



*The Voice of the Private Sector in Kenya*

Climate Change and Your Business Briefing Note Series | April 2014

# Kenya's National Climate Change Action Plan and the Private Sector

Photo credit: Daborah Murphy



## What is the National Climate Change Action Plan?

The Government of Kenya launched its National Climate Change Action Plan 2013-2017 in March 2013. This plan sets out a vision for a low carbon climate resilient development pathway, summarises analysis of mitigation and adaptation options, and recommends actions. The plan explains that Kenya will move toward this pathway by creating new jobs through green growth, reducing disaster risks, leveraging investment in adaptation and mitigation through the private sector, and attracting international climate finance, technology and capacity-building assistance<sup>1</sup>. **The private sector is expected to play an important role in the implementation of the National Climate Change Action Plan (NCCAP) by reducing the impacts of climate change, known as mitigation; and helping Kenya adapt to a changing climate.**

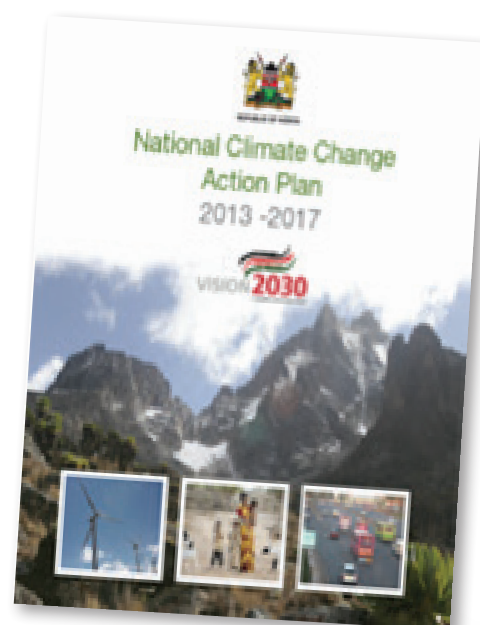
Actions set out in the NCCAP can create new market opportunities for the Kenyan private sector. This briefing note reviews priority actions identified in the NCCAP, and shows how the private sector is contributing to the implementation of the action plan.

## What are some of the strides taken in different sectors?

### Agriculture, livestock and fisheries sector

The agriculture, livestock and fisheries sector is a large and growing greenhouse gas emitter, responsible for about 30 per cent of Kenya's emissions in 2010, with about 90 per cent of these emissions generated by the livestock sector. **Many climate smart agricultural practices that reduce climate vulnerability also reduce emissions and improve agricultural production potential.** Agroforestry, for example, sequesters carbon while offering climate resilience benefits of improved soil quality and improved water retention in soil. Other important climate change actions are:

- Conservation tillage.
- Limiting the use of fire in cropland and rangeland management.
- Promotion of drought tolerant crops.
- Water harvesting.
- Integrated soil fertility management.
- Insurance schemes.



- Price stabilization schemes for livestock.
- Mainstreaming climate change into agricultural extension services.

### Box 1: The Private Sector and Kenya's National Climate Change Action Plan

"The private sector needs to focus on building resilience and adapting to climate change, while identifying and acting on both risks and opportunities. Strengthened engagement with the government will enable the private sector to help with the implementation of the Climate Change Action Plan and move Kenya toward a green economy."

*Carole Kariuki, CEO, KEPSA, remarks at the launch of the NCCAP, 13th March 2013*

#### Commerce and tourism sector

Greenhouse gas emissions in the commerce and tourism sector are low relative to Kenya's overall national emissions, but many low carbon actions can be applied – such as solar water heating, the use of energy efficient lighting and appliances, and more efficient passenger vehicles. **A concerted program could help to create a niche market by branding Kenya as a low carbon footprint destination** (see briefing note #7 that discusses sustainable tourism). In addition, research is needed to determine the vulnerabilities of wildlife populations and habitats and appropriate adaptation actions.

