

Climate change in East Africa: major challenges, policies & business opportunities for french companies

1. Major climate-related challenges facing East Africa
2. Country case studies :
 1. Kenya
 2. Rwanda
 3. Ouganda
3. Opportunities for french companies in adaptation and mitigation

East Africa: a region particularly vulnerable to climate change

Projected effects of climate change in the region:



TEMPERATURE

Increase of T°C between 1-2°C in the 2050s
Intensity of hot extremes projected to increase



PRECIPITATIONS

Increase in rainfall variability
Increase in the frequency and intensity of heavy rainfall events



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Sea-level rise projected to increase by 0.3m by the 2050s

East african countries are highly vulnerable to climate change and need to adapt:

- Agriculture and food security (maize, wheat, coffee)
- Water availability and quality (biggest threats to domestic users), impacts on hydroelectric production
- Health (food insecurity, poverty, poor housing, sanitary conditions)
- Urban environment and infrastructure (floods, power and communication outages, damage to housing etc)
- Coastal areas and fisheries (sea level and fish catches)

Climate change is estimated to have a considerable impact on East African economies by 2030 **(15% of GDP)**



Focus on the United Nations Framework Convention and Climate Change (UNFCCC) and the Nationally Determined Contributions (NDCs):

- **UNFCCC establishes an international treaty that aims to achieve the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous interference with the climate system.**
- **Signed by 154 countries ("Parties") during the Earth Summit in Rio (1992), and entered into force in 1994. As of 2021, UNFCCC has 197 parties.**
- **The Paris Agreement (2015) requires each Party to prepare, communicate and achieve Nationally Determined Contributions (NDCs), to pursue domestic mitigation and adaptation measures. NDCs should be updated and submitted every 5 years.**
- **Together, these climate actions determine whether the world achieves the long-term goals of the Paris Agreement (*i.e* to limit the increase of mean annual temperature by 2°C before the end of the century compared to pre-industrial levels). **If the last NDCs and other engagements from COP26 are respected, the estimated increase would be +2.3 °C.****



Kenya : a marginal emitter but highly vulnerable to climate change

Kenya has been visibly pro-active on climate change issues, both climate policy and climate action programs, whether in international negotiations or national strategies.

- **0.2% of global GHG emissions**
Agriculture: 40%
Deforestation/Land use: 38%

Projected effects of climate change in the country:



TEMPERATURE

Increase of the mean T°C in all regions
Increase in the frequency of hot days



PRECIPITATIONS

Increase in annual / seasonal rainfall in most regions
Increase in the frequency and intensity of heavy rainfall events



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Sea-level will continue to rise
Increase of the frequency and intensity of marine heatwaves along the coast



Main risks: household water security, food security in arid and semi-arid regions, floods in cities, flooding along Lake Turkana, Lake Victoria, reduced productivity of freshwater fisheries



Nationally Determined Contribution (NDC)

2016: first NDC submitted – one of the most detailed of African NDCs, and compatible with a 2°C trajectory.

December 2020: submission of an updated NDC – compatible with a 2°C trajectory

- -32 % emission reduction by 2030 compared to a *business-as-usual* scenario (143 MtCO₂eq)
- Estimated cost of implementation: **62 Bn USD between 2020 and 2030** (13% from national sources, 87% from international support).

MITIGATION

- Increase the share of renewable energy in the energy mix ;
- Promote energy-efficiency and low-carbon technologies in various sectors, including transport ;
- Increase forest cover to 10% of the land ;
- Promote climate-resilient agricultural practices ;
- Sustainable waste management systems.

