

Climate Finance (CF)

1. METHOD DESCRIPTION

Objective

Well-aligned, integrated and mutually reinforcing climate policies and strategies and national-level urban-related policies are vital for leveraging climate finance from international, national and private sources. However, climate finance is complex and challenging for countries, and even more so for cities, to access.

The tool: **Climate Finance INFORMATION SHEET** defines the concept and provides an introduction to the global structure and mechanisms of climate finance, and points at the various ways that climate actions can be financed at the sub-national level. It provides a summary of international, bi-lateral, national and private financing mechanisms, and highlights ways to overcome the various challenges that different levels of government might face in accessing them.

When to use

This activity supports the following tasks:

Phase/Element	Element I: Substantive Process	Element II: Resources and Capacities	Element III: Policies	Element IV: Institutions and Stakeholders
Phase A: Feasibility and Diagnosis		✓ Assess availability and gaps in needed human, financial, informational, institutional and other resources for undertaking the mainstreaming process, and develop a Financing and Capacity Development Strategy	✓ Identify relevant sections in international frameworks linked to urban development and/or climate change with relevance for urban context	
Phase B: Formulation				
Phase C: Implementation		✓ Support resource mobilization for implementation of mainstreamed climate actions, considering domestic and international, private and public financing sources and mechanisms; and support measures to channel financial resources to sectoral and sub-national implementing bodies.		
Phase D: Monitoring and Evaluation				

It can also be used for general reference throughout the mainstreaming process.

Key Points Covered

- Definition of Climate Finance

- Domestic, international (multilateral/bilateral) and private climate financing mechanisms
- How climate change mainstreaming into national-level urban-related policies serves to improve access to climate finance

Climate Finance (CF)

2. INFORMATION SHEET

What is Climate Finance?

The United Nations Framework Convention on Climate Change (UNFCCC, see Box CF 2.1 for explanation) defines climate finance as ‘local, national or transnational financing, which may be drawn from public, private and alternative sources of financing - that seeks to support mitigation and adaptation actions that will address climate change’. It is critical to addressing climate change because large-scale investments are required to significantly reduce emissions, notably in sectors that emit large quantities of greenhouse gases. Climate finance is equally important for adaptation, for which significant financial resources will be similarly required to allow countries to adapt to the adverse effects and reduce the impacts of climate change.¹

Box CF 2.1: What is the UNFCCC and what does it do?

The United Nations Framework Convention on Climate Change (**UNFCCC**) has the aim to prevent “dangerous” human interference with the climate system by stabilizing greenhouse gas (GHG) concentrations in the earth’s atmosphere. It was adopted at the “Rio Earth Summit” in 1992 and entered into force in 1994. The 197 countries that have ratified the Convention are called Parties to the Convention.

Along with the UNFCCC, countries also set up a UNFCCC secretariat in Bonn, Germany. With the subsequent adoption of the **Kyoto Protocol** in 1997 and the **Paris Agreement** in 2015, Parties to these three agreements have progressively reaffirmed the secretariat’s role as the United Nations entity tasked with supporting the global response to the threat of climate change. The secretariat provides technical expertise and assists in the analysis and review of climate change information reported by Parties and in the implementation of the Kyoto mechanisms. It also maintains the registry for Nationally Determined Contributions (**NDC**) established under the Paris Agreement, a key aspect of implementation of the Paris Agreement. The secretariat organizes and supports negotiating sessions each year, most importantly the Conference of the Parties (**COP**).

Much of the scientific basis on climate change to underlie negotiations at the UNFCCC is provided by the Intergovernmental Panel on Climate Change (**IPCC**), which publishes comprehensive assessment reports every five years focusing on the physical science (Working Group I), the impacts, adaptation and vulnerability (Working Group II), and mitigation of climate change. It also provides guidance for preparing National Greenhouse Gas Inventories.

The UNFCCC has a number of funds and financial mechanisms to assist countries with climate actions. These are the Global Environment Facility (**GEF**), the Green Climate Fund (**GCF**), the Adaptation Fund (**AF**), The Special Climate Change Fund (**SCCF**), The Least Developed Countries Fund (**LDCF**) (both managed under the GCF) and under the Kyoto Protocol, three market based finance mechanisms: the Clean Development Mechanism (**CDM**), and the Joint Implementation (**JI**) Mechanism and the Emissions trading. The funds are introduced in more detail on pp. 8-13 of this Information Sheet.

Sources: <https://unfccc.int/process>; <https://unfccc.int/about-us/about-the-secretariat>;

¹ http://unfccc.int/focus/climate_finance/items/7001.php#intro

http://www.ipcc.ch/news_and_events/docs/factsheets/FS_what_ipcc.pdf

There is no formal internationally agreed definition for what counts as climate finance. In 2015, The Climate Policy Initiative estimated that the total global climate finance flow was US\$391 billion, with around 92 per cent of this amount being invested in mitigation actions². Of this, US\$243 billion was private, compared to US\$148 billion of public finance³. However, it is thought that some domestic public finance, such as investment in infrastructure, which is difficult to directly attribute as climate finance, is not included in this total. This finance could be as much as US\$60 billion per year⁴.

