

About the authors

Corresponding author: Daniel Fikreyesus (PhD) is a Director of Echnoserve Consulting PLC. daniel@echnoserve.com

Nanki Kaur is a senior researcher with the Climate Change Group at IIED. She works on action research projects on climate change adaptation, monitoring and evaluation and low carbon resilient development. www.iied.org/users/nanki-kaur. nanki.kaur@iied.org

Misgana E. Kallore is a Policy expert and researcher with Echnoserve Consulting. misgana@echnoserve.com

Lidya T. Ayalew is a Research assistant with Echnoserve Consulting. lidya@echnoserve.com

Acknowledgements

The production of this paper has been an iterative process in keeping with the evolving policy responses around climate change planning in Ethiopia. The authors would like to thank colleagues from the Ministry of Environment and Forests, Ministry of Finance and Economic Development, Ministry of Water and Energy and Ministry of Agriculture for their continued guidance. In particular we would like to thank Mulugeta Ayalew for reviewing previous iterations of this paper. Finally, we would like to thank UK AID for supporting this work. The views expressed are those of the authors and do not reflect the official policy or position of the organisations or institutions involved.

Produced by IIED's Climate Change Group and Echnoserve

The Climate Change Group works with partners to help secure fair and equitable solutions to climate change by combining appropriate support for adaptation by the poor in low- and middle-income countries, with ambitious and practical mitigation targets.

Echnoserve is a consulting company based in Addis Ababa, Ethiopia. Echnoserve works with government agencies, international organisations and nongovernmental organisations in the fields of environment, energy, agriculture and sustainable development.

Published by IIED, March 2014

Fikreyesus, D., Kaur, N., Kallore, M., Ayalew, L. 2014. Public Policy Responses for a Climate Resilient Green Economy in Ethiopia.

IIED Research Report. IIED, London.

http://pubs.iied.org/10066IIED

ISBN: 978-1-78431-011-0

Printed on recycled paper with vegetable-based inks.

International Institute for Environment and Development

80-86 Gray's Inn Road, London WC1X 8NH, UK

Tel: +44 (0)20 3463 7399 Fax: +44 (0)20 3514 9055

email: info@iied.org www.iied.org

@iied

www.facebook.com/theIIED

Download more publications at www.iied.org/pubs

Cover photo: A house in Rema, Ethiopia is fitted with solar panels. By Stiftung Solarengie (Creative Commons license).

Public Policy Responses for a Climate Resilient Green Economy in Ethiopia

Daniel Fikreyesus, Echnoserve Nanki Kaur, IIED Misgana E. Kallore, Echnoserve Lidya T. Ayalew, Echnoserve

Table of contents

Sum	mary	3
Acro	nyms	4
Intro	duction	5
The o	context for climate resilient green economy planning	7
2.1	Climate change trends	7
2.2	Development planning systems in Ethiopia	8
Publi	c policy responses to a climate resilient green economy	12
3.1	Drivers of public policy responses	12
3.2	Policy frameworks	13
3.3	Institutional arrangements	18
3.4	Financial arrangements	19
3.5	Flagship development programmes	23
Cond	clusion	26
Refe	rences	29
	Acro Introd 2.1 2.2 Publi 3.1 3.2 3.3 3.4 3.5 Cond	2.1 Climate change trends 2.2 Development planning systems in Ethiopia Public policy responses to a climate resilient green economy 3.1 Drivers of public policy responses 3.2 Policy frameworks 3.3 Institutional arrangements 3.4 Financial arrangements

Summary

With a GDP of US\$41.61 billion in 2012, Ethiopia has sustained a high and impressive growth rate in the last decade and is on track to achieving middle-income status by 2025 (World Bank 2013a).

A sizeable proportion of the GDP is associated with climate sensitive activities. For example, agriculture contributes 45 per cent to the GDP. Approximately 83 per cent of the population relies directly on agriculture for their livelihoods, with many more dependent on agriculture-related activities.

Agriculture is predominantly rain-fed and vulnerable to the impacts of climate change and extreme weather events (Evans, 2012). Climate change induced damages are projected to result in a 2-10 per cent loss of GDP by 2045 relative to baseline growth (World Bank 2010).

With a relatively low capacity to absorb the shocks of extreme weather events, Ethiopia is at risk of losing out on the gains it has made through its remarkable economic growth. The recent report on 'The geography of poverty, disasters and climate change' ranks Ethiopia as the 11th country most at risk of disaster induced poverty (Shepherd *et al.* 2013).

In addition to the challenges posed by climate change, a number of development opportunities are emerging in response to climate policy. Climate finance, technology transfer and capacity building measures are incentivizing investment in climate resilient green economy initiatives globally.

Ethiopia has adopted a Climate Resilient Green Economy Strategy (CRGE) to keep its development objectives on track in the context of a changing climate. The government is designing an impressive portfolio of public policy responses to address climate change and capitalise on the opportunities provided by climate change policies, like access to climate finance and technology.

This paper provides a baseline assessment of public policy responses in Ethiopia with a focus on outlining the evolution of responses within policy, institutional and financial frameworks and key development programmes. It will assist policymakers in taking stock and reflecting on progress, as public policy responses are refined and implemented.

Acronyms

ΔΔΔ Analytical and Advisory Activities ACCRA African Climate Change Resilience Alliance AGP Agricultural Growth Program ATA Agriculture Transformation Agency CROs Community Based Organisations CCA Climate Change Adaptation CCF-F Climate change Forum-Ethiopia **CDCS** Country Development Cooperation Strategy CIAFS Capacity to Improve Agriculture and Food Security

CPS Country Partnership Strategy
CRD Climate Resilient Development
CRGE Climate Resilient Green Economy

CSO Civil Society Organisation

DAG Development Assistance Group

DFID Department for International Development

DRR Disaster Risk Reduction

CIDA

EPACC

IIED

EARO Ethiopian Agricultural Research Organisation
ECSNCC Ethiopian Civil Society Network on Climate

Change

EDRI Ethiopian Development Research Institute

EIA Environmental Impact Assessment

EPA Environmental Protection Authority

Ethiopian Programme of Adaptation to Climate

Canadian International Development Agency

Change

ESSP Ethiopia Strategy Support Program

EU European Union

FtF Feed the Future

GCF Green Climate Fund

GCM General Circulation Model

GDP Gross Domestic Product

GHG Greenhouse Gas

GHI Global Health Initiative

GoE Government of Ethiopia
GTP Growth and Transformation Plan
IBC Institute of Biodiversity Conservation
IDA International Development Association
IFPRI International Food Policy Research Institute

International Institute on Environment and

Development

IMC Inter-Ministerial Committee

INGO International Non-governmental Organizations
IPCC International Panel on Climate Change

MoA Ministry of Agriculture

MoFA Ministry of Federal Affairs

MoFED Ministry of Finance and Economic

Development

MoH Ministry of Health

MoI Ministry of Industry

MoWE Ministry of Water and Energy

NAMA Nationally Appropriate Mitigation Action

NMA National Meteorology Agency
ODI Overseas Development Institute

REDD+ Reducing Emissions from Deforestation and

Forest Degradation

SCIP Strategic Climate Institutions Programme

SIDA Swedish International Development

Cooperation Agency

SLMP Sustainable Land Management Programme

SRM Sectoral Reduction Mechanism
STC Sub-Technical Committee
TC Technical Committee
UN United Nations

UNCCD United Nations Convention to Combat

Desertification

UNIFCCC United Nations Development Program

UNFCCC United Nations Framework Convention on

Climate Change

UNICEF United Nations Children's Fund

USAID U.S. Agency for International Development

WBG World Bank Group

Introduction

Ethiopia is one of the first countries to have developed a climate resilient green economy strategy (Fisher 2013). In doing so the country hopes to capitalise on its current economic growth by becoming more resilient to the impacts of climate change while developing its economy in a carbon neutral way. The country aims to transition to a middle-income economy by 2025 by investing in priority economic sectors and by ensuring sustainable and equitable development outcomes.

