

**Submission to the Standing Committee on Finance calls for evidence
for the 2020 Report on the determination of the needs of developing
country Parties related to implementing the Convention and the Paris
Agreement and the 2020 Biennial Assessment and Overview of
Climate Finance Flows**

FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

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Addis Ababa, Ethiopia**

PROCESSES AND APPROACHES UTILIZED FOR THE DETERMINATION OF NEEDS OF ETHIOPIA

The Government of Ethiopia welcomes this opportunity to submit its views on the needs of developing country Parties related to implementing the Convention and the Paris Agreement, which will serve as an input for the SCF's 2020 Report.

INFORMATION AND DATA ON THE NEEDS OF THE COUNTRY

Ethiopia has set a vision to build a climate-resilient and carbon-neutral middle-income economy by 2025. The Climate Resilient Green Economy (CRGE) strategy was developed in 2010 and launched in 2011 at the side of COP17 in Durban. The CRGE strategy aims for an economy-wide GHG emission reduction of 255 Mt of CO₂e per year in 2030. The realization of the CRGE vision requires strong political commitment, policy measures, institutional setup, implementation capacity, and technology transfer. Most importantly, building a green economy requires an estimated total expenditure of around USD 150 billion from 2011-2030.

1. Adaptation Based Needs

The government of Ethiopia has designed and launched a National Adaptation Plan (NAP-ETH), which focuses on the sectors that have been identified as most vulnerable, namely: agriculture, forestry, health, transport, power, industry, water, and urban. Within these sectors, 18 adaptation options have been identified for implementation at all levels and across different development sectors, recognizing the considerable diversity in context and vulnerability across Ethiopia's regions and social groups. These options are:

1. Enhancing food security by improving agricultural productivity in a climate-smart manner.
2. Improving access to potable water.
3. Strengthening sustainable natural resource management through safeguarding landscapes and watersheds.
4. Improving soil and water harvesting and water retention mechanisms.
5. Improving human health systems through the implementation of changes based on integrated health and environmental surveillance protocol.
6. Improving ecosystem resilience through conserving biodiversity.

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| <ul style="list-style-type: none"> 7. Enhancing sustainable forest management. 8. Building social protection and livelihood options of vulnerable people. 9. Enhancing alternative and renewable power generation and management. 10. Increasing resilience of urban systems. 11. Building sustainable transport systems. 12. Developing adaptive industry systems. 13. Mainstreaming endogenous adaptation practices. | <ul style="list-style-type: none"> 14. Developing an efficient value chain and marketing systems. 15. Strengthening drought and crop insurance mechanisms. 16. Improving early warning systems. 17. Developing and using adaptation technologies. 18. Reinforcing adaptation research and development. |
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The estimated cost of implementing NAP-ETH is USD 5 billion per year and USD 90 billion until 2030. This cost is additional to the USD 150 billion for the green economy initiatives. It is expected that these funds will be raised from various sources, including public and private, as well as domestic and international sources.

Ethiopia aims to proactively and iteratively pursue further integration of climate change adaptation in development policies and strategies, including macroeconomic and sectoral policies and strategies at the national level, as well as Regional and Woreda plans and strategies. To achieve this, five strategic priorities have been identified:

- 1. Mainstreaming climate change adaptation into development policies and strategies
- 2. Building long-term capacities of institutional structures involved in NAP-ETH
- 3. Improving knowledge management system of NAP-ETH
- 4. Implementing effective and sustainable funding mechanisms
- 5. Advancing adaptation research and development in the area of climate change adaptation

The realization of these strategic priorities is critical to enable effective implementation of the options identified above.

