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CLIMATE
FUND

COP27
2022



Egypt's Climate Investment Plan

From climate strategy to investment plan



Announcement event – COP27
9 November 2022

The Green Climate Fund (GCF) and the Government of Egypt (GoE) are announcing the launch of the Egypt Climate Investment Plan. The plan will be developed in two volumes covering investment needs and ambition (Volume 1) and how the GoE, GCF and other climate

financiers can systematically match different financial resources, maximising the sources of funding available (Volume 2). This brochure provides an overview of the background to, and role of the investment plan, and highlights some of the key elements within.

The benefits of an investment planning approach

By helping developing countries deploy climate risk, vulnerability and feasibility assessments early in the design process and at a systems level, rather than on a project-by-project basis, the investment planning approach offers the potential to move well-designed proposals through the investment processes of climate financiers more quickly. GCF could offer tailored support to help countries strengthen climate hydro-meteorological infrastructure, collect data and convert it into climate information products and services. These would support integrated planning, enable 'financial engineering' approaches to access and structure different sources of public and private finance to implement priority investments and achieve systemic change – all areas of need identified by developing countries.

Building investment collaborations to maximise the finance deployed for developing countries' climate priorities, including from the private sector, will enable money to flow to where it is needed faster. With its unique position at the hub of a global network of over 200 partners, combined with flexible instruments, patient risk-taking capital and a country-driven approach, GCF is well placed to forge collaborations between diverse investment partners to structure programmes of investments that respond to key developing country needs. 'Co-investment platforms' could take cues from the systemic planning approach to design either country/region or thematically-based programmes of investments that respond to key transition areas, such as the blue economy, restoring nature or the zero-carbon just energy transition. This kind of approach offers the potential of multiplying the volume of finance attracted for developing countries' climate priorities well beyond what a single source of climate finance is able to channel, by intentionally matching different sources of finance to different interventions and initiatives with different risk profiles and bringing GCF's institutional reputation and robust due diligence standards to bear in attracting other investors, including catalysing private sector finance.

The role of GCF within country investment planning

The GCF has a distinctive business model, with governance based on equal participation of developed and developing countries, investments made through partnerships rather than directly, and guided overall by the principle of country ownership. GCF empowers countries to translate their climate ambitions and priorities into action. It does this through sup-

porting integrated investment planning; building capacities to access climate finance, including through DAEs; and evolving wider climate-compatible enabling environments and financial systems. Secure true country ownership can be achieved through meaningful engagement with investment processes.

Shifting the model of NDC/NAP/LTS implementation and investment planning from incremental to systemic responses

Being mandated to promote paradigm shift and endowed with the ability to build climate investment readiness, GCF has the opportunity to help developing countries shift from implementing NDCs/NAPs/LTS through standalone projects – which may not optimise financing and only achieve incremental and short-lived impacts; and/or not be cost-effective or even be maladaptive over the long term – to more integrated, systemic, country-owned responses. This approach would lead to developing projects and programmes targeting systems transitions in line with the advice of the IPCC.

Egypt's Climate Investment Plan

Egypt recently accelerated efforts to address the adverse impacts of climate change with the launch of the National Climate Change Strategy (NCCS) based on the sustainable development strategy (Egypt vision 2030) and updated its Nationally Determined Contributions (NDCs) showing more ambition and commitment. The NCCS is a roadmap for achieving objective 3.1 of Egypt Vision 2030, 'meeting the challenges of climate change'. The strategy enables Egypt to plan and manage climate change at different levels in a way that supports the achievement of the country's desired economic and development goals, following a low-emissions approach. Investment planning will help achieve the goals of the strategy.

Egypt is the first country to adopt the investment planning approach through the GCF. The Investment Plan (IP) is a high-level document presenting overarching key state priorities for low emissions and climate-resilient development. The IP is aligned with the climate agenda of the Government of Egypt (GoE), as well as other opportunities identified in dialogue with the Nationally Designated Authority (NDA) and relevant ministries.