With a GDP of US\$41.61 billion in 2012, the country has sustained a high growth rate in the last decade, averaging at 10.6 per cent per year in 2004/05-2011/12. This is significantly higher than the regional average of 5.4 per cent (World Bank 2013a).

The percentage of population living below the national poverty line has fallen to 27.8 per cent in 2011/12 from 45.5 per cent in 1995/96 (MoFED 2013)

To accompany its impressive economic growth, the country's population dynamics and energy mix provide significant opportunities for transitioning to a middle-income economy. With a population of 91.73 million (2012), Ethiopia has the second largest population in sub-Saharan Africa (World Bank 2013a). Population growth rates stand at 2.73 per cent, as compared to an average of 2.2 per cent for Africa and 1.2 per cent for the world. Ethiopia's population is notably rural in its composition with more than one out of every seven rural Africans living in Ethiopia.

Approximately 98 per cent of power that will support Ethiopia's transition to a middle-income economy is generated by renewable energy sources, specifically hydro-electricity. With only 5 per cent of its estimated 15,000-45,000 megawatt hydropower potential currently being used Ethiopia is expected to become one of the largest producers and exporters of renewable energy in the region (World Bank 2012).

Whilst the government aims to capitalise on trends in current economic growth and future trends in population dynamics and investment portfolios, it also recognises that a large proportion of Ethiopia's GDP is associated with climate sensitive activities. For instance, agriculture contributes around 45 per cent to GDP. Approximately 83 per cent of the population depends directly on agriculture for their

livelihoods, with many more reliant on agriculture-related industries. With only 0.5 per cent of agricultural land with access to irrigation – agriculture is predominantly rain-fed and as such vulnerable to the impacts of climate change and extreme weather events (Evans 2012). For example, the major drought in 2002-3 resulted in a drop in food production by 26 per cent (Barnett *et al.* 2009).

With a relatively low capacity to absorb the shocks of such events, Ethiopia's population and economy is at risk of losing out on the gains that the country has made through its impressive economic growth in recent years. For instance, the recent report on the 'geography of poverty, disasters and climate change' ranks Ethiopia as the 11th country most at risk of disaster induced poverty. The report goes on to highlight that 'poorer households have a far lower coping capacity, often reverting to the sale of their already limited productive assets. These asset-poor households also have the hardest time recovering, with impacts on their livelihoods still visible years after extreme weather events like the Great Famine of the 1980s' (Shepherd *et al.* 2013, p. 7).

The government of Ethiopia is designing an impressive portfolio of public policy responses aimed at addressing the challenges posed by climate change and at capitalising on the opportunities provided by climate change polices, like access to climate finance and technology. These responses aim to keep the country's development objectives on track in the context of a changing climate.

This paper provides an overview of public policy responses that intend to support Ethiopia's transition to a climate resilient green economy. Specifically, the focus is on tracing the evolution of responses within policy, institutional and financial frameworks and within key development programmes. The study aims to provide a baseline assessment of public policy responses in Ethiopia. It will assist policymakers in taking stock and reflecting on progress, as public policy responses are refined and implemented.

Part 1 provides the context within which public policy responses are framed. Section 1.1 sets out climate change trends that public policy responds to, before outlining climate policy trends in Ethiopia. Section 1.2 gives an overview of development planning systems in Ethiopia, particularly the national development planning process and the administrative structure within which planning takes place.

Part 2 offers a comprehensive status review of public policy responses to climate resilient green economy in Ethiopia. Section 2.1 looks at the drivers of climate change policy. Section 2.2 considers how CRGE is reflected in policy frameworks. Section 2.3 and 2.4 examine how CRGE is reflected in institutional and financial arrangements respectively. Section 2.5 shows how CRGE is being integrated into flagship development programmes in the country.

Part 3 concludes the report.

2

The context for climate resilient green economy planning

This section provides the context for CRGE planning in Ethiopia. We begin with a short summary of the challenges and opportunities posed by climate change and climate policy on development planning. We then give an overview of the main planning systems that shape public policy responses in the country.

2.1 Climate change trends

Ethiopia has dealt with the impacts of variable and extreme weather historically. Climate change in terms of increases in temperature, in the intensity and frequency of extreme weather events and in variability of precipitation (Table 1) is likely to exacerbate such impacts. For instance, without adaptation, climate change induced impacts are projected to result in a 2-10 per cent loss of GDP by 2045 relative to baseline growth (World Bank 2010). At the household level, such impacts can translate into significant losses in income, trapping people into poverty cycles. For instance, drought induced crop and livestock losses in northeastern Ethiopia between 1999 and 2000 were estimated at US\$266 per household, an amount greater than the annual average income of more than three quarters of the households in the region (Carter *et al.* 2004). 'These asset-poor households also have the hardest time recovering, with impacts on their livelihoods still visible years after extreme weather events like the Great Famine of the 1980s' (Shepherd *et al.* 2013, p. 7).

Projected climate change impacts in the country are expected to result in increased variability in precipitation patterns and in an increase in temperature with associated increases in the frequency and intensity of extreme weather events like droughts. These changes are likely to exacerbate and multiply the existing drivers of poverty. For instance, various policy documents in Ethiopia highlight that livelihoods, specific agro-ecological systems and sectors are extremely vulnerable to climate change. According to Ethiopia's National Adaptation Programme of Action (NAPA), the agricultural, water resources and human health sectors will be most negatively impacted by climate change. The NAPA additionally identifies the infrastructure sector as particularly vulnerable to climate change impacts (MoWR 2007).

Table 1: climate change trends

Climate Variables Projected Trends

Temperature Expected to increase

- 1.1 to 3.1 °C by 20601.5 to 5.1 °C by 2090
- Rainfall Expected to increase throughout the country during October-December by 10-70%
- Extreme weather events 'Hot' days are projected to occur more frequently by 2060 (projected change of 19-
 - 'Hot' nights are projected to occur more frequently by 2060 (projected change of 26-69%)
 - Change in proportion of total rainfall that falls in 'heavy' events (between -1 to +18%)

Along with the challenges posed by climate change, a number of development opportunities are also emerging in response to climate policy. Climate change policy, which includes access to climate finance, technology transfer and capacity building measures, is incentivising investment in CRGE initiatives globally. For instance, in 2011 approximately US\$364 billion was invested globally in climate resilient and low carbon development projects (Buchner *et al.* 2012). At the national level, Ethiopia received a total of US\$111.46 million between 2010 and 2012 for adaptation and mitigation specific interventions (OECD DAC). The country also benefits from the Scaling-up Renewable Energy Programme (SREP), which provides financial and technical support aimed at scaling up investments in renewable energy (Climate Investment Funds 2014).

Public policy responses (considered in Part 2) aim at addressing the challenges posed by climate change impacts and at capitalising on the opportunities provided by climate policy.

2.2 Development planning systems in Ethiopia

In this section we present the key planning and administrative structures that shape public policy responses in Ethiopia.

Ethiopia's development objectives are set out in the country's National Development Plans. Development priorities articulated within these documents play a significant role in shaping the scope of development interventions implemented by federal and regional bodies in the country. Over a decade of planned development has targeted poverty eradication and economic growth as the overarching development agenda.

