Multilevel Governance Guidelines on
Integrated Climate Action Coordination in Lao PDR

GUIDELINES ON FINANCING TOOLS AND MECHANISMS

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Guidelines on Financing Tools and Mechanisms

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Abbreviations and Acronyms

ADB	Asian Development Bank
AE	Accredited Entity
AF	Adaptation Fund
ASAP	Adaptation for Smallholder Agriculture Programme
CBDR-RC	Common but differentiated responsibilities and respective capabilities
CBIT	Capacity-building Initiative for Transparency
CDM	Clean Development Mechanism
CER	Certified Emission Reductions
CIFs	Climate Investment Funds
CMA	Conference of the Parties serving as the meeting of the Parties to the Paris Agreement
COP	Conference of the Parties
EM	Emissions Trading
EPF	Environment Protection Fund
GCF	Green Climate Fund
GCoM	Global Covenant of Mayors for Climate and Energy
GEF	Global Environmental Facility
GHG	Greenhouse gas
IFAD	International Fund for Agriculture and Development
JI	Joint Implementation
LDCF	Least Developed Countries Fund
LDCs	Least Developed Countries
LUCI	Leadership of Urban Climate Investments'
MDB	Multilateral Development Banks
MEM	Ministry of energy and Mining
MONRE	Ministry of Natural Resources and Environment
MRV	Measuring, Reporting and Verification
NAPA	National Adaptation Programme of Action
NCF	Nordic Climate Facility
NDA	National Designated Authority
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
SAP	Simplified Approval Process Pilot Scheme
SCCF	Special Climate Change Fund
SDGs	Sustainable Development Goals
SGP	Small Grants Programme
SIDS	Small Island Developing States
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention for Climate Change

1. Introduction to the Guidelines

This is one of a set of four guidelines explaining multilevel governance processes related to climate change as they affect Laos. The guidelines have been developed under the aegis of the *Promoting Low Emission Urban Development Strategies in Emerging Economy Countries (Urban-LEDS)* project which is funded by the European Union under its Global Climate Change Alliance Plus initiative and implemented by UN-Habitat and ICLEI-Local Governments for Sustainability (ICLEI).

The Department of Climate Change (DCC) of the Ministry of Natural Resources and Environment (MONRE) is the focal point for climate change in Laos. DCC staff are active in global affairs and they drive the mainstreaming of climate change action within the country. At a sub-national level, the climate change mandate is carried by the Provincial Office of Natural Resources and Environment (PONRE) and the District Office of Natural Resources and Environment (DONRE) in each province and district. As the focal point at their level for climate change-related governance processes and systems, it is important that the institutional knowledge in these offices is strengthened to enable staff to fulfill their role in implementing legislation, policies and plans, thereby ensuring that Laos has a cohesive multilevel climate change response. The purpose of these guidelines is to strengthen the technical and institutional knowledge of PONRE and DONRE staff. The guidelines focus on:

1. Measurement, reporting and verification (MRV);
2. Legal frameworks, policies and treaties;
3. Governance – climate coordination enhancement; and
4. Financing tools and mechanisms

The objectives of this guideline are to enhance the knowledge within the natural resources and environment sector in the areas of:
- The United Nations Framework Convention on Climate Change (UNFCCC) financial mechanism;
- International and Lao climate funds; and
- Market mechanisms and private finance.

2. Introduction to climate finance

While there is no internationally agreed definition for climate finance, a commonly quoted definition is that provided by the UNFCCC Standing Committee on Finance in 2014. This broad definition has evolved over time. It still encompasses finance for all climate change responses and enables climate finance to be classified according to a number of variables, including:

- the type of finance (grants, loans, private equity or concessional finance);
- the source of the finance (e.g. public or private sources);
- the flow mechanism of the finance (e.g. within a nation, bilaterally from developed countries to developing countries, from developing to developed countries, or multilaterally through development banks and finance entities); and
- whether the finance is additional to what would have been provided anyway for development assistance (Grantham Research Institute on Climate Change and the Environment, 2018).

Climate finance is "finance that aims at reducing emissions and enhancing sinks of greenhouse gases and aims at reducing vulnerability of, and maintaining and increasing the resilience of, human and ecological systems to negative climate change impacts" (United Nations Framework Convention on Climate Change, 2014, p. 5)

For measuring purposes, the source of international climate finance has been further categorised as bilateral public climate finance, multilateral public climate finance (sourced from developed countries), climate-related export credits, and private finance mobilised by bilateral and multilateral public climate finance (Organisation for Economic Co-operation and Development, 2019). Although there has been a lot of focus on climate funds established through the UNFCCC financial mechanism, these funds do not provide the largest component of climate finance. According to a recent report (UNFCCC, 2018), commitments made through multilateral climate funds, including the UNFCCC funds, totalled USD 1.4 billion in 2015 and USD 2.4 billion in 2016. Along with other climate funds, finance flowing through these funds is increasing over time. Overall climate finance provided and mobilised by developed countries is calculated to have increased from USD 58.6 billion in 2016 to USD 71.2 billion in 2017 (OECD, 2019).

As shown in Figure 1, there is a significantly higher proportion of overall public finance from developed countries which is allocated to mitigation compared to adaptation. The proportion of private climate finance mobilised by developed countries' public climate finance allocated to mitigation is even higher and was estimated at 94% in 2016-7. However, a greater proportion of public climate finance was allocated to adaptation in LDCs and small island developing states (SIDS).