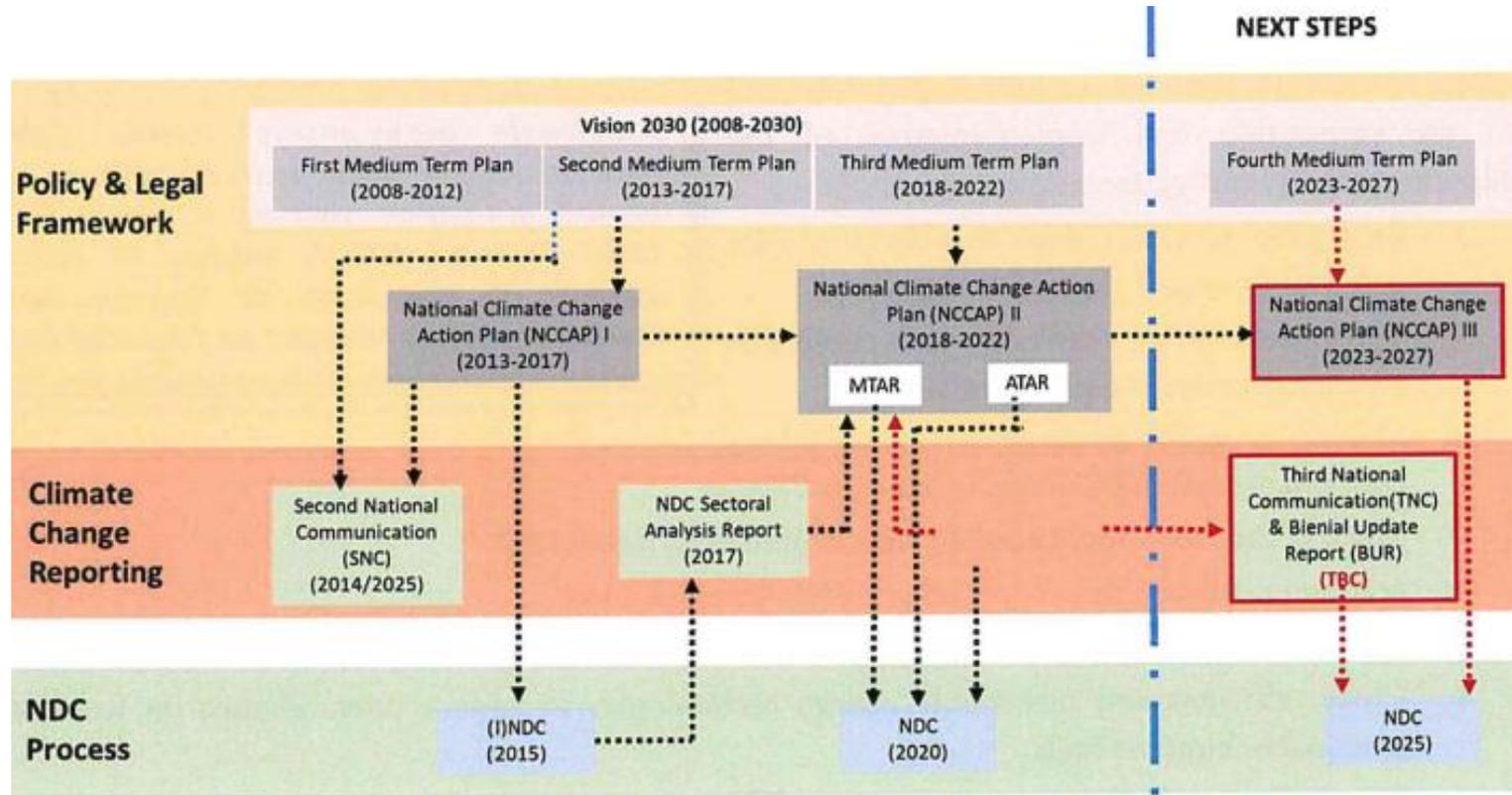
ADAPTATION

- Focus on strengthening adaptation actions in all economic sectors and at two levels : national and county governments ;
- Increase investments in ocean and blue economy ;
- Enhance grassroots resilience through financing of locally led climate change initiatives.



Kenya: post COP26 policy engagement

- The country is developing the **Long Term Strategy (LTS)**, supported by GIZ, to shape Kenya's low emission development trajectory.
 - Target to become a net zero economy by 2050
- Development of the **National Climate Change Action Plan III (2023-2027)**, to be aligned with updated NDC.
- Strengthening of Kenya's international role in climate negotiations: recently appointed **new chair of the Committee of African Heads of State and Government on Climate Change (CAHOSCC)**





Rwanda: high political will in favour of climate actions

Rwanda sets a good example for climate action at the continental and global level. Despite its very low weight in global GHG emissions, the country is highly affected by the consequences of climate change. Adapting is therefore a major concern and a priority for the country.

