

Heikki Lihavainen, the Finnish Meteorological Institute

# Financial, technological and capacity-building support

Finland supports developing countries in their efforts to mitigate climate change and adapt to its impacts. This chapter provides information on Finnish financial contributions to the Financial Mechanism of the Convention and to other multilateral funds and programmes as well as on bilateral support to developing countries. In addition, this chapter provides information related to private sector cooperation, and support to technology transfer and capacity building. It also includes information on Kyoto Mechanisms.

## Financial, technological and capacity-building support

This section aims to give an overview of the financial, technological and capacity-building support to developing country Parties provided by Finland. Financial support provided with exact figures is reported in the CTF Tables 7 for 2019 and 2020 in Annex 2. The provision of technology development and transfer support and capacity-building support is summarised in CTF Tables 8 and 9 in Annex 2.

## Tracking climate finance

Finland uses the "Rio markers" developed for the OECD Development Assistance Committee's Creditor Reporting System (OECD DAC CRS) to track adaptation and mitigation-related finance based on the data provided in the CRS. As the markers give qualitative rather than quantitative information, there is a need for follow-up work to obtain quantitative results. Depending on whether adaptation or mitigation is the principal or a significant objective, the share usually varies between 10 and 100 per cent. Based on the project document or other relevant documentation from the implementing organisations (e.g. budget information or agreed strategies), the desk officer responsible for the respective intervention gives a value for the markers. For the MDBs, Finland uses a similar approach to that of the OECD when calculating imputed multilateral contributions. To avoid double-counting, an important element of this phase is to ensure that the total sum of all Rio markers does not exceed 100 per cent. The shares of adaptation or mitigation of the core support for multilateral organisations are based on data provided by the organisation on exact thematic budget allocations.

### Climate finance in 2019 and 2020

The overall aim of Finland's development policy is to reduce poverty and inequality in the context of sustainable development. With its development policy, Finland supports the realisation of human rights, the rules-based multilateral system and the Sustainable Development Goals (SDGs) adopted by the UN. Finland's international cooperation and actions are grounded in the UNFCCC, Kyoto Protocol and the Paris Agreement on Climate Change and the goals of the 2030 Agenda for Sustainable Development. The cross-cutting objectives that Finland promotes through its development policy include gender equality, non-discrimination, climate resilience and low emission development, as well as protection of the environment, with an emphasis on safeguarding biodiversity. The integration of climate change has been one of the cross-cutting objectives of Finland's development policy and development

cooperation since 2012. Overall, Finland's development cooperation aims to strengthen developing countries' own capacities and resilience.

Finland takes a long-term perspective on development cooperation. The Government Report on Development Policy across Parliamentary Terms confirms Finland's commitment to long-term development policy. A parliamentary monitoring group representing all parliamentary parties participated in the preparation of the report, which was adopted by the Government in 2021 and approved by Parliament in 2022. The report confirms Finland's aim to provide long-term support for climate change mitigation and adaptation, development that is low in emissions and climateresilient, and biodiversity protection.

Finland's development cooperation focuses on a limited number of priorities building on its values and strength. "Climate change, biodiversity and sustainable management and use of natural resources" is one of them. It emphasises the strengthening of adaptation alongside the mitigation of climate change, food security, water and energy, meteorology and disaster risk prevention, forests and safeguarding biodiversity.

Finland's contribution to international climate finance is channelled as part of financing allocated for development cooperation. Financing is continued in a way that takes Finland's international obligations into account, and that targets resources equally to both mitigation of and adaptation to climate change. In 2019, Finland's development aid disbursements were EUR 1,010 million<sup>1</sup>, which was 0.41 per cent of gross national income (GNI). The Official Development Assistance (ODA) figures for 2020, which is the final year in this report, amounted to EUR 1,121 million<sup>2</sup> (0.47% of GNI).

After the Copenhagen fast-start finance pledge, Finland decided to use 2009 as a baseline for defining new and additional funding. The Finnish fast-start finance commitment of EUR 110 million was implemented through a net increase of Finnish funding directly allocated to developing countries' climate activities in 2010 to 2012 compared to 2009. The baseline figure for overall Finnish climate funding (as grants) in 2009 was approximately EUR 26.8 million. While the fast-start finance period is now over, the international public climate finance that Finland has provided has continued to be higher than in the base year used for fast-start finance. The total allocations were about EUR 147 million in 2019 and EUR 131 million in 2020 Annex 2, Tables 7. Total climate finance allocations are projected to increase, even though there was a slight decrease in 2020 compared to the record figure of 2019. The division between mitigation and adaptation support varies according to year, but Finland aims for balance. In 2019, the division was 64

 $<sup>1 \</sup>text{ USD} = \text{EUR } 0.8933 (2019)$ 

 $<sup>1 \</sup>text{ USD} = \text{EUR } 0.8775 (2020)$ 

per cent for mitigation and 36 per cent for adaptation, and in 2020, 59 per cent for mitigation and 41 per cent for adaptation.