Note: "Cross-cutting" relates to projects with both mitigation and adaptation benefits or to climate finance that was not yet allocated to mitigation and/or adaptation at the point of reporting

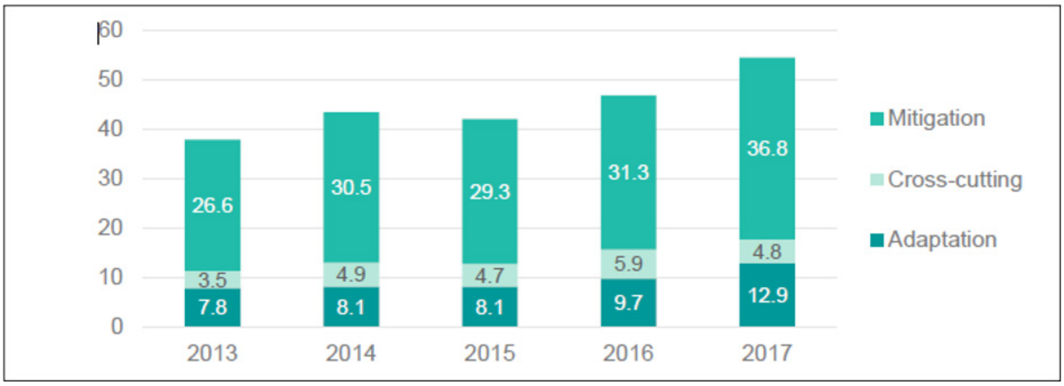

Figure 1. Thematic split of developed countries' public climate finance (USD billion)
Source: OECD, Climate Finance Provided and Mobilised by Developed Countries in 2013-17

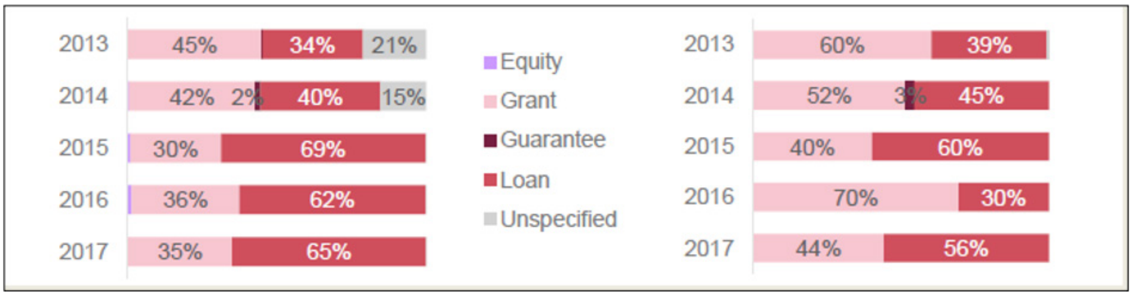

Figure 2. Instrument split of public climate finance to LDCs (left) and SIDS (right) (%)
Source: OECD, Climate Finance Provided and Mobilised by Developed Countries in 2013-17

While the amount of funding provided for climate change actions has been growing, but when considering countries' financial needs and in comparison, with current investments in fossil fuels global climate finance remains inadequate. Figure 3 puts the amounts in context.

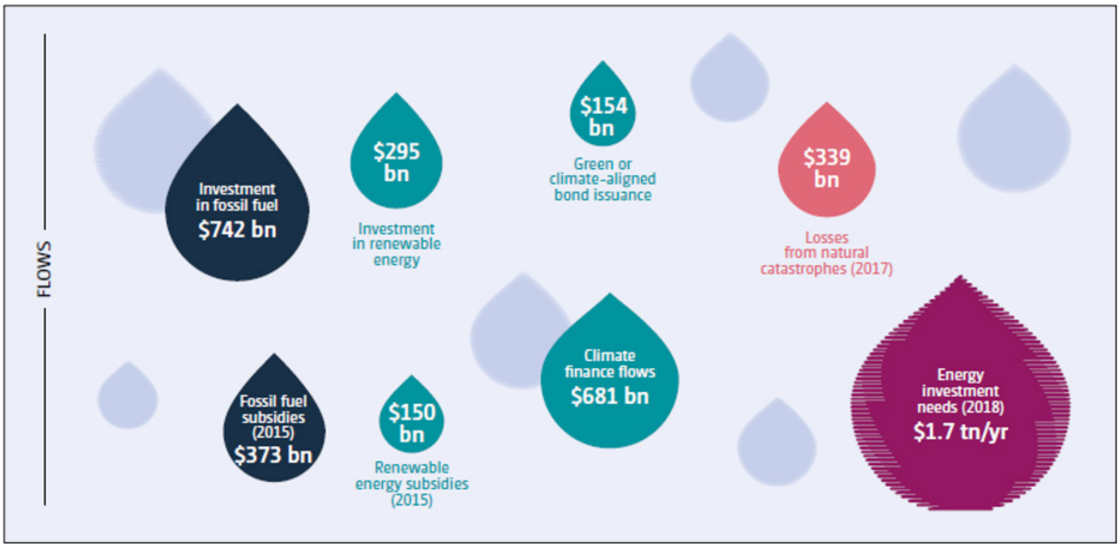

Figure 3. Climate flows in context

Source: Adapted from Figure 3, UNFCCC Standing Committee on Finance 2018 Biennial Assessment and Overview of Climate Finance Flows Technical Report

3. The UNFCCC Financial Mechanism

The United Nations Framework Convention on Climate Change was developed to achieve the, "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system" (United Nations, 1992, Article 2). At the time the Convention was established, there was a growing awareness of the severity of climate change and of the urgency of action.