Starting with the Sustainable Development and Poverty Reduction Programme (SDPRP) from 2002-2005, which focused on agriculture led growth, the country implemented the Plan for Accelerated and Sustained Development to End Poverty (PASDEP) from 2005 to 2010. The GoE is currently

implementing the Growth and Transformation Plan (GTP), with a view to realising several priorities towards achieving middle-income country status for Ethiopia by 2025 as well as attaining Millennium Development Goals by 2015 (Box 1)

One key element that distinguishes the GTP from previous policy frameworks is its focus on responding to climate change. The GTP addresses climate change as a crosscutting issue under the strategic priority of 'environment and climate change'. It outlines 'building a climate resilient green economy' as one of the key policies for developing long term sustainability in the context of climate change. The plan identifies objectives, targets and implementation strategies that will be pursued towards the goal of building a climate resilient green economy in the current five year planning horizon (2010/11-2014/15) (Box 1) (MoFED 2010, p. 120).

Box 1. National Development Plan: goals and pillars

National Development Plans	Goals	Pillars
SDPRP	 Increase productivity of agriculture to improve the livelihoods of 85% of the population who depend on agriculture Achieve economic growth via industrial development Strengthen private sector engagement through improved governance, particularly in industry, in order to achieve off-farm employment and output growth, as well as to empower the poor Increase the frequency of exporting high quality agricultural products, leather and textile garments Expand education service investment and strengthen capacity building activities Strengthen the decentralization process to bring decision-making closer to grassroots level Ensure food security by promoting research in agricultural, water harvesting and small scale irrigation. (FDRE et al. 2002) 	 Agriculture Development Led Industrialisation (ADLI) Decentralization and empowerment Reform justice system and civil services Capacity Building for Private and Public Sector.

PASDEP	 Build a modern and productive agricultural sector with enhanced technology Build an industrial sector that plays a leading role in the economy Sustain economic development and secure social justice Increase per capita income of citizens to middle-income country level. 	 Build all inclusive implementation capacity Accelerated growth Create balance between economic development and population growth Empowerment of Ethiopian women Strengthen the infrastructural backbone Strengthen human resource development Manage risk and volatility Create employment opportunities.
GTP	 Best case scenario: double the size of the economy, with projected GDP per capita of US\$698 by 2015 Worst case scenario: rapid economic growth of 11 per year Double agricultural production to ensure food security for the first time Increased contribution from the industrial sector with focus on sugar, textiles, leather products and cement Foreign exchange reserves projected to increase and the Birr to depreciate by 5% against the US\$ per year Roads network to increase from 49,000km to 64,500km by 2015 Power generation capacity to increase from 2,000MW to 8,000MW; customers to increase from two million to four million by 2015 Construction of 2,395 kilometres of railway line Achievement of Millennium Development Goals. (World Bank 2012) 	 Sustain rapid and equitable economic growth Maintain agriculture as major source of economic growth Create conditions for industry to play key role in the economy Expand and enhance quality of infrastructure development Expand and enhance quality of social development Capacity building and intensification of good governance Promote gender equality and youth empowerment. (MoFED 2010)

Ethiopia has a federal system of governance. The Ethiopian Constitution outlines the division of roles and responsibilities between federal and regional entities. With respect to planning, the federal government is responsible for formulating and implementing national policies, plans and strategies concerning the overall economic and social development. Legislative and executive bodies drive planning at this level.

The House of Peoples' Representatives constitutes the legislative wing. Ministries, agencies and commissions make up the executive wing of the government. The executive wing drafts policies and proclamations, and presents and defends these at the House of Peoples' Representatives.

At federal level the Ministry of Finance and Economic Development (MoFED) used to be responsible for establishing systems for the preparation and implementation of the national development plan, including the economic and social development plan, in coordination with the concerned organisations and regions. In 2013 the GoE established the National Planning Commission. The Commission will take over the national development planning from 2015 onwards.

The regional administrative structure comprises of regions, zones, *woredas* (districts) and *kebeles* (wards/neighbourhood associations). There are around 650 *woredas* composed of a number of *kebeles*, which are the smallest unit of local government. The administrative divisions enable *woredas* to take a leading role in the implementation of regional plans because they are the administrative body closest to the community. The legislative body at the regional level is the *woreda* council made up of individuals elected from *woredas*. The executive body comprises of regional bureaus and regional administrators. A regional council comprising of representatives from *woredas* and zones often provides technical guidance to legislative and executive bodies.

Institutional arrangements for coordinating and implementing public policy responses for CRGE are outlined in the National Environmental Policy (NEP) and CRGE Vision document. The statutory mandate to coordinate CRGE planning lies with the Ministry of Environment and Forests (MEF). In addition, the Ministry of Finance and Economic Development (MoFED) is responsible for financial aspects of the CRGE process. The CRGE Inter-Ministerial Steering Committee, under the Council of Ministers, provides oversight of the CRGE process (see section 2.3 for details).

In line with these arrangements, MEF has coordinated the CRGE initiative and has been responsible for presenting progress reports and further action plans on CRGE to the House of Peoples' Representatives on several occasions.

3

Public policy responses to a climate resilient green economy

In recognition of the challenges and opportunities provided by climate change and climate policy, the Government of Ethiopia is articulating and implementing public policy responses to a CRGE.

In this section we first outline the main drivers behind Ethiopia's adoption of a CRGE pathway – we then present the public policy responses that aim to support Ethiopia's transition to a climate resilient green economy. We focus specifically on outlining the evolution of responses within policy, institutional and financial frameworks and within key development programmes.

3.1 Drivers of public policy responses

A number of reasons have been given in policy documents for adopting a climate resilient green economy pathway for Ethiopia's transition to a middle-income economy.

Primarily, investments in climate resilience aim at keeping Ethiopia's development achievements on track, whilst investments in green economy aim at unlocking opportunities around economic growth. For instance, the GTP considers designing and implementing green economy strategies as key to securing the country's economic interests, specifically in the context of energy security, and leapfrogging towards economically viable and sustainable production models. The GTP emphasises the need to implement climate resilient strategies as a way to address development losses caused by climate change.

Additional drivers shaping public policy responses to CRGE include access to climate finance, technology and capacity building initiatives. Taking on a 'leadership' role at the global and regional level is cited as another reason to adopt a CRGE pathway (FDRE 2011).

3.2 Policy frameworks

For the purpose of this report, policy frameworks include legislative and policy-oriented approaches to articulating CRGE objectives. We have maintained this flexibility, as countries, including Ethiopia, are still designing their policy frameworks and are using diverse approaches to do so (Townshend *et al.* 2013).

In Ethiopia, Proclamations, passed by the House of Representatives, are the main form of legislation. In addition to these, the executive branch (Council of Ministers of the Federal Government and federal ministries) may issue decrees, regulations and directives. Additionally, according to the constitution, international agreements ratified by the parliament are integral parts of the laws of the land (FDRE 1994).

Climate resilient green economy objectives are embedded within environment, climate change and national development policy frameworks in Ethiopia (Figure 1). The country is adopting policies, strategies, proclamations and mechanisms as modalities to guide the articulation, integration and implementation of CRGE objectives.

In this section we consider how CRGE objectives are reflected in key policy documents.

