

Africa on the road to COP28: reconciling climate & development



Building on the African Leaders Nairobi
Declaration on Climate Change and
Call to Action

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Foreword by Mo Ibrahim

Founder and Chair of the Mo Ibrahim Foundation (MIF)

Africa's unique climate context: least responsible and resilient due to lower levels of economic development

Building developed economies is an emissions-laden process. Due to its lower level of development, Africa is the least responsible for the climate crisis. But this lower level of economic development also means that Africa is the least resilient region to the adverse impacts of the climate crisis. Achieving development goals in Africa, whether the UN's SDGs or the AU's Agenda 2063, will not be possible without a massive increase in energy use and energy access for all on the continent, as is already the case in developed countries. There can be no trade-off between climate and development goals, no saving the planet at the expense of almost one-fifth of its people. But this does not mean Africa will follow the historical carbon-intensive development path seen in the Global North: natural gas, the least polluting of fossil fuels, can act as transition fuel to help bridge the energy access gap on the continent, if accompanied with adequate infrastructure. Africa also owns extensive green, blue and mineral wealth, without which the world cannot go green. African countries can leverage these climate assets to simultaneously pursue their own development agendas while also contributing to global climate goals.

The African Leaders Nairobi Declaration on Climate Change and Call to Action has kick-started discussions on reconciling climate and development in Africa. Now we need to see action. A successful COP28 must build on these discussions by addressing three key priorities.

Priority 1. Focus on adaptation: build resilience and climate-proof development

For a continent where almost half the population still has no access to electricity, curtailing already minimal emissions cannot be the focus, and would have little to no impact in slowing climate change globally anyway. The principle of 'common but differentiated responsibility' is key. While curtailing the emissions of those with the biggest carbon footprints makes obvious sense, and will have the greatest impact on the climate crisis, for Africa the focus must be on adaptation to the impact of climate change and building resilience. This means addressing ongoing development challenges that increase vulnerability and incorporating climate resilience into development projects going forward.

Priority 2. Unlock the potential of Africa's green assets: add value locally and focus on governance

Africa's critical green assets can be tapped to make progress on the continent's development agendas, while simultaneously contributing to global climate goals. In order to realise these dual objectives, it is key to move away from the historic extractive growth model, rooted in exporting raw materials. Local transformation, which will both foster local employment and reduce emissions from carbon-intensive shipping, natural resource governance, as well as global efforts to conserve biodiversity will all be key to tapping the continent's green potential.

Priority 3. Break the debt-climate nexus and grow Africa's domestic revenues

Limited domestic revenues force African countries to turn to external borrowing to fund development goals, either at punitive interest rates from the private sector, with burdensome policy conditions from MDBs, or reinforced dependency from bilateral partners. At the same time, illicit financial flows and capital flight continue to bleed the continent of resources. Ever more costly debt servicing triggers a further drain of resources from the continent and subsequently prevents the investment needed to generate climate resilience. Reforming the global financial architecture, breaking the debt-climate nexus and boosting Africa's revenues is critical to reconciling climate and development.



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But this does not mean Africa will follow the historical carbon-intensive development path seen in the Global North. Africa owns extensive green, blue and mineral wealth, without which the world cannot go green. African countries can leverage these climate assets to simultaneously pursue their own development agendas while also contributing to global climate goals.

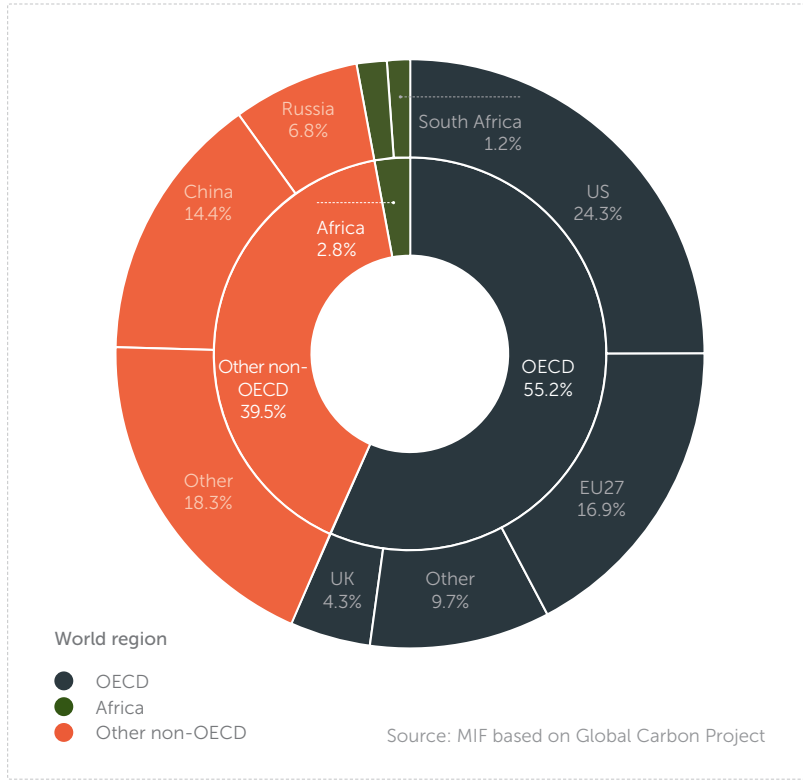


8 **AS THE LEAST ECONOMICALLY DEVELOPED CONTINENT, AFRICA IS THE LEAST RESPONSIBLE FOR CLIMATE CHANGE**

Africa is the least responsible continent for climate change

Between 1850 and 2021, Africa was responsible for just 2.8% of global fossil fuel emissions.

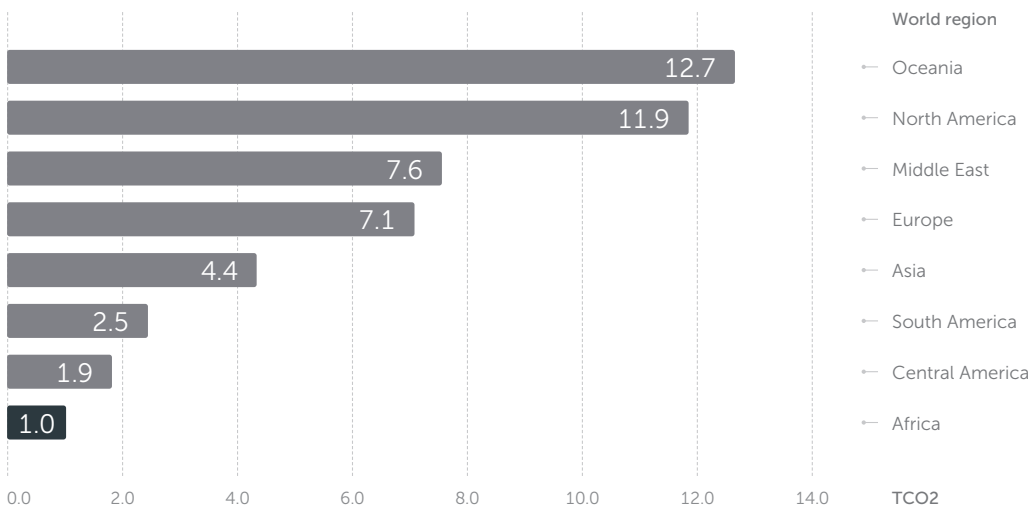
World: share of historic global carbon emissions (1850-2021)



OECD countries, Russia and China collectively account for over ¾ of historic fossil fuel emissions

Africa still only accounts for 4.0% of territorial emissions from fossil fuels in 2021

World regions: per capita emissions from fossil fuels (2021)



The average person in North America or Oceania accounts for more than ten times the amount of fossil fuel emissions than the average person in Africa.

Even when including land-use change and forestry, Africa's per capita greenhouse gas emissions were less than one-fifth of those of the US in 2019.

