2018

Synergies between Climate Finance mechanisms

Portfolio Analysis



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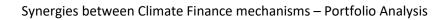
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Abbreviations					
AAD	Agency for Agricultural Development in Morocco				
Acumen	Acumen Fund Inc.				
ADA	Austrian Development Agency				
ADB	Asian Development Bank				
AF	Adaptation Fund				
AFD	Agence Française de Développement				
AFDB	African Development Bank				
CAF	Corporacion Andina de Fomento (Development Bank of Latin America)				
ссссс	Caribbean Community Climate Change Centre				
CI	Conservation International				
CIF	Climate Investment Fund				
CSE	Centre de Suivi Ecologique				
CTF	Clean Technology Fund				
DB	Deutsche Bank				
DBSA	Development Bank of Southern Africa				
DoE AG	Department of Environment of Antigua and Barbuda				
DoE MV	Ministry of Environment and Energy of the Republic of Maldives				
DRFN	Desert Research Foundation of Namibia				
E&L	Evaluation and Learning				
EBRD	European Bank for Reconstruction and Development				
EIB	European Investment Bank				
EIF	Environmental Investment Fund				
FAO	Food and Agriculture Organisation				
FIP	Forest Investment Program				
FONERWA	Rwanda's Green Fund				
GCF	Green Climate Fund				
GEF	Global Environment Facility				
GEF CBIT	Capacity-building Initiative for Transparency				
GEF MTF	Global Environment Facility Multi Trust Funds				
GEF TF	Global Environment Facility Trust Fund				
GEFSEC	GEF Secretariat				
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit				
IBRD	International Bank for Reconstruction and Development				
IDB	Inter-American Development Bank				
IFAD	International Fund for Agricultural Development				
IFC	International Finance Corporation				
IUCN	International Union for Conservation of Nature				
KfW	Kreditanstalt für Wiederaufbau				
LDCF	Least Developed Countries Fund				
MFA	Multi-focal area				
MFEM	Ministry of Finance and Economic Management, Government of Cook Islands				
MINIRENA	Ministry of Natural Resources Rwanda				

MOFEC	Ministry of Finance and Economic Cooperation of the Federal Democratic Republic of Ethiopia				
NABARD	National Bank for Agriculture and Rural Development				
NEMA	National Environment Management Authority of Malawi				
OSS	Sahara and Sahel Observatory				
PIOJ	Planning Institute of Jamaica				
PPCR	Pilot Program for Climate Resilience				
Profonanpe	Peruano de Parques Nacionales y Áreas Protegidas				
ΡνΜτι	Photovoltaic Market Transformation Initiative				
SCCF	Special Climate Change Fund				
SLM	Sustainable Land Management				
SME	Small and medium-sized enterprises				
SPREP	Secretariat of the Pacific Regional Environment Programme				
SREP	Scaling up Renewable Energy Program				
UCAR	Unidad para el Cambio Rural				
UNDP	United Nations Development Programme				
UNEP	United Nations Environment Programme				
UNFCCC	United Nations Framework Convention on Climate Change				
UN-Habitat	United Nations Human Settlements Programme				
UNIDO	United Nations Industrial Development Organisation				
WADB	Banque Ouest Africaine de Développement (West African Development Bank)				
WFP	United Nations World Food Programme				
WMO	World Meteorological Organization				
WWF	World Wildlife Fund (US Chapter)				



Executive Summary

Since 1992 with the adoption of the Framework Convention on Climate Change by the United Nations General Assembly, developed countries provide financial support to developing countries to meet the challenges of climate change. Therefore, the past decade has seen a proliferation of climate funds, including domestic, bilateral, and multilateral. The largest key multilateral climate finance mechanisms are the Climate Investment Funds (CIFs), the Green Climate Fund (GCF), the Global Environment Facility (GEF) including the Least Developed Countries Fund (LDCF), the Special Climate Change Fund (SCCF), and the Adaptation Fund (AF).¹

It is important for these mechanisms as well as for countries and the global community to understand how these funds can work together. The first step in this understanding is to describe to what degree this is already the case. A precondition for synergies between the funding flows is that they converge on specific themes and geographies. This paper provides a basis for an analysis of existing synergies and complementarities by briefly describing the portfolios of each of the funds and where (i.e. in which countries and thematic areas) the largest convergence of funds from these four facilities can be found. The analysis helps identify interesting case studies for the collection of evidence on synthesis. It also helps understand the magnitude and prevalence of funding convergences.

The portfolio analysis is done from the viewpoint of the GCF and from the viewpoint of the CIFs, and takes into account the respective portfolios by June 30, 2018. It revealed that CIF and GCF projects both build on projects of the other funds. The analysis of funding convergence from the GCF perspective showed that for all but one GCF project the research team found GEF and/or CIF projects which were working in the same country and theme before. Specifically, the GEF has been funding projects in almost all countries and themes that are now also benefitting from GCF funding. The GEF portfolio exhibits the highest number of projects, but also the lowest average size, highlighting the opportunity to upscale climate action through the GCF.

Overall, fewer instances of convergence of funding were found in adaptation than in mitigation. This is partially due to the fact that explicit multilateral climate funding started later than mitigation funding. But the picture is somewhat warped by the increasing trend towards integrating mitigation and adaptation technologies and approaches into the same project and that the funding practice increasingly acknowledges the synergies between the two types of climate action. The GCF, for example, has a separate funding area for the mix of mitigation and adaptation funding. In other cases, projects find renewable energy technologies very helpful for adaptation purposes, for example in the Tajikistan portfolio of the CIF Pilot Program for Climate Resilience (PPCR) or in the Namibia projects of the Adaptation Fund.

The funds have national projects, but also a significant share of regional and global projects. To some degree, this impedes the analysis of funding convergence as it is unclear how much funding goes to each country, and it cannot be taken as an indication of the strength of possible synergies. However, the increasing number of global and regional projects, specifically also with the GCF, and their increasing size, highlights their expected benefits in particular also for private sector investment activity: regional and global investment facilities allow for higher flexibility to invest in appropriate opportunities. In technical

¹ World Resources Institute (WRI) (2017): The Future of the Funds. Exploring the Architecture of Multilateral Climate Finance.

assistance, they allow for joint capacity building and knowledge transfer between different countries, for example in the GEF Global Solar Water Heater Initiative or the CIF's Forest Investment Program (FIP) Dedicated Grant Mechanism both of which have a global coordination component and national implementation "sub-projects". Looking at the specific sub-portfolios provides interesting insights into the funding activities. The CTF portfolio analysis in particular highlights the complementarities between the funds. Most CTF countries have national GCF projects and are building on earlier GEF. This funding convergence in these major emitting countries can be helpful in fueling low carbon development. The CTF countries in Asia, however, are yet to apply for national GCF projects in mitigation. On the other hand, countries that do not have access to GCF like the Ukraine and Turkey are benefitting at an appropriate scale from CTF resources, highlighting one important dimension of complementarity between the funds, which is that together they can provide access to many more countries than any fund could do by itself.

The SREP portfolio exhibits much fewer convergences with GCF funding to national projects. In almost all these countries, with the sole exception of Mongolia, SREP is the most significant source of climate mitigation funding. Many SREP countries are eligible for some of the large global or regional private sector programs of the GCF, though.

In adaptation and forestry, significant funds are still devoted to capacity building although more recently large amounts of investment capital can be leveraged from GCF and PPCR. In PPCR eligible countries, typically the funding stream from PPCR is still larger than from the GCF. Most PPCR countries have also benefitted from LDCF projects. Both, PPCR and FIP projects have convergence with projects of the Adaptation Fund. But the convergence between FIP and GCF is to date low, as only two GCF project was matched to the CIF's FIP projects. This is particularly true for SIDS, including Samoa, Grenada, Tuvalu, Maldives, Fiji, Marshall Islands and Vanuatu. These and most other SIDS participate and benefit also significantly from regional projects focusing on SIDS. Most countries that benefit from GCF funding for adaptation, also benefit from at least one Adaptation Fund project.

The study was based on the current databases of the funds and included approved projects from all four funds that were approved until June 30th, 2018. Due to the sheer number of projects, synergies with the GEF were identified generally by comparing the title of GEF projects with the focus of the projects of the GCF or CIFs. Regional projects were typically compared in each country that was officially part of the project. As this does not always coincide with actual project impacts, and as it was not possible to consider whether projects have failed or terminated early, this assessment overestimates the actual convergence of funding flows, and cannot reflect the actual synergies between the projects. It only gives an indication of possible convergence of flows.



1 Introduction

To address climate change, the past decade has seen a proliferation of climate funds, including domestic, bilateral, and multilateral. Since the adoption of the Framework Convention on Climate Change by the UN in 1992, developed countries have provided financial resources to assist developing countries in decreasing greenhouse gas emissions and adapt to climate change. Among the key multilateral mechanisms that provide climate-related funding at a large scale are the Climate Investment Funds (CIFs), the Green Climate Fund (GCF), the Global Environment Facility (GEF) and the Adaptation Fund (AF).² These are the focus of this study.

The GCF and the GEF are two operating entities of the Financial Mechanism of the United Nations Framework Convention on Climate Change (UNFCCC), with the GEF having been in operation since 1992 and the GCF since 2016. The GEF administers several funds with three of them being relevant for tackling climate change issues: the GEF Trust Fund, the Special Climate Change Fund (SCCF) and the Least Developed Countries Fund (LDCF). The CIFs were established in 2008 outside the UNFCCC process to provide scaled-up finance to developing countries for low-carbon, climate-resilient development. They consist of two funds, the Clean Technology Fund (CTF) and the Strategic Climate Fund (SCF) which in turn is made up of three targeted programs – the Scaling up Renewable Energy Program (SREP), the Pilot Program for Climate Resilience, (PPCR) and the Forest Investment Program (FIP). Additionally, the Adaptation Fund (AF), established under the Kyoto Protocol and funding climate adaptation and resilience activities since 2010, has been considered .

Despite the recognition of the importance and value of synergies among the multilateral climate funds, little analytical work has been carried out to date to investigate how these synergies have or have not been or can be developed at the project and program level. This also applies to what the driving forces behind them are, where synergy has taken place, and why synergy has not been demonstrated in other cases despite, often, good intentions to combine different sources of climate finance.

The objective of this portfolio analysis is to describe the existing synergies and analyze to the extent possible (1) what were conditions and driving forces that favored such synergies, (2) where were barriers to blending resources from different funds, and (3) where possible to propose ways to overcome these barriers and to support the creation of these synergies actively.

Synergies here are defined as those that can arise when funding flows from different financial mechanisms converge in the same sector and country, either consecutively or in parallel.³ As a first step of the project, a portfolio analysis of the three multilateral funds was conducted to get an overview of the extent of such convergence, which is the precondition for a synergy. The portfolio analysis shows in the next pages:

- in which countries the climate funds are/have been active with projects in the same thematic areas,
- and how large these projects are with respect to the funding volume.

² World Resources Institute (WRI) (2017): The Future of the Funds. Exploring the Architecture of Multilateral Climate Finance. ³ This is not the only situation that can lead to synergies. For a more thorough discussion of synergies please refer to the main report of this study.



Apart from providing this overview of the portfolio(s), this analysis also provides the basis for the case study selection for an Evaluation and Learning activity "Maximizing Synergy and Complementarity among Multilateral Climate Funds: Evidence, Challenges, and Opportunities" funded under the CIF Evaluation and Learning activity and co-financed by the GCF.

The analysis is organized as follows: after a short description of the project portfolio of the different climate funds that were considered, the analysis results for potential convergence of the funds for CIF projects are discussed for each of the CIF programs separately. In chapter 5, the convergence of GCF projects with projects of the other funds is discussed by differentiating between the two focal areas of mitigation, and adaptation and their combination. The last chapter briefly discusses the countries and combination of the funds and projects selected as case studies for the bigger Evaluation and Learning study.

2 Approach

2.1 Methodology

The study team has analyzed the project portfolio (1) for convergence of funding flows of CIF projects with GCF, GEF and Adaptation Fund projects (Figure 1) and (2) for convergence funding flows of GCF projects with CIF, GEF and Adaptation Fund projects (Figure 2). This dual approach was necessary as there is incomplete overlap between GCF and CIF portfolios, i.e. there are convergences between CIF and GCF and other funds, but also convergences between CIF and other funds (without the GCF) and convergences between GCF and other funds (without the CIF).

2.1.1 CIF-portfolio based analyses

The basis for the CIF-portfolio analysis was the Climate Investment Fund (CIF) portfolio of projects of the Clean Technology Fund (CTF), the Pilot Program for Climate Resilience (PPCR), the Scaling up Renewable Energy Program (SREP) and the Forest Investment Program (FIP) that have at least the stage of approval by their respective Trust Fund Committee as of July 2018.

In a first step ("Analysis 1"), this list was compared to the list of projects of the Green Climate Fund (GCF). The reduced list was then compared to the Global Environment Facility (GEF) portfolio (incl. the GEF Trust Fund, the Special Climate Change Fund (SCCF) and the Least Developed Countries Fund (LDCF)). The Adaptation Fund (AF) portfolio was also included at this stage. This process resulted in a list of countries that are benefitting from these four major funds (CIF, GCF, GEF and AF).

In a second step to this analysis ("Analysis 2"), the list of CIF projects was directly compared to the list of GEF projects, in order to have a larger sample and get a more complete picture of different types of synergies. Figure 1 shows the different steps of analysis.



CIF	Analysis 1 Analysis 1	→ [GEF Trust Fund
PPCR SREP	Analysis 2		SCCF LDCF
FIP		→	Adaptation Fund

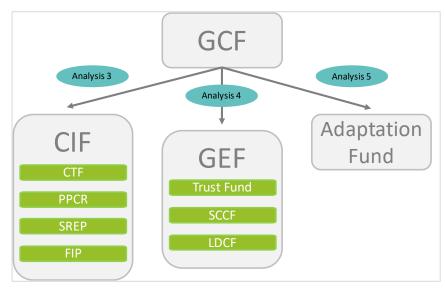
Figure 1: Synergies of CIF with GCF, GEF and the Adaptation Fund

Source: Own Compilation.