Considering the global immensity and scale of climate change, it is critical for the international community to work together in combatting it. Nonetheless, it is generally understood that developed countries had, through industrialisation, contributed more to climate change than developing countries had. This places a stronger pressure and responsibility for them to lead the global agenda, especially in consideration of their greater capacity and resources. This is the premise behind the UNFCCC's principle of, "common but differentiated responsibilities and respective capabilities" or CBDR-RC (United Nations, 1992, Article 3, para. 1). The Convention was written in a way that placed obligations on countries according to their part in causing climate change and their capacity to mitigate it. Thus, developed countries were to take the lead in climate action and their commitments under the Convention were different from those of developing countries.

All Parties to the Convention had commitments which included the following:

- Calculating their net GHG emissions and reporting them to the Conference of the Parties (COP)[1] in the form of a GHG inventory;
- Taking measures to mitigate and adapt to climate change;
- Cooperating in the development and transfer of technologies, practices and processes that control, reduce or prevent GHG emissions;
- Promoting sustainable management, and cooperating in the conservation and enhancement of sinks[2] and reservoirs[3] of GHGs, including biomass, forests and oceans.

Developed countries had additional commitments under the treaty, including the following:

1 The Conference of the Parties is the decision-making body of the UNFCCC, in which every Party is represented.
2 A carbon sink is anything which absorbs carbon dioxide from the atmosphere, mainly forests and oceans.
3 A reservoir is anything which stores carbon. Reservoirs include forests and oceans.

- Taking measures to lower their net GHG emissions to pre 1990 levels;
- Contributing financially to covering the cost of developing countries' reporting commitments to the UNFCCC, including the cost of GHG inventories;
- Assisting the developing country Parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation to those adverse effects; and
- Financing and assisting in the transfer of technologies and know-how to other Parties, particularly developing country Parties, to enable them to implement the provisions of the Convention.

The Convention expressly noted that:

> the extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and transfer of technology and will take fully into account that economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties (United Nations, 1992, Article 4, para. 7).

On the basis of the CBDR-RC principle and the requirement for the provision of finances and technology from developed to developing countries, the UNFCCC created the conditions for a large flow of finance. There was, therefore, a need for a mechanism to operate the flow of climate finance. The following sections focus on the operating entities and the funds associated with the UNFCCC financial mechanism.

In 2009, developed countries committed to a goal of mobilizing jointly USD 100 billion per year by 2020 to address the needs of developing countries.

3.1. The Global Environmental Facility

The original operating entity for the UNFCCC was the Global Environmental Facility (GEF) which has been fulfilling the role since 1992. The GEF was established in 1991 to finance a broader range of global environmental issues than solely climate change. In 1992 it became the operating entity for the UNFCCC and it functions in the same way for the Paris Agreement. It operates in a relationship with the COP or CMA, whereby the COP/CMA provides direction on policies, and eligibility criteria for funding. Up until June 2019, the GEF had funded 972 climate change mitigation projects in more than 165 countries. The GEF funding was over US$6.2 billion, and this leveraged more than US$52.4 billion from a range of sources, including governments, multilateral and bilateral organisations, private sector entities and civil society organisations (GEF, 2019). The GEF has also provided US$490.5 million for 384 enabling activities.[4] This funding has leveraged US$205.7 million in co-financing. Finance flows through a number of different funds which are managed by the GEF in four-year funding cycles. The current funding cycle in 2020 is GEF-7 which covers the period from 2018 - 2022. Although the initial focus was on mitigation, it became apparent that there was also a need to fund adaptation measures in developing countries. Specific funds are explained in the following sections.

3.2. The Least Developed Countries Fund

The Least Developed Countries Fund (LDCF) was established through the UNFCCC in 2001, when adaptation was made a priority in LDCs and developing countries. The LDCF is managed by the GEF, and has been operating since 2006. The rationale for the fund was that Least Developed Countries (LDCs) are the most vulnerable to the impacts of climate change and yet many of them lack the capacity to develop effective programmes to build resilience. The LDCF supports LDCs to develop National Adaptation Programmes of Action (NAPAs). Through the NAPA preparation

4 Enabling activities include planning, capacity-building and institutional strengthening activities that allow countries to take effective climate change response measures and meet their obligations to the UNFCCC and associated agreements. This includes funding for National Communications and Biennial Update Reports.

process, a country determines its most pressing adaptation needs in selected key sectors, and draws up a plan to build resilience in those sectors. Laos is one of 51 countries which had received support by 2020 to develop a NAPA. The Lao NAPA was submitted to the UNFCCC in 2009. Once a country has submitted its NAPA, it is eligible for funding to, "implement urgent adaptation measures laid out in NAPAs" (GEF, 2020).

The following three objectives are highlighted in the 2018 – 2022 funding cycle for the LDCF:

- Reduce vulnerability and increase resilience through innovation and technology transfer for climate change adaptation.
- Mainstream climate change adaptation and resilience for systemic impact.
- Foster enabling conditions for effective and integrated climate change adaptation.

There is also an enhanced focus on gender mainstreaming and women's empowerment.