#### Energy and petroleum sector

**In the energy and petroleum sector, the private sector has worked to reduce emissions through renewable energy and energy efficiency technologies.** For example, in regard to renewable energy, Oserian Flower Farm in Naivasha invested US\$ 12 million in a three megawatt (MW) geothermal power plant that provides 98 per cent of the company's electricity requirement. Mumias Sugar Company invested in a 35 MW bagasse based cogeneration project that supports its power requirements and exports excess electricity to the national grid. The private sector is also distributing renewable energy technologies (such as wind and solar), although much of the demand is met by imports. One firm, Ubbink, has established a factory in Kenya that produces solar panels, although all the components are imported with assembly taking place in Kenya (see Box 3). The Kenya Association of Manufacturers reports that total cost savings of around US\$ 116 million and a potential 68 MW reduction in energy consumption



have been realized through energy audits and energy efficiency measures since 2007. More than 200 companies have been audited and potential savings of Ksh 10 billion identified. The manufacturing and hotel industries have been particularly responsive to energy saving measures and some have demonstrated considerable energy savings, such as Kenafric (see briefing note #10 for additional details).<sup>2</sup>

#### Environment, water and natural resources sector

**Water resource management is particularly important in the environment, water and natural resources sector for addressing drought.** Forests in water catchments are critical for sustaining water availability, which is needed for generation of hydropower, drinking water and water for irrigation. Priority adaptation actions to improve water management include:

- Increased domestic water supply and improved sewage systems.
- Enhanced irrigation and drainage to increase agricultural and livestock production.

### Box 2: Unilever and Tea Production

Unilever established a sustainable agricultural programme in 1999 that included adaptation to climate change through the production of drought resistant tea varieties. The company has also set up mini-hydro plants and grows eucalyptus tree to use as fuel wood in its tea boilers. Unilever also is active in protecting its local water catchment areas. The introduction of sustainable agriculture practices has increased tea yields by four to five times.

*Source: Ellis, K., Lemma, A., Mutimba, S. and Wanyoike, R. (2013), Low Carbon Competitiveness in Kenya (London: Overseas Development Institute), page 27.*

- Effective trans-boundary water resources management and flood mitigation schemes.

These actions reduce the impact of droughts and floods on crop yields and livelihoods, and more irrigation-based agriculture reduces the reliance of crop production on rainfall.

#### Information, communication and technology (ICT) sector

**The ICT sector has multiple relationships with climate change and plays an important role in the climate change response.** The ICT sector itself and operation of the technology contributes over two per cent to global carbon emissions, although this is growing. On the other hand, ICTs – through "smart" applications – can help to reduce the carbon footprint of the sectors contributing the other 98 per cent of emissions. ICTs also have an important adaptation role because they facilitate the processes of knowledge integration and learning.<sup>3</sup>

An example in Kenya is Kilimo Salama, a partnership between Syngenta Foundation for Sustainable Agriculture, UAP Insurance and Safaricom. It offers insurance policies to farmers who plant on as little as one acre to shield them from significant financial losses when drought or excess rain negatively impacts their harvests. Payments to farmers are made through the M-Pesa platform.<sup>4</sup>

#### Industrialisation and enterprise development sector

Greenhouse gas emissions result from electricity and fuel use in manufacturing as well as from industrial processes, mainly from cement and charcoal production. Improvements in the energy efficiency of industrial processes will enhance competitiveness and potentially create cost reductions. **The use of state-of-the-art technology and equipment for manufacturing processes can reduce emissions, by lowering both use of electricity and emissions in the industrial process.** For example, process emissions from cement manufacturing can be reduced by replacing clinker in the





Photo credit: Deborah Murphy

cement mix with alternative materials – a low carbon option implemented by some Kenyan cement companies. The most significant low carbon opportunity in regard to process emissions is the use of more efficient kilns for charcoal production. In addition, the Governments of Kenya can help to stimulate markets for climate-friendly products by prioritising purchases from manufacturers of green products.

### Health sector

**Priority actions in the health sector focus on building climate resilience, and include:**

- Improved disease surveillance, including strengthening existing early warning, monitoring and evaluation systems for malaria epidemics.
- Improved community-level health care and increased access to water and sanitation to improve disease vector control.
- Provision of water filters that provide access to clean water while reducing demand for firewood used to boil water and therefore slowing deforestation.