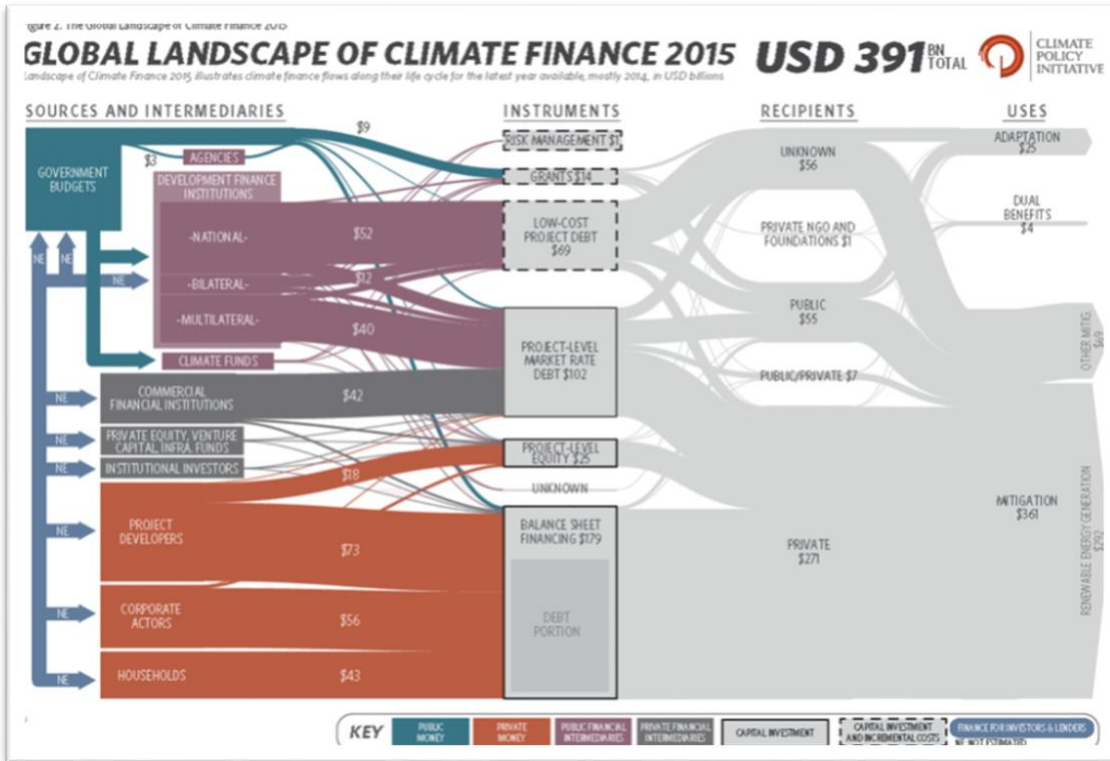
Figure CF 2.1 provides an overview of the global climate finance landscape in 2015. The largest source of the US\$391 billion climate finance globally was development finance institutions, totalling US\$104 billion. This was followed by the private sector, including domestic measures taken by households to mitigate and adapt to climate change (US\$43 billion), and commercial finance institutions (US\$42 billion). Government budgets constituted the smallest share, at US\$9 billion.

² CPI (2015) Global Landscape of Climate Finance, p.2

³ Ibid, p.1

⁴ Curran, P. (2016) What is Climate Finance? LSE/Grantham Research Institute on Climate Change and the Environment

Figure CF 2.1: Global Landscape of Climate Finance 2015

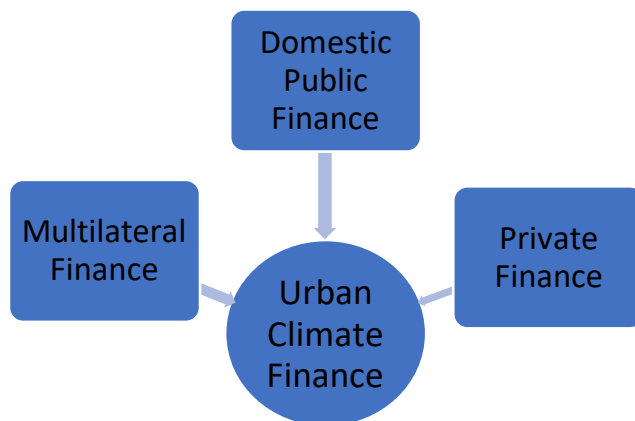


This document provides an overview of the main types of climate finance, and highlights some of the challenges that might be faced with accessing it at local, city and national levels. Recommendations are then provided on how the mainstreaming of climate change into national-level urban-related policies, as well as the mainstreaming framework provided in the main Guide can help both national and sub-national levels of government gain better access to various sources of climate finance.

Sources of Climate Finance

Sources of urban climate finance can be broadly separated into four categories: domestic public climate finance, international public climate finance and Domestic and International private sources, as displayed in Figure CF 2.2 below. An overview of each, including some of the challenges surrounding access to their respective financial mechanisms are provided in the sections below.