3.3. The Special Climate Change Fund

The Special Climate Change Fund (SCCF) was established at the same time as the LDCF to support adaptation and technology transfer in all developing countries which are party to the UNFCCC. The fund supports adaptation activities in water resources management, land management, agriculture, health, infrastructure development, fragile ecosystems, and integrated coastal zone management (GEF, 2012). It also supports technology transfer for both adaptation and mitigation in selected sectors. From 2018-2022, there are two access points to the SCCF. The first is the Challenge Window, which aims to support fundable investment approaches, business models, partnerships and technologies, and "catalytic measures to enhance climate security" (GEF, 2019, p. 4). This is in line with the SCCF's focus on technology transfer, innovation, private sector engagement, and scale-up. The second means of access to the fund is the Incentive for Mainstreaming Adaptation and Resilience. This supports mainstreaming adaptation measures into existing development initiatives.

As of June 2019, the LDCF and the SCCF had supported 360 adaptation projects in 117 countries with nearly USD1.7 billion, directly benefitting over 28 million people. There have been 368 sub-national plans and processes for which adaptation mainstreaming support has been provided (GEF, 2019). There are 18 projects in Laos which have benefitted from the LDCF. Table 1 shows the projects which have received funding from the LDCF or the GEF Trust Fund.

The SCCF had received USD 354.44 million in contributions as of the 30th September 2020 (The World Bank).

Project Title	Implementing Agency	GEF grant (USD)	Source fund
Integrated Water Resource Management and Ecosystem-based Adaptation (EbA) in the Xe Bang Hieng River Basin and Luang Prabang City	UNDP	5,329,452	LDCF
Climate Smart Agriculture alternatives for upland production systems in Lao PDR	FAO	3,502,968	LDCF
Strengthening Lao PDR's institutional capacity to comply with the Enhanced Transparency Framework under the Paris Agreement	UNEP	1,210,000	CBIT
Lao PDR Intended National Contributions (Lao INDC)	UNDP	182,648	GEF Trust Fund
Vientiane Sustainable Urban Transport Project	ADB	1,840,000	GEF Trust Fund
Building the Capacity of the Lao PDR Government to Advance the National Adaptation Planning Process	UNEP	3,552,969	LDCF
Reducing of Green House Gas Emissions in the Industrial Sector through Pelletization Technology	UNIDO	1,268,539	GEF Trust Fund
Climate Adaptation in Wetlands Areas (CAWA)	FAO	4,717,579	LDCF
Strengthening Agro-climatic Monitoring and Information Systems to Improve Adaptation to Climate Change and Food Security in Lao PDR	FAO	5,479,452	LDCF
GMS-FBP: Strengthening Protection and Management Effectiveness for Wildlife and Protected Areas	World Bank	6,825,688	GEF Trust Fund
Effective Governance for Small Scale Rural Infrastructure and Disaster Preparedness in a Changing Climate	UNDP	4,700,000	LDCF
Rural Electrification Phase II	World Bank	1,818,000	GEF Trust Fund
Improving the Resilience of the Agriculture Sector in Lao PDR to Climate Change Impacts	UNDP	4,445,450	LDCF
Southern Provinces Rural Electrification II Program	World Bank	3,750,000	GEF Trust Fund
National Adaptation Program of Action	UNDP	200,000	LDCF
Climate Change Enabling Activity (Additional Financing for Capacity Building in Priority Areas)	UNDP	100,000	GEF Trust Fund
Off-grid Electrification Pilot Demonstration, A Component of the Laos Southern Provinces Rural Electrification	World Bank	744,000	GEF Trust Fund
National Greenhouse Gas Inventory Project	UNDP	313,000	GEF Trust Fund

Table 1. Projects in Laos which have received finance from GEF-managed funds

3.4. The GEF Small Grants Programme

Under the wider GEF umbrella, the GEF Small Grants Programme (SGP) supports a range of environmental initiatives, including climate change mitigation and adaptation. The SGP assists community and non-governmental organisations. It is funded by GEF and implemented by the United Nations Development Programme (UNDP). The SGP works directly with local communities, providing grants of up to USD 50,000. Since 2009, the SGP has funded 40 local projects in Laos that have a focus on climate change mitigation (Global Environment Fund Small Grants Programme, 2020). The SGP takes an inclusive approach which aims to empower communities, with a particular focus on gender, indigenous peoples and youth. It also focuses on capacity building, poverty reduction, knowledge management, replication and up-scaling, policy impact and monitoring and evaluation. The SGP has funded initiatives which include:

- Renewable energy such as solar panels, solar heaters, micro hydropower plants, biodigestors and biomass generators.
- Energy efficient technologies for houses, buildings, and industry, including fuel wood-efficient stoves.
- Local sustainable transport solutions promoting mass transit, non-motorized transport, emissions monitoring and reduction, and liquid biofuels.
- Carbon storage, such as reforestation, cultivation and compost creation initiatives (Global Environment Fund Small Grants Programme, 2020).

At the country level, the SGP has a National Steering Committee which contributes to national strategy, project approval, and monitoring and evaluation. Applications for grants are made through the National Coordinator based in UNDP.

3.5. Capacity-building Initiative for Transparency

Under the Paris Agreement, countries committed to an enhanced transparency framework which requires them to track, report and make projections of GHG emissions in increased detail. At the request of the Paris Agreement, the Capacity-building Initiative for Transparency (CBIT) was established to build institutional and technical capacity in developing countries to support them in meeting the increased requirements under the enhanced transparency framework. The CBIT is managed by the GEF, and projects are supported from voluntary contributions through the GEF Trust Fund. The CBIT is a key part of the GEF's 2018 – 2022 funding cycle. By November 2019, 58 CBIT projects had been approved including a CBIT project for Laos which was approved in July 2019, with the United Nations Environment Programme (UNEP) as the implementing agency and the Department of Climate Change as the executing agency.

