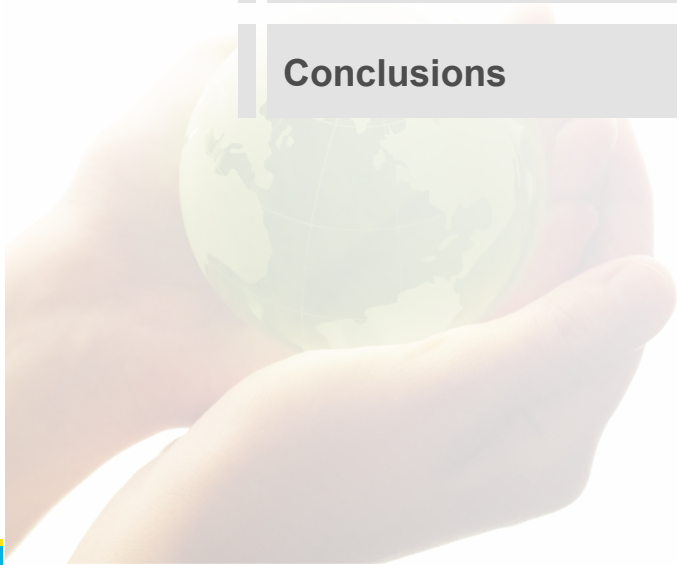


Introduction

Outline

- National Forestry and Rangeland Policies and Strategies
- National Development Strategies (Climate Resilient Green Economy Strategy)
- Institutional Framework
- Current Planned Projects/Programmes

Conclusions



➤ Forest in Ethiopia:

- Ethiopia Climate is conducive for development and conservation of forest resources
- In late 19th century, studies show about 30% of [Ethiopia](#) was covered with [forest](#)
- Rapid population growth causing need for arable land, land for settlement and need for fuel wood has resulted in degradation of Ethiopian Forest over a centuries
- Studies estimated that due to expansion of rain-fed agricultur, the amount of forest loss vary from 80,000 to 200,000 ha/annum
- Unsustainable utilization and mismanagement of the resource resluted in less benefit from the sub-sector.
- WBISPP (2004) estimated a total high forest area of 4.07 million ha. or about 3.56% of the land area of the Country
- Of which 95% was located in 3 Regions (Oromya, SNNPR and Gambela).
- As a result estimations show currently less than 3% of the original forest is remained.
- The Ethiopian Forestry Action Program (EFAP) estimated the full value of forest depletion in 1990 to have been about Birr 138 million or some 25 per cent of the potential forestry GDP of Birr 544 million.

Forest Contribution

- Over 90% of the Energy Consumed is from biomass Fuel
- Forest resources of Ethiopia is estimated to store 2.76billion tons of carbon (about 10 billion tons of CO₂ in the above ground biomass
- It is the habitat of many plant and animal biodiversity
- Great contribution in modifying micro climate in situation where the earth's average temperature is rising.
- It serves to hold soil from degradation and conserve moisture
- Significant contribution to the GDP, 2010 (about 2%)
- etc.

Rangelands Contribution to the Country



- Range lands support a large number of Livestock resources in the country
- Livestock population: Ethiopia is the first in Africa
- It plays a vital role in the economy of the country in terms of livelihood and Export.
- However land degradation is estimated to result a loss of 2 million hectares of pasture land between 1985 and 1995.
- Overstocking in turn is to be mentioned as one of the cause of range land degradation.
- Associated with that it was estimated to loss about 1.1 million tropical livestock unit during that time.



I. National Policies and Strategies and contribution of Forestry and Rangelands to the Ethiopia's Economy



National Policies and Strategies

Conservation Private Forest Development and Utilization (1997) considered:

- Expansion of Forest Development Technologies
- Expanding Market Development for Forests
- Administration and Management of State Forest
- Protecting Forest Resources from Threats
- Establishing Modern Information Systems of Forest Development, Conservation and Utilization

2) Forest Development, Conservation and Utilization Proclamation:

1) Policy and Strategy:

- Fostering of Private Forest Development and Conservation
- Expansion of Forest Development Technologies
- Expanding Market Development for Forests
- Administration and Management of State Forest
- Protecting Forest Resources from Threats
- Establishing Modern Information Systems of Forest Development, Conservation and Utilization

