

»»» Perspectives on Development Finance

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Authors: Lutz Horn-Haacke, Janis Müller-Späth, Alexander Hablik, Sophia Moschinski

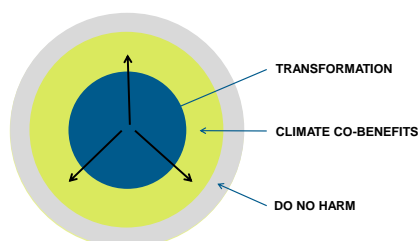
Applying Transformative Climate Finance in Practice: Experiences and Proposals

Entire societies must transform to address climate change, achieve the 1.5-2.0°C target, and sustainably increase resilience. This text explores how such processes can be supported by Transformative Climate Finance.

Why Transformative Climate Finance?

The world is not on track towards reaching the 1.5-2.0°C target set by the Paris Agreement on climate change. Analysing past developments and present trends, the UNEP Emissions Gap Report 2019¹ concludes “it is evident that incremental changes will not be enough and there is need for rapid and transformational action.” IPCC Assessment Reports regularly discuss the urgent need for transformation across all sectors and regions.² A framework for alignment with the Paris Agreement mandated by the International Development Finance Club (IDFC) demands that individual activities should at least do no (climate) harm, and preferably create climate co-benefits. But it especially calls to “seek whenever possible to contribute to both the incremental and transformational changes needed to support national and global sustainable long-term low-GHG climate-resilient development”³. This is the “bull’s eye” of climate finance.

Graphic 1: The three circles of climate finance



Based on Cochran, I., & Pauthier, A. (2019). A Framework for Alignment with the Paris Agreement. Why, What and How for Financial Institutions. I4CE. https://www.i4ce.org/wp-core/wp-content/uploads/2019/09/I4CE%E2%80%A2Framework_Alignment_Financial_Paris_Agreement_52p.pdf

Basic understanding

Transformation within the climate context means “fundamental change in systems relevant to climate action, with large-scale positive impacts that shift and accelerate the trajectory of progress towards climate-neutral, inclusive, resilient, and sustainable development pathways”⁴. Thus transformation is complex, goes “deep” (i.e. shows systemic or structural impacts) and implies long-term, non-linear processes. It not only changes technological and economic systems, it also touches upon societies as a whole.

An example of the successes and drawbacks of transformation as well as the strong interconnection between technological, environmental and socio-political developments is the German Energy Transition (“Energiewende”).

This process started several decades ago and still has important milestones to reach, e.g. the coal exit presently foreseen for 2038. Thus, it can also serve as a practical illustration for the potentially extremely long transformation duration – compared to the considerably shorter time horizon of a typical development cooperation project.

To make the concept more tangible, an evaluation of the CIF^{5,6} came up with four dimensions which separate an “ordinary” project from a transformative initiative (presented here with our interpretation of their essence):

- 1. Relevance:** Transformative initiatives target key climate risks as well as key barriers to low-GHG climate-resilient (LGCR) development. They must be deeply embedded into national / local strategies, be based on strong ownership, and promoted by influential “champions”.
- 2. Depth (Systemic Change):** Transformative initiatives have to consider not only necessary investments / assets but also the need for changes in policies, institutions, and behaviours.
- 3. Scale:** The financial, sectoral and geographical width and impetus of the included measures need to be in tune with the main potentials for, and key barriers to or risks for, LGCR development.

¹ UN Environment Programme. (2019). *Emissions Gap Report 2019*. <https://www.unep.org/resources/emissions-gap-report-2019>

² See for example: IPCC. (2014). *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, 151 pp. <https://www.ipcc.ch/report/ar5/syr/>

³ Cochran, I., & Pauthier, A. (2019). *A Framework for Alignment with the Paris Agreement. Why, What and How for Financial Institutions*. I4CE. https://www.i4ce.org/wp-core/wp-content/uploads/2019/09/I4CE%E2%80%A2Framework_Alignment_Financial_Paris_Agreement_52p.pdf

⁴ Climate Investment Funds (2021). *Transformational Change Concepts. Transformational Change Learning Brief*. https://www.climateinvestmentfunds.org/sites/cif_enc/files/knowledge-documents/tc_concepts_brief.pdf

⁵ CIF, & Itad. (2020). *Signals of Transformational Climate Change. Insights from the Evaluation of Transformational Change in the Climate Investment Funds*. https://www.climateinvestmentfunds.org/sites/cif_enc/files/knowledge-documents/tc_signals_brief.pdf

⁶ Itad. (2019). *Evaluation of Transformational Change in the Climate Investment Funds*. https://www.climateinvestmentfunds.org/sites/cif_enc/files/knowledge-documents/evaluation_of_transformational_change_in_the_cif_final_w_mresp_jan_2019.pdf

4. Sustainability: The initiative has to lay the necessary foundations that allow for future climate-related decisions to be taken and implemented in line with the needs for continued, or even more ambitious, LGCR development.