2.1.2 GCF-portfolio based analyses

The project portfolio of the GCF was compared to the different funds of the CIF ("Analysis 3"), the GEF ("Analysis 4") and the Adaptation Fund ("Analysis 5"). Figure 2 shows the steps of this comparison from the vantage of the GCF. To cluster the synergies, the official GCF categorization in mitigation, adaptation and mitigation/adaptation projects was used.

Figure 2: Synergies of GCF with CIF, GEF and the Adaptation Fund



Source: Own compilation

2.1.3 Regional classification

Projects taken into account are either implemented only in one country, in several countries in a specific region or globally. The projects are grouped into the following seven regions:

- Africa
- Middle East and North Africa (MENA)
- Pacific Islands
- Latin America



- Europe and Central Asia
- Asia

Caribbean

Annex I contains the full list of countries as used in this analysis per respective regional classification. In the end, the large data set and the potential synergies were structured by means of pivot tables in Microsoft Excel to allow filtering and analyzing by different categories.

2.2 Limitations of this approach

There are key limitations to this portfolio analysis:

- The content of the project could be deduced only from its title. For the assessment, the excel version
 of the GEF database was downloaded from the website and manually searched for titles that sounded
 convergent with titles of CIF / GCF projects. Where it was difficult to understand the potential
 synergies from the title, the team went for inclusivity and also included these projects. This means
 that the claimed convergence with the GEF funding flows might be significantly overestimated, in
 particular for the GEF funding from focal areas other than climate change.
- Generally, potential convergence of funding flows and actual synergy in the project are two very different concepts. Potential convergence in the sense of this analysis does not have to result in any kind of factual synergy. Whether or not actual synergies are arising, cannot be seen on the basis of this summary analysis.
- Due to data limitations the analysis could not go beyond approval of projects i.e. projects that were discontinued were treated in the same way as successfully implemented projects. Project sizes and local counterparts were also not included in the analysis.
- Regional and global projects, in some cases (e.g. region-specific programs in SIDS) were included in the analysis but more often were disregarded on the assumption that comparatively small amounts of money for a large number of countries would result in minimal country-based implementation and thus also in negligible synergies. For the analysis by funding volume, national and regional/global projects are always discussed separately as no information for national funding shares allocated to countries from regional and global projects was available. Otherwise, the complete amount of funding for regional and global projects would have counted into the funding volumes of several countries.
- Specifically, many regional and global countries mention intended implementation in a large number of countries but are actually not implemented equally in all countries. This could not be reflected in this analysis.
- A typical setup are global projects with national components. In some cases, these are reflected in the databases as two different projects even as they might be implemented without notable difference. The count of projects is therefore sometimes arbitrary to some degree.
- Furthermore, for the GEF and GCF, currently all approved projects are included in the analysis, even if they have been withdrawn or cancelled.

Taken together, but also individually, these limitations imply that this portfolio analysis cannot describe actual synergies, but only highlight where the probability for in-country synergies might be particularly

high. It overestimates the funding flows and cannot serve for accountability purposes neither for donors, nor for recipient countries nor for the funds.

3 Short portfolio description of climate funds

3.1 Climate Investment Funds (CIF)

The CIFs were set up in 2008 and have gained effectiveness in the last ten years. The projects of the Clean Technology Fund (CTF), the Pilot Program for Climate Resilience (PPCR), the Scaling up Renewable Energy Program (SREP) and the Forest Investment Program (FIP) are assigned to five Multilateral Development Banks (MDBs): World Bank, International Finance Corporation (IFC), Asian Development Bank (ADB), European Bank for Reconstruction and Development (EBRD), Interamerican Development Bank (IDB) and African Development Bank (AfDB). Their projects are also limited to specific countries for each of the programs and related investment plans. The overall CIF portfolio that has been taken into consideration for this analysis includes 271 projects that have been approved by the respective MDB Board or at least by the respective Trust Fund Committee until July 2018 (Table 1).

- The CTF is active in 55 countries⁴ across all seven regions (see chapter 4.1) co-funding 106 national, six regional and three global projects. In 25 countries across six regions, 46 national and one regional SREP projects are implemented (or about to be implemented).
- The analysis further includes: 71⁵ PPCR projects (of which three are regional) in 27 countries; and 37 national projects in ten countries and one global FIP project in 13 countries in Africa, Asia and Latin America.

	CTF	SREP	PPCR	FIP	CIF Portfolio		
Number of projects							
National	106	46	68	37	257		
Regional	6	1	3	-	10		
Global	3	-	-	1	4		
TOTAL	115	47	71	38	271		
Number of countries							
	55	25	27	13	73		
Number of regions							
	7	6	6	3	7		

Table 1: Overview of analyzed CIF portfolio

Source: Own compilation.

⁴ Officially, only 19 countries are CTF countries, i.e. countries with a CTF country investment plan. The other countries have CTF projects due to Dedicated Private Sector Programs which are open to all CIF countries.

⁵ This includes seven follow-up projects in Bangladesh, Grenada, Nepal, Niger, Papua New Guinea, St. Vincent and Grenadines and Tajikistan that were counted in the analysis as separate national projects.



3.2 Green Climate Fund (GCF)

The Green Climate Fund (GCF) was established in 2016 as an operating entity of the Financial Mechanism of the United Nations Framework Convention on Climate Change (UNFCCC). The portfolio that was taken into consideration for this assessment consisted of 64 national, eight regional and two global projects which had been approved by the GCF Board until the 19th Board Meeting (February/March 2018). The portfolio can be categorized into **mitigation or adaptation projects** and into projects where **both** focal areas play a role. Currently, the GCF has 21 mitigation projects (18 national, two regional and one global), 37 adaptation projects (34 national and three regional) as well as 17 projects in the mixed category (13 national, three regional and one global). The projects take place in 79 countries across all seven regions, except for the mitigation focal area. Here, no projects are funded in the Pacific Islands.

	Mitigation	Adaptation	Mitigation/ Adaptation	GCF Portfolio			
Number of projects							
National	18	34	13	64			
Regional	2	3	3	8			
Global	1	0	1	2			
TOTAL	21	37	17	74			
Number of countries							
	25	32	25	79			
Number of regions							
	6	7	7	7			

Table 2: Overview of analyzed GCF portfolio⁶

Source: Own compilation.

3.3 Global Environment Facility (GEF)

The Global Environment Facility (GEF) is one of the operating entities of the financial mechanism of the UNFCCC and has been in operation the longest among climate investment funds, i.e. since 1992.⁷ With many thousands of projects in different focal areas, it has the largest portfolio of the four funding mechanisms. It was included selectively in that sense that countries and sectors from the other two funds (CIF and GCF) were compared with the GEF portfolio, and the projects from GEF that were found by this search for keywords and countries from an online database were included in the analysis.

This resulted in 996 national, 117 regional and 37 global projects considered in the current analysis and are spread across all seven regions in 151 countries. The projects are either funded by the GEF Trust Fund (TF), the Special Climate Change Fund (SCCF) and the Least Developed Countries Fund (LDCF). Overall, 837 projects funded by the GEF TF (700 national / 105 regional / 32 global) were included into the database. Additionally, 56 national, seven regional and four global projects are funded by the SCCF; and 240 national, five regional and one global projects funded by the LDCF were taken into account. For the GEF, also projects with the project status cancelled were included, because even when a project was not

⁶ Projects approved until 19th Board meeting, July 2018.

⁷ World Resources Institute (WRI) (2017): The Future of the Funds. Exploring the Architecture of Multilateral Climate Finance.

completed, institutional convergence with other funds might be possible – depending on the stage of development of the project when it was cancelled.

	GEF TF	SCCF	LDCF	GEF Portfolio		
Number of projects						
National	700	56	240	996		
Regional	105	7	5	117		
Global	32	4	1	37		
TOTAL	837	67	246	1,150		
Number of countries						
	151	79	52	151		
Number of regions						
	7	7	5	7		

Source: Own compilation.

3.4 Adaptation Fund (AF)

Under the Kyoto Protocol of the UNFCCC, the Adaptation Fund has been funding projects regarding climate adaptation and resilience activities since 2010. The projects are implemented by National Multilateral and Regional Implementing Entities In the same way as for the GEF, projects were included selectively and resulted in 54 national and three regional project. The projects are distributed across 31 countries in seven regions.

Table 4: Overview of analyzed AF portfolio

	AF Portfolio			
Number of projects				
National	54			
Regional	3			
Global	0			
TOTAL	57			
Number of countries				
	31			
Number of regions				
	7			

Source: Own compilation.



4 Analysis of funding convergence from the CIF perspective

4.1 Clean Technology Fund (CTF)

4.1.1 Analysis by number of projects

The following breakdown of 102 national, six regional and two global projects in Clean Technology Fund (CTF) under CIF converge in funding flows with eight national, two different regional and two global GCF projects, and 146 national, eight regional and 17 global GEF projects in 22 countries.⁸ The GEF projects are all funded by the GEF Trust Fund, except one national project which is funded by the SCCF.⁹ GEF was or is funding projects in all 22 CTF countries.¹⁰ In eleven of these countries, GCF is also funding one or more projects (see Figure 3): in Mexico and Egypt, the GCF is funding a national and a regional project each, in India, Vietnam, South Africa, Chile, Kazakhstan and Brazil, the GCF is funding a national project each. Nigeria and Dominica are eligible for the GEEREF Next (global) project and in Morocco, the EBRD/GCF sustainable financing facility has committed funding. The Adaptation Fund has no CTF-related projects. Therefore, no synergies were found.

Among the CTF projects, Colombia (12), Morocco and Turkey (each 11) are leading, followed by Mexico and India (each 10). Colombia, Turkey and Mexico have the highest number of national CTF projects in the portfolio. Overall, the highest number of projects with convergence of funds from the different funds considered is found in India where 35 projects were marked as potentially synergistic during the analysis, followed by Mexico (30) and the Philippines (29).

None of the eleven (11) countries with significant CTF (CIF) and GEF portfolios have GCF projects. Apart from countries like Turkey and the Ukraine (who are not eligible for GCF support),¹¹ it might be noteworthy that among these countries are the Philippines, Colombia, Indonesia and Thailand.

The brief overview provided in Figure 3 shows the project of the different funds where convergence of the funds is assumed. However, the simple compilation is not able to illustrate the whole depth of a number of interesting details regarding a possible convergence. For example, in Morocco, all CTF projects have either a utility emphasis or are on-grid renewables. Synergies with the interregional sustainable energy financing facility of EBRD/GCF can exist in financing such on-grid facilities. But a synergy with the GEF-financed IFC project Photovoltaic Market Transformation Initiative (PVMTI)¹² (which supported businesses that provided solar home systems) is less likely – a difference that the figure cannot highlight.

⁸ There is only one project in the Adaptation Fund that has a renewable energy focus, which is in Namibia. Namibia is not a CIF country.

⁹ The SCCF project "Low Carbon Development Path: Promoting Energy Efficient Applications and Solar Photovoltaic Technologies in Streets, Outdoor areas and Public Buildings in Island Communities Nationwide (LCDP)" is implemented in Dominica.

¹⁰ Although in Dominica, the GEF project is a regional project.

 ¹¹ Only non-Annex I countries of the UN Framework Convention on Climate Change (UNFCCC) are eligible for GCF finance (for a list of the non-Annex I countries see https://unfccc.int/process/parties-non-party-stakeholders/parties-convention-and-observer-states?field_national_communications_target_id%5B514%5D=514&field_partys_partyto_target_id%5B511%5D=511).
 ¹² For further information see: https://www.thegef.org/project/photovoltaic-market-transformation-initiative-ifc.

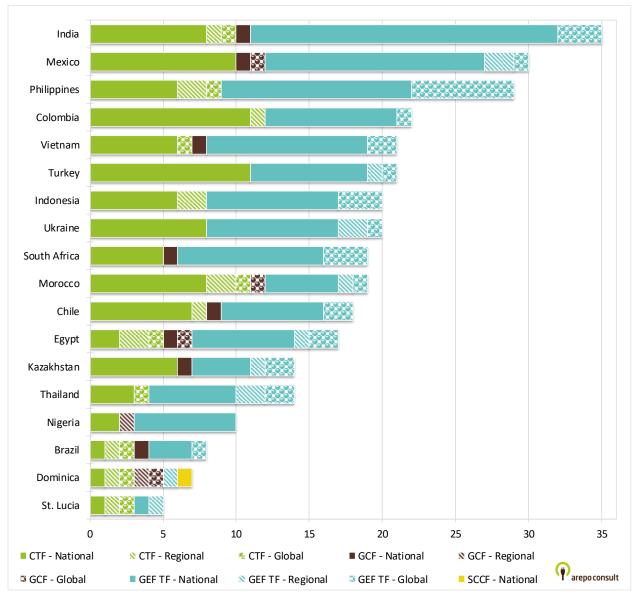
In other countries, like Mexico or Vietnam, the CTF Investment Plans include projects in various mitigation fields, including on-grid renewables but also energy efficiency in industry and buildings and urban transport. Here, convergence of funding flows with other climate finance mechanisms might be larger, as a broader range of thematic areas. In South Africa, for example, a Development Bank of Southern Africa (DBSA)/GCF project supports financing for small and medium-sized enterprises (SMEs) while the European Investment Bank (EIB)/GCF project GEEREF Next intends to finance renewable power projects for power generation. Such differences in the project's approach cannot be reflected in the diagrams but would need to be presented in more detail separately, e.g. in the case studies.

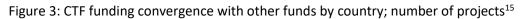
In Figure 3, three non-CTF countries are listed with one national project each (Brazil, Dominica and St. Lucia).¹³ These countries have national CTF-projects due to their participation in the so-called Dedicated Private Sector Program (DPSP), which was open to all CIF countries.¹⁴

¹³ See Annex II for the list of CTF-countries according to the Website of the Climate Investment Fund.

¹⁴ Dominica and St. Lucia are PPCR countries, and Brazil is a FIP country. The SREP countries which participated in the DPSP will be discussed in the SREP synergies chapter (4.2) as synergies between CTF and SREP projects are possible. Non-CTF countries that are part of regional or global CTF-projects have not been included in the analysis.







Source: Own compilation.