2) Forest Development, Conservation and Utilization Proclamation



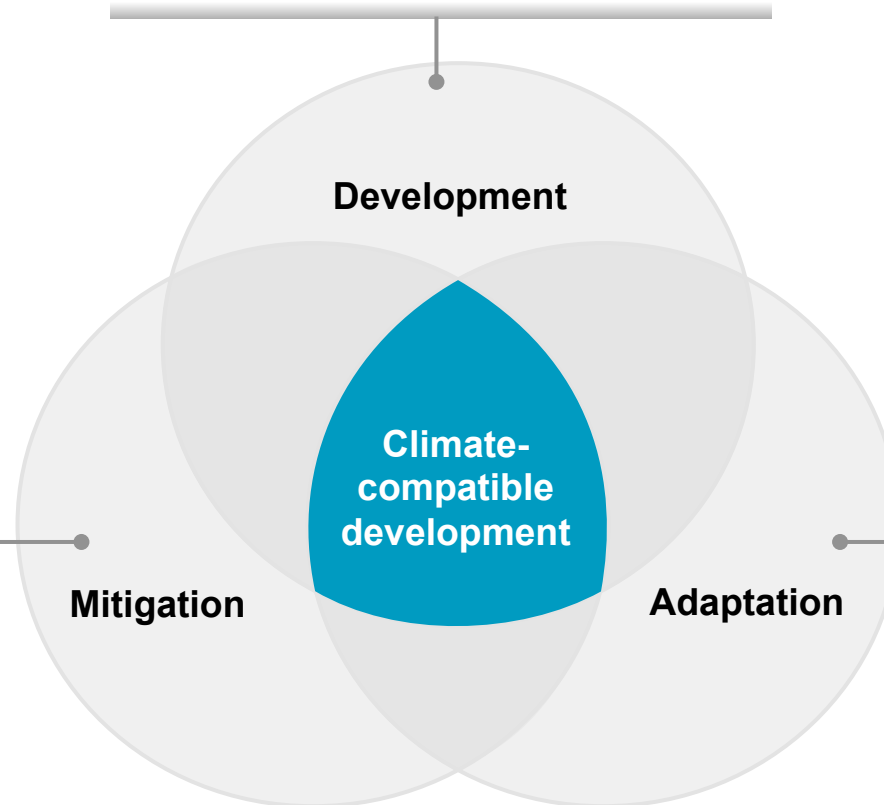
II. National Development Strategy: (Climate Resilient Green Economy Strategy)

Ethiopia's Vision: building a Climate Resilient
Green Economy and achieve a Middle income country in
2025



Developing a climate resilient green growth plan requires the integration of economic development, adaptation and mitigation

Economic development, although essential for job and income creation, cannot be addressed independent of climate change risks (& opportunities)



Power, agriculture and forestry related mitigation (REDD+) is the cornerstone of climate compatible development (REDD+) is the cornerstone of climate compatible

Adaptation prepares for changes in climate risk factors

1 Reduction in emissions from deforestation and forest degradation + sequestration from afforestation/reforestation



2. Climate Resilient Green Economy

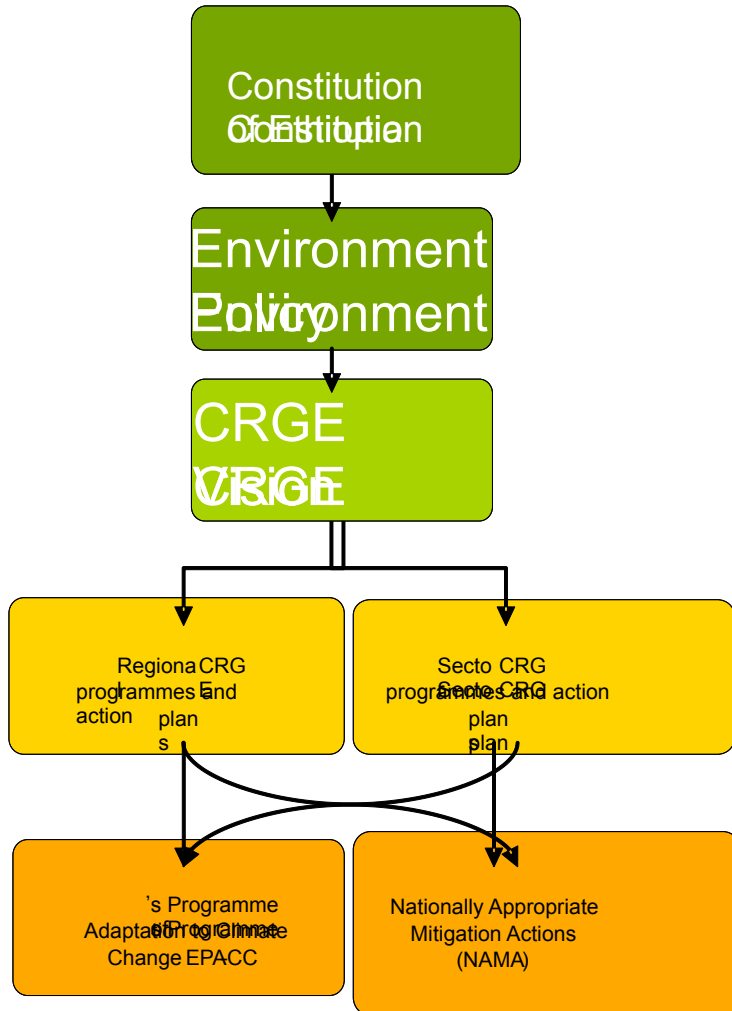
- **Ethiopia: declared nationally and internationally 'Climate Resilient Green Economy (CRGE) as a priority in its development through including the CRGE strategy in its five year ambitious *Growth and Transformation Plan***
- **Ethiopia: declared nationally and internationally 'Climate Resilient Green Economy (CRGE) as a priority in its development through including the CRGE strategy in its five year ambitious *Growth and Transformation Plan***
- **The CRGE strategy has two main components:**
Adaptation to Climate Change
and
Mitigation of Green