Figure CF 2.2: Sources of Urban Climate Finance



Domestic Public Climate Finance

Domestic climate finance is, and will continue to be, an important source of climate finance. Globally, available climate funds remain at a relatively modest scale compared with the climate change needs of developing countries. Domestic public finance has a catalytic role because it can leverage both climate and development finance through piloting innovative approaches that combine resources to maximize synergies. As shown in Figure CF 2.1, about US\$52 billion globally was national climate finance from public budgets. To try to establish what countries spend from their national budgets on climate change, UNDP has led a series of studies known as Climate Public Expenditure and Institutional Reviews (CPEIRs). These have shown some interesting results. In Bangladesh, for example, the government spends around US\$1 billion on what UNDP terms ‘climate sensitive activity’⁵. Accounting for national climate finance remains challenging because of ongoing problems with the definition of what constitutes climate finance. While adaptation and mitigation actions are well defined among climate practitioners⁶, they are much less well defined in public accounting systems, making the classification of climate budget and expenditure a subjective task⁷. To try to address this, the UNDP CPEIR reports make a distinction between pure climate change spending and climate sensitive spending.

For local governments, domestic public finance presents a significant opportunity, as it can be easier to access than international finance. It does not require complex and lengthy accreditation procedures, and requires only compliance with national laws and standards in issues such as environmental and social safeguards, rather than requiring ‘dual compliance’ – with both national standards and the (often more rigorous) standards of an international financier. Fiscal transfers to local governments can be tailored to address local climate action. Local revenue generation through taxes can also be a potentially powerful tool, especially property tax. It has a direct relationship with land use and the built environment, which is responsible for a large part of cities’ GHG emissions. Local governments can also raise domestic climate finance through climate change related fees and charges which could be effective instruments in a variety of areas to signal the higher cost of internalizing environmental externalities or adaptation action, including in the transport, land development, waste, and water sectors.

⁵ UNDP/UNEP (2012) Bangladesh Climate Public Expenditure and Institutional Review, p.20

⁶ See for example OECD (2011) Handbook on the OECD-DEC climate markers. Preliminary version.

⁷ UNDP (2012) Bangladesh Climate Public Expenditure and Institutional Review, p.89

Some examples of domestic public climate finance⁸ are displayed in Box CF 2.2, together with some examples of National Climate Change Trust Funds. However, as shown in the example from Vietnam in Figure CF 2.3, domestic climate finance is often allocated at national level and through sectoral ministries - mainly to agriculture, water security and forestry, while urban-related climate change issues are not often prioritised. This points to a need for improved lobbying from cities and urban actors for climate finance from domestic budgets and for strengthening of vertical channels of distributing finance.

Box CF 2.2: Domestic Climate Finance: Examples in Asia

Domestic Climate Finance Examples

- Bangladesh invests 7% of its total budget per year on 'climate sensitive' activities
- Thailand spends over USD 40 million per year on adaptation activities from its own budget
- Vietnam was investing about USD 33 million per year in the National Target Programme to Respond to Climate Change
- Costed National Adaptation Plan with urban sector priority in Sri Lanka

National Climate Change Trust Funds:

- People's Survival Fund – Philippines
- Bangladesh Climate Change Resilience Trust Fund
- National Adaptation Fund – Sri Lanka (proposed)
- Indonesia Climate Change Trust Fund

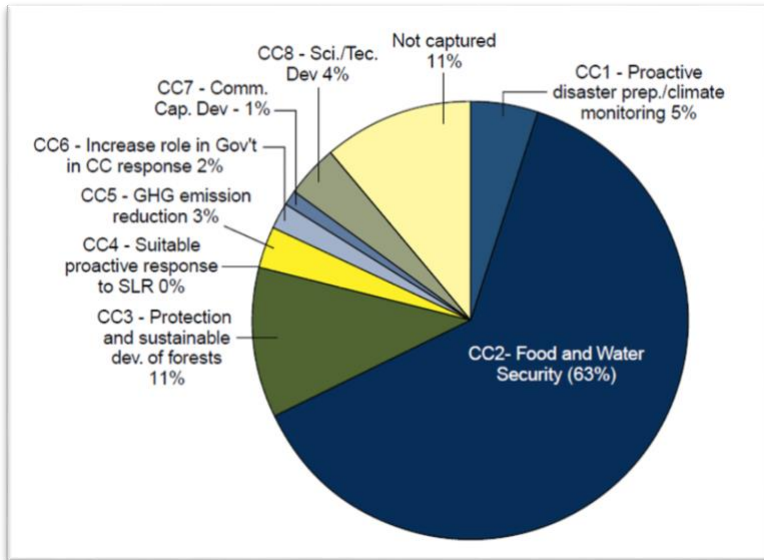
It is also essential that effective mechanisms are in place to channel national-level climate finance to the local level – whether its source is domestic or international. Experience from the Rockefeller 100 Resilient cities programme has shown that city governments often lack the systems and capacities to plan for, prioritize, design viable projects and manage the influx of climate finance required to drive local climate action. An example of such a mechanism is the People's Survival Fund (PSF), an annual fund programmed by the government of the Philippines and intended for local government units and accredited local and community organizations to implement climate change adaptation projects that will equip vulnerable communities to deal with the impacts of climate change. The initiative is to be commended, but in practice, the PSF process has had significant start-up challenges that the government of the Philippines is now in the process of addressing. Thus, since the first call of the PSF in November 2015 to the latest call in July 2017, the PSF Board has approved only four proposals.