3.6. The Adaptation Fund

The Adaptation Fund (AF) supports concrete adaptation projects and programmes in developing countries which are parties to the Kyoto Protocol. The fund was established under the Kyoto Protocol in 2001 and has been operating since 2010, under the management of an Adaptation Fund Board comprising representatives of parties to the Kyoto Protocol. The World Bank serves as trustee of the fund. The AF receives financial contributions from government and private donors, and it is also funded by a two percent share of proceeds of Certified Emission Reductions (CERs) which are issued under the Protocol's Clean Development Mechanism projects (see Section 5.1.1. to read about the Clean Development Mechanism).

Applications to the Adaptation Fund are made through accredited National, Regional, or Multilateral Implementing Entities. Since in 2020 there are no accredited National or Regional Implementing agencies in Laos, applications are made through Multilateral Implementing Agencies which include a number of United Nations agencies, the World Bank and the Asian

Development Bank (ADB). In Laos the AF has supported two projects by UN-Habitat which aim to build resilience in small and emerging towns.

3.7. The Green Climate Fund

The UNFCCC established the Green Climate Fund (GCF) in 2010 to support the Paris Agreement goal of keeping global temperature rise below 2 degrees Celsius. The GCF is generally considered the largest provider of public climate finance since the Paris Agreement was inaugurated. The key purpose of the fund is to catalyse a paradigm shift that transforms development pathways so that they are low-emission and climate resilient, The GCF invests in low-emission and climate-resilient development in developing countries, with particular attention being paid to highly vulnerable societies, especially LDCs, SIDS and African states. The fund also aims to stimulate private finance to add to the impact made by its own funds which have been contributed by developed countries, some developing countries, regions, and one city. The Initial Resource Mobilisation period in 2014 resulted in a confirmed USD 8.2 billion, and approval was given to the first GCF funded project in 2015. In 2019, USD 9.9 billion had been pledged for the first replenishment of the fund. By the end of 2019, funding proposals had been approved for 124 projects, at an approved amount of 5.6 billion USD, and with 905 million USD disbursed (Green Climate Fund, 2020). Two projects in Laos were approved for 28.4 million USD and 3.2 million USD was approved for readiness support in Laos.

There is an aim to have a balance between adaptation and mitigation initiatives in the GCF portfolio. The GCF invests in the following eight results areas:

- Energy generation and access
- Transport
- Buildings, industries, cities and appliances
- Forests and land use
- Health, food and water
- Livelihoods of people and communities
- Ecosystems and ecosystem services
- Infrastructure and the built environment

The GCF has an independent secretariat based in Korea. It works with accredited entities (AEs), who develop project proposals and manage and monitor projects. AEs can be public or private, and from any level ranging from international to sub-national. The point of contact within a country for AEs and other stakeholders is the National Designated Authority (NDA). An NDA is a government institution which provides oversight and coordination. In Laos, the NDA is the Ministry of Natural Resources and Environment (MONRE).

The GCF operates a Readiness Programme to enhance the capacity of developing countries in their dealings with the GCF. The Readiness Programme supports initiatives involving institutional capacity building, coordination, policy and planning, programming for investment, and capacity building for entities aiming to become an AE. In Laos, work is in progress for the Environment Protection Fund to become an AE. This is one of seven readiness activities which had been approved in Laos by the end of 2019.

The Simplified Approval Process Pilot Scheme (SAP) aims to support developing countries to attain simpler and faster access to GCF funding. It does this by simplifying and reducing the number of pages in the application process. Criteria for SAP eligibility include a GCF contribution of no more than USD 10 million and minimal environmental and social risks and impacts.

A project focused on *Building resilience of urban populations with ecosystem-based solutions in Lao PDR* was funded through the SAP. The project implementation began in 2020, as did a mitigation project *on Implementation of the Lao PDR Emission Reductions Programme through improved governance and sustainable forest landscape management.*

4. Other International climate funds

There are numerous funds through which international climate finance flows. These include multilateral and bilateral funds, including climate funds within institutions such as development banks. The following sections describe a number of funds but do not cover all climate funds that are in operation.

4.1. The Climate Investment Funds

The World Bank oversees the Climate Investment Funds (CIFs), which were established in 2008. The funds work exclusively with regional development banks including the Asian Development Bank (ADB). The CIFs support programmes which scale up mitigation and adaptation in developing and middle-income countries. The CIFs had a total pledge of USD 8 billion at the beginning of 2020. Table 2 shows the Climate Investment Funds. The Strategic Climate Fund is composed of three other funds.

<table>
<tr><th colspan="2">Fund</th><th>Funds (USD)</th><th>Focus</th></tr>
<tr><td colspan="2">Clean Technology Fund</td><td>5.4 billion</td><td>Providing resources to scale up low carbon technologies with significant potential for long-term greenhouse gas emissions savings.</td></tr>
<tr><td rowspan="3">Strategic Climate Fund

USD 2.61 billion in total</td><td>Pilot Programme for Climate Resilience</td><td>1.2 billion</td><td>Building adaptation and resilience to the impacts of climate change in developing countries</td></tr>
<tr><td>Forest Investment Programme</td><td></td><td>Supports developing countries' efforts to reduce deforestation and forest degradation and promotes sustainable forest management that leads to emission reductions and the protection of carbon reservoirs</td></tr>
<tr><td>Scaling up Renewable Energy Programme for Low-income Countries</td><td>720 million</td><td>Supports scaling up of renewable energy solutions like solar, geothermal, and biomass to increase energy access. There are 14 projects on renewable energy mini-grid systems.</td></tr>
</table>

