climate change objectives and strategies, including a departure from potentially high-carbon business-as-usual development, i.e., a transition towards low carbon development. Climate finance is to contribute to such development, which raises the question in how far ICF deviates from established ODA principles, as well as how to deal with sovereignty infringement issues if getting too closely involved into ongoing policy processes. Table 2 shows a comparison of ODA principles (OECD Development Assistance Committee, 2005) and selected experiences (left) and aspects of ICF within contexts of transformational change processes.

**TABLE 2**

**Comparison of development aid and international climate finance for transformational change**

Principles of and experience with ODA	International climate finance in transformational change processes
<p><b>Partner countries’ ownership:</b> Developing countries set their own strategies, policies and improve their institutions.</p>	<p><b>Diverse domestic interests:</b> Cannot necessarily expect that host governments speak with one voice, as protagonists in policy struggles may be a minority and may not be represented in climate finance design processes. Ownership may be dispersed, and it becomes a strategic and sensitive question which groups to support:</p> <p>Can be win-win process if interests of multiple actors converge (e.g., energy efficiency in housing)</p> <p>Can be a conflictual, with winners and losers if tough political issues are tackled (e.g., fossil fuel subsidy phase out)</p>
<p><b>Alignment of donors with partner countries:</b> Donor countries align behind partner policy objectives, strategies and use local systems.</p>	<p><b>Alignment coupled with deviation from business-as-usual emissions:</b> Relying strictly on the alignment and ownership principles may take out of consideration that deviations from the business as usual may be needed as it is formulated in many developing countries’ NDCs.</p>

Principles of and experience with ODA	International climate finance in transformational change processes
Reliance on existing governance: Trend by donors to rely on solid governance systems to ensure effective spending of ODA resources.	Support of improved governance systems: Can result in struggles for overall new governance systems, if existing ones do not prove effective for low carbon development.
<b>Linear change:</b> Use of linear log frame approaches for ODA project proposals.	<b>Non-linear change:</b> Strict reliance on linear log frame approaches might be ineffective as transformational change processes can be high-risk, non-linear, and with uncertain results

In summary, alignment with domestic institutions, policies and mechanisms is a precondition for effective implementation, but may be highly dependent on existing political will and policy capacities. Going beyond pure alignment may be even the norm in transformational change processes but may require taking sides with certain actor constellations. This implies that climate finance frequently has to be implemented in a political environment which can be characterised by high turbulence due to conflicting interests of stakeholders, but also by win-win type of processes, if stakeholders show matching interests. This also shows that the ODA principles of alignment and host country ownership needs to be viewed in the context of such processes (see for instance Winkler & Dubash, 2016).

Another principle which can be confirmed by our case studies is that the harmonisation of ICF donors can lead to significant synergies across programmes and need to be encouraged again in the context of ICF (for instance, UNDP providing support to develop Indonesia's budget tagging system has proven very valuable for subsequent ICF contributions). However, proper coordination and harmonisation among donor agencies remains challenging, for instance due to competitive behaviour among donors (Well & Carrapatoso, 2016).

Further implications of the table 2, above all in regards to logical consequences from the comparison of ODA and ICF for the specific design and provision of ICF as well as the relationship of ODA and ICF are outside of the scope of this policy report. Such follow up questions can be addressed by future research (see section *Next steps to develop evidence-based policy advice* in the conclusions).

## 9.2

# Conceptualisation of the finance-policy link

Linkages exist between the targeted ICF contributions (projects) and the policy frameworks, which are, however, very different in nature (table x). For instance, REDD+ in Indonesia had an agreed objective to alter the existing policies, while REDD+ in the case of the Amazon fund served mainly the purpose of supporting the implementation of the existing government programs. Yet differently, the Green Sukuk in Indonesia relies on the existence of governmental programs to develop investable projects with investors having little interest in influencing the policy developments. In the SANBI case of South Africa, activities supported through enhanced direct access informed national level policy making through necessary information about local circumstances.

