

# Bilateral Finance Institutions and Climate Change

# A Mapping of 2009 Climate Financial Flows to Developing Countries



European Investment Bank







#### Copyright © United Nations Environment Programme, 2010

This publication may be reproduced in whole or in part and in any form for educational or non-profit purposes without special permission from the copyright holder, provided acknowledgement of the source is made. UNEP would appreciate receiving a copy of any publication that uses this publication as a source.

No use of this publication may be made for resale or for any other commercial purpose whatsoever without prior permission in writing from the United Nations Environment Programme.

#### Disclaimer

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the United Nations Environment Programme concerning the legal status of any country, territory, city or area or of its authorities, or concerning delimitation of its frontiers or boundaries. Moreover, the views expressed do not necessarily represent the decision or the stated policy of the United Nations Environment Programme, nor does citing of trade names or commercial processes constitute endorsement.

This report is an annual initiative of the United Nations Environment Programme (UNEP) Climate Change Working Group for Bilateral Finance Institutions, to report on climate change financial flows to developing countries. The UNEP Working Group is comprised of Agence Française de Développement (AFD), KfW Entwicklungsbank (Development Bank, Germany), Japan International Cooperation Agency (JICA), Nordic Environment Finance Corporation (NEFCO), European Investment Bank (EIB) and UNEP. It is open to other like-minded finance institutions who wish to take part.

The report was prepared by the Stockholm Environment Institute (Clarisse Kehler Siebert\*, Aaron Atteridge, Richard J.T. Klein) and by staff of the UNEP Working Group.

\*Coordinating author. Please address questions to clarisse.kehler.siebert@sei.se or dean.cooper@unep.org





# Bilateral Finance Institutions and Climate Change

# A Mapping of 2009 Climate Financial Flows to Developing Countries





## Erratum

1. In the first paragraph of section 2.5 (p.12), 'Figure 8' should read 'Figure 7', and 'Figure 9' should read 'Figure 8'.

2. Figure 8 (p.13) of this report should appear as follows:



Figure 8: Financial instruments supporting adaptation activities

3. The statement at the base of Appendix 2 (p. 19) should read: 'Note: Does not include carbon finance.'

# **Table of Contents**

About t	he Clim	nate Change Working Group for Bilateral Finance Institutions	4
List of A	bbrevio	ations	5
1.	Introdu	uction to Mapping Bilateral Finance Institutions' Climate Portfolios	6
2.	Climat 2.1 2.2 2.3 2.4 2.5	Te Finance to Developing Countries During 2009 Total flows of climate finance Regional distribution of BFI climate finance Mitigation finance Adaptation finance The use of different financial instruments	8 9 10 11
3.	Investr	ment by Bilateral Finance Institutions in Carbon Finance	14
4.	Conclu	usions	.16
Append	lix 1:	'Climate finance' – Definitions and terminology	17
Append	lix 2:	Countries receiving climate finance from participating finance institutions	.19
Append	lix 3:	Climate Finance to Eastern and South Europe	20
Append	lix 4:	Finance data	21
Append	lix 5:	Data collection sheet	26

# About the Climate Change Working Group for Bilateral Finance Institutions

This report is an initiative of the United National Environment Programme (UNEP) Climate Change Working Group for Bilateral Finance Institutions ('UNEP Working Group'). The UNEP Working Group was born from a workshop on bilateral financing for climate change convened in January 2009 at UNEP in Paris. The Working Group is at present comprised of five bilateral finance institutions and UNEP, Agence Française de Développement (AFD), KfW Entwicklungsbank (Development Bank, Germany), Japan International Cooperation Agency (JICA), Nordic Environment Finance Corporation (NEFCO) and European Investment Bank (EIB). 'Bilateral' means that beneficiaries or clients of these institutions are not direct shareholders. UNEP facilitates the operation of the UNEP Working Group, providing the opportunity for closer interaction and co-ordination of BFIs' climate change activities and investment modalities.

The financial data reported and analysed in this report is provided by the participating finance institutions through a financial survey and interview process, as part of a growing global effort to make available comparable, transparent and accurate data on financing to address climate change mitigation and adaptation in developing countries.

This report is an annual initiative of the UNEP Climate Change Working Group for Bilateral Finance Institutions to report on climate change financial flows to developing countries. It is open to other likeminded finance institutions who wish to take part. Inquiries can be directed to UNEP.

# **List of Abbreviations**

AFD	Agence Française de Développement (French Development Agency)
BFI	Bilateral Finance Institution
BMU	Federal Ministry for the Environment (Germany)
CDM	Clean Development Mechanism
CER	Certified emission reductions
CFE	Carbon Fund for Europe
CHP	Combined heat and power
CIFs	Climate Investment Funds
COP	Conference of the Parties (to the UNFCCC)
CTF	Clean Technology Fund
DAC	Development Assistance Committee (of the OECD)
EIB	European Investment Bank
EU ETS	European Union Emission Trading Scheme
FCCM	Fonds Capital Carbone Maroc
FDI	Foreign direct investment
GEF	Global Environment Facility
JI	Joint Implementation
JICA	Japan International Cooperation Agency
KfW	KfW Entwicklungsbank (Development Bank, Germany)
LDC	Least Developed Country
MCCF	Multilateral Carbon Credit Fund
MDB	Multilateral development bank
MRT	Mass Rapid Transit
NCF	Nordic Climate Facility
NeCF	NEFCO Carbon Fund
NEFCO	Nordic Environment Finance Corporation
ODA	Official development assistance
OECD	Organisation for Economic Co-operation and Development
SCF	Strategic Climate Fund
SME	Small and medium enterprise
TGF	Baltic Sea Region Testing Ground Facility (of NEFCO)
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States dollars

# 1. Introduction to Mapping Bilateral Finance Institutions' Climate Portfolios

### Climate finance – a global challenge

The *Bali Action Plan* agreed to in 2007 at the thirteenth Conference of the Parties (COP13) to the United Nations Framework Convention on Climate Change (UNFCCC) identified 'financing' as a key component in reaching a future global agreement on climate change. Industrialised countries explicitly agreed to finance efforts of developing countries to pursue low-carbon development and to adapt to the adverse effects of climate change. Two years later in Copenhagen at UNFCCC COP 15, Parties 'took note' of the *Copenhagen Accord*, under which developed countries pledged to mobilise 'fast-start' (short-term) finance to the amount of 30 billion dollars for 2010-2012, as well as a long-term 100 billion dollars per year from 2020.