4.1.2 Analysis by funding volume

Figure 5 and Figure 6 show the regional and the global projects that are relevant for a CTF convergence with other funds. Of all CIF countries, India over the decades received the highest volume of climate mitigation funding for its national projects with USD 1,074 million. India is also part of the regional project "Renewable Energy Mini-grids and Distributed Power Generation" and four global projects which are assumed to have synergistic effects. The global project "Mezzanine Financing for Climate Change" is funded by the CTF and three projects are funded by the GEF TF (Development of a Strategic Market Intervention Approach for Grid-Connected Solar Energy Technologies (EMPower); Promoting Industrial

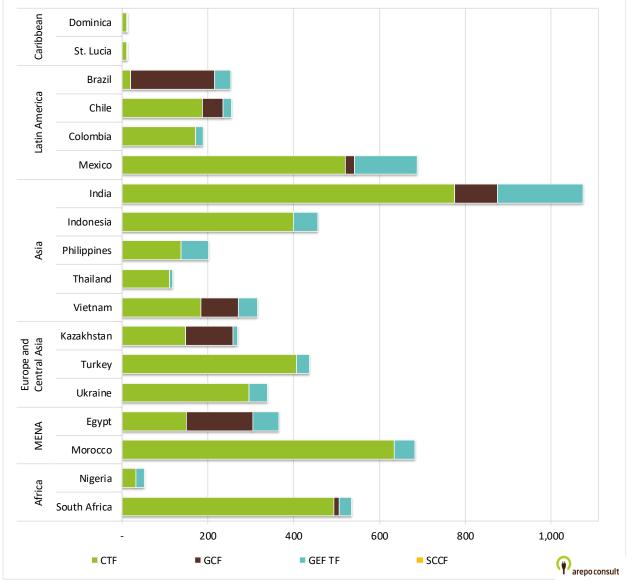
¹⁵ The full color-filled parts of the bars represent the national projects, the forward-slashed parts regional projects and the dotted parts the global projects of the respective Climate funds.

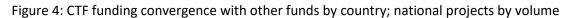


Energy Efficiency through a Cleaner Production/Environmental Management System Framework; Photovoltaic Market Transformation Initiative (IFC)).

In Mexico, national projects are funded with USD 718 million and in Morocco with USD 688 million by the different funds (see Figure 4). The projects in Mexico are financed with USD 520 million from the CTF, USD 22 million from the GCF and USD 176 million from the GEF Trust Fund. In Morocco, the most funding comes from the CTF with USD 635 million. The national GEF TF projects that have convergence with CTF projects have a volume of USD 54 million. India, Mexico and Morocco are also the countries with the highest funding from the CIF's CTF.

The largest single CTF project by volume is the SEMed Private Renewable Energy Framework in the MENA region (USD 35 million), followed by the Renewable Energy Mini-grids and Distributed Power Generation in Asia (USD 34 million).





Source: Own compilation.



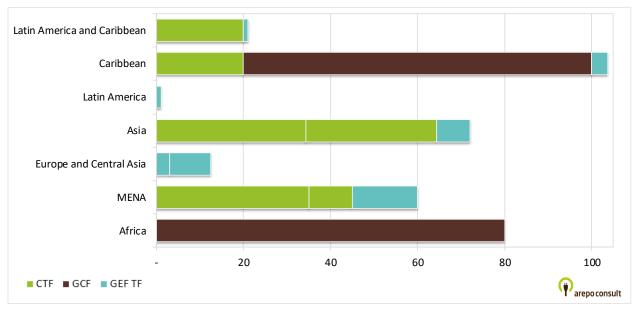


Figure 5: CTF funding convergence with other funds; regional projects by volume



Both regional GCF projects (Africa and Caribbean) are funded with USD 80 million (Figure 5). But the figure also shows that the picture is very checkered – not only between the funds but also in terms of the definition of the regions.

The two global GCF projects are the "GCF-EBRD Sustainable Energy Financing Facilities" and the "Geeref Next" (Figure 6). They have among the highest funding volumes. The two global projects of the CTF are the "Mezzanine Financing for Climate Change" and the "Utility Scale Solar Photovoltaic Sub-Program". The projects from the GEF trust fund, including the regional or global projects, are relatively small compared to GCF and CTF volumes.

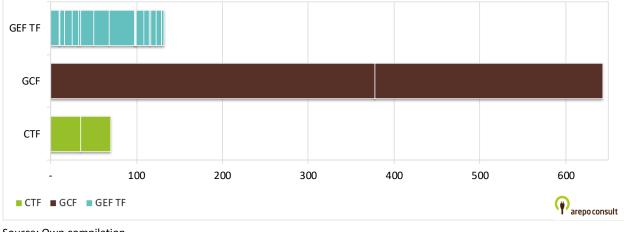


Figure 6: CTF funding convergence with other funds by country; global projects by volume

Source: Own compilation.



4.1.3 Example: Mexico

To illustrate the potential of the portfolio analysis approach and usefulness of assessing it, the potential for synergies will be discussed in more depth for the country example of Mexico. In Mexico, projects that have possible convergence are funded by all three funds: ten national projects by the CTF, one national and one global mitigation projects by the GCF and 18 projects by the GEF Trust Fund's Climate Change focal area, of which 15 are national, two regional and one global (Figure 3). The projects are implemented by six different implementing entities: IBRD/World Bank (12 projects), IDB (11), United Nations Development Programme (UNDP) (3), United Nations Environment Programme (UNEP) (2), IFC (1) and EIB (1).

The CTF project "Efficient Lighting and Appliances Project", for example, is implemented by the IBRD as well as the two GEF TF projects "High Efficiency Lighting Pilot" and "Lighting and Appliances Efficiency Project" (see Figure 7). This can be assumed to be a situation that would allow for an exploitation of synergies within the IBRD, and in working with the local counterparts. Projects had an opportunity to build on each other.

The same applies to the IDB. For CTF, the IDB implemented several energy efficiency (EE) projects: "Support to FIRA for the Implementation of an Energy Efficiency Financing Strategy for the Food Processing Industry", "Energy Efficiency Program, Part 1" and "Ecocasa" Program (Mexico Energy Efficiency Program Part II). The GCF funded the IDB project on "Energy Efficiency Green Bonds in Latin America and the Caribbean". See Figure 7 for the timeline of the projects and Table 5 for the full list of projects in Mexico.

All funds have projects in Mexico under the "Renewable Energy (RE)" thematic area. The CTF has five, the GCF one and the GEF TF eleven projects. While the IDB is implementing seven of these projects which are funded by the CTF and GEF TF, the IBRD has been responsible for five projects – all funded by the CIF's CTF. Other organizations implementing RE projects in Mexico are the UNDP (2), and UNEP, IFC and EIB with one project each. Thus, while synergies might for example be possible for the four projects regarding wind technology – and three of them are funded by the GEF TF (the other one is funded by CTF) – all are implemented by different organizations.



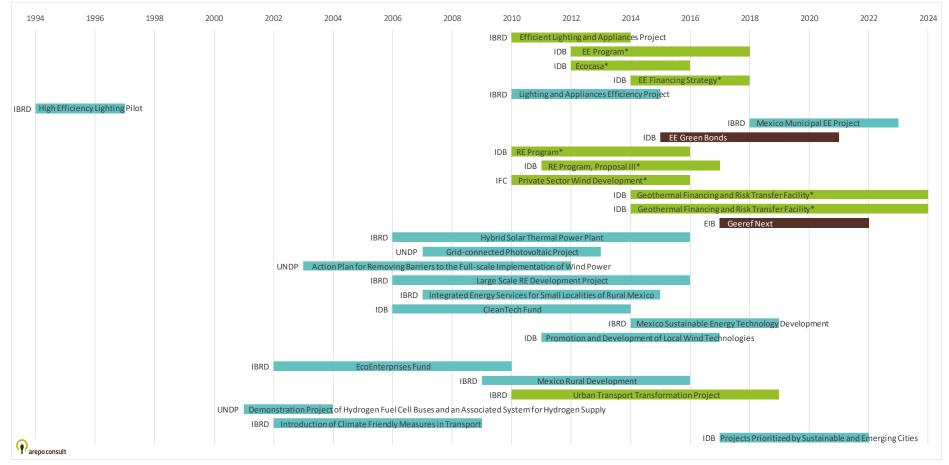


Figure 7: CIF's CTF convergence with other funds in Mexico

*for these projects, no (estimated) completion dates were found in the database and the project documents available on the CIFs website and therefore the duration of the project displayed in the figure might not be correct.

Source: Own compilation.



Project ID	Project Title	Project Size	Entity
CTF (CIF)			
PCTFMX050A	Renewable Energy Program	National	IDB
PCTFMX052A	Energy Efficiency Program, Part 1	National	IDB
PCTFMX054A	Private Sector Wind Development	National	IFC
XCTFMX048A	Urban Transport Transformation Project	National	IBRD
XCTFMX049A	Efficient Lighting and Appliances Project	National	IBRD
XCTFMX051A	Renewable Energy Program, Proposal III	National	IDB
XCTFMX053A	"Ecocasa" Program (Mexico Energy Efficiency Program Part II)	National	IDB
XCTFMX055A	Geothermal Financing and Risk Transfer Facility	National	IDB
XCTFMX100A	Support to FIRA for the Implementation of an Energy Efficiency Financing Strategy for the Food Processing Industry	National	IDB
XCTFMX504A	Geothermal Financing and Risk Transfer Facility	National	IDB
GCF			
FP038	Geeref Next	Global	EIB
FP006	Energy Efficiency Green Bonds in Latin America and the Caribbean	National	IDB
GEF TF			
12	Hybrid Solar Thermal Power Plant	National	IBRD
575	High Efficiency Lighting Pilot	National	IBRD
931	Demonstration Project of Hydrogen Fuel Cell Buses and an Associated System for Hydrogen Supply in Mexico City, Phase I	National	UNDP
1155	Introduction of Climate Friendly Measures in Transport	National	IBRD
1284	Action Plan for Removing Barriers to the Full-scale Implementation of Wind Power	National	UNDP
1571	EcoEnterprises Fund	Regional	IBRD
1900	Large Scale Renewable Energy Development Project	National	IBRD
2611	Integrated Energy Services for Small Localities of Rural Mexico	National	IBRD
3005	CleanTech Fund	Regional	IDB
3142	Grid-connected Photovoltaic Project	National	UNDP
3537	Mexico Rural Development	National	IBRD
4116	Lighting and Appliances Efficiency Project	National	IBRD
4132	TT-Pilot (GEF 4): Promotion and Development of Local Wind Technologies in Mexico	National	IDB
4909	Stabilizing GHG Emissions from Road Transport Through Doubling of Global Vehicle Fuel Economy: Regional Implementation of the Global Fuel Economy Initiative (GFEI)	Global	UNEP
4999	TT-Pilot (GEF 4): Promotion and Development of Local Wind Technologies in Mexico	National	UNEP

Table 5: CIF's CTF convergence with other funds under the Renewable Energy thematic area in Mexico



Project ID	Project Title	Project Size	Entity
5387	Mexico Sustainable Energy Technology Development	National	IBRD
9564	Mexico Municipal Energy Efficiency Project (PRESEM)	National	IBRD
9649	Implementation of Projects Prioritized by the Sustainable and Emerging Cities Program in Three Mexican Cities	National	IDB

Source: Own compilation.

4.2 Scaling up Renewable Energy Program (SREP)

4.2.1 Analysis by number of projects

Under CIF's SREP program, there are 46 national and one regional¹⁶ project in 17 countries having potential synergies with the other climate funds. Most of these projects are in African countries, followed by Asia, Pacific Islands, Latin America, Caribbean and Europe and Central Asia. By far the highest number of potentially synergistic projects was found in Honduras (nine SREP, two CTF, four GEF TF and one SCCF project). In the other countries typically two or three SREP projects can have synergy potential to other climate funds' projects.

Figure 8 shows also CTF projects for eight countries though they are actually non-CTF but SREP countries (see also section 4.1) namely Haiti, Honduras, Nicaragua, Mongolia, Tanzania, Kenya, Mali, and Rwanda. There is a likeability that there is convergence of the funds with SREP projects and relating projects of other funds. This is why they were included in the CIF's SREP funding convergence analysis. Four countries (Haiti, Honduras, Nicaragua and Kenya) have one national project each. In addition, Haiti and Honduras are part of the regional project "Energy Efficiency and Self-Supply Renewable Energy Program", together with five other Latin American and Caribbean countries.¹⁷ For eight countries, the global project "Utility Scale Solar Photovoltaic Sub-Program" was included in the data set as project with potential synergistic effects.

Only in Mongolia, SREP projects have potential synergies with nationally implemented GCF projects. In addition, the global project "GCF-EBRD Sustainable Energy Financing Facilities" could have synergies with three SREP projects each in Mongolia and Armenia. In Africa, the regional GCF-projects "Universal Green Energy Access Programme" could have synergies with other climate-financed projects in Kenya and Tanzania and the "KawiSafiVentures Fund in East Africa" project in Kenya and Rwanda.

In all 17 countries, the SREP projects might have developed synergies with GEF projects. In the chart below, 31 national, 16 regional and four global projects funded by the GEF Trust Fund and one national project each funded by the LDCF (Maldives) and the SCCF (Honduras) are assumed to have synergies with the respective SREP projects.

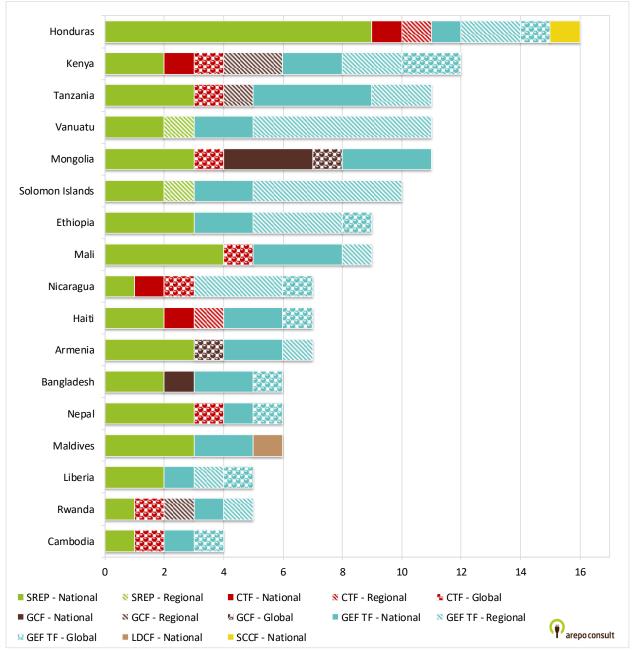
Non-SREP countries¹⁸ that are part of the regional project ("Sustainable Energy Industry Development Project") have not been taken into account for the analysis as the potential for synergies is assumed to be low.