Besides providing funds to the operating entities of the financial mechanism of the UNFCCC, Finland provides support through bilateral, regional and other multilateral channels. Funding is directed at both climate change mitigation and adaptation. In addition to grant funding, Finland uses investment-based and loan-based funding to effectively accelerate private sector investment in climate solutions. Research, cooperation with universities, and interinstitutional cooperation are also supported to strenghten national capacity building in developing countries (see also Section 8.4). Most Finnish climate finance is provided through multilateral channels (Annex 2, tables 7).

Finland's development cooperation especially supports the least developed, fragile or conflict-prone countries, taking into account situations where climate change and other serious development challenges are slowing down the achievement of sustainable development goals. The priority for Finland's climate finance is to support the least developed countries and small island developing states, as they are particularly vulnerable to the impacts of climate change. This approach is taken into account when any new funding opportunities are considered. For example, Finland is a long-term funder of the Least Developed Countries Fund (LDCF), which helps least developed countries build resilience and reduce vulnerability to climate change. In 2020, Finland contributed EUR seven million to the LDCF (Annex 2, Table 7a). In addition, in late 2020, Finland joined CREWS<sup>3</sup> (the Climate Risk and Early Warning Systems Initiative) as a funder. This is a mechanism that funds Least Developed Countries (LDC) and Small Island Developing States (SIDS) for risk informed early warning services to better equip them to forecast and respond to climate risks.

Finland's development cooperation is based on the development needs defined by the partner countries and their own development plans. The objective is to strengthen developing countries' own carrying capacity. Accordingly, Finland's resources are especially directed at bringing about system-level changes that strengthen the opportunities and ability of the partner country and its society and communities to respond better and more sustainably to the country's own economy and wellbeing.

Similarly, in climate finance, Finland's support is based on developing country ownership and national plans, which, however, must be in line with internationally agreed development goals and values such as the Paris Agreement and Sustainable Development Goals. Most Finnish climate finance is channelled through multilateral funds and organisations. In 2019, the top receivers of Finland's climate finance were the Finland-IFC Blended Finance Climate Program, the Green Climate Fund and the Asian Development

https://www.crews-initiative.org/en

Bank (Annex 2, Table 7a). Many of these support climate-resilient and low emissions pathways, e.g. development and implementation of NDCs and NAPs in developing countries. One example is the GCF and its Readiness and Preparatory Support programme, which finances the formulation and implementation of NDCs and NAPs.

#### 7.3 Multilateral assistance

UN agencies, development finance institutions and multilateral climate funds play an important role in the mitigation of and adaptation to climate change. Finland defends the multilateral system and international law, recognises the significant results obtained through multilateral cooperation, and thus sees this system as one of the most important climate action. A large part of Finland's international climate finance is therefore channelled through multilateral organisations and funds. The strengths of multilateral cooperation are its wider coordination of climate finance and larger common funding base, which also has great potential for effectiveness. Finland works with other likeminded countries from its various constituencies to influence the full Paris-alignment of the strategies and operations of the multilateral development banks and funds.

As a party to international climate agreements, Finland supports the official financing mechanisms under which developed countries finance climate action in developing countries in accordance with the objectives of the climate agreements. Of the official financing mechanisms for international climate agreements, Finland financed the Global Environment Facility (GEF), the Least Developed Countries Fund (LDCF) and the Green Climate Fund (GCF) in 2019 and 2020.

Finland supports other multilateral climate funds with their own specific purposes. These include the Climate Risks and Early Warning Systems initiative, which supports the development of early warning systems and meteorological capacities in the Least Developed Countries and Small Island Developing States and the Partnership for Market Implementation managed by the World Bank, which supports the readiness and implementation of carbon pricing in developing countries. During the reporting period, Finland has contributed EUR five million to each of these funds. In addition, Finland invested EUR 46 million in a bilateral climate fund established with the International Finance Corporation (IFC) in 2019. This was part of a EUR 114 million investment in the Fund between 2017 and 2019. The Finland-IFC climate fund invests in large climate mitigation projects especially in least developed, low-income and lower-middle-income countries globally. Finland also invested EUR 20 million in the Asian Development Bank's Ventures Investment Fund in 2020. The Fund focuses on combating climate change and improving adaptation to climate change by investing capital in start-up and

growth companies in Southeast and South Asia that aim to develop and scale up new climate solutions technology.

