



# Mapping Donor Support for Low Carbon Development in Low Income Countries

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## 1. BACKGROUND

This report is prepared in response to a request by the participants of the Carbon Initiative for Development (Ci-Dev) for a desktop study describing donor activities in Low Income Countries (LICs) in Africa and Asia that have elements in common with the Ci-Dev Methodology Work Program (MWP). The scope of the research was broadened during implementation to allow for a review of initiatives that had similarities related to the entire Ci-Dev work program including business models. The intent of broadening the scope was to enhance the value of the report in assisting the Ci-Dev work plan implementation by identifying opportunities to utilize potential synergies and avoid duplication with existing donor activities.

### 1.1 THE CARBON INITIATIVE FOR DEVELOPMENT<sup>1</sup>

Ci-Dev supports low-carbon investments in improving energy access of rural households in least developed countries using carbon-linked results-based payments and builds on the infrastructure that has been created by the Clean Development Mechanism (CDM). The objectives of Ci-Dev include:

- To demonstrate that results-based payments for the purchase of carbon-based certified emission reductions (CERs) can lead to successful and viable business models that improve energy access for rural households while promoting increased private sector participation and sharing subsequent lessons learned for further scaling and replication.
- To influence future carbon market mechanisms so that low income countries, and especially least developed ones, receive a greater and fairer share of carbon finance, resulting in high development benefits that avoid carbon emissions.
- To support low income countries in developing standardized baselines and establishing “suppressed demand” accounting standards in key areas such as rural electrification, household energy access and energy efficiency.
- To contribute proposals to further improve and extend the scope of the CDM for use by least developed countries (LDCs), in particular for Programmes of Activities (POA).

### 1.2 DEFINITION OF LOW INCOME COUNTRIES

Ci-Dev targets programs in LICs in Africa that are International Development Assistance (IDA) designated countries or Least Developed Countries (LDCs), and for Asian countries defined by the UN as being low income. The Ci-Dev eligible countries are listed in table 1 and table 2 below.

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<sup>1</sup> See the Ci-Dev website [www.ci-dev.org](http://www.ci-dev.org)

**Table 1: Ci-Dev eligible LICs in Africa and total GHG emissions from 1990-2011<sup>2</sup>**

Countries	MtCO <sub>2</sub> e	Countries	MtCO <sub>2</sub> e	Countries	MtCO <sub>2</sub> e	Countries	MtCO <sub>2</sub> e
Benin	16.98	Cote d'Ivoire	56.85	Madagascar	48.86	Sierra Leone	5.92
Burkina Faso	20.53	Eritrea <sup>1</sup>	5.80	Malawi	17.73	Somalia <sup>1</sup>	No Data
Burundi	37.68	Ethiopia	124.61	Mali	26.53	South Sudan	No Data
Cameroon <sup>2</sup>	89.51	Gambia, The	7.51	Mauritania	9.06	Sudan <sup>1</sup>	166.26
Cape Verde <sup>2 &amp; 3</sup>	0.80	Ghana <sup>4</sup>	28.03	Mozambique	26.59	Tanzania	73.07
C.A.R.	90.00	Guinea	19.96	Niger	19.83	Togo	8.05
Chad	38.36	Guinea-Bissau	2.36	Nigeria <sup>2</sup>	324.51	Uganda	27.60
Comoros	0.29	Kenya	46.26	Rwanda	4.99	Zambia	68.02
Congo, Democratic Republic	171.80	Lesotho <sup>4</sup>	2.66	Sao Tome and Pr. <sup>3</sup>	0.23	Zimbabwe	20.85
Congo, Republic <sup>2</sup>	13.10	Liberia	1.71	Senegal	21.30		
<b>Total Emissions (MtCO<sub>2</sub>e) 1,644.20</b>				<b>( 3.75% of total World GHG Emissions)</b>			

<sup>1</sup> Inactive country: no active IDA financing due to protracted non-accrual status.

<sup>2</sup> Blend countries: IDA-eligible but also creditworthy for some IBRD borrowing.

<sup>3</sup> Small island economy exceptions: small islands (with less than 1.5 million people, significant vulnerability due to size and geography, and very limited credit-worthiness and financing options) have been granted exceptions in maintaining their eligibility.

<sup>4</sup> Borrowing on blend terms: countries that access IDA financing only on blend credit terms.

**Table 2: Ci-Dev eligible LICs in Asia and total GHG emissions from 1990-2011<sup>2</sup>**

Countries	MtCO <sub>2</sub> e	Countries	MtCO <sub>2</sub> e	Countries	MtCO <sub>2</sub> e
Afghanistan	25.31	Cambodia	26.18	Myanmar	161.22
Bangladesh	128.85	East Timor	No Data	Nepal	37.98
Bhutan	1.29	Laos	21.50	Yemen	29.47
<b>Total emissions (MtCO<sub>2</sub>e) 431.80</b>			<b>(0.99% of total World GHG emissions)</b>		

Table 1 and 2 show the countries targeted by the Ci-Dev program. The total emissions in 2011 from these countries are approximately 2000 MtCO<sub>2</sub>e in total. Total world emissions are estimated by the World Resources Institute (WRI) Climate Analysis Indicator Tool (CAIT) version 2.0 model to be approximately 43,816.73 MtCO<sub>2</sub>e. In other words, the total emissions from Ci-Dev eligible countries are approximately five percent of total global emissions.

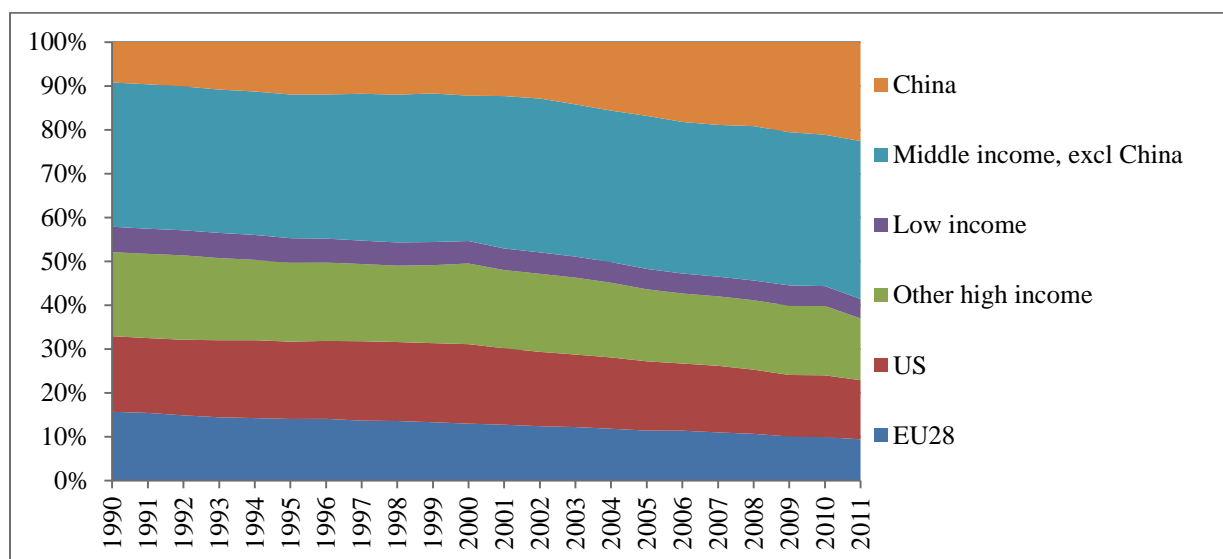
<sup>2</sup> Excluding LLUCF (MtCO<sub>2</sub>e) Data source: World Resource Institute Database

## 2. CONTEXT

### 2.1 GHG MITIGATION POTENTIAL IN LOW INCOME COUNTRIES (LICs)

When considering which policy tools are most appropriate for countries to apply as part of national measures to combat climate change, it is useful to consider the magnitude of the emissions problem faced by each country i.e. to clarify the quantity of emissions that needs to be reduced. Figure 1 shows the historical global emissions according to regions using the data available from the World Resource Institute<sup>3</sup>.

**Fig. 1 Historic global GHG emissions<sup>4</sup>**



The historic data in Figure 1 is in line with the IPCC AR5 baselines scenario and UNEP emission gap report (2013) data. Evidence from the IPCC reports indicates that this trend is not likely to change significantly in the next 30-50 years. As a result, it can be expected that middle income countries and China will continue to be the major contributors to GHG emissions and the 48 Ci-Dev eligible low income countries are likely to continue to represent a small percentage. Currently, they generate approximately five percent of global emissions excluding land use change and forestry<sup>5</sup>.

<sup>3</sup> WRI, CAIT 2.0. 2014. Climate Analysis Indicators Tool: WRI's Climate Data Explorer. Washington, DC: World Resources Institute. Available at: <http://cait2.wri.org>.

<sup>4</sup> WRI definition of LIC is broader than Ci-Dev definition

<sup>5</sup> Calculated using 2014 WRI climate analysis indicators tool

However, while LICs may not currently contribute substantially to global emissions it is clear that if actions are not taken soon, these countries could run the risk of locking in to a fossil fuel intensive development path since – as already discussed above – supply currently does not meet demand for energy in LICs

To avoid such a scenario policy makers in the low income countries must be supported in making low carbon emission choices related to urban development, agriculture, forestry, and energy in order to support them in decoupling development from increased GHG emissions. By supporting the implementation of low carbon technologies to support increased energy access, Ci-Dev can play a part in facilitating this goal.

## 2.2 OPTIONS TO REDUCE GHGs AND IMPROVE ENERGY ACCESS

Currently, there are an estimated 1.5 billion people living without electricity, and almost three billion people do not have clean fuels for cooking. Subsequently, access to modern energy is a development imperative that needs to be addressed urgently. Governments need support to ensure that energy development is equated with clean energy. The critical climate change challenge in LICs is therefore to ensure that investments are directed towards a low carbon development path whilst simultaneously improving access to energy.

Recent research has indicated that the emission reduction potential through clean energy access is at “least 300 MT” on a global scale<sup>6</sup>, demonstrating that achieving energy access in low income countries is aligned with the goal of achieving climate change mitigation. However, the cost of achieving universal access to energy is estimated to be US\$48 billion per year, and yet current estimates indicate only US\$14bn per year is available (of which just US\$7bn is estimated to be available from public finance)<sup>7</sup>. The size of the market for modern energy services has been estimated to be approximately US\$37 billion per year (i.e. based on an assessment of spending on kerosene and biomass expenditure)<sup>8</sup>. In order to bridge this energy financing gap, it is critical that the private sector is made aware of the market opportunity – both in terms of capital and innovation.

However, given the existing limitations faced by low income countries in terms of finance, policy environment, and technical capacity, private finance is difficult to attract. Public climate finance will therefore be needed in the short and medium term to achieve GHG reductions to buy down risks faced by these investors and unlock the untapped potential for low-carbon development. Recently, crediting and baseline market mechanisms such as the CDM have become increasingly relevant for the delivery of results-based finance (RBF) from public sources. This is because the mechanism results in the development of robust monitoring, reporting and verification (MRV) and governance systems, and as a market mechanism has the ability to trigger and support private sector investment.

The existing CDM pipeline therefore presents an opportunity for exploring innovative business models that can be tailored for the purposes of delivering climate finance to low carbon development actions. According to the United Nations Environment Program (UNEP) in partnership with the Technical University of Denmark (DTU) pipeline<sup>9</sup> CDM and Program of Activity (PoA) databases there are 8,638 “live”<sup>10</sup> CDM projects and 399 PoAs worldwide. CDM projects are expected to issue 4,736 million certified emission reductions (CERs) and PoAs could issue approximately 273 million CERs in the crediting period 2013-2020. However, this estimate assumes that such projects receive the necessary financial

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<sup>6</sup> IFC (2012) From Gap to Opportunity: Business Models for Scaling up Energy Access

<sup>7</sup> IEA (International Energy Agency) 2011. World Energy Outlook 2011. Paris: International Energy Agency

<sup>8</sup> IFC (2012) From Gap to Opportunity: Business Models for Scaling up Energy Access

<sup>9</sup> Updated on 6<sup>th</sup> March 2015. See website at: <http://cdmpipeline.org/>

<sup>10</sup> “Live” refers to projects that are still able to continue their CDM activities despite the dramatic decrease in value of certified emission reductions.



incentives to start operation or to continue operating. In contrast, Point Carbon<sup>11</sup> uses risk-adjusted figures for estimating the potential emissions reductions in the CDM pipeline, which it calculates to be only approximately 1,677 million CERs by 30 April 2021.

Although this emissions reduction potential in the existing CDM and PoA pipelines may in reality not be quite as large as these figures indicate, there are clearly some active projects remaining in the CDM pipeline. These “live” projects may, if supported by climate finance, be effective for triggering GHG mitigation actions in the short term. The Ci-Dev therefore works to utilize capacity developed under the CDM to explore how the CDM crediting and baseline mechanism can best be utilized as a vehicle for delivering results-based finance for improved energy access in low income countries. However, the CDM was not originally designed to be a flexible, multipurpose mechanism but rather it was designed to achieve an offset of GHGs from developed countries. As a result, the current regulatory framework governing it in part limits the full potential of the CDM pipeline to be utilized for the purpose of results-based finance. Given the current lack of market demand for offsets, the CDM is at risk of becoming irrelevant unless it can adapt. As a result, the Ci-Dev methodology work program was designed to explore which elements of the CDM regulatory framework could be adjusted to maximize its potential as a flexible market mechanism to meet the needs of evolving carbon markets as well as to deliver results-based finance.

### 3. OVERVIEW OF DONORS INITIATIVES TO SUPPORT THE CDM IN LICs

The Ci-Dev work plan aims to address energy access with innovative low carbon development solutions by utilizing existing capacity and carbon market tools to engage with the private sector and ensure cost effective mitigation approaches. To ensure that the Ci-Dev work plan adds value to existing initiatives in the field of energy access it is useful to assess other donor driven initiatives that address some or all of the objectives of the Ci-Dev work plan.

This report therefore summarizes existing initiatives that are also contributing to increase and improve energy access and low carbon development to ensure that the Ci-Dev work program does not duplicate or miss opportunities for deepening or complementing work that has been or is being undertaken.

#### 3.1 CATEGORIZATION OF DONOR INITIATIVES

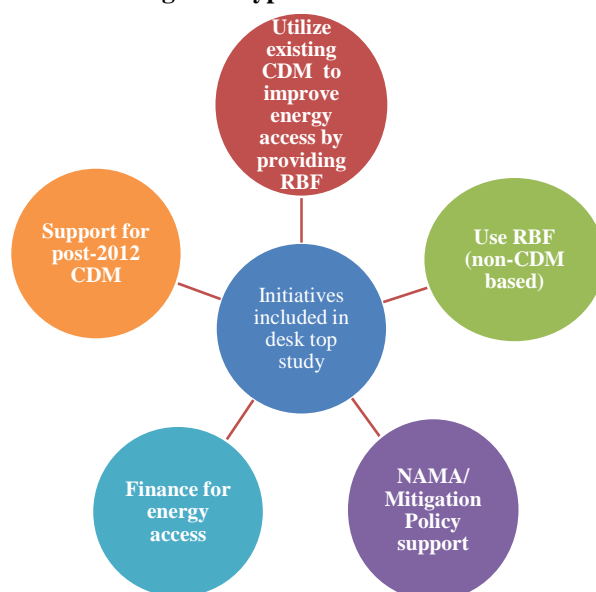
Key current donor initiatives were reviewed and categorized according to their focus on one of the following areas:

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<sup>11</sup> Point Carbon issue 20 Jan 2015

- a. **Utilize the existing CDM to improve energy access in low income countries by providing results-based finance.** This category refers to programs which purchase CDM CERs on the basis of an Emission Reduction Purchase Agreement (ERPA) in low income countries and might provide technical assistance for the development of CDM project materials, training, or working on CDM research/reform etc. Ci-Dev has this approach at the core of its work program.
- b. **Non-CDM results-based finance targeting energy access.** Results-based finance is not a new concept and has been used for many years to support effective deployment of overseas development assistance (ODA). There are some RBF initiatives that are supporting improved energy access in LICs that are not utilizing the CDM infrastructure.
- c. **NAMA/mitigation policy support to low income countries** that target either energy access or support carbon market mechanisms. There are several initiatives that seek to support countries as they develop and implement nationally appropriate mitigation actions (NAMAs) or support the development of sectoral carbon market initiatives that result in the mitigation of greenhouse gases in LICs while simultaneously working to improve energy access.
- d. **Finance to support improved energy access in low income countries.** Due to the risks associated with investing in LICs there are several initiatives seeking to reduce these risks and to improve the liquidity in the investment market, in order to support LICs moving towards a low carbon development path.
- e. **Post-2012 CDM support in general** (i.e. not focused on advancing energy access in low income countries). Some of the initiatives are supportive of CDM activities beyond 2012 in general, in an attempt to utilize and to some extent preserve existing CDM capacity.

**Fig. 2. Types of initiatives reviewed**



### 3.2 ANALYSIS OF SIMILAR ACTIVE DONOR INITIATIVES

Table 3 identifies the programs and initiatives reviewed in this report. The list identifies key activities relevant to Ci Dev, although does not claim to be exhaustive. The full names and a more detailed description of all of the initiatives reviewed are presented in Annex A. The results of the analysis are presented below.