The National Environmental Policy (NEP) and the Environmental Protection Organs Establishment Proclamation of 2002 (No. 295/2002) provide the overarching policy and legal context for public policy responses to climate change. The NEP outlines policy objectives that pertain to climate change, including a focus on climate monitoring, control of greenhouse gases and use of renewable energy. Proclamation No. 295/2002 established the Environmental Protection Agency and gave it the statutory mandate to coordinate the national response to climate change (FDRE 2002). Proclamation 803/2013 passes this mandate onto the Ministry of Environment and Forests (FDRE 2011)

Alongside the NEP, the government ratified the United Nations Framework Convention on Climate Change (UNFCCC) in April 1994 and initiated the process of preparing specific climate change policies in 2007. These range from programme documents like the NAPA (2007), Nationally Appropriate Mitigation Actions (NAMA) (2010) and the Ethiopian Program of Adaption to Climate Change (EPACC) (2010), to the strategy documents like the CRGE Vision and Strategy (2011), and to proclamations like the New Energy Proclamation (2013). Broadly, these policy documents articulate the country's objectives around climate resilience and green economy. The government is also developing additional policy documents, like the Sector Reduction Mechanism (SRM) to guide the integration and implementation of CRGE investments within federal and regional plans.

In 2010, the country's priority objective of building a climate resilient green economy was reinforced by the national development planning process when CRGE was integrated into the Growth and Transformation Plan. The GTP addresses climate change as a crosscutting issue under the strategic priority of 'environment and climate change'. It outlines 'building a climate resilient green economy' as a strategic priority for the current plan period (2010-2015) as a way to counter development losses

caused by climate change. Similarly, designing and implementing green economy strategies are regarded as key in securing the country's economic interests, specifically in the context of energy security, and leapfrogging towards economically viable and sustainable production models.

The GTP goes on to identify objectives, targets and implementation strategies that will be pursued towards the goal of building a climate resilient green economy (Table 2) (MoFED 2010, p. 120). The country is on track towards achieving identified targets. And the government endeavours to further integrate CRGE into its next 5-year development plan – GTP II.

Refer to Table 3 for a summary of objectives reflected in various policy documents.

Figure 1: Policy Framework for climate resilient green economy

Environmental Policies

1997 Environmenta Policy 2013: Proclamation 803/2013

Climate Change Policies

1994 UNFCCC ratification

2007 NAPA 2010
• EPA-CC
• NAMA

2011

CRGE Vision
Green
Economy

2013 Energy Proclamation 2014
Draft SRM
Draft Climate Resilient Strategy (agriculture and water)

National Development Plans

2010-2015: Growth and Transformation Plan 2015-2020: Growth and Transformation Plan II

Table 2: Policy matrix of Environment and Climate Change, Growth and Transformation Plan

Objectives	Outputs	Indicators
To enhance the capacity required to build a climate resilient green economy	New and additional funds utilised for climate change adaptation technology, enhancement of good practice and skills development	 Preparation of national climate adaptation manuals Preparation of sectoral and regional climate change adaptation plans Development of climate change resilient infrastructure Implementation of projects to decrease vulnerability of wetlands, lakes and riverbanks Implementation of projects to build a climate resilient green economy at the woreda level.
To develop capacity for taking actions on mitigating greenhouse gases	New and additional funds acquired and implemented for mitigation technology transfer, including funds solicited through carbon trading	 Implementation of projects that will generate a minimum of 8000 MW of clean energy to replace GHG emitting activities Implementation of projects that sequester GHG through the afforestation/reforestation of 2000km² of degraded lands Implementation of projects that sequester GHG, and manage 2876km² of natural forest, 4390.96km² of deciduous forest, 60360km² of national parks, 51496km² of wetlands Implementation projects that sequester GHG and enhances agro-forestry in 261,840km² of land through the use of compost to increase the fertility of 40000km² of agriculture land Implementation of projects that will recover methane from total of 20 million cubic meters of deposited waste within existing or new landfills.

Source: MoFED 20101

¹ Growth and Transformation Plan 2010/11-2014/15. Volume II: Policy Matrix

Table 3: Policy framework for CRGE in Ethiopia

Table 3: Policy framework for CRG							
Policy frameworks	Policy Priorities						
ENVIRONMENTAL POLICIES							
National Environmental Policy of Ethiopia 1997	The overarching policy and legal context for public policy responses to climate change is provided by the National Environmental Policy (NEP). The NEP outlines policy objectives that pertain to climate change, including a focus on climate monitoring; control of greenhouse gases; and use of renewable energy. The Environmental Protection Organs Establishment Proclamation of 2002 (no 295/2002) provides the statutory mandate to coordinate the national response to climate change. Proclamation 803/2013 passes this mandate on to the Ministry of Environment and Forests.						
	CLIMATE CHANGE POLICIES						
National Adaptation Programme of Action (NAPA) 2007	The main objective of the NAPA was to build a climate resilient green economy through support for adaptation at the sectoral, regional, and community levels. It encompassed 11 priority projects with a focus on activities in agricultural and livestock sectors. The activities focused on promoting drought/crop insurance and early drought and flood warning systems, development of small-scale irrigation and water harvesting schemes, community based sustainable use of wetland and capacity building and improved rangeland resources management practice. Participation in NAPA at the village level was encouraged and local communities were responsible for developing their own work programmes and by-laws to ensure climate resilience.						
Ethiopian Programme of Adaptation to Climate Change (EPACC) 2011	EPACC aims to build a climate resilient economy through adaptation initiatives implemented at sectoral, regional and local community levels. The EPACC replaced the NAPA in 2011 and takes a more programmatic approach to adaptation planning. It outlines 29 components that include objectives around mainstreaming climate change within government policies and plans. In response, the country has prepared Sectoral and Regional Programmes of Adaptation to Climate Change. The first phase of EPACC implementation (2011-14) has been budgeted at US\$10 million.						
Nationally Appropriate Mitigation Actions (NAMA) 2010	Ethiopia formally submitted its voluntary NAMA to the UNFCCC in January 2010. The NAMAs contain aspirational mitigation targets across seven sectors (agriculture, building, energy, forestry, industry, waste and transport). The country aims to draw down on technical and financial support to implement NAMAs. The policy framework around NAMAs is still being developed but NAMAs are set to become a building block for a future action related to developing a green economy.						
Climate Resilient Green Economy (CRGE) Vision 2011	The CRGE Vision outlines Ethiopia's ambition to build a climate resilient green economy by 2025. It aims to support the country's development objective of achieving middle-income status by 2025 in a carbon neutral and climate resilient way by transforming development planning, investments and outcomes. The CRGE Vision builds on the policy objectives of the National Environmental Policy, the Growth and Transformation Plan, the NAPA, NAMA and the EPACC (FDRE 2011). The CRGE Vision is supported by two national strategies – the Green Economy Strategy and the Climate Resilient Strategy.						