The image cannot be displayed. Your computer may not have enough memory to open the image, or the image may have been corrupted. Restart your computer, and then open the file again. If the red x still appears, you may have to delete the image and then insert it again.



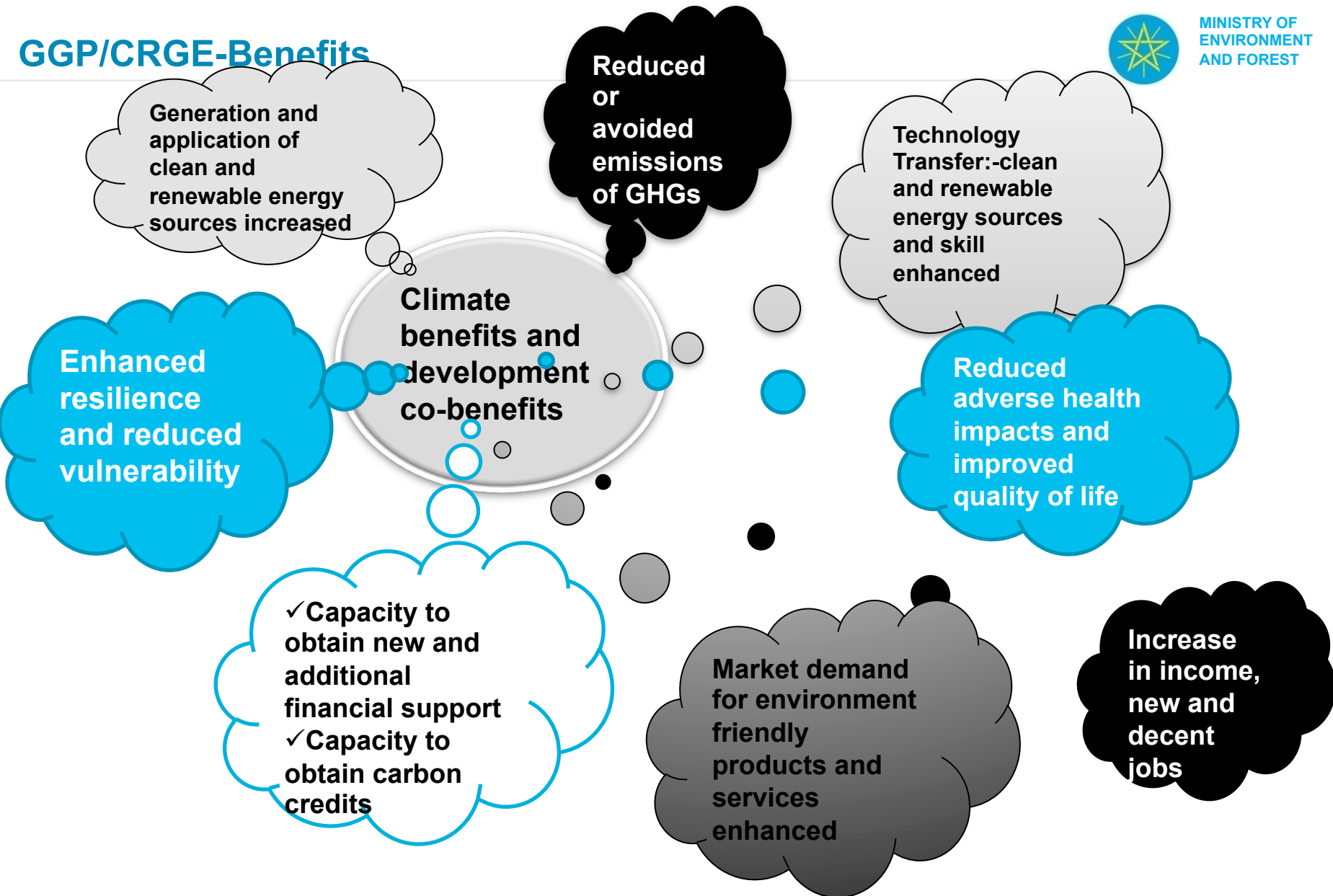
2. Climate Resilient Green Economy...