**Table 3 Primary focus of the initiatives reviewed**

#	Publically funded initiative	Primary focus of the initiative				
		a) Use CDM for energy access in LICs w/ RBF	b) Non-CDM RBF targeting energy access in LICs	c) NAMA/mitigation policy support for LICs	d) Finance for low carbon energy access in LICs	e) Post-2012 CDM/CMM support in general
1	ACAD	X				
2	ACSP					X
3	AECF/REACT				X	
4	ANI			X		
5	AREF				X	
6	CCC					X
7	Ci-Dev	X				



activities are identified as coming to an end of their lifetime, they are clearly relevant for the Ci-Dev regarding the program's lessons learned that could be used to inform the Ci Dev work program.

- **Evaluating total capitalization** helps identify to some degree the governance structures of initiatives and programs based on the assumption that the smaller capitalized programs are more likely to have simpler management structures facilitating easier direct communications than the central administrators of the larger funds. Notably some funds with very large capitalization supporting multiple programs under a common guiding framework are unlikely to be useful contact points for Ci-Dev. These “super funds” have the advantage that they automatically ensure some degree of consistency within countries absorbing climate finance but often have complex administrative structures which could make it harder to develop strong collaborative links. It may be possible to explore links with the subprograms where closer synergies could be identified.
- **Inclusion of innovative financing aspects** is critically relevant for Ci-Dev to support the long term implementation of activities and to explore innovative approaches to engage the private sector in working to mitigate climate change.

### Core Focus 1: Utilize the CDM to improve energy access in low income countries using results-based finance

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The list of programs, funds and initiatives listed in Table 3 shows that compared to other programs reviewed, Ci-Dev is unique since it **combines** elements of results-based finance (RBF), procurement of CERs, and technical assistance into a single work program to deliver climate finance for projects that improve low carbon energy access activities in low income countries. This is distinct from the other initiatives since they focus on a single element as the core of their work programs.

For example, there are 11 initiatives which also purchase CERs from CDM projects. Two initiatives, the Climate Change Capital Carbon fund (CCC CF) and the Umbrella Carbon Facility (UCF)Tranche 2, are primarily compliance procurement vehicles and do not have stated objectives to support low income countries, although some of their activities do occur in low income countries. These initiatives are therefore somewhat different to Ci-Dev supported activities. However there are 9 initiatives that purchase CERs with the clear goal of supporting low carbon development. These initiatives with the clear stated goal of supporting low income countries include the: African Carbon Asset Development (ACAD) fund, the Africa Carbon Support Program (ACSP), Austrian NAMA Initiative (ANI) which purchases from PoAs, the Carbon Market Program (CMP), Swedish Global Purchasing Program, the Millennium Development Goals (MDG) carbon facility, the Nordic Climate Facility(NFC) , The Norwegian Carbon Procurement Facility (NorCap) and the Nordic Environment Finance Corporation Carbon Fund (NeCF). These 9 initiatives differ from the Ci-Dev since a key element in considered in their programs was to support the continuation of the CDM in low income countries until the end of the Kyoto second commitment period.. Furthermore, many of these programs are entering into or are in a sunset phase, and appear set to slowly wind down their purchasing programs.

Of those programs which are set to continue (i.e. NeCF and NorCaP) collaboration may become relevant depending on the focus of their purchasing initiative. For example, NorCaP included a set aside in their fund to support LICs to participate in the last call and the NeCF has also been opened to LICs. However, since the focus of these procurement funds is not on exploring the innovation in the RBF delivery, but rather on supporting both the currently ailing carbon market and the climate commitments of Norway they remain primarily informative for the Ci-Dev work program.

All 11 of these purchasing programs have played and some continue to play an important function in exploring lessons and experiences to be gained under the CDM to inform the evolving climate change framework to be agreed in 2020.

While the experiences of these initiatives continue to inform Ci-Dev in terms of dealing with CDM delivery, implementation and risk adjustment lesson, they offer limited opportunity for developing synergies that would be of specific additional value to the Ci Dev.

Other programs, like Ci-Dev, utilize results-based financing to support low carbon development. However, unlike Ci-Dev they do not exclusively rely on the CDM to achieve this goal, and are in this regard distinct from the Ci-Dev work program. Ci-Dev is unique in that its work program extends beyond purchasing credits for compliance and supporting low-carbon development by integrating several other goals, including delivering results-based finance to innovative business models, learning from its pilot portfolio to scale up and replicate successful models, and improving energy access. These other programs that utilize RBF without a CDM component treat these goals as separate elements, and are discussed in detail in Section 2 below. Finally, because *most* of the carbon purchasing programs are winding down their activities, the potential for duplication or opportunities for collaboration are relatively low. Their findings and experiences however are therefore primarily informative for the Ci-Dev work program.

## Core Focus 2: Non-CDM results-based finance targeting energy access

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The Norwegian Energy+ Partnership, Energising Development (EnDev), Energy Sector Management Assistance Program (ESMAP) Results-Based Funding (RBF) for Energy Sector Development, the Global Partnership on Output-Based Aid, Clean Cooking Stove Initiative in Africa (CCI), and the Lighting Africa program all utilize results-based finance to achieve low carbon development outcomes in low income countries and to support activities that improve energy access. However, these initiatives do not focus on using the CDM as an instrument to deliver the RBF, in contrast to Ci-Dev.

The Clean Cooking Stove Initiative (CCI) for Africa is, compared to the other initiatives, a small activity with total contributions of US\$200,000. It is a program that is close to completion, having provided support to African countries through the dissemination of clean cooking stoves using RBF to deliver climate finance. The single technological focus of the program provides some insights for the Ci-Dev program regarding household appliances and could inform the development of business models supporting private sector engagement for dispersed technologies. Given that the program is close to completion, the scale of capitalization and the limited applicability of business models it is unlikely that this program will duplicate the activities under the Ci-Dev. The research from this project can provide useful information regarding barriers to market entry for household energy technologies.

The ESMAP RBF for Energy Sector Development program has three components: to provide guidance on how to apply RBF in the energy sector; to support knowledge management and outreach to ensure that lessons learnt on RBF programs and projects are shared; and to test new results-based concepts and ideas in the area of energy sector development. The work program has focused on providing guidance on how to apply RBF in the energy sector and has two projects supporting cooking stoves in Indonesia and Lao. The experiences from the projects could be informative for Ci-Dev and it would be useful to explore lessons under this program regarding dissemination of information, in order to ensure that Ci-Dev draws on best practice and experiences when disseminating lessons learnt.

The Norwegian Energy + Partnership, EnDev and the Global Partnership on Output-Based Aid (GPOBA), have both a large capitalization and a broader technological scope. The Energy+ Partnership works with partner developing countries through three phases, which include design of the actions, development of MRV infrastructure, and program implementation. Currently Energy+ partners have activities in Ethiopia, Liberia, Kenya and India. The relevance for the

Ci-Dev work program relates to two aspects. First, understanding the methodological approaches for measuring scaled up reductions in mitigation activities that support improved energy access might inform the reforms that the Ci-Dev MWP may propose for the CDM. Second, the business models supported by Energy+ for applying the results-based finance and engaging with the private sector could inform Ci-Dev pipeline development and knowledge management.

However, Energy+ activities in Ethiopia were the first project activities to be implemented under the program and are only just now reaching the end of the second phase. In other words, there has to date been no experience in applying RBF approaches to implementation. It is therefore not yet possible to fully explore synergies with this program or to learn about financing innovations, but it will be useful to follow the progress of the activities and to identify the possibility for synergies with Ci-Dev as the initiative progresses.

The EnDev program was established in 2004 following the World Summit on Sustainable development with the initial objective to provide sustainable access to modern energy services to 3.1 million people by supporting access for households, social institutions and small businesses in developing countries in Africa, Latin America and Asia. During the first phase the program helped 5.1 million people, exceeding the initial target by two million people. Consequently, the program has been scaled up several times. To date 245.8 million Euros have been committed to support access to energy for the poor. EnDev is currently working to provide services for 14.3 million people. The RBF model is focused on outputs against a baseline established at the start of the project. In other words the metrics for assessing the success of an activity is different to Ci-Dev, which applies climate outcome metrics. For example, under the EnDev program if a project is focused on disseminating improved cookstoves, the metric for assessing success is determined according to the sales figures of the stove producers. In projects that implement a mini-grid supplied by a micro hydro power scheme, the number of people connected to the hydro power scheme is the metric applied to trigger RBF and assess success. Of particular relevance to Ci-Dev is that EnDev criteria have been defined to assess the sustainability of any activity. Such experience could be informative for defining an approach for assessing the sustainable impacts of the Ci-Dev program.

The GPOBA was established with the specific mandate to fund, design, demonstrate and document RBF approaches to improve the delivery of basic services to the poor in developing countries. Its mandate was not explicitly to support energy access although it has supported a rural electrification project in Uganda with US\$5.5 million to provide fully-subsidized connection materials to the poorest Ugandan households for free. The model delivers public finance to the government in the form of a loan scheme that enables end users to borrow funds to meet the cost of having the wiring installed in their houses/premises by a certified technician prior to being connected to the grid. The overall rural electrification project, to which GPOBA is contributing aims to provide 1.3 million new energy connections, and is being considered for partial support from Ci-Dev. Despite this practical complementarity, the GPOBA business model in this particular case (as well as in general) is not directly relevant for Ci-Dev from a theoretical or model-based perspective. Further, most of GPOBA's activities focus on delivering RBF to *outputs* rather than focusing on the *climate outcomes* themselves (e.g. GHG reductions in the form of CERs). As a result, the RBF nature of the activities under the Ci-Dev complement the activities of both EnDev and GPOBA rather than duplicate them since the GPOBA pays for outputs but struggles to pay for outcomes, which the Ci-Dev does very well.

Therefore, programs identified as having a core focus that utilizes non-CDM results-based finance are relevant collaboration partners for the Ci-Dev. The Energy+ Partnership and EnDev plan to utilize RBF to achieve low carbon development and improve energy access for communities. It should be noted that the Energy+ Partnership program, EnDev and GPOBA use metrics other than one ton of CO<sub>2</sub> equivalent as triggers for results-based finance since the payments are based on outputs as opposed to climate outcomes. Energy+ Partnership, EnDev and GPOBA financing of outputs could complement payments made by Ci-Dev for climate outcomes. For example, GPOBA sometimes pays for

energy access outputs (e.g. number of cook stoves distributed or household electricity connections made) that may yield climate outcomes in terms of reduced GHG emissions.

This creates the potential for future collaborations. Opportunities for developing synergies in the areas of business model innovation and financing could be explored. Furthermore exploring lessons learnt from the EnDev program with regard to understanding the sustainability of activities could be relevant for Ci-Dev. The ESMAP RBF program could also provide channels to support Ci-Dev to ensure widespread information dissemination of experiences with innovative climate mitigation RBF models. The extent to which this is possible in reality could be investigated further.

### Core Focus 3: NAMA/mitigation policy support to low income countries that target either energy access or support carbon market mechanisms

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There are 11 initiatives included in this study that have – as a core objective – the aim to support the development of nationally appropriate mitigation actions (NAMAs) and/or to support climate change mitigation policies in low income countries that either target energy access or support carbon market mechanisms. Four initiatives are more keenly focused on supporting the development of NAMAs: the Austrian NAMA Facility, the Low Emissions Capacity Building Program, the Millennium Development Goal Carbon Facility, and the NAMA Facility

The Austrian NAMA Facility was created in 2014 with a budget of €1 million to support the development of approximately 2-3 NAMAs or programmes of activities that foster access to low carbon energy in low income countries and small island states by providing technical assistance and purchase of CERs against an ERPA. The program has to date concentrated on developing small scale renewable and energy efficiency technologies and due to its limited capitalization of €1 million is unlikely to be able to support new policy initiatives beyond 2016.

The Low Emission Capacity Building Program aims to enhance the capacity of the public and private sectors by providing technical assistance and capacity building support in the following areas: Develop national GHG inventory systems, identify and formulate NAMAs, prepare Low-Emission Development Strategies (LEDs), facilitate the design and adoption of mitigation action plans by selected industries, and design MRV systems for the proposed mitigation actions. It has a total contribution of US\$40 million and there are 26 countries participating in this initiative, of which the following low income countries are taking part: Bhutan, DR Congo, Ghana, Tanzania, Uganda and Zambia. However, the initiative is gradually coming to an end since its closure date is in December 2016. Activities in low income countries have primarily focused on capacity building workshops rather than new methodological developments to support mitigation efforts. The broad focus beyond energy access means that it can be considered more complementary than similar to the activities envisaged under the Ci-Dev work program.

The Millennium Development Goal Carbon Facility provides technical support and seed finance against an ERPA for the development of NAMAs and Programs of Activities. To date the program has primarily supported programs of activities in low income countries focusing on clean cooking stoves. This program is in a sunset phase and is unlikely to continue beyond 2016.

The German and UK funded NAMA Facility was launched in 2012 with the aim of supporting countries implement transformation policies. To date NAMAs selected for support under the program in low income countries are limited only

to activities in Burkina Faso. The other eight NAMAs<sup>12</sup> are not located in low income countries. The activity supported in Burkina Faso is receiving result-based financing. The main objective of the NAMA Support Project in Burkina Faso is to make biomass energy a commercially viable, renewable and low emission energy source. Biomass accounts for 84 percent of energy consumption in Burkina Faso. The NAMA Support Project has the potential to achieve 41 percent of the national emission reduction target. The project focus is on a more rational and regulated use of biomass, private sector investment and new low emission technologies, which is intended to transform the sector. In this regard the private sector engagement strategies used in these activities could inform activities within Ci-Dev.

The remaining initiatives in this category focus efforts on facilitating the design, implementation and operationalization of mitigation policy in low income countries. The Fund for the Japanese Crediting Mechanism and the Japanese Crediting Mechanism are combined to develop a bilateral approach between Japan and its partners to support climate mitigation policies using a baseline and credit mechanism that seeks to develop scaled up approaches building on the experiences of the CDM. The Japanese Crediting Mechanism supports the development of eligible activities and the fund purchases the emission reductions from these activities. The eligibility of project activities is decided by a Joint Committee, with representatives from Japan and the partner developing country. The initiative is currently working in the following LICs: Bangladesh, Cambodia, Ethiopia, Lao, Mozambique, Myanmar, and Rwanda. Activities are broad and include energy access improvements but do not exclude other mitigation options. The methodological approaches used to credit policies are of interest, but since the Ci-Dev work program focuses on using CDM activities this information could only inform ideas for improving the CDM and could not be applied directly. Therefore this program does not present a duplication of Ci-Dev but is complimentary.

The Global Climate Change Alliance is an initiative of the EU supporting the mainstreaming of climate change into policy and development in low income countries and small island states. One sub-component of this activity which is particularly relevant in terms of similarities to the Ci-Dev work program is the ClimDev Africa program which was supported with US\$8 million from Global Climate Change Alliance funds with additional contributions from Norway, Sweden, and the UK. Its main focus is the provision of capacity building opportunities such as support for negotiators in the policy making process in the negotiations up to 2015. The project ends in 2015. If Ci-Dev were to continue to support the African negotiators in the run up to the 2020 negotiations, it would ensure continuity of the important work completed under this program.

The UK's International Climate Fund<sup>13</sup> and Germany's International Climate Initiative are examples of "super funds" i.e. large initiatives that support many sub-programs. They include as part of their objectives support for mitigation policy implementation in low income countries. The German IKI supports the Future of the Carbon Market Program which is run by KfW, which builds on experiences of programmatic mitigation approaches to inform negotiations on carbon market mechanisms by providing start up finance<sup>14</sup> to approximately two programmatic activities per year or to approaches that "go beyond the CDM." Two programs in Africa have received first tranches of start-up funding through the program. One of the supported programs promotes the distribution of efficient stoves to farmers in rural villages in Zambia. The second program promotes fuel switch from charcoal to wood chips for cooking in urban areas of Senegal. The program is not

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<sup>12</sup> The other countries selected for support under the NAMA facility include: Chile, Colombia, Costa Rica, Indonesia, Mexico, Peru, Tajikistan and Thailand.

<sup>13</sup> The UK ICF supports Ci-Dev, and therefore will not be discussed in the context of this report.

<sup>14</sup> Up to approx. €2 million per selected activity.



exploring innovative financing approaches but rather is focused on building on the experiences of the CDM to inform the development of new carbon market mechanisms.

The Nordic Climate Facility is also actively working to advance low carbon development in low income countries. Similar to the Ci-Dev work program, the Nordic Climate Facility is particularly interested in supporting innovative business approaches that can be duplicated. However, the focus of the calls for project activities is much broader than energy access alone. The first call for activities was in 2009, and so far three calls have been announced: NCF1 under the themes of water resources and energy efficiency, NCF2 under the themes of renewable energy and urban adaptation, and NCF3 with a single theme of innovative low-cost climate solutions with focus on local business development. The fourth NCF call was launched in December 2013 for projects that fall under the theme of “Inclusive green growth projects contributing to private sector development.” Based on the analysis of the activities supported by these calls, the Ci-Dev work program can be seen as complimentary to this initiative rather than duplicative.

In summary, Ci-Dev appears complimentary to the initiatives that have a core focus on providing NAMA/mitigation policy support to low income countries that target either energy access or that support carbon market mechanisms. Most of these initiatives can to some degree inform Ci-Dev activities but opportunities for developing synergies and risks of duplications are both low.