One challenge for local government units (LGUs) is the shift to not-business-as-usual planning and budgeting. Planning for adaptation activities requires a clear understanding of local climate vulnerabilities. This understanding has to be translated into baselines, which then serve as the starting point of the PSF proposal. Agencies involved in the disaster risk reduction and climate change action-enhanced Comprehensive Land Use Plan (CLUP), Comprehensive Development Plan (CDP), or Local Climate Change Action Plan (LCCAP) have faced substantial challenges in guiding LGUs on how to go about their planning. The national government also suffers from the same problem because no single agency, as of the moment, can certify the strength and merits of the

⁸ From project countries under the UN Development Account project, "*Strengthening capacities of member states in the Asian and Pacific Region to mainstream climate change concerns into national urban-related policies*", in the framework of which the Regional Guide and Training and Reference Tools have been developed.

plans. Another challenge is the lack of information dissemination regarding the PSF and there were cases of misinformation spreading among LGUs on the requirements to access the Fund. In addition to the above challenges more specific issues, many LGUs generally still lack the capacity to implement and monitor and evaluate projects.⁹

Figure CF 2.3: Domestic Climate Finance Allocation in Vietnam



⁹ Adapted from Institute for Climate and Sustainable Cities: Accessing the People's Survival Fund <http://www.icsc.ngo/accessing-people's-survival-fund>.

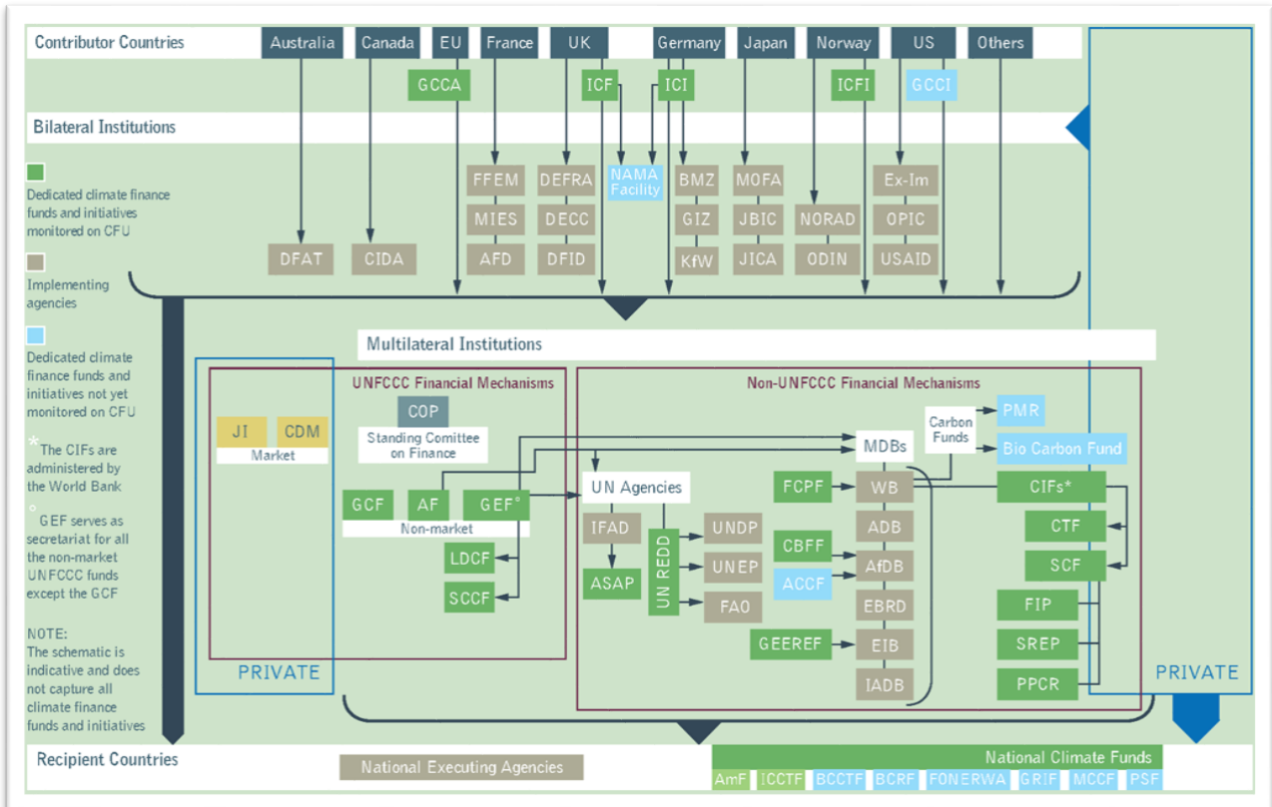
Table CF 2.1: Mechanisms to channel national climate funds to sub-national governments

Project Country	Mechanism to Channel to Sub-National Government	Requirements and Challenges
Philippines	People's Survival Fund	<ul style="list-style-type: none"> • Lack of LGU capacity to plan for adaptation projects • Lack of information dissemination regarding the Fund and its access requirements • Currently going through revision process to simplify access and provide better information to LGUs
Myanmar	Three-level climate finance strategy	<ul style="list-style-type: none"> • The strategy has only recently been officially adopted • Internal competition for time/resources due to Myanmar's ongoing reform agenda
Vietnam	National Target Programme to Respond to Climate Change	<ul style="list-style-type: none"> • Allocated at national level and through sectoral ministries • Urban-related climate change issues are not often prioritised
Bangladesh	Bangladesh Climate Change Resilience Fund Bangladesh Climate Change Trust Fund	<ul style="list-style-type: none"> • Dependent on external donors • Funded through national budget allocation
Sri Lanka	National Adaptation Fund	<ul style="list-style-type: none"> • This fund is proposed and therefore is not yet operational

International Public Climate Finance

International Public climate finance consists of multilateral and bilateral financing mechanisms. The international climate finance architecture is displayed in Figure CF 2.4 below providing an overview of both multilateral and bilateral financing institutions and mechanisms, along with their major contributor countries and implementing agencies.