A system's transition approach (as supported by the IPCC's 6th Assessment Report)¹ is being taken as the GoE's climate change strategy is considered to draw synergies between

¹ <https://www.ipcc.ch/assessment-report/ar6/>

the sectoral plans (moving them into systems transition), and to identify new opportunities.

The IP is intended to be used by all stakeholders – including all public sector agencies, NGOs, the private sector, all potential investors/financiers, civil society, faith-based organisations, the academia and the general public – in supporting and enhancing their work on climate change. The priority investment areas have been identified by the GoE with the GCF and other climate financiers invited to collaborate and discuss further. The IP is intended to yield positive and sustainable results in the national work on climate change management.

Climate financing challenges

There are several challenges and opportunities to support the implementation of Egypt's climate objectives through green investment. These include both cross-cutting and sector-specific factors. The main cross-cutting factors are outlined below

- **Insufficient access to climate finance:** While the implementation of some green projects is ongoing, a vast majority of Egyptian private sector actors, including SMEs, have had little success in directly or indirectly accessing dedicated climate funds and other concessional green loans from international sources. The procedures and requirements to access these funds remain a big challenge for the private sector.
- **Knowledge gaps and limited skills related to climate change.** Private investors, before investing, need to have a good understanding of the climate change policies, adaptation and mitigation processes and actions, the benefits to them as businesses and the positive economic, social and environmental impacts of implementing climate objectives in Egypt.
- **Weak business case for green investment in adaptation projects:** Whereas several mitigation projects – particularly in domains such as energy, transport, waste management, and green cities – offer strong incentives for private investors, adaptation projects (particularly those where profit is their bottom-line) often struggle to present a strong business case for private investors.²

To overcome this, investment needs can be financed from a variety of sources, including:

- International climate and development finance (including funds established within the framework of the UNFCCC and other bilateral and multilateral funding institutions);

- The private sector (including through both domestic and international capital markets);
- Government budgets.

The IP will be developed in two volumes. Volume 1 includes an overview of the investment needs and ambition, and will identify the most critical responses identified by GCF following consultations and based on the review of relevant climate-related targets.

Volume 2 of the IP will be designed to maximise co-investment opportunities from non-state actors (e.g., multilateral development banks, international and local financial institutions) and – as appropriate but to the greatest extent possible – mobilise private sector financing. Volume 2 will include how the GoE, GCF and other climate financiers can systematically match different financial resources (including GCF's) to the different types of proposed interventions, maximising the sources of funding available. To this effect, the IP design takes account of the full range of financial instruments deployed by GCF, consistent with the risk appetite of the Fund to achieve strategic impacts.

The current white paper document comprises Volume 1 of the Egypt Climate Investment Plan. The purposes of the document are to:

- Identify a list of key adaptation and mitigation projects in the agriculture, water, ecosystems, transport, waste, and energy sectors. This list has been developed into project idea summaries to allow for a more thorough evaluation.
- Provide an estimate of climate financing needs for each of the investment ideas identified.

A portfolio of adaptation and mitigation options for the key sectors was drafted through a comprehensive review of national policy documents and sectoral plans and stakeholder consultation with the relevant ministry officials. This includes discussions with the Ministries of Environment, Agriculture, Irrigation and Water Resources, Transport, Electricity and Renewable Energy, Planning and Economic Development, Finance, International Cooperation, Planning and Economic Development and relevant national stakeholders. This step is crucial to gain buy-in and country ownership of the investment planning process from the beginning.



² African Development Bank (2021), NDC implementation in Egypt through green investments by the private sector.

Priority investment areas

The investment priority areas have been identified by the GoE, with the GCF and other climate financiers invited to drive the wider discussion and to strategically mobilise resources into key sectors.