#### Core Focus 4: Finance for energy access in low income countries

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Active initiatives providing debt and/or equity finance in low income countries are relevant for Ci-Dev since they can provide examples of successful and less successful alternative financing and delivery models that could inform the activities of the Ci-Dev. Additionally, where synergies exist, options could be explored for leveraging additional financial support, to provide investment in technologies and sectors where without public finance, private investment is unlikely to materialize. The following programs were reviewed since they could be relevant to Ci-Dev program development includes:

- The African Development Bank is responsible for the following funds and programs:
  - The African Renewable Energy Fund (AREF) is managed by Berkeley Energy and pays for technical assistance in the form of feasibility studies, capacity building and technology transfer to support renewable energy deployment in Africa. As a result, the fund’s work is not relevant for Ci-Dev beyond some minor overlap in Ci-Dev’s provision of Readiness Grants for capacity building and technical assistance, which are targeted directly to energy access programs versus AREF’s work on renewable energy in general.
  - The SE4All initiative in the African region. Globally, the SE4All initiative has three interlinked objectives to be achieved by 2030: (1) to ensure universal access to modern energy services, (2) to double the global rate of improvement in energy efficiency, and (2) to double the share of renewable energy in the global energy mix. The African Development Bank is one of the key agencies responsible for operations in Africa. The SE4All initiative is an example of a “super fund” that provides a framework for many activities. It is recommended that synergies are more likely to be identified with the sub-activities under the SE4all program than with the coordinators of the entire program itself.
- The African Enterprise Challenge Fund (AECF) has a Renewable Energy Adaptation to Climate Technologies Window (REACT) that is open to business ideas based on low cost clean energy and solutions (technologies, products, services) that can help rural people adapt to climate change. It has raised US\$34 million for projects in its portfolio located in Burundi, Kenya, Rwanda, Tanzania, Uganda, and Mozambique. The experiences with engaging with the private sector and effective methods for reaching rural areas could inform Ci-Dev activities.

- The Sustainable Energy Fund for Africa (SEFA) has US\$57 million to support small and medium clean energy and energy efficiency projects with grants and technical assistance. The focus of this fund is not related to climate finance in anyway and is probably not directly relevant for Ci-Dev.
- The recently launched ElectriFI financing initiative by the European Commission seeks to support and accelerate electrification in developing countries by providing €75 million in subordinated debt funding through convertible grants for sustainable private sector (off-grid) energy projects starting in the second quarter of 2015. Additionally, the project intends to develop a center of excellence for energy access that will provide financial structuring / advisory / arranging skills. In principle the monies provided by ElectriFI will need to be returned by the borrowers, since the initiative results in an early stage development risk capital payment to the activities. Collaboration with this program could allow exploration of innovative financing options for low carbon developments in LICs.
- The Renewable Energy Cooperation Program (RECP) financed by the EU and supported by the French Development Agency (AFD) also provides equity and debt to support the construction of renewable energy projects as well as technical support for policy design. The focus of the RECP is to provide long term cooperation between Africa and Europe on renewable energy by supporting the development of renewable energy markets in Africa for all sources of renewable energy technologies. This will contribute to the African EU political targets on access and renewables and improve security of energy supply whilst protecting the environment. The program provides mezzanine style finance for renewable energy developments in Africa as well as some policy advice and training support. It could be a platform of relevance to information dissemination, but does not duplicate the activities planned in the Ci-Dev program.
- The Lighting for Africa initiative of the World Bank and IFC is focused on a specific household need and technology. The activities within the program aim to work across the household lighting supply chain with manufacturers and distributors, consumers, financial institutions, development partners, and governments to remove market entry barriers and to build confidence in the off-grid lighting market in order to accelerate the development of markets for clean off-grid lighting products in sub-Saharan Africa. With a capitalization of approximately US\$26 million the program is engaging with the private sector in the LICs of Ethiopia, Ghana, Kenya, Mali, Nigeria, Tanzania and Zambia. The experiences from this program of engaging with the private sector and the successful models for rural outreach are relevant for Ci-Dev.
- The Low Emission Capacity Building Program aims to enhance the capacity of the public and private sectors to scale up mitigation action through the development of LEDS and NAMAs, and to strengthen the underlying MRV systems and national GHG inventories. The program has capitalization of US\$40 million and has NAMA activities in DR Congo, Kenya and Zambia. The program is to end at the end of 2016 and therefore synergies or potential collaboration is relatively limited although the lessons learnt from the program could still inform the Ci-Dev program.
- Di Frontier Energy and Carbon Fund and Evolution One are investment banking agencies receiving support from the Global Energy Efficiency and Renewable Energy Fund for investments in LICs in Africa. Both provide debt and equity to projects that advance energy efficiency and renewable energy, and while they have explored different financing structures none are directly related to climate finance. The focus on financing in Africa may be relevant to the Ci-Dev in terms of being able to develop innovative blending of finance to support climate mitigation activities.
- The Private Infrastructure Development Group (PIDG) delivers finance under their Green Africa Power portfolio to support and promote renewable energy. The program for scaling up renewable energy in low income countries (SREP) under the Strategic Climate Fund (SCF) is to demonstrate the social, economic, and environmental viability of low carbon development pathways in the energy sector. It seeks to create new economic opportunities and increase energy access through the production and use of renewable energy. Investment plans have been approved for activities in Ethiopia, Kenya, Mali and Nepal. Plans are to be developed for Liberia and Tanzania. Synergies might

be developed if the PIDG was open to exploring business models to facilitate the blending of finance to support climate mitigation activities.

- The UNEP Seed Capital Assistance Facility (SCAF) provides financial support to investors to reduce risks associated with investments in clean energy in the form of cost sharing for enterprise development or as seed capital in the range of 10-20 percent of the total capital investment required. It provides grants to support investment companies invest in clean energy projects (i.e. it buys down the risks associated with such investments). The activities are similar to those under the Ci-Dev readiness fund; although under Ci-Dev the focus is support for the development of a CDM project. Under SCAF the technical assistance facility supports payments for contract negotiations and impact assessments etc.
- The UNFCCC loan scheme also provides technical assistance and interest free loans to pay for CDM project activity development costs. The financing comprises direct loans to address regional representation in the CDM. As such this activity does not duplicate those being developed under the Ci-Dev.

Of the activities listed above, the activities of Di Frontier Energy and Carbon Fund, Evolution, the PDIG, the Lighting Africa Initiative, AECF REACT, and the EU ElectriFI program may present opportunities for developing compatible financing and investment synergies with the Ci-Dev work program. Notably, due to the involvement of the private sector in Di Frontier Energy and Carbon Fund, Evolution, and the PDIG, it would be interesting to explore if opportunities exist for developing joint financing models to support energy access mitigation activities advance in low income countries. The experiences in the Lighting Africa Initiative and AECF REACT with regards to ensuring distribution to rural areas could also inform business models under development in Ci-Dev. Furthermore the activities of the EU program ElectriFI and Lighting Africa Initiative could provide useful lessons for the Ci-Dev in terms of outreach and engagement with the private sector.

#### Core Focus 5: Post-2012 CDM support in general (i.e. not focused on advancing energy access in low income countries)

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Several initiatives are focusing their efforts on supporting the continuation of the CDM under the new carbon market regime which is to be defined in 2020. As part of their activities, these initiatives often explore ways to reform the CDM to make it “fit for the future.” For example, the Africa Carbon Support Program is exploring how to support African country involvement in the new market mechanism building on the experiences with the CDM. However, concrete activities have yet to be defined on the website and it has not yet been possible to identify if there were synergies with this program, which was originally developed to support implementation of CDM activities in Africa.

The Pilot Auction Facility for Methane and Climate Change Mitigation (PAF) utilizes the CDM pipeline in order to assess if auctions are an appropriate mode for delivering climate finance. This initiative is focused on defining a model for delivering results-based global climate finance and utilizes the existing CDM pipeline in order to “test” the model in the short term. The auction model defined in the PAF could be used with other crediting mechanisms and therefore the PAF only supports the CDM in general terms and aims to be relevant for the post-2012 CDM world by concentrating on developing a new form for effectively delivering climate finance. Provided that Ci-Dev does not consider the use of auctions as part of its work program, duplication will be avoided.

In the area of simplification of CDM methodologies, several donor activities refer to the development of standardized methodological approaches to baseline setting and monitoring. These include: The German Carbon Market Foundation, Japanese Joint Crediting Mechanism, the Swiss Government program “Transforming the charcoal sector in Tanzania”, the UNFCCC Secretariat that supports standardization through its regional collaboration centers (RCCs), UNEPs MDG

Carbon supporting PoAs and scaled up activities, and the World Bank Group's Carbon Partnership Facility (CPF). Of these activities, only the German Carbon Market Foundation, the Japanese Joint Crediting Mechanism, the CPF and the UNFCCC Secretariat and its RCCs are not in a sunset phase. Although standardization is a key aim of these programs, only Ci-Dev and the UNFCCC Secretariat are systematically working to achieve simplification of the project cycle for standardized baselines and micro-scale PoAs. Further exchange and co-operation with the UNFCCC Secretariat and its RCCs will ensure that in this area synergies are developed and utilized with the UNFCCC. Furthermore the Ci-Dev actively seeks to learn from the experiences of the previous and current carbon funds of the Climate and Carbon Finance Unit within the World Bank Group including the CPF.

In the area of negotiation support for low income country representatives, support is ad hoc. This includes generic capacity building not relevant to the specific efforts undertaken by Ci-Dev like that undertaken by the EU Energy Initiative Partnership Dialogue Facility that focuses on creating information exchange platforms to support countries to implement low carbon development policies. Efforts such as the ClimDev Africa initiative under the Global Climate Change Alliance seem to be coming to an end and therefore can offer little in terms of future collaboration.

## 4. IMPLICATIONS FOR THE CI-DEV METHODOLOGY WORK PROGRAM & BEYOND

### 4.1 CONCLUSIONS

In general it can be seen that the Ci-Dev methodology work program is uniquely placed in being dedicated to utilizing experience under the CDM in support of improving energy access in low income countries. Furthermore, the Ci-Dev methodology work program is well placed to capitalize on multiple donor initiatives related to objectives such as low carbon sustainable development, improving renewable energy and energy efficiency in sectors or technologies (e.g. Cooking Stove Initiative), incentivizing the private sector to support greenhouse gas mitigation, and CDM reform.

The assessment of the initiatives supporting private sector finance in the field of low carbon development suggests that it might be possible for the overall activities under the broader Ci-Dev work program to utilize synergies with these programs in order to more effectively leverage additional debt and equity financing to support project activities. The scalability of the activities to be supported under the Ci-Dev program would be enhanced by such an approach and facilitate Ci-Dev to achieve further scalability and replicability.

Achieving a critical mass or scale of mitigation will give weight to the findings from the work undertaken in the Ci-Dev work program and is likely to be able to meaningfully inform the UNFCCC process on options for CDM reforms and scaling up. Not least the critical size of the program could position Ci-Dev to be a useful basis for engagement with African governments in policy dialogues exploring market mechanisms and results-based finance approaches to support low carbon development.

### 4.2 RECOMMENDATIONS

This analysis has identified the uniqueness of the Ci-Dev initiative to use the CDM to promote private sector investments in energy access projects with strong development benefits in low income countries. This is achieved through the guaranteed offtake of Certified Emission Reductions (CERs) at a fixed negotiated price in order to support low-carbon energy access programs in the least developed countries. The Ci-Dev program is to be both sustainable and replicable.

Within the Ci-Dev program there are two key elements – the support of innovative delivery models and the support of innovative financing models:

- Innovative delivery models are expected to utilize multiple climate finance sources including carbon finance in order to improve energy access and meet mitigation and sustainable development targets defined in INDCs. The emergence of this new policy and financing environment makes it timely to evaluate how improvements needed in the CDM, mainly utilizing the standardized baselines framework and project cycle reform, can be integrated and enhanced. This results in the need to focus on advancing CDM reform.
- Innovative financing models are needed to help the public sector agencies or private companies implementing Ci-Dev programs to overcome the typical equity constraints and broader investment barriers they face. This results in the focus on looking to synergize and learn from financing and investing companies.

It is clear that in order to really achieve the scale of mitigation that the program envisages, certain CDM reforms are urgently needed to ensure the CDM becomes a more flexible tool than for which it was originally designed. This includes both pushing the boundaries of the current CDM through proposals for CDM reform ensuring that the Ci-Dev initiative lives up to its full potential, as well as exploring new innovative, and scalable business models that stimulate private sector engagement.

The work to date on CDM reform has put Ci-Dev in a good position to cooperate with relevant organizations including the UNFCCC Secretariat and its RCCs, DNAs, and other CDM reform stakeholders. Most of the actors in this field are actually phasing down their programs as they come to an end although some continue to be active as they pursue CDM reform (in particular the RCCs). Continued collaboration with the UNFCCC Secretariat will ensure that synergies are utilized and overlap between activities is minimized.

In terms of exploring and exchanging experience with innovative business and finance models, synergies could be explored with the following programs:

- **AECF REACT** experiences in achieving distribution to rural areas could also inform business models under development in Ci-Dev and support the long term sustainability of activities initiated under Ci-Dev.
- **ElectriFI** to clarify details about the excellence centers and the focus of these centers going forward and to explore complementary financing models in which ElectriFI might provide upfront finance and Ci-Dev RBF.
- **Di Frontier Energy and Carbon Fund and Evolution One** focus on developing innovative financing models to support the deployment of renewable energy. It would be interesting to explore to what extent their models could be applied with Ci-Dev's carbon RBF approach.
- The **Lighting Africa Initiative** has extensive experience in supporting the private sector involvement for the distribution of solar lighting. Understanding the lessons learnt for this technology and building on the network established under this initiative could support the dissemination of experiences and sustainability of the activities supported under Ci-Dev.
- The **Norwegian Energy+ Partnership, EnDev and GPOBA** could provide collaboration partners that could support new models for delivering climate finance using result-based financing vehicles. Since Energy+, EnDev and GPOBA finance outputs rather than outcomes, it might be possible to identify “win win” synergies with these programs that leverage finance for a combination of both outputs and outcomes.
- The **Private Infrastructure Development Group (PIDG)** aims to create new approaches to encouraging economic development and improved energy access using renewable energy. Investment plans have been approved for activities in Ethiopia, Kenya, Mali and Nepal. Plans are to be developed for Liberia and Tanzania. Ci-Dev and PIDG could work to explore innovative financing models.

It is recommended that Ci-Dev explore specific ways in which to collaborate and engage with these programs in its forthcoming knowledge management strategy.

Finally, it is important that work on strengthening the policy environment is intensified since existing initiatives in this regard are ad hoc and inconsistent. Therefore to ensure that low income countries are ready for a reformed CDM it is critical that LIC governments are given a voice in the negotiations.

## **Annex A List of initiatives<sup>15</sup> in alphabetical order**

### **1. AFRICAN CARBON ASSET DEVELOPMENT (ACAD)**

Objective	Working to kick-start the African carbon market – foremost by providing seed funding for innovative and replicable investment projects and providing technical assistance to project developers, but also by helping banks and entrepreneurs to realize local eco-solutions through training and hands-on advisory. Emphasis on POAs and leveraging investment in LDCs. Aims also to develop Capacity building in banks – i.e. awareness raising in finance sector regarding climate change.
Priority areas	CDM projects in Africa – Note: 1/3 of ACAD portfolio located in LDCs or Programs of Activities
Country focus areas	Africa - ACAD has already supported the realization of over 15 replicable low-carbon investment projects across Africa.  9 projects are located in LICs – Burkina Faso (One woman, one stove, one tree), Kenya (Lake Turkana wind farm), Njenga and Terem Falls Hydro projects, Malawi, Carbon soft PoA and Loan for lights pilot, Mali Karten Kadji green fuel project, Mauritius National Solar Water Heating, Mozambique, Terra Nova Waste Composting, Rwanda NURU Lights Project, Uganda Bagass Cogeneration at Kakira sugar.
Total contribution	Total contribution - \$87.1 million.
Donors	ACAD is a public-private partnership spearheaded by the United Nations Environment Programme and its UNEP DTU Partnership. Formed in late 2009 in cooperation with Standard Bank , ACAD is generously supported by the German Federal Environment Ministry.
Nature of financial instrument	Technical assistance and soft loan.
Web site	<a href="http://www.acadfacility.org/">http://www.acadfacility.org/</a>
Date created	Formed in late 2009
Administrating organization	UNEP

### **2. AFRICAN CARBON SUPPORT PROGRAM (ACSP)**

Objective	To better access to the CDM in Africa.
Priority areas	CDM or new market mechanism related activities in Africa.

<sup>15</sup> All information was taken from program websites.