'Climate finance' has raised a whole host of questions from public and private donors and investors, recipient countries, civil society and academia about how much financing is needed to address mitigation and adaptation, how and from where this finance will be generated, who manages it, how it is disbursed and to whom, and how it is used. While most can agree that more climate finance is needed, the recent United Nations Secretary-General's High-Level Advisory Group on Climate Change Financing report<sup>1</sup> demonstrates that there is less convergence on what combination of public and private, concessional and non-concessional, carbon finance or not, can and should be used to scale up financing in the future, and on how to deliver this financing. As to reporting and tracking the proliferating funds, it is easier to agree on guiding principles – such as completeness, transparency, comparability, accuracy, and efficiency<sup>2</sup> – than on how to implement these ideals.

### **Report objectives overview**

The present report is an effort by the UNEP Climate Change Working Group for Bilateral Finance Institutions ('Working Group' – see p. iii) to both transparently disclose their part of the present story of climate change financial flows to developing countries, and to demonstrate their future potential as vehicles for the delivery of significant amounts of climate finance. Building on a more extensive mapping of the climate portfolios of each of the Working Group members published in December 2009,<sup>3</sup> this report again finds that Bilateral Finance Institutions (BFIs) channel significant amounts of climate finance for both mitigation and adaptation, and demonstrates an increase of 25% in climate financing over 2008. By annually and collectively reporting on climate finance, the Working Group aims to demonstrate the size and nature of its contribution to global financial flows for climate change to developing countries, and methodologically to contribute to global efforts on tracking these flows by disclosing its data collection and reporting methods, definitions and challenges. The report further aims to demonstrate – at least by order of magnitude – the relative roles of different stakeholders in the global picture of climate change financing.

Section 2 of the report summarises total climate financing to developing countries as well as breakdown by mitigation, adaptation, region, sector and financial instrument. Section 3 presents amounts invested by the Working Group members in carbon finance.

<sup>1</sup> Report of the Secretary-General's High-Level Advisory Group on Climate Change Financing, 5 November 2010. Available online at http://www.un.org/wcm/content/site/climatechange/pages/financeadvisorygroup/pid/13300

<sup>2</sup> See Tirpak et al. Guidelines for Reporting Information on Climate Finance. WRI Working Paper. World Resources Institute, Washington DC. Available online at http://www.wri.org.

<sup>3</sup> The report of 2008 data was published in 2009 as an SEI Working Paper: Atteridge et al. Bilateral Finance Institutions and Climate Change: A Mapping of Climate Portfolios (hereinafter 'Atteridge et al (2009)'). Available online at http://sei-international. org/publications?pid=1324

## Methodology

### Challenges for reporting climate change finance

Mapping the amounts of climate financing and the mechanisms through which this financing flows is rife with methodological challenges. Globally, there is no standard definition of what is counted toward 'climate finance'; it is conceptually difficult to distinguish between funds that support mitigation, adaptation or both; and it is difficult to track funds committed from source through to disbursement.

This report acknowledges and addresses these challenges by providing clear information about what is and is not included as climate finance in the discussion below and in Appendix 1, by disclosing methodological challenges, and by inviting comments on how to overcome these in future reporting.

### Definitions and terminology

A working definition of 'climate finance' for purposes of this report is proposed as: Finance flowing from developed to developing countries, including support for mitigation, adaptation, policy and capacitybuilding. Mitigation projects include renewable energy projects, energy efficiency and fuel switch, forestry and land use, sustainable urban transport and sequestration projects, and technical assistance and capacity building dedicated to addressing climate change. Adaptation projects imply that part of the project is dedicated to a specific adaptation purpose such as water, agriculture, infrastructure, or capacity building. Also included is direct budgetary support for climate policy.

To determine what qualifies as mitigation and adaptation, the Working Group is guided by the Rio markers and the new adaptation marker of the Organisation for Economic Co-operation and Development's Development Assistance Committee (OECD DAC), as well as other methodologies or accounting methods such as carbon footprint tools. Where funds support an activity with both an adaptation and mitigation benefit, the UNEP Working Group members reported half of the total amount under mitigation and half as adaptation.

That this working definition leaves much to be desired reflects a global need for further work and increased cooperation among finance institutions on precision and transparency in reporting financial flows. It is further acknowledged that future refinement of this definition must consider that many projects with clear climate 'relevance' may in fact have a high carbon footprint and/or contribute to an overall new increase in greenhouse gas (GHG) emissions. To illustrate, many energy efficiency or sustainable transport projects are not 'climate friendly' to the extent that they result in a net increase in GHG emissions, even if causing a reduction in emissions intensity.

This report is thus premised on an understanding that providing data on financial flows for climate change is essential despite a lack of standardisation. As work continues on developing definitions and reporting methods that allow data to be compared across institutions, it is necessary to be explicit about what is included as 'climate finance' and what is not.