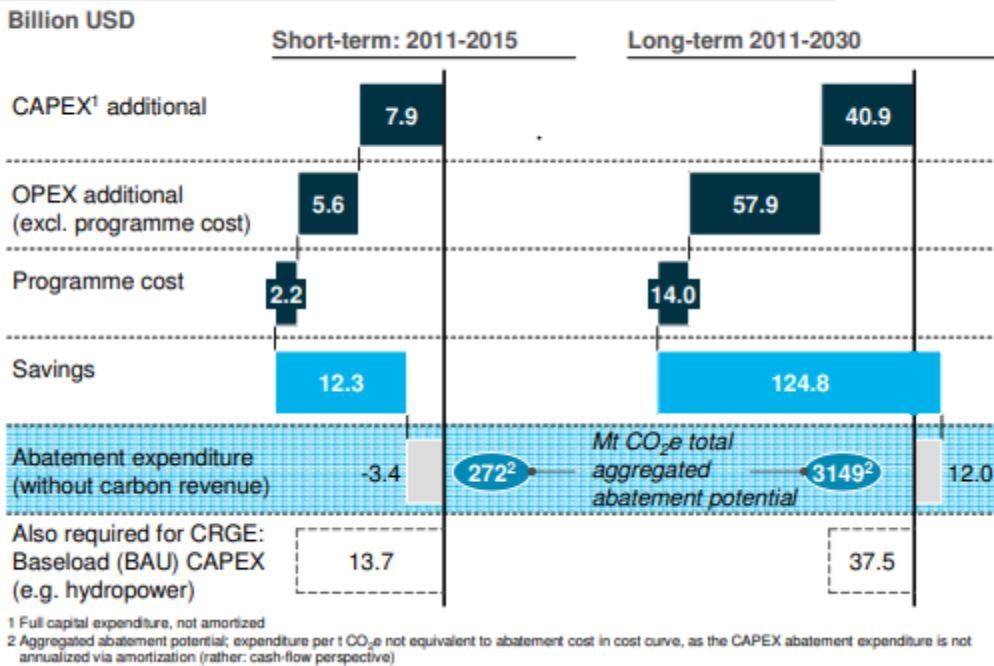
2. Mitigation Based Needs

The CRGE strategy aims for an economy-wide GHG emission reduction of 255 Mt of CO₂e per year in 2030. The realization of the CRGE vision requires strong political commitment, policy measures, institutional setup, implementation capacity, and technology transfer. Most importantly, building a green economy requires an estimated total expenditure of around USD 150 billion from 2011-2030. The green economy plan is based on four pillars:

1. Improving crop and livestock production practices for higher food security and farmer income while reducing emissions
2. Protecting and re-establishing forests for their economic and ecosystem services, including as carbon stocks
3. Expanding electricity generation from renewable sources of energy for domestic and regional markets
4. Leapfrogging to modern and energy-efficient technologies in transport, industrial sectors, and buildings.

The below figure underlines the significant funding needed to build a green economy despite the overall low average cost of abatement, and the need to mobilize capital investment in the early years of the development of the green economy. However, not all of this expenditure is necessarily additional to current investment plans – rather, a large part of this expenditure, e.g., for power generation infrastructure or transport infrastructure, would also occur in a conventional growth scenario.

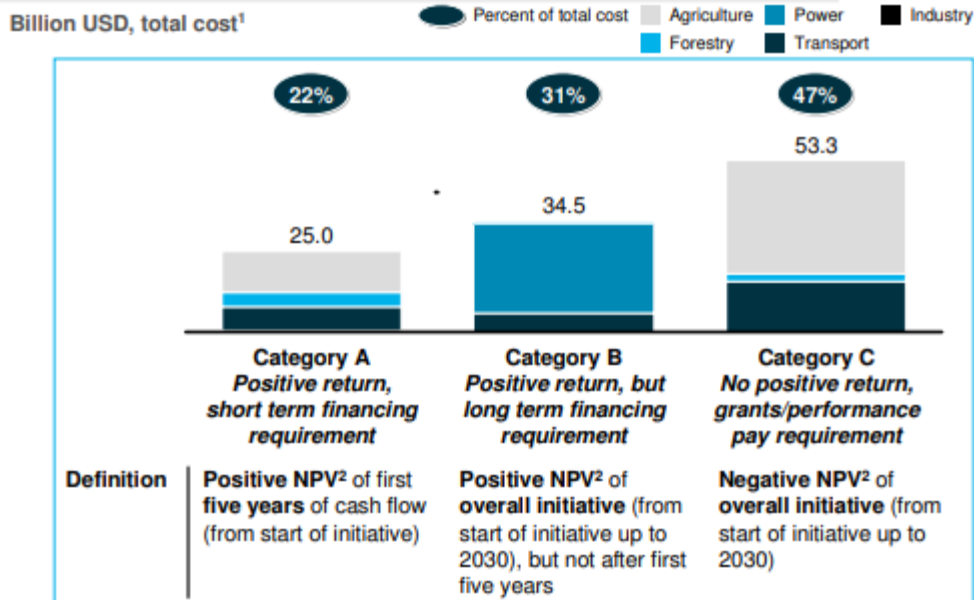
Building a green economy requires around USD 150 billion up to 2030