Country focus areas	<p>Africa. Has supported the development of new CDM methodology and 4 CDM projects in Africa – that included:</p> <ul style="list-style-type: none"> <li>• Ethiopia to Kenya power interconnection project</li> <li>• Ithezi- Tezhi hydropower projet in Zambia</li> <li>• Lagos Cable propelled transit project in Nigeria</li> <li>• Windiga Solar PV project in Burkina Faso</li> </ul> <p>Future work will explore how to utilize new mechanisms in addition to the CDM in Africa</p>
Total Contribution	Information not available on website or publications available for download on the website.
Donors	Funding from the Fund for African Private Sector Assistance (FAPA), a multi-donor thematic trust fund financed by the AfDB, the Government of Japan, the Government of Austria and the Austrian Development Bank
Nature of financial instrument or delivery mechanism	The objective of FAPA is to support the AfDB's Private Sector Development strategy through the provision of technical assistance and capacity building grants .The ACSP aims to provide direct technical support, awareness and training to AfDB staff, project owners and government agencies on the CDM and other issues of climate change impact.
Web site	<a href="http://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/AfDB%20African%20Carbon%20Support%20Programme.pdf">http://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/AfDB%20African%20Carbon%20Support%20Programme.pdf</a>
Date created	The African Development Bank's (AfDB) African Carbon Support Programme (ACSP) began in 2010
Administrating organization	AfDB

### 3. AFRICAN ENTERPRISE CHALLENGE FUND RENEWABLE ENERGY ADAPTATION TO CLIMATE TECHNOLOGY WINDOW (AECF REACT)

Objective	The African Enterprise Challenge Fund (AECF) Renewable Energy and Adaptation to Climate Technologies (REACT) window is a special fund of the AECF that is open to business ideas based on low cost clean energy and solutions (technologies, products, services) that can help rural people adapt to climate change.
Priority areas	<p>REACT supports private sector investment in the following areas:</p> <ol style="list-style-type: none"> <li>1. Solutions (products, services and technologies) that can help pastoralists and smallholder farmers adapt to climate change by reducing their vulnerability to climatic shocks such as droughts or floods, or by increasing their resilience and ability to cope with such shocks. Examples are drought resistant seeds, post-harvest storage, water management technologies (eg harvesting, conservation and irrigation), micro-insurance or early weather warning systems.</li> <li>2. Increased access to low cost clean energy for rural businesses and households. This includes cost effective renewable electricity, commercially viable renewable fuels and other clean energy alternatives.</li> </ol>



	3. Financial services that increase access to finance for low cost clean energy and climate adaptation technologies or catalyse financial solutions, such as supply chain and end user financing for consumer renewable energy products
Country focus areas	<p>East Africa – currently REACT is investing in 32 companies in Burundi, Kenya, Rwanda, Tanzania, Uganda, of which 12 are in Mozambique.</p> <ul style="list-style-type: none"> <li>• 11 businesses in renewable energy (6 renewable energy power generation businesses; 7 businesses targeting the replacement of fuels with biomass, biogas and biofuels.</li> <li>• 2 businesses aimed at increasing lending by MFIs through clean energy loans.</li> <li>• 5 businesses operating in adaptation.</li> </ul>
Total Contribution	US\$34 million
Donors	UK, Netherlands, Canada, Sweden, Denmark, Australia, Alliance for a Green Revolution in Africa (AGRA), The International Fund for Agricultural Development (IFAD)
Nature of financial instrument or delivery mechanism	<p>REACT provides patient risk capital (grants, interest free loans) to businesses with potentially transformative climate change solutions and which seek to make a profit, go to scale and to have a deep social impact.</p> <p>The AECF requires that the applicant provides matching funds from their own and their partners or third parties e.g. bank loans at least equal to or greater than, 50% of the total cost of the project (i.e. the ratio of company funds to AECF funds must be at least equal to (and preferably greater than 50:50). Of the matching funds provided by the company at least half must be cash; the remaining can be measurable and verifiable in-kind contributions. In kind contributions may include staff salaries, equipment, vehicles and other items that are already owned by the company and made available specifically for the project.</p>
Web site	<a href="http://www.aecfafrica.org/windows/react-window">http://www.aecfafrica.org/windows/react-window</a>
Date created	October 2011
Administrating organization	The Fund Manager of the AECF and the REACT Window is KPMG International Development Advisory Services in association with Triple Line Consulting (TLC).

#### 4. AUSTRIAN NAMA INITIATIVE (ANI)

Objective	<p>The <i>Austrian NAMA Initiative</i> aims to identify NAMAs to be supported in selected countries for preparation and implementation. These NAMAs will contribute to (i) decrease greenhouse gas emissions, (ii) foster sustainable development and (iii) build capacity in the host countries. NAMA activities, <b>including projects and programmes</b>, that foster <i>access to sustainable energy</i>, should be at the core of the initiative.</p>
Priority areas	<p>Areas include small-scale renewable and energy-efficient technologies (such as small hydropower, wind parks of limited size, energy-efficient lighting), as well as, household-centered or community based technologies (PV panels, solar-thermal installations, efficient cook stoves, and others).</p>

Country focus areas	LDCs and SIDs
Total contribution	€1 million. May amount per NAMA is €500,000
Donors	Austrian Ministry of Agriculture and Forestry, Environment and Water Management
Nature of financial instrument	Climate finance supporting preparation and piloting of NAMAs
Web site	<a href="http://www4.unfccc.int/sites/nama/_layouts/un/fccc/nama/InformationOnSupportAvailable.aspx?ID=52&amp;viewOnly=1">http://www4.unfccc.int/sites/nama/_layouts/un/fccc/nama/InformationOnSupportAvailable.aspx?ID=52&amp;viewOnly=1</a>
Date created	13.03.2014
Administrating organization	KPC - Kommunalkredit Public Consulting GmbH <a href="mailto:nama@kommunalkredit.at">nama@kommunalkredit.at</a>

## 5. AFRICAN RENEWABLE ENERGY FUND (AREF)

Objective	An investment fund that is in co-operation with the African Biofuel and renewable Energy Company (ABREC) and the sustainable development fund for Africa (SEFA). The fund will contribute to the development of the biofuel and renewable energy industry in the African region, with a particular focus on West African countries. In doing so, the fund will aim to provide investors with superior returns through investments in biofuels and renewable energy projects which will generate Certified Emission Reductions (CERs). Investors in the fund will receive CERs besides financial returns.
Priority areas	The AREF fund supports the African will focus on investing in and procuring CERs or supporting renewable energy. Main focus are following project types: Biofuels, Fuel-Switching to Biomass Energy, Hydro power, Wind, Methane leakage, avoidance from gas pipelines, Methane capture from landfill
Country focus areas	All African countries. In the first phase (2008) the emphasis will be placed on the ECOWAS countries: Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone and Togo.
Total Contribution	March 12, 2014 had US \$100 million of committed capital to support small- to medium-scale independent power producers (IPPs). The fund, which will be headquartered in Nairobi, is targeting a final close of US \$200 million by 2015 to be invested in grid-connected development stage renewable energy projects including small hydro, wind, geothermal, solar, biomass and waste gas.
Donors	Multilateral
Nature of financial instrument or	<ul style="list-style-type: none"> <li>Loans (including synthetic local currency, and syndicated loans)</li> <li>Guarantees</li> <li>Equity</li> </ul>

delivery mechanism	<ul style="list-style-type: none"> <li>• Quasi - equity</li> <li>• Risk management products</li> </ul>
Web site	<a href="http://www.bidc-ebid.com/en/fondsbiocarburant.php">http://www.bidc-ebid.com/en/fondsbiocarburant.php</a>
Administrating organization	The fund is managed by the African Biofuel and Renewable Energy Company (ABREC) and Berkeley Energy Africa Limited (Berkeley Energy). The AfDB and ABREC support all activities in Africa providing investment and technical assistance in the form of feasibility studies, capacity building and technology transfer. <a href="http://www.faber-abref.org/index_english.php">http://www.faber-abref.org/index_english.php</a> .

## 6. CLIMATE CHANGE CAPITAL (CCC) CARBON FUND

Objective	CCC Carbon Finance and Bunge Environmental Markets manage the world's largest carbon fund which is managed by CCC investment group. The objective of the fund is to acquire a diversified portfolio of carbon credits from both CDM and VERs.
Priority areas	Developed more than 300 CDM and VER projects in the following sectors:  Coal mine methane extraction, industrial gas destruction, leaky gas repairs, waste-to-energy, wind, hydro, industrial energy efficiency and forestry.
Country focus areas	Global
Total contribution	Since 2005, the group has managed US\$1 billion of capital commitments and has advised or developed a portfolio of over 300 CDM and VER projects in over 25 countries through its local offices in Europe, North America, South America, Africa and across Asia.
Donors	N/A
Nature of financial instrument or delivery mechanism	CCC has developed investment vehicles including a managed account, a deal syndication, a Private Equity structure fund and two Hedge Funds. Provide: <ul style="list-style-type: none"> <li>• Equity and debt investment</li> <li>• Upfront financing through carbon purchase agreements or pay-on-delivery carbon purchases.</li> </ul>
Web site	<a href="http://www.climatechangecapital.com/environmental-markets">http://www.climatechangecapital.com/environmental-markets</a>
Date created	2005
Administrating organization	CCC

## 7. CARBON INITIATIVE FOR DEVELOPMENT (CI-DEV)

Objective	<p>The Carbon Initiative for Development (Ci-Dev) supports low-carbon investments in improving energy access of rural households in least developed countries using carbon-linked results-based payments and builds on the infrastructure that has been created by the Clean Development Mechanism (CDM). The objectives of Ci-Dev include:</p> <ul style="list-style-type: none"> <li>• To demonstrate that results-based payments for the purchase of carbon-based certified emission reductions (CERs) can lead to successful and viable business models that improve energy access for rural households while promoting increased private sector participation and sharing subsequent lessons learned for further scaling and replication.</li> <li>• To influence future carbon market mechanisms so that low income countries, and especially least developed ones, receive a greater and fairer share of carbon finance, resulting in high development benefits that avoid carbon emissions.</li> <li>• To support low income countries in developing standardized baselines and establishing “suppressed demand” accounting standards in key areas such as rural electrification, household energy access and energy efficiency.</li> <li>• To contribute proposals to further improve and extend the scope of the CDM for use by least developed countries (LDCs), in particular for Programmes of Activities (POA).</li> </ul>
Priority areas	Ci-Dev will focus on projects that improve and increase access to energy, using clean and efficient technologies
Country focus areas	Low income countries
Total contribution	\$123 million total. Of which US\$ 27 million is allocated to the Readiness Fund and US\$ 96 million to the Carbon Fund
Donors	UK, Sweden, Swiss-based Climate Cent Foundation
Nature of financial instrument or delivery mechanism	<p>Ci-Dev comprises two reinforcing components, the Readiness Fund and the Carbon Fund.</p> <ul style="list-style-type: none"> <li>• The Readiness Fund finances capacity building activities in LDCs to develop standardized baselines and to provide technical assistance for energy access programs. It supports the development of new methodologies and proposals for simplified CDM rules, and dissemination of results. Where needed, it also provides technical assistance to the programs supported by the Carbon Fund and for the dissemination of knowledge gained from those pilot programs.</li> <li>• The Carbon Fund provides results-based payments for CERs generated by low-carbon energy access programs piloting innovative business models.</li> </ul>
Web site	<a href="http://www.ci-dev.org">http://www.ci-dev.org</a>
Date created	2011
Administering organization	World Bank Group

## 8. CARBON MARKET PROGRAM (CMP)

Objective	<p>The Carbon Market Program (CMP) provides <b>technical assistance financing</b> to support the development of greenhouse gas (GHG) mitigation projects (in developing countries in Asia and the Pacific that are eligible under the Clean Development Mechanism (CDM) of the Kyoto Protocol (KP). The program provides upfront carbon financing up until 2020 via the <b>Future Carbon fund</b>.</p> <p>The Technical Support Facility (TSF) provides technical support and marketing support to project sponsors to find good prices for CERs.</p>
Priority areas	<ul style="list-style-type: none"> <li>• Eligible for the CDM</li> <li>• Focus: renewable energy, energy efficiency and methane capture and utilization</li> </ul>
Country focus areas	<ul style="list-style-type: none"> <li>• Developing country in an Asian LIC or Pacific region, must be ADB regional member country and have a DNA.</li> </ul>
Total contribution	115 million USD
Donors	Finland, Belgium, Sweden, Republic of Korea, Eneco Energy Trade the Netherlands
Nature of financial instrument or delivery mechanism	<p>Grants,</p> <p>Technical assistance</p> <p>Provision of upfront financing against CER delivery.</p>
Web site	<a href="http://www.adb.org/site/funds/funds/future-carbon-fund-fcf">http://www.adb.org/site/funds/funds/future-carbon-fund-fcf</a>
Date created	January 2009
Administrating organization	ADB

## 9. CARBON PARTNERSHIP FACILITY (CPF)

Objective	The CPF's objective is to develop emission reductions and support their purchase, on a larger scale through the provision of carbon finance to long-term investments.
Priority areas	<p>The CPF has utilized the CDM Programme of Activities modality for its first set of programs in areas such as solid waste management, renewable energy and energy efficiency.</p> <p>The CPF has begun work to develop conceptual approaches and initial pilots for the next generation of crediting instruments, which will target broad segments of the economy, including sector-based approaches. It is unlikely to focus on LIC but may include activities where scale is possible.</p>
Country focus areas	Programmatic and sector-based carbon crediting for the post 2012 world. The purpose of the CPF is to innovate in developing scaled up emission reduction programs in developing countries
Total contribution	Available capital of US\$ 99 million

Donors	Sweden, Spain, Norway and Italy, and the European Commission.
Nature of financial instrument or delivery mechanism	<p>The Facility is composed of two trust funds: (i) the Carbon Asset Development Fund for the preparation and implementation of emissions reduction programs; and (ii) a carbon fund to obtain credits from the implemented programs.</p> <p>The mechanism is designed to support long-term investments in GHG reduction projects that are suitable for scaling-up.</p>
Web site	<a href="http://cpf.wbcarbonfinance.org/cpf/">cpf.wbcarbonfinance.org/cpf/</a>
Administrating organization	World Bank

## 10. CLEAN COOKING INITIATIVE FOR AFRICA( CCI)

Objective	This activity will support the introduction of results-based financing/output-based aid (RBF/OBA) approaches to promote enterprise-based, large-scale dissemination and the adoption of clean cooking solutions in Sub-Saharan Africa in order to improve access to clean household energy and make biomass use and supply more sustainable for Africa.
Priority areas	Clean cooking stove dissemination in Africa
Country focus areas	<p>Activities include:</p> <ol style="list-style-type: none"> <li>1) Two regional workshops among stakeholders to discuss the design of the Clean Cooking Initiative (one regional held to date in Nairobi),</li> <li>2) Publicize market research activities; and</li> <li>3) Report on 3-5 pilot countries on the biomass energy industry with a focus on market potential, market segments, value proposition and market barriers.</li> </ol> <p>Useful base information for development of methodologies and standardized approaches.</p>
Total contribution	US\$200,000
Donors	The Energy Sector Management Assistance Program (ESMAP)/Public-Private Infrastructure Advisory Facility (PIIAF)/Global Partnership on Output-Based Aid (GPOBA) facility, together with ESMAP block grant and Africa Renewable Energy and Access Program (AFREA) Trust Fund will finance (i) the initial stock- taking, market research and other upstream activities that would lead to the development of a viable large-scale clean cooking program, and (ii) the design of the program in 3-4 pilot countries
Nature of financial instrument	Technical assistance
Web site	<a href="https://www.esmap.org">https://www.esmap.org</a>
Date created	2012

Administrating organization	World Bank Group
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## 11. CLEAN TECHNOLOGY FUND (CTF)

Objective	The Clean Technology Fund (CTF) seeks to <b>promote scaled-up financing for</b> demonstration, deployment and transfer of low-carbon technologies with significant potential for long-term greenhouse gas emissions savings. Supports public and private sector initiatives.
Priority areas	Power Sector – renewable energy and efficient technologies, Transport Sector – efficiency and modal shifts Energy efficiency – buildings, industry and agriculture
Country focus areas	Primarily middle income countries but also have an investment plan for Nigeria. Countries must be eligible for ODA and have active multilateral development bank country programs.
Total contribution	250 million USD to leverage US\$ 1 billion
Donors	Australia, Canada, France, Germany, Spain, Sweden, USA and confidential sources of finance.
Nature of financial instrument or delivery mechanism	Concessional loans, grants, and guarantees through the multilateral development banks. CTF financing provides a grant element tailored to cover the identifiable additional support necessary to make the project viable, thereby providing the appropriate incentive to facilitate deployment of low carbon technologies at scale.
Web site	<a href="https://www.climateinvestmentfunds.org/cifnet/?q=country/nigeria">https://www.climateinvestmentfunds.org/cifnet/?q=country/nigeria</a>  Nigerian Government Focal Point: Mr. Jare Adejuwon   Head of Special Climate Change Unit   Nigerian Federal Ministry of Environment   <a href="mailto:jareadejuwon@yahoo.com">jareadejuwon@yahoo.com</a> AfDB: Mrs. Marie-Hellen Minja   <a href="mailto:m.minja@afdb.org">m.minja@afdb.org</a> , Mr. Monojeet Pal
Date created	CTF created in 2008. Nigeria investment plan finalized 2011 and updated in 2014
Administrating organization	The World Bank is the Trustee and Administrating Unit of the CTF Trust Fund  The World Bank Group, The African Development Bank, the Asian Development Bank, the European Development Bank, and the Inter-Amecian Development Bank are the implementing agencies for CTF investments.  AfDB administers the finance for Nigeria
1. Sub – Program that could be relevant for Ci Dev program	<ul style="list-style-type: none"> <li>Credit for Renewable Energy and Energy Efficient Project. USD 25 million approved for Nigeria on April 11, 2014.</li> <li>Renewable Energy and Energy Efficiency through Local Banks in Nigeria– USD 50 million Jan 2013. (Second tranche of CTF Funding)</li> </ul>

## 12. CLIMATE FINANCE INNOVATION FACILITY (CIF)

Objective	The overall aim of CIF is to help mobilize a scaling up of financial flows into climate change solutions. By encouraging early action within the finance community, the Facility helps cultivate on-the-ground leadership amongst financial actors that can have replication effects across markets and geographies.
Priority areas	The Facility provides <i>developing country financial institutions</i> with technical assistance and funding for the development of climate focused financial products and services. It therefore helps financial institutions innovate new products and services for climate technology. A broad range of activities are eligible for support, ranging from feasibility studies, to market assessments and legal reviews.
Country focus areas	Developing countries in Asia
Total contribution	USD 35.2 million.
Donors	ADB, BMU, KfW and UNEP.
Nature of financial instrument or delivery mechanism	The Facility is committed to helping financial institutions of developing countries and it can provide support for the following activities: business planning; carbon finance; feasibility studies; financial advisory services; market surveys; procedural development; and risk analysis. Funding (up to 50% of the total cost) and technical assistance cannot be channeled directly to single projects or initiatives.
Web site	<a href="http://fs-unep-centre.org/publications/climate-finance-innovation-facility-brochure">http://fs-unep-centre.org/publications/climate-finance-innovation-facility-brochure</a>
Administrating organization	United Nations Environment Programme and the Frankfurt School of Finance & management.