### Data collection

Data related to activities financed by the UNEP Working Group members was collected through a financial survey. The data collection tool was co-developed by the UNEP Working Group members, and organises information regionally, by sector, and by financial instrument. The information was compiled and analysed by an independent research organisation, the Stockholm Environment Institute, in dialogue with the UNEP Working Group. The raw data on which this report is based is available (Appendix 4), as is the data collection tool (Appendix 5). Data related to other stakeholders has been collected from publically available sources. All financial data is reported in United States dollars (USD) unless otherwise indicated. The data assessed in this report is based on funds committed in 2009. Please refer to Appendix 1 for a discussion of the scope of and reason for reporting committed funds.

# 2. Climate Finance to Developing Countries During 2009

## 2.1 Total flows of climate finance

### 2.1.1 BFI climate finance

Table 1 summarises the total climate finance committed to developing countries by AFD, EIB, JICA and KFW during 2009.<sup>4</sup> Just under 70% of this total finance was destined for mitigation. The three Europeanbased institutions in particular have a stronger focus on providing mitigation finance compared to adaptation (82% AFD, 100% EIB, 85% KFW), whereas JICA reports a relatively even balance between financing for mitigation and adaptation.

# Table 1: Committed BFI climate finance for mitigation and adaptation 2009 (USD millions)

	AFD	EIB	JICA	KFW	Total 2009	Total 2008*	Increase 2008- 2009
Mitigation	2807	1515	3300	1304	8926	7249	+23%
Adaptation	615	-	3118	230	3 963	3029	+31%
Total	3422	1515	6418	1534	12889	10278	+25%

\* The 2008 figures are taken from Atteridge et al (2009) (see footnote 1). Note that the 2008 figures reported in Atteridge et al (2009) included flows to Eastern Europe. These amounts (€637m for mitigation and €68m for adaptation) have been subtracted in the 2008 figures presented here, in order to be comparable to the funds to developing countries reported in the 2009 data. The 2008 data has been converted from Euro using the average exchange rate on 31 December 2008 (1 Euro = 1.392 USD, from http://www.exchange-rates.org), consistent with the methodology for 2009 data.

As shown in the far right column of Table 1, these figures for both mitigation and adaptation (and consequently total finance) are higher than the total reported for 2008. A more detailed breakdown for mitigation and adaptation finance is presented in sections 2.3 and 2.4 respectively.

### 2.1.2 Global climate finance

An objective of this report is to assess the significance of BFI climate finance within global climate change financial flows. However, the definitional and tracking challenges as explained in Section 1 make it difficult to compile a global sum of climate finance. In addition to differences regarding the definition of 'climate finance' for mitigation and adaptation, not all funds are committed or reported on an annual basis, making it difficult to compare these with the annual reporting of BFI figures available in this report. As the role of private sector funds increases, a further challenge is in collecting climate data about private finance.

To compound the reporting challenges, the global sources and channels of climate finance are numerous. These include public sources such as BFIs and bilateral development cooperation agencies, multilateral development banks (MDBs), specialised climate funds, carbon markets, national budgets, foreign direct investment, and private sources such as the private sector, philanthropy, and nongovernmental organisations.

Within the diversity of public sources of financing, the nearly 13 billion USD in climate finance channelled through BFI members of the Working Group is significant. Where this sits in the global picture of public financing is also significant, but difficult to demonstrate in absolute terms due to the lack of transparent

<sup>4</sup> NEFCO figures are not included here as NEFCO's finance to developing countries is in the form of carbon finance, which is discussed in Section 3 below.

and comparable information available. It is, however, possible to provide an estimation for 2009 commitments by other major international financial institutions (MDBs) and international specialised funds dedicated to climate change from publicly available sources:

- The MDBs presented a preliminary figure of 15 billion USD in climate finance for mitigation in 2009;
- International specialised funds dedicated to climate change provide figures for their commitments in 2009 ranging from 1.05 billion USD to 1.75 billion USD.
  - the Climate Investment Funds (CIFs) committed 0.47 billion USD in 20096
  - the GEF channelled 0.24 billion USD for climate change7
  - the Special Climate Change Fund (SCCF) and Least Developed Countries Fund (LDCF) made available 0.15 billion USD8
  - reporting methods from other international specialised funds dedicated to climate change do not provide annual commitments. However data suggest that commitments by these funds range between 0.19 and 0.89 billion USD9.
- Other bilateral commitments in 2009, which may be significant in size, are not systematically reported and can not be easily estimated. Thus, to the above figures of 15 billion from MDBs, and 0.86 billion and an additional 0.19 to 0.89 billion from spcialised funds, should be added an undetermined amount in other bilateral commitments.

In spite of the uncertainties surrounding the non-BFI sources of public climate finance – which appear from the above to amount to a minimum of 16 billion USD flowing through major international financial institutions and specialised climate funds – the 13 billion USD from the Working Group is a highly significant and transparent contribution to global public support for climate action in developing countries.

## 2.2 Regional distribution of BFI climate finance

Figure 1 presents the regional distribution of total climate finance from participating finance institutions in 2009. Just over half the total funding is directed to Asia, which is a smaller piece of the pie than in 2008. Larger slices are set aside for Latin America as well as North Africa and Middle East region – the latter due to the region receiving a greater share of mitigation finance than in 2008).



### Figure 1: Regional distribution of total climate finance - 2009

7 Global Environment Facility (GEF) annual report 2009 – commitments are recorded from July 1st, 2008 to June, 30th, 2009.

8 Status report on the Least Developed Countries Fund and the Special Climate Change Fund. Note that the period of analysis is 2002 – 2010 and that the figure represents cumulative funding as no annual data is available.