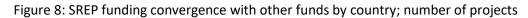
¹⁶ "Sustainable Energy Industry Development Project" in the Pacific Islands.

¹⁷ Namely Bolivia, Brazil, Chile, Colombia and Jamaica.

¹⁸ Namely Fiji, Marshall Islands, Micronesia, Nauru, Palau, Samoa, Tonga and Tuvalu.







Source: Own compilation.

4.2.2 Analysis by funding volume

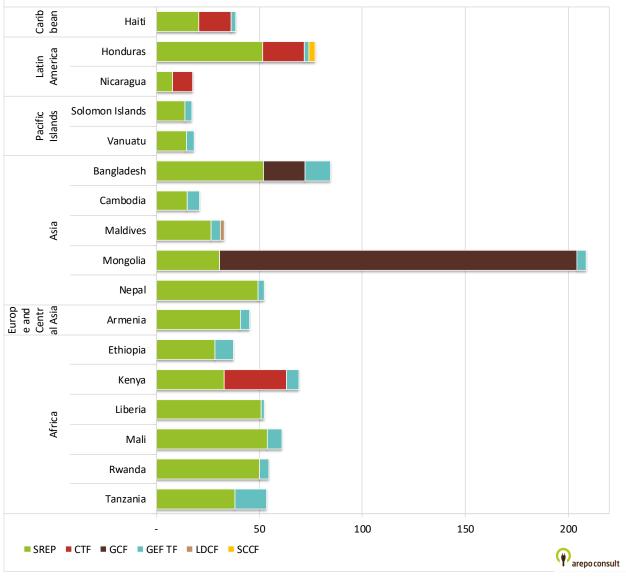
Across all funds, Mongolia has been funded with the largest volume of USD 209 million, mainly through the large funding received from the three GCF projects.¹⁹ The highest funding volume for national SREP projects that have convergence with other funds' projects is received by Mali with USD 54 million. Several

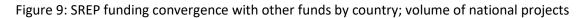
¹⁹ "Ulaanbaatar Green Affordable Housing and Resilient Urban Renewal Project (AHURP)", "Renewable Energy Program #1 – Solar" and "Business loan programme for GHG emissions reduction".



other countries also receive around USD 50 million for national SREP projects, e.g. Honduras, Bangladesh and Liberia.

SREP has one regional program but no global program. The regional program "Sustainable Energy Industry Development Project" was taken into account as synergistic for Solomon Islands and Vanuatu, where also national SREP projects are implemented and is funded with around USD 2 million. The GCF has the largest regional projects (both in Africa) and the global project "GCF-EBRD Sustainable Energy Financing Facilities" (USD 378 million).





Source: Own compilation.



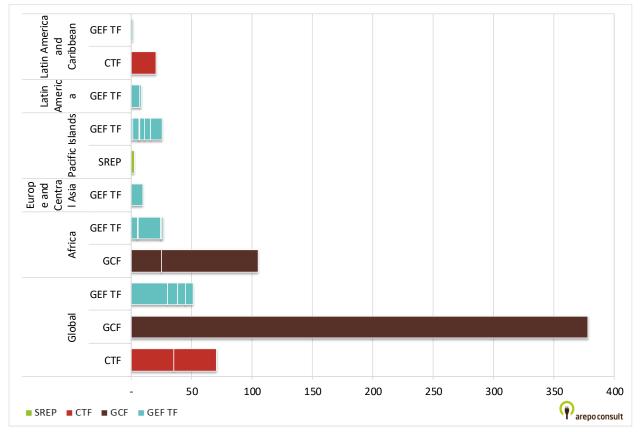


Figure 10: SREP funding convergence with other funds by country; volume of regional and global projects

Source: Own compilation.

4.3 Pilot Program for Climate Resilience (PPCR)

4.3.1 Analysis by number of projects

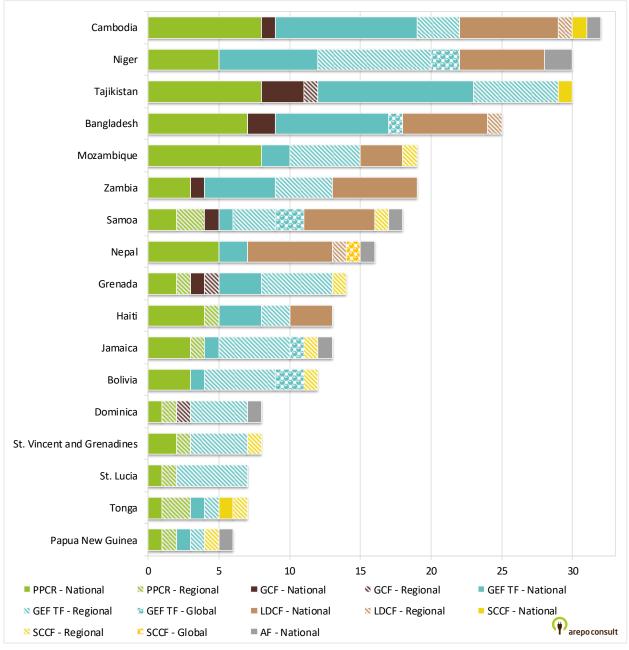
In 17 PPCR countries, synergies are possible between 64 national and three regional PPCR projects, nine national and two regional GCF, and eight national Adaptation Fund projects as well as with different GEF funds. Here, funding convergence with LDCF and SCCF projects also plays a role.²⁰ Overall, 56 national, 36 regional and three global projects funded by the GEF Trust Fund, 41 national and one regional project funded by the LDCF as well as three national, five regional and one global project funded by the SCCF have been included in the data base as potentially synergistic with PPCR projects.

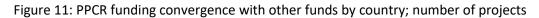
Under PPCR, Mozambique, Tajikistan and Cambodia have eight national projects each with synergy potential with other climate-financed projects. For Bangladesh, seven national PPCR projects were included in the list (Figure 11).

So far, the PPCR is funding regional projects only in the Pacific Islands and the Caribbean. Non-PPCR countries that participated in the PPCR regional projects ("Implementation of the Strategic Program for

²⁰ The Adaptation Fund has not been included in this analysis.

Climate Resilience (SPCR): Pacific Region" and "Pacific Resilience Program (PREP)") but do not have own PPCR country programs were not taken into account for the analysis.²¹





Source: Own compilation.

4.3.2 Analysis by funding volume

Regarding the commitment volume of national PPCR projects, both Bangladesh and Niger rank on top with USD 111 million each. The overall highest funding amount from all funds together is committed to

²¹ Namely Cook Islands, Kiribati, Marshall Islands, Micronesia, Nauru, Palau, Solomon Islands, Timor Leste, Tuvalu, Vanuatu.

Bangladesh (USD 222 million), followed by Cambodia (USD 182 million), Zambia (USD 180 million) and Niger (USD 172 million) (see Figure 12).

Figure 13 shows the regional and global projects that under PPRCR have a potential for funding convergence with other funds. The GEF TF has a high funding volume of different regional projects in Africa and the Caribbean – mostly multifocal area (MFA), biodiversity or sustainable land management (SLM) projects.

The GCF is present in the Caribbean²² (USD 20 million) and in Europe and Central Asia²³ (USD 19 million). The SCCF has regional projects in four different regions (Africa, Pacific Islands, Latin America, Caribbean and additionally one in Latin America and Caribbean together) and one global project "Enhancing Capacity, Knowledge and Technology Support to Build Climate Resilience of Vulnerable Developing Countries". The global project has a funding volume of USD 5 million and is only seen as relevant for potential synergistic effects in Nepal, so far.

²² "Integrated physical adaptation and community resilience through an enhanced direct access pilot in the public, private, and civil society sectors of three Eastern Caribbean small island developing states".

²³ "Climate Adaptation and Mitigation Program for the Aral Sea Basin (CAMP4ASB)".



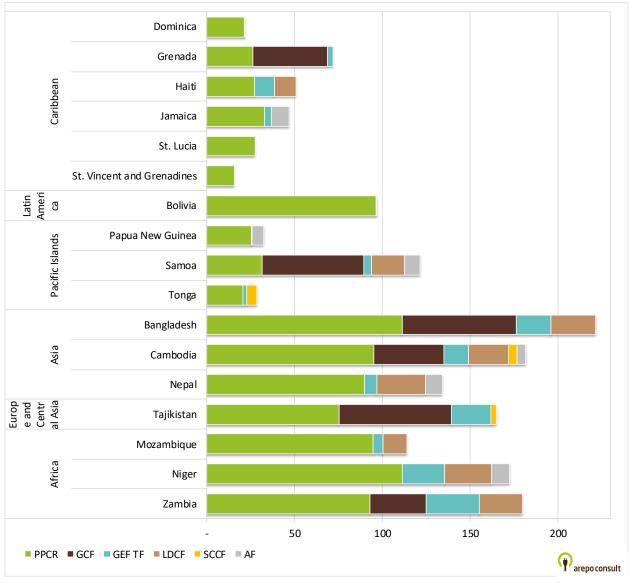


Figure 12: PPCR funding convergence with other funds by country; volume of national projects

Source: Own compilation.

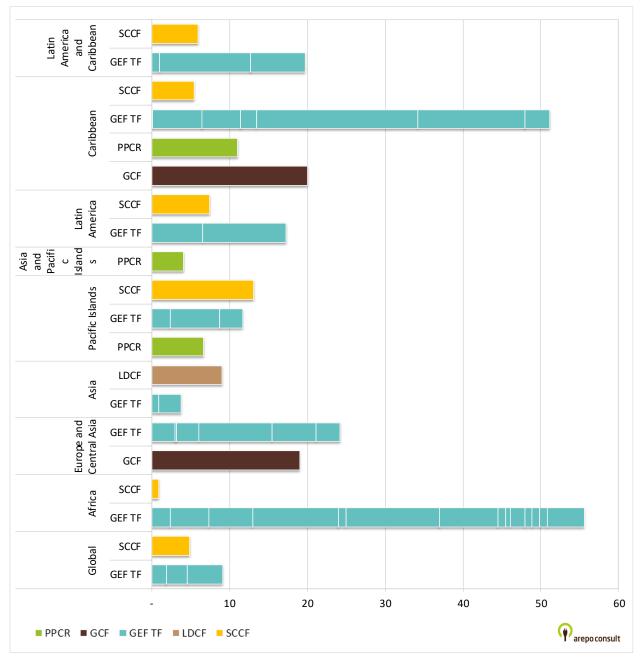


Figure 13: PPCR funding convergence with other funds by country; volume of regional and global projects

Source: Own compilation.

4.4 Forest Investment Program (FIP)

4.4.1 Analysis by number of projects

For all ten countries that have approved national projects funded by CIF's Forest Investment Program (FIP) synergies have been found with projects by other climate funds. Ecuador and Guatemala are so far only part of the global "Dedicated Grant Mechanism for Indigenous Peoples and Local Communities: Program Framework and Funding Proposal for the DGM Project for the Global Component" and have no national



projects approved yet. However, Ecuador is also the only country where there could be synergies with the GCF, as there is only one GCF project in the forestry sector so far. The global DGM focuses on the coordination of the national DGM projects of which eight are approved and five more are under development to date.

Furthermore, synergies are possible with one regional project of the GCF in Guatemala, seven national and one regional (Ecuador) project of the Adaptation Fund, 22 national, twelve regional andfour different global projects of the GEF Trust Fund, and one national (Mexico) and regional (Peru) each of the SCCF.

Brazil has the most FIP projects that have potential synergies and also the largest number of synergistic projects overall (17). In Peru, 14 projects, in Ghana twelve projects and in Ecuador eleven projects were found. Ecuador has the most national GEF TF projects that were included into the analysis as potential FIP synergy projects (7), followed by five projects in Ghana. Most projects with synergistic potential of the Adaptation Fund have been found in Peru (3).

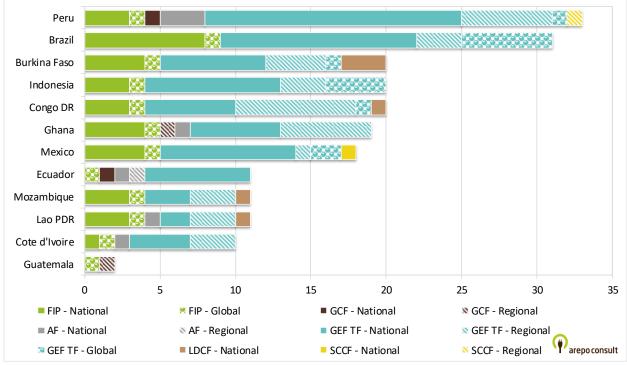


Figure 14: FIP funding convergence with other funds by country; number of projects

Source: Own compilation.

4.4.2 Analysis by funding volume

The largest FIP funding commitment for national projects in total is found for Brazil (USD 105 million) but also for projects in the forestry area by all climate funds (USD 330 million) (see Figure 15). The largest funding volume (USD 42 million) for a single national project is received by Mexico for the "Forests and Climate Change Project". The GCF project in Ecuador has a volume of USD 41 million. The national projects of the Adaptation Fund (7) have an average volume of USD 6 million.

The global FIP mechanism DGM (see chapter 4.4.1) has a volume of USD 6 million. The largest regional project is the "Low-Emission Climate Resilient Agriculture Risk Sharing Facility for MSMEs" project and is



funded by GCF in Latin America. The forest-related regional Adaptation Fund project²⁴ which has possible synergistic effects in Ecuador has a volume of USD 14 million.