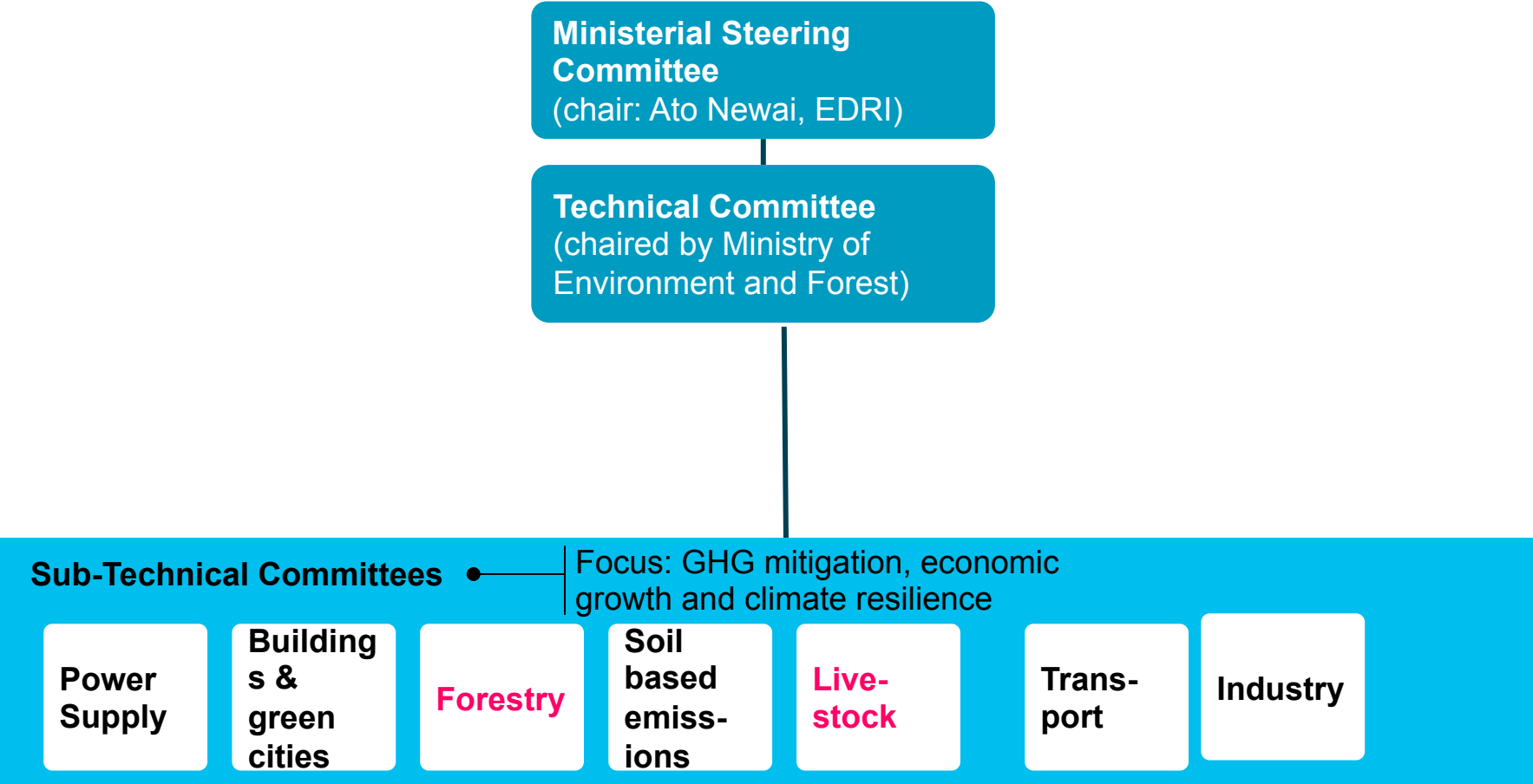


Ethiopia- CRGE by 2025



GGP/CRGE-Benefits

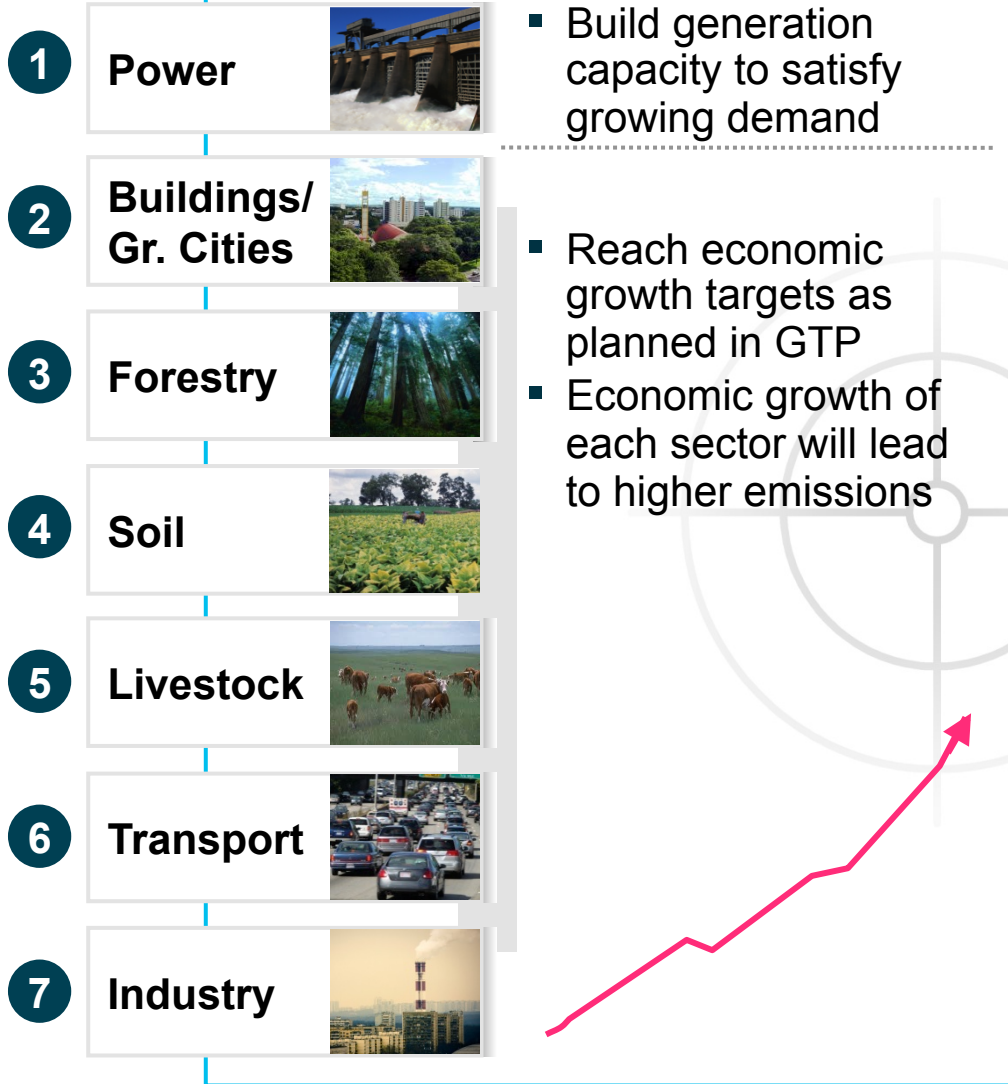




Organizing structure approved

The 7 Pillars of the Ethiopian CRGE Strategy

Goal of the sector and implications



Contribution of CRGE

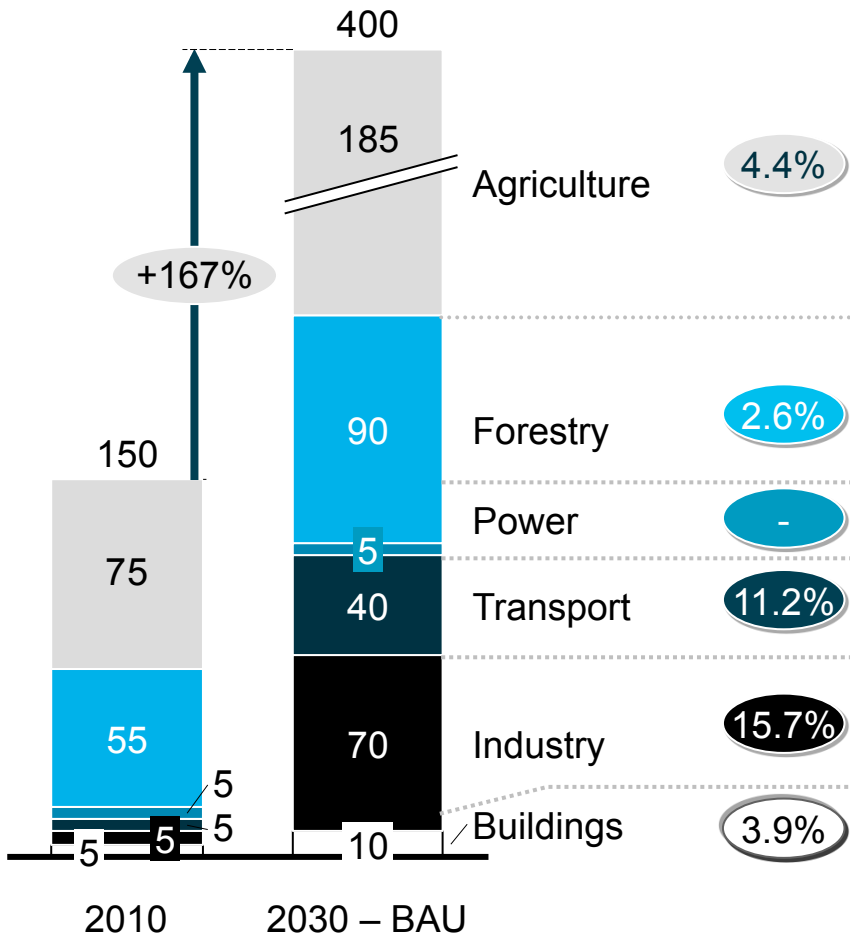
- **Enable** infrastructure development by developing strategy to **obtain financing**
- Develop green growth initiatives to **achieve GTP targets** while **reducing emissions**
- Provide essential analytics required to **secure carbon funding**
 - Estimate BAU emissions
 - Develop list of green growth interventions
 - Estimate abatement, growth contributions and feasibility of interventions
 - Develop implementation plans