- **0.03% of global GHG emissions**
 - Agriculture: 55 %
 - Energie: 31 %
 - Déchets: 12 %

Projected effects of climate change in the country:

	TEMPERATURE	Increase in mean annual T°C Increase in the frequency of hot days (above 30°C)
	PRECIPITATIONS	Increase in seasonal rainfall Increase in the frequency and intensity of heavy rainfall events

 **Main risks:** floods in urban areas, soil erosion, food insecurity, household water security (east), health risks (vector borne disease transmission).



Rwanda: high political will in favour of climate actions

Nationally Determined Contribution (NDC)

2020: first African country to submit its updated NDC

- - **38 % emission reduction by 2030** compared to a *business-as-usual* scenario (4,6 MtCO₂eq)
- Estimated cost of implementation: **10 Bn EUR between 2020 and 2030**

Current policy engagement to reach this goal:

- **Energy strategic plan 2018-2024:** aims to reach 60 % of renewables in the energy mix by 2030.
- **Agricultural transformation strategic plan 2018-2024:** targets four main pillars (i) innovation; (ii) increased productivity, food security and resilience; (iii) improved added value of the sector ; (iv) strengthening of the regulatory framework.
- **Forestry strategic plan 2018-2022:** that includes priorities such as capacity building for sustainable forest management, private sector investment, valuation of ecosystem services, and adoption of agroforestry techniques.
- **National Strategic Transformation Plan:** high-level planning policy that frames the subsequent plans of local governments and different sectors of the country.



Rwanda: a green fond to finance sustainable projects

Rwanda has put in place various instruments to channel investments towards sustainable development projects.

Rwanda Green Fund (FONERWA) :

- Created in 2012, public fund aiming at providing strategic funding to create a strong, resilient and green economy ;
- Mainly funded by international donors (incl. AFD) - provides grants and credit lines ;
- By 2021, 217 MUSD were invested in 46 projects (energy access, protection against soil erosion, tree planting) with 129 000 people positively impacted ;
- FONERWA will however not be able to meet the estimated investment requirements of 10 Bn EUR necessary for the implementation of mitigation and adaptation measures.





Uganda: low emissions and high vulnerability

The country is experiencing an increased frequency and severity of extreme weather events, manifested in more erratic rainfall and prolonged dry seasons. Disasters and climate risks are already having a negative impact on the economy, particularly on the agriculture, water, energy and infrastructure sectors.

- **0.14% of global GHG emissions**
Deforestation/Land use: 86 %

Projected effects of climate change in the country:

	TEMPERATURE	Increase of the mean T°C in all regions Increase in the frequency of hot days (above 40°C)
	PRECIPITATIONS	Increase in annual / seasonal rainfall in most regions Increase in the frequency and intensity of heavy rainfall events



Main risks: flooding and food security along Lake Victoria, food security for pastoralist and agropastoral livelihoods, urban flooding, reduced productivity of freshwater fisheries due to rising surface water temperatures



Uganda: a willingness to promote adaptation and mitigation, despite new oil projects

Nationally Determined Contribution (NDC)

2016: submission of the first NDC

October 2021: interim updated NDC submitted (after warning from the UN)

- - **22 % reduction in GHG by 2030** compared to *business as usual* trajectory
- NDC as been updated to be coherent with vision 2040 and 3rd national development plan (energy efficiency, waste management, forestry)
- Estimated cost of implementation: **2,9 Bn EUR between 2020 and 2030 (8% of GDP)**

Yet, the country has not abandoned its exploitation of oil resources to accelerate its economic development:

- Exploitation of oil reserves in Tilenga, Kingfisher fields (Total, CNOOC, UNOC);
- EACOP pipeline: FID has been signed early February 2022;

A number of sectoral opportunities exist for french companies

MITIGATION

- French companies well-positioned in designing and developing efficient and low carbon urban transportation systems ;
- Opportunities in strenghtening electricity networks, developing off-grid renewable energies.

ADAPTATION

- French expertise recognised in the water and sanitation sectors ; Important AFD financing in this sector in the region
- Sustainable forest management ;
- Innovations in agricultural and agri-food sectors.

In complement to (untied) AFD fundings, French Treasury funding tools can be mobilised to support projets in the region:

- Grants (FASEP facility)
- Loans (direct, soft loans)

Merci de votre attention !

Pour plus d'information :

www.tresor.economie.gouv.fr