Table 2. Climate Investment Funds

4.2. Multilateral Development Bank, UN and Bilateral Funds

A large amount of funding flows through Multilateral Development Banks (MDBs). In 2019, USD 61.56 billion was committed as climate finance with USD 46.6 billion for mitigation and USD 14.9 billion for mitigation (African Development Bank, Asian Development Bank, Asian Infrastructure Investment Bank, European Bank for Reconstruction, European Investment Bank, Inter-American, Islamic Development Bank & World Bank Group., 2020). In addition to mainstreaming climate change into their general operations, many MDBs have established funds specifically committed to climate finance. An example is the World Bank's Forest Carbon Partnership Facility, which looks at using carbon market proceeds to reduce emissions from deforestation and forest degradation, and foster conservation, sustainable management of forests, and enhancement of forest carbon stocks.

UN organisations have also mainstreamed climate change into general development funding, and like MDBs, have established climate change funds. An example is the International Fund for Agriculture and Development (IFAD) fund which assists smallholder farmers through scaling up climate change adaptation in rural development programmes. The fund is the Adaptation for Smallholder Agriculture Programme (ASAP).

A large portion of climate finance moves through bilateral channels. Although difficult to measure, it has been estimated that USD 31.7 billion was provided by developed to developing countries bilaterally in 2015-2016 (UNFCCC, 2018). In addition, some countries or regions have set up climate specific funds. An example is the Nordic Climate Facility (NCF) which is funded by the joint development finance institution of Denmark, Finland, Iceland, Norway and Sweden. The NCF funds innovative ideas to adapt to and/or mitigate climate change while at the same time contributing to achieving the Sustainable Development Goals (SDGs). Germany has an International Climate Initiative and the United Kingdom has an International Climate Fund, both of which support developing countries in adaptation, mitigation and REDD+.

4.3. Reducing emissions from deforestation and forest degradation in developing countries, and the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks in developing countries (REDD+)

Forests play a major role in the emission and sequestration of carbon. Since the emission of carbon into the atmosphere causes climate change, there is an opportunity to mitigate climate change by managing forests so for them to absorb more carbon from the atmosphere than humans emit. While forests release a certain amount of carbon dioxide into the atmosphere through the natural processes of respiration and oxidation, additional carbon is released through human activities such as harvesting, burning, deforestation and degradation of forests. From 2007 to 2013 negotiations were carried on through the UNFCCC and decisions were made leading countries to collectively aim to prevent carbon being released from forests through human activities. This was to be achieved through the following activities which are described by the acronym REDD+:

- Reducing emissions from deforestation
- Reducing emissions from forest degradation
- Conservation of forest carbon stocks
- Sustainable management of forests
- Enhancement of forest carbon stocks

Since REDD+ was initiated, processes have been developed for capacity-building, and for developing institutions and policies to achieve REDD+ goals. There are three stages which are readiness, implementation and results-based payment. Readiness involves putting in place a number of specified arrangements including strategies, assessments, monitoring, safeguards and a robust Measuring, Reporting and Verification (MRV) system to show that actions will reduce emissions. Developing countries are supported in the significant investment to put in place the necessary systems for REDD+. REDD+ is well established in Laos.

Figure 4 shows key funding sources for REDD+.