9 As indicative, please see, www.climatefundsupdate.org (one of several independent websites tracking climate finance). The minimum of .19 billion USD is equal to the disbursement of funds, while the maximum is equal to deposits in the funds. The funds included in the calculation are : Amazon Fund (Fundo Amazônia), Congo Basin Forest Fund, Forest Carbon Partnership Facility, Global Climate Change Alliance, Global Energy Efficiency and Renewable Energy Fund, MDG Achievement Fund – Environment and Climate Change thematic window; UN-REDD Programme

<sup>5</sup> Joint Multilateral Development Bank Climate Financing Report, Preliminary version (June 2010). The preliminary report indicates a 17 billion USD committed in 2009, from which the present report subtracts the 1.5 billion from EIB which is herein counted as BFI financing, and 0.47 billion USD channeled through the Climate Investment Funds (CIFs).

<sup>6</sup> Trustee report on financial status of the Clean Technology Fund (CTF) and Trustee report on financial status of CTF and Strategic Climate Find (SCF), March 2010.

## 2.3 Mitigation finance

Mitigation finance has risen from USD 7.249 billion in 2008 to USD 8.855 billion in 2009, a substantial increase of around 22%. Figure 2 illustrates the breakdown of mitigation finance by region.



Figure 2: Regional distribution of mitigation finance – 2009

Figure 3 illustrates the sectoral breakdown of mitigation finance. The high portion directed to the transport sector is partly a result of JICA's USD 2.24 billion (comprising nearly 70% of JICA's total mitigation finance). JICA's transport sector focus is primarily in railway, including urban mass rapid transit (MRT). In 2009, data includes MRT in Jakarta, Bangkok, Hanoi and Delhi. A new development in 2009 is that both KfW and JICA provided mitigation finance for water supply and treatment. For KfW, GHG mitigation is achieved by using the energy from biogas and sludge. In JICA's case, methane mitigation technology is applied in waste water treatment projects, and some water supply projects contain solar energy systems to supply electricity for operation.

Finally, both AFD and JICA agreed a number of "policy loans" in 2009. These are essentially development policy lending schemes designed to encourage the development and implementation of public policies to tackle climate change and to better integrate climate into development strategies, typically by financing a country's 'climate plan'. In 2009, AFD financed loans in Indonesia, Mauritius and Mexico, and JICA financed loans to Indonesia.



Figure 3: Sectoral distribution of mitigation finance – 2009

"Other" includes forestry, waste and capacity building (which are all accounted for separately in the raw data in Appendix 4).

Figure 4 illustrates where mitigation finance for the energy sector was directed during 2009, highlighting an even split between renewable energy, energy efficiency and lines of credit to local financial institutions. Credit lines have typically been used as an indirect instrument for financing small scale energy efficiency and renewable energy projects.



## 2.4 Adaptation finance

Adaptation finance from the participating institutions appears to have risen significantly between 2008 and 2009, the USD 3.964 billion committed in 2009 representing a 31% increase on the USD 3.029 billion reported in 2008. The reporting of 2008 data (Atteridge et al (2009)) was the first time the institutions had collectively attempted to map financial flows in support of adaptation to climate change. This pre-dated the OECD DAC's articulation of an 'adaptation marker' to help define what should be counted as adaptation finance. While the present report uses – for the first time – guidance for the new adaptation marker to report adaptation data, the participating institutions have indicated that any change in criteria for reporting adaptation under the new adaptation marker has made reporting more stringent – suggesting that the comparative increase in adaptation financing may in fact be greater than the 31% calculated here.

Figure 5 presents the regional breakdown of adaptation finance. In total, 54% was directed to Africa and the Middle East, around twice as much to North Africa and the Middle East than to West and Sub-Saharan Africa. West and Sub-Saharan Africa received a significantly larger portion of adaptation finance than in 2008. This is in line with the general policy of the participating institutions to direct mitigation finance to emerging economies and adaptation finance to less developed countries.



### Figure 5: Regional distribution of adaptation finance – 2009

A sectoral breakdown of adaptation spending is presented in Figure 6. Consistent with 2008 data, adaptation finance in 2009 was overwhelmingly directed to the water sector.



### Figure 6: Sectoral distribution of adaptation finance – 2009

Note that 'Agriculture' figures include forestry for adaptation data reported by AFD.

### 2.5 The use of different financial instruments

Table 2 summarises the extent to which different financial instruments have been used in the delivery of climate finance in 2009, while Figures 8 and 9 show the use of different instruments for supporting mitigation and adaptation respectively.

At around 64%, concessional loans make up the most significant share of total climate finance from these institutions. Concessional lending dominates finance for adaptation in particular. This suggests that financial instruments are well adapted to meet country needs, by providing concessional loans when subsidised interest rates are necessary to address the adaptation challenge, and that non-concessional loans are provided when no subsidy is required. In principle, this maximises the efficiency of use of public funds. It remains to be seen whether there is scope for expanded non-concessional lending opportunities for adaptation (see Figure 8).

Non-concessional lending still makes up a sizeable chunk of total climate finance (around 23%), but is heavily concentrated in mitigation activities, particularly to the energy and transport sectors.

Grants make up around 7% of total climate finance, though unsurprisingly a higher portion of adaptation-related finance (15.5%).

Instrument	Mitigation	Adaptation	Total
Grants	271	566	837
Concessional loans	5215	3205	8420
Non-concessional loans	2763	100	2863
Other	677	92	769
Total	8926	3963	12889

### Table 2: Use of different financial instruments



### Figure 7: Financial instruments supporting mitigation activities





Appendix 4 gives a more detailed breakdown of how extensively different types of finance have been used in supporting both mitigation and adaptation, and a further breakdown on regional and sectoral bases.