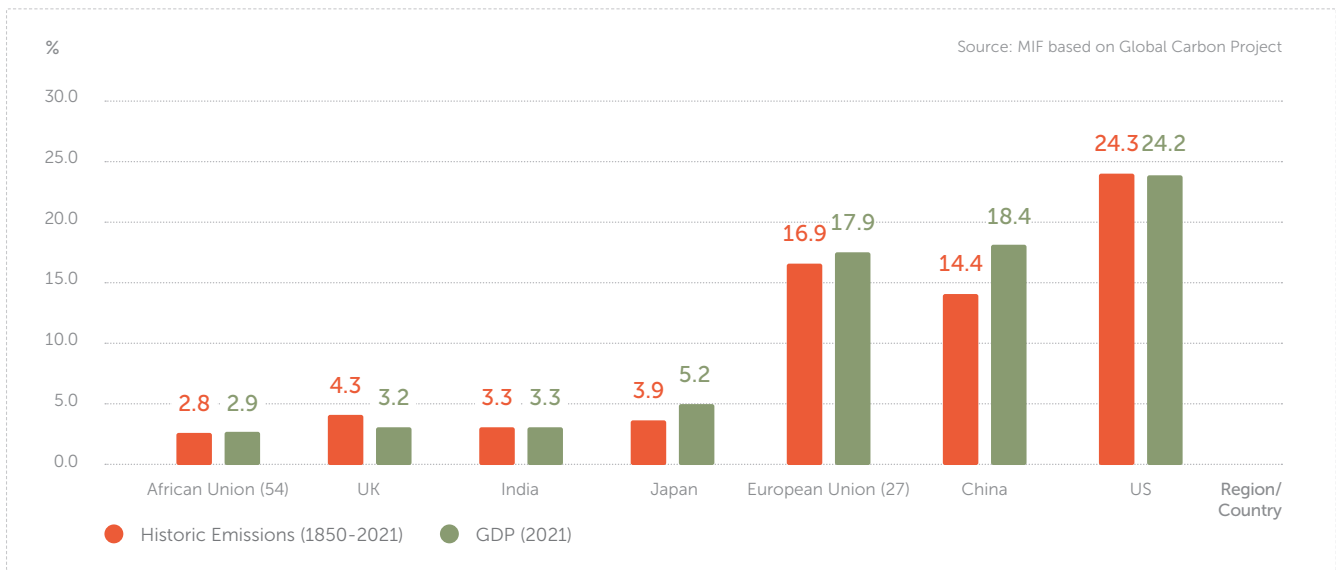
Low emissions due to limited economic development

Building industrial economies, with resilient energy and food systems, expansive infrastructure networks and secure housing is an emissions-laden process. Africa’s small carbon footprint is due to the relatively small size of the continent’s economies and its limited economic and social infrastructures.

A country’s historic carbon footprint closely correlates to the size of its economy today

Selected regions & countries: share of historic fossil CO2 emissions against share of global GDP (2021)

8 of the 10 countries with the highest historic fossil fuel emissions are also among the 10 largest economies today



Food for thought

Africa’s booming population will increase the scope of development challenges

Global population growth in the coming century will be led mainly by Africa

- Between 2030 and 2100, Africa’s population will increase by over two billion, more than in every other world region combined.
- Africa’s population in 2050 is projected to be almost double 2023 levels.

Delivering on development goals for this growing population will see demand for food, housing, infrastructure - and therefore energy - rise.

Meanwhile Asia, Europe, and Latin America & the Caribbean will see their populations and the subsequent resource demands decline.

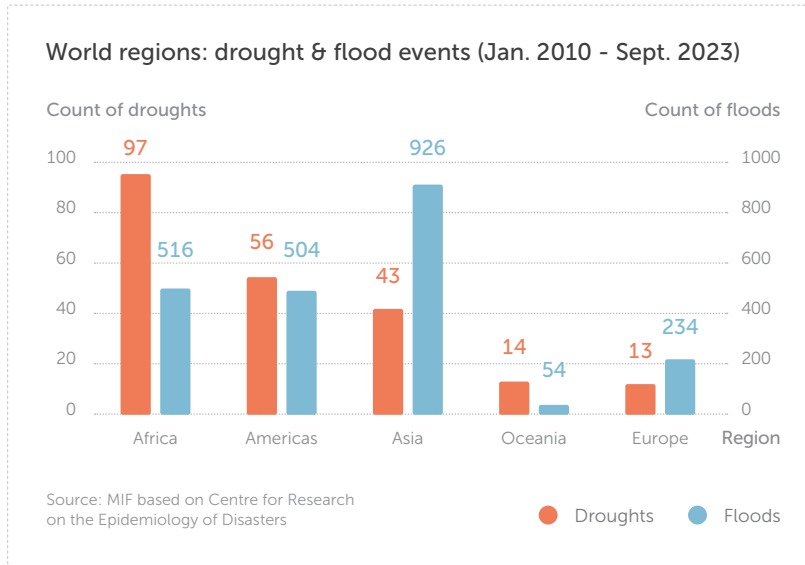


AS THE LEAST ECONOMICALLY DEVELOPED CONTINENT, AFRICA IS THE LEAST RESILIENT TO THE IMPACT OF CLIMATE CHANGE

Africa is the region most vulnerable to the impact of climate change

African countries are uniquely vulnerable to climate change, with seven of the ten most climate-vulnerable countries globally in Africa. However, Africa's specific vulnerability is two-fold, based on geography on the one hand and development levels on the other.

Africa is geographically more prone to adverse climate events

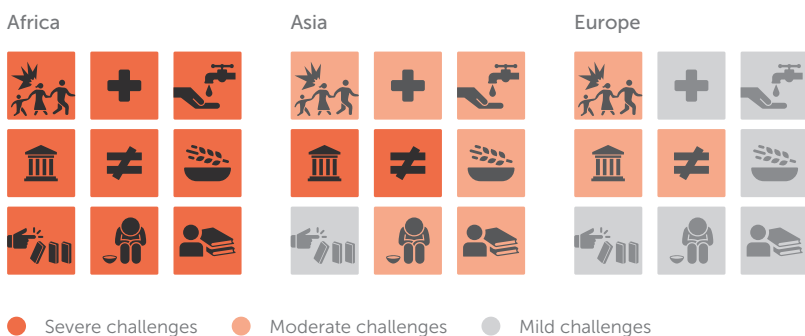


In Africa, temperatures are already rising faster than anywhere else and could rise by as much as 6°C before the end of the 21st century

Lower levels of development mean more climate vulnerability

Other regions also face adverse climate shocks but lower levels of economic development in many African countries mean resilience is low, the impact of climate events more severe and capacity to respond more limited.

The Intergovernmental Panel on Climate Change (IPCC) sees severe challenges for Africa across all facets of vulnerability. No other region is predicted to face such severe challenges.



39.7 million more people in sub-Saharan Africa could be pushed into extreme poverty by 2030 due to climate change, more than in any other world region

23% of Africa's 30 deadliest weather-related disasters since 1900 have occurred in the past 2 years

Africa is the world region most vulnerable to drought events and the 2nd most vulnerable to flood events

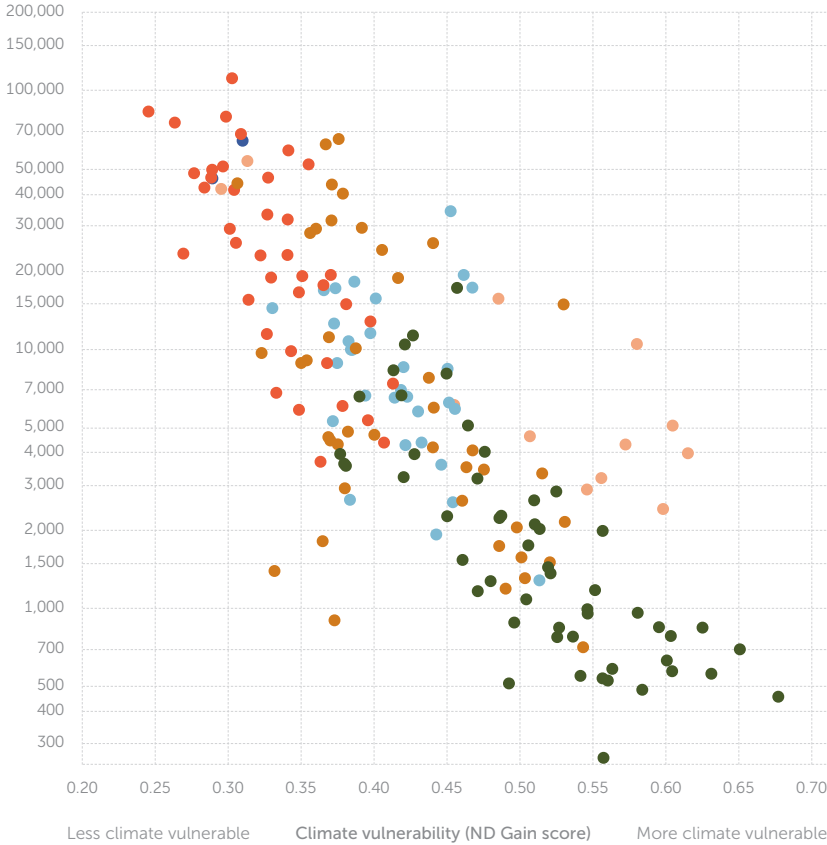
Facets of vulnerability

- Uprooted people
- Governance
- Dependency ratio
- Access to health care
- Inequality
- Extreme poverty
- Access to basic infrastructure
- Food security
- Adult literacy rate

Poorer countries are more climate vulnerable

World regions: Gross Domestic Product (GDP) per capita vs climate vulnerability (2021)

GDP per capita, \$ (log scale)



13 of the 20 most climate vulnerable countries are also among the 20 poorest countries in GDP per capita terms, while 15 of the richest 20 are among the least vulnerable

- World region
- Africa
 - Asia
 - Europe
 - Latin America & the Caribbean
 - Northern America
 - Oceania

Source: MIF based on IMF and ND Gain

Deficits in energy, formal housing, transport networks, reliable food systems and social infrastructure amplify the impact of climate change. People without air conditioning cannot cool themselves down, people without internet cannot see cyclone warnings, people with no roads cannot quickly make it to the nearest hospital, people in makeshift housing cannot protect themselves from floods and people whose livelihoods stem from rainfed agriculture cannot feed themselves during droughts.