If a typical development path were followed, emissions would increase from 150 Mt to 400 Mt (2010 to 2030)

BAU emissions development
Mt CO₂e per year

CAGR¹
Percent

t CO₂e/capi



Drivers and rationale

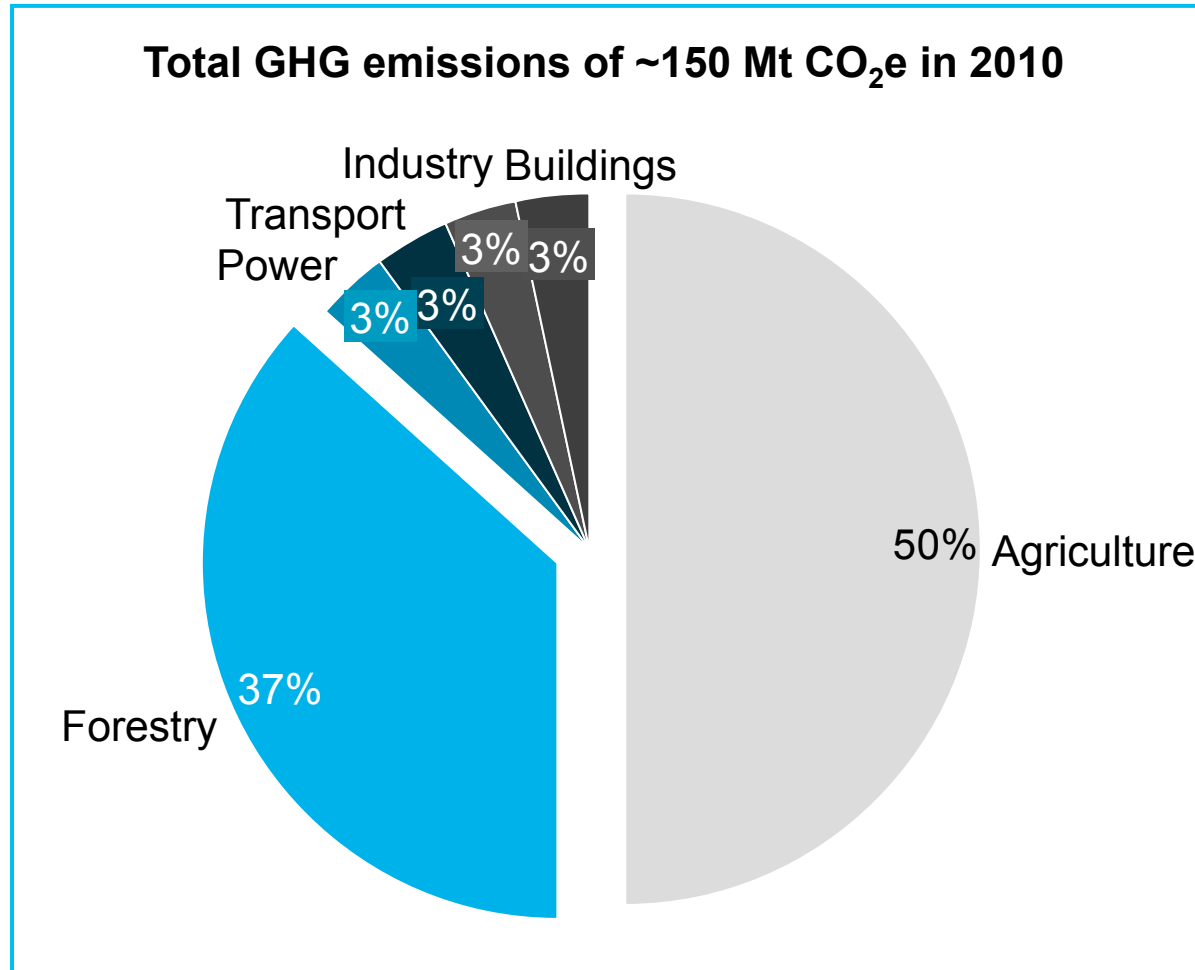
- **Livestock**: Increase in **cattle population** and other species (doubling from 2010-30)
- **Soil**: Increase in cultivated land (crops production) and **synthetic fertilizer**
- Average **growth of cropland** (estimated to reach 3.9% per year)
- Increase in population leading to **higher fuelwood consumption**
- Switch of remaining fossil fuel capacity to **100% clean/renewable** generation for on-grid (2014)
- **Increase in passenger-km traveled** projected based on elasticity to real GDP
- **Increase in ton-km of cargo transported** based on elasticity to real GDP
- Cement production (**steep increase in GTP, thereafter approach to MIC-level**)
- Establishment and scale-up of industries in **textile, steel, fertilizer, mining** and others
- Buildings and solid/liquid waste emissions