Green Economy Strategy, The Green Economy Strategy was launched with the CRGE Vision in November 2011 2011. It takes an economy wide approach to greenhouse gas reduction. It is based on four pillars: Agriculture: improving crop and livestock production practices for greater food security and better income for farmers whilst reducing emissions Forest: protecting and re-establishing forests for their economic and ecological values, including carbon stocks 3. Power: expanding electricity generation from renewable sources of energy for domestic and regional markets 4. Transport, industry and buildings: leapfrogging to modern and energy-efficient technologies in transport, industrial sectors, and buildings. **Climate Resilient** The GoE is promoting a sectoral approach to the preparation of climate resilient (Agricultural) Strategy strategies. The agriculture and water sector had prepared draft strategies at the (draft) time of writing this paper. The climate resilient strategy for agriculture (draft) aims to address the impacts of current weather variability and future climate change on the agricultural sector. The strategy outlines the challenges posed by climate change on the agricultural sector in Ethiopia, which includes crops, livestock and forestry. It highlights options for building resilience to climate change, and ways in which these options will be delivered. It has identified 41 options to build climate resilience within the agricultural sector. Of these 15 have been identified for early action. The options aim to build resilience at three scales: macro (primarily to enhance GDP), households (to ensure protection of small scale farmers) and biodiversity options (recognising linkages with the agricultural system) (FDRE (draft) 2013).2 **Reducing Emissions from** REDD+ strategy aims to reduce emissions from deforestation and forest deg-**Deforestation and Forest** radation, and enhances the role of conservation and sustainable management Degradation (REDD+) of forests. By creating financial value for carbon stocks it aims to show the value Strategy of forests. Now under the Ministry of Environment and Forests, it was one of the early priorities in the CRGE. The World Bank funds the REDD+. Sector Reduction The SRM (draft) is a mechanism for reducing vulnerability to climate change and Mechanism (SRM) (draft) emissions in Ethiopia. The mechanism will support actors (implementing and executing entities) in preparing and mainstreaming plans that will reduce vulnerability and emissions. SRM will also coordinate the implementation of these plans by identifying and drawing down on financial, technological and technical investment (FDRE (draft) 2013).3 **Energy Proclamation,** The new energy proclamation, ratified on November 19, 2013, is an example of 2013 legislative action aimed at incentivising private sector investment in renewable energy. The proclamation will be complemented by a feed-in tariff bill, which will offer independent power producers an option to sell renewable energy power to the national grid at specified rates. It will also make provision for loans and financial support (New Energy Proclamation (draft), 2013). NATIONAL DEVELOPMENT PLANS Growth and The GTP is a 5-year strategic plan that aims to foster sustainable development to **Transformation Plan** achieve the MDGs. The objective is to make Ethiopia a middle-income country by (GTP) 2010 2025. To achieve this goal, the GTP emphasises the need for boosting agricultural productivity, strengthening the industrial base and fostering export growth. The GTP has included CRGE as a crosscutting strategic priority for the country.

² Ethiopia's Climate Resiliant Green Economy. Climate Resilient Strategy - Agriculture. Federal Democratic Republic of Ethiopia.

³ Sectoral reduction mechanism framework. Federal Democratic Republic of Ethiopia.

3.3 Institutional arrangements

Institutional arrangements for coordinating and implementing public policy responses for CRGE are being developed.

The responsibility of coordinating CRGE planning lies with the Ministry of Environment and Forests. To complement the role of the MEF, the Ministry of Finance and Economic Development (MoFED) is responsible for financial aspects of the CRGE process.

The CRGE Inter-Ministerial Committee , under the Council of Ministers, provides oversight of the CRGE process (CRGE Vision 2011). This Committee is the highest-level body within the CRGE institutional arrangements. It is responsible for providing overall direction to the CRGE process and for approving financial decisions of the CRGE Facility. The Committee comprises of State Ministers and senior officials from participating institutions.

Institutional arrangements that are currently in the design phase include arrangements related to the management of the CRGE financing facility and institutions that will be responsible for articulating and implementing CRGE investments. Details of these arrangements include:

CRGE Financial Facility

The CRGE Facility is the financing mechanism for the CRGE. Proposed institutional arrangements responsible for managing CRGE Facility are as follows.

- Management Committee will be co-chaired by MoFED and MEF. Members are likely to include State
 ministers and high-level government officials. The committee will review and approve financing of
 CRGE investment proposals.
- CRGE Facility Secretariat will comprise of a director, a coordinator, a finance team and a technical team. The director will manage the Secretariat and report to the Management Committee. The finance team, housed in MoFED, will oversee mobilisation, management and disbursement of funds. The technical team, housed in MEF, will guide the development and implementation of investment proposals.
- Advisory Board will consist of selected development partners, civil society and academia. The board will provide advice to the Management Committee (CRGE Facility Operational Manual (draft) 2013, personal interviews).

Institutional arrangements for articulating and implementing CRGE investments

The GoE is designing institutional arrangements that will enable demand driven articulation and implementation of CRGE investments. The proposed arrangements include outlining a role for 'implementing' and 'executing' entities, along with the establishment of CRGE units within the implementing entities.

1. Implementing entities (IE) refer to federal entities (sectoral ministries) or regional governments.

IE are responsible for preparing, developing and implementing CRGE interventions through investment plans. Under the current proposal, investment plans refer to Sector Reduction Action Plans (SRAPs), which provide details on investments that will achieve climate resilience and green economy targets. MEF will coordinate the preparation of Thematic Reduction Action Plans (TRAPs), which will articulate crosscutting CRGE investments. CRGE Units are being established within the implementing entities to coordinate the preparation and implementation of CRGE investment plans.

- Executing entities (EE) include private sector enterprises, parastatals, micro green enterprises, community associations, non-governmental organizations, research organizations, professional societies, academic institutions, consultancy firms, financial institutions and insurance companies. EE are responsible for implementing concrete reduction interventions in collaboration with the implementing entity (CRGE Facility Operational Manual (draft) 2013).
- 3. Technical committees have been established to prepare the green economy and climate resilient strategy.

3.4 Financial arrangements

A transition to a climate resilient green economy is estimated to cost in excess of US\$150 billion over the next 20 years (FDRE 2011). The GoE is preparing financial arrangements that will mobilise, manage and disburse financial resources in support of the country's CRGE objectives.

The CRGE Facility has been established as the primary mechanism responsible for mobilising, managing and disbursing climate finance. The facility has been designed to draw down on a range of international and national sources of public, private and carbon finance. In December 2013 Department for International Development (DFID) signed an agreement with MoFED to provide £15 million (US\$25.02 million) to the CRGE Facility. This is complemented by an additional US\$1 million from the government of Austria (MEF 2014). There are ongoing efforts to get the CRGE Facility accredited by the Adaptation Fund under the Kyoto Protocol. Successful accreditation will enable the CRGE Facility to directly access international funding mechanisms like the Green Climate Fund and the Adaptation Fund (MEF 2014). In response to the specific needs of CRGE investments, the facility will disburse resources via a range of intermediaries, like the Development Bank of Ethiopia, and financial instruments, like grants and results based payments. Federal entities (line ministries) also known as 'implementing entities' have direct access to the CRGE Facility. Regional entities, private sector and civil society organisations can access resources from the facility in collaboration with the implementing entities.

The CRGE Facility provides a single coherent system where stakeholders can engage and determine how best to invest in actions that support the country's CRGE objectives. It thus aims to enable a programmatic approach that will minimise the transaction costs, fragmentation and duplication associated with projectised funding.

A number of additional financial arrangements for financing the country's CRGE investments are currently operational (Table 4). These include: dedicated bilateral and multilateral climate change funds like the SCIP and the SREP respectively, trust funds like the BioCarbon Fund and the SLMP II, and

PUBLIC POLICY RESPONSES FOR A CLIMATE RESILIENT GREEN ECONOMY IN ETHIOPIA

credit lines like the Market Development for Renewable Energy and Energy Efficient Product Fund (MDREEE). All these financial arrangements provide financing to support CRGE investments – with an emphasis on investments in renewable energy and adaptation and mitigation interventions in the forest and agriculture sector. Public, private and civil society organisations can access resources from these financial arrangements – there is an emphasis on enabling private sector access, however. For instance, the Climate Innovation Centre (CIC), SREP, Rural Electrification Fund (REF) and MDREEE⁴ have all been designed to enable private sector investments in CRGE initiatives. These financial arrangements provide risk sharing financial instruments and concessional loans to disburse resources to the private sector.