## 13. ElectriFI

Objective	<p>Accelerate sustainable electrification in developing countries by:</p> <ul style="list-style-type: none"> <li>• Increasing the provision of risk capital addressing the lack of equity</li> <li>• Increasing availability of long term debt</li> <li>• Through standardization increase scale</li> <li>• Through structuring / arranging / advising increase the number of projects reaching financial close</li> </ul>
Priority areas	<p>1) Grid-connected (un)solicited solar-PV;</p> <p>2) Replacement of diesel by solar, by corporate or social entities (breweries, mines, hospitals, schools, etc.), including mini-grids where the corporates provide for an anchor load, and,</p> <p>3) Off-grid PV solutions.</p>



Country focus areas	Developing countries
Total contribution	€125 million. Beneficiaries next to the end-users are companies active in off-grid lighting, mobile phones, and computers. The project manager shall explore other venues to attract long term debt funding. Part of the Terms of Reference is investigating the possibility of crowd-funding (example: Co-operation of US and EU crowdfunding platforms for energy projects to overcome regulatory issues).
Donors	European Commission
Nature of financial instrument or delivery mechanism	Long term subordinated debt via convertible grants to electrification ventures. The returns will be market conform i.e. roughly 2/3 of the expected equity returns of a specific venture, but In case the investment case requires ElectriFI can decide: <ul style="list-style-type: none"> <li>• not to convert the grant into subordinated debt</li> <li>• to convert only partially the grant into subordinated debt</li> <li>• to (partial) convert but forgo (partially) on returns which can be zero interest</li> </ul>
Web site	No website established yet. Information secured from press release at the EC website ( <a href="http://europa.eu/rapid/press-release_IP-14-630_en.htm">http://europa.eu/rapid/press-release_IP-14-630_en.htm</a> ) and from information about the workshop held by the EC to launch the initiative available at: <a href="http://capacity4dev.ec.europa.eu/public-energy/minisite/empowering-rural-electrification-workshop">http://capacity4dev.ec.europa.eu/public-energy/minisite/empowering-rural-electrification-workshop</a>
Date created	June 2014
Administrating organization	European Commission will appoint a manager for this activity.

#### 14. ENERGISING DEVELOPMENT (ENDEV)

Objective	Provide reliable and sustainable energy access to households, social institutions and SMEs in developing countries. EnDev surpassed its original goals and by March 2013, more than 10.33 million people have gained access to either electricity or improved cookstoves as a result of the program. The program will therefore continue.
Priority areas	Support photovoltaic systems, micro hydro power plants, improved cook stoves, biogas plants and digesters. For areas where a power grid is in close distance the program also facilitates grid extension or densification. For remote areas with no access to a central grid system (and no plans to be reached by the grid in the near future), the program supports decentralised or mini-grid energy solutions.
Country focus areas	Developing countries
Total contribution	Since 2005, 245.8 million Euros have been committed by the Dutch-German-Norwegian-Australian-British-Swiss Partnership to support sustainable access to modern energy services.
Donors	Holland, Germany, Norway, Australia, UK, Switzerland.

Nature of financial instrument or delivery mechanism	Results-based finance approach that results in the provision of debt, equity and training support.
Web site	<a href="http://endev.info/content/Main_Page">http://endev.info/content/Main_Page</a>
Date created	2005
Administering organization	German GIZ

## 15. ENERGY + PARTNERSHIP

Objective	Energy+ was established to support developing countries in achieving access to renewable energy while reducing carbon emissions. Using a phased approach, it ultimately leads to results-based payments for actions that will result in low carbon transformation of an economy or a sector.
Priority areas	Energy+’ focus is on household-level services and devices, although some projects may also address community-level energy access. Energy+ prioritizes basic levels of energy access to a large number of households, rather than a higher level of energy access to fewer households.
Country focus areas	<p>Four countries have to date been identified as being places where Energy+ can make a difference and these include:</p> <ul style="list-style-type: none"> <li>• Kenya – support will be provided to implement the ‘Kerosene Free Kenya’ program focusing initially on solar home systems and cook stoves. Use of kerosene is costing Kenya about \$500 million annually.</li> <li>• Liberia – Because of the civil war, the urgent need for energy in Liberia is now covered by large diesel generators. Liberia has the potential to switch to hydro power, bio and solar energy, and reduce their dependence on imported fossil fuel. Support will be provided to prepare an integrated energy access and climate plan and to build necessary capacity, as well as for electrification.</li> <li>• India – Norway has already supported rural electrification with the use of photo voltaic technologies. Now, a new large fund to further support rural electrification based on reverse auctioning will be established. The fund is a result of joint efforts from India, the UK and Norway.</li> <li>• Ethiopia – Ethiopia has developed a Climate Resilient Green Economy strategy outlining Ethiopia’s ambitions to become a middle-income country by 2025 and keeping the emissions at today’s level.. Energy + signed a partnership with the Federal Democratic Republic of Ethiopia in 2012 for a total of NOK 500 million over five years. Phase 2 will start in 2015. Ethiopia is implementing solar PV, cook stoves (9 million stoves by 2015, reducing emissions by 14 million tCO<sub>2</sub>e), water pumping, biofuels and biogas.</li> </ul> <p>In addition Energy + is also active in Nepal, and Bhutan.</p>

Total contribution	Not determined
Donors	Nearly fifty countries and organizations have signed up to the Energy+ Partnership. This comprises developing countries (e.g. Ethiopia, Kenya, Maldives, Senegal), developed countries (e.g. UK, Denmark, France, Norway), UN agencies (UNDP, UNEP, UNIDO), multilateral development banks (World Bank, ADB, IDB, AfDB), international organizations (e.g. IEA, OECD), private sector (WBCSD), think-tanks (e.g. CCAP) and civil society (e.g. WWF).
Nature of financial instrument or delivery mechanism	<p>Energy+ is organized in three phases:</p> <ul style="list-style-type: none"> <li>• Strategy development: The first phase supports readiness activities using initial payments for capacity building, to guide policy developments and strategies, as well as to facilitate financing;</li> <li>• Implementation of policies and measures: Next, implementation activities are added, such as by establishing credit lines or applying monitoring reporting and verification (MRV) protocols;</li> <li>• Payment by result: The last phase provides results-based payments made on the basis of measured and verified outcomes.</li> </ul>
Web site	<a href="https://www.regjeringen.no/en/topics/foreign-affairs/development-cooperation/energy_plus/id672635/">https://www.regjeringen.no/en/topics/foreign-affairs/development-cooperation/energy_plus/id672635/</a>
Date created	launched in 2011
Administering organization	Norwegian Government's Ministry of Foreign Affairs

## 16. ESMAP RESULTS BASED FUNDING FOR ENERGY SECTOR DEVELOPMENT (ESMAP/RBF)

Objective	To assess how, and under what circumstances, results-based funding can be used to improve outcomes and scale up financing for energy sector development. Under this work program ESMAP has supported the design, implementation and assessment of results-based funding—including provision of support to the Climate Investment Funds (CIF) and Energy+, and by funding two projects (in Indonesia and Lao) exploring the use of results-based funding for the promotion of improved cookstoves.
Priority areas	<ul style="list-style-type: none"> <li>• Analytical work and guidance on when and how to use results-based funding instruments in the energy sector</li> <li>• Knowledge management and outreach to learn and share lessons on results-based funding programs and projects, including with our development partners</li> <li>• Operational support to country-based technical assistance projects to design and test out new results-based concepts and ideas</li> </ul>
Country focus areas	Global
Total contribution	Not determined
Donors	Activities support via donors contributing to the World Bank Climate Investment Funds and Norwegian investment under the Energy+ Partnership

Nature of financial instrument or delivery mechanism	Technical Assistance, knowledge management.
Web site	<a href="https://www.esmap.org/Results_Based_Funding">https://www.esmap.org/Results_Based_Funding</a>
Date created	Work program created in 2011
Administrating organization	World Bank Group

#### 17. FUND FOR THE JOINT CREDITING MECHANISM (FJCM)

Objective	Trust fund to promote low carbon technologies eligible for the JCM in Asia Pacific
Priority areas	Support of low carbon technologies
Country focus areas	ADB member countries that have signed the memorandum of understanding for the crediting mechanism with Japan. Include: Bangladesh, Cambodia, Indonesia, Laos, the Maldives, Mongolia, Palau and Vietnam.
Total contribution	US\$ 17.65 million
Donors	Japan
Nature of financial instrument or delivery mechanism	Grant component that will: a) Buy down the interest of the ADB loan b) Assist in overcoming the high initial capital costs of a project and to support maintenance. Technical assistance in form of training, research and policy advise.
Web site	N/A
Date created	2014
Administrating organization	Asian Development Bank

#### 18. FUTURE OF THE CARBON MARKET FOUNDATION (FCM)

Objective	Works to raise the profile of programmatic mitigation approaches and builds capacity to integrate programmatic approaches into national climate mitigation policies.
Priority areas	Supporting credit-based programmatic mitigation projects in developing countries.

Country focus	Developing countries
Total contribution	€4 million per year.
Donors	Finance provided by the International Climate Initiative (IKI)
Nature of financial instrument or delivery mechanism	Provides start up finance (valued of approx. up to €2 million per selected activity) for approx. 2 selected programmatic activities per year or approaches that “go beyond the CDM. Two programmes in Africa received first tranches of start-up funding. One of the supported programmes promotes the distribution of efficient stoves to farmers in rural villages in Zambia. The second programme promotes fuel switch from charcoal to wood chips for cooking in urban areas of Senegal.
Web site	<a href="http://www.carbonmarket-foundation.org/">http://www.carbonmarket-foundation.org/</a>
Date created	2014
Administrating organization	BMUB and the KfW manage the foundation

## 19. GLOBAL CLIMATE CHANGE ALLIANCE (GCCA)

Objective	<p>The Global Climate Change Alliance (GCCA) is an initiative of the European Union. Its overall objective is to build a new alliance on climate change between the European Union and the low income countries and small island developing states (SIDs) and poor developing countries that are most affected and that have the least capacity to deal with climate change.</p> <p>Financing from the GCCA supports:</p> <ul style="list-style-type: none"> <li>• the <b>Intra-ACP program</b> – that supports the sub-programs of ClimaDev Africa program and 4 regional components in Eastern &amp; Southern, Western Africa, the Caribbean and the Pacific. (see discussion on sub programs below)</li> <li>• National programs</li> <li>• <b>Regional program</b> for Asia to support adaptation, and the mainstreaming of climate change into policy and development initiatives.</li> <li>• <b>Local Climate Adaptive Living Facility (LoCAL)</b> for adaptation and resilience financing. Seek to mainstream climate change adaptation into planning and budgeting systems.</li> </ul>
Priority areas	<p>Mainstreaming climate change into poverty reduction and development strategies by focusing on developing a platform for dialogue and co-operation and provision of technical support for five key areas:</p> <ul style="list-style-type: none"> <li>• Institutional strengthening to integrate climate into national development planning and policymaking and monitoring.</li> <li>• Enhancing participation in the global carbon market by building the capacities of partner countries to access climate finance and by ensuring a more equitable geographic distribution of financing opportunities linked to the CDM.</li> <li>• Reducing emissions from deforestation and forest degradation (REDD)</li> <li>• Disaster risk reductions</li> </ul>

	<ul style="list-style-type: none"> <li>Adaptation</li> </ul>
Country focus areas	Low income countries and SIDs
Total contribution	US\$ 385,36 million (Gross) <ul style="list-style-type: none"> <li>8 US\$ million to ClimDev from GCCA, with contributions from Norway, Sweden and UK (DFID)</li> </ul>
Donors	Cyprus, Czech, EC fast start funding, Estonia, European Community, European Development Fund, Ireland, and Sweden
Nature of financial instrument	Funding is delivered as a grant. Focus is on projects.
Web site	<a href="http://www.gcca.eu/about-the-gcca">http://www.gcca.eu/about-the-gcca</a>
Date created	2007
Administering organization	European Commission - Directorate-General for Development and Cooperation - EuropeAid
1. Sub – Program that could be relevant for Ci Dev program.	<b>ClimDev Africa</b> will end in Dec. 2015. Has provided support to African negotiators group to support policy dialogue and climate change and development policy making processes. Focus on post 2012 climate agreement through analytical studies and consultative workshops supporting the development of a common African position on climate issues.. Contact Dr. Fatima Denton, Coordinator/Officer In-Charge for the African Climate Policy Centre (ACPC) of the United Nations Economic Commission for Africa (UNECA): <a href="mailto:FDenton@uneca.org">FDenton@uneca.org</a>
2. Sub – Program that could be relevant for Ci Dev program	<b>GCCA regional programme for Western Africa</b> Funds: 4 Million US\$ GCCA. Some of activities support training for African negotiators. Contact: Mrs Edwige Botoni, Programme Manager of the West-African GCCA component and CILSS expert in natural resources management: <a href="mailto:edwige.botoni@cilss.bf">edwige.botoni@cilss.bf</a>

## 20. GLOBAL CLIMATE CHANGE PROGRAMME (GCCP)

Objective	Includes both adaptation and mitigation objectives. The program is has leveraged additional investment from the following multilateral institutions and organisations: IBRD, AfDB, ADB and UNDP.
Priority areas	Main focus in LIC in relation to climate change mitigation is policy and capacity building.
Country focus areas	Focuses aid primarily on China, India, South Africa and the Andean region.
Total contribution	Unclear
Donors	Switzerland

Nature of financial instrument	Grants
Web site	<a href="http://www.sdc-climateandenvironment.net/en/Home/About_Us/GPCC/Swiss_Climate_Programmes">http://www.sdc-climateandenvironment.net/en/Home/About_Us/GPCC/Swiss_Climate_Programmes</a>
Date created	Not defined
Administering organization	Swiss Agency for Development and Cooperation (SDC) provide the finance and the programs are administered by the SDCs Global Programme Climate Change team.
1. Sub – Program relevant for Ci Dev program	<ul style="list-style-type: none"> <li>• <b>Transforming the charcoal sector in Tanzania</b> – Project ends December 2017. Uses REDD methodologies in 2,000 charcoal producing households and 3'000 smallscale farmers in Kilosa and Mpwapwa districts of Morogoro and Dodoma regions respectively.</li> </ul>
2. Sub – Program that appears to be relevant for Ci Dev program	<ul style="list-style-type: none"> <li>• <b>Training on integrating climate change into development co-operation.</b> The Eastern and South Africa Partnership Program (ESAPP) focuses on Eritrea, Ethiopia, Kenya, Tanzania, Mozambique and Madagascar. The Swiss Agency for Development and Cooperation fund the program that is implemented by the Centre for Development and Environment (CDE) at Bern University.</li> </ul>

## 21. GLOBAL CLIMATE CHANGE PURCHASING PROGRAM (GCCPP)

Objective	<ul style="list-style-type: none"> <li>• Development of carbon market instruments</li> <li>• Acquire cost-effective emission reductions to comply with Sweden's International commitments (Kyoto Protocol and EU Effort Sharing Decision) as well as the Swedish national target 2020 (40 M tons from international mechanisms)</li> <li>• Contributing to sustainable development in host countries</li> </ul>
Priority areas	<p>The GCCPPP takes a three-pronged approach to mitigation:</p> <ul style="list-style-type: none"> <li>• Promotion of decentralized rural electrification and access to local renewable energy sources (biomass and mini-hydro)</li> <li>• Exchange of knowledge and technology for energy efficiency in the building sector</li> <li>• Reduction of deforestation and forest degradation, promotion of forest restoration and sustainable land use.</li> </ul>
Country focus areas	LDC and small island developing states (SIDs)
Total contribution	Sweden will purchase up to 40 million tons of CO <sub>2</sub> equivalent. Last call closed in February 2013
Donors	Swedish Energy Agency.
Nature of financial instrument	CER up take up against an ERPA. CERs only purchased up until 2020
Web site	<a href="http://www.energimyndigheten.se/Global/Internationellt/">http://www.energimyndigheten.se/Global/Internationellt/</a>

Date created	Over a decade ago.
Administrating organization	Swedish Energy Agency operates the Swedish CDM and JI Purchasing program and manages climate policy research program.
1. Sub – Program	Swedish CDM and JI purchasing program. Call for projects on website of energy agency.