# 3. Investment by Bilateral Finance Institutions in Carbon Finance

Some members of the UNEP Working Group purchase emissions reduction credits from the carbon market – typically from the Kyoto Protocol's Clean Development Mechanism (CDM) or Joint Implementation (JI). To this end, EIB, KfW, and NEFCO all play a 'carbon brokering' role through carbon investment funds. As detailed in Atteridge et al (2009), there are various reasons to keep carbon finance analytically separate from other forms of climate finance in this report – namely that BFIs typically do not invest in these funds and if they do it is in form of a temporary capital commitment; and while carbon finance may strengthen the carbon market, because emissions reduction units are sold, it does not achieve new climate change outcomes (Atteridge et al (2009) p.22).

Table 3 summarises the carbon funds established by or involving EIB, KfW and NEFCO.

Fund	Institutions	Total Capitalisation*
Carbon Fund for Europe (CFE)	EIB (+World Bank)	€50 / 65 USD
Post-2012 Carbon Credit Fund	EIB, KfW (+ others)	€125 / 175 USD
Fonds Capital Carbone Maroc (FCCM)	EIB	€26 / 36.4 USD
KfW Carbon Fund	KfW	€84 / 117.6 USD
NEFCO Carbon Fund (NeCF)	NEFCO	€100 / 140 USD
EIB-KfW Carbon Programme I and II	EIB, KfW	€188 / 263 USD
Baltic Sea Region Testing Ground Facility (TGF)	NEFCO	€35 / 49 USD

### **Table 3: Carbon Funds**

\* Reported in millions of Euros/converted from Euro to USD using the average exchange rate on 31 December 2009 (1 Euro = 1.4 USD); amounts are total capitalisation is not per annum.

In cooperation with the World Bank, EIB has set up the Carbon Fund for Europe (CFE), which is aimed at the EU Member States and the European private sector. With a capital of EUR 50m, the Fund acquires emission credits from projects eligible under the Kyoto Protocol's flexible mechanisms, compatible with the EU's Emissions Trading Scheme (EU ETS). In addition, the CFE can invest up to 20% of its capital in Green Investment Schemes. Tailored to promote projects generating carbon credits from 2012 onwards, the Post-2012 Carbon Credit Fund is an initiative developed by KfW, EIB and three other public finance institutions (Caisse des Dépôts, Instituto de Crédito Oficial and the Nordic Investment Bank). The objective of this carbon fund is to bolster confidence in the establishment of a regulatory regime beyond the Kyoto Protocol. The Post-2012 Carbon Fund has a budget of EUR 125m and is the first of its kind.

The first carbon fund in French-speaking Africa and the first national fund co-established by the EIB, the Fonds Capital Carbone Maroc (FCCM), supports CDM projects by acquiring carbon credits over the period 2008-2017. The Fund is worth approximately €26m.

The KfW Carbon Fund department became part of KfW Entwicklungsbank in 2009, and has to date concluded two purchase programmes. In the first programme, KfW Carbon Fund acquired nearly 8 million carbon credits from 24 projects in twelve countries. The EIB-KfW Carbon Programme also acquired acquired approximately 8 million carbon credits from 20 projects in five countries. In December 2009 EIB and KfW agreed on a follow-on programme, EIB-KfW Carbon Programme II with a target volume of EUR 100 million, which is aimed in particular at acquiring credits in LDCs and from innovative programmatic approaches. Buyers from the programmes are European entities which used the credits to meet their European Emissions Trading Scheme (EU-ETS) obligations.

For its part, NEFCO operates two carbon procurement funds. The NEFCO Carbon Fund (NeCF), established in 2008, consolidated its capital based by an additional EUR 24 million in 2009. The NeCF signed emission reduction purchase agreements (ERPAs) to substantially place its €100 million of capital in 10 renewable energy projects in Asia and Latin America. More than half of this was long term finance (i.e. post 2012 procurement). Finally, the Baltic Sea Region Testing Ground Facility (TGF) established in 2003, is a regional carbon finance facility structured as a Public Private Partnership. The remainder of the fund's total capital of EUR 35 million was invested in 2009, meaning that the TGF effectively concluded its active procurement of emissions reductions from carbon credits. The TGF has funded projects under the Kyoto Protocol provisions regarding Joint Implementation (JI) by buying emission reductions in countries including Estonia, Latvia, Lithuania, Russia and Ukraine.

KfW, EIB, AFD/Proparco and others are discussing the launch of a Mediterranean Carbon Fund.

## 4. Conclusions

While it is difficult to demonstrate the total size of the global climate finance pie, it is clear that the nearly 13 billion USD committed in 2009 by the participating finance institutions for climate finance is significant in absolute terms, as compared to finance committed by MDBs, and also shows a considerable increase over 2008. As compared to 2008, the UNEP Working Group in 2009 increased its climate finance by over 25%, with a 31% increase in adaptation financing, and a 23% increase in mitigation financing. Regionally, the 2009 data shows a marked increase in adaptation financing to West and Sub-Saharan Africa. Significant financing for climate change mitigation was also committed in West and Sub-Saharan Africa, demonstrating that BFIs are able to respond to the needs for low carbon development in LDCs. Sectorally, mitigation finance continues to flow primarily to the energy and transport sectors, and adaptation finance predominately flows to the water sector.

Methodologically, it is clear that there is much work to be done on the reporting and tracking of climate financial flows by all actors involved. Both the standardisation of what constitutes 'climate finance' and the means to track finance through proliferating channels will need to be addressed. While the DAC Rio markers and new adaptation marker comprise a point of departure, they will need to be honed, and their relevance to non-ODA climate finance and to non-OECD countries be articulated. A potentially useful next step is a discussion among a broader set of financial institutions, perhaps including the BFIs and MDBs, with an aim to move toward a common and prescribed definition of climate finance for mitigation and adaptation, and means to map and track data that are comparable temporally, and across regions, sectors and financial instruments.