One of the key statements of the CIF-evaluation is that “transformation occurs when all dimensions are (to some extent) present”. In contrast to the task of managing the extreme complexity of transformation described earlier, addressing these four dimensions in our projects and programmes seems to be more feasible – not least since they partly overlap with the standard evaluation criteria of German Financial Cooperation, i.e. relevance, coherence, sustainability and impact among other things, although these partly have slightly different connotations.

Examples from our work

When looking at KfW’s portfolio through the lens of these dimensions, we identified a broad range of programmes and projects that can be considered transformative – or so close that making them transformative by executing some adjustments or add-ons seems possible.

Examples include:

- **projects** focusing on very specific barriers or sub-sectors (e.g. GETFIT creating security for investors in renewable energies, thus inciting significant private investment, or a holistic approach to energy efficiency in the public sector in Montenegro),

- evolving and ever more ambitious sector and/or country **portfolios** (e.g. the energy sector in Georgia, or the water sector in Tunisia), and
- complex **policy-based financing** (PBF) approaches supporting NDC-implementation (e.g. in Columbia) or wide-ranging, proactive adaptation to climate change (e.g. Climate Loan Kerala).

The share of such transformative initiatives in German Financial Cooperation seems to be growing, as indicated, for example, by the high volume of climate-related PBF-approaches presently in preparation. However, we would like to propose developing them even more systematically, or using the words from the IDFC-report mentioned above, “whenever possible” – since we believe that growing ambition needs to start with us.

Some entry points

Targeting: Very closely related to the dimension of “relevance”, national climate policies are necessary points of departure. All signatories of the Paris Agreement have to prepare Nationally Determined Contributions (NDC), while others also prepare National Adaptation Plans (NAP) or similar documents. Even if these strategies may sometimes be less than perfect⁷, we still have to start with them – and parallel to this offer some support for their further improvement. This is an area where German development cooperation as a whole – Technical Cooperation via GIZ and

Financial Cooperation via KfW Development Bank – can be brought to bear in an exemplary manner.

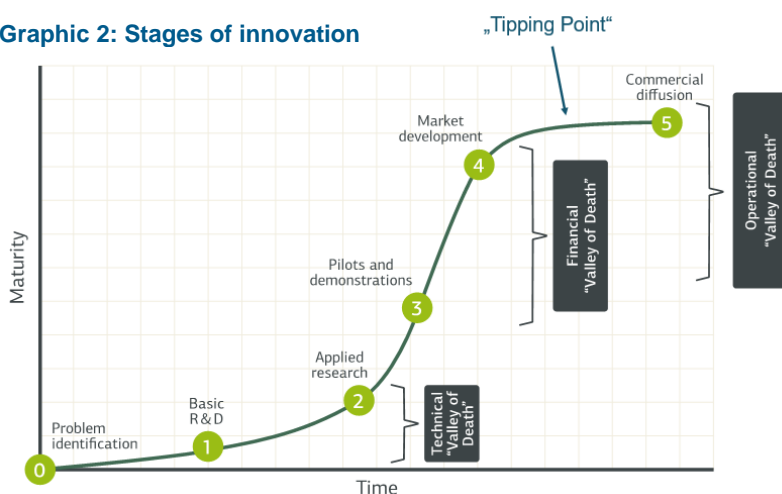
Tooling: The World Bank⁸ identified a range of “climate levers”, each linked to specific instruments from the development cooperation toolbox. Important levers include (improved) infrastructure, reforms (financial sector, fiscal policy, sector policies, trade policy), innovation, carbon markets and climate intelligence. Specific instruments correspond to each lever; they encompass investment finance, technical assistance, and particularly, PBF/RBF (results-based financing).

This produces two messages: Firstly, climate levers and financing instruments need to be attuned (e.g. leveraging reforms can best be supported via PBF / RBF combined with technical assistance). Secondly, and more importantly, levers will often need to be combined to reach a sufficient depth and scale.

Timing: Especially in the area of mitigation, successful transformation is often closely related to cost-cutting and market penetration of new (low-carbon) technologies. This was already achieved for solar and wind for example; possible next candidates could be battery storage, hydrogen or even carbon capture for instance.