Figure CF 2.4: International Climate Finance Architecture¹⁰



¹⁰ Figure retrieved from GGGI presentation: Climate Finance for Local Climate Action from the workshop "Enhanced National Urban Policies and Vertical Integration: Governance Capacities – Finance for Local Climate Action" Kuala Lumpur, 4-6 February 2018

Multilateral Financial Mechanisms

Multilateral Financial Mechanisms consist of United Nations Framework Convention on Climate Change (UNFCCC) Funds and non-UNFCCC funds. A summary of major mechanisms is provided in Table CF 2.2, below. Selected multilateral financial mechanisms, as well as the means for accessing them are elaborated in the following sections as examples.

Table CF 2.2: Types of multilateral financial mechanisms¹¹

UNFCCC Funds	Global Environment Facility (GEF) Green Climate Fund (GCF) Adaptation Fund (AF) Special Climate Change Fund (SCCF) Least Developed Countries Fund (LDCF) Clean Development Mechanism (CDM) Joint Implementation (JI) Mechanism
Non-UNFCCC Funds	Climate Investment Fund (CIF) – World Bank (including Clean Technology Fund, Forest Investment Programme, Pilot Programme for Resilience; Scaling up RE Programme) NAMA Facility (UK and Germany) Global Fund for Disaster Risk Reduction Global Climate Change Alliance (EU) Various Bilateral Initiatives

Table CF 2.3 below displays the share of multilateral climate finance in project countries. One notable challenge observed in relation to cities is that UNFCCC funds, in particular, are often accessed by the Ministry of Environment and channelled to agriculture, forestry, and other environmental initiatives. This means that, as in the case with domestic climate finance, cities have thus far lacked the capacity to lobby themselves for international funding to be channelled towards local climate change action.

¹¹ Table retrieved from GGGI presentation: Climate Finance for Local Climate Action from the workshop “Enhanced National Urban Policies and Vertical Integration: Governance Capacities – Finance for Local Climate Action” Kuala Lumpur, 4-6 February 2018

Table CF 2.3: Multi-lateral Climate Finance in Project Countries

Country	GCF	GEF	Adaptation Fund	Others
Bangladesh	\$80m	\$28.8m	N/A	PPCR - \$110m, BCCRTF €130m
Myanmar	Readiness	\$21.3	\$7.9m	MCCA - \$4m
Philippines	Readiness	\$1.5m	N/A	PPCR - \$250m
Solomon Islands	\$234m	\$20.7	\$5.5m (excl proposals)	
Sri Lanka	\$52m (14 co-finance from govt)	\$36.7m	\$8m	
Vietnam	\$29.5m	\$7.9m	\$1m	

Green Climate Fund

The Green Climate Fund (GCF) aims to help developing countries reduce emissions and adapt to the impacts of climate change. Created by the United Nations Framework Convention on Climate Change (UNFCCC), the Fund became operational in May 2014. The GCF aims to allocate 50 per cent of its resources to mitigation projects and 50 per cent to adaptation. Across adaptation and mitigation, it will allocate 50 per cent of its resources to least developed countries, small islands developing states and African countries.

The GCF has become the first multilateral fund to make cities and urban areas a priority. There are eight strategic priorities for the GCF; four in mitigation, four in adaptation, as shown in Figure CF 2.5. Of these cities and urban areas are a priority in five of them – three in mitigation; transport; energy generation and access; buildings, cities, industries and appliances; and two in adaptation; enhanced livelihoods of vulnerable people and communities; and food, water security, and health.



Figure CF 2.5 - GCF Strategic Funding Priorities¹²

¹² GCF (2015) Elements 02 – Investment Opportunities for the Green Climate Fund, pp.10-11

There are three types of GCF accreditation; national direct access, which allows an organisation registered in a given country to implement projects in that country (this is called the national implementation Entity or NIE); regional direct access, which follows a similar logic in a given region; and international access, which is typically for international organisations and the private sector. Accessing GCF remains a challenge for many countries, as grants under the main GCF funding window requires accreditation based on fiduciary standards which account for capacities surrounding finance and administration, transparency and accountability, and project management and monitoring and evaluation¹³; as well the adoption of an Environmental and Social Safeguard system¹⁴ that aims to avoid, reduce or compensate for negative effects of planned activities and ensure that they are successful. A total of 145 countries have now officially nominated National Designated Authorities¹⁵.

As of September 2017, there are only 17 nationally accredited entities globally, of which seven are in Asia-Pacific, in Korea, China, Mongolia, Indonesia, Bangladesh and India (two separate entities)¹⁶. There are ten regional direct access entities, of which two are in Asia-Pacific¹⁷. There are 27 accredited international access entities, of which up to 22 could be active in Asia-Pacific¹⁸. This list includes some private sector finance institutions, such as HSBC Bank and Bank of Tokyo Mitsubishi (MUFG).