Finland contributes to a holistic view of climate change and biodiversity in terms of both challenges and solutions (for example, an ecosystem-based approach or nature-based solutions). Finland's biodiversity funding is primarily channelled through the Global Environment Facility (GEF), which is the funding mechanism for the UN Convention on Biological Diversity and has targets for climate change mitigation.

#### Bilateral, regional and other channels 7.4

The bilateral cooperation in long-term partner countries is based on country programmes that are prepared in collaboration with partners and that build on national development plans. The main sectors for climate-related cooperation, especially with public sector counterparts, include energy, forestry, natural resource management, water and sanitation and meteorology.

The forest projects implemented in Tanzania aim principally to increase forestbased livelihoods and employment but also provide significant climate benefits (mitigation and/or adaptation). Likewise, the projects focusing on water, sanitation and hygiene (WASH) in Nepal, Kenya and Ethiopia also include measures for climate change adaptation. In the energy sector, the regional energy and environment partnerships in the Mekong and in Southern and Eastern Africa support energy access through renewable sources, providing also significant mitigation benefits.

Meteorological cooperation is one of the priority areas of Finland's development cooperation and an important part of Finland's adaptation finance. This cooperation includes weather observation infrastructure and equipment, weather forecast and warning systems and software, technical assistance and capacity building, delivered by private and public sector actors and civil society organisations to develop weather, climate and early warning services (see also Sections 6.3.5 and 6.4).

The national Development Finance Institution of Finland, Finnfund, plays a key role in financing private-sector climate mitigation and adaptation projects in all developing countries and especially in the least developed and lower-middle-income countries. Finnfund makes new investments worth approximately EUR 200 to 250 million per year, with the aim of allocating at least 50 per cent of its new investments to climate projects annually. The Government of Finland granted Finnfund new equity worth EUR 70 million during 2019 and 2020 and a EUR 105 million loan earmarked for climate investments in 2019.

Finnish NGOs and their local counterpart organisations also play an important role in supporting local communities in their endeavours to adapt to climate change, as well as in protecting the environment.

#### Private finance 7.5

The private sector plays a significant role in promoting climate action in developing countries as a developer of new technologies, developer and implementer of projects and financier. The role of the private sector is particularly important in climate mitigation, which requires more innovative, scalable and commercially viable renewable energy and energy efficiency solutions, as well as other ways to avoid and mitigate GHG emissions. Finland therefore offers different types of funding and services for the private sector on climate, ranging from large scale climate investments to small grants that help develop climate projects and get them started.

Finland has used investment-based and loan-based climate finance since 2016 to complement traditional grant-based climate finance. According to the current Government of Finland policies, 75 per cent of the investmentand loan-based ODA finance must be allocated to climate action. Besides concrete climate mitigation and adaptation targets, one of the objectives of this investment finance is to leverage large amounts of other financing, especially private sector financing, for climate projects. Most of the investments made by the Government of Finland have been targeted at the special climate-focused funds and activities of the international financial organisations (IFIs). They produce and share data on the overall leveraged amount of financing for climate funds and projects, but despite constant requests, not all of them separately report to donors the amount of leveraged private financing of the total leveraged amount of financing. Finland continues to advocate more accurate and transparent data on leveraged private sector financing figures from IFIs.

#### 7.6 Technology development and transfer

Finland has specific programmes and financial arrangements for transferring environmentally sound technology to developing countries thus enhancing access to it (examples in Annex 2, Tables 8 and 9). These activities comprise the transfer of both "soft" technology such as capacity building, creating information networks, and enhancing training and research and "hard" technology, that is, technology to control greenhouse gas emissions and for adaptation measures. The differences between these types of technologies are not always clear, and some activities have characteristics of both.

Many climate funds which Finland supports provide funding for technology transfer among other project types. These could be installation of renewable energy equipment in new areas or grey technology for adaptation, such as flood walls. However, it is rarely reported separately in their project portfolios.

Finland is a global leader in weather observation technology and systems. Over the years, Finland has transferred technology related to weather observation and climate services through bilateral and regional cooperation and concessional credit arrangements (see Table 7.1 for an example and Sections 8.3.5 and 8.4 for more details).