Since 2020, for every flood in Africa, 57 people have died on average. In Europe 13 people died per flood, while in the US only 7 died per flood

Rich countries have more financial resources for disaster response

After Cyclone Freddy hit Malawi in March 2023, the government was dependent on international support to finance the response. The UN were only able to mobilise 10% (\$150 million) of the \$1.5 billion response and recovery costs.

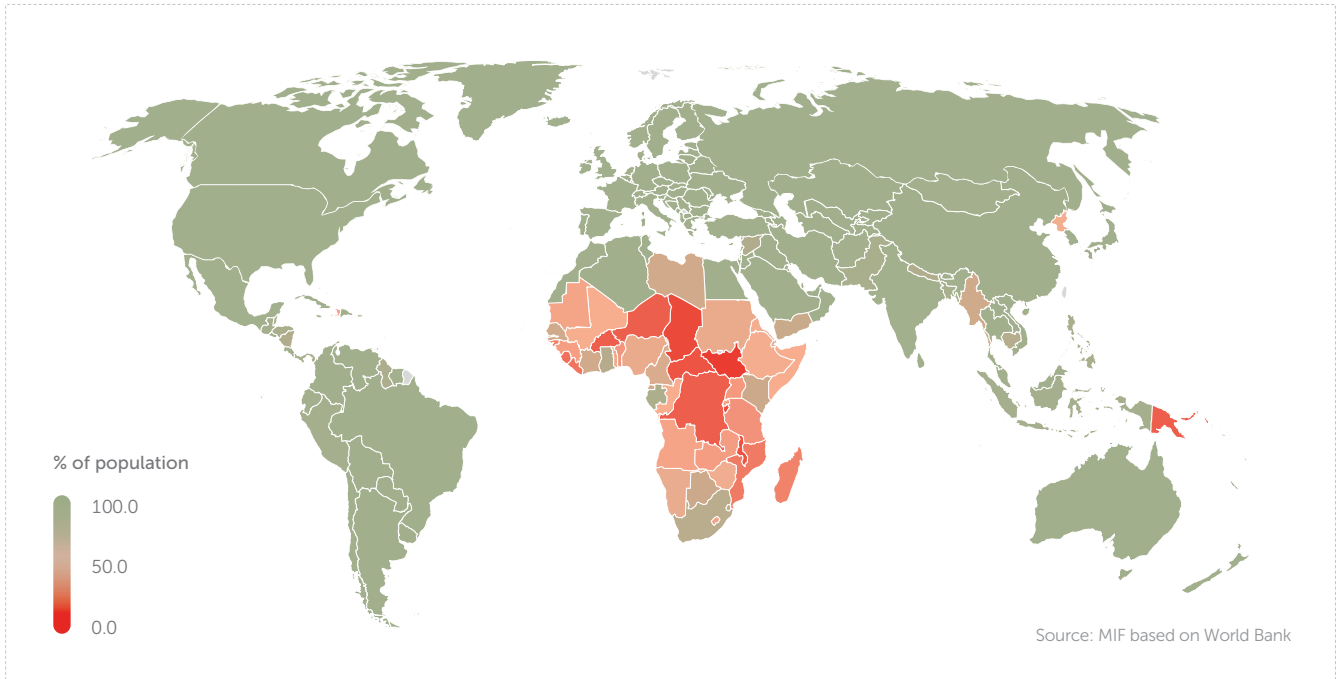
The US has also been hit with high intensity by hurricanes, such as Hurricane Idalia in August 2023. However, the Federal Emergency Management Agency, the body tasked with the country's disaster response, has a 2023 budget of \$29.5 billion, more than twice the entire GDP of Malawi.

The US disaster response budget (\$29.5 billion) is more than twice the GDP of Malawi

Addressing the unique deficits in energy, infrastructure, housing and food security is the priority for Africa

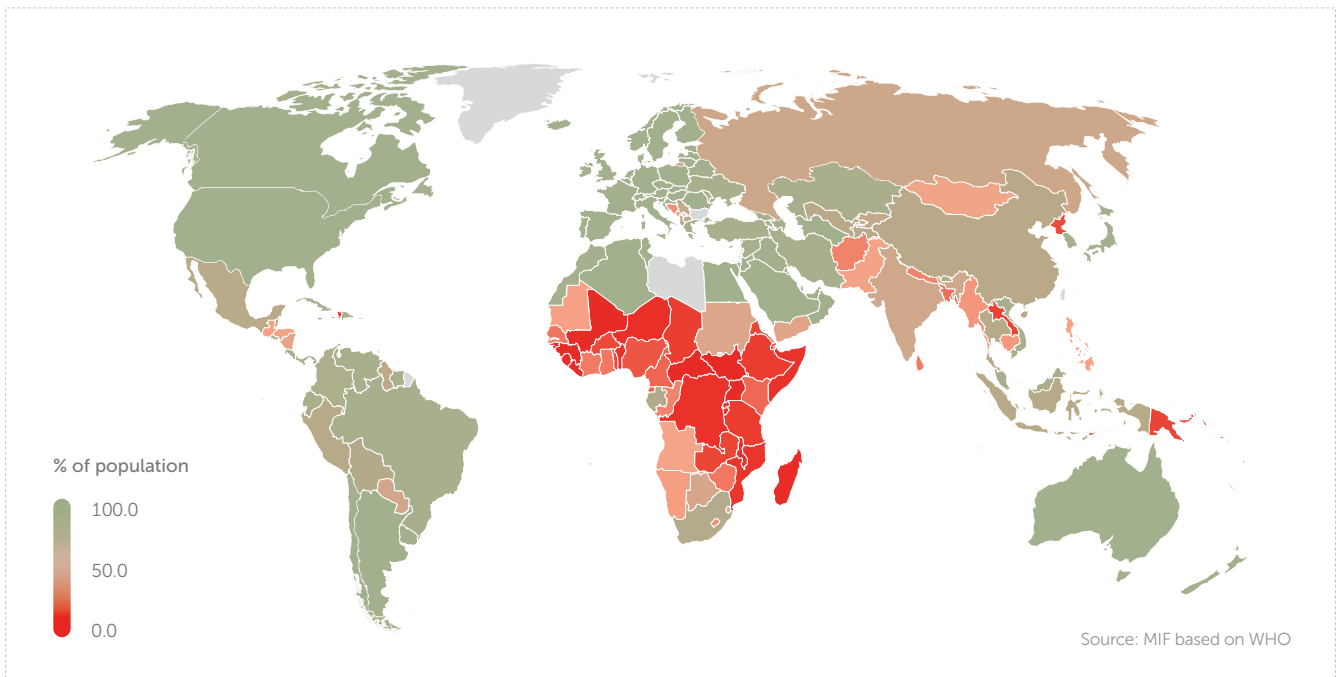
Almost 600 million people in Africa have no access to electricity, more than the combined population of France, Japan, the US and the UK.

World countries: access to electricity (2021)

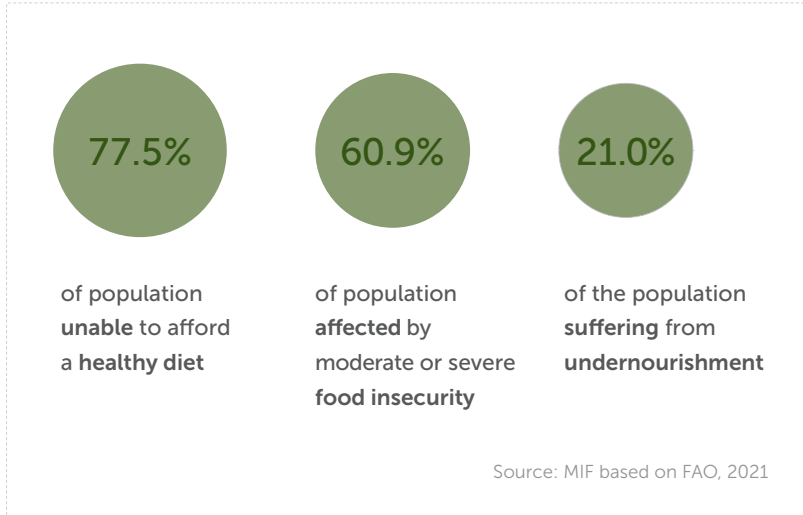


Over 950 million people in Africa have no access to clean cooking fuels, causing health and environmental issues.