Adaptation Fund

The Adaptation Fund (AF) was established in 2001 under the Kyoto Protocol of the UN Framework Convention on Climate Change (UNFCCC), to finance projects and programmes that help vulnerable communities in developing countries adapt to climate change based on country needs, views and priorities. It has committed US\$ 462 million in 73 countries since 2010 to climate adaptation and resilience activities.

The AF allows national direct access through National Implementing Entities (NIE). NIEs are able to directly access financing and manage all aspects of climate adaptation and resilience projects, from design through implementation to monitoring and evaluation. However, at present only three NIEs have been accredited in the Asia-Pacific region, in Bhutan, India and Indonesia¹⁹.

Similar to the GCF, there are fiduciary standards for the accreditation of NIEs, which are displayed in Figure CF 2.6 below. As this demonstrates, adequate financial, human and institutional capacity, including sound financial budgeting and management, capacity to develop, implement and monitor and evaluate projects, and transparency are general requirements for national direct access to AF funds.

¹³ See full GCF Fiduciary Standards here: <http://www.greenclimate.fund/documents/20182/818273/1.6 - Fiduciary Standards.pdf/083cfe10-46f4-4a73-b603-8d7bfd2a35bd>

¹⁴ Find GCF Environmental and Social Safeguard system here: <http://www.gcreadinessprogramme.org/sites/default/files/Environmental%20and%20Social%20Safeguards%20at%20the%20Green%20Climate%20Fund.pdf>

¹⁵ A list can be found here - <http://www.greenclimate.fund/how-we-work/tools/country-directory>

¹⁶ The list can be found here - <http://www.greenclimate.fund/how-we-work/tools/entity-directory>,

¹⁷ The Micronesia Conservation Trust and the Secretariat of the Pacific Regional Environment Programme - <http://www.greenclimate.fund/how-we-work/tools/entity-directory>

¹⁸ The list can be found here - <http://www.greenclimate.fund/how-we-work/tools/entity-directory>. Of the 27 international access entities, five are not operational in Asia, and will not be in the future (African Development Bank, African Finance Corporation, European Bank for Reconstruction and Development, European Investment Bank, and the Inter-American Development Bank)

¹⁹ <https://www.adaptation-fund.org/apply-funding/implementing-entities/national-implementing-entity/>

Figure CF 2.6: AF Fiduciary standards for implementing agencies

ACCREDITATION OF IMPLEMENTING ENTITIES	
Fiduciary Standards	
32.	Among the principles established for the Adaptation Fund (Decision 5/CMP.2) is “sound financial management, including the use of international fiduciary standards.” At its 7 th meeting the Board adopted fiduciary standards governing the use, disbursement and reporting on funds issued by the Adaptation Fund covering the following broad areas (refer to Annex 2 for details):
(a)	<u>Financial Integrity and Management:</u>
(i)	Accurately and regularly record transactions and balances in a manner that adheres to broadly accepted good practices, and are audited periodically by an independent firm or organization;
(ii)	Managing and disbursing funds efficiently and with safeguards to recipients on a timely basis;
(iii)	Produce forward-looking financial plans and budgets;
(iv)	Legal status to contract with the Adaptation Fund and third parties
(b)	<u>Institutional Capacity:</u>
(i)	Procurement procedures which provide for transparent practices, including in competition;
(ii)	Capacity to undertake monitoring and evaluation;
(iii)	Ability to identify, develop and appraise project;
(iv)	Competency to manage or oversee the execution of the project/programme including ability to manage sub-recipients and to support project /programme delivery and implementation.
(c)	<u>Transparency and Self-investigative Powers:</u> Competence to deal with financial mismanagement and other forms of malpractice.

NAMA Facility

The NAMA Facility was jointly established by the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB), the UK Department of Energy and Climate Change (DECC), Danish government and the European Union with the aim of providing financial support to implement transformational country-led NAMAs within the existing global mitigation architecture in the short term.

As of February 2018, the NAMA Facility is on its 5th Call for Projects. National ministries and/or qualified public benefit legal entities can submit a NAMA Support Project to the NAMA Facility. NAMA Support Projects have no accreditation process, but need to nominate a qualified delivery organisation. A sub-national government body cannot directly apply, but can be a key implementing partner for a NAMA Support Project endorsed by the national government.

The central decision-making body is the NAMA Facility Board, consisting of representatives from DECC and BMUB. All decisions on strategy, guidelines and selection of NAMA Support Projects for funding are taken on by the NAMA Facility Board.

Bilateral Financial Mechanisms

Examples of bilateral cooperation mechanisms include the International Climate Initiative (IKI) initiated by Germany, or the Joint Crediting Mechanism initiated by Japan, as described below.

International Climate Initiative

The International Climate Initiative (IKI) was founded in 2008 by the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) of Germany, and has been financing climate and biodiversity projects in developing and newly industrialising countries, as well as in countries in transition. It supports projects carried out in partner countries by federal implementing agencies, NGOs, business enterprises, universities and research institutes, and by international and multinational organisations and institutions, e.g. development banks and United Nations bodies and programmes.

Since 2017, IKI project implementing organisations are expected to apply the GCF Safeguard System for the avoidance of potential negative impacts of projects on people or the environment, and to enhance the overall quality of project planning and implementation. Project applicants are expected to suggest a risk category based on a screening of all Performance Standards in conjunction with planned measures to avoid and mitigate the risks. In case of potential risky activities relevant instruments for risk minimization, monitoring and management have to be included in the project concept (e.g. indicators, desk study, safeguards workshop with stakeholders)²⁰.

