Planning and implementing the Ethiopian Climate Resilient Green Economy, CRGE Strategy

CLIMATE VULNERABILITY FORUM
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# AIMS AND OVERVIEW

The aim of this presentation is to give a brief overview of Ethiopia’s Climate Resilient Green Economy (CRGE) initiative and current developments towards the vision

## Outline

1. CRGE Strategy Background
2. Reduction
   - a. emissions
   - b. vulnerability
3. Implementation: The Sectoral Reduction Mechanism
4. Challenge, Conclusions and Next steps
Within Ethiopia extreme climate events are common, particularly droughts and floods. Alongside the evidence of a changing climate, evidence suggests the incidence of droughts and floods has been increasing from time to time.

**FREQUENCY OF DROUGHTS BY WOREDA**

1990 to 1999

2000 to 2009

**FREQUENCY OF FLOODS BY WOREDA**

1990 to 1999

2000 to 2009

Historic weather variability, extreme events and hazards have resulted in a substantial negative impact in agriculture & the economy in general.

- Floods and droughts have resulted in severe loss to agricultural crop and livestock resulting in food insecurity implications.

- The economic impact depends on the extent of the variability and extreme events but droughts alone is estimated to reduce total GDP by 1% - 4%.

- Soil erosion has been estimated to reduce agricultural GDP by 2%-3% (around 1% of total GDP).

- Even normal variability has a negative economic impact due to the sensitivity of agricultural output to climate. These all equates to a high current vulnerability and economic cost that we must tackle.
### Poverty Reduction Eradication

#### GTP

**VISION**
- To achieve a middle income economy by 2025 and Eradicate poverty

**OBJECTIVES**
- Maintain double digit economic growth per year
- Expand quality of education and health and achieve the MDGs in the social sectors
- Build stable a state
- Have stable macroeconomic environment

**KEY AGENDA ITEMS**
- Sustaining faster and equitable economic growth
- Maintaining agriculture as a major source of economic growth
- Creating favorable conditions for the industry to play key role in the economy
- Enhancing expansion and quality of infrastructure development
- Enhancing expansion and quality of social development
- Building capacity and deepen good governance
- Promote women and youth empowerment and equitable benefit

#### CRGE

**VISION**
- To achieve a middle income country by 2025 which is resilient to the impacts of climate change

**OBJECTIVES**
- Maintain economic growth
- No net increase in GHG emissions by 2025 relative to 2010 emissions levels
- Build climate resilience across the economy

**KEY AGENDA ITEMS**
- Agriculture – improve crop and livestock practices
- Forest – protect and forests as a carbon stock
- Power – deploy renewables
- Industry, transport and buildings – use more efficient technologies
- Urban Make the most of urbanization
- Water
The CRGE is focused on climate resilient development (CR) and low carbon, resource efficient and clean development (GE)

- **Green Economy**
  - Reach middle income threshold by 2025 and
  - Keep growth carbon neutral (net zero emission)

- **Resilient Economy**
  - Build the capacity of the economy to cope with the adverse consequences of climate change

**Development Initiatives through general development**
The CRGE shows how to meet its development ambitions through keeping emissions constant.

Emissions per year; Mt CO$_2$e

The Green Economy initiatives have the potential to reduce emissions by ~19 Mt CO$_2$e by exporting green power to regional markets.

Additional abatement potential of ~19 Mt CO$_2$e from exporting green power to regional markets.
Concrete initiatives for Ethiopia's key sources of GHG emissions across main pillars have been developed

<table>
<thead>
<tr>
<th>Sector</th>
<th>Abatement potential Mt CO₂e in 2030</th>
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<tbody>
<tr>
<td><strong>Agriculture – improve crop/livestock practices</strong></td>
<td>90</td>
</tr>
<tr>
<td>▪ Reduce deforestation by agricultural intensification and irrigation</td>
<td>▪ Improve animal value chain</td>
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<tr>
<td>▪ Use lower-emitting techniques</td>
<td>▪ Shift animal mix</td>
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<tr>
<td>▪ Mechanisation</td>
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<tr>
<td><strong>Forestry – protect and grow forests as carbon stocks</strong></td>
<td>130</td>
</tr>
<tr>
<td>▪ Reduce demand for fuel wood via efficient stoves</td>
<td>▪ Increase sequestration by afforestation/reforestation and forest management</td>
</tr>
<tr>
<td><strong>Power – deploy renewable and clean power generation</strong></td>
<td>19</td>
</tr>
<tr>
<td>▪ Build renewable power generation capacity and switch off fossil fuel power</td>
<td>▪ Export renewable power to substitute fossil fuel power abroad</td>
</tr>
<tr>
<td>▪ Export renewable power to substitute fossil fuel power abroad</td>
<td></td>
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<tr>
<td><strong>Industry, transport and buildings – use advanced technologies</strong></td>
<td>35</td>
</tr>
<tr>
<td>▪ Improve industry energy efficiency</td>
<td>▪ Expand electric rail</td>
</tr>
<tr>
<td>▪ Improve production processes</td>
<td>▪ Substitute fossil fuel with biofuels</td>
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<tr>
<td>▪ Tighten cars’ fuel efficiency</td>
<td>▪ Improve waste management</td>
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The Sectoral Reduction Mechanism (SRM) is the process by which Ethiopia will achieve its middle income climate resilient green economy.