World countries: access to clean cooking fuels (2021)



Food insecurity in Africa is already affecting large shares of the population, while climate change is forecast to push more than 39 million people into chronic hunger by 2050.



41 out of 54 African countries were net importers of basic food items in 2021

Climate change is forecast to push an additional 78 million people into chronic hunger by 2050, over half of them in sub-Saharan Africa

Over one-third (39.7%) of Africa’s urban population live in slum households, a higher proportion than any other region including Asia (17.3%) and Latin America & the Caribbean (6.2%).

Africa covers over one-fifth of the world’s land area but less than 8% of the world’s road and rail networks.

Over 1/3 (39.7% of Africa’s urban population lived in slum households in 2020

Selected regions & countries: global share (latest data year)

Country	Road Network	Rail Network	Air Traffic	Surface Area	Population
Africa	7.4%	6.9%	2.2%	22.8%	18.0%
China	13.0%	11.7%	14.5%	7.4%	17.8%
EU	14.4%	15.9%	17.6%	3.2%	5.6%
US	16.4%	22.9%	20.3%	7.6%	4.2%

Source: MIF based on CIA World Factbook, UNDESA, UNSD & World Bank

Addressing these deficits will mean more emissions

There is no way around it - plugging these deficits will require that emissions rise in Africa. Fossil fuels are used not just in electric power generation, where renewable alternatives have made headway, but in agricultural fertiliser, the cement and steel needed to build infrastructure and housing, and the transportation fuels for shipping and trade.

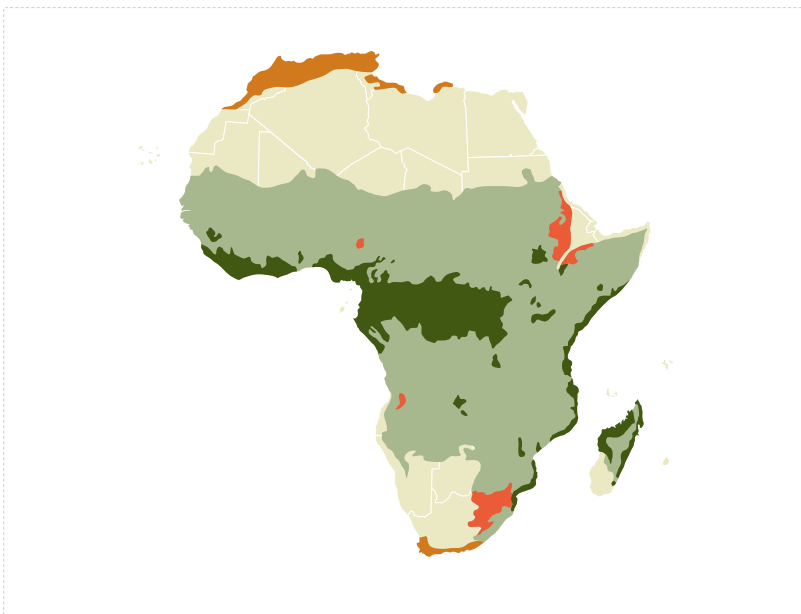
Though emissions will rise, Africa can follow a greener path than countries in Europe, North America and East Asia.

Africa is not just the continent most impacted by the climate crisis, it also has an abundance of green and blue assets essential for keeping the world on track for 1.5°C. The first Africa Climate Summit (ACS) in September 2023 highlighted the continent’s potential to act as a catalyst for a shift to a global green economy.

Green and blue wealth: critical ecosystems and carbon sinks

- Africa hosts approximately 45,000 plant species, roughly 25% of the world’s plant genetic resources, the second largest global plant diversity after Southern America.
- Africa is home to around one-sixth of the world’s remaining forests.
- Three of Africa’s six large marine ecosystems rank within the four most productive large marine ecosystems in the world.

Africa: biodiversity assets in terrestrial ecosystems (2022)



The Rift Valley, Zululand Basin, Rovuma Basin and Ethiopia’s Blue Nile region are all optimal for carbon capture technologies

Africa could produce 5,000 Mts of hydrogen a year at less than \$2 per kg – equivalent to the total global energy supply in 2021 according to the IEA

- Drylands and deserts
- Mediterranean forests, woodlands and scrub
- Tropical and subtropical dry and humid forests
- Tropical and subtropical savannas and grasslands
- Tundra and high mountain habitats

Source: MIF based on Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

Congo Basin rainforest is the world’s primary tropical carbon sink

Despite being the world’s second largest rainforest after the Amazon, only the Congo Basin has enough standing forest left to remain a strong net carbon sink. Net carbon sequestration in the Congo Basin rainforest is more than in the Amazon and Southeast Asia combined, making it the world’s primary tropical carbon sink.

The Congo Basin’s annual net carbon sinking equates to more than the UK’s fossil fuel emissions for 2021

Congo River Basin

GT CO2 emissions: +0.5
 GT CO2 removals: -1.1
 GT CO2 net carbon sinking: -0.6

Amazon River Basin

GT CO2 emissions: +1.1
 GT CO2 removals: -1.2
 GT CO2 net carbon sinking: -0.1

Borneo - Mekong Basin

GT CO2 emissions: +1.6
 GT CO2 removals: -1.1
 GT CO2 net carbon sinking: +0.5

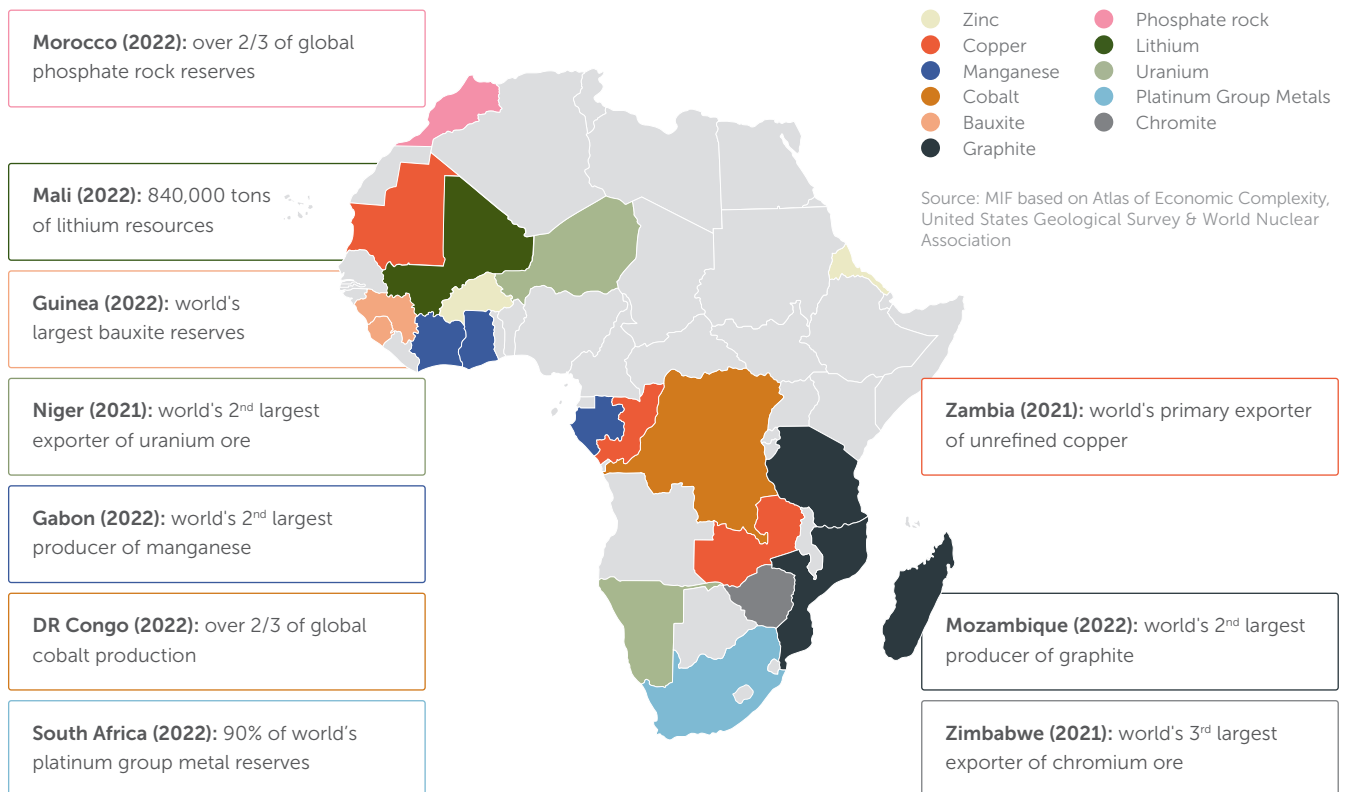
Africa's minerals: critical for the global green energy transition

The low-carbon technologies needed for the green transition cannot be produced without Africa's minerals. Africa is home to an abundance of critical minerals including cobalt, graphite and manganese (used in battery storage), platinum group metals (used in green hydrogen), bauxite and chromite (used in solar) and phosphate rock (used in batteries and fertilisers).