IKI is unique in that it provides substantial support to beneficiaries, including support to the risk assessment process for implementing organisations that lack an institutional safeguard system or in-house expertise. IKI also supports its partner countries in developing mechanisms for mobilising additional funding, in particular private investments, as well as sustainable business models for climate change mitigation and biodiversity conservation measures. In addition, it supports its partner countries in strengthening transparency and governance, to be able to make measurable, reportable and verifiable (MRV) contributions to climate change mitigation.

Joint Crediting Mechanism

The Joint Crediting Mechanism (JCM) is a bilateral carbon market mechanism, funded by the Ministry of Environment of Japan, to promote use of low carbon technology in host countries. JCM was established and announced by the Minister of the Environment of Japan and the President of the Asian Development Bank in June 2014. The JCM provides financial incentives for adoption of advanced low-carbon technologies to government and public-sector entities in the form of grants, and also provides direct financial assistance to private sector projects to leverage a large amount of finances from commercial sources. Eligible countries in the Asia region are Bangladesh, Maldives, Thailand, Cambodia, Vietnam, Lao PDR, Myanmar, Mongolia, Indonesia and Palau.

At present 28 projects carried out by Japanese businesses for JCM, including following areas: Waste management and treatment (03); Land use and forestry (03); Industry, energy saving and efficiency (18); Transport.

²⁰ For additional information, see <https://www.international-climate-initiative.com/en/project-funding/information-for-applicants/#c6362>

Eligibility requirements include adoption of JCM methodology; preparation of the Project Design Documents; validation by a third-party entity; monitoring and verification of GHG emissions reduction; and issuance of the JCM credits and delivery to both governments. Therefore, the technical and institutional capacity of project participants can present a challenge.

Private Financing Mechanisms

Private financing institutions include commercial banks, local banks, private equity funds and institutional investors such as pension funds. There are also capital market mechanisms, such as green bonds.

However, local governments often lack the capacity and legislative authority to mobilise finance from these alternative sources of financing. In addition, regulatory uncertainty often affects low carbon infrastructure investments. As a result, less than 20 per cent of cities in developing countries have access to local capital markets, through for example issuing bonds to investors, and only 4 per cent are deemed creditworthy enough to access international capital markets²¹. Therefore, local governments continue to rely heavily on national climate funds.

There are many direct and market based private financing mechanisms available to finance local climate action. These include direct investments by private sector actors, structured projects and programmes done through private-public partnerships (PPP), guarantee schemes, insurance schemes for climate risk management measures to market based instruments such as green bonds, carbon finance etc. As explained below, accessing Green Bonds can offer a potential solution for cities in developing countries looking to secure investment in low-carbon, climate-resilient infrastructure to meet the water, energy, housing and transportation needs of their expanding urban populations.

Green Bonds

A green bond is a tax-exempt bond issued by federally qualified organizations or by municipalities to fund projects that have positive environmental and/or climate change benefits. Since 2007, USD 131 billion in green bonds have been sold to institutional and retail investors attracted by their link to green projects, goods and services. The last three years has seen an exponential 13-fold increase in the value of annual bonds issued, from USD 3.2 billion in 2012 to USD 44 billion in 2015. This was projected to reach USD 75 billion by the end of 2016²².

According to an analysis of the Climate Policy Initiative (CPI), the projects underlying green bonds currently in the market shows USD 2.3 billion in value is linked with city-based projects in developing countries, including urban mass transit systems, district heating and water distribution networks. To put this in context, this represents²³:

- 1.7 per cent of total green bond market flows since 2007

²¹ World Bank, 2013

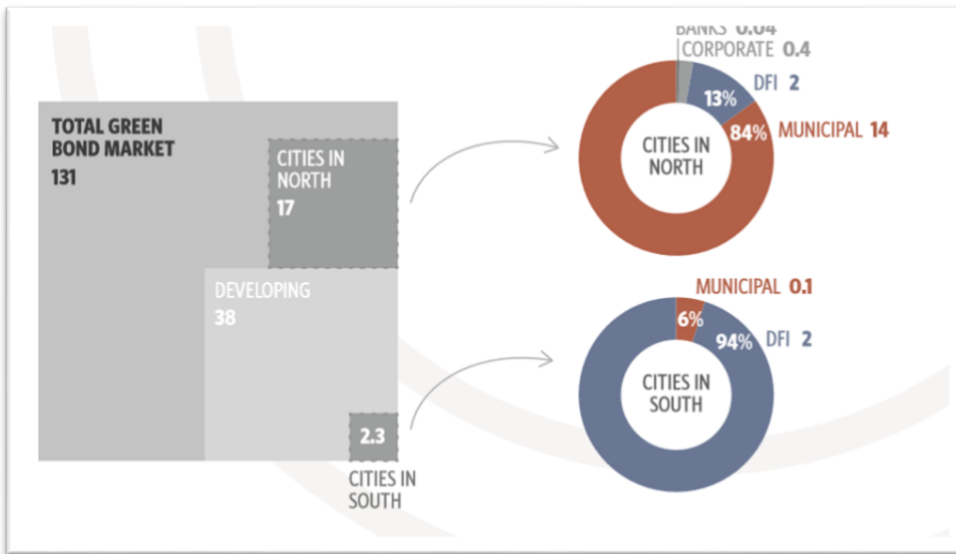
²² Bloomberg, 2016

²³ Excerpt from Climate Policy Initiative (2016) Green Bonds for Cities: A Strategic Guide for City-level Policymakers in Developing Countries <https://climatepolicyinitiative.org/wp-content/uploads/2016/12/Green-Bonds-for-Cities-A-Strategic-Guide-for-City-level-Policymakers-in-Developing-Countries.pdf>

- 6 per cent of all flows to developing countries: A total of USD 38 billion of the proceeds from green bonds issued by development finance institutions (DFIs), commercial banks, and corporations has been directed toward projects in developing countries
- 11 per cent of flows to all city-based projects worldwide: USD 17 billion has been raised by cities in developed countries such as the US, France, and Sweden.