The identified opportunities are:



Agriculture and food security

Agriculture employs 28 per cent of the population and accounted for 11.8 per cent of gross domestic product in 2021. At the same time, the sector is significantly impacted by climate change which has the risk of undermining the country's food security. The IP has identified key investment areas that support resilient agriculture and enhanced food security. They will help climate informed advisory and risk management services to facilitate evidence-based decision-making in the sector and the reconfiguration of food systems throughout the value chain to enable adaptive capacity in mobilising, transporting, processing, storing and distributing products. Specific interventions include:

1. Investing in the development of early warning systems to support risk mitigation and planning for farming communities in Egypt's agricultural sector;
2. Channelling private investment in low-carbon, climate-resilient dairy productions systems through improving productivity of dairy cattle;
3. Investing in the reduced use of chemical fertilizer and the promotion of organic agriculture;
4. Reducing food loss and waste along the selected value chains.



Water security and flood risk

Currently, more water is used than the volume of internal renewable resources, with water resources already well below the threshold of 1,000 m³/year, which the UN deems as the level necessary to provide enough water for drinking, agriculture, and nutrition. Conversely, Egypt has seen an increase in the frequency and severity of flooding. This IP has identified priority investment areas that support enhanced water security and increased resilience to flooding through interventions and planning. They will compel water demand management through enhancing water efficiency and encompass climate proofing of critical water infrastructure. They include:

1. Improving irrigation efficiency;
2. Improving the institutionalisation of water management;
3. Strengthening water resources management;
4. Development of desalination plans using solar energy;
5. Constructing underground reservoirs and installation for protection against floods as well as obstruction dams, artificial lakes, guide barriers, and weirs to benefit from flood water.



Ecosystems, ecosystem services and land use

There is a significant opportunity to invest in protecting, restoring and sustainably managing biodiversity so that it can contribute to socioeconomic development. Interventions will enable ecosystem-based management of terrestrial and fresh-water ecosystems to enhance function at the scale needed to be ecological sustainable as well as management of coastal and marine ecosystems. This IP has identified the following as key investment areas that support enhanced resilience to climate change for ecosystems:

Enabling Environment and Capacity Building

1. Prioritising the delivery of Integrated Coastal Zone Management (ICZM) plans and the strengthening of institutional frameworks;
2. Assessing the impact of climate change on biodiversity in vulnerable areas and protected areas;
3. Developing guidelines and mechanisms for collection, maintenance, reproduction and reintroduction of plants and animal species in ex-situ programmes for endemic species.

Climate Change Interventions

1. Coastal protection to climate change through dune and beach conservation and restoration;
2. Coastal wetland conservation and restoration;
3. Investing in ecotourism to address unsustainable tourism and increasing coastal development;
4. Coral reef rehabilitation in partnership with the private sector;
5. Desertification control through the production of drought-tolerant trees and conservation and maintenance of endangered plants.



Low-emission transport

The GoE has made sustainable, low-emissions transport a key pillar of its carbon emissions mitigation strategy. Interventions will help accelerate the shift to low-emissions public transport to enable enhanced urban mobility, the electrification of the transport system throughout the entire value chain, and the scale up of new generation technology. The IP has identified the following as investment areas prioritised by the Government of Egypt to support the transition to low-emission transport:

1. Electrification of the Abu Kir metro line;
2. Rehabilitation of the El Raml Tramway in Alexandria;
3. The transformation of public buses including via efficient routes through the adoption of Bus Rapid Transit (BRT) systems;
4. Development of a high-speed rail network in Egypt (lines 2&3);
5. Encouraging the use of green hydrogen in commercial shipping.