# Appendix 1: 'Climate finance' – Definitions and terminology

This Appendix provides further explanation of the terms and classifications used in the report. It demonstrates both the complexity of establishing a common definition of 'climate finance' based on current practice, and that much work is yet to be done on standardising reporting procedures by the UNEP Working Group and other financial institutions.

## 'Climate finance'

There is no standardised, global definition of 'climate finance'. Achieving such a definition will require a longer term, joint effort by all actors involved. For the present report, the UNEP Working Group has adopted a broad and inclusive description, while the table below provides more information on what is included and excluded by the participating finance institutions.

### Common working definition

A working definition of 'climate finance' for purposes of this report is proposed as: Finance flowing from developed to developing countries, including support for mitigation, adaptation, policy and capacitybuilding. Mitigation projects include renewable energy projects, energy efficiency and fuel switch, forestry and land use, sustainable urban transport and sequestration projects, and technical assistance and capacity building dedicated to addressing climate change. Adaptation projects imply that part of the project is dedicated to a specific adaptation purpose such as water, agriculture, infrastructure, or capacity building. Also included is climate policy direct budgetary support.

Where funds support an activity with both an adaptation and mitigation benefit, the UNEP Working Group members reported half of the total amount under mitigation and half as adaptation. To determine what qualifies as mitigation and adaptation, the Working Group uses guidance for the Rio markers and the new adaptation marker of the Organisation for Economic Co-operation and Development's Development Assistance Committee (OECD DAC).

### The Scope of 'climate finance' by institution

	· · · · · · · · · · · · · · · · · · ·
AFD	Climate <b>mitigation</b> projects are assessed based on a measurement of the carbon footprint of projects for mitigation. A project is included in this category when the emissions it avoids during its lifetime exceed the emissions it induces. AFD has developed a tool and standard methodology to assess the carbon footprint of its projects. Because of the lack of international standardised accounting methodologies, AFD is working to disseminate this methodology to other financial institutions. A definition of <b>adaptation</b> projects has also been adopted by AFD: they are development projects that help decrease the vulnerability of populations, infrastructures and ecosystems to current and future impacts of climate change. To make this definition concrete, a precise typology of projects that can contribute to this objective has been set up and can be downloaded on AFD's website.
KfW	Different divisions of KfW (i.e. domestic, export finance, development finance) use slightly different definitions of 'climate financing' in order to be compatible with internal planning and reporting systems. For climate flows to developing countries, DAC Rio-Marker 1 or 2 in combination with the new DAC adaptation definition is used as key selection criteria.

JICA	For climate flows to developing countries reported for this report, DAC Rio-Marker 1 or 2 in combination with the new DAC adaptation definition is used as key selection criteria.
EIB	<ul> <li>Mitigation projects include:</li> <li>Energy efficiency. All projects that result in: <ul> <li>An increase in energy efficiency of at least 20% from the baseline;</li> <li>An increase in energy efficiency of less than 20% from the baseline provided that the energy savings justify at least 50% of the investment cost; or</li> <li>Examples of eligible projects would include combined heat and power (CHP) plants and district heating systems, and energy efficiency investments in buildings and industrial facilities.</li> </ul> </li> </ul>
	<ul> <li>Renewable energy. Projects from renewable non-fossil sources such as wind, solar, aero-thermal, geothermal, hydrothermal and ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases – and related component manufacturing facilities and infrastructure. Hydro above 20 MW, biomass and biofuels and infrastructure may not be considered climate change projects when their net carbon balance is to be presumed positive – i.e. resulting in an increase in emissions of GHGs.</li> <li>Transport. All transport projects that contribute to reducing road and air traffic emissions. Examples of eligible projects would be metro, tramways, bus rapid transit, rail, inland waterway and short sea shipping, as well as investments in rolling stock, vessels, and associated equipment.</li> <li>Forestry and land use. Biological sequestration projects that sequester or conserve at least 20000 tons/year of CO<sub>2</sub>-e; examples of eligible projects would be afforestation, reforestation, forest and cropland management, avoided deforestation, reduced tillage, and revegetation.</li> </ul>
	Adaptation projects include: Projects, intended primarily as measures taken specifically to anticipate climate change when these measures either exceed €20 m in value or account for at least 50% of total project costs. Examples of eligible projects would be flood control and drought management measures, and measures to increase the climate resilience of vulnerable infrastructure or areas (e.g. coasts).
NEFCO	N/A

## Funds 'committed' and funds 'disbursed'

It is standard practice by finance institutions to report in terms of total funds *committed* in a particular time frame. This is sometimes questioned by those attempting to track financial flows, because funds committed in a given time period can differ from funds disbursed, and because there is a perceived danger of 'double counting' when funds committed in a given year are not disbursed but reassigned in a different budgetary year. The participating financial institutions provide the following information for what it meant by 'committed' funds.

AFD	Funds that have received Board approval.
KfW	Definition of commitment is to conclude Loan Agreement (L/A) or Grant Agreement (G/A).
JICA	Definition of commitment is to conclude Loan Agreement (L/A) or Grant Agreement (G/A).
EIB	Amount of finance contracts signed with beneficiaries respectively equity contributions
	subscribed
NEFCO	N/A