## 22. GLOBAL ENERGY EFFICIENCY AND RENEWABLE ENERGY FUND (GEERF)

Objective	GEEREF was structured to <b>catalyze private sector investments</b> into funds and underlying projects by leveraging the public sector seed contributions. It is a <b>fund of funds</b> and is advised by the EIB. GEEREF seeks to provide access to sustainable energy and increase energy efficiency in developing countries and economies in transition.
Priority areas	<p>GEEREF invests in specialized funds developing small to medium-sized projects in the following sectors:</p> <ul style="list-style-type: none"> <li>• Renewable Energy – including small hydro, solar, wind, biomass and geothermal; and</li> <li>• Energy Efficiency – including waste heat recovery, energy management in buildings, co-generation of heat and power, energy storage and smart grids.</li> </ul> <p>GEEREF funds typically work with experienced local developers with a pipeline of projects seeking investment pre-construction.</p>
Country focus areas	GEEREF invests exclusively in funds targeting projects in emerging markets that qualify as recipients for Official Development Assistance. There are 148 countries recognized as such by the Organization for Economic Co-operation and Development and GEEREF's funds can target all of these other than candidates for accession to the European Union.
Total contribution	Donations totaling € 112 million at launch in 2008. GEEREF is currently seeking a similar amount of private capital from private sector investors, to bring the total funds under management above € 200 million. The first private capital commitments were signed in the end of 2013 and fund-raising efforts are ongoing.
Donors	GEEREF was initiated by the European Commission in 2006 and launched in 2008 with funding from the European Union, Germany and Norway.
Nature of financial instrument or delivery mechanism	<p>This fund provides additional funds (10 million USD or more ) to funds investing in small scale renewable energy and energy efficiency projects in ODA eligible countries.</p> <p>Currently supporting the following funds:</p> <ol style="list-style-type: none"> <li>1. Armstrong asset management (South East Asia fund): <a href="http://www.armstrongam.com">www.armstrongam.com</a></li> <li>2. Di Frontier energy and carbon fund (E/S Africa): : <a href="http://www.frontier.dk">www.frontier.dk</a></li> <li>3. Emerging Energy Latin America Fund II: <a href="http://www.emergingenergy.com">www.emergingenergy.com</a></li> <li>4. Evolution One (southern Africa) : <a href="http://www.inspiredevolution.co.za">www.inspiredevolution.co.za</a></li> <li>5. MGM Sustainable Energy Fund (providing equity and mezzanine financing to Columbia, Mexico, Central America and Caribbean: <a href="http://www.mgminnovacap.com">www.mgminnovacap.com</a></li> <li>6. Renewable Energy Asia Fund – private equity fund providing equity financing (Asia) - <a href="http://www.berkeley-energy.com">www.berkeley-energy.com</a></li> </ol>



Web site	<a href="http://geeref.com/">http://geeref.com/</a>
Date created	GEEREF was initiated by the European Commission in 2006(1) and launched in 2008
Administrating organization	EIB

### 23. GLOBAL PARTNERSHIP ON OUTPUT-BASED AID (GPOBA)

Objective	GPOBA's mandate is to fund, design, demonstrate, and document OBA approaches to improve the delivery of basic services to the poor in developing countries. OBA approaches have been tested in every region and applied in six sectors, including <a href="#">energy</a> , <a href="#">water and sanitation</a> , <a href="#">health</a> , <a href="#">solid waste management</a> , <a href="#">education</a> , and <a href="#">information and communication technology</a> (ICT). OBA projects have taken a diversity of approaches, each one with a unique design and financial model, incorporating lessons learned from previous experiences.
Priority areas	GPOBA aims to concentrate on: a) designing output-based aid (OBA) projects in less-tested sectors and in fragile and conflict-affected situations; b) working on scale-ups and collaborating with governments to mainstream successful OBA pilots via OBA Funds and/or OBA Facilities; and c) strengthening centres of excellence (CoE) through a solid Knowledge Management function and supporting in a more strategic way the World Bank's Program-for-Results activities, as well as results-based approaches with other development partners (ODPs).
Country focus areas	Global
Total contribution	As of September 2014, through a portfolio of 40 projects with \$190.7 million in commitments for subsidy funding and ongoing technical assistance activities.
Donors	GPOBA is a partnership of donors working together to support output-based aid (OBA) approaches. GPOBA was established in 2003 by the United Kingdom's <a href="#">Department for International Development</a> (DFID) as a multi-donor trust fund administered by the <a href="#">World Bank</a> . Since 2003, four additional donors have joined the partnership: the International Finance Corporation (IFC), the <a href="#">Dutch Directorate General for International Cooperation</a> (DGIS), the <a href="#">Australian Department for Foreign Affairs and Trade</a> (DFAT), the <a href="#">Swedish International Development Agency</a> (Sida).
Nature of financial instrument	Subsidy funding in the form of RBF and technical assistance
Web site	<a href="http://www.gpoba.org">http://www.gpoba.org</a>
Date created	2003
Administrating organization	GPOBA is governed by a Program Council made up of one representative from each of its <a href="#">partners</a> , including a World Bank Representative who serves as Chair. The World Bank's Urban and Disaster Risk Management Department administers the GPOBA unit.

1. Sub – Program that could be relevant for Ci Dev program.	<b>GPOBA Rural Electrification Project in Uganda</b> - The US\$5.5 million GPOBA component of the project will start providing approximately 510,000 residents (102,000 households) with grid connections free of charge (this is part of a larger OBA facility funded by the World Bank, KfW, and the governments of Germany, Uganda and Norway, which could eventually provide 1.3 million service connections in the short and medium-term). A complimentary power connection loan scheme will enable end users to borrow fund to meet the cost of having the wiring in their houses/premises by a certified technician prior to being connected to the grid.
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## 24. INTERNATIONAL CLIMATE FUND (ICF)

Objective	The UK government has set up the International Climate Fund (ICF) with the aim of providing approximately £3.7 billion between April 2011 and March 2016 to help the world's poorest adapt to climate change and promote cleaner, greener growth.
Priority areas	<p>i) Demonstrate that building low carbon, climate resilient growth at scale is feasible and desirable. This will build confidence that climate resilient growth and adaptation to climate change are achievable, and it will also help to lay the foundations of a global deal.</p> <p>ii) Support the negotiations, particularly through providing support for adaptation in poor countries and building an effective international architecture.</p> <p>iii) Recognize that climate change offers real opportunities to drive innovation and new ideas for action, and create new partnerships with the private sector to support low carbon climate resilient growth.</p>
Country focus areas	Developing countries in accordance with DAC definition of ODA.
Total contribution	Funding that has so far been committed to the International Climate Fund (ICF) will be provided by DFID (£1.8bn), DECC (£1bn) and Defra (£0.9bn) (the latter with respect to forestry finance). The ICF will aim for a balanced allocation between adaptation (50%), low carbon development (30%) and forestry (20%). This is in line with the HMG agreed thematic split for Fast Start
Donors	UK
Nature of financial instrument	Finance in fund is managed by DFID, and DECC. The Ci-Dev funding contribution from the UK is sourced from the ICF.
Web site	<a href="https://www.gov.uk/government/policies/taking-international-action-to-mitigate-climate-change/supporting-pages/international-climate-fund-icf">https://www.gov.uk/government/policies/taking-international-action-to-mitigate-climate-change/supporting-pages/international-climate-fund-icf</a>
Date created	April 2011 until March 2016
Administrating organization	Proposals for ICF expenditure will be prepared for Ministers by an ICF Board comprising of Directors General from DECC, DFID, FCO, Defra, HMT, and chaired by DFID. ICF funds will be programmed through global, multilaterally administered programs (CIFs, Adaptation Fund, GCF, etc) rather than towards specific country programmes or projects.

1. Sub – Program that could be relevant for Ci Dev program	The NAMA facility funded by DECC and the German BMU with finance from the International Climate Initiative. Originally total contribution was €70 million of funding to support developing countries that show leadership on tackling climate change and that want to implement ambitious climate protection measures (NAMAs). Due to the success of the first call for projects of the NAMA Facility, BMUB and DECC will jointly contribute an additional €50 million, to fund a second bidding round for NAMA Support Projects to be held in 2014, for which 49 NAMA outlines were received.
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## 25. INTERNATIONAL CLIMATE INITIATIVE (IKI)

Objective	<p>The IKI finances and supports climate change mitigation, adaptation and biodiversity projects with climate relevance to help trigger private investments of a greater magnitude.</p> <p>The IKI aims to:</p> <ol style="list-style-type: none"> <li>1. Promote a climate-friendly economy by supporting partner countries in establishing a climate-friendly economic structure that prevents climate-damaging greenhouse gas emissions;</li> <li>2. Promote measures for climate change adaptation by supporting appropriate national programmes in selected partner countries that are especially vulnerable to climate change; and</li> <li>3. Promote and finance measures for preservation and sustainable use of carbon reservoirs/Reducing Emissions from Deforestation and Degradation (REDD).</li> </ol>
Priority areas	<p>Projects must be relevant to one or several of IKI's key focus areas. Projects should be innovative in character (technologically, economically, methodologically, and institutionally), integrated into national strategies, and contribute to national economic and social development. The effects of a project must also be sustainable.</p> <p>Other criteria for project evaluation and selection include:</p> <ul style="list-style-type: none"> <li>• Duplicability of results, prominence and multiplier effect;</li> <li>• Transferability of projects to the level of international climate cooperation;</li> <li>• Significance of the partner country in cooperating with Germany, or in the context of international negotiations;</li> <li>• Solidity and quality of concept, presentation, expected project management and monitoring; and</li> <li>• Availability of self-financing, third party financing, and financial leverage effect.</li> </ul>
Country focus areas	<p>The IKI prioritizes certain countries/regions according to its focus areas:</p> <ul style="list-style-type: none"> <li>• Climate-friendly economy; <ul style="list-style-type: none"> <li>– small and medium-sized newly industrializing countries with a high greenhouse gas reduction potential</li> <li>– consulting and capacity-building projects are preferred for the largest newly industrializing countries</li> </ul> </li> <li>• Adaptation <ul style="list-style-type: none"> <li>– countries/regions that are particularly vulnerable to climate change</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>Carbon sinks/REDD+ <ul style="list-style-type: none"> <li>countries and regions that are particularly relevant/suitable to carbon storage and biodiversity;</li> </ul> </li> <li>Biodiversity <ul style="list-style-type: none"> <li>Countries and regions particularly rich in biodiversity and/or an important role in the international CBD processes.</li> </ul> </li> </ul>
Total contribution	EUR€120 million per year
Donors	German Federal Ministry for the Environment, Nature Conservation & Nuclear Safety (BMU)
Nature of financial instrument	Originally financed from the sale of emission reductions but now funded by BMU.
Web site	<a href="http://www.international-climate-initiative.com/en/">http://www.international-climate-initiative.com/en/</a>
Date created	Initially 2008-2011. However the IKI has been extended beyond 2011
Administering organization	All funding decisions on projects are made by the BMU. The IKI works closely with GIZ and KfW. Administration of the ICI is carried out by a programme office located at GIZ, and supported by additional personnel capacity from KfW.
1. Sub Program that appears to be relevant for Ci-Dev program	<p><b>Research to support the use of the carbon market and utilize existing capacity developed under the CDM.</b> The BMUB commissions research. Research projects that are likely to be directly relevant to Ci-Dev and which have been completed in 2014 or are to be completed in 2015 include:</p> <ol style="list-style-type: none"> <li>Concepts and Country Specific Strategies for the Carbon Market Post 2012 Standardized Baselines and Their Implications for a National Measurement, Reporting and Verification (MRV) System in Least Developed Countries (LDCs) that includes analysis of projects in Sub-Saharan Africa, Senegal, Uganda and Vietnam.</li> <li>Opportunities for a Stepwise Transition from CDM towards Future Market Mechanisms and Emissions Trading and the Respective Capacity Building Needs.</li> <li>Options to Utilize CDM Design Features for Future Market Mechanisms.</li> <li>Developing Sectoral Mechanisms in the Transition Period towards a New Climate Treaty.</li> </ol>

## 26. JOINT CREDITING MECHANISM (JCM)

Objective	Bilateral Purchasing facility
Priority areas	<p>Low carbon technologies and products including renewable energy, efficient power generation, home electronics, low emission vehicles, energy savings in industry.</p> <p>Eligibility defined by Joint committee with members from Japan and Recipient – i.e. develop positive list of technologies, products.</p>
Country focus areas	Mongolia, Bangladesh, Ethiopia, Kenya, Maldives, Viet Nam, Lao PDR, Indonesia, Costa Rica, Palau, Cambodia and Mexico.
Total contribution	Budget for FY 2014 USD 12 million – per year until 2016

	Budget for JCM promotion scheme which is supporting JCM Demonstration projects is US\$38 million. Covers feasibility, design, and implementation and MRV costs of projects. Only Japanese companies can apply to administer a demonstration project. To date the scheme has selected 54 projects. Japan Fund for JCM is purchasing vehicle administered by the ADB
Donors	Japan
Nature of financial instrument	Upfront financing for purchase of Emission Reductions and grant providing technical assistance.
Web site	<a href="http://www.mmechanisms.org/e/initiatives/index.html">http://www.mmechanisms.org/e/initiatives/index.html</a>
Date created	First agreement with Mongolia in January 2013
Administrating organization	METI runs the JCM promotion scheme
1. Sub – Program that appears to be relevant for Ci Dev program	<p>The CDM reform agenda is focus of JCM since they are seeking to apply more standardized and simplified approaches. The JCM has implemented streamlined validation/verification procedures and are working to standardize baselines using default parameters and digitized worksheets. Net mitigation is applied as a result of applying conservative defaults within methodologies.</p> <p>The JCM are exploring scaled up crediting mechanisms in particular for application with GHG mitigation policies. They are developing standardized approaches. They have completed feasibility studies for the following projects in 2012/2013/2014</p> <ul style="list-style-type: none"> <li>• Bangladesh: CCGT power generation</li> <li>• Cambodia: Energy efficiency LED street lighting</li> <li>• Djibouti, Ethiopia: Geothermal Power Generation and micro hydro power</li> <li>• Kenya: Micro hydro power plant and dissemination of solar lanterns</li> <li>• Lao PDR: Energy Efficiency container date center</li> <li>• Mozambique: Bio Diesel Fuel and PV Hybrid Power Generation System</li> <li>• Myanmar: run of River micro Hydro Power Generation</li> <li>• Rwanda: Geothermal Power Generation</li> </ul>

## 27. LIGHTING AFRICA (LA)

Objective	<p>The program mobilizes the private sector to build sustainable markets that will provide millions of people in Africa not connected to grid electricity with clean, affordable, quality lighting products, most of which are solar powered.</p> <p>Lighting Africa is a key component of the Global Lighting and Energy Access Partnership (Global LEAP), an initiative of the Clean Energy Ministerial.</p>
Priority areas	Development of markets for clean off-grid lighting products in sub-Saharan Africa

Country focus areas	Sub Saharan Africa. Burkino Faso, Democratic Republic of Congo, Ethiopia, Ghana, Kenya, Liberia, Mali, Nigeria, Senegal, s. Sudan, Tanzania, Uganda
Total contribution	US\$ 25.7 million
Donors	Lighting Africa is implemented in partnership with: the Global Environment Facility (GEF), the Energy Sector Management Assistance Program (ESMAP), Good Energies Inc., The UK, Luxemburg, The Netherlands, Norway, The Public-Private Infrastructure Advisory Facility (PPIAF), The Renewable Energy & Energy Efficiency Partnership (REEEP), and the Asia Sustainable and Alternative Energy Program (ASTAE).
Nature of financial instrument	Activities include: <ul style="list-style-type: none"> <li>• Market intelligence to support entry into new markets or the mobilization of investment in lighting,</li> <li>• Quality assurance in the form of minimum standards</li> <li>• Access to finance,</li> <li>• Consumer education campaigns</li> <li>• Business development support in terms of best business practice and risk management.</li> <li>• Capacity support for governments to facilitate institutional and policy developments.</li> </ul>
Web site	<a href="https://www.lightingafrica.org/">https://www.lightingafrica.org/</a>
Date created	2009
Administrating organization	IFC and World Bank Group

## 28. LOAN SCHEME FOR COUNTRIES WITH < 10 REGISTERED CDM PROJECTS (LS)

Objective	To address the regional imbalance in CDM project registration by providing a means of supporting CDM project development in LDCs, particularly in Africa.
Priority areas	All CDM eligible project activities in countries with less than 10 CDM registered projects.  Projects must have high chance of registration and generate at least 7,500 tCO <sub>2</sub> per year in LDC and 15000 tCO <sub>2</sub> in non LDCs
Country focus areas	Global
Donors	The scheme is to be funded by interest on surplus the UNFCCC Secretariat has accumulated. The surplus stems from CDM registration fees, share of proceeds from issued certified emission reductions (CERs; the carbon unit issued by the UN for CDM projects), third party accreditation fees and other minor income sources that have been higher than actually needed for other CDM tasks. The surplus is expected to help over 100 projects obtain UN approval and thereby generate revenue through carbon credits.
Nature of financial instrument	Interest free loans for CDM project financing for PDD development, validation and the 1st verification process. This includes: a) the preparation of the Project Design Document (PDD),

	<p>b) the validation by a ‘Designated Operational Entity’ (DOE), c) verification of the first issuance of ‘Certified Emissions Reductions’ (CERs).</p> <p>The loan scheme is based on a revolving fund structure. It has a startup budget of US\$ 5m and annual budget replenishments for at least the same amount over the next 3-5 years. Payments are made on achievement of pre-determined milestones.</p>
Web site	<a href="http://cdmloanscheme.org/">http://cdmloanscheme.org/</a>
Date created	April 2012
Administering organization	The Loan Scheme is collaboratively administered by the UN Office for Project Services (UNOPS) and the UNEP DTU Partnership on behalf of the UNFCCC Secretariat.