Energy

The three key sub-sectors in the energy sector discussed in the IP include Energy Efficiency, Renewable Energy, and the generation of Green Hydrogen. Under these three sub-sectors, the IP considers the following investment opportunities:

- **Energy Efficiency:**
 - Retrofit programme for existing buildings;
 - Automation, controls and energy management in commercial and public buildings;
 - Reducing urban heat island through nature-based solutions;
 - Reducing cooling needs in buildings with retrofit in existing buildings;
 - Investing in district cooling systems;
 - Energy management systems (EMS).
- **Renewable Energy:**
 - Investing in onshore wind farms;
 - Investing in large scale CSP;
 - Investing in RE thermal storage facilities;
 - Investing in solar powered pumped storage hydropower;
 - Production of distribution of Hybrid Renewable Energy System (HRES) to be implemented in industry.
- **Green Hydrogen generation:**
 - Exploring green hydrogen as an alternative energy source;
 - Reducing emissions and switching to green ammonia in the nitrogen fertiliser sector;
 - Certificates for green hydrogen and ammonia;
 - Storage and transmission;
 - Connecting infrastructure for green hydrogen;
 - Green hydrogen applications and scale-up;
 - Increased climate resilience of grid with hydrogen storage pilot projects.



Circular urban economy

Emissions from the waster sector contribute to 9 per cent of the country's emissions and have the potential to contribute significantly to reductions, particularly since the government is developing a waste management system. Objectives to reduce emissions from this sector include: (i) promoting reduce, reuse, recycle and recover (4Rs) concepts for municipal and agricultural waste, (ii) safe and proper disposal of solid waste in suitable landfills and landfill gas collection, and (iii) develop policies to reduce waste such as from plastics.

Waste management also acts as a cross-cutting measure, not only reducing emissions but also building resiliency by preserving the country's resources from the impacts of climate change. The Ministry of International Cooperation has previously provided development financing for solid waste management projects, seeing it as an important sector to contribute towards the objectives of the NCCS. The IP highlights the following investment opportunities for the waste sector:

- The creation of a multi-capable international waste management hub;
- Waste-to-energy projects, including adapting existing landfill sites.



Ambitions

To achieve successful interventions in the areas of investment opportunity, it is necessary to encourage actions in four key areas:

1. Promotion of transformational planning and programming;
2. Catalysing climate innovation;
3. De-risking investment to mobilize finance at scale, including from the private sector;
4. Mainstreaming climate risks and opportunities into investment decision-making.

The IP will help achieve the goals and ambitions of Egypt. The country has published several policies and strategies which set out the country's targets for sustainable economic growth, and for mitigating against and adapting to the effects of climate change. The key national policies are outlined below. Further detail on the targets established in these strategies and coverage of sectoral plans can be found in Volume 2 of this Investment Plan, to be published in 2023.

Egypt's updated NDC pledge for climate change action up to 2030 is anchored and dependent on international financial support, ensuring a just transition and appropriateness to

national capabilities. The 2030 targets focus on key sectoral emissions reductions, including 33 per cent from electricity; 7 per cent from transport; and 65 per cent from oil and gas compared to a business as usual scenario. Climate change efforts fall within Egypt's path toward sustainable and inclusive development that eradicates poverty and strives to achieve prosperity for future generations. The NDC implementation will leverage Egypt's recent success on attaining pro-poor economic growth with a decline in poverty since 2020 – for the first time in almost two decades – and strengthening social safety nets to reach the most vulnerable.

In May 2022, Egypt launched its **National Climate Change Strategy (NCCS) 2050**, to support the move to a low-emission, climate-resilient economy. The costs of implementing the targets listed in the Strategy are estimated at USD 211bn for mitigation and USD 112bn for adaptation. The strategy does not include an overall emissions reduction goal.

Egypt's Vision 2030, developed in 2014–2015, is the country's overarching sustainable development strategy. Climate change does not feature prominently, and the Vision does not include an economy-wide emission reduction target; however, it does have a few mitigation-related sectoral targets.

GCF would like to invite collaborations from across the space of financial entities and the private sector, to work together on climate adaptation and mitigation priorities for Egypt. This collaboration would contribute to Volume 2 of the IP. GCF is embarking on a pilot of this novel and ambitious project with the Government of Egypt and its strategic partners, with the aim of showcasing this approach for other developing countries to follow.



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