**TABLE 3**

### *Types of linkages between finance and policies*

	<b>Ty of finance-policy linkage</b>	<b>Scaling up to transformational change works under conditions of...</b>
Amazon Fund, Brazil	Supporting implementation of existing programs	Unchanged political will
Sustainable Landscape Programme, Brazil	Co-financing from federal and state budgets.	Well-functioning existing programmes
Green Energy Corridor, India	Loans for program implementation with little involvement in program formulation	Strong ownership and high-level political visibility and commitment

	<b>Ty of finance-policy linkage</b>	<b>Scaling up to transformational change works under conditions of...</b>
Solar Rooftop Programme, India	Development of new policy framework and provision of low-cost loans	Parallel technical learning and improvements for installing and integrating small-scale solar
Green Sukuk, Indonesia	Dependence on policies, no interest in altering them	Simultaneous work on policy improvements
REDD+, Indonesia	Stimulating policy change by supporting TA and promised payments	Desirable if agreed by both parties and if sufficient time and resources are granted for policy and institutional change processes
REI4P, South Africa	Limited, but targeted support to emerging policy and institutional change	Targeted negotiations for optimal support
SANBI, South Africa	Support local level with a view to feed in national policy making	Many small-scale actors financed and informed, domestic MRV functioning
Self-Supply Renewable Energy, Chile	Newly developed regulatory framework to support implementation	Implications of local institutions
Sustainable Urban Transport, Peru	Creation of a policy matrix to implement the programme	Common agenda, adjusting programmes to dynamic changes e.g. of ministerial staff
Mexican New Housing, Mexico	Development of new policies and rules in the social housing sector	Monitoring system and transmission of knowledge.
Refrigeration and Air Conditioning, Thailand	Enhancing public sector capacity to integrate new efficient technologies	Unchanged political will and proper transmission of knowledge

There is no general rule as to which type of linkage and accordingly, which type of ICF would fit to which particular policy and institutional situation in partner countries. But indispensable appears to be the transparent negotiation between national governments and donors for the type of support, based on proper and mutual stocking on needs and situations and potentials of the existing policy and institutional arrangements.

Based on the findings of the case studies, we suggest defining the linkage between policies and ICF as the main instrument which can assist in the scaling up from project levels to national and sector-based transformation. As Table 3 shows, this instrument can work in different ways, depending on the individual circumstances in countries.



We follow Marquardt et al (2016) who suggest in their analysis of donor contributions to energy transitions in Morocco and the Philippines that donors should and effectively cannot force transformational change, but that successful ICF contributions rather hinge on strong government leadership, and need to be undertaken in a dialogue mode and considering political priorities. We confirm the importance of ICF projects as facilitating components in larger sectoral transitions, which necessitate a sound design and strategy in order to succeed in terms of optimally fitting in to the larger context.