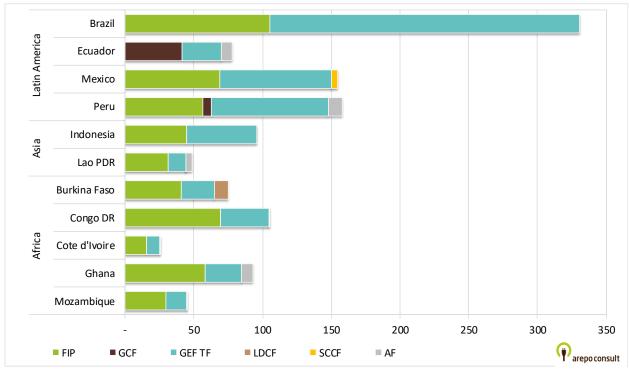


Figure 15: FIP funding convergence with other funds by country; volume of national projects

Source: Own compilation.

²⁴ "Building adaptive capacity to climate change through food security and nutrition actions in vulnerable Afro and indigenous communities in the Colombia-Ecuador border area (Colombia, Ecuador)".

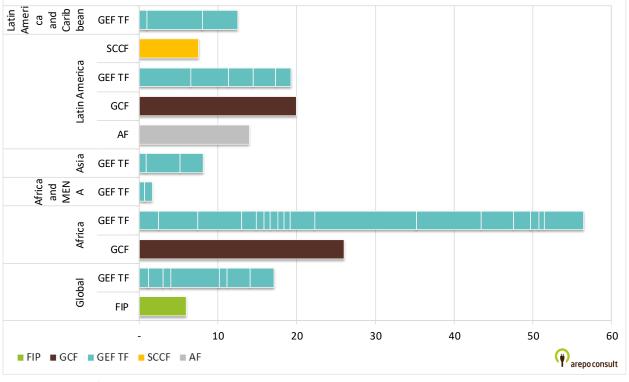


Figure 16: FIP funding convergence with other funds by country; volume of regional and global projects

Source: Own compilation.

5 Analysis of funding convergence from the GCF perspective

5.1.1 GCF portfolio

For the analysis of possible convergence of projects from other climate-specific funds with GCF projects, the whole GCF portfolio that was approved before the 19th Meeting of the Board on June 30, 2018 was taken as the basis (see chapter 3.2). This analysis demonstrated that at least one of the two other large funds (CIF or GEF) were already active in all countries that the GCF has committed funds to. Therefore, almost all of them may build on projects that these have implemented before. This assumption was confirmed by the convergence analysis, where for almost each GCF project possible relations to the other climate funds were found.²⁵

The discussion of the results is categorized into the two different GCF impact areas, mitigation and adaptation (see chapter 5.2 and 5.3). Additionally, the GCF has projects addressing mitigation and adaptation. These projects are discussed in chapter 5.4. For the analysis by funding, a separate discussion for national and regional/global projects is necessary so that the funding volume of regional/global projects are not counted several times as no data was available that showed the funding of regional/global projects by country.

²⁵ The exception is the agricultural insurance project in Mexico.

Currently, the GCF has two global projects, the "GCF-EBRD Sustainable Energy Financing Facilities" funded with USD 378 million and the "Geeref Next" funded with USD 265 million. For the GCF-EBRD project, synergies in the MENA region and in Europe and Central Asia are possible, as the EBRD is a leading entity for implementation in these two regions. The Geeref Next is a very large project that includes 29 countries of six different regions and therefore only a low level of convergence with other funds can be assumed on the country level. In the following, these two projects are included in the analysis but will not be discussed in more detail. "Gereef Next" has been included for discussion in countries where GCF has committed funds to national or regional projects.

5.1.2 Example: Egypt

To illustrate the potential GCF convergence with other climate-related funding flows, the mitigation projects in Egypt are discussed in more detail.

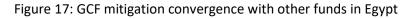
Table 6 includes a list of all projects that have been considered relevant in this analysis and Figure 17 shows the timeframe of these projects.

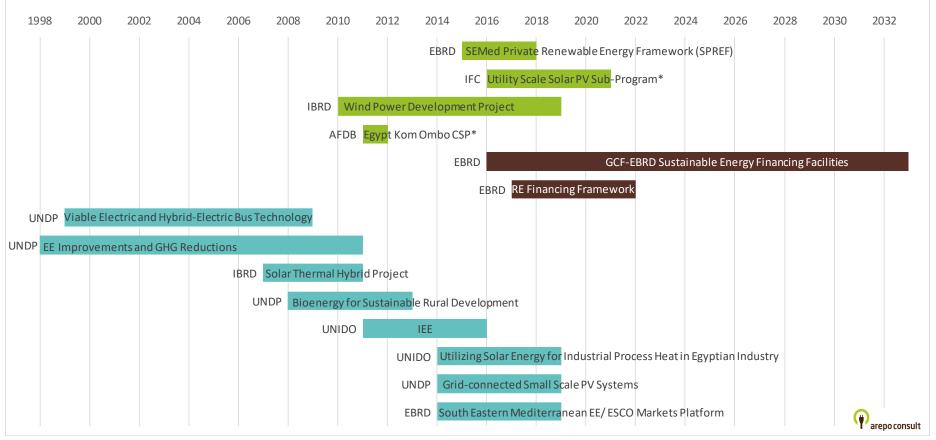
In Egypt, the GCF is funding two projects implemented by the European Bank for Reconstruction and Development (EBRD): the national "Egypt Renewable Energy Financing Framework" and the global "GCF-EBRD Sustainable Energy Financing Facilities" projects. The national project focuses on renewable energy, while the global one can be categorized as "enabling the environment for sustainable energy financing".

The CIF database contains information on four CTF projects which may have synergistic effects with the GCF projects, all with the focus on RE. The two national projects are implemented by the AfDB and the IBRD. For the regional project "SEMed Private Renewable Energy Framework (SPREF)", the EBRD is responsible. The global CTF project "Utility Scale Solar Photovoltaic Sub-Program" is implemented by the IFC.

Additionally, the GEF TF has funded eight projects in Egypt: six national and two regional. There is no convergence of leading entities with the GCF, as the organizations commissioned are the IBRD and EBRD (each 1), UNIDO (2) and UNDP (4). Four of the national projects are about RE, and other national and regional projects focus more on EE. Therefore, synergistic effects may only be realized between GEF with the global GCF project. However, as mentioned before, synergistic effects of global projects with other funds' projects are limited, as the country-based implementation for global projects is relatively small.







*for these projects, no (estimated) completion dates were found in the database and the project documents available on the CIFs website and therefore the duration of the project displayed in the figure might not be correct.

Project ID	Project Title	Project Size	Entity
GCF			
FP025	GCF-EBRD Sustainable Energy Financing Facilities	Global	EBRD
FP039	Egypt Renewable Energy Financing Framework	National	EBRD
CTF			
PCTFDP606A	SEMed Private Renewable Energy Framework (SPREF)	Regional	EBRD
PCTFDP613A	Utility Scale Solar Photovoltaic Sub-Program	Global	IFC
XCTFEG010A	Wind Power Development Project	National	IBRD
XCTFMB029A	Egypt Kom Ombo CSP	National	AFDB
GEF TF			
31	Introduction of Viable Electric and Hybrid-Electric Bus Technology	National	UNDP
267	Energy Efficiency Improvements and Greenhouse Gas Reductions	Regional	UNDP
1040	Solar Thermal Hybrid Project	National	IBRD
1335	Bioenergy for Sustainable Rural Development	National	UNDP
3742	Industrial Energy Efficiency (IEE)	National	UNIDO
4790	Utilizing Solar Energy for Industrial Process Heat in Egyptian Industry	National	UNIDO
5064	Grid-connected Small -Scale Photovoltaic Systems	National	UNDP
5143	PPP-EBRD South Eastern Mediterranean EE/ ESCO Markets Platform (PROGRAM)	Regional	EBRD

Table 6: GCF-convergence of the funds in the case of Egypt

Source: Own compilation.

5.2 Mitigation projects

5.2.1 Analysis by number of projects

All 18 national, three regional and two global mitigation projects (total 23) of the GCF across 25 countries have been identified to have potential synergies with mitigation projects of the CIFs or the GEF (see Figure 18). Synergies of GCF projects were found with total of 29 projects under CIF: 24 national, three regional and two global CTF projects and eight national SREP projects. Additionally, 96 GEF projects: 71 national, twelve regional and eight global GEF projects, were included in the analysis database for potential synergies with the GCF.

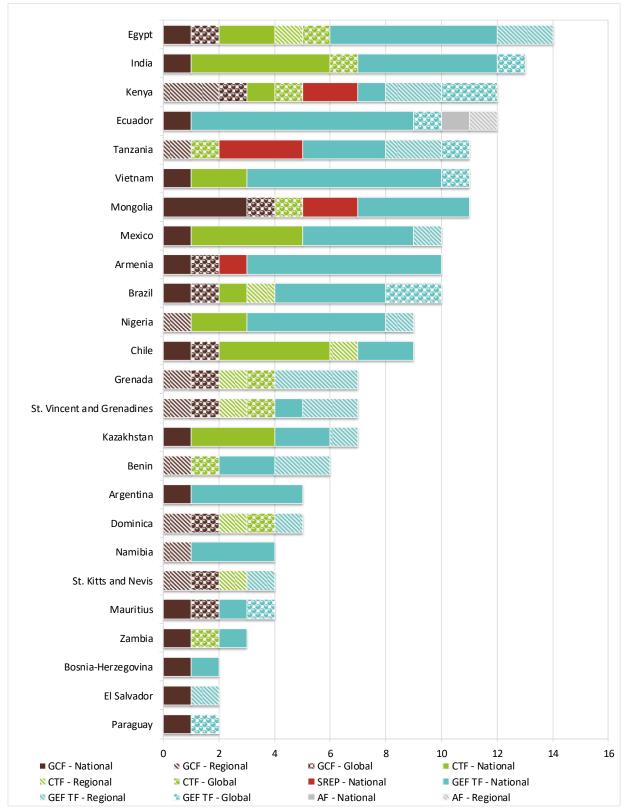
From the Adaptation Fund, two projects (one national and one regional) may have convergence of the funds with a GCF project of the mitigation category. The GCF project "Priming Financial and Land-Use Planning Instruments to Reduce Emissions from Deforestation" in Ecuador is categorized as mitigation project but may have synergistic potential with two projects of the Adaptation Fund. The focus of the GCF

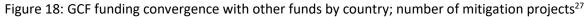
project is on forests and land use with a special involvement of women in land-use-planning, which is similar to the foci of the AF projects.²⁶

To date, there are only regional and global GCF mitigation projects in the Caribbean and the projects of the CTF and the GEF Trust Fund are also mainly regional or global projects, so that the synergy potential can be assumed as low. The same applies to Namibia and Benin. Tanzania, Kenya and Nigeria, which are only part of regional GCF projects (all three: "Universal Green Energy Access Programme", and Kenya additionally: "KawiSafi Ventures Fund in East Africa").

Among GCF projects, Mongolia has the highest number of national mitigation projects (3). All other countries only have one national project each. The highest number of projects of the GCF, CIF, GEF and AF with potential for synergies were found in Egypt (14), India (13), Ecuador (12) and Kenya (12).

²⁶ The two projects of the AF are called "Enhancing resilience of communities to the adverse effects of climate change on food security, in Pichincha Province and the Jubones River basin" and "Building adaptive capacity to climate change through food security and nutrition actions in vulnerable Afro and indigenous communities in the Colombia-Ecuador border area".





²⁷ The full color-filled parts of the bars represent the national projects, the forward-slashed parts regional projects and the dotted parts the global projects of the respective Climate funds.



5.2.2 Analysis by funding volume

Contrary to the very high number of projects in Egypt and India, the trend is opposite for the analysis by the funding volume for national projects. For national projects in India, an overall volume of USD 750 million has been committed, for Egypt these were USD 373 million (Figure 19). In India, the bulk of funding comes from the CTF. In Egypt, the project funding volumes of GCF and CTF are similar, however the CTF is funding two projects and the GCF only one. With regard to the highest GCF funding of national mitigation projects, Brazil has the highest level of funding (USD 195 million for the national project FinBRAZEEC), followed by Mongolia with USD 174 million.

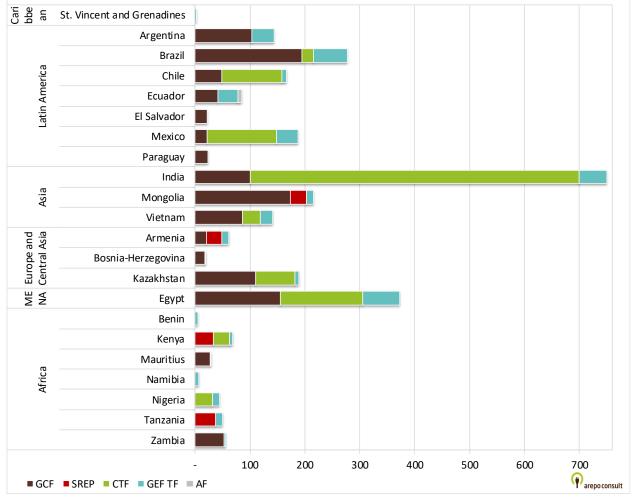
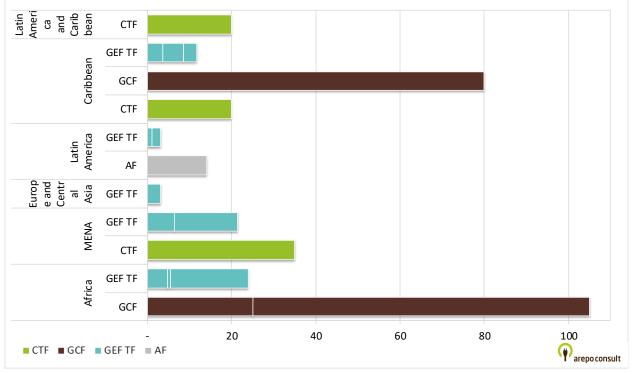
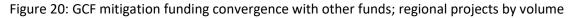


Figure 19: GCF mitigation funding convergence with other funds by country; volume of national projects

Source: Own compilation.

