

# GCF IN BRIEF: SUPPORT FOR TECHNOLOGY



Technology solutions and innovations are instrumental to facilitate the move towards low-emission and climate-resilient pathways. Climate technologies can cover sectors such as energy supply and distribution, industry, transport, waste and agriculture. They can help adapt to the adverse impacts of climate change, for instance, through the deployment of early warning systems or drought-resistant crops, or support the reduction of greenhouse gas (GHG) emissions through “clean tech” in renewable energy, energy efficiency or transportation systems.

Against this background, financial and technical support is needed in areas such as: R&D of new technology; developing/strengthening innovation systems including understanding the context-specific needs of different countries where transformational innovation efforts must be based; piloting/testing of technologies in new environments and adapting climate technologies to local contexts; supporting policy/regulatory frameworks for climate technology deployment; fostering national coordination mechanisms to effectively identify and prioritise climate technology solutions in national strategies and plans; and market preparation, business planning, and financing for deployment and scaling-up of climate technology solutions.

## The UNFCCC context and the role of the GCF

With the adoption of the Paris Agreement in 2015, technology development and transfer has been recognised as a core enabling element to limit global average temperature rise to 1.5°C. Parties agreed that efforts towards fully realising this shall be supported by the Financial Mechanism of the UNFCCC, for collaborative approaches to R&D and facilitating access to technology, in particular for early stages of the technology cycle in developing countries.

As an operating entity of the Financial Mechanism under UNFCCC that also serves the Paris Agreement, GCF supports

developing countries in mitigation and adaptation actions as well as in capacity-building and technology development and transfer. The GCF Board confirmed in 2016 that current GCF modalities enable support for technology development and transfer, including for collaborative R&D. The Board also emphasised the importance of continued collaboration with the UNFCCC Technology Executive Committee (TEC) and the Climate Technology Centre and Network (CTCN) in implementing support for technology. At COP23, Parties encouraged GCF to report information on approved projects that support the innovation in climate technologies.

## GCF technology support: Entrypoints and country examples

### Support for technology through the GCF Readiness and Preparatory Support Programme (Readiness programme).

The Readiness programme is a funding window to enhance country ownership and access to GCF, providing resources to strengthen the institutional capacities of National Designated Authorities (NDAs), Focal Points (FPs) and Direct Access Entities (DAEs) to efficiently engage with the Fund. It also assists countries in undertaking adaptation planning and developing strategic frameworks to build their programming and develop priorities with GCF in line with national planning processes. As of July 2018, 185 readiness requests from 110 countries have been approved, including requests that support developing country efforts to deploy climate technologies. GCF has received 9 technology-specific readiness requests through UN Environment and UNIDO, requesting over USD 2.5 million in GCF support. Six of these requests have been approved, for a total commitment of USD 1.8 million.

GCF seeks to ensure that the activities it supports aligns with strategic national objectives and priorities, and help advance ambitious action on adaptation and mitigation in line with national



needs. To better assist NDAs, FPs, and National Designated Entities (NDEs, the national climate technology focal points of CTCN) in formulating proposals for technology-related readiness support, GCF revised the Readiness and Preparatory Support Guidebook to include technology outcomes. The revision provides instructions on how countries can use readiness resources to enhance the deployment of climate technologies by: establishing an effective coordination mechanism between NDAs and NDEs; identifying and prioritising appropriate climate technologies in accordance with national strategies and plans for climate adaptation and mitigation; conducting feasibility assessments of selected climate technologies for mitigation and adaptation and incorporating into national processes; and strengthening market preparation and business planning for the deployment and scale-up of prioritised climate technology solutions.

### Examples of technology support through the Readiness programme

**Strengthened drought and flood management through improved science based information availability and management in Myanmar:** Implementation of vulnerability assessment and adaptation technologies

**Development of an Energy Efficiency Master Plan for Tonga:** Promotion of renewable energy generation, energy efficiency improvement, resilient agriculture with enhanced production

**Support for technology through GCF projects and programmes.** Many GCF projects showcase support for technology and enabling environments to stimulate the uptake of climate technology. From the first projects approved in 2015, this support cuts across the mitigation and adaptation windows of GCF and includes capacity-building and similar enabling activities. GCF support flows to countries in all regions, including LDCs, SIDS and African states.

### Examples of projects that feature support for technology

**Water Sector Resilience Nexus for Sustainability in Barbados (FP060):** Promotion of renewable energy technologies usage to increase water security via the installation of photovoltaic, solar and backup natural gas power for pumping stations

**Business loan Programme for GHG Emissions reduction in Mongolia (FP028):** Promotion of energy efficient and renewable energy technologies in the Mongolian Micro, Small & Medium Enterprises market, building off Mongolia's TNA

Preliminary analysis indicates that GCF projects that support climate technology amount to USD 2.2 billion, with USD 699 million of GCF financing. While not all project financing can or should be counted as support for technology, this sample indicates GCF has been committed to provide resources to supporting climate technology in developing countries.

### Support for climate technology incubators and accelerators in developing countries.

In 2017, the Board considered options to support collaborative R&D, including climate technology innovations systems and targeted climate technology research, development and demonstration support, in response to guidance from COP21. Board deliberation was informed by analysis that highlighted key lessons learned on collaborative R&D for climate technology, including:

- No “one-size fits all” approach exists to funding collaborative R&D
- Understand and respond to context-specific conditions and needs, including attending to gender and other sources of social inequality
- Build on existing initiatives and trends
- Consider application of diverse financing instruments

The Board mandated the GCF Secretariat to develop a Terms of Reference (ToR) for a Request for Proposals (RfP) to support climate technology incubators and accelerators (I&A) in developing countries. Climate technology I&As are innovative vehicles for climate solutions because they occupy a key space in the technology cycle by translating concepts into action and adapting them to local conditions for effective diffusion and deployment of technologies. The Secretariat was also requested to continue collaboration with TEC and CTCN in the implementation of the decision.

To build on existing experiences and make the RfP meaningful and valuable for countries, GCF hosted a thematic dialogue on “Boosting Climate Technology Incubators and Accelerators” in Bonn in March 2018 with the TEC and CTCN. The dialogue clarified the role of I&As, showcased country experiences and considered good practices and lessons learned from implementation, and focused on opportunities for unlocking financing, including possible support from the GCF. The dialogue provided valuable input and important basis for the further development of the ToR for the RfP.

The GCF Secretariat continues to seek inputs for further development of the RfP. NDAs and FPs are also encouraged to submit readiness requests, concept notes, funding proposals and proposals for the Project Preparation Facility for activities that support technology collaborative R&D.