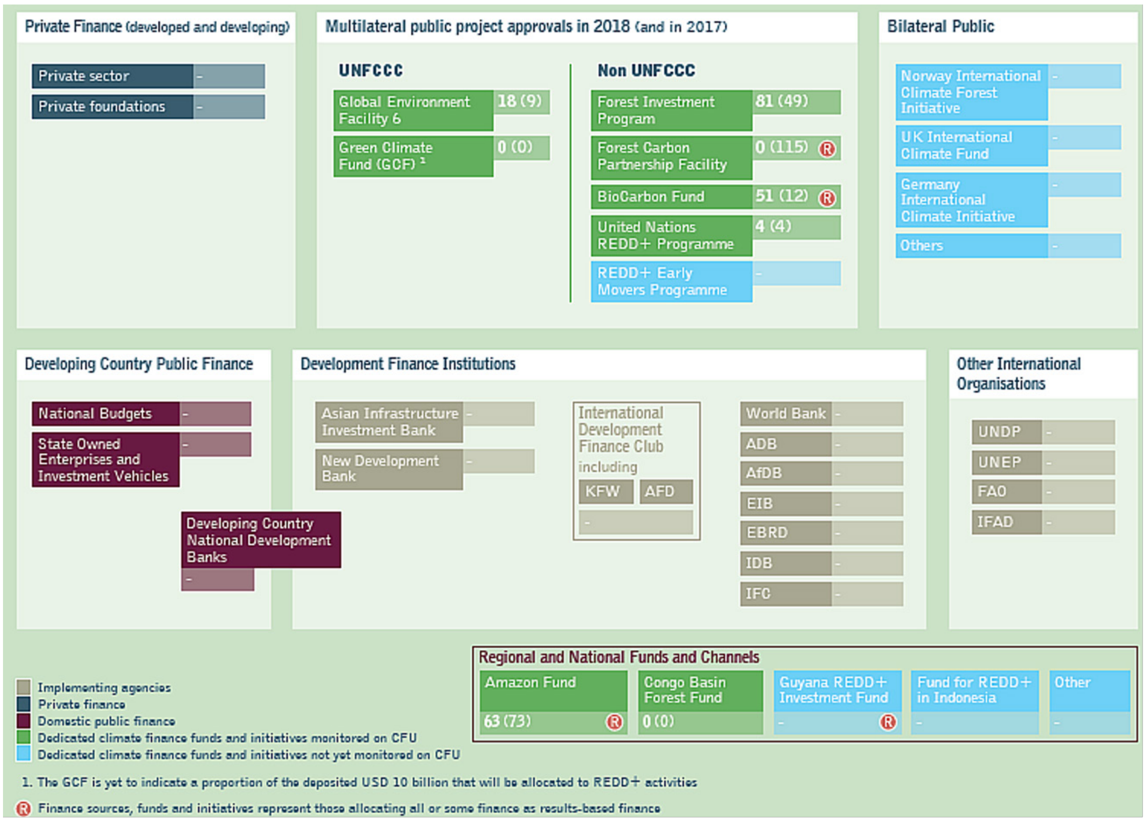

Figure 4. Finance sources for REDD+

Source: Watson, C. & Schalatek, L., Climate Finance Thematic Briefing: REDD+ Finance, 2019

4.4. City Climate Finance Gap Fund

Commonly known as “The Gap Fund,” the City Climate Finance Gap Fund aims to fill a perceived gap in project support at the local level. Recognising that cities often cannot move project ideas to implementation stage because they lack the needed capacity, finance and support, the Gap Fund offers technical and advisory assistance to support local leaders at the early stage of preparing climate-smart investments and programmes. The Fund aims to accelerate preparation, enhance quality, and ensure programmes are financially viable.

Local authorities in developing or emerging economies are able to apply for support from the Gap Fund by submitting an expression of interest. The Gap Fund supports mitigation and/or adaptation actions in urban areas. Eligible sectors include mobility; energy efficiency and small renewables; solid waste, water and wastewater management; greening of urban areas and nature-based solutions; green buildings and affordable housing.

The entities behind the Gap Fund are the governments of Germany and Luxembourg as well as the Global Covenant of Mayors for Climate and Energy (GCOM), in partnership with other key climate finance players. Implementing entities are the European Investment Bank and the World Bank. The Gap Fund was launched in September, 2020 as part of the Leadership of Urban Climate Investments’ (LUCI) Initiative. LUCI aims to strengthen the project preparation capacity of 2,000 cities and create 1,000 bankable, climate-smart urban projects by 2030, at the same time building innovative financing mechanisms.

5. Carbon pricing, market mechanisms and private finance

Carbon pricing is based on the idea that a reduction in emissions, measured in standardised units, is a saleable commodity. The acceptance of this idea has opened the way for a range of market-based mechanisms to incentivise emission reductions. Adopted in 1997, the Kyoto Protocol introduced market mechanisms at the international level. Since then, regions and countries have developed their own mechanisms as a means to reduce emissions.

5.1. Market mechanisms under the Kyoto Protocol

Under the Kyoto Protocol, developed countries were required to reduce their emissions to the extent that, in the period 2008 to 2012, overall global emissions were 5% below 1990 levels. A second period, from 2013 to 2020, required GHG emissions to be reduced overall by 18% relative to 1990 levels. In the 2008 to 2012 period, each developed country had a specified target reduction. However, there was no such requirement for developing countries. These requirements set the scene for the introduction of the following Kyoto Protocol market mechanisms:

- Clean Development Mechanism (CDM)
- Joint Implementation (JI)
- Emissions Trading (ET)

5.1.1. Clean Development Mechanism

Through the Clean Development Mechanism (CDM), a country with an emission reduction commitment is able to implement a project in a developing country so that emissions are reduced in that developing country. For every one tonne of CO2 emissions that are reduced by the project, the implementing country receives one saleable certified emission reduction (CER) credit. The implementing country is able to count their CER credits towards meeting their Kyoto reduction target. Therefore, under the Kyoto Protocol, a developed country is required to reduce emissions but the reductions could be in a developing country instead of in their own country. As of October 2020, there were 24 registered CDM projects in Laos, the majority of which were hydropower projects.

5.1.2. Joint Implementation

Through joint implementation (JI), a developed country, with emission reduction commitments, is able to implement an emission reduction project in another developed country, and count the emission reductions from the project towards its own reductions.

5.1.3. Emissions trading

In various ways, it is possible to receive a credit when emissions are reduced. The credit can then be traded on what has come to be known as the carbon market. International emissions trading under the Kyoto Protocol enabled a country that had reduced its emissions by more than its target, to sell its “extra” reductions to another country. In this way, if a country did not succeed in lowering its emissions by the required amount, it could buy credits from another country inn order to meet its target.

The idea of emissions trading has been taken up at the regional and national levels as a means of reducing emissions. A national level emissions trading, or ‘cap and trade’ scheme sets a cap on the amount of emissions allowed by each business. Permits are allocated to businesses which allow them a specified number of emission units. These permits may then be traded amongst businesses.

In 2019 there were 21 emissions trading schemes (ETD)s in operation with a further 24 under development or being considered (International Carbon Action Partnership, 2020).

5.2. Carbon tax

By applying a tax to GHG emissions, governments provide an incentive to emitters such as businesses, facilities or consumers, to reduce their emissions and switch to new and cleaner technologies. A carbon tax is often a set price that emitters are required to pay for each ton of GHG that they emit. In some cases, a tax is applied to goods or services that are high emitters, such as petrol.