Three regional GCF projects (two in Africa and one in the Caribbean) have a higher funding volume in each region compared to regional projects of the GEF TF and the CTF (Figure 20). Consistent with other trends for funding volume for regional projects, the GEF TF has a high number of projects but comparatively with a small funding volume. The same applies to the funding volume for global projects: while the GCF has two large projects, the volumes of the CTF and GEF TF projects are relatively low (Figure 21).





Source: Own compilation.

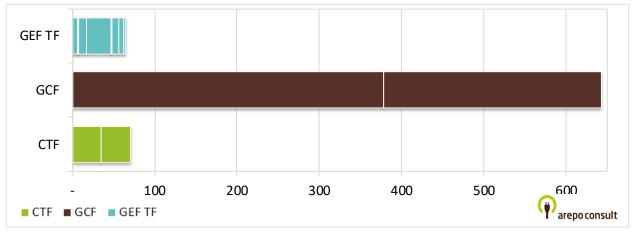


Figure 21: GCF mitigation funding convergence with other funds; global projects by volume²⁸

²⁸ According to the GCF, the GCF-EBRD Sustainable Energy Financing Facilities project is both, an adaptation and mitigation project. For Egypt, Armenia and Mongolia, the project was however counted as mitigation project as the national GCF projects in these countries are mitigation projects and these synergetic effects are seen as more relevant.

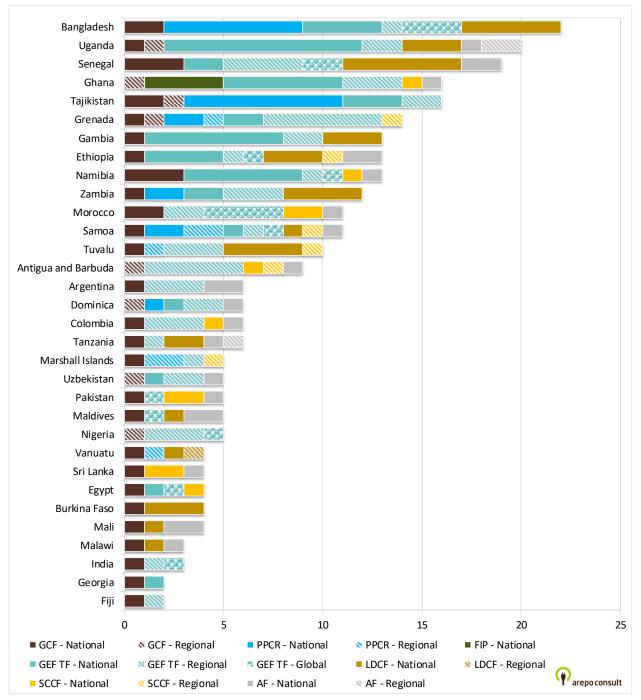


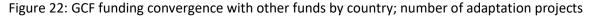
5.3 Adaptation projects

5.3.1 Analysis by number of projects

In the adaptation field, the 34 national GCF projects and three regional GCF projects converge in different ways with 22 national and three regional projects of the PPCR and four national FIP projects under CIF. Further, 51 national, 27 regional and eight global GEF projects funded by the Trust Fund might converge with funding flows in adaptation under GCF; likely convergences were identified with other GEF projects: 38 national and one regional project of the LDCF; and eleven national and three regional projects of the SCCF. Additionally, 23 national and two regional projects of the Adaptation Fund were included (see Figure 22). Similar to the situation in the mitigation area, the analysis showed that the GCF has only projects in countries where at least one of the other climate funds (CIF, GEF/LDCF/SCCF or AF) are also active and therefore builds on projects that they have implemented before.

In Senegal and Namibia, the GCF has funded three national projects in each, and two national projects in Bangladesh, and two in Morocco. In all other countries, one national or regional project has been implemented. The country with the highest number of GCF projects with synergy potential with PPCR and GEF TF projects is Bangladesh (22). Uganda (20 projects) and Senegal (19 projects) have also a high potential of synergy with many other projects, followed by Tajikistan and Ghana (16 each) and Grenada with 14 projects. Convergence between GCF and FIP projects were only found in Ghana.





Source: Own compilation.

5.3.2 Analysis by funding volume

Bangladesh has not only the largest number of national adaptation projects but also leads in terms of funding volume (USD 209 million). It is followed by Zambia (USD 132 million) for nine projects and Tanzania (USD 132 million) for four projects. With Tanzania having received USD 119 million alone for its project "Simiyu Climate Resilient Development Programme" which is by far the highest volume of all national GCF adaptation projects (see Figure 23).



The analysis for the convergence of different climate funds revealed that a large number of regional and global projects is relevant for any GCF convergence with the other funds in the focal area of adaptation (see Figure 24). In Africa, the Pacific Islands and the Caribbean, the GEF TF has many regional projects on which the GCF may build their projects upon. The Adaptation Fund is funding its two regional projects in Africa with USD 5 million and USD 7 million.

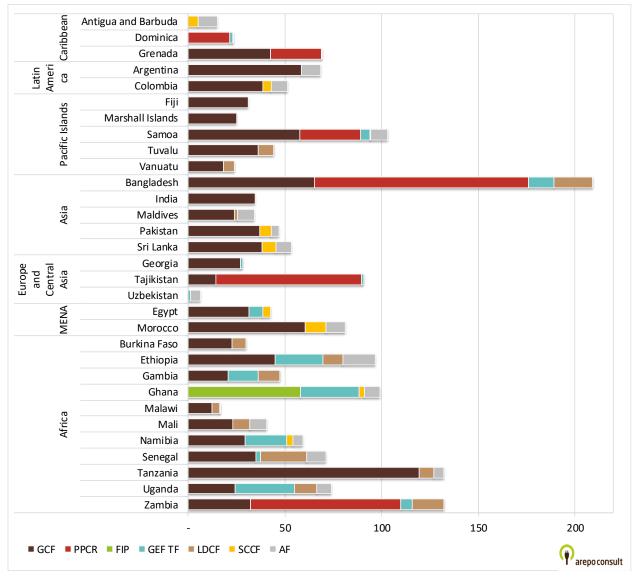
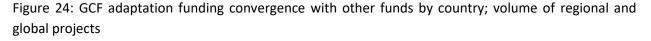
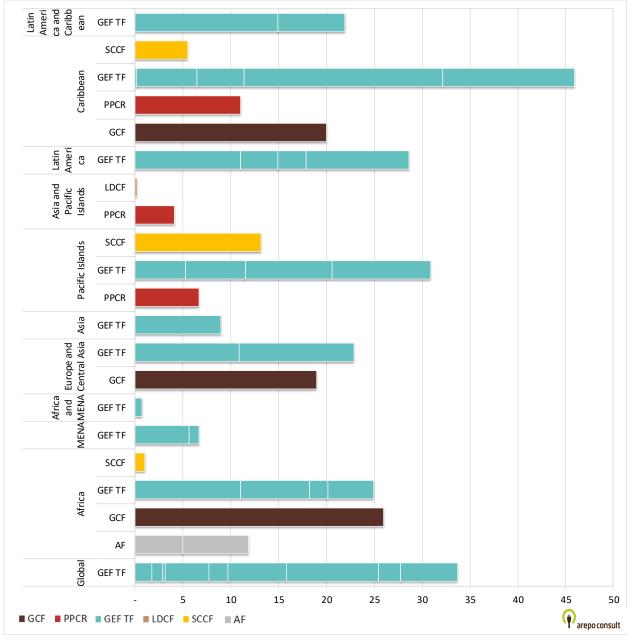


Figure 23: GCF adaptation funding convergence with other funds by country; volume of national projects





Source: Own compilation.

5.4 Mitigation and adaptation projects

5.4.1 Analysis by number of projects

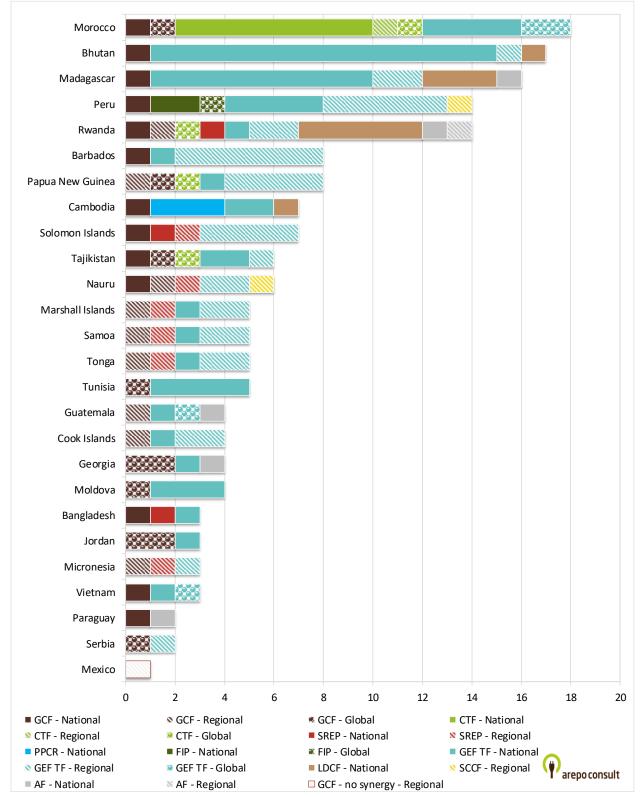
For projects that include mitigation and adaptation elements, the GCF uses the mixed category "mitigation/adaptation". This applies to 13 national, three regional and two global projects. Only in Mexico, the research team has not found any projects from other funds with synergy potential for the

regional project "Low-Emission Climate Resilient Agriculture Risk Sharing Facility for MSMEs" that is implemented in Guatemala and Mexico.

Overall, the GCF mitigation/adaptation projects could have synergies with eight national, one regional and two global CTF, three national and one regional SREP, three national PPCR and two national and one global FIP project. Regarding the GEF, synergy potential was found with 54 national, 21 regional and three global GEF Trust Fund, 10 national LDCF and two different regional SCCF projects. Additionally, five national and one regional projects of the Adaptation Fund have been added to the database for convergence with GCF adaptation/mitigation projects (see Figure 25).

The countries where the highest number of projects of the other climate funds were found to have synergistic potential with the GCF projects are Morocco (18), Bhutan (17), Madagascar (16) and Peru and Rwanda (each 14). In Bhutan and Madagascar especially the GEF Trust Fund and to a lower degree the LDCF seem to be relevant. In Morocco, the study team found mainly projects of the Clean Technology Fund, but also some of the GEF TF to be relevant. Besides the GEF TF, the FIP plays a role in Peru. In five countries, the Adaptation Fund has also projects that might have synergistic potential, namely Madagascar, Paraguay, Rwanda, Guatemala and Georgia.

Figure 25: GCF funding convergence with other funds by country; number of mitigation/adaptation projects



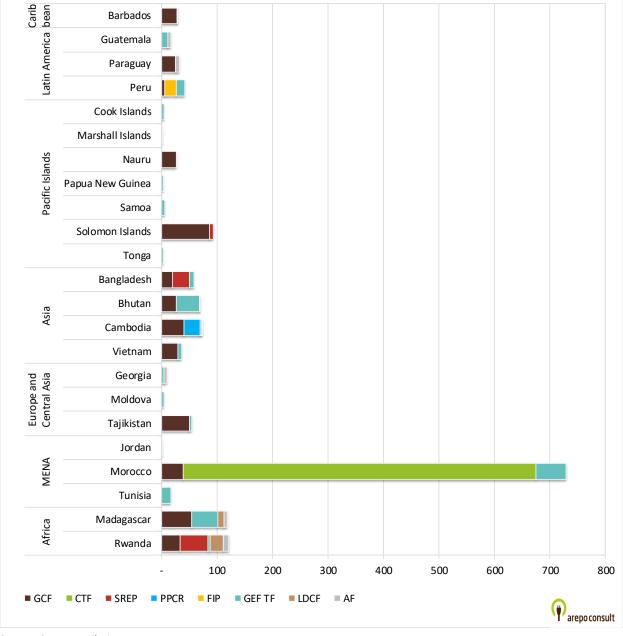


5.4.2 Analysis by funding volume

The highest level of funding for GCF national projects has been received with USD 86 million by the Solomon Islands, followed by Madagascar (USD 54 million) and Tajikistan (USD 50 million) (Figure 26).

In the portfolio of the GCF regional projects, three relevant projects are located in Africa ("KawiSafi Venture Fund in East Africa" USD 25 million), Pacific Islands ("Pacific Islands Renewable Energy Investment Program" USD 17 million) and Latin America ("Low-Emission Climate Resilient Agriculture Risk Sharing Facility for MSMEs" USD 20 million). The GEF TF tends to fund regional projects primarily in the Caribbean.

Figure 26: GCF adaptation funding convergence with other funds by country; volume of national projects



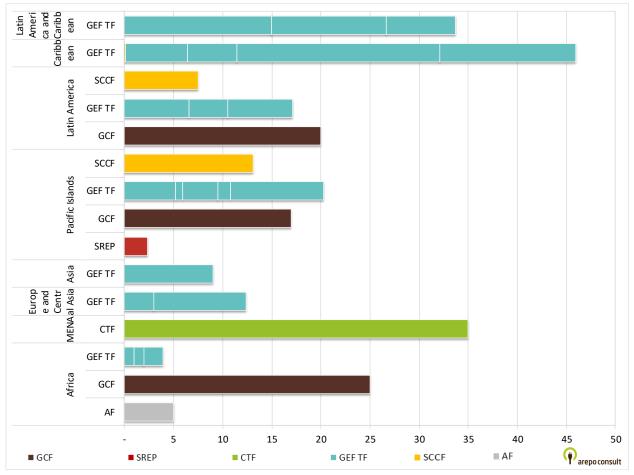
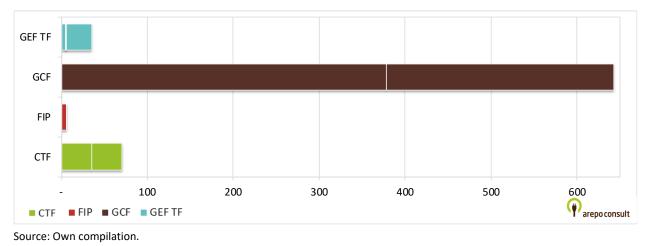


Figure 27: GCF adaptation funding convergence with other funds by country; volume of regional projects

Figure 28: GCF adaptation funding convergence with other funds by country; volume of global projects²⁹



Source: Own compilation.