Production of graphite and cobalt will need to increase by nearly 500% by 2050, to meet climate goals

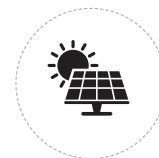
African countries: selected low carbon minerals (2021-2022)



Renewable power: an abundance of solar, wind and hydro potential

There is still much untapped potential that could decrease energy poverty and limit increases in emissions, and once this has been achieved, even export renewable energy to the rest of the world.

- Geothermal: Kenya has more geothermal power capacity under construction than any other country.
- Wind: full mobilisation of technical wind potential would increase electricity capacity more than 30-fold in Chad, Mauritania, Niger and Mali.
- Hydro: the Grand Inga Dam in DR Congo could produce up to 40,000 MW of electricity, twice the power generation capacity of the world's current largest dam, China's Three Gorges.



Solar: Africa has 40% of the global solar potential but just above 1% of installed capacity

Priority 1.

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While curtailing the emissions of those with the biggest carbon footprints makes obvious sense, and will have the greatest impact on the climate crisis, for Africa adaptation to the impact of climate change and building resilience must be the focus. This means addressing ongoing development challenges that increase vulnerability and incorporating climate resilience into development projects going forward.



1.1. ADAPTATION MEANS FOOD SECURITY: BUILD CLIMATE-RESILIENT FOOD SYSTEMS

The pre-existing challenges of food security, energy security, housing and infrastructure deficits render African countries and populations more vulnerable and less resilient to the consequences of global warming.

This generates a vicious cycle in which the effects of climate change and extreme weather events are more strongly felt due to already low resilience, while at the same time they further weaken adaptation and resilience capacities.

Adaptation to climate change ultimately means addressing these development challenges. More attention and finance must be dedicated to these issues, looking beyond the narrow lens of short-term climate change mitigation.

Invest in climate-resilient agriculture for reliable food systems

Despite Africa's unique food security challenges, with over 65% of the world's remaining uncultivated arable land and at least one-sixth of the world's plant species, Africa's agricultural potential is huge.

However, climate impacts on Africa's agriculture are being felt acutely. Rainfed food production sits at the centre of 70% of Africa's livelihoods—leaving populations vulnerable to drought.

Scaling up investment in climate-friendly and climate-resilient agricultural production in Africa to reduce dependency on food imports will be key to adapting to climate change, resolving food insecurity and realising the continent's potential.

- Regenerative agriculture: reducing mono-cultivated land, removing chemical runoffs, reduction in water usage and reduction in hormone and chemical content.
- Water harvesting and irrigation: only about 5% of agricultural land in Africa being irrigated.
- Cropping systems: growing different and diversified crops in succession on the same land to preserve the soil's productive capacity.

With the removal of barriers to agricultural development aided by new investments, Africa's agricultural output could increase from \$280 billion per year to \$1 trillion by 2030.

Punitive seed laws are preventing Africa from tapping its seed diversity

Legislation that strengthens the intellectual property rights of commercial seed manufacturers continues to undermine customary practices, often preventing farmers from sharing and accessing the continent's local seed diversity and reducing climate-friendly crop rotation.



Africa receives 28.3% more in mitigation finance than in adaptation finance



The Africa Food Summit (Dakar, January 2023) claimed Africa has the potential to feed 9 billion people in the world by 2050, greater than the current world population



Africa hosts roughly 25% of the world's plant genetic resources



Seed law is undermining customary farming practices that are better for soil conservation

Agroecology: linking food security and climate-compatible agriculture?

Agroecology applies ecological and social concepts to the design and management of agricultural and food system practices such as promoting native crops - millet, teff, cowpea, sorghum - in a rotational pattern with export crops to restore nutrients to soil and guard against soil erosion and depletion.

The aim is to produce climate-resilient and low-carbon food systems, recycle resources, and prioritise local supply chains. Agroecology is advocated for by the Food and Agriculture Organization of the United Nations (FAO) and groups like the Alliance for Food Sovereignty in Africa (AFSA) who are pushing for it to be included in the basket of climate solutions by national leaders.



Agriculture is a key driver of emissions and in Africa accounts for over 1/5 of total GHG



Food insecurity is a key driver of domestic unrest, conflict and forced migration

Agricultural subsidies in Global North are bad for African food security and the planet

Agricultural subsidies in the Global North such as the EU's Common Agricultural Policy (CAP), have disadvantaged African farmers, unable to compete with the low prices, and African governments, unable to provide equivalent subsidies. Further, agreements negotiated in the World Trade Organization (WTO) encourage African countries to expose their domestic industries to international competition, while IMF packages to African countries have often been conditioned on the removal of agricultural subsidies.

Consequently, many African farmers stopped farming all together, while others switched to producing cash crops for export, that did not meet local food needs and led to environmentally harmful farming practices.

According to FAO, almost 90% of the \$540 billion in annual global farming subsidies are damaging public health, fuelling the climate crisis, and destroying nature.

The United Nations Development Programme (UNDP) has suggested redirecting agricultural subsidies to boost the livelihoods of 500 million smallholder farmers worldwide while improving environmental outcomes.



According to FAO, almost 90% of the \$540 billion in annual global farming subsidies are damaging public health, fuelling the climate crisis, and destroying nature

1.2. ADAPTATION MEANS ENERGY SECURITY: FAST-TRACK RENEWABLES, WITH GAS AS A TRANSITION FUEL

Energy access crucial for adaptation

Increasing energy access in Africa and achieving 'SDG7: Ensure access to affordable, reliable, sustainable and modern energy for all' is critical to the implementation of all the SDGs.

Energy access also addresses various dimensions of resilience and wider social and economic development through diversification of livelihoods, access to modern technologies, access to knowledge and information and as a basic enabler of further adaptation programmes.

Tapping Africa's renewable power potential is key

The African Leaders Declaration on Climate Change and Call to Action (Nairobi Declaration) in September 2023 pledged to increase Africa's renewable power generation capacity fivefold - from 56GW in 2022 to 300GW by 2030 - to address energy poverty and to bolster the global supply of cost-effective clean energy for industry.

Achieving this target will be no mean feat. Existing renewable energy initiatives will need further support and new initiatives will need establishing:

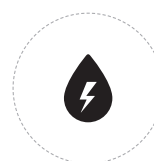
- The Africa Renewable Energy Initiative (AREI): Africa-owned and Africa-led inclusive effort, established under the mandate of the African Union in 2015, to scale up the continent's huge renewable energy potential.
- The Sustainable Energy Fund for Africa (SEFA): established in 2011 by the African Development Bank (AfDB), provides catalytic finance to unlock private sector investments in renewable energy and energy efficiency.
- Desert to Power Initiative: launched by the AfDB in 2021 to increase existing capacity of the eleven countries in the Sahel region by almost 40% and bring electricity access to 90 million people for the first time by 2030.
- Grand Inga Hydropower Project: intended to provide electricity capacity of over 42GW, the project is intended to contribute to the electricity supply for DR Congo and the entire continent.

Regional power pools: a means to address energy security and increase renewable penetration

African countries do not all have the same access to sources of renewable energy. Investment in cross-border transmission energy infrastructure and support for Africa's five independent regional power pools, the Southern African Power Pool, the Eastern Africa Power Pool, the Central African Power Pool, the West African Power Pool, and COMELEC (the North African Power Pool) will be crucial.

The Continental Power Systems Masterplan and the African Single Electricity Market (AfSEM), aim to link these pools together to connect all African countries on a single grid, allowing them to trade energy across borders with lower prices and increased reliability.