¹ Compound average growth rate

More than 85% of today's GHG emissions in Ethiopia come from forestry and agriculture



Share of GHG emissions, 2010



The strategy for a green economy is based on four pillars



Agriculture – Improving crop and livestock practices

- **Reduce deforestation** by agricultural intensification and **irrigation of degraded land**
- Use **lower-emitting techniques**
- Improve animal value chain
- Shift **animal mix**
- Mechanize draft power



Forestry – Protecting and growing forests as carbon stocks

- **Reduce demand for fuelwood** via efficient stoves
- **Increase sequestration** by **afforestation/reforestation** and forest management



Power – Deploying renewable and clean power generation

- **Build renewable power generation capacity** and **switch-off fossil fuel power generation**
- **Export renewable power** to substitute for fossil fuel power generation abroad



Industry, transport and buildings – Using advanced technologies

- Improve industry **energy efficiency**
- Improve production processes
- Tighten **fuel efficiency of cars**
- Construct **electric rail network**
- Substitute **fossil fuel by biofuels**
- Improve **waste management**



Green economy strategy

The Green Economy Plan is based on 4 pillars:



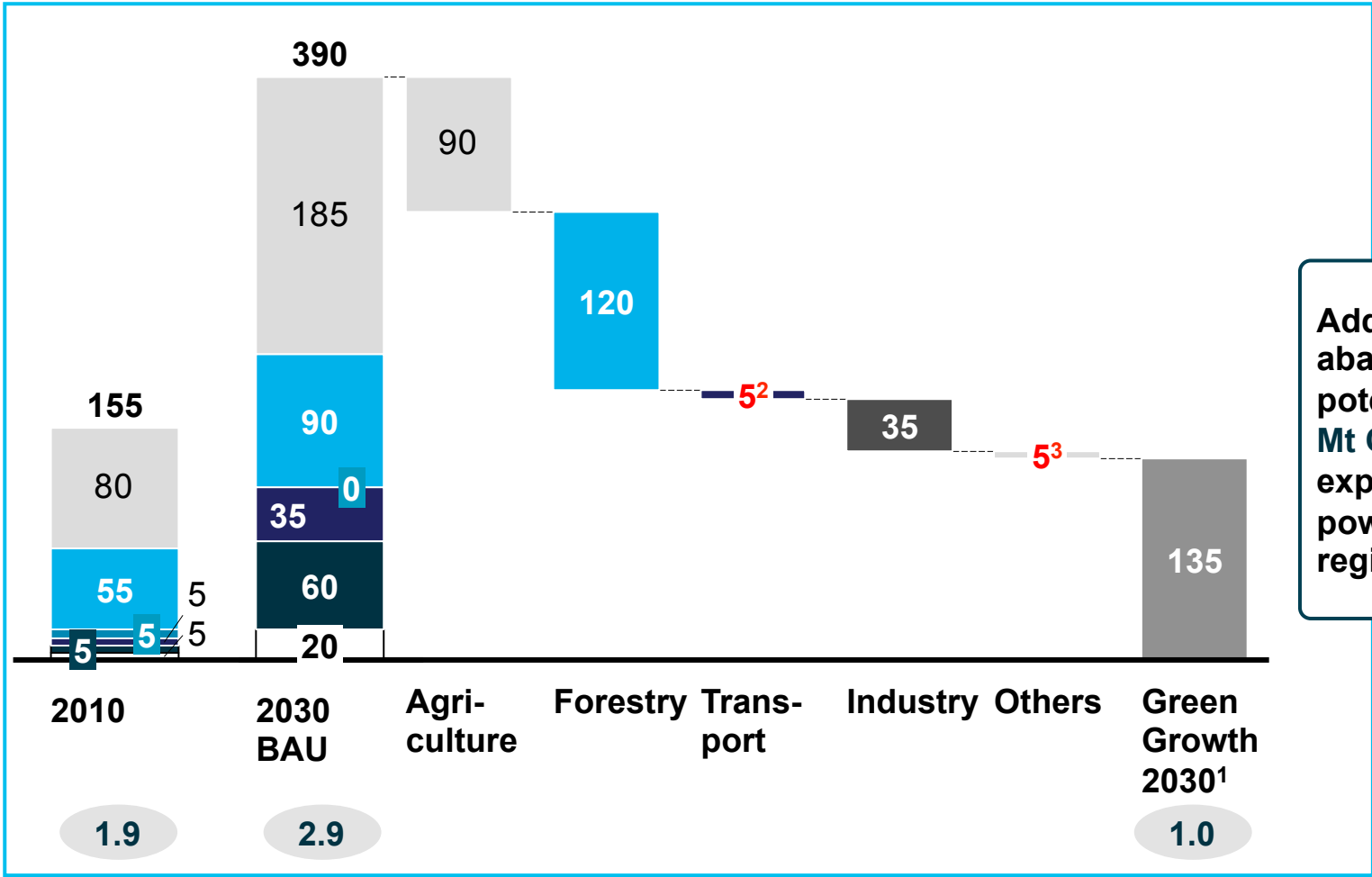
- Improving crop and livestock production practices for higher food security and farmer income while **reducing emissions**.
- Protecting and re-establishing forests for their economic and ecosystem services, including as **carbon stocks**.
- Expanding electricity generation from renewable **sources**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