²⁹ According to the GCF, the Geeref Next project is a mitigation project, only. For Georgia, Jordan and Papua New Guinea, the project was however counted as mitigation and adaptation project as the national GCF projects linked to the same focal area are classified as mitigation and adaptation projects and synergetic effects with national projects are seen as more relevant.

6 Summary and case study selection

It is important for these mechanisms as well as for countries and the global community to understand how these funds can work together. The first step in this understanding is to describe to what degree this is already the case. A precondition for synergies between the funding flows is that they converge on specific themes and geographies. This paper provides a basis for an analysis of existing synergies and complementarities by briefly describing the portfolios of each of the funds and where (i.e. in which countries and thematic areas) the largest convergence of funds from these four facilities can be found. The analysis helps identify interesting case studies for the collection of evidence on synthesis. It also helps understand the magnitude and prevalence of funding convergences.

The portfolio analysis is done from the viewpoint of the GCF and from the viewpoint of the CIFs and takes into account the respective portfolios by June 30, 2018. It revealed that CIF and GCF projects both build on projects of the other funds. The analysis of funding convergence from the GCF perspective showed that for all but one GCF project the research team found GEF and/or CIF projects which were working in the same country and theme before. Specifically, the GEF has been funding projects in almost all countries and themes that are now also benefitting from GCF funding. The GEF portfolio exhibits the highest number of projects, but also the lowest average size, highlighting the opportunity to upscale climate action through the GCF.

Overall, fewer instances of convergence of funding were found in adaptation than in mitigation. This is partially due to the fact that explicit multilateral climate funding started later than mitigation funding. But the picture is somewhat warped by the increasing trend towards integrating mitigation and adaptation technologies and approaches into the same project and that the funding practice increasingly acknowledges the synergies between the two types of climate action. The GCF, for example, has a separate funding area for mitigation and adaptation funding. In other cases, projects find renewable energy technologies very helpful for adaptation purposes, for example in the Tajikistan portfolio of the CIFs Pilot Program for Climate Resilience (PPCR) or in the Namibia projects of the Adaptation Fund.

The funds have national projects, but also a significant share of regional and global projects. To some degree, this impedes the analysis of funding convergence as it is unclear how much funding goes to each country, and it cannot be taken as an indication of the strength of possible synergies. However, the increasing number of global and regional projects, specifically also with the GCF and their increasing size, highlights their expected benefits in particular also for private sector investment activity: regional and global investment facilities allow for higher flexibility to invest in appropriate opportunities. In technical assistance, they allow for joint capacity building and knowledge transfer between different countries, for example in the GEF Global Solar Water Heater Initiative or the CIF FIP Dedicated Grant Mechanism both of which have a global coordination component and national implementation "subprojects".

Looking at the specific sub-portfolios provides interesting insights into the funding activities. The CTF portfolio analysis in particular highlights the complementarities between the funds. Most CTF countries have national GCF projects and are building on earlier GEF. This funding convergence in these major emitting countries can be helpful in fueling low carbon development. The CTF countries in Asia, however, are yet to apply for national GCF projects in mitigation. On the other hand, countries that do not have access to GCF like the Ukraine and Turkey are benefitting at an appropriate scale from CTF resources, highlighting one important dimension of complementarity between the funds, which is that together they can provide access to many more countries than any fund could do by itself.

The SREP portfolio exhibits much fewer convergences with GCF funding to national projects. In almost all these countries, with the sole exception of Mongolia, SREP is the most significant source of climate mitigation funding. Many SREP countries are eligible for some of the large global or regional private sector programs of the GCF, though.

In adaptation and forestry, significant funds are still devoted to capacity building although more recently large amounts of investment capital can be leveraged from GCF and PPCR. In PPCR eligible countries, the funding stream from PPCR is typically still larger than from the GCF. Most PPCR countries have also benefitted from LDCF projects. Both, PPCR and FIP projects have convergence with projects of the Adaptation Fund. But the convergence between FIP and GCF is to date low, as only two GCF project was matched to the CIF's FIP projects. This is particularly true for SIDS, including Samoa, Grenada, Tuvalu, Maldives, Fiji, Marshall Islands and Vanuatu. These and most other SIDS participate and benefit also significantly from regional projects focusing on SIDS. Most countries that benefit from GCF funding for adaptation also benefit from at least one adaptation fund project.

The case study approach will complement this analysis by showcasing detailed descriptive data, qualitative in nature and addressing 'how' and 'why' questions. In several case studies, the convergence between the funds and possible synergistic effects will be analyzed more deeply. The case studies have been selected based on the stakeholder consultations and qualitative interviews about the types of synergies that can be identified in the cases. The selection considered diversity considerations with respect to funding sources, implementors, thematic areas, income levels and continents. Case studies will be written for five countries and projects: **Brazil, Kazakhstan on-grid renewables, Mongolia mitigation, Cambodia adaptation, Namibia national and global projects**. Further detail on projects considered for inclusion in the case studies can be found in Annex V.

Beyond supporting the selection of these cases, the analysis conducted in this portfolio assessment will be used to understand questions about the representativeness of the case studies, and other aspects of their interpretation. For example, they will help understand whether it bears any significance that none of the cases is from one of the countries with the largest funding commitments, or the largest number of projects. And how global and regional projects can facilitate significant synergies. And finally, if it is easier or harder to leverage synergies if several entities are implementing projects.

Annex I. Co	untries per	region				
Africa	MENA	Europe and Central Asia	Asia	Pacific Islands	Latin America	Caribbean
Benin	Algeria	Albania	Bangladesh	Cook Islands	Argentina	Antigua and Barbuda
Burkina Faso	Egypt	Armenia	Bhutan	Fiji	Bolivia	Bahamas
Comoros	Jordan	Bosnia and Herzegovina	Cambodia	Kiribati	Brazil	Barbados
Congo	Libya	Georgia	India	Marshall Islands	Chile	Belize
Congo DR	Morocco	Kazakhstan	Indonesia	Micronesia	Colombia	Dominica
Cote d'Ivoire	Tunisia	Moldova	Lao PDR	Nauru	Costa Rica	Dominican Republic
Equatorial Guinea		Serbia	Maldives	Niue	Ecuador	Grenada
Ethiopia		Slovak Republic	Mongolia	Palau	El Salvador	Guyana
Gambia		Tajikistan	Nepal	Papua New Guinea	Guatemala	Haiti
Ghana		Turkey	Pakistan	Samoa	Honduras	Jamaica
Kenya		Ukraine	Philippines	Solomon Islands	Mexico	St. Kitts and Nevis
Liberia		Uzbekistan	Sri Lanka	Tonga	Nicaragua	St. Lucia
Madagascar			Thailand	Tuvalu	Paraguay	St. Vincent and Grenadines
Malawi			Timor Leste	Vanuatu	Peru	Suriname
Mali			Vietnam		Uruguay	
Mauritius						
Mozambique						
Namibia						
Niger						
Nigeria						
Rwanda						
Senegal						
South Africa						
Tanzania						
Тодо						
Uganda						
Zambia						



Annex II. CIF country list

CTF	SREP	PPCR	FIP
Algeria	Armenia	Bangladesh	Bangladesh
Chile	Bangladesh	Bhutan	Brazil
Colombia	Benin	Bolivia	Burkina Faso
Egypt	Cambodia	Cambodia	Cambodia
India	Ethiopia	Caribbean Region: Dominica, Grenada, Haiti, Jamaica, St. Lucia, St. Vincent and Grenadines	Cameroon
Indonesia	Ghana	Dominica	Congo
Jordan	Haiti	Ethiopia	Cote D'Ivoire
Kazakhstan	Honduras	Gambia	Congo DR
Libya	Kenya	Grenada	Ecuador
Mexico	Kiribati	Haiti	Ghana
MENA Region : Egypt, Tunisia, Morocco, Jordan And Libya	Lesotho	Honduras	Guatemala
Morocco	Liberia	Jamaica	Guyana
Nigeria	Madagascar	Kyrgyz Republic	Honduras
Philippines	Malawi	Madagascar	Indonesia
South Africa	Maldives	Malawi	Lao PDR
Thailand	Mali	Mozambique	Mexico
Tunisia	Mongolia	Nepal	Mozambique
Turkey	Nepal	Niger	Nepal
Ukraine	Nicaragua	Pacific Region: Papua New Guinea, Samoa, Tonga	Peru
Vietnam	Rwanda	Papua New Guinea	Rwanda
	Sierra Leone	Philippines	Tunisia
	Solomon Islands	Rwanda	Uganda
	Tanzania	Samoa	Zambia
	Uganda	St. Lucia	
	Vanuatu	St. Vincent and Grenadines	
	Yemen	Tajikistan	
	Zambia	Tonga	
		Uganda	
		Yemen	
		Zambia	

Source: https://www.climateinvestmentfunds.org/country.



Annex III. GCF country list

E Ecuador Egypt El Salvador Equatorial Guinea Eritrea Eswatini Ethiopia F Fiji G Gabon Gabon Gambia Georgia Ghana Grenada	M Madagascar Macedonia Malawi Malawi Malaysia Maldives Mali Marshall Islands Mauritania Mauritania Mauritius Mexico Micronesia Mongolia Montenegro	SamoaSao Tome and PrincipeSaudi ArabiaSenegalSerbiaSeychellesSierra LeoneSingaporeSolomon IslandsSomaliaSouth AfricaSouth SudanSri LankaState of Palestine
Egypt El Salvador Equatorial Guinea Eritrea Eswatini Ethiopia F Fiji G Gabon Gabon Gambia Georgia Ghana	Macedonia Malawi Malaysia Maldives Mali Marshall Islands Mauritania Mauritius Mexico Micronesia Mongolia Montenegro	Saudi ArabiaSenegalSerbiaSeychellesSierra LeoneSingaporeSolomon IslandsSomaliaSouth AfricaSouth SudanSri Lanka
El Salvador Equatorial Guinea Eritrea Eswatini Ethiopia F Fiji G Gabon Gabon Gambia Georgia Ghana	MalawiMalaysiaMaldivesMaliMarshall IslandsMauritaniaMauritiusMexicoMicronesiaMongoliaMontenegro	SenegalSerbiaSeychellesSierra LeoneSingaporeSolomon IslandsSomaliaSouth AfricaSouth SudanSri Lanka
Equatorial Guinea Eritrea Eswatini Ethiopia F Fiji G Gabon Gabon Gambia Georgia Ghana	Malaysia Maldives Mali Marshall Islands Mauritania Mauritius Mexico Micronesia Mongolia Montenegro	Serbia Seychelles Sierra Leone Singapore Solomon Islands Somalia South Africa South Sudan Sri Lanka
Eritrea Eswatini Ethiopia F Fiji G Gabon Gabon Gambia Georgia Ghana	Maldives Mali Marshall Islands Mauritania Mauritius Mexico Micronesia Mongolia Montenegro	SeychellesSierra LeoneSingaporeSolomon IslandsSomaliaSouth AfricaSouth SudanSri Lanka
Eswatini Ethiopia F Fiji G Gabon Gabon Gambia Georgia Ghana	Mali Marshall Islands Mauritania Mauritius Mexico Micronesia Mongolia Montenegro	Sierra Leone Singapore Solomon Islands Somalia South Africa South Sudan Sri Lanka
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Gabon Gambia Georgia Ghana	Micronesia Mongolia Montenegro	South Sudan Sri Lanka
Gambia Georgia Ghana	Mongolia Montenegro	Sri Lanka
Georgia Ghana	Montenegro	
Ghana	-	State of Palastina
	1	
Grenada	Morocco	Sudan
G. CHUUU	Mozambique	Suriname
Guatemala	Myanmar	Syrian Arab Republic
Guinea	N	Т
Guinea-Bissau	Namibia	Tajikistan
Guyana	Nauru	Tanzania
H	Nepal	Thailand
Haiti	Nicaragua	Timor Leste
Honduras	Niger	Тодо
I	Nigeria	Tonga
India	Niue	Trinidad and Tobago
Indonesia	0	Tunisia
Iran	Oman	Turkmenistan
Iraq	Р	Tuvalu
J	Pakistan	U
Jamaica	Palau	Uganda
Jordan	Panama	Uruguay
К	Papua New Guinea	Uzbekistan
Kazakhstan	Paraguay	V
Kenya	Peru	Vanuatu
Kiribati	Philippines	Viet Nam
Kuwait	R	Y
Kyrgyzstan	Republic of Korea	Yemen
L	Republic of Moldova	Z
Lao PDR	Rwanda	Zambia
Lebanon	S	Zimbabwe
Lesotho	St. Kitts and Nevis	
Liberia	St. Lucia	1
	St. Vincent and	
	Grenada Guatemala Guinea-Bissau Guinea-Bissau Guyana H Haiti Honduras ndia ndonesia ran raq amaica ordan (Kazakhstan Kenya Kiribati Kuwait Kyrgyzstan - .ao PDR .ebanon .esotho	ShanaMoroccoGrenadaMozambiqueGuatemalaMyanmarGuineaNGuinea-BissauNamibiaGuyanaNauruHNepalHaitiNicaraguaHondurasNigerIndiaNiuendonesiaOranOmanraqPImage PakistanamaicaPalauordanPanamaKazakhstanParaguayKenyaPeruKiribatiPhilippinesKuwaitRKyrgyzstanRepublic of KoreaLao PDRSt. Kitts and NevisLiberiaSt. LuciaSt. Vincent and

Source: <u>https://www.greenclimate.fund/countries</u>.