Table 4. Financial arrangements for Ethiopia's CRGE investments

Financial arrangement	Amount	Source	Time frame	Focus	Access	Disburse- ment in- strument	Manage- ment
Strategic Climate Institutions Programme (SCIP)	The Fund holds a total budget of about £9m to £12m. ⁵	DFID, Norway and Denmark.	4 years (2011 – 2015)	SCIP is a climate fund that aims to build Ethiopia's capacity to cope with climate change and respond to the challenges of transitioning to a climate resilient green economy. The fund provides demand driven support for strategic and institution building activities on climate change.	Ethiopian government agencies, civil society organisations and aca- demia.	Grant	The Fund is managed by KPMG with supervision from the SCIP Oversight Committee (SOC), comprised of 12 state and non-state parties and co-chaired by MEF and DFID.
Climate Innovation Centre (CIC) ⁶	Business Plan envisages an invest- ment of US\$15.9m (47% for financing, 35% for programs and 18% for staff and centre costs).	DFID, Norway and World Bank.	5 years (Launched Dec 2013 and operational in 2014)	CIC will provide financing, and advisory services to local climate innovators and entrepreneurs interested in investment in low carbon technologies and solutions in 5 primary sectors: sustainable agribusiness, biofuels and bio-mass, transportation technologies, hydropower (micro) and energy efficiency.	Entrepreneurs and SMEs	Risk capital through two types of financial instruments: 1. Proof of concept funding 2. Seed capital financing.	CIC is part of the World Bank global network of climate innovation centres managed by infoDev. In Ethiopia it is managed through a consortium led by the Horn of Africa Regional Environment Centre (HoAREC) — a regional institution hosted by the Addis Ababa University.
Scaling Up Renewable Energy Programme (SREP) ⁷	US\$50m of which US\$19.5m allocated from the SREP Reserve Fund.	Climate Investment Funds		SREP provides funds for scaling up renewable energy investments. In Ethiopia, it is financing three projects: geothermal, wind and the establishment of a clean energy SME facility.		Grant (96%) Loan (4%)	Administered by the World Bank.

⁵ The total fund value of SCIP was raised to about £28m following additional contribution from Norway (about £12.5m) and Denmark (about £0.51m). 6 World Bank https://wbcarbonfinance.org/Router.cfm?Page=BioCF&FID=9708&ItemID=9708&It=Projects&ProjID=9625

Ethiopia Climate Innovation Centre, Environmental and Social Management Framework, HoAREC, 2013 http://www.hoarec.org/docs/documents/ETHIOPIA%20CLIMATE%20 INNOVATION%20CENTER%20(CIC)%20-%20ENVIRONMENTAL\(^{3}\)20AND\(^{2}\)20SOCIAL\(^{3}\)20MANAGEMENT\(^{3}\)20FRAME\(^{3}\)ORK.pdf Climate Innovation Center Business Plan: Ethiopia. An infoDev publication, November 2011. See www.infodev.org/climate

⁷ Rai, N., Kaur. N., Fikreysus. D., and Kallore, M., (2013). Climate Investment Funds. Scaling up renewable energy programme in Ethiopia – a status review. Country Report. IIED http://pubs.iied.org/pdfs/10053IIED.pdf

BioCarbon Fund ⁸	US\$18 million	DFID (US\$5m), Norway (US\$13m), Forest Carbon Partnership Facility.		The BioCarbon Fund allocates resources to projects that sequester or conserve carbon in forest and agro ecosystems and directly benefit poor farmers. It is the first carbon fund that focuses on land use. In Ethiopia, the fund supports the Humbo Assisted Natural Regeneration project. It supports the CRGE initiative with a specific focus on financing the REDD+programme, which focuses on forest protection and land rehabilitation activities.			The Fund is housed within the Carbon Finance Unit of the World Bank.
Sustain- able Land Management Programme II (SLMP II) Trust Fund ⁹	US\$114m	Norway (US\$50m), IDA (US\$50m), GEF (US\$14m).	2013 - 2019	Supports investments that reduce land degradation and increase land productivity of small-holder farmers.		Grant	World Bank
Rural Electrification Fund (REF) ¹⁰	US\$15 m	World Bank and GEF under the Energy Access Programme.		REF supports the private component of the National Rural Electrification Strategy. It provides financing to support the expansion of renewable and non-renewable energy services in rural areas.	Eligible private and non-government project promoters.	Loan	REF is administered by the Alternative Energy Technology Dissemination Directorate under the Ministry of Water & Energy. A Rural Electrification Board (REB) directs the activities of the Directorate. The Development Bank of Ethiopia (Trust Agent) is the financial intermediary between the Rural Electrification Fund and Project Promoters.

⁸ World Bank http://www.worldbank.org/en/news/press-release/2013/08/30/government-of-norway-partners-with-world-bank-to-support-ethiopia-in-scaling-up-climate-smart-land-management, and Carbon Finance Unit https://wbcarbonfinance.org/Router.cfm?Page=BioCF&FID=9708&ft=HD=9708&ft=Page=BioCF&FID=9708&ft=Projects&ProjID=9625

9 World Bank http://www.worldbank.org/en/news/press-release/2013/08/30/government-of-norway-partners-with-world-bank-to-support-ethiopia-in-scaling-up-climate-smart-land-management

¹⁰ Development Bank of Ethiopia http://www.dbe.com.et/Programs/Rural_Elecrification.htm

Market Development for Renewable Energy and Energy Efficient Product (MDREEE)**	US\$20m	World Bank (IDA)		The primary objective of the credit line is to provide and/ or facilitate investments in Renewable Energy Technology and Energy Efficient products by the private sector and promote the development of Renewable Energy Technology and Energy Efficient markets in Ethiopia.	Households, micro finance institutions and project developers (SMEs & Pri- vate Sector Enterprises).	Loan	Development Bank of Ethi- opia is the implementing agency for this credit line.
---	---------	---------------------	--	---	---	------	---

3.5 Flagship development programmes

Along with deploying policy, institutional and financial frameworks to respond to climate change, the GoE is also using flagship development programmes to operationalise CRGE objectives.

In this section we provide an overview of two flagship programmes – the Sustainable Land Management Programme (SLMP) and the Productive Safety Net Programme (PSNP). Both programmes fall under the Policy Investment Framework (PIF), a 10-year roadmap prepared by the Ministry of Agriculture to achieve the objectives of the Growth and Transformation Plan.

Both the SLMP and the PSNP have incorporated climate smart initiatives into their programme design and will provide an example of 'fast track' approach to piloting and implementing initiatives that will support the agricultural sector CRGE initiatives.

Sustainable Land Management Programme

The Sustainable Land Management Program was established within the context of the agriculture sector's Policy and Investment Framework. SLMP I (2008-2013) introduced sustainable land management practices in 45 watersheds across six regions. SLMP I was complemented by investments through the Bio-Carbon Fund (BioCF), which supported the implementation of the Humbo Assisted Natural Regeneration Project. The project became the first in Africa to be registered under the Clean Development Mechanism (CDM) and generated carbon revenues for rehabilitation of heavily degraded land.

SLMP II will build on the success of SLMP I. The second phase of the programme will run from 2013-2019 at a total project cost of US\$94.65 million. The programme integrates climate change responses into a number of areas, as follows.

REDD+ Readiness process: Ethiopia's REDD+ Readiness proposal outlines strategic plans
to strengthen national capacity and institutional frameworks to reduce GHG emissions from
deforestation and degradation. As part of this process, the Ministry of Agriculture and the Oromia
Forest and Wildlife Enterprise have prepared the Oromia REDD+ Pilot Programme, which will
promote activities to reduce emission from deforestation and forest degradation. SLMP II, with
support from the World Bank BioCarbon Fund will pilot an innovative mechanism of results-based

¹¹ Development Bank of Ethiopia http://www.dbe.com.et/Programs/Rural_Elecrification1_2.htm

payments against emission reductions to support the REDD+ programme.