## 29. LOW EMISSION CAPACITY BUILDING PROGRAM (LECB)

Objective	Aims to enhance the capacity of the public and private sectors to scale up mitigation action through the development of Low Emission Development Strategies (LEDS) and Nationally Appropriate Mitigation Actions (NAMAs), and the strengthening of the underlying systems for Measuring, Reporting and Verification (MRV) and national greenhouse gas (GHG) inventories.
Priority areas	<p>Under this program NAMAs have been developed in the following LICs:</p> <ul style="list-style-type: none"> <li>• DR Congo (NAMA identification process started)</li> <li>• Kenya (Transport NAMA and then explore NAMAs in energy household sector.</li> <li>• Zambia (NAMAs in energy, agriculture industrial processes, &amp; waste management sectors)</li> </ul>
Country focus areas	26 participating countries including: Argentina Bhutan Chile China Colombia Costa Rica DRC Ecuador Egypt Ghana Indonesia Kenya Lebanon Malaysia Mexico Moldova Morocco Peru Philippines Tanzania Thailand Trinidad and Tobago Uganda Vietnam Zambia
Total contribution	40,000,000 USD
Donors	European Commission, German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) , and the Government of Australia
Nature of financial instrument	Technical assistance
Web site	<a href="http://www.lowemissiondevelopment.org/">http://www.lowemissiondevelopment.org/</a>
Date created	Started in January 2011 will run until December 2016
Administering organization	Support to the participating LECB countries is provided by a Global Support Unit (GSU), which sits within the larger green, low-emission climate resilient strategies (GLECRDS) team of UNDP. The GSU works closely with UNDP-GEF regional technical advisors and UNDP Country Offices

## 30. MDG CARBON FACILITY



Objective	Support developing countries leverage the benefits of carbon finance by promoting emission reductions projects in countries which are currently under represented in climate finance and for activities which both reduce GHG emissions as well as make clear contributions to the millennium development goals.
Priority areas	<p>GHG emission reductions and contribution to millennium development goals. Current activities by MDG Carbon include on -going support for the development of PoAs (Programme of Activities), SB s (Standardized Baselines), the development of detailed NAMAs (Nationally Appropriate Mitigation Actions) and shorter NAMA Studies. Also provide training workshops and a variety of knowledge products.</p> <p>PoAs supported:</p> <ul style="list-style-type: none"> <li>• West African Biodigester Programme of Activities - Under Validation</li> <li>• Disseminating Efficient Cookstoves in Vanuatu – Under Validation-</li> <li>• Household energy distribution programme in Indonesia &amp; Timor Leste - Awaiting Validation</li> <li>• Improved Cook Stoves programme for Rwanda and Cameroon</li> <li>• Improved cookstoves PoA in DR Congo - Awaiting Validation</li> </ul>
Country focus areas	Developing countries
Total contribution	Not defined
Donors	Multiple
Nature of financial instrument	Technical assistance and seed financing against an ERPA
Web site	<a href="http://www.undp.org/content/undp/en/home/librarypage/environment-energy/climate_change/mitigation/mdg-carbon-facility-brochure.html">http://www.undp.org/content/undp/en/home/librarypage/environment-energy/climate_change/mitigation/mdg-carbon-facility-brochure.html</a>
Administering organization	UNEP and Fortis Bank.

### 31. NAMA FACILITY (NF)

Objective	Supports NAMA development if the NAMA shows that it has the potential to catalyse transformational change in a partner country towards a low-carbon development path. So far, the NAMA Facility has made two calls for projects and 5 NAMA Support Projects are now receiving support.
Priority areas	Eligible projects are evaluated for ambition (in terms of potential for change, mitigation, financial and sustainable co benefits) and feasibility (in terms of national and international embeddedness, project structure, log frame, monitoring and evaluation and project finance).
Country focus areas	Global - The selected NAMA Support Projects currently supporting NAMAs Burkina Faso, Chile, Colombia, Costa Rica, Indonesia, Mexico, Peru, Tajikistan, and Thailand



Total contribution	Total contribution originally €70 million. BMUB and DECC jointly contributed an additional €50 million to fund a second bidding round for NAMA Support Projects in 2014 for which 49 NAMA outlines were received. <a href="http://www.nama-facility.org/news.html">http://www.nama-facility.org/news.html</a>
Donors	The German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) uses funds from the International Climate Initiative (IKI) and the UK Department for Environment and Climate Change (DECC) using funds from the International Climate Fund.
Nature of financial instrument	Allocation between €5-15 million for each NAMA according to pre-defined milestones of implementation.
Web site	<a href="http://www.nama-facility.org/">http://www.nama-facility.org/</a>
Date created	2012
Administering organization	The KfW Development Bank and Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ) are commissioned by BMUB and DECC to implement the Facility.

### 32. NORDIC CLIMATE FACILITY (NCF)

Objective	The Nordic Climate Facility provides grant financing for projects that have a potential to combat climate change and reduce poverty in low-income countries.
Priority areas	NCF encourages and promotes technological innovation in areas susceptible to climate change such as: energy, transport, water and sanitation, health, agriculture, and forestry and other areas related to natural resource management. NCF is based on calls for innovative proposals comprising specific themes related to climate change.
Country focus areas	<p>The applicant must be an active institution, organization, company or authority holding a registered place of operations in Denmark, Finland, Iceland, Norway or Sweden with relevant experience.</p> <p>The project must be implemented in at least one of the following eligible countries:</p> <ul style="list-style-type: none"> <li>• Africa: Benin, Burkina Faso, Cape Verde, Ethiopia, Ghana, Kenya, Malawi, Mozambique, Rwanda, Senegal, Tanzania, Uganda, Zambia, Zimbabwe</li> <li>• Asia: Bangladesh, Cambodia, Kyrgyz Republic, Lao PDR, Maldives, Mongolia, Nepal, Pakistan, Sri Lanka, Vietnam</li> <li>• Latin America: Bolivia, Honduras, Nicaragua</li> </ul>
Total contribution	As of 31 December 2013, the cumulative funding for four NCF Calls for Proposal is EUR 22.31 million including some interest earned.
Donors	The Nordic Climate Fund is financed through the Nordic Development Fund – a multilateral finance institution established by Denmark, Finland, Iceland, Norway and Sweden in 1989. The original subscribed fund capital by the Nordic countries was equivalent to EUR 1 billion.

	22.31 million EUROS including some interest earned has been invested in the Nordic Climate Facility.
Nature of financial instrument	The best proposals may receive grant co-financing amounting to between EUR 250,000 and 500,000.
Web site	<a href="http://www.nefco.org/financing/nordic_climate_facility">http://www.nefco.org/financing/nordic_climate_facility</a>
Date created	NCF was launched in 2009, and so far three calls have been announced: NCF1 under the themes of water resources and energy efficiency, NCF2 under the themes of renewable energy and urban adaptation, and NCF3 with a single theme of innovative low-cost climate solutions with focus on local business development. The fourth NCF call was launched in December 2013 for projects that fall under the theme of „Inclusive green growth projects contributing to private sector development“.
Administrating organization	NCF is financed by the Nordic Development Fund (NDF) and administered by the Nordic Environment Finance Corporation (NEFCO)

### 33. NEFCO CARBON FUND (NeCF)

Objective	an instrument for purchasing greenhouse gas emission reductions under the joint implementation (JI) and clean development mechanism (CDM) up until 2020. Since the price collapse in 2011/2012 the NeCF consolidated its activities and reduced active procurement. In 2014, however the NeCF re-opened for new business with Norwegian government funding to solicit CDM projects in LDCs by joining with NorCaP.
Priority areas	The NeCF invests in a wide typology of projects by providing carbon finance to renewable energy, energy efficiency, fuel switching and other investments.
Country focus areas	The principal target markets are the People's Republic of China, South East Asia, India and LICs
Total Contribution	As of August 2011 EUR 165.3 million.
Donors	The NeCF had an initial target capitalisation of €50 million, but as of August 2011 EUR 165.3 million had already been raised from DONG Energy (Dk), Danish Energy Agency, EPV Energy (Fi), the Finnish government, Kymppivoima (Fi), Vapo (Fi), Industrialisation Fund for Developing Countries (IFU), the Norwegian government, GDF Suez, Eesti Energia and NEFCO itself.
Nature of financial instrument or delivery mechanism	Procurement of CERs against an ERPA
Web site	<a href="http://www.nefco.org/financing/nefco_carbon_fund_necf">http://www.nefco.org/financing/nefco_carbon_fund_necf</a>
Date created	April 2008

Administrating organization	NEFCO
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#### 34. NORWEGIAN CARBON PROCUREMENT FACILITY (NoRCaP)

Objective	To support the climate commitments of the Norwegian state, whilst at the same time sustaining some level of demand in the ailing carbon market in parallel with the international negotiations the fund purchases from vulnerable CDM projects. Through supporting the CDM Norway will support sustainable development, and to the extent possible maintain MRV capacity in the market.
Priority areas	Purchase credits from registered but “vulnerable” projects in the CDM pipeline. Last call included a set aside to encourage projects from LICs. All CERs except industrial gases and coal based energy production.
Country focus areas	Global
Total Contribution	Will purchase 30 million CERs. Set aside to purchase up to 5 million CERs from LDCs.
Donors	Norway
Nature of financial instrument	Purchasing CERs against ERPA.
Web site	<a href="http://www.nefco.org/financing/nefco_norwegian_carbon_procurement_facility">http://www.nefco.org/financing/nefco_norwegian_carbon_procurement_facility</a>
Date created	2013
Administrating organization	NEFCO

#### 35. PILOT AUCTION FACILITY FOR METHANE AND CLIMATE CHANGE MITIGATION (PAF)

Objective	<p>The World Bank Group has developed an innovative, pay-for-performance finance mechanism, the Pilot Auction Facility for Methane and Climate Change mitigation (PAF) which key objective is to demonstrate a new, cost-effective climate finance mechanism that incentivizes private sector investment and action in climate change in developing countries by providing a guaranteed floor price on carbon credits. The guaranteed floor price will be delivered through the auctioning of put options supported by donor funding. The PAF will take advantage of the existing instruments and procedures of the carbon market, including the Clean Development Mechanism (CDM), for implementation.</p> <p>In its first auctions, the PAF will target CDM projects that reduce methane emissions and that are not being realized, or are at risk of being decommissioned due to the low price for carbon credits today.</p>
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Priority areas	Sectors of focus will be determined on an auction by auction basis. Details on the first auction are available on <a href="http://www.pilotauctionfacility.org">www.pilotauctionfacility.org</a> .
Country focus areas	The country focus area will be determined on an auction by auction basis. Details on the first auction are available on <a href="http://www.pilotauctionfacility.org">www.pilotauctionfacility.org</a> .
Total contribution	Aim to raise US\$100 million. As of April 2015, \$53 million in pledges secured.
Donors	Current donors Germany, Sweden, Switzerland, USA.
Nature of financial instrument	<p>The PAF will establish a price floor for future carbon credits in the form of a tradable put option, which will be competitively allocated through an auction. Put options give the project owner the right, but not the obligation to sell at the guarantee price (a.k.a., strike price). This means if the carbon market prices are higher than the guaranteed price at the time of put option exercise, then the project developer can benefit of the upside and sell its carbon credits in the carbon market.</p> <p>The auction result sets the guarantee price level. Auctioning ensures that the least-cost climate mitigation activities are selected to get the price guarantee. Auction winners must purchase the price guarantee (a.k.a., pay put premium). The put option will take the form of a World Bank bond, with bond purchase price being the equivalent of the option premium, and bond redemption amount being the equivalent of the strike price.</p>
Web site	<a href="http://www.pilotauctionfacility.org">http://www.pilotauctionfacility.org</a>
Date created	2014
Administering organization	The World Bank Group acts as trustee, secretariat, auction manager and issuer. The World Bank liaises with contributors and designs and runs the auctions, issues the put options to the winners and manages the redemptions.

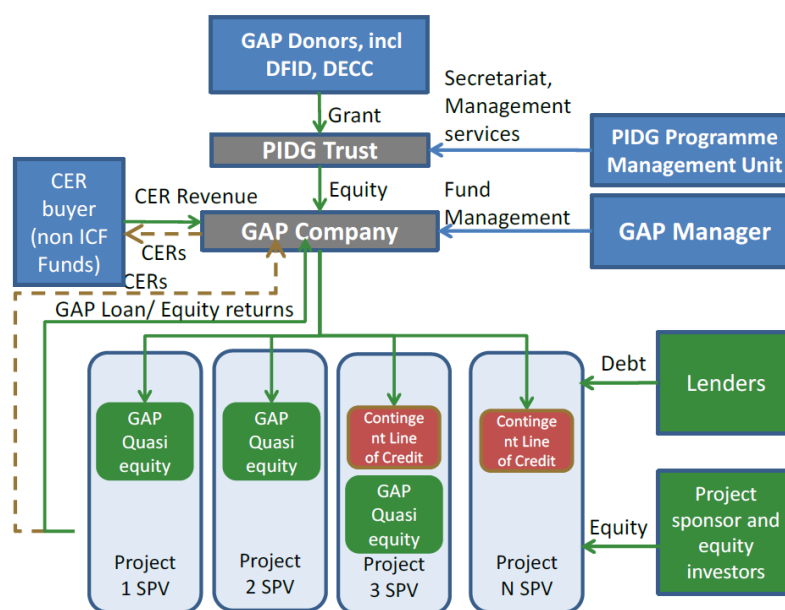
### 36. PRIVATE INFRASTRUCTURE DEVELOPMENT GROUP (PIDG)

Objective	The Private Infrastructure Development Group (PIDG) aims to address market and institutional failures that constrain the private sector's involvement in infrastructure development that fosters economic growth and reduces poverty. In 2003 it launched the Emerging Africa Infrastructure Fund, but has since developed a portfolio of related funds / facilities.
Priority areas	Infrastructure, finance, energy, transport, capacity building.
Country focus	Developing countries
Total contribution	As of 31 July 2010, donors had disbursed \$390 million to the PIDG. The PIDG facilities have helped 46 projects to reach financial close and these projects have attracted a total of \$10.5 bn <sup>16</sup> in private sector investment commitments.

<sup>16</sup> PIDG MAR submission 7 Sept 2010.

Donors	Membership of the PIDG has grown to 8 donors (Austria, Germany, International Finance Corporation (IFC), Ireland, The Netherlands, Sweden, Switzerland and United Kingdom)
Nature of financial instrument or delivery mechanism	At the facility level, funding from the PIDG donors can be supplemented with funding from private financial institutions and official Development Finance Institutions (DFIs). Further funding from third parties is achieved at the project level. PIDG has created a series of companies, designed to harness the efficiency of the private sector and its ability to provide capital. Use donor finance to create a climate in which private investors can feel confident in the long-term stability and sustainability of the projects in which they are investing.
Web site	<a href="http://www.pidg.org/">http://www.pidg.org/</a>
Date created	Established in 2002
Administrating organization	<p>The PIDG comprises an overarching governing body of the donors, a programme management unit (PMU), more or less equivalent to a Secretariat) and several autonomously-managed facilities:</p> <ul style="list-style-type: none"> <li>• Emerging Africa Infrastructure Fund (EAIF) - Long term loans for infrastructure</li> <li>• GuarantCo - Local currency guarantees</li> <li>• InfraCo Africa – Project development</li> <li>• InfraCo Asia – Project development</li> <li>• DevCov (managed by the IFC) – Transactions advisory facility</li> <li>• The Technical Advisory Facility (TAF) – Technical advice and capacity building</li> <li>• International Crisis Facility Debt Pool (ICF-DP) – Loans to infrastructure projects with cash flow challenges due to the global economic crisis.</li> </ul>
1. Sub – Program that could be relevant for Ci Dev program.	<p>The <b>Emerging Africa Infrastructure Fund (EAIF)</b> is a Public Private Partnership able to provide long-term debt or mezzanine finance on commercial terms to finance the construction and development of infrastructure supported in part with private sector finance. EAIF was set up in 2001 as the first multi-donor PIDG facility, and is the first dedicated debt fund in 47 countries across sub-Saharan Africa (except Mauritius).</p> <p>EAIF aims to address the market gap created by the high-interest short-term loans provided by commercial banks in the region, which are typically inappropriate for infrastructure financing. EAIF is able to provide between US\$ 10 million to US\$ 36.5 million typically over 15 years. While EAIF lends on commercial terms, it aims to support projects that promote economic growth and reduce poverty, benefit broad population groups, address issues of equity and participation, and promote social and cultural rights.<a href="http://www.emergingafricafund.com/policy-and-procedures/investment-policy.aspx">http://www.emergingafricafund.com/policy-and-procedures/investment-policy.aspx</a></p>
2. Sub – Program that could be relevant for Ci Dev program	<p><b>Green Africa Power (GAP)</b> has been set up in 2013 to stimulate private investment in renewable energy in Africa by acting as a long term source of financing and policy support to projects. GAP is the newest of PIDG's Facilities. It is a multi-donor Facility, and was formed after a scoping exercise funded by the UK Department for International Development (DFID) and the Norwegian Agency for Development Cooperation (Norad) concluded that there was definite potential for a fund to address key market failures and stimulate private sector investment in renewable energy in Africa.</p> <p>GAP has been designed to counter the pronounced market failures inhibiting the growth of renewables in the region by reducing the upfront cost of capital while maintaining overall</p>

commercial returns, providing cover for specific construction phase risks, and facilitating policy dialogue to move towards cost reflective tariffs GAP aims to finance approximately 270MW of new renewable energy generation capacity in four years, saving 3.9m tonnes of carbon emissions and improving the supply of clean energy to millions of people in Africa.



Fund managed by EISER Infrastructure Partners LLP (EISER), in collaboration with Camco Clean Energy plc (Camco).