Annex IV.	List of accredited entities/implementing organizations
AAD	Agency for Agricultural Development in Morocco
Acumen	Acumen Fund Inc.
ADA	Austrian Development Agency
ADB	Asian Development Bank
AFD	Agence Française de Développement
AFDB	African Development Bank
CAF	Corporacion Andina de Fomento (Development Bank of Latin America)
ссссс	Caribbean Community Climate Change Centre
СІ	Conservation International
CSE	Centre de Suivi Ecologique
DB	Deutsche Bank
DBSA	Development Bank of Southern Africa
DoE AG	Department of Environment of Antigua and Barbuda
DoE MV	Ministry of Environment and Energy of the Republic of Maldives
DRFN	Desert Research Foundation of Namibia
EBRD	European Bank for Reconstruction and Development
EIB	European Investment Bank
EIF	Environmental Investment Fund
FAO	Food and Agriculture Organisation
FONERWA	Rwanda's Green Fund
GEFSEC	GEF Secretariat
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
IBRD	International Bank for Reconstruction and Development
IDB	Inter-American Development Bank
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IUCN	International Union for Conservation of Nature
KfW	Kreditanstalt für Wiederaufbau
MFEM	Ministry of Finance and Economic Management, Government of Cook Islands
MINIRENA	Ministry of Natural Resources Rwanda
MOFEC	Ministry of Finance and Economic Cooperation of the Federal Democratic Republic of Ethiopia
NABARD	National Bank for Agriculture and Rural Development
NEMA	National Environment Management Authority of Malawi
OSS	Sahara and Sahel Observatory
ΡΙΟΙ	Planning Institute of Jamaica
Profonanpe	Peruano de Parques Nacionales y Áreas Protegidas
SPREP	Secretariat of the Pacific Regional Environment Programme
UCAR	Unidad para el Cambio Rural
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UN-Habitat	United Nations Human Settlements Programme

UNIDO	United Nations Industrial Development Organisation
WADB	Banque Ouest Africaine de Développement (West African Development Bank)
WFP	United Nations World Food Programme
WMO	World Meteorological Organization
WWF	World Wildlife Fund (US Chapter)
XacBank	XacBank

Annex V. List of projects for case study country selection

Annex V.1 Cambodia

Table 7: PPCR funding convergence with other funds in Cambodia

Project ID	Project Title	Project Size	Entity
PPCR			
XPCRKH009A	Climate resilient Rural Infrastructure in Kampong Cham Province (as part of Rural Roads Improvement Project (RRIP-II))	National	ADB
XPCRKH010A	Enhancement of Flood and Drought Management in Pursat Province	National	ADB
XPCRKH011A	Promoting Climate-Resilient Agriculture in Koh Kong and Mondulkiri Provinces as part of the Greater Mekong Subregion Biodiversity Conservation Corridors Project	National	ADB
XPCRKH012A	Climate Proofing of Agricultural Infrastructure and Business-focused Adaptation	National	ADB
XPCRKH013A	Provincial Roads Improvement Project - Climate Proofing of Roads in Prey Veng, Svay Rieng, Kampong Chhnang and Kampong Speu Provinces	National	ADB
XPCRKH014A	GMS Southern Economic Corridor Towns Development Project	National	ADB
XPCRKH015A	Flood-resilient Infrastructure Development in Pursat and Kampong Chhnang Towns as part of the Integrated Urban Environmental Management in the Tonle Sap Basin Project	National	ADB
XPCRKH016A	Mainstreaming Climate Resilience into Development Planning / Technical Assistance: Mainstreaming Climate Resilience into Development Planning of Key Vulnerable Sectors	National	ADB
GCF			
FP076	Climate-Friendly Agribusiness Value Chains Sector Project	National	ADB
GEF TF			
1043	Establishing Conservation Areas Landscape Management (CALM) in the Northern Plains	National	UNDP
1086	Developing an Integrated Protected Area System for the Cardamom Mountains	National	UNDP
1493	National Capacity Self-Assessment (NCSA) for Global Environment Management	National	UNDP

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Project ID	Project Title	Project Size	Entity
1602	Climate Change Enabling Activity (Additional Financing for Capacity Building in Priority Areas)	National	UNDP
3635	SFM Strengthening Sustainable Forest Management and the Development of Bio-energy Markets to Promote Environmental Sustainability and to Reduce Green House Gas Emissions in Cambodia	National	UNDP
4042	TT-Pilot (GEF-4): Climate Change Related Technology Transfer for Cambodia: Using Agricultural Residue Biomass for Sustainable Energy Solutions	National	UNIDO
4649	GMS-FBP Greater Mekong Sub-region Forests and Biodiversity Program (PROGRAM)	Regional	ADB
4652	GMS Forest and Biodiversity Program (GMS-FBP) - Creating Transboundary Links Through a Regional Support	Regional	ADB
4945	Collaborative Management for Watershed and Ecosystem Service Protection and Rehabilitation in the Cardamom Mountains, Upper Prek Thnot River Basin	National	UNDP
9232	Sustainable Management of Peatland Ecosystems in Mekong Countries	Regional	IUCN
9640	Low-carbon Development for Productivity and Climate Change Mitigation through the Transfer of Environmentally Sound Technology (TEST) Methodology	National	UNIDO
9781	Integrated Natural Resource Management (INRM) in the Productive, Natural and Forested Landscape of Northern Region of Cambodia	National	UNDP
9927	Building Resilience of Cambodian Communities Using Natural Infrastructure and Promoting Diversified Livelihood	National	UNEP
LDCF			
1869	Programme of Action for Adaptation to Climate Change	National	UNDP
3404	Promoting Climate-Resilient Water Management and Agricultural Practices	National	UNDP
3890	Vulnerability Assessment and Adaptation Programme for Climate Change in the Coastal Zone of Cambodia Considering Livelihood Improvement and Ecosystems	National	UNEP
4434	Strengthening the Adaptive Capacity and Resilience of Rural Communities Using Micro Watershed Approaches to Climate Change and Variability to Attain Sustainable Food Security	National	FAO
5318	Strengthening Climate Information and Early Warning Systems in Cambodia to Support Climate Resilient Development and Adaptation to Climate Change	National	UNDP
5419	Reducing the Vulnerability of Cambodian Rural Livelihoods through Enhanced sub-national Climate Change Planning and Execution of Priority Actions	National	UNDP
6984	Building Resilience of Health Systems in Asian LDCs to Climate Change	Regional	UNDP
9201	Climate Adaptation and Resilience in Cambodia's Coastal Fishery Dependent Communities	National	FAO
SCCF			
9103	Building Adaptive Capacity through the Scaling-up of Renewable Energy Technologies in Rural Cambodia (S-RET)	National	IFAD



Project ID	Project Title	Project Size	Entity
GCF			
FP076	Climate-Friendly Agribusiness Value Chains Sector Project	National	ADB
GEF TF			
1493	National Capacity Self-Assessment (NCSA) for Global Environment Management	National	UNDP
4042	TT-Pilot (GEF-4): Climate Change Related Technology Transfer for Cambodia: Using Agricultural Residue Biomass for Sustainable Energy Solutions	National	UNIDO
LDCF			
3404	Promoting Climate-Resilient Water Management and Agricultural Practices	National	UNDP
PPCR			
XPCRKH011A	Promoting Climate-Resilient Agriculture in Koh Kong and Mondulkiri Provinces as part of the Greater Mekong Subregion Biodiversity Conservation Corridors Project	National	ADB
XPCRKH012A	Climate Proofing of Agricultural Infrastructure and Business-focused Adaptation	National	ADB
XPCRKH016A	Mainstreaming Climate Resilience into Development Planning / Technical Assistance: Mainstreaming Climate Resilience into Development Planning of Key Vulnerable Sectors	National	ADB

Table 8: GCF funding convergence with other funds in Cambodia

Annex V.2 Kazakhstan

Table 9: CTF funding convergence with other funds in Kazakhstan

Project ID	Project Title	Project Size	Entity
CTF			
PCTFKZ099A	Yermentau Large Wind Power Plant	National	EBRD
PCTFKZ025A	Renewable Energy Infrastructure Program	National	IFC
PCTFKZ023A	District Heating Modernisation Framework (DHMFF)	National	EBRD
PCTFKZ021A	Renewable Energy Finance Facility (KAZREFF)	National	EBRD
PCTFKZ020A	Kazakh Railways: Sustainable Energy Program	National	EBRD
PCTFKZ019A	Waste Management Framework (KWMF)	National	EBRD
GCF	·		

Synergies between Climate Finance mechanisms – Portfolio Analysis



Project ID	Project Title	Project Size	Entity
FP047	GCF-EBRD Kazakhstan Renewables Framework	National	EBRD
GEF TF			
783	Wind Power Market Development Initiative	National	UNDP
1149	Removing Barriers to Energy Efficiency in Municipal Heat and Hot Water Supply	National	UNDP
2619	Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation	Regional	UNEP
4166	LGGE Promotion of Energy Efficient Lighting in Kazakhstan	National	UNDP
9083	Leapfrogging Markets to High Efficiency Products (Appliances, including Lighting, and Electrical Equipment) (PROGRAM)	Global	UNEP
9192	De-risking Renewable Energy Investment	National	UNDP
9337	Global Project to Leapfrog Markets to Energy Efficient Lighting, Appliances and Equipment	Global	UNEP

Table 10: GCF funding convergence with other funds in Kazakhstan

Project ID	Project Title	Project Size	Entity
GCF			
FP047	GCF-EBRD Kazakhstan Renewables Framework	National	EBRD
CTF			
PCTFKZ099A	Yermentau Large Wind Power Plant	National	EBRD
PCTFKZ025A	Renewable Energy Infrastructure Program	National	IFC
PCTFKZ021A	Renewable Energy Finance Facility (KAZREFF)	National	EBRD
GEF TF			
9192	De-risking Renewable Energy Investment	National	UNDP
783	Wind Power Market Development Initiative	National	UNDP
2619	Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation	Regional	UNEP



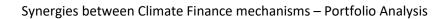
Annex V.3 Mongolia

Project ID	Project Title	Project Size	Entity	
SREP				
XSREMN055A	Upscaling Renewable Energy Sector	National	ADB	
XSREMN056A	Upscaling Rural Renewable Energy - Solar PV	National	IBRD	
XSREMN057A	Capacity Building and Regulatory Support Technical Assistance	National	IBRD	
CTF				
PCTFDP602A	Mezzanine Financing for Climate Change	Global	ADB	
GCF				
FP025	GCF-EBRD Sustainable Energy Financing Facilities	Global	EBRD	
FP028	Business loan programme for GHG emissions reduction	National	XacBank	
FP046	Renewable Energy Program #1 - Solar	National	XacBank	
FP077	Ulaanbaatar Green Affordable Housing and Resilient Urban Renewal Project (AHURP)	National	ADB	
GEF TF	GEF TF			
862	Improved Household Stoves in Mongolian Urban Centers	National	IBRD	
889	Technology Needs Assessment in Energy Sector	National	IBRD	
2947	Renewable Energy and Rural Electricity Access (RERA)	National	IBRD	

Table 11: SREP funding convergence with other funds in Mongolia

Table 12: GCF funding convergence with other funds in Mongolia

Project ID	Project Title	Project Size	Entity
GCF			
FP025	GCF-EBRD Sustainable Energy Financing Facilities	Global	EBRD
FP028	Business loan programme for GHG emissions reduction	National	XacBank
FP046	Renewable Energy Program #1 - Solar	National	XacBank





Project ID	Project Title	Project Size	Entity
FP077	Ulaanbaatar Green Affordable Housing and Resilient Urban Renewal Project (AHURP)	National	ADB
CTF			
PCTFDP602A	Mezzanine Financing for Climate Change	Global	ADB
SREP			
XSREMN056A	Upscaling Rural Renewable Energy - Solar PV	National	IBRD
XSREMN055A	Upscaling Renewable Energy Sector	National	ADB
GEF TF			
2945	Heating Energy Efficiency	National	IBRD
2947	Renewable Energy and Rural Electricity Access (RERA)	National	IBRD
3010	LGGE: Energy Efficiency in New Construction in the Residential and Commercial Buildings Sector in Mongolia	National	UNDP
5830	Nationally Appropriate Mitigation Actions in the Construction Sector in Mongolia	National	UNDP

Annex V.4 Namibia

Table 13: GCF funding convergence with other funds in Namibia for adaptation projects

Project ID	Project Title	Project Size	Entity
GCF			
FP023	Climate Resilient Agriculture in three of the Vulnerable Extreme northern crop- growing regions (CRAVE)	National	EIF
FP024	Empower to Adapt: Creating Climate-Change Resilient Livelihoods through Community-Based Natural Resource Management in Namibia	National	EIF
SAP001	Improving rangeland and ecosystem management practices of smallholder farmers under conditions of climate change in Sesfontein, Fransfontein, and Warmquelle areas of the Republic of Namibia	National	EIF
GEF TF			
2087	Climate Change Enabling Activity (Additional financing for Capacity Building in Priority Areas	National	UNDP
2439	CPP Namibia: Country Pilot Partnership for Integrated Sustainable Land Management, Phase 1	National	UNDP
2757	SIP PROGRAM: Strategic Investment Program for SLM in Sub-Saharan Africa (SIP)	Regional	IBRD



Synergies between Climate Finance mechanisms – Portfolio Analysis

Project ID	Project Title	Project Size	Entity
2774	Community-based Adaptation (CBA) Programme	Global	UNDP
3355	CPP Namibia: Enhancing Institutional and Human Resource Capacity Through Local Level Coordination of Integrated Rangeland Management and Support (CALLC)	National	UNDP
3356	CPP Namibia: Sustainable Land Management Support and Adaptive Management Project (NAM SLM SAM)	National	UNDP
4163	Concentrating Solar Power Technology Transfer for Electricity Generation in Namibia (CSP TT NAM)	National	UNDP
9426	Namibia Integrated Landscape Approach for Enhancing Livelihoods and Environmental Governance to Eradicate Poverty (NILALEG)	National	UNDP
SCCF			
5343	Scaling Up Community Resilience to Climate Variability and Climate Change in Northern Namibia, with a Special Focus on Women and Children	National	UNDP
AF			
NAM/NIE/Water /2015/1	Pilot rural desalination plants using renewable power and membrane technology	National	DRFN

Table 14: GCF funding convergence with other funds in Namibia for mitigation projects

Project ID	Project Title	Project Size	Entity
GCF			
FP027	Universal Green Energy Access Programme	Regional	DB
GEF TF			
935	Barrier Removal to Namibian Renewable Energy Programme, Phase I	National	UNDP
2256	Barrier Removal to Namibian Renewable Energy Programme (NAMREP), Phase II	National	UNDP
3793	Namibia Energy Efficiency Programme (NEEP) In Buildings	National	UNDP



Annex VI. References

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