- 2. Climate Smart Agriculture: Climate smart agriculture in SLMP II refers to 'practices that seek to increase agricultural productivity, strengthen farmers' resilience to climate change, reduce GHG emissions and increase carbon sequestration. It includes proven practical techniques such as mulching, intercropping, conservation agriculture, no-till, crop rotation, cover cropping, integrated crop-livestock management, agroforestry, improved grazing, and improved water management and innovative practices such as more resilient food crops.¹¹² SLMP II will invest in providing skills and training to government and other stakeholders to promote climate smart agriculture.
- 3. Great Green Wall Initiative (GGWI): SLMP II is a part of the pan-African GGWI that aims to implement a country-driven vision for integrated natural resource management for sustainable and climate resilient development (World Bank 2013b).¹³

SLMP II thus provides an avenue for integrating and implementing the country's CRGE objectives. 'Climate change' is one of the four themes that will be addressed by the programme: it has been allocated 20 per cent of the total project budget (World Bank 2013c). ¹⁴

Productive Safety Net Programme (PSNP)

Launched in 2005, Ethiopia's Productive Safety Net Programme (PSNP) is a large national social safety net programme that responds to chronic food insecurity and shorter-term shocks, like droughts. It is a core element of the broader national Food Security Programme (FSP). The programme has grown from 4.5 million to 7.6 million (approximately) beneficiaries between 2005 and 2012.

The programme supports the following objectives:

- 1. Public works that build resilience to the impacts of climate change
- 2. A risk financing facility that helps poor households and communities to better cope with transitory shocks
- 3. Targeted food and cash transfers to assist the most climate-vulnerable community members to obtain the full benefits of consumption smoothing asset protection.

The PSNP is linked to the Household Asset Building Programme (HABP), another core element of the national FSP. The HABP provides credit and agricultural extension services to support vulnerable households to engage in both farm and non-farm activities. The HABP has demonstrated the value of combining social protection with livelihoods diversification activities to improve household resilience as the biggest gains in food security have been attained where households had access to both the PSNP and the HABP.

More than seven million people have received PSNP transfers enabling them to meet consumption needs, reducing their risks, and providing them with alternative options to selling productive assets. About 692,002 households (around 3.5 million people) received credit financed by the federal government's

¹² World Bank. Sustainale Land Management Project-II http://www.worldbank.org/projects/P133133?lang=en

¹³ World Bank 2013. Ethiopia - Second Phase of the Sustainable Land Management Programme. World Bank Group, Washington DC. http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/11/07/000333037_20131107121854/Rendered/PDF/PAD5250PAD0P13010Box379865B000U0090.pdf
14 World Bank. Sustainale Land Management Project-II http://www.worldbank.org/projects/P133133?lang=en

food security budget line between 2005 and 2007.

The PSNP is a core government program and operates under a rolling Medium-Term Expenditure and Financing Framework. It is integrated into the GoE's fiscal management system, which combines GoE and donor resources (cash/food). Ten development partners have committed approximately US\$2.3 billion for the third phase of implementation (2011-2015). This approach has helped to secure longer-term, more predictable GoE and donor financing (PSNP 2013).¹⁵

PSNP provides a model for integrating CRGE responses within existing institutional arrangements and financial management systems.

 $^{15\} http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/08/26/000442464_20130826114500/Rendered/PDF/806220WP0P12680Box0379812B00PUBLIC0.pdf$

4 Conclusion

Climate change provides opportunities and barriers to Ethiopia's development.

Ethiopia's livelihoods and economy are dependent on climate sensitive sectors that have limited capacity to cope with climate-induced impacts. Building climate resilience is thus a key priority for the country. At the same time, the country's economic growth is supported by renewable sources of energy and robust population dynamics amongst other factors. Climate policy, in the form of access to climate finance and technology transfer, provides opportunities in the context of energy security and leapfrogging to an economically viable and sustainable production model for achieving middle-income status by 2025.

In relation to the opportunities and barriers posed by climate change, the country is designing public policy responses to design and implement a climate resilient green economy pathway to achieve its national development goals.

In this report we have provided an overview of public policy responses that aim to support Ethiopia's transition to a climate resilient green economy. We have focused specifically on outlining the evolution of responses within policy, institutional and financial frameworks and within key development programmes.

In this section, we conclude by providing a summary of the status or the baseline of public policy responses to CRGE and the emerging trends within them.

Policy framework

First, policy frameworks to address CRGE are evolving. The GoE is using a range of policy arenas to articulate objectives around a CRGE, including the National Environmental Policy, Climate Change Policies and the National Development Plans. This indicates that public policy responses in Ethiopia will address climate change as an integral part of broader economic and development planning rather than as

a siloed issue.

Second, the government is using legislative and policy oriented approaches to guide the articulation and implementation of CRGE objectives. Whilst majority of its public policy responses can be categorised as policy-oriented in nature, that is, involving the use of national development plans and climate change strategies to articulate and implement CRGE objectives - the government is also deploying legislative approaches that use existing stocks of laws, like the Environmental Protection Organs Establishment Proclamation of 2002 (No. 295/2002) or, the Energy Proclamation to guide the articulation and implementation of CRGE initiatives.

Third, the government has brought climate resilience and green economy objectives under a single policy framework, making it one of the first countries to have formally merged this agenda within its policy framework.

Institutional framework

Institutional arrangements to coordinate and implement a transition to a CRGE pathway are being established.

Institutional arrangements have been designed to ensure strong political and technocratic backing from the federal and regional levels. For instance, the CRGE Inter-Ministerial Committee, under the Council of Ministers, provides the overarching political direction to the CRGE initiative. At the Federal level, the Ministry of Environment and Forests and the Ministry of Finance and Economic Development share equal responsibility in coordinating technical and financial aspects of the CRGE initiative respectively. Roles for Line Ministries and regional entities are currently being defined. They are likely to take on the role of 'implementing entities' within the CRGE institutional architecture – taking on the responsibility for preparing sector specific investment plans that will deliver the objectives of the CRGE.

Institutional arrangements, whilst establishing new structures, are embedded within existing administrative structures. For instance, the newly established CRGE units are embedded within the administrative structure of federal and regional entities. Similarly, the institutional arrangements to manage the CRGE Facility are housed in the Ministry of Finance and Economic Development and the Ministry of Environment and Forests. These arrangements have the potential of building the capacity to manage the transition to a CRGE within the existing administrative set up.

Financial framework

Financial arrangements to mobilise, manage and disburse resources towards CRGE initiatives have been put in place. The current status of, and trends within, these arrangements are as follows.

First, the GoE has established a number of financial arrangements to finance the CRGE. The GoE has established a national financing facility (CRGE Facility) to mobilise, manage and disburse resources for CRGE initiatives. The facility aims to enable a programmatic approach to financing the CRGE strategy. Once operational, it will ensure a coordinated approach to financing Ethiopia's transition to a CRGE. A number of additional financial arrangements for financing the country's CRGE investments are currently

operational. These include dedicated bilateral and multilateral climate change funds like the SCIP and the SREP respectively, trust funds like the BioCarbon Fund and the SLMP II, and credit lines like the MDREEE.

Second, financial arrangements have been designed to be flexible in their approach to mobilising and disbursing climate finance. Majority of the financial arrangements – and specifically the CRGE facility – can tap into, and pool, international and national public, private and carbon finance. Similarly, a number of these arrangements – specifically the CRGE Facility – will deploy financial instruments (grants, loans etc.) to suit the specific needs of CRGE investments.

Third, all the financial arrangements provide financing to support CRGE investments – with an emphasis on investments in renewable energy and adaptation and mitigation interventions in the forest and agriculture sector.

Fourth, access to the financial arrangements varies. For instance, federal entities have direct access to the CRGE Facility – whereas financial arrangements like the CIC and MDREEE and SREP have been designed to enhance private sector access to climate finance.