Nairobi Declaration Objective: increase Africa's renewable generation capacity fivefold



The Grand Inga Dam could produce twice the power generation capacity of the world's current largest dam, China's Three Gorges



Launched in June 2021, the AU's AfSEM aims to become the world's largest interconnected electricity grid by 2040

Gas, as the least polluting fossil fuel, can bridge the divide between climate and development goals

In the short-to-medium term, renewables alone cannot deliver the reliable low-cost electricity supply that Africa requires to boost resilience i.e. industrialise, grow its economies, and deliver reliable public services such as health and education.

- Wind and solar face intermittency issues, while low or zero-emissions back-up capacity are still a decade away from being available at scale.
- Building roads, rail, housing, hospitals etc. will require cement and steel. Technologies to produce zero-emissions cement or steel are not available at scale.
- Renewable alternatives are yet to penetrate aviation and shipping sectors that are still dependent on fossil fuels.

To achieve resilience and development goals, gas will be needed to complement renewable power generation, without jeopardising climate goals:

- Gas is the least polluting fossil fuel: coal produces almost twice as much CO₂ per million units of energy than gas, while oil produces roughly one third more.

Many African countries have room to increase emissions without jeopardising global climate goals. In as many as 39 African countries, accounting for almost $\frac{3}{4}$ of the continent's population, per capita CO₂ emissions are still safely within the range needed to keep warming to 1.5C.

The Global North, responsible for the bulk of emissions, is keen to tap Africa's gas supplies to reduce dependency on Russian energy. Yet at the same time, Multilateral Development Banks (MDBs), international donors and the private sector are under pressure to avoid downstream investment in Africa's gas industry that would increase energy access on the continent. Such double standards cannot continue. Gas should be treated as a key part of Africa's modern energy mix.

An exemption for IDA countries on gas investment

An exemption on extra carbon-related conditions for projects in the 74 International Development Association (IDA)-eligible countries has been proposed as one possible solution. These countries are least responsible for emissions and gas projects in these countries are likely to have the highest development impact.

CO₂ emissions by fuel: kg emitted per million units of energy



Coal (anthracite):
103.7 kg CO₂



Oil (gasoline):
70.9 kg CO₂



Natural gas:
52.9 kg CO₂

Source: MIF based on United States Energy Information Administration



There are no examples of absolute decoupling of emissions and growth among low-income countries with a population of over 1 million



If we make a list of the top 500 things we need to do to be in line with our climate targets, what Africa does with its gas does not make that list.

Dr Fatih Birol, Executive Director of the IEA

1.3. RESILIENT CITIES AND INFRASTRUCTURE: BUILDING CLIMATE RESILIENCE INTO DEVELOPMENT IS KEY

Development is critical to adaptation and adaptation is also critical to development. Climate resilience must be built into development initiatives and specific adaptation measures adopted to ensure development objectives are not hindered by climate disasters.

- **Invest in early-warning systems:** The floods in Libya, September 2023, were Africa's deadliest floods since 1900. The lack of early warning systems and services cost many lives according to UN groups.
- **Invest in flood defences:** by 2030, an estimated 108-116 million people in Africa will live in low-elevation coastal zones vulnerable to rising sea levels.
- **Invest in climate-resilient infrastructure:** failure to integrate climate change into the planning and design of power and water infrastructure could lead to a 5-60% loss of hydropower revenue in the driest climate scenarios.

Support African adaptation initiatives

Africa Adaptation Acceleration Programme (AAP)

Launched in January 2021, the AAP is a joint initiative of the AfDB and the Global Center on Adaptation (GCA). It aims to mobilise \$25 billion over five years, to scale up new technologies to develop and adapt physical and digital infrastructure to Africa's current and future climate and to train Africa's youth for green jobs and entrepreneurship.


Africa Climate Resilience Investment Facility (AFRI-RES)

AFRI-RES is an Africa-based networked centre of technical competence with an aim to strengthen the capacity of African institutions as well as the private sector to plan, design, and implement infrastructure investments that are resilient to climate variability.

Global Goal on Adaptation (GGA) - Nairobi Declaration calls for more progress

The Nairobi Declaration calls for a 'measurable GGA', with established indicators and targets to assess progress against the negative impacts of climate change.

The concept of a GGA was first established during the 2015 Paris Agreement with the aim of enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change. Following COP26 and COP27 in Glasgow and Sharm el-Sheikh respectively, a work programme to further operationalise and create a framework has been ongoing, though rifts between wealthy and developing countries have stalled progress leaving much to deliberate before COP28.



The UN aims to achieve universal early warning systems by 2027



Invest in climate-resilient cities: Africa's coastal cities face threats from rising seawater and storm surges, and rising groundwater which will turn urban areas into wetlands

Nairobi Declaration Objectives:

- Mainstream adaptation into development policy-making and planning
- Build climate-resilient cities and urban centres
- Strengthen early warning systems and climate information services
- Establish a measurable GGA with indicators and targets to enable assessment of progress

Accelerate investments in data to identify priorities and monitor progress

There are still major data gaps that impede the ability of policymakers to understand the impact of climate change mitigation and adaptation policies.

Without comprehensive and internationally comparable data to monitor progress, it's impossible to know what policies work, and where changes are needed.

Data is a huge untapped potential for governments and donors – as evidenced by an investment case commissioned by the Global Partnership for Sustainable Development Data, investments in strengthening data systems can offer an average rate of return of \$32 of economic benefits for \$1 invested.

Africa has the largest capacity gaps in terms of climate observations and early warning systems

Between 1970 and 2021, Africa accounted for 35% of weather, climate, and water-related fatalities.

Historical and current weather and climate data are essential for the development of early warning systems, research, and efficient policies, while early warning systems ensure that timely and accurate information about natural hazards and impending disasters reaches all vulnerable populations

- Africa has just one-eighth of the minimum density of weather stations recommended by the World Meteorological Organization (WMO).
- As much as 60% of the Africa's population do not have access to early warning systems, the lowest rate of any world region.

Africa's natural assets: no proper assessment

Without proper assessment, the true value of the continent's biodiversity contribution to human wellbeing will continue to be overlooked in global decision-making processes.

Carbon accounting: a lack of granular data hinders sound data

Carbon accounting gives an organisation, sector, country or even an individual an estimate of its carbon footprint. The accuracy of this estimation depends on the comprehensiveness, quality and precision of the greenhouse gas (GHG) emissions and removals data.

A lack of granular data makes the estimates of emissions and removals for land use, land-use change and forestry (LULUCF) more complex and uncertain than in other GHG sectors (e.g. energy, agriculture), because it can be hard to separate the simultaneous natural and man-made emissions from land. Improving the granularity of the data will help more accurately account for emissions.



A new Early Warnings for All Action Plan for Africa was unveiled on the opening day of the Africa Climate Summit in Nairobi, Kenya, September 2023



The US and EU combined have 636 weather radar stations for a population of 788 million, while Africa, with 1.4 billion people, has just 37

Climate data gaps in the 2022 Ibrahim Index of African Governance (IIAG)

The most salient data gaps at source in the 2022 IIAG sub-category *Sustainable Environment* are the following: climate change resilience, climate change mitigation and adaptation policies, sustainable management of marine and freshwater ecosystems, natural resource governance, recycling and waste management.

Priority 2.

Unlock the potential of Africa's green assets: add value locally and focus on governance

Africa's critical green assets can be tapped to make progress on the continent's development agendas, while simultaneously contributing to global climate goals. In order to realise these dual objectives, it is key to move away from the historic extractive growth model, rooted in exporting raw materials.

Local transformation, which will both foster local employment and reduce emissions from carbon-intensive shipping, natural resource governance, as well as global efforts to conserve biodiversity will all be key to tapping the continent's green potential.



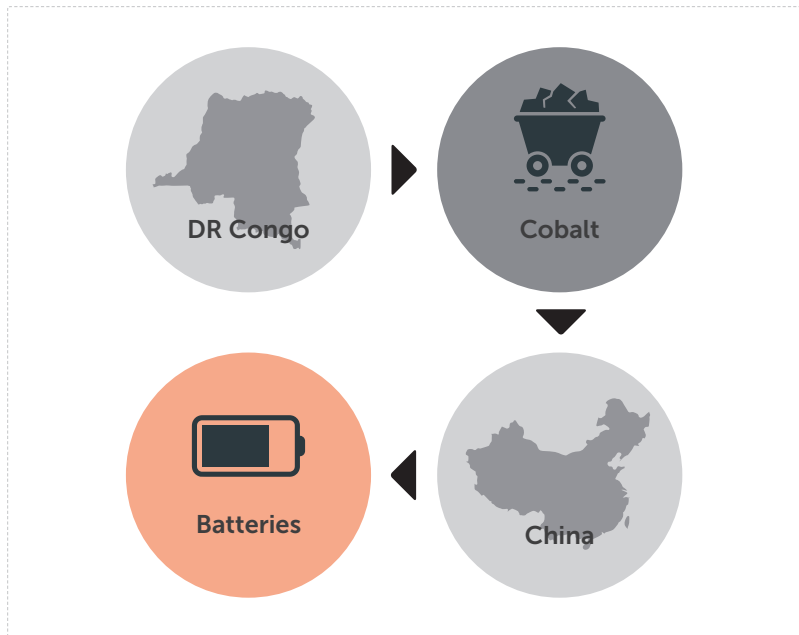
2.1. BUILD GREEN SUPPLY CHAINS LOCALLY TO CREATE JOBS AND REDUCE EMISSIONS

Abandon extractive economic models to get more value from mineral wealth

The extractive sector is capital intensive and creates few jobs when minerals are just transported from pit to port.