**SRM OBJECTIVES**

1. **Reduce the cost of vulnerability.** Creating enabling conditions for the implementation of actions which reduce the cost of social, economic and environmental vulnerability.

2. **Reduce greenhouse emissions.** Creating enabling conditions to reduce greenhouse emissions, net zero emission.

3. **Tracking progress.** Providing a measurement and quantification of reductions in emissions and vulnerability due to implemented actions.

4. **Deliver on international commitments.** The SRM will help to foster the implementation of the UNFCCC and other relevant multilateral environmental agreements to which Ethiopia is party consistent with other national environmental policy.
The core concept of the SRM is to match strategic actions to a pool of finance through this institutional structure.

**THE MECHANISM AND ITS INSTITUTIONS**

The process involves multiple steps facilitated by CRGE registry and includes financial flow. Here is a breakdown of the steps:

1. **Step 0.** Use the CRGE strategies to set green growth strategic vision including detailed indicators for progress.
2. **Step 1.** IEs work to develop investment plans. These specify the strategic actions needed to secure transformative change.
3. **Step 2.** EEs invited to develop investment proposals against priorities identified in investment plans.
4. **Step 3.** Preparation of investment proposals and reporting of reduction results (RRRs) by EEs to deliver on strategic priorities, which are then submitted to IEs. EEs will also voluntarily report on unsupported actions.
5. **Step 4.** IEs review and bundle investment proposals into investment packages and collate RRRs. The review and bundling of investment packages will be in line with strategic priorities included in investment plans.
6. **Step 5.** Submission of investment packages and RRRs to the TC from IEs. This will include details of support required.
7. **Step 6.** Review of investment packages and RRRs by TC.
8. **Step 7.** Approved proposals and RRRs to MC.
9. **Step 8.** Review of investment packages and RRRs by MC.
10. **Step 9.** Approved proposals and RRRs result in an instruction to the facility to release funds.
11. **Step 10.** RRRs report against strategic vision in state of CRGE report periodically.
12. **Step 11.** CRGE facility release finance for either supported or rewarded actions.
13. **Step 12.** IEs release finance to EEs for implementation of investment proposals or for demonstrated results.

Bottom-Up implementation process and top-down leadership.
The SRM reduction actions

Step 1. Understand the base year situation

Step 2. Project business as usual based on brown development based on assumptions around population, income, institution and technology. Based on historical trends and assumptions around key drivers

Step 3. Unsupported actions. These will reduce emissions and vulnerability but will not be supported by the SRM, although they will be acknowledged

Step 4. Baseline target and supported actions. These targets avoid, leakage, double counting and duplication and are underpinned by MRV. Actions to achieve a baseline target will be supported upfront through the facility.

Step 5. Crediting baseline and rewarded actions*. Rewarded actions through ex-poste support for reductions in emissions and vulnerability, provided after reduction actions can be MRVed.
PROGRESS TOWARDS THE VISION
Progress towards achieving the Vision; systems to deliver the CRGE in (i) planning; (ii) resources; (iii) delivery, underpinned by strong institution

Progress to date

- Green Economy strategy
- Climate Resilient strategies
- Sector Reduction Mechanism
- Planning for GTP2 through mainstreaming (under progress)

- Allocate huge internal resources & community mobilization; Mobilize investment from climate & non-climate international sources;

- Institutions, Systems, Processes and Tools for climate finance set up & under continuous progress & evolution (CRGE Facility);

- Overcoming delivery bottlenecks to deliver results
- Tracking results through Monitoring and Evaluation systems

- Through the MEF, MoFED, NPC, CRGE Facility, Line Ministries and Regional Implementers
Progress towards achieving the Vision
Fast Tracking THE MECHANISM AND ITS INSTITUTIONS

The core concept of the SRM is to match strategic actions to a pool of finance through this institutional structure

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The Facility delivery as per the SRM principles is under the process of fast tracking.
Progress towards achieving the Vision
Growth has historically been strong even by international standards

Real GDP and GDP growth (2003/04 – 2012/13)

Average GDP growth: 10.7% (ranging from 8.7% (2011/12) to 13.6% (2003/04))

GDP in real terms: 242.5 bn birr to 606.7 bn birr (2010/11 prices)
There has been a historical transformation of economy, employment and export undergoing.