A total abatement potential of up to 280 Mt CO₂e has been identified, with 75% of related to agriculture and forestry



Emissions per year¹, Mt CO₂e

t CO₂e/capita Agriculture Power Industry
 Forestry Transport Others



Additional abatement potential of ~25 Mt CO₂e from exporting green power to regional markets

¹ Rounded numbers ² Only 4 out of 11 initiatives incorporated
³ Currently estimated emissions from buildings and waste, will be updated

Forestry – List of identified abatement levers

Macro levers	Levers	Description
<ul style="list-style-type: none"> Reduce pressure from agriculture on forests 	<ul style="list-style-type: none"> Agriculture intensification on existing land 	<ul style="list-style-type: none"> Decrease requirements for new agricultural land
	<ul style="list-style-type: none"> Prepare new land for agriculture through medium and large scale irrigation 	<ul style="list-style-type: none"> Shift of new agricultural land from forest to degraded land brought into production thanks to irrigation
	<ul style="list-style-type: none"> Prepare new land for agriculture 	<ul style="list-style-type: none"> Shift of new agricultural land from forest to degraded land brought into production thanks to irrigation
<ul style="list-style-type: none"> Reduce demand for fuelwood 	<ul style="list-style-type: none"> Electric stoves 	<ul style="list-style-type: none"> Reduce wood requirements thanks to efficient Switch to electric stoves (in urban areas mostly)
	<ul style="list-style-type: none"> LPG stoves 	<ul style="list-style-type: none"> Switch to LPG stoves
	<ul style="list-style-type: none"> Biogas stoves 	<ul style="list-style-type: none"> Switch to biogas stoves (in rural areas)
	<ul style="list-style-type: none"> Afforestation and reforestation 	<ul style="list-style-type: none"> Large scale afforestation and reforestation degraded areas
<ul style="list-style-type: none"> Increase sequestration 	<ul style="list-style-type: none"> Afforestation and reforestation 	<ul style="list-style-type: none"> Large scale afforestation and reforestation degraded areas
	<ul style="list-style-type: none"> Forest management 	<ul style="list-style-type: none"> Large scale forest management programs



I. Institutional Framework



Institutional Framework

- The Previous Environmental Protection Authority is newly established as the Ministry of Environment and Forest (MEF) with new and additional responsibilities and mandates: Established by Proclamation Established having 2 State Ministers
 1. Environment State Minister
 2. Forest State Minister

The Environmental Protection Authority is newly established as the Ministry of Environment and Forest (MEF) with new and additional responsibilities and mandates: Established by Proclamation Established having 2 State Ministers

The Forest State Minister is responsible for Forest issues. Forest related issues which were previously under the Ministry of Agriculture have transferred to MEF under the Proclamation

The Environment State Minister is responsible for Environment and Climate Change issues under the Forest State Minister:

The Forest State Minister is responsible for Forest issues. Forest related issues which were previously under the Ministry of Agriculture have transferred to MEF under the Proclamation

the Forest State Minister:

 1. Forest Programme and Systems Development and Monitoring Directorate
 2. Protected and Degraded Forest Conservation and Development Directorate
 3. Forest fund Coordination and Carbon Fund Support Directorate
 4. Forest Registration, Follow up and Management Directorate
 5. Community Forest and Agro forestry Extension Directorate
 6. State Production Forest Development Directorat
- 7. Private Forest Development and Marketing Expansion Directorate
- 8.
 - REDD Project Office
 - The Ministry of Agriculture: Range Land Management and other Agriculture and NRM related Issue
 -

- REDD (MEF)
- The Great Green Wall for Sahel
Sahel REDD Initiative (MoA)
- The Great Green Wall for Sahel





**Thank you
for your
attention!!!**