Flagship development programmes

The GoE is also integrating CRGE initiatives into flagship development programmes like the SLMP II and the PSNP. This is often viewed as a 'fast track' approach to piloting and establishing the CRGE.

In conclusion, the baseline report highlights that the GoE is using all entry points, including its planning systems and ongoing development programmes, to transition to a CRGE development pathway.

Being one of the first countries to embark on this pathway, Ethiopia's progress and learning against this baseline will provide important lessons for the evolving public policy process in the country and internationally.

References

Abebe, T. (ed.) 2001. *Initial National*Communication of Ethiopia to the United Nations
Framework Convention on Climate Change
(UNFCCC). National Meteorological Services
Agency, Ministry of Water Resources, Federal
Democratic Republic of Ethiopia, Addis Ababa.

Abebe, T. (ed.) 2007. Climate Change National Adaptation Programme of Action (NAPA) of Ethiopia. National Meteorological Services Agency, Ministry of Water Resources, Federal Democratic Republic of Ethiopia, Addis Ababa.

Barnett, C. et al. 2009. Country Programme Evaluation: Ethiopia. Evaluation Report (EV697), Department for International Development, government of UK, London.

Buchner, B., Falconer, A., Herve-Mignucci, M., Trabacchi, C. 2012. *The landscape of climate finance in 2012*. Climate Policy Initiative, San Francisco.

Carter, M., Little, P., Mogues, T., Negatu, W. 2006. Shocks, Sensitivity and Resilience: Tracking the Economic Impacts of Environmental Disaster on Assets in Ethiopia and Honduras. DSGD Discussion Paper No 32. International Food Policy Research Institute, Washington DC.

Climate Investment Funds 2014. Ethiopia. World Bank Group, Washington DC. See https://www.climateinvestmentfunds.org/cifnet/?q=country/ethiopia

Environmental Protection Authority 2012. *National Report of Ethiopia, The United Nations Conference on Sustainable Development (Rio+20)*. Federal

Democratic Republic of Ethiopia, Addis Ababa.

Evans, A. 2012. Resources, Risk and Resilience: Scarcity and climate change in Ethiopia. Centre on International Cooperation, NYU, New York.

FDRE 1994. Constitution of the Federal Democratic Republic of Ethiopia. See http://www.wipo.int/wipolex/en/text.jsp?file_id=193667 [accessed on 12 March 2014].

FDRE 2002. Proclamation No. 295/2002.
Federal Democratic Republic of Ethiopia, Addis Ababa. See http://www.epa.gov.et/Download/Proclamations/Proc%20No.%20295-2002%20Environmental%20Protection%20organs%20Establishment.pdf

FDRE 2011. Ethiopia's Climate-Resilient Green Economy: Green Economy Strategy. Federal and Democratic Republic of Ethiopia, Addis Ababa.

Fisher, S. 2013. Low carbon resilient development in the least developed countries. IIED Issue Paper. IIED, London. See http://pubs.iied.org/pdfs/10049IIED.pdf

Funk, C., Rowland, J., Eilerts, G., Kebebe, E., Biru, N., White, L. and Galu, G. 2012. *A Climate Trend Analysis of Ethiopia*. U.S. Geological Survey Fact Sheet 2012-3053, 6p. U.S. Geological Survey, US.

Held, D., Nag, E. and Roger, C. 2012. The Governance of Climate Change in Developing Countries - A Report on International and Domestic Climate Change Politics in China, Brazil, Ethiopia and Tuvalu. Research Department, Agence Française de Développement (AFD), France.

International Monetary Fund. 2004. *The Federal Democratic Republic of Ethiopia: Poverty Reduction Strategy Paper. Annual Progress Report.* IMF Country Report No. 04/37. IMF, Washington DC.

International Monetary Fund 2011. *The Federal Democratic Republic of Ethiopia: Joint Staff Advisory Note on the Growth and Transformation Plan 2010/11–2014/15.* IMF Country Report No. 11/303. IMF, Washington DC.

Kefyalew, A., Tegegn, F. 2012. The effect of climate change on ruminant livestock population dynamics in Ethiopia. Livestock Research for Rural Development. Volume 24, Article #185. See http://www.lrrd.org/lrrd24/10/kefy24185.htm [accessed January 2014]

Ludi, E. et al. 2011. Preparing for the future? Understanding the Influence of Development Interventions on Adaptive Capacity at Local Level in Ethiopia. Africa Climate Change Resilience Alliance (ACCRA) Ethiopia Synthesis Report. ACCRA, Ethiopia.

Ministry of Environment and Forest (MEF) 2014. CRGE Highlights. Volume 1, No. 6, February 2014. Federal Democratic Republic of Ethiopia, Addis Ababa.

Ministry of Finance and Economic Development (MoFED) 2002. *Ethiopia: Sustainable Development and Poverty Reduction Program.*Federal Democratic Republic of Ethiopia, Addis Ababa.

Ministry of Finance and Economic Development (MoFED) 2006. Ethiopia: Building on Progress: A Plan for Accelerated and Sustained Development to End Poverty (PASDEP) (2005/06-2009/10). Volume 1: Main Text. Federal Democratic Republic of Ethiopia, Addis Ababa.

Ministry of Finance and Economic Development

(MoFED) 2010. Growth and Transformation Plan (GTP) 2010/11-2014/15. Volume 1. Federal Democratic Republic of Ethiopia, Addis Ababa.

Ministry of Finance and Economic Development (MoFED) 2013. *Annual Progress Report for F.Y.* 2011/12 Growth and Transformation Plan. Federal Democratic Republic of Ethiopia (FDRE), Addis Ababa.

Ministry of Water Resources (MoWR) and National Meteorological Agency 2007. Climate Change National Adaptation Programme of Action of Ethiopia. Federal Democratic Republic of Ethiopia, Addis Ababa. See http://unfccc.int/resource/docs/napa/eth01.pdf

Tadege, A. (ed.) 2007. Climate Change National Adaptation Programme of Action (NAPA) of Ethiopia. National Meteorological Agency, Ministry of Water Resources, Federal Democratic Republic of Ethiopia, Addis Ababa.

Townshend, T. et al. (eds) 2013. *Climate Legislation Study: A Review of Climate Change Legislation in 33 Countries*. Third Edition. GLOBE International, London.

Shepherd, A. et al. 2013. *The geography of poverty, disasters and climate extremes in 2030*. Overseas Development Institute, London.

UNDP 2008. Climate Change Country Profiles: Ethiopia. UNDP, New York. See http://ncsp.undp. org/sites/default/files/Ethiopia.oxford.report.pdf

World Bank 2010. *Ethiopia: Economics of Adaptation to Climate Change*. The World Bank Group, Washington DC.

World Bank 2012. International Development Association and International Finance Corporation and Multilateral Investment Guarantee Agency Country Partnership Strategy for The Federal Democratic Republic of Ethiopia. Report No.

71884-ET. World Bank Group, Washnigton DC.

World Bank 2013a. Ethiopia Overview. World Bank Group, Washnigton DC. See http://www.worldbank.org/en/country/ethiopia/overview

World Bank 2013b. Ethiopia – Sustainable
Land Management Project (SLMP-2). World
Bank Group, Washington DC. See http://
www-wds.worldbank.org/external/default/
WDSContentServer/WDSP/IB/2013/11/07/00
0333037_20131107121854/Rendered/PDF/
World Bank 2013a. Ethiopia Overview. See http://
www.worldbank.org/en/country/ethiopia/overview



Research Report

March 2014

Climate Change

Keywords:

Climate change, green economy, climate finance, climate resilient development planning