#### Table 7.1

Description of selected projects or programmes that promoted practicable steps to facilitate and/or finance the transfer of or access to environmentallysound technologies

#### Project/programme title:

Upgrading the rainfall, storm and lightning detection capabilities of the national hydrometeorological service, Vietnam

Purpose: To strengthen the capacity of Vietnam's hydrometeorological service

Recipient Countries	Sector	Total Funding	Years in operation
Vietnam	Meteorology	Grant approximately EUR 12.4m	2017 to 2020 (*disbursements for the interest subsidy ongoing)

#### Description:

The goal of the project was to strengthen the capability of Vietnam to mitigate the adverse impacts of climate change and weather, thus providing safer living conditions, decreased economic losses, and improved overall preparedness for civil crisis management. In this project, a world-class meteorological monitoring infrastructure was established in Vietnam, specifically targeting the remote monitoring capabilities of rainfall and tropical storms. The project consisted of an upgrade of the current weather radar observation network adding five new weather radars and upgrading three existing weather radars, and also establishing a lightning detection network. In addition to modern observation infrastructure, the project included the installation and commissioning of the meteorological data visualization and automated forecast production system, SmartMet, from Finnish Meteorological Institute (FMI).

#### Factors which led to the project/programme's success:

High-quality products and extensive technical assistance and capacity-building by the Vaisala corporation throughout the project phases, plus extensive capacity-building by the Finnish Meteorological Institute (FMI). Counterpart funding from the partner / host country for infrastructural works including for example establishment of data communication for equipment and road access to installation sites.

Continued support and capacity-building by the FMI through the ongoing Institutional Cooperation Instrument (ICI) project (2019- ongoing).

#### Technology transferred:

Weather radars, lightning detection system, weather radar and lightning central site servers and application software, meteorological data visualization and automated forecast production system (SmartMet).

#### Capacity building 7.7

Finland supports capacity building through its climate finance to developing countries in several types of projects. Most of the Finnish bilateral projects that have a climate-related objective as their principal or significant objective also include a capacity-building component as a response to existing and emerging capacity-building needs in our partner countries. Finland also supports several multilateral climate funds (such as GCF, GEF, LDCF, CREWS and the World Bank's Partnership for Market Implementation), which include a strong capacity-building component in their activities. This can be in the form of capacity building for developing country stakeholders for developing mitigation and/or adaptation projects to apply for funding or capacity development in a specific climate change theme.

For example, Finland is one of the world leaders as a donor in supporting the capacity building of non-Annex I partner countries' national meteorological and hydrological services (NMHS). During the reporting period, capacity support programmes for hydro-meteorological institutions were ongoing in Africa and Asia. The main instrument for channelling funds for hydrometeorological cooperation is the Institutional Cooperation Instrument (ICI). Other channels for funding capacity building include Higher Education Institutions Institutional Cooperation Instrument (HEI-ICI) and the Academy Programme for Development Research (DEVELOP). Detailed information about these funding instruments and the capacity building projects is provided in Chapter 8.4. and in Annex 2, table 9.

Since 2004, Finland has funded an international course on environmental law and diplomacy. The support is also expected to continue in the coming years. This "Course on Multilateral Environmental Agreements" is organised annually by the University of Eastern Finland in cooperation with the UNEP and partners in developing countries. The course transfers experience in the field of international environmental law to current and future negotiators of multilateral environmental agreements (MEAs), including the UNFCCC. In addition to teaching environmental law, the course aims to foster contacts between developing and industrialised countries and thus support international environmental negotiations. Due to the Covid-19 pandemic, it was impossible to organise the course in 2020, and the course was held in virtual format in 2021.

## Kyoto Mechanisms

Finland's Kyoto mechanism purchase programme covered the period from 2006 to 2020. The total budget for the acquisition of emissions reductions from the Kyoto Protocol flexible mechanisms was approximately EUR 70 million. Approximately EUR 20 million was invested during the CDM/JI

pilot programme, which was in operation from 1999 until early 2006. The rest was allocated between 2005 and 2012.

Finland committed about EUR 12.2 million through ten bilateral projects for the purchase of project units during the prompt start phase and the first commitment period of the Kyoto Protocol. Two of these projects also continued to generate units after 2012. As part of its purchase programme, Finland also invested in multilateral carbon funds. USD 10 million was invested in the World Bank's Prototype Carbon Fund (PCF), EUR 4.25 million in the Nordic Environmental Financing Corporation's (NEFCO) Testing Ground Facility (TGF), EUR 10 million in the European Bank for Reconstruction and Development's Multilateral Carbon Credit Fund (MCCF), USD 25 million in the Asian Development Bank's Asia Pacific Carbon Fund, EUR 3 million in the Nordic Environment Finance Corporation's NEFCO Carbon Fund, and USD 20 million in the Asian Development Bank's Future Carbon Fund. Of these funds, the Asian Development Bank's Future Carbon Fund continued to generate a small amount of units between 2013 and 2020.