This demonstrates that there is considerable room for cities to directly access increased finance from the green bonds market.

Figure CF 2.7: Breakdown of green bond market flows from total issuance 2007- mid-2016²⁴



²⁴ Climate Policy Initiative (2016)

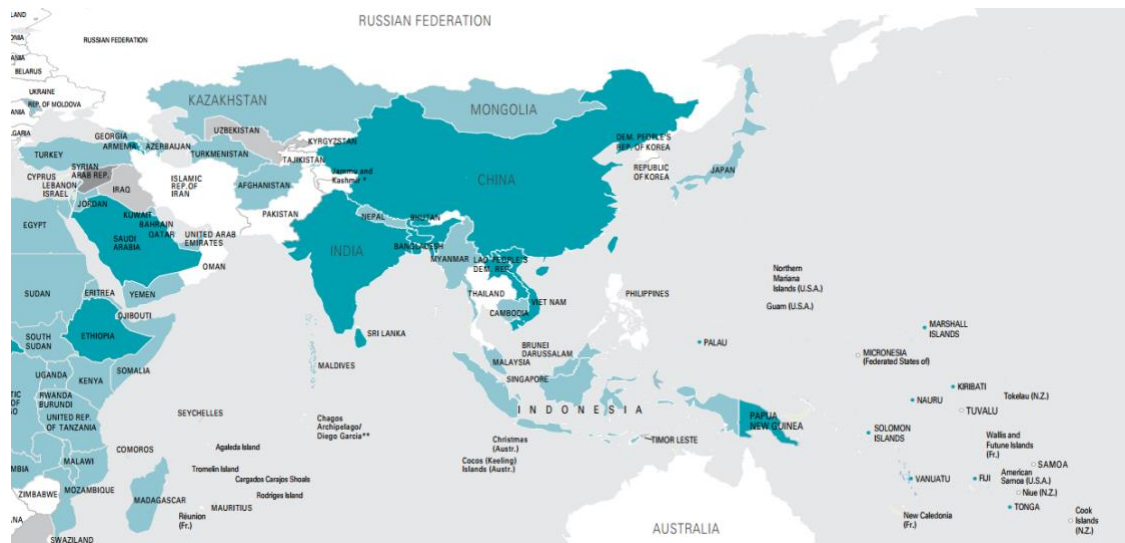
How can mainstreaming Climate Change into national-level urban-related policies help in accessing Climate Finance?

In summary, access to international sources of climate finance generally requires that implementing entities on the national-level have adequate capacity for the financial and administrative management of projects, as well as project-management capacities including the development, implementation and monitoring and evaluation of planned activities. In addition, mitigation-related projects typically require that greenhouse gas (GHG) mitigation actions and commitments are “measurable, reportable and verifiable.” Therefore, strengthening governmental stakeholder capacities and ensuring transparent processes are prerequisites for improved access to international climate finance by national governments.

International sources of climate finance often do not have mechanisms for sub-national levels of government to access them directly, and local governments often also lack the capacity to lobby for international funding accessed by national government agencies, or to mobilize resources through the development of project proposals. They also often lack the capacity, authority and credit worthiness to access alternative sources of financing such as private sector and capital market mechanisms. As a result, they tend to face significant challenges in financing local climate action.

The development of a climate-responsive National Urban Policy, or the mainstreaming of climate change into national-level urban-related policies makes countries attractive to international climate financing institutions, as gaps between national policy targets and the indicators and targets of major global commitments and frameworks such as the 2030 Sustainable Development Agenda, the Paris Agreement, Sendai Framework for Disaster Risk Reduction and the New Urban Agenda are identified through the assessment and comparative analysis of policies, and alignment takes place through the process of policy formulation or revision. In this context, most countries in the Asia-Pacific region have urban, or urban-related targets in their Intended Nationally Determined Contributions (Figure CF 2.8), presenting an entry point for climate change mainstreaming into urban policies and a significant financing opportunity.

Figure CF 2.8: Urban and Urban-related Targets in INDCs in the Asia-Pacific Region



Furthermore, as demonstrated in the main Guide and the mainstreaming framework introduced, the mainstreaming of climate change into national-level urban-related policy frameworks offers the opportunity to strengthen governance itself, through the assessment and development of human, financial and institutional capacities on both the national and local levels. In addition, the mainstreaming framework proposes the establishment of effective mechanisms to channel national funding to the local level, which will in turn make the country more attractive in leveraging international climate finance. Providing an enabling policy framework coupled with supportive legislation, and empowering local governments to access various sources of climate finance is essential, so that they can develop blended instruments for financing local climate action instead of relying solely on national funding sources.