# Appendix 2: Countries receiving climate finance from participating finance institutions

Central, East, and	Cambodia	Philippines
South-East Asia	China	Thailand
Soum-Easi Asia		
	Indonesia	Timor-Leste
	Lao People's Democratic Republic	Vietnam
	Mongolia	+ The Mekong River Commission
	Myanmar	
South Asia	Afghanistan	Pakistan
	Bangladesh	Maldives
	Bhutan	Nepal
	India	Sri Lanka
North Africa and	Armenia	Morocco
Middle East	Azerbaijan	Palestine
	Egypt	Syrian Arab Republic
	Iraq	Tunisia
	Jordan	Turkey
	Lebanon	Yemen
West and Sub-Saharan	Benin	Mali
Africa	Burkina Faso	Mauritania
/ inted	Burundi	Mauritius
	Cameroon	Mozambique
	Cape Verde	Niger
	Chad	Réunion
	Comoros	Rwanda
	Cote d'Ivoire	Senegal
	Democratic Republic of the Congo	South Africa
	Djibouti	Тодо
	Ethiopia	Uganda
	Gambia	United Republic of Tanzania
	Ghana	Zambia
	Kenya	
Latin America and the	Belize	Haiti
Caribbean	Bolivia (Plurinational State of)	Martinique
	Brazil	Mexico
	Chile	Nicaragua
	Colombia	Panama
	Ecuador	Paraguay
	Guatemala	Peru
	Guyana	1610
Ocception		Paraua Naw Cuinea
Oceania	French Polynesia Marshall Islands	Papua New Guinea Solomon Islands
	New Caledonia	Vanuatu
	Palau	
Eastern Europe and	Albania	Poland
South Europe	Belarus	Republic of Kosovo
	Bosnia and Herzegovina	Romania
	Croatia	Russian Federation
	Czech Republic	Serbia
	Estonia	The former Yugoslav Republic of
	Hungary	Macedonia
	Montenegro	Ukraine

# Appendix 3: Climate Finance to Eastern and South Europe (in millions USD)

	Mitigati	on (Rio Mark	ers 1 or 2)	Adapta	tion (Adaptatior	n Marker)	Grand Total
	(ODA)		(Non-ODA)	(ODA)	(Non-	ODA)	
	Grants	Other (pls specify)	Non- Concessional Loans	Grants	Non- Concessional Loans	Other (pls specify)	
Region	Total (USD)	Total (USD)	Total (USD million)	Total (USD)	Total (USD)	Total (USD)	
EIB			1218				
KfW	17	84	6	54	36	7	
JICA				13			
Totals	17	84	1224	67	36	7	1435

# Appendix 4: Finance data

## Summary: Regional breakdown of climate finance

Region	Mitigation	Adaptation	Total
Central, East, and	2986	1027	4013
South-East Asia			
South Asia	1986	672	2657
North Africa and	1981	1328	3309
Middle East			
West and Sub-Saharan	729	747	1476
Africa			
Latin America	1100	172	1272
Oceania	38	9	47
Transregional	35	9	44
Total	8855	3964	12819

## Summary: Sectoral breakdown of finance

Sector	Mitigation	Adaptation	Total
Energy**	4488	-	4488
Transport	4078	240	4318
Agriculture	61	418	479
Forestry	41	3	44
Water supply/treatment	424	2 920	3344
Waste	13	13	26
Policy loans	956	203	1159
Health	-	-	-
Coastal protection	-	11	11
Other disaster risk reduction	-	172	172
Capacity building (not included above)	3	2	5
Other	82	45	126
Total	10146	4027	14173

## Summary: Energy sector mitigation finance by sub-sector

/ 3/					
Sub-sector	AFD	EIB	JICA	KfW	Total
Renewable energy	292	441	102	436	1271
Energy efficiency	463	94	400	462	1419
Fuel switch	142	-	60	-	202
Lines of credit to local	986	611	-	-	1597
financial institutions					
Total	1883	1146	562	898	4489

Note: Total finance figures in the sectoral data table are higher than the total regional figures because in the sectoral data: 1. mitigation figures include EIB finance to Eastern Europe; 2. adaptation figures include KFW and JICA to Eastern Europe and excludes AFD to French Territories. These cannot be disaggregated given the way data was collected in 2009 (the sector-region correlation was not reported). For purposes of this exercise, the sectoral analysis is important to illuminate patterns in the data rather than specific dollar amounts – achieved despite the difference in totals.

	JICA	AFD	EIB	KfW	NEFCO	
Mitigation (total)						Regional total - mitigation
Central, East, and South-East Asia	1859	676	96	354		2985
South Asia	1233	347	144	262		1986
West and Sub-Saharan Africa	66	437	120	105		728
North Africa and Middle East	37	782	855	307		1981
Latin America	94	551	212	243		1100
Oceania	11	11	16	-		38
Transregional	-	3		32		35
Total	3300	2807	1443	1303		8853
Eastern and South Europe	-	-	1218	107		1325
Total incl Europe			2661	1 410		10178
Adaptation (total)						Regional total - adaptation
Central, East, and South-East Asia	1010	18	-	-		1028
South Asia	666	-	-	5		672
West and Sub-Saharan Africa	276	434	-	37		747
North Africa and Middle East	1038	153	-	137		1328
Latin America	120	1	-	51		172
Oceania	9	1	-	-		10
Transregional	-	9	-	-		9
Total	3119	616	-	230		3966
Eastern and Southern Europe	13	-	-	96		109
Total incl Europe	3132			326		4075
TOTAL CLIMATE FINANCE (excl Europe)	6419	3423	1443	1533	0	12819

# Detailed regional breakdown of climate finance

All figures in USD (millions) and exclude carbon finance. Note that totals in this regional data sheet do not match those in the sectoral data sheet because AFD's finance to several French Territories has been included in regional data but not sectoral data.