## 9.3

# Role of the ICF propositions

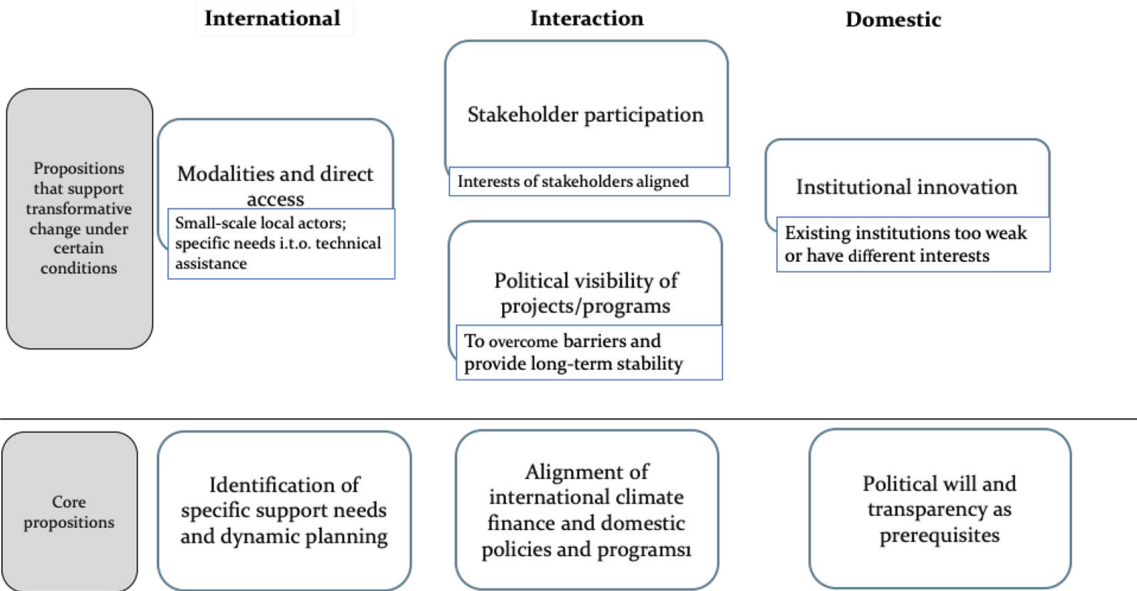
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We have found that the propositions take different roles and that none of the propositions work in isolation from each other. For instance, the integration of ICF with the political level can lead to higher political visibility of funded programmes and related momentum for implementation, and political will for success is also subject to changes and can be influenced (proposition 4). Likewise, the importance of early and targeted support needs (proposition 1) is also closely connected to proposition 6 (Stakeholder engagement) because changes in stakeholder constellations might influence the communicated support needs.

Figure 6 shows the role of the propositions as they are working in conjunction towards ICF outcomes. There are three central propositions working on different levels of the interaction between international climate finance and domestic policy-making: the engagement with the political and oftentimes international level to create momentum and visibility, the necessity to align with national processes and policies, and the modalities of the ICF itself, which can have a major impact in the way it interacts with national developments. In between these principal propositions are the ones that constitute important additional factors such as stakeholder engagement, strong institutions and governance arrangements as well institutional innovation.

FIGURE 6 [SHOULD BE 'FIGURE 8']

**Transformational change rests on several factors and case-specific conditions**



These factors have supported transformative change outcomes under a variety of circumstances, in different countries, and for several sectors. The analysis of transformative change outcomes also highlights the challenges of the analysis: Many of the case studies are still under implementation, i.e. have not been completed for long enough to know all the associated outcomes. This is due to the trade-off between analysing very recent programmes (modern programmes in line with current best practices, staff largely still in place and can be interviewed) and older programmes (outdated project approaches, staff dispersed): While recent programmes can provide more relevant insights, the assessment of outcomes is not always quite final yet.

## 9.4

# How to handle unfavourable change of political will?

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A finding well worth discussion is that ICF induced achievements and results may be easily abandoned if the political will changes, as is demonstrated by the Brazilian case on the Amazon fund. The question is what approaches could be taken to handle such changes of political will and how to mitigate antagonistic effects on climate policy.

Although it is too early to evaluate how the recent political changes will impact the Amazon Fund in the long-term, one of the issues that this situation raises is whether the functioning of a financial instrument could be shielded from political changes. For example, private funds could be more effective than a national trust fund in sustaining transformational outcomes when political conditions change. Indeed, non-governmental third parties were responsible for disbursing the funds of the Norway International Climate and Forest Initiative in Tanzania, Guyana and Indonesia. Alternatively, a fund of this magnitude could be created and linked to a specific federal law. For illustration, this was also the case with the Paris Agreement in Brazil, whose ratification was also approved by the National Congress via a Legislative Decree. This explicitly states that according to Brazil's Federal Constitution, "any acts that may result in the revision of the Agreement" are to be subjected to congressional approval. Such a provision is also found in the Promulgation of the Paris Agreement, by then President Michel Temer.