The largest share of the total capital investment of USD 80 billion will be required for the development of power generation and transmission infrastructure (48%), followed by the transport sector (29%) and financial requirements for the transformation of the agricultural sector (2% for soil and 3% for livestock) as well as the forestry sector (12%, including agricultural intensification and irrigation initiatives that ultimately create GHG abatement in the forest sector). Upgrading technology in the cement sector will require investments equal to nearly USD 5 billion over 2030 – or 6% of the total estimated green economy capital investment. The power generation investment, however, has to be considered as part, not as an addition, of the ‘conventional development path’ because the renewable-based development of the electric power sector is part of the existing development path. Indeed, the scale-up of renewable energy infrastructure builds on existing competitive advantages and represents the most viable pathway economically, socially, and environmentally, and the Ministry of Water, Irrigation and Energy through the Ethiopian Electric Power Corporation has consequently built its development master plan very strongly on hydro, solar, geothermal, and wind power.

In order to analyze the required type of financing for the respective initiatives, their expenditure is grouped into 3 distinct categories.

More than 50% of expenditure will have positive returns – out of that, more than 20% in the short to medium term



¹ Including additional CAPEX, additional OPEX, and programme cost (not containing baseload/BAU expenditure)
² NPV calculated with 6% discount rate; societal perspective, the implementing agency might face higher net expenditure when benefits (i.e. savings or revenues) are captured by different parties

- **Category A:** Expenditure for initiatives that have a positive return and only require short-term financing. These are defined as yielding a positive Net Present Value (NPV) from the first five years of cash-flow (from the start of implementation of the initiative).
- **Category B:** Expenditure for initiatives that have a positive return, but require long-term financing. These are defined as yielding a positive NPV from the overall initiative (from start of implementation of the initiative) up to 2030, but not during the first five years.
- **Category C:** Expenditure for initiatives that do not yield a positive (financial) return, hence they require grants or performance payments for GHG abatement. These are defined as yielding a negative NPV from the overall initiative from the start of implementation of the initiative up to 2030. This does, however, not necessarily mean that the initiative does not yield a positive NPV at all. The construction of electric rail, for example, has been calculated with a much longer depreciation period and generates

positive returns from the initial investment even beyond 2030, which can eventually make the overall return positive.

This categorization shows that more than half of the expenditure of the proposed initiatives will have positive returns, i.e., the green economy initiatives are less expensive – over the 20-year horizon – than the conventional alternatives. More than 20% of the expenditure for green economy initiatives will already have positive returns and payback in the short-run (i.e., five years or less after the start of the implementation). However, the profile of expenditure of the green initiatives typically has a bulge at the beginning due mainly to upfront capital investment. Upfront investments for green economy initiatives are usually higher due to the higher investment required in modern and efficient technology, compared to one of the traditional paths, as well as the investment required to set up the different scale-up programmes.

On the other hand, the medium- to long-term running costs are typically lower due to the combined effects of fuel savings and efficient use of other resources. This effect is reflected in a large part of the expenditure only paying off in the long run. On the one hand, the green path for 2010 to 2030 is more capital intensive. For some initiatives, accounting for 47% of the expenditure, the green path could be even more expensive than the conventional development path. The implementation of these green economy initiatives will require the support of international funding. On the other hand, potential support from climate-related sources of funding comes as a compliment and hence helps to fund initiatives that would otherwise not be financed. They provide the additional support required to steer the economy towards sustainable growth instead of developing along a traditional path and will reinforce the robustness of many sectors, especially in agriculture.

Ethiopia has already divided all prioritized green economy initiatives into three categories:

- Own initiatives that are planned and fully funded by the government
- Supported initiatives that are planned by the government but require support in implementation

- Market-based initiatives for which Ethiopia might be able to monetize carbon credits in exchange for GHG abatement.