### Land, housing and urban development sector

**Climate change is likely to make rural livelihood strategies and living conditions increasingly challenging, which will exaggerate the rural to urban migration**

### Box 3: Solar Panel Manufacturer

Ubbink is a European energy efficiency firm that started production of solar panels in Kenya. Located in Naivasha, it is the first solar module manufacturing site in the East African community. The Kenya operation began in 2011, initially under a Corporate Social Responsibility programme. While considered a risky commercial venture, the value of creating a brand name and building up market share in a fast-growing solar panel market was also recognized.

Kenya was chosen to host this investment because the county was deemed to have the best infra-structure in the region, good accessibility, good quality resources, a relatively skilled labour force and adequate supporting industries. In addition, the company was well placed to export regionally with Kenya being a member of the East African Community.

*Source: Ellis, K., Lemma, A., Mutimba, S. and Wanyoike, R. (2013), Low Carbon Competitiveness in Kenya (London: Overseas Development Institute), page 35.*

**trend.** Building capacity to manage climate risks in urban centres will increase in importance, particularly since cities such as Nairobi and Mombasa are predicted to play a vital role in Kenya's future economic development. Actions that hold opportunities for the private sector include:

- Expanded flood management in high-risk areas.
- Upgrading of building codes to include climate resilience and green building concepts.
- Construction of green energy-efficient buildings.
- Clean energy solutions for households and institutions.

### Mining sector

The mining sector holds promise of significant growth in Kenya, which has implications for a low carbon climate resilient pathway. Mining and minerals currently contribute less than one per cent to GDP, but this is expected to increase with the exploitation of newly found reserves of oil, coal, natural gas and other minerals. **Kenya has options to develop these resources taking low carbon considerations into account**, including:

- Encouraging the use of clean coal technologies with international support.
- Making use of the natural gas, which is a by-product of oil production, instead of flaring it.
- Allocating a percentage of royalties to a climate change fund to support reforestation and other low-carbon actions.

### What can your Business do?

**You can use the NCCAP as input and guidance for investment decisions.** Actions set out in the NCCAP can create new market opportunities that are often followed by financing mechanisms that involve private sector players. You can act first on climate change opportunities that create cost savings or improve your bottom line. You might also choose to take on a leadership role and be an early mover on emerging opportunities.

### Acknowledgements

This briefing note was written by Deborah Murphy (International Institute for Sustainable Development). The author thanks Victor Ogalo, Kenya Private Sector Alliance, Maliza van Eeden and Margaret Kamau, Climate and Development Knowledge Network, Tom Owino, ClimateCare, and Jo-Ellen Parry, IISD, for providing useful comments.

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Photo credit: Deborah Murphy

## Endnotes

1. Government of Kenya (2013), National Climate Change Action Plan 2013-2017 (Nairobi: Ministry of Environment and Mineral Resources).
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3. Akoh, B., Bizikova, L., Parry, J., Creech, H., Karami, J., Echeverria, D., Hammill, A. and Gass, P. (2011), Africa Transformation-Ready: The Strategic Application of Information and Communication Technologies to Climate Change Adaptation in Africa (Winnipeg: International Institute for Sustainable Development).
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This document is an output from a project funded by the UK Department for International Development (DFID) and the Netherlands Directorate-General for International Cooperation (DGIS) for the benefit of developing countries. However, the views expressed and information contained in it are not necessarily those of or endorsed by DFID, DGIS or the entities managing the delivery of the Climate and Development Knowledge Network\*, which can accept no responsibility or liability for such views, completeness or accuracy of the information or for any reliance placed on them.

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The Climate and Development Knowledge Network ("CDKN") is a project funded by the UK Department for International Development (DFID) and the Netherlands Directorate-General for International Cooperation (DGIS) and is led and administered by PricewaterhouseCoopers LLP. Management of the delivery of CDKN is undertaken by PricewaterhouseCoopers LLP and an alliance of organisations including Fundacion Futuro Latinoamericano, INTRAC, LEAD International, the Overseas Development and SouthSouthNorth.

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