Although initially more complex, time-consuming and susceptible to political capture, linking the financial instrument to a federal law would require eventual changes to be approved by both the executive and legislative branches, minimizing the risk of abrupt discontinuation.

The political changes around the Amazon Fund raise the discussion that in countries with poor local governance and/or political instability, international donors may decide to continue working on local level by disbursing grants through their own arrangements and thereby depoliticise their support by staying neutral to unfavourable political conditions. This is because changes in the political sphere can quickly compromise the functioning of a financial mechanism that depends on cooperation between national governments. This can become challenging as the majority of the NAMA support projects shows that it is precisely the domestic ownership over visions like domestic sectoral development which assists in achieving transformational change outcomes. In particular, local governments should have a clear vision of long-term sectoral development which allows donors to provide ICF support.

## 9.5

# Barriers and challenges to successful ICF contributions to transformational change

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In this study, we aimed at a selection of cases, which allows to show positive outcomes of the policy - finance linkage on transformational change, given that such cases enable to maximize learnings on positive outcomes. The consequence of such selection is that our results do not show a lot of negative learning in terms of which type of barriers and challenges exist for the finance-policy linkages in the course of ICF application. Such challenges can occur on both sides of our analytical framework, i.e., the national as well as the international side. These can relate to difficulties to establish a proper project pipeline for bankable projects for private sector investors and which can have their origins in sectoral policy deficits, among others. Another example is constituted by frequent staff rotation in ministries which challenge the continued cooperation with international actors, or the difficulty to synchronize properly between partner governmental budget and policy cycles and the corresponding work modalities of ICF projects. Another cause of delays can be downright the challenges in administrative procedures which are necessary on both sides, donors and partner governments.

We have found that the existence of strong institutions in the recipient country (e.g. strong development bank, legitimate/strong civil society) can facilitate the attraction and effective implementation of ICF.



CHAPTER TEN —————>

# Conclusions

This report addresses the question, how the USD 100bn annually in international climate finance, promised by developed countries under Article 9 of the Paris Agreement, support national NDC implementation in emerging and developing economies?

### **Propositions for effective ICF contributions as a primer.**

We have developed seven propositions which may serve as guidance for the design of effective ICF contributions. We have divided the propositions into core propositions, which need to be in place regardless of specific conditions, and four propositions, which rather depend on specific circumstances. This set of propositions is a primer, which need to be tested, validated and specified based on future research in order to transform them into ICF design principles to strengthen developing and emerging countries' ability to fulfil their commitments under the Paris Agreement.

### **Propositions:**

- 1.** ICF must identify specific, domestic support needs and activities and allow for dynamic planning
- 2.** ICF contributions must be aligned with government policies and programmes but must not prevent further policy development process while keeping a common vision of transformational change with all the partners.
- 3.** ICF requires political will to succeed and transparency as a basis for trust as prerequisites for effective implementation, but it can also help shaping such conditions.
- 4.** ICF can create the environment in which high-level political backing supports transformational change IF programmes are supported in a context of high political visibility.
- 5.** Institutional innovation can be a crucial element of ICF IF it addresses specific issues that are difficult to address in existing institutions.
- 6.** Stakeholder participation can improve policy development, provide legitimacy for policies and programmes, and form coalitions driving transformational change IF the involved stakeholders share a common interest in the success of the programmes.



7. Implementation modalities matter for ICF supported programmes. Direct access can enable transformational change IF transaction costs for many local stakeholders can be lowered, additional costs of domestic MRV are manageable and an able local authority exists.

**Country owner- and leadership are guiding principles, but there should be room for negotiation and discussion among ICF providers and partner countries.** The propositions are based on an understanding that ownership and leadership must be wielded from host countries, and that donors use this as guidance for the design of ICF contributions. Recognizing this as a guiding principle, there is leeway for negotiation and discussion between donors and host countries on desirable changes in terms of policies, institutions, and programs - always provided that there is a principle mutual understanding on the need to make NDCs more ambitious.