Drivers

- Shift in employment away from agriculture (83% to 77%).
- Shift in exports (both in terms of income, number of goods and trade partners).
CONCLUSION & NEXT STEP

2. Urbanization

Population, urbanisation and economic development trends in Ethiopia

- GDP:
  - 2009/10: 382mB
  - 2014/15: 739mB
  - 2016/17: 1,102mB
  - 2021/22: 2,237mB
  - 2025/26: 3,590mB

- Population:
  - 2009/10: 83m
  - 2012/13: 87m
  - 2016/17: 94m
  - 2021/22: 105m
  - 2025/26: 116m

- Urbanisation:
  - 2009/10: 15%
  - 2012/13: 16%
  - 2016/17: 18%
  - 2021/22: 25%
  - 2025/26: 30%
Important Ingredients for Progress towards Achieving the Vision

Ingredient 1: Political leadership & Local ownership and leadership is essential for building momentum and leading to better results

Ingredient 2: Work needs to start from an understanding of already ongoing national work and drawing on international experience as we are not starting from scratch

Ingredient 3: Green growth will be transformational if it is integrated, mainstreamed and implemented with national development objectives

Ingredient 4: Focus on the information needed to inform key policy decisions

Ingredient 5: Capacity development at institutional, systemic and human capital development levels
The future impacts and costs of climate change on the economy are potentially very large, which could put our middle-income ambition at risk.

- In a hotter drier scenario, with increased incidences of droughts & flood, the negative impact on GDP could be 10% or more by 2050.

- This is particularly worrying for our middle-income ambition but also because the impacts will fall on the most vulnerable in society.

- Different analysis highlights that climate change may pose threat to the economy.

Financial & Capacity Constraints to implement the Ambitious, Strategic & Transformative CRGE vision is real challenge
Important ingredient for Current Achievements In developing and Implementing the Ethiopian CRGE since 2010

**Ingredient 3: Green growth will be transformational if it is integrated, mainstreamed and implemented with national development objectives**

**Economic growth**
- To have the per capita income of a middle income country ( $1045 USD)

**Structural transformation of the economy**
- A GVA share shift to non-agricultural income
- An employment share shift to non-agricultural employment
- Export and export partner diversification

**Ultimate goal**
- Social progress and the eradication of poverty

Achieved through:
- Improving agriculture
- Fostering Industrialization
- Enhancing exports income
- Improving infrastructure
- Managing urbanization
- Private sector development
- Fiscal stability
- Creation of off-farm jobs

**Implications**
*Any Strategy in CC, need to be main streamed, integrated and implemented in high level goals & priorities for better & successful achievement (GTPs)*
3. Emergence of Industry as a Growth Driver

Strategic Development and Transformation of the Economy

- Agricultural products to be an input to industry; the development of an Ethiopian Sugar Corporation, Cotton production and to act as an input into light manufacturing
- Strengthen and expand manufacturing

- Development of industry aligned to construction, education, infrastructure development
- Implementation and training for SMEs and creation of micro entrepreneurs

- Manufacturing of Goods requiring low-skilled labour that can absorb surplus labour, job creation
- Strategic development needed

- Creation of more jobs
- Need to focus on productivity, competitiveness and job creation
- Links to urbanisation strategy
4. Capacity Development at System, Institution and Individuals level

The support functions needed are included in the current work on the SRM by the MEF and MOFED. These functions will be delivered through a capacity development made up of four key components.

- **Analysis & Policy**: Capacity development to help implementing and executing entities prepare and implement investment plans and proposals to realise the CRGE. This requires analysis of scientific, economic and policy techniques.

- **Coordination**: Capacity development to help coordinate the process for implementing and executing entities. Coordination with all stakeholders.

- **Finance**: Capacity development to attract and leverage finance to ensure the facility can fund investment proposals which are strategic and transformative.

- **System**: Capacity development to establish Registry, MRV, ESSG, M&E to ensure that actions actually deliver results that will achieve the CRGE and these can be tracked through time following international standards & requirements.

Capacity Constraint Doubles the Layer of Vulnerability