According to the concept illustrated by Graphic 2, an innovative technology (or service, or process/procedure) first has to prove its functionality (i.e. survive what is labelled the “technical valley of death” in the graphic) and later demonstrate its market viability (i.e. passing through the “financial valley of death”). While financial cooperation will usually contribute little in the early stages, it can support pilot applications – often via grants – and if these are successful, provide finance to enter the market. The conditions of this finance evolve, with growing maturity and decreasing cost, from being highly concessional to ever more market oriented. Furthermore, the potential for mobilising the private sector will often grow in sync with the maturity of the innovation.

Graphic 2: Stages of innovation



Based on World Economic Forum (2019). *Fostering Effective Energy Transition. 2019 edition.* https://www3.weforum.org/docs/WEF_Fostering_Effective_Energy_Transition_2019.pdf

⁷ UNFCCC. (2021). *Full NDC Synthesis Report: Some Progress, but Still a Big Concern.* <https://unfccc.int/news/full-ndc-synthesis-report-some-progress-but-still-a-big-concern>

⁸ World Bank Group. (2020). *Transformative Climate Finance. A New Approach for Climate Finance to Achieve Low-Carbon Resilient Development in Developing Countries.* <https://openknowledge.worldbank.org/bitstream/handle/10986/33917/149752.pdf>

Looking at the wider context, innovation and its environment may need to be attuned so that the necessary regulations, services and supportive infrastructures are in place (e.g. creating “fair” market conditions for renewables, or modernising power grids to allow for growing shares of renewables) to avoid stagnation in an “operational valley of death”. During this last stage, huge investment programmes into underlying infrastructure or PBF for supporting further reforms may play important roles. So for example, reducing, or even better, abolishing subsidies for fossils and introducing CO₂-pricing are seen as key measures for consolidating production and use of renewable energies.⁹

The message here, again, is twofold: Firstly, levers and financing instruments need to be adapted to the specific stage of innovation. Secondly, reaching sustainability will require a continuous analysis of the evolution of the wider environment and probably also measures aimed at fostering its sustained supportiveness.

Categories of transformative approaches

Based on the considerations presented before, we categorised potential approaches as further guidance for designing concrete projects and programmes (see following table). For each category, for reasons of space, we can only mention some of the specific challenges that need to be considered in order to become “more transformative”. These categories are not carved in stone, and they will also partly overlap, e.g. a medium- to long-term “Dynamic Portfolio” can, at different times, include any of the other transformative approaches as appropriate under the specific circumstances.

Theories of change and indicators

Like any project, transformative initiatives need to be based on a solid theory of change, which – in German Financial Cooperation – will then be condensed into a logical framework, including activities, objectives and quantifiable indicators.

As potential support for our operational teams, we are presently assessing the

usefulness of developing “model” theories of change and schematic logframes for the above-mentioned transformative approach categories.

For the time being, some general observations are already possible. Most importantly, a key aspect of logical frameworks for transformative initiatives is that they have to consider three arenas simultaneously:

- policies / institutions
- infrastructure / services
- society / people

It is highly probable that activities will be needed in all three arenas to address the challenges named, amongst others, in Table 1. Policies and regulations need to be “right”; institutions strong (enough); necessary infrastructures in place; operations supported by adequate rules, structures and services as well as

transparent and “fair” markets; and societies need to back LGCR development. Within the latter context, one key concept is “just transition”, meaning that in the best-case scenario, the transformation should leave no-one behind.

It may often be too ambitious for a relatively modest German Financial Cooperation initiative to cover such a broad field completely. However, we should still be aware of the overall picture, i.e. where our specific contribution fits in, which role contributions by other parties will play, and if, all things considered, we will either fall short of meeting the transformative “bull’s eye” of climate finance (see Graphic 1), or we can “walk the extra mile” and mobilise additional resources or allies to close the gap towards achieving a transformative impact.

Table 1: Transformative approach categories

Category	Description
Game Changer	Focused on overcoming one key barrier / climate risk or using one key potential for LGCR development; challenge: create firm basis for later upscaling; prepare for addressing the forthcoming barrier
Steady Ascent	Moving up through the stages of innovation; challenges: create basis for upscaling, especially in early / pilot stages; strengthen overall capacity for innovation / transformation; create favourable environment for sustainable operation; achieve sustained public / societal backing
Smart System	Making a clearly delimited (geographical / (sub-) sectoral) system or value chain climate smart; challenges: strengthen institutional capacities; achieve sustained public / societal backing; provide for horizontal spread into similar systems

Resilient Net (adaptation only)	Providing broad support to integrated disaster risk management or building back better / building better forward approaches; challenges: achieve sustained public / societal backing; strengthen institutional capacities; prepare for (possibly even) strong(er) future climate shocks
Strategic Support	Massive support (often PBF, often multi-donor) towards implementation of country's climate strategy; challenges: reasonable certainty concerning policy impacts; achieve sustained public / societal backing
Dynamic Portfolio	Steadily increasing climate relevance, depth, scale and sustainability of a country / sector portfolio by complementing or switching activities according to changing barriers and potentials; challenges: nimbleness and reliability of cooperation; achieve sustained public / societal backing