In fact, there are frequent and multi-faceted interactions between the domestic level and international climate finance: the cases have shown that interactions work in both directions, with the results of ICF related programmes often depending on local circumstances and pre-conditions but ample evidence exist that ICF can also influence these.

**Connectedness of ICF with political levels is a double-edged sword.** We have found that involvement of ICF with political processes can be very advantageous in terms of providing visibility and momentum for implementation, but it can be a double-edged argument: if the political will changes, it might be more strategic to devise instruments and approaches which are more independent of the current “political mood”, for instance finance instruments for the private sector.

**Diversity of ICF types can be an advantage.** Our case studies have shown a variety of different ways, how ICF can work along the linkages between finance and national policies. This does not only imply that situation specific conditions in partner countries require specifically designed ICF contributions, but also that the frequently criticized fragmentation of international climate finance can also be used as an advantage.

**International climate finance as one element in transformational change processes among many.** ICF is best understood as one element among many components which contribute to transformational change in developing countries and emerging economies. Hence, the design of ICF contributions should be done based on partner needs assessments conducted jointly with donors, implemented in a flexible manner and seeking strong alignment with national processes and instruments. Recognizing that ICF projects are “merely one element in a broader stream of transformational change processes” might just bring that level of humbleness which might be needed for success but in reality, might stand at times in contrast to donors wishing to leave “their marks”. In fact, the best strategy for donors for successful ICF contributions might be to maintain a “low profile” and thereby being in a good position to act as a reliable facilitator for transformational change processes.

**Technical and financial cooperation should work together.** We have found a strong confirmation for the need to combine financial and technical cooperation if ICF is to be effective. This was shown in diverse cases of the Indonesian green sukuk, the Indian green energy corridor and various NAMA support projects. The ratio of TC and FC is naturally dependent on individual circumstances as well as the resources availability from the side of the donors, however for the future design of effective ICF contributions, ways to enhance the synchronization between the two will be important. This becomes all the more important as the financial components of international climate finance are substantial and often most-easily quantifiable, but additional elements like political visibility, stakeholder engagement and alignment in the interests between donors and recipients are also crucial for achieving transformational change outcomes.

**Limitations to this research.** While the case studies allowed for a number of lessons learned and the development of the propositions, there are a number of limitations which we need to address. First, some of the ICF projects were still in early stages of implementation, and accordingly the amount of empirical evidence is not yet fully developed. Subsequent research of a more longitudinal nature might address this point and allow for making use of the full range of empirical data. Secondly, the case studies are idiosyncratic owing to the fact that different national contexts make comparisons harder, and in particular, the

extrapolation of findings to other cases outside of our sample. Thirdly, there is significant complexity in each of the cases due to the international and national level interactions, as well as associated variety of actors, institutions and influencing factors. This complexity bears the risk of omitting and oversimplifying while we drew propositions, and which we addressed where it was possible.

**Next steps to develop evidence-based policy advice.** In order to provide further policy advice based on solid research, we suggest to undertake research with the objective to analyse single sectors in depth across countries to derive very specific learnings for individual sectors, e.g. renewable energies, deforestation, industry. This would allow to specify and validate the propositions established in this report through in depth analysis of case studies, including to observe one specific mode, e.g. concessional loans or enhanced direct access modalities across different countries. In particular, the set of propositions which depend on certain conditions (propositions 4-7) can be further developed and specified for instance through the selection of cases which feature the absence of the identified components, e.g. cases where explicitly no institutional innovation was the case, where no stakeholders were involved, etc. Another area of future research may include the question of relationships between ODA and ICF and consequences for design and provision of ICF as well as coexistence with ODA measures for the achievement of national climate and development targets.

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