All of the prioritized green economy initiatives could potentially be candidates to access the emerging climate finance pool in exchange for GHG abatement.

Integration and Mainstreaming of Climate Change Mitigation and Adaptation into National Development Plan

Climate change mitigation and adaptation actions have been mainstreamed into the national midterm development, which is known as the Second Growth and Transformation Plan (GTP II) for the period 2016-2020. Furthermore, building a climate-resilient middle-income economy is one of the key strategic pillars of Ethiopia's Ten Years Perspective Plan for the period 2021-2030. The relevant CRGE sectors have mainstreamed climate change mitigation and adaptation actions into sectoral ten years of the development plan and key performance indicators level.

Climate Finance Tagging and Tracking

The government of Ethiopia has invested over USD 22.1 billion from 2011-2019 (or USD 3.2 billion per year) mobilized from domestic, bilateral, multi-lateral sources as well as from international climate finance institutions on climate change mitigation and adaptation projects and programs in agriculture, energy, transport, industry, forest, urban development, health sectors. Out of this, USD 6.4 billion, 8.1 billion, 7.6 billion were invested in climate change adaptation, mitigation, and cross-cutting activities respectively. The above estimate doesn't include the in-kind and free labor contributions of communities in natural resources management, landscape restoration, and other activities. Furthermore, the government contribution in the form of recurrent and capital budget allocations are not fully captured in the estimation. Despite this investment, Ethiopia still needs to attract and mobilize finance to support its climate compatible development agenda. The country has responded by establishing a national fund, the Climate Resilient Green Economy Facility (CRGE Facility), as a mechanism to mobilize finance from various sources, including domestic and international, and drive investments to build resilience and support green growth.

In the absence of a governmental budget tracking or coding system that identifies spending linked to CRGE, or climate change mitigation and climate change adaptation, there is currently

no mechanism available to unpack activities funded under the country's development plans to determine climate-change linked expenditure. Climate finance tracking in Ethiopia will benefit from the establishment of an accessible, and consolidated data and information management system that adopts climate finance classifications used globally and records climate change-linked expenditure by the public sector, as well as donor and DFI climate change-linked expenditure. Such a system would ideally record not only total budgets, but characterize the funding by several other key features (e.g. project preparation expenditure, capital expenditure, operating expenditure; grant, loan, or equity; yearly breakdown; geographical breakdown; breakdown by source, etc.) to enable more sophisticated analysis of climate finance in the future. The government of Ethiopia is collaborating with development partners to develop a climate-related expenditure tagging and tracking system. This system shall enable Ethiopia to accurately report climate change mitigation and adaptation related budget allocations and expenditure by developing effective budget tagging and tracking systems and capabilities. Such a system would ideally record not only total budgets, but characterize the funding by several other key features (e.g. project preparation expenditure, capital expenditure, operating expenditure; grant, loan, or equity; yearly breakdown; geographical breakdown; breakdown by source, etc.) to enable more sophisticated analysis of climate finance in the future.

CHALLENGES AND OPPORTUNITIES

Challenges

- Identifying and quantifying needs and options for climate investment

Clearly identifying and quantifying needs for the realization of the NDC/CRGE is one of the critical challenges faced by the country in accessing financial resources. The country requires support to translate its NDC into an investment plan, quantify the needs and build its national, and institutional capacities to access funding.

- Cumbersome climate finance accessing processes and procedures of bilateral and multilateral funds

- **Limited capacity to access and secure climate finance from international funds**
- **Challenges to unlock private finance**

It is necessary to unlock private finance as the private sector can be instrumental in implementing the NDC/CRGE to the level and quality needed. Identifying physical and transitional risks is also a critical factor in investment.

Opportunities

- The existence of a well-coordinated institutional/governance structure, clear policies, political willingness of the government to implement its CRGE Strategy, and trying to build the capacities of various stakeholders to implement their green initiatives.
- Better communication with bilateral and multilateral development partners in supporting the realization of SDGs.
- Opportunity to link enhancing NDC/CRGE with green recovery in the context of COVID-19