Own presentation

⁹ Bauer, S.; Kurdziel, M.-J.; Iacobuta, G.; Brandi, C.; Rodríguez, J. C.; Deryng, D.; Hanshom, J.; Höhne, N.; Smit, S.; & Srigiri, S. (2021). *Gemeinsam Paris-Ziele und nachhaltige Entwicklung erreichen. Internationale Klimakooperation und die Rolle der Entwicklungs- und Schwellenländer*. Deutsches Institut für Entwicklungspolitik (DIE), & New Climate Institute. https://www.die-gdi.de/uploads/media/Report_DIE_NewClimate_DEUTSCH_Langfassung.pdf

Evidently, managing such complexity will be easier if we

- focus on a few well-defined barriers / climate risks or (sub-) systems, or
- follow a portfolio approach with in-built nimbleness and tolerance for learning-by-doing and advancing in a stepwise manner, or
- are part of a strong, work-sharing multi-donor initiative supporting an ambitious country policy.

This coincides with – and partly explains – the types of transformative initiatives that we found within KfW’s existing portfolio and presented as examples on page 2.

In terms of indicators, “classical” key objectives of climate finance are reducing emissions or increasing resilience of people, communities or assets. In addition, the evaluation of the CIF and other studies provided a wide range of proposals for monitoring emerging systemic changes, for example, in terms of budding policy reforms; more climate-conscious use of (dis-)incentives (via subsidies, taxes, and other means); positive development of investment pipelines, i.e. in the sense of being better adapted, more efficient, greener and at the same time more privately financed; increasing market dynamics (e.g. more private or citizen participation); falling capital cost for green investments; upscaling and replication of models / pilots; shifts in employment patterns towards green businesses; consumer preferences increasingly taking sustainability considerations into account; higher proactiveness / preparedness of institutions, communities and people in view of potential climate hazards; stable or increasing level of public support for LGCR development, etc. It should be possible to identify several ideas among these generic indicators that can be adapted to, and made measurable for, the specific initiative at hand.

Measuring success

For reasons of simplicity, up to now we have partly used the term “transformative” project or programme. In reality, our aim is to **contribute** to LGCR transformations. This somewhat more modest ambition simply results from two considerations: transformation always needs to be owned by the partner (see “relevance”) and it may need far more time than provided by the planning horizon of a single cooperation project or

even by several decades of development cooperation.

What also follows directly from these considerations is that we do not recommend trying to measure “our” transformational impact, but rather to assess whether or not we contribute(d) to LGCR transformation.

To do so, we propose combining three criteria:

- The initiative needs a clear and convincing theory of change that illustrates how it is linked to transformative processes; this theory may be based on a conclusive argument, detailed calculations and scenarios or – especially at programme level or in the case of big, complex programmes or PBF – on sophisticated economic modelling;
- It has to meet the transformative indicators included in its own logical framework;
- The development of the initiative’s environment (depending on the context, this may be a (sub-)sector, city, region or a whole country, etc.) needs to show a positive LGCR trend; the latter may partly be verifiable by referring to publicly available data like the Energy Transition Index.

between urgent and highly complex challenges on the one hand, and the need to make them workable on the other.

We see this paper as a contribution to an ongoing discussion, and we are therefore very interested in hearing your feedback and in sharing experiences.

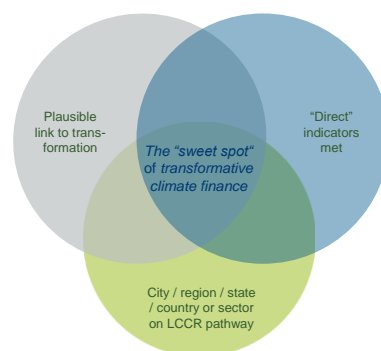
This paper is based on the content of a series of workshops and training events organised within KfW Development Bank in 2020 and 2021 and the feedback received.

KfW Group

KfW Development Bank
Palmengartenstrasse 5–9
60325 Frankfurt am Main, Germany

Competence Centre Climate and Energy
Alexander Hablik
Tel. +49 69 7431-1037
alexander.hablik@kfw.de
www.kfw.de

Graphic 3: Assessing the success of Transformative Climate Finance



Own presentation

Only an initiative meeting all three criteria would be considered to support transformation effectively. However, if it “only” meets the first two criteria, it may still be a very successful development project achieving important climate (co-) benefits.

Final points

With the approach presented above we endeavoured to cover the overall “project cycle”, from initial design to final evaluation. It tries to strike a balance