Africa will only benefit from its critical minerals if it breaks historic trade patterns and stops primarily exporting unprocessed raw materials and importing manufactured products from outside the continent.

Congolese cobalt underpins China's world leading battery industry



Primary commodities still account for more than $\frac{3}{4}$ of Africa's exports, a far higher share than in any other region

Almost 70% of global cobalt is mined from DR Congo

97.7% of Congolese cobalt is exported to China

Cobalt's primary use is in batteries. China is the number one global exporter of batteries

Source: MIF Based on USGS & Atlas of Economic Complexity

Africa Mining Vision: tapping into Africa's resources in a sustainable way

First adopted in 2009 by the AU heads of state, the Africa Mining Vision (AMV) is the key continental framework to promote mineral resource-based development. The initiative is overseen and coordinated by the African Minerals Development Centre (AMDC) and aims not just to optimise tax revenue from the sector but to integrate it further into developmental policies. Key goals include:

- Knowledge-driven sustainable development which is fully integrated into a single African market.
- Harnessing the potential of diverse stakeholders such as artisanal and small-scale mining communities.
- Optimising Africa's finite mineral resources to become major players in national, continental and international markets.

DR Congo is the world's largest producer of cobalt but is involved in just 1% of refining

Only 24 of the 54 AU member states have begun implementing the AMV

Support regional integration for green growth and value addition

Regional integration can be leveraged to support global climate goals and Africa’s development agendas. At COP28, African countries should encourage investment in continental green supply chains.

The African Continental Free Trade Area (AfCFTA) can build local value chains and cut global emissions

The AfCFTA can support regional supply chains because when African countries trade among themselves, they exchange more manufactured and processed goods, have more knowledge transfer and create more value.

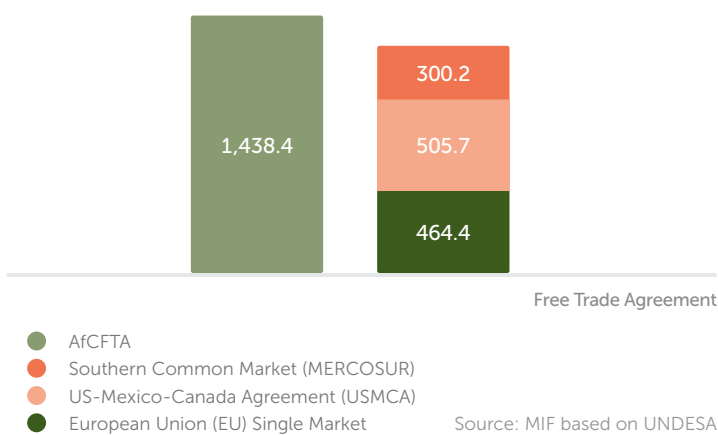
- Manufactured goods make up 40.5% of intra-regional trade in comparison to 17.3% of trade with the rest of the world.

The AfCFTA can also improve climate outcomes by:

- Boosting intra-regional supply chains with fewer transport-based emissions.
- Increasing the potential for regional renewable energy pooling.
- Replacing cash crops for export that degrade the land with more sustainable, local crops for regional food supplies.

Selected Free Trade Agreements: total population covered (2023)

Population (millions)



Only 14.1% of African countries' exports stay within the region, in comparison to 68.5% in Europe and 62.0% in Asia & Oceania

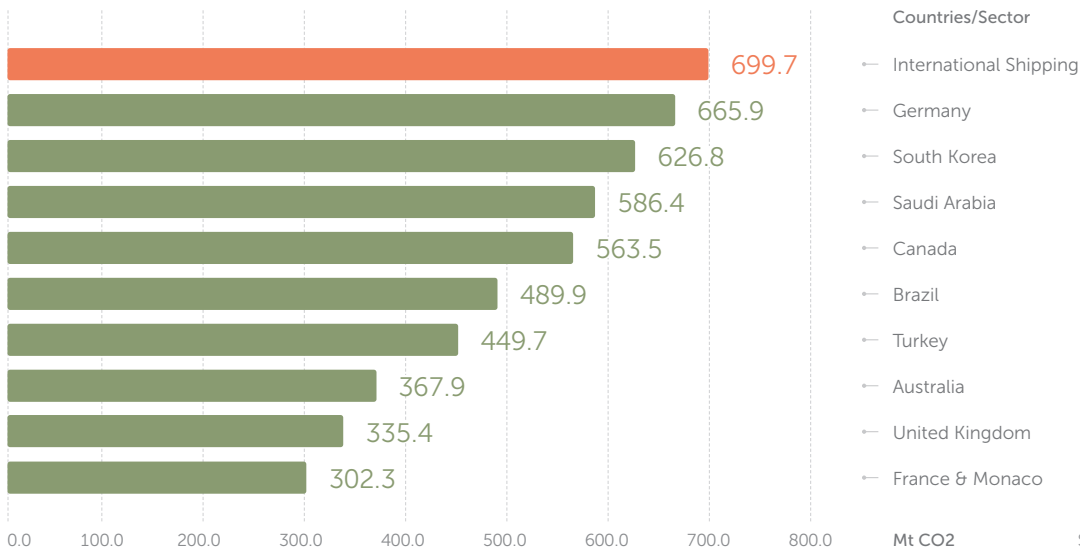
With a potential market of more than 1.4 billion people, the AfCFTA surpasses the EU single market, USMCA and MERCOSUR combined

Nairobi Declaration Objective: advance green growth by accelerating operationalisation of the AfCFTA

International shipping among the biggest emitters

In 2021, international shipping accounted for 1.8% of global energy-related CO₂ emissions, which was more than the emissions of the UK and France combined.

Selected countries & sectors: CO₂ emissions (2021)



Source: MIF based on European Commission

Green industrial policies must be on the agenda

To leverage green minerals for their own development goals, break historic trade patterns, and build green supply chains, it will be key to support green industrial policies on the continent. Many African countries have already introduced such policies. Since 2020, around 42% of sub-Saharan African countries have implemented restrictions on raw exports or Special Economic Zones with regards to transition minerals, including DR Congo, Ghana, Nigeria and Zambia.

- In 2022, Zimbabwe, which has Africa's largest lithium reserves, imposed the Base Minerals Control Act, a ban on raw lithium ore exports to boost local value chains.
- Namibia followed suit in June 2023, banning the bulk export of unprocessed minerals including lithium, graphite and cobalt and insisting on local processing.



Nairobi Declaration
Objective: advance green industrialisation across the continent

Emulating Indonesia: export ban on unprocessed nickel sees 40% increase in FDI

Since 2020, Indonesia has progressively banned the export of nickel ore, requiring nickel to be processed domestically for export to strengthen domestic processing facilities, bring back the added value of nickel supply chains to Indonesia and create jobs. As a result, \$21.6 billion in foreign direct investment (FDI) flowed into Indonesia in the first half of 2022— 40% more than in the same period in 2021.



When Indonesia banned the export of unprocessed nickel in 2020, FDI increased by 40%

Global trade rules need revising to support development and climate goals

Green industrial policies frequently end up at the World Trade Organization (WTO). Rich countries and multilateral institutions need to reconsider their policy positions for African countries to effectively pursue green industrialisation.

The EU has taken Indonesia to the WTO over the ban of raw nickel exports, with the organisation coming down on the side of the EU. The EU has also taken the UK to the WTO and threatened to take action against the US and China for green subsidies. The risk for African countries that pursue green industrial policy is that they too may end up at the WTO.

Global trade rules are not equipped to deal with the climate crisis and need to be updated to reflect the needs of the planet and developing countries.

**Nairobi Declaration
Objective: design
global and regional
trade mechanisms in
a manner that enables
products from Africa
to compete on fair
and equitable terms**

The new race for minerals?