### 37. REGIONAL COLLABORATION CENTERS (RCC)

Objective	Regional Collaboration Centres (RCCs) are a network of regionally located offices providing CDM project support to governments, NGOs and the private sector. This on-the-ground support is part of an effort to increase the regional distribution of CDM projects by removing some of the barriers (lack of resources, lack of expertise) that have hindered lesser-developed countries from accessing the CDM.
Priority areas	<p>Countries that are under-represented in the CDM. Four centers exist in the city of Lome in Togo, in the city of Kampala in Uganda, in the city of St. Georges in Grenada, and in Bogota in the city of Columbia. Another RCC may be opened in Asia.</p> <p>The host partner to the UNFCCC Secretariat provides local logistical and administrative arrangements, such as suitable office and meeting space, telecommunication costs and IT equipment. An operating budget for the activities of the RCC, such as travel to other countries in the region to meet with CDM stakeholders and/ or visit project sites, would be agreed on an annual basis and financed jointly.</p>
Country focus areas	Global
Donors	UNFCCC Secretariat

Nature of financial instrument	Capacity building and technical assistance through information exchange. A budget of approx. US\$1 million was available for 2014.
Web site	<a href="https://cdm.unfccc.int/stakeholder/rcc/index.html">https://cdm.unfccc.int/stakeholder/rcc/index.html</a>
Date created	2013
Administering organization	UNFCCC Secretariat in partnership with Banque Ouest Africaine de Développement, East African Development Bank (EADB), St. George's University School of Medicine and CAF Banco de Desarrollo de América Latina.

### 38. RENEWABLE ENERGY COOPERATION PROGRAM (RECP)

Objective	This initiative aims to support long term cooperation between Africa and Europe on renewable energy by supporting the development of renewable energy markets in Africa for all sources of renewable energy technologies. This will contribute to the African EU political targets on access and renewables and improve security of energy supply whilst protecting the environment.
Priority areas	Renewable energy technologies, sources and applications by providing: <ul style="list-style-type: none"> <li>• Policy advisory services to support the development of national and regional renewable energy policies within planning processes.</li> <li>• Private sector cooperation through support of opportunities for business cooperation to support technology transfer</li> <li>• Project preparation and finance facilitation for flagship investment projects</li> <li>• Technology innovation and capacity development – supporting African EU research and innovation to strengthen capacity for renewable energy research and vocational training and higher education.</li> </ul>
Country focus areas	Africa
Total contribution	5 Million Euro in first three years 2011-2013
Donors	European Commission
Nature of financial instrument	Meso scale renewable energy investment
Web site	
Date created	March 2011
Administering organization	The EU Energy Initiative Partnership Dialogue Facility (see subcategory below) is responsible for the implementation of the RECP.
1. Sub – Program that could be	<b>EU Energy Initiative Partnership Dialogue Facility – (EUEI PDF)</b> is a flexible instrument that supports enabling environments for investments in sustainable energy markets across

relevant for Ci Dev program.	Africa Southeast Asia, Latin America and the Pacific through policy regulation and strategy development, institutional buildings and strengthening, private sector exchange support, capacity development and knowledge sharing. It is the secretariat for the implementation of the RECP. The EUEI PDF presents country and regional case studies, explore innovative approaches and best practices for policy makers in the area of rural electrification and biomass energy and supports dialogue events. (see <a href="http://www.euei-pdf.org/euei-pdf-and-recp-projects">http://www.euei-pdf.org/euei-pdf-and-recp-projects</a> )
2. Sub – Program that could be relevant for Ci Dev program.	<b>A Regional Technical Assistance Programme (RTAP)</b> cofinanced by the European Union Infrastructure Trust Fund (ITF) and Agence Francais de Developpement (AFD) was set up in August 2011. Kenya Association of Manufacturers (KAM) has been entrusted by AFD with the responsibility of hosting and implementing this regional technical assistance to the benefits of stakeholders of Kenya, Tanzania and Uganda. In parallel AFD has signed agreements with two banks in Kenya, with one bank in Tanzania and has recently approved credit lines for a Ugandan bank.

### 39. SE4ALL

Objective	SE4All has three interlinked objectives to be achieved by 2030: <ul style="list-style-type: none"> <li>• Ensure universal access to modern energy services.</li> <li>• Double the global rate of improvement in energy efficiency.</li> <li>• Double the share of renewable energy in the global energy mix.</li> </ul>
Priority areas	Energy access through improvements to Energy efficiency, Renewable Energy and Capacity building.
Country focus areas	SE4All has an African Hub targeting the following countries:  Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Congo, Cote d'Ivoire, Democratic Republic of Congo, Equatorial Guinea, Egypt, Ethiopia, Gabon, Gambia, Ghana, Guinea-Bissau, Guinea-Conakri, Kenya, Lebanon, Lesotho, Liberia, Malawi, Mali, Mauritania, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, South Africa, Sudan, Swaziland, Tanzania, Togo, Uganda, Zambia, Zimbabwe  Afghanistan, Bangladesh, Bhutan, Cambodia, Fiji, Indonesia, Laos, Malaysia, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka
Donors	Multilateral
Nature of financial instrument or delivery mechanism	Capacity Building and information exchange to support countries implement national plans to achieve improved energy access. Often results in triggering public finance support for specific activities.  Support countries define and implement national action plans to increase renewable energy, improve energy efficiency and extend energy access.



Web site	<a href="http://www.se4all.org/">http://www.se4all.org/</a>
Date created	SE4All – initiated in 2011 by UN
Administrating organization	The AfDB is part of the oversight and operations committee for the African hub of this initiative that provides guidance to activities in Africa. The oversight and operation committee comprises one representative of the African Union Commission (AUC), the NEPAD Planning and Coordinating Agency (NPCA), the <a href="#">African Development Bank</a> (AfDB), the United Nations Development Program (UNDP) and of the Regional Economic Communities (selected on a rotating basis). The Asian Development Bank leads the Asia Pacific Hub for SE4All.

#### 40. SEED CAPITAL ASSISTANCE FACILITY (SCAF)

Objective	The Seed Capital Assistance Facility (SCAF) is aimed at helping energy investment funds in Asia and Africa to provide seed financing to early stage clean energy enterprises and projects. Only investment entities that have a business mandate and relevant requisite experience for financing clean energy companies and projects are eligible to enter into SCAF co-operating fund agreements. Project developers or entrepreneurs seeking seed financing are directed to SCAF co-operating fund managers for their consideration. By accepting SCAF co-financing for these activities the cooperating fund managers commit to investing seed capital in a minimum number of early stage ventures.
Priority areas	Energy efficiency and renewable energy development
Country focus areas	Global
Total contribution	Not defined
Donors	Multiple
Nature of financial instrument	<p>Grants in the form of two options:</p> <ol style="list-style-type: none"> <li>1. The first SCAF support line can be used to cost-share some of the elevated costs associated with deal sourcing, providing enterprise development services to and transacting seed scale investments. Services generally involve: a) Identification and training of new ‘pre-commercial’ clean energy entrepreneurs and project developers, b) Targeted coaching or incubator services for specific promising investment opportunities and c) Co-financing of pre-investment feasibility studies. The Enterprise Development Support comes in the form of annual fees, time limited to between two and three years, the time it normally takes to graduate seed financed developments into full-scale investments. This support is provided as a contingent grant, requiring that the cost-shared activities lead to corresponding investments being taken by the fund’s seed window.</li> <li>2. The second SCAF support line is designed to help offset the hurdle of higher perceived risks and lower expected returns when dealing with early stage clean energy project and enterprise developments. Typically the support is in the range of 10% to 20% of each seed capital investment, paid at the time of investment disbursement. This support is used for covering some of the elevated project development costs that normally are charged to or financed by the</li> </ol>

	developer, for example technical assessments; contract negotiations for fuel-supply or off-take agreements; environmental impact analysis; and other aspects of the permitting process.
Web site	<a href="http://www.scaf-energy.org/">http://www.scaf-energy.org/</a>
Date created	2010
Administrating organization	UNEP, AfDB, ADB

#### 41. SUSTAINABLE ENERGY FUND FOR AFRICA (SEFA)

Objective	The Sustainable Energy Fund for Africa (SEFA) is a multi-donor trust fund administered by the African Development Bank – anchored in a commitment of USD 60 million by the Governments of Denmark and the United States – to support small- and medium-scale Renewable Energy (RE) and Energy Efficiency (EE) projects in Africa.
Priority areas	SEFA is structured to respond to requests originated or championed by AfDB staff
Country focus areas	Africa
Donors	Multilateral
Nature of financial instrument or delivery mechanism	<p>SEFA has been designed to operate under three financing windows: project preparation, equity investments and enabling environment support.</p> <p>(i) - Project Preparation: This window provides cost-sharing grants and technical assistance to private project developers/promoters to facilitate pre-investment activities for renewable energy and energy efficiency projects. Grant funding will target development activities from feasibility up to financial closure for projects with total capital investments in the range of USD 30 million – 200 million. All proposals received will be screened and pre-assessed against the basic eligibility criteria by the SEFA Secretariat, currently hosted in the Energy, Environment and Climate Change Department (ONEC) of AfDB. In the case of external requests meeting the basic eligibility criteria and presenting a good pipeline opportunity, SEFA Secretariat will work with other departments with the view of identifying a champion to lead the internal review and approval of a proposal.</p> <p>(ii) - Equity Investments: This financing window seeks to address the lack of access to early stage capital for small-and medium-sized projects, as well as the low managerial and technical capability of smaller entrepreneurs and developers. The SEFA equity capital combined with a dedicated technical assistance envelope will be deployed by the SEFA co-sponsored Africa Renewable Energy Fund (AREF), a pan-African Private Equity Fund (PEF) solely focused on small/medium (5-50 MW) independent power projects from solar, wind, biomass, hydro as well as some geothermal and stranded gas technologies. Investment decisions are the sole responsibility of AREF's Fund Manager – Berkeley Energy LLC – subject to the terms of the AREF fund agreements, with the SEFA Secretariat's role mainly as providing general oversight to fund implementation as well as collaboration on project identification.</p>

	(iii) - Enabling Environment: This window provides grants to support mainly public sector activities that create and improve the enabling environment for private sector investments in the sustainable energy space in Africa. This includes advisory and implementation of legal, regulatory and policy regimes that provide clear and predictable rules for project development, implementation and operation, capacity-building activities to allow the public sector to act as a reliable and creditworthy counterparty in energy projects and programs. This component is not bound by project size limits, and includes interventions spanning the off-grid, mini-grid, and grid-connected segments.
Web site	<a href="http://www.afdb.org/en/topics-and-sectors/initiatives-partnerships/sustainable-energy-fund-for-africa/">http://www.afdb.org/en/topics-and-sectors/initiatives-partnerships/sustainable-energy-fund-for-africa/</a>
Administering organization	AfDB

## 42. STRATEGIC CLIMATE FUND (SCF) - TARGETED PROGRAM FOR SCALING UP RENEWABLE ENERGY IN LOW INCOME COUNTRIES

Objective	<p>The Strategic Climate Fund (SCF) is one of the two funds of the <a href="#">Climate Investment Funds</a>. It serves as an overarching framework to support three targeted programs with dedicated funding to pilot new approaches with potential for scaled-up, transformational action aimed at a specific climate change challenge or sectoral response. Targeted programs under the SCF include:</p> <ul style="list-style-type: none"> <li>• The Forest Investment Program (FIP), approved in May 2009,</li> <li>• The Pilot Program for Climate Resilience (PPCR), approved in November 2008, and</li> <li>• <b>The Program for Scaling-Up Renewable Energy in Low Income Countries (SREP)</b> – <i>see information on sub-program below</i>, approved in May 2009, is aimed at demonstrating the social, economic, and environmental viability of low carbon development pathways in the energy sector. It seeks to create new economic opportunities and increase energy access through the production and use of renewable energy. Funding primarily provided for overcoming commercial financing barriers, providing capacity building, information dissemination, advisory services and some direct support to renewable energy project developments.</li> </ul>
Priority areas	<p>Through its targeted programs, SREP is designed to:</p> <ol style="list-style-type: none"> <li>1. Assist low income countries foster transformational change to low carbon pathways by exploiting renewable energy potential;</li> <li>2. Highlight economic, social and environmental co-benefits of renewable energy programs;</li> <li>3. Help scale up private sector investments to achieve SREP objectives;</li> <li>4. Enable blended financing from multiple sources to enable scaling up of renewable energy programs; and</li> <li>5. Facilitate knowledge sharing and exchange of international experience and lessons.</li> </ol> <p>Eligible renewable energy applications included grid and off grid electricity applications for small hydro, biomass based power, wind and solar power systems and geothermal. Cooking and</p>

	heating applications including sustainable community forests, improved cook stoves, geothermal heating and biogas or other renewable based fuels are eligible.
Country focus areas	<p>Low Income countries are prioritized</p> <p>As of October 2013, eight pilot countries have had Investment Plans endorsed for by the SREP Sub-Committee, for a total amount of proposed SREP funding of USD 340 million. 7 out of these 8 are Ci-Dev eligible countries:</p> <ul style="list-style-type: none"> <li>• Ethiopia – Over 4million USD invested in projects including: <ul style="list-style-type: none"> <li>– Grant 1.6 million US\$ for Lighting Ethiopia. IFC managed project in two phases to i) remove the barriers to the development of a strong supplier base for solar lanterns and dynamo power lighting products via provision of market intelligence, business plan development, technology appropriateness and management training for clean energy in Ethiopia, and ii) provide finance to SME.</li> <li>– Advisory services grant of USD 1.5 million. IFC will help develop a geothermal power sector strategy including how to include private sector participation and phase II will provide technical and commercial capacity building.</li> <li>– Geothermal projects in Auto Langano (IBRD and AfDB) and a wind farm project (AfDB).</li> </ul> </li> <li>• Kenya- Total of 50 USD million to help Kenya meet growing energy demand: <ul style="list-style-type: none"> <li>– Development of Kopere Solar Park – 11.6 million USD (AfDB)</li> <li>– Development of Geothermal potential - 25 million USD (AfDB)</li> </ul> </li> <li>• Liberia <ul style="list-style-type: none"> <li>– No projects identified yet.</li> </ul> </li> <li>• Maldives (Not relevant to Ci-Dev) <ul style="list-style-type: none"> <li>– Preparing outer islands for sustainable energy development project (ADB) 12 million USD</li> <li>– Accelerating sustainable private investments in renewable energy (IBRD) 12 million USD</li> </ul> </li> <li>• Mali – Total of US\$40 million to support expansion of renewables and capacity building. Specific projects include: <ul style="list-style-type: none"> <li>– Project for scaling up renewable energy in Mali – 1.5 million USD (AfDB),</li> <li>– Rural electrification Hybrid Systems (IBRD) 14.9 million USD.</li> </ul> </li> <li>• Nepal – US\$ 40 million to increase energy capacity from on grid and off grid and support climate resilience. Specific projects to date have all focused on improving climate resilience. E.g. improving access to reliable water sources</li> <li>• Tanzania <ul style="list-style-type: none"> <li>– No projects identified yet.</li> </ul> </li> </ul> <p>Investment Plan preparation grants have also been approved for Armenia, the Pacific Region (comprising the Solomon Islands and Vanuatu) and Yemen, in the event that additional funding becomes available.</p>
Total contribution	Aim to secure up to US\$ 551 million but to date have received US\$521 million (see below)
Donors	<ul style="list-style-type: none"> <li>• Australia 12 USD million</li> <li>• Denmark 12 USD million</li> <li>• Japans Fast Start Finance 36USD million</li> <li>• Korea 6USD million</li> <li>• Netherlands 76 USD million</li> </ul>

	<ul style="list-style-type: none"> <li>• Norway 91 USD million</li> <li>• Spain 4 USD million</li> <li>• Sweden 44 USD million</li> <li>• Switzerland 26 USD million</li> <li>• UK International Climate Fund 164 USD million</li> <li>• USA 50 USD million</li> <li>• (NB – Information on pledges and deposits as of December 31, 2012 (CIF 2012 Annual Report: Creating the Climate for Change)).</li> </ul>
Nature of financial instrument	Channeled through the multilateral development banks (MDBs) as grants and near-zero interest credit, the SREP is country-led and builds on national policies and the activities of existing energy initiatives.
Web site	<a href="http://www.climateinvestmentfunds.org/cif/Scaling_Up_Renewable_Energy_Program_in_Low_Income_Countries">http://www.climateinvestmentfunds.org/cif/Scaling_Up_Renewable_Energy_Program_in_Low_Income_Countries</a>
Date created	Date fund proposed: February 2008. Date fund made operational: 14 December 2009.
Administering organization	The World Bank is the Trustee and Administering Unit of the SREP. The World Bank Group, the African Development Bank, the Asian Development Bank, the European Development Bank, and the Inter-American Development Bank are implementing agencies for SREP investments.

#### 43. UMBRELLA CARBON FACILITY TRANCHE 2

Objective	Fund to purchase post 2012 CERs from CDM projects (up to 2018)
Priority areas	CDM projects for post-2012 CERs in sectors of energy efficiency and renewable energy sector
Country focus areas	Developing countries preferred
Total contribution	Current capitalization 78 million Euro
Donors	Swedish Energy Agency, Statkraft Markets GmbH, GDF Suez, and Enel Trade S.p.A
Nature of financial instrument	Purchase of CERs against an ERPA. Fund is to support 13 projects. Three projects are located in Senegal, Mali, and Nepal. The fund currently has three PoAs.
Web site	<a href="https://wbcarbonfinance.org/Router.cfm?Page=UCFT2&amp;ItemID=53224&amp;FID=53224">https://wbcarbonfinance.org/Router.cfm?Page=UCFT2&amp;ItemID=53224&amp;FID=53224</a>
Date created	2011
Administering organization	World Bank Group