	JICA	AFD	EIB	KfW	NEFCO	
Mitigation (total)						Total by instrument - mitigation
Grants	64	4	-	202		270
Concessional loans	3236	1825	-	153		5214
Non-concessional Ioans	-	978	1515	271		2764
Other	-	-	-	677		677
Total	3300	2807	1515	1303		8925
Adaptation (total)						Total by instrument - adaptation
Grants	416	48	-	102		566
Concessional loans	2702	468	-	36		3206
Non-concessional loans	-	100	-	-		100
Other	-	-	-	92		92
Total	3118	616	-	230		3964
GRAND TOTAL	6418	3423	1515	1533		12889

## Detailed breakdown of climate finance by financial instrument

	JICA	AFD	EIB	KfW	NEFCO	
Mitigation (total)						Sectoral total - mitigation
Energy	562	1884	1145	897		4488
Transport	2240	135	1480	224		4079
Agriculture	-	-	-	61		61
Forestry	-	-	-	41		41
Water supply/treatment	282	-	-	142		424
Waste	13	-	-	-		13
Policy loans	203	752	-	-		955
Capacity building (not included above)	-	3	-	-		3
Other	-	-	36	46		82
Total	3300	2774	2661	1411		10146

## Detailed sectoral breakdown of climate finance

	JICA	AFD	EIB	KfW	NEFCO	
Adaptation (total)						Sectoral total - adaptation
Energy	-	-	-	-		0
Transport	240	-	-	-		240
Agriculture	318	64	-	37		419
Forestry	-	-	-	3		3
Water supply/treatment	2199	503	-	218		2920
Waste	-	-	-	13		13
Policy loans	203	-	-	-		203
Health	-	-	-	-		0
Coastal protection	-	-	-	11		11
Other disaster risk reduction	171	1	-	-		172
Capacity building (not included above)	-	2	-	-		2
Other	-	-	-	45		45
Total	3131	570	-	327		4028
GRAND TOTAL (institution)	6431	3344	2661	1738		14174

EIB data differs from regional spreadsheet because sectoral data includes finance to Eastern and Southern Europe.

# **Appendix 5: Data collection sheet**

## **Climate Change Financing 2009**

(Committed funds in USD millions (use exchange rate 2009.12.31))

Name of Institution:

Contact person:

Please refer to Reporting Guide for country-by-country list for regional breakdown. No double reporting of mitigation and adaptation - see Reporting Guide for instructions where finance may contribute to both.

	Mitigation (Rio Markers 1 or 2)							
		(ODA)	(Non-ODA)					
	Grants	Concessional Loans	Other (pls specify)	Non-Concessional Loans	Other (pls specify)			
Region	Total (USD)	Total (USD)	Total (USD)	Total (USD)	Total (USD)			
Central, Eastern, and South-Eastern Asia								
Southern Asia								
West and Sub-Saharan Africa								
Northern Africa and Western Asia								
Latin America								
Eastern and South Europe								
Oceanea								
Transregional								
Totals (region)	0	0	0	0	0			
Sector	Total (USD)	Total (USD)	Total (USD)	Total (USD)	Total (USD)			
Energy**								
Transport								
Agriculture								
Forestry								
Water supply/treatment								
Waste								
Policy loans								
Health								
Coastal protection Other disaster risk reduction								
Other disaster risk reduction Capacity building (not included above)								
Other (pls specify)								
Totals (sector)	0	0	0	0	0			

\*\*Energy sector

	Total (USD)		Total (USD)
Renewable energy			
Energy efficiency			
Fuel switch			
Lines of credit (local banks)			
Other (pls specify)			
Sub totals (energy)			

		Grand Total			
	(ODA)			DA)	
Grants	Concessional Loans	Other (pls specify)	Non-Concessional Loans	Other (pls specify)	
Total (USD)	Total (USD)	Total (USD)	Total (USD)	Total (USD)	
0	0	0	0	0	0
Total (USD)	Total (USD)	Total (USD)	Total (USD)	Total (USD)	
0	0	0	0	0	0

Bilateral Finance Institutions and Climate Change: A Mapping of 2009 Climate Financial Flows to Developing Countries

•



### Agence Française de Développement, AFD

Mr. Pierre Forestier Mr. Olivier Grandvoinet Climate Chanae Unit 5. rue Roland Barthes 75598 Paris, cedex 12, France : + 33 1 5344 4546 Tel Fax : +33 1 5344 3866 Email : forestierp@afd.fr Web : http://www.afd.fr

**European** Investment **Bank** 

### **European Investment Bank, EIB**

Mr. Matthias Zoellner , Managerial Adviser Environment Operations outside Europe 98-100, boulevard Konrad Adenauer L-2950 Luxembourg : +352 4379 86579 Tel

- : + 352 4379 62000 Fax
- Email : m.zoellner@eib.org
- Web : http://www.eib.org

### Japan International Cooperation Agency, JICA

Office for Climate Change, Global Environment Department (Attention: Director)

- Tel : +81-3-5226-8470
- Fax : +81-3-5226-6371
- Email : gegoc@jica.go.jp
- Web : http://www.jica.go.jp/english/index.html

### KfW Development Bank, KfW

Dr. Jochen Harnisch Vice President, Coordinator – Climate Change Policy Palmenaartenstr. 5-9 D-60325 Frankfurt a. M. Tel : +49 69 7431-9883 : +49 69 7431-4775 Fax Email : Jochen.Harnisch@kfw.de

Web : www.kfw-entwicklungsbank.de

# 

TWICKLUNGSBANK

**Nordic Environment Finance Corporation, NEFCO** 

Mr. Ash Sharma, Senior Investment Manager Head, Carbon Finance and Funds Unit Fabianinkatu, 34 FI 00171 Helsinki FINLAND : +35 8 40 08 11327 Tel : +35 8 96 30 976 Fax Email : ash.sharma@nefco.fi Web : http://www.nefco.org/cff

### **United Nations Environment Programme, UNEP**

Mr. Dean Cooper, Head of the Energy Finance Unit Ms. Maria Milagros Morales, Energy Finance Programme Manager 15 rue de Milan 75441 Paris cedex 09, France Tel : +33 1 44 37 16 27/28 Fax : +33 1 44 37 14 74 Email : dean.cooper@unep.org Email : maria-milagros.morales@unep.org

Web : http://www.unep.fr/energy