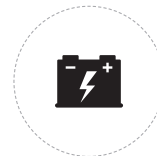
In the wake of the COVID-19 pandemic and Russia's invasion of Ukraine, the EU and US are reassessing their raw materials supply chains to find alternatives to Russian gas and reduce their dependence on China, a major supplier of green and digital technologies globally. Africa's large critical mineral reserves make the continent a new strategic battleground.

The global 'race for raw materials' has raised concerns about the possibility of a new form of economic colonisation - green colonialism - that could reinforce dependencies and existing global inequalities.

However, the new geopolitics of mineral supply chains also opens a 'window of opportunity' for African states to reduce their dependencies, support sustainable industrialisation and drive structural transformation. To prevent exploitation and avoid a race to the bottom with social and environmental harms, regional alliances can be formed to establish fair trade agreements and strong regulations that protect the environment and workers' rights and ensure that the economic benefits of these investments reach local communities.



**Africa's large critical
mineral reserves make
the continent a new
strategic battleground**



**In December 2022,
the US signed an MoU
with DR Congo and
Zambia to cooperate
on fostering African
electric vehicle battery
supply chains**

2.2. RESPONSIBLE RESOURCE GOVERNANCE NEEDED TO AVOID THE SO-CALLED 'RESOURCE CURSE' WITH TRANSITION MINERALS

Resource wealth can cause environmental damage, conflict and corruption

Often, resource wealth has proved to be detrimental to development goals, leading to the so-called 'resource curse'. Research has identified a strong tendency for resource-rich countries to be more prone to:

- Democratic deficits
- Conflict
- Unstable public revenues
- Dutch disease*
- Environmental problems
- Weaker institutional development

Strong governance frameworks needed by all actors involved in extractive sector to avoid 'resource curse'

Strong governance at the national level, as demonstrated by countries such as Botswana, is key. But crucially, governments and companies all need to participate in the enforcement of strong governance frameworks and regulations for the extractive industry.

The impact of international mining operations in transition minerals is already being seen across some African countries, most notably in DR Congo.

If both Africa and the world are to benefit from the continent's transition minerals, then stronger governance and due diligence will be needed in international supply chains – not just in the country of operations.

International compliance initiatives to improve practices

Extractive Industries Transparency Initiative (EITI): the EITI is a multistakeholder initiative seeking to promote open and accountable management of natural resources. EITI has been implemented in almost 60 countries across the world and 28 African countries and by many multinational mining companies.

OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas: this framework intends to help companies cultivate transparent mineral supply chains, respect human rights and avoid contributing to conflict through their mineral sourcing practices, thereby enabling countries to benefit from their mineral resources.

International Council for Mining and Metals (ICMM): the ICMM sets requirements company members must adhere to for good environmental, social and governance mining practices. Key performance measures include ethical business, decision making, human rights, risk management, health & safety and conservation of biodiversity.



Mining companies and extractive industries in Africa are responsible for 65% of tax fraud



According to anti-corruption group Congo is Not for Sale, DR Congo could lose out on over \$1.7 billion in mining royalties from reportedly corrupt copper and cobalt mining deals, equivalent to almost 1/5 of government revenues in 2023



40,000 children work as artisanal miners in southern DR Congo, many of them in cobalt mines

* When a large increase in natural resource revenues hurts other sectors of the economy by causing exchange rate appreciation and diverting human and financial resources away from non-resource sectors.

2.3. COMPENSATION FOR CONSERVATION: PRESERVATION OF AFRICA’S FORESTS IS A GLOBAL RESPONSIBILITY

Congo Basin at risk of becoming a carbon source rather than a sink

Deforestation can turn carbon sinks into carbon sources. When forests are cut down, they stop sequestering carbon, but they also release the carbon they have stored into the atmosphere.

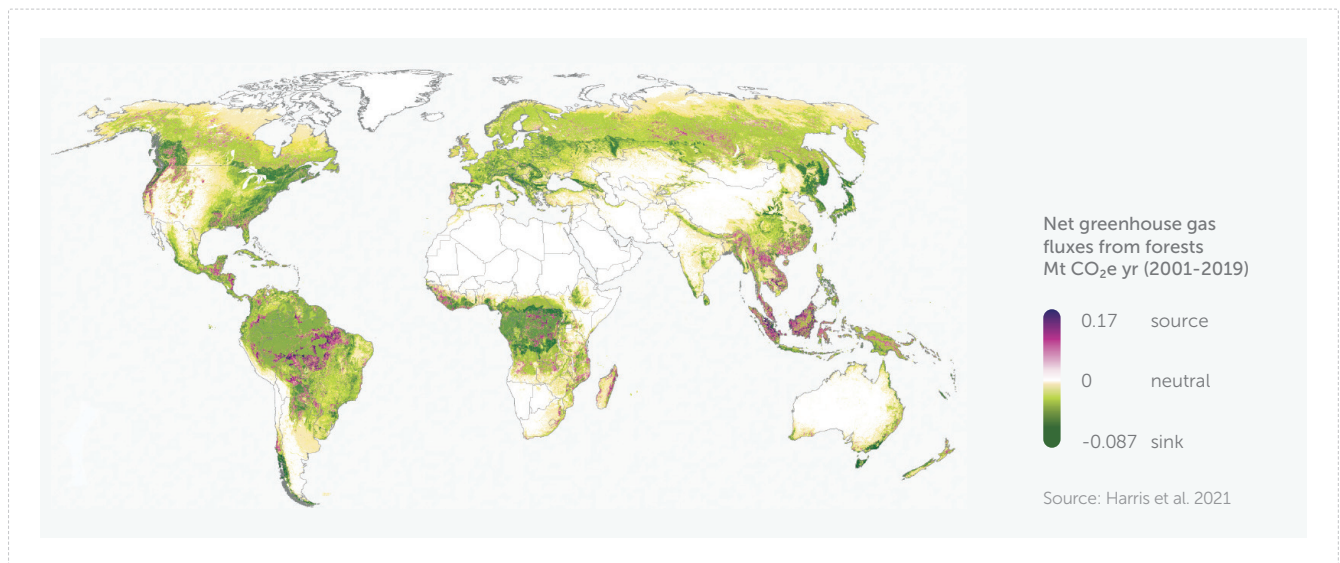
The Congo Basin has lost over 22 million hectares of forest cover since 2000 – equivalent to over 30 million football pitches.

If this trend continues Africa’s forests could become a net carbon source rather than a carbon sink, like the rainforests of Southeast Asia.



Africa has lost almost 10% of its tree cover since 2000

Forests: carbon sinks or carbon sources?



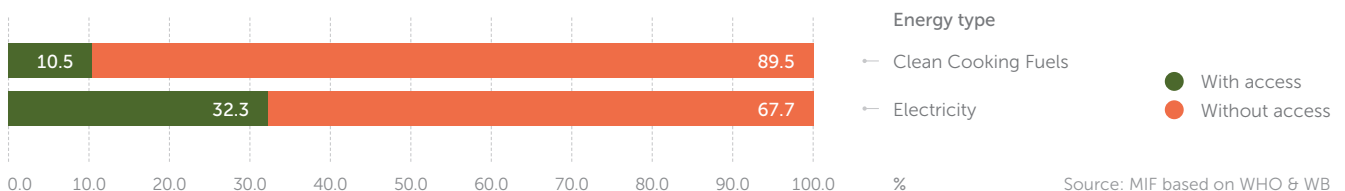
Addressing energy security key to forest conservation

Energy demand is one of the key drivers of deforestation.

- In the Congo Basin countries over two-thirds of the population lack access to electricity or clean cooking fuels.
- The number of people using biomass as their primary cooking fuel has increased by over 45% in Congo Basin countries since the year 2000.

By improving access to clean sources of domestic energy, such as electricity or gas, and investing in low-carbon agriculture, deforestation pressures can be reduced.

Congo Basin countries: share of population with access to electricity and clean cooking fuels (2021)



Global South countries calling for global efforts to conserve rainforests

With the Congo Basin producing crucial global ecosystem services, it is a global responsibility to protect it. COP28 must build upon the Three Basin Summits and establish global mechanisms to support forest conservation and compensate countries and communities for their efforts and the opportunity cost of conservation.

Three Basins Summit – Brazzaville, Congo Republic (26th–28th October): leaders call for remuneration for ecosystem services

The second Three Basins Summit brought together leaders from the Amazon, Congo and Borneo-Mekong-Southeast Asia regions. These regions alone account for 80% of the world's tropical forests and two-thirds of terrestrial biodiversity, playing an essential role in regulating the carbon balance.

Leaders signed a declaration that called for the establishment of innovative financing mechanisms for biodiversity conservation and the establishment of a sustainable system of remuneration for the ecosystem services provided by the three basins.