A 2019 report found that a number of ASEAN countries are considering carbon pricing instruments and Singapore implemented a carbon tax in 2019. The potential to develop a regional carbon market has been suggested as an option with potential in the long term (Aleluia, 2019). Laos is one of a number of ASEAN countries which do not currently use carbon pricing instruments to reduce emissions, although there has been involvement in Laos through the CDM projects.

5.3. Private finance

A large amount of finance is kept in private investment funds. In order to bring about the transformational changes in technology that are needed to reduce GHG emissions, there is a need to access private finance. A lot of climate related investment has been in the energy sector which is largely driven by private sector financing. However, only 30% of private funds have supported public sector activity (International Urban Cooperation Programme). A major issue for private finance concerns finding ways to bring returns from climate action projects as private investment is driven by the need to provide returns for investors. As such, it is encouraged by stable legal, economic and regulatory frameworks. However, there are still many questions about how to mobilise private finance for climate change related action.

6. Climate Finance in Laos

In any country, climate finance is either sourced internationally or raised domestically through a range of mechanisms. The bulk of climate change action in Laos has been supported by international climate finance. The Organisation for Economic Co-operation and Development (OECD) reports that in 2013-2014, over USD 223 million in official development assistance (ODA) was allocated to climate change projects in Laos. Figure 5 shows the details of the sector distribution, with 47% supporting adaptation, 33% supporting mitigation and the remainder supporting both adaptation and mitigation (Organisation for Economic Co-operation and Development, 2017).

The Lao Government estimates that USD 1.5 billion is needed for the implementation of mitigation actions according to the national strategy on climate change in Lao PDR (Government of Lao PDR, 2020). An estimated USD 6.58 million is required to meet 2025 adaptation targets in the development of sectoral adaptation strategies and action plans, as well as the implementation of the Strategy on Climate and Health Adaptation to 2025 (Government of Lao PDR, 2020a). As in many countries, there is a large gap between the needs and the finance which is being made available.

A key mechanism for channelling environmental funds in Laos is the Environment Protection Fund (EPF). The EPF was established through a Prime Ministerial decree in 2005, and is based in the Prime Minister's Office. It is both financially and administratively autonomous, and is managed by a Board of Directors and an Executive Office. The Board of Directors comprises

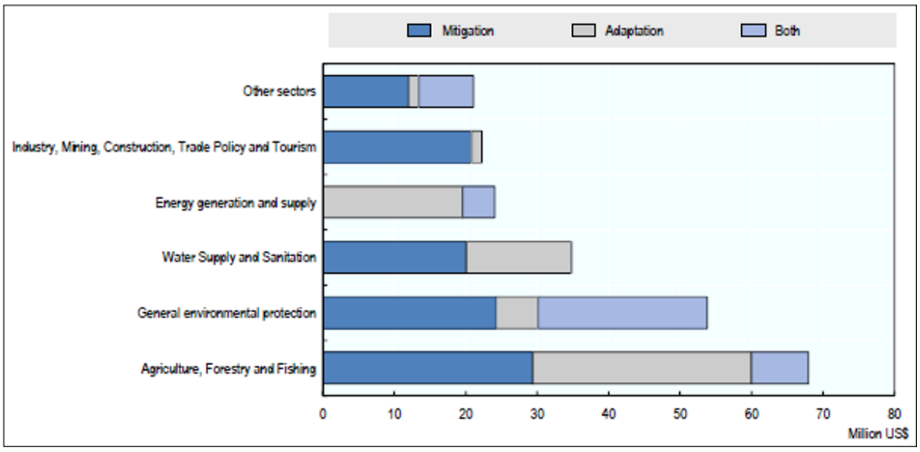

Figure 5. Climate-related development finance to Lao PDR, 2013-14

Source: OECD Investment Policy Reviews: Lao PDR, 2017

representatives from line-ministries, mass organisations, local authorities, trade and industry council, research institutes and civil society. The aim of the EPF is to strengthen environmental protection, sustainable natural resources management, biodiversity conservation and community development.

The EPF is funded by grants and loans from domestic and foreign entities, Government budget, development projects, contributions from business and interest accrued from investing the EPF endowment. The EPF supports environmental protection at the local level and can be accessed by any person, commercial entity, government organizations or civil society entity. Funds are allocated through five thematic windows, none of which is focussed on climate change.

The 2019 Climate Change Decree established a Climate Change Fund under the EPF, which has the structure and capacity required to administer climate finance. The climate change fund is the mechanism through which international climate change funds will be administered in Laos. The climate change fund will be used for the following:

- Policy development and climate change strategies, plans and programmes
- Scientific and technological research
- Promoting low carbon emission technologies
- Improving climate change knowledge, technical competency, education and public awareness
- Management of prioritised climate change issues at different levels
- Development of local wisdom on climate change adaptation and GHG emission reduction.

Local entities wishing to apply for funding from the Climate Change Fund apply directly according to EPF processes. Table 4 summarises some key funding sources for local level climate action in Laos. These funds have all been explained.

Source	Funding target	Website
The Gap Fund	Early stage development of urban climate projects	https://www.citygapfund.org/
Small Grants Programme	Grants up to USD 50,000 for local level climate projects	https://sgp.undp.org/
Nordic Climate Facility[5]	Innovative ideas developed with a Nordic partner	https://www.nordicclimatefacility.com/#
Environment Protection Fund	Projects that support a Government of Lao PDR policy, strategy and/or an official plan	https://laoepf.org.la/

Table 3. Some key funding sources for local level climate initiatives

5 NCF had no plans to call for proposals as of the end of 2020, however will publicise on their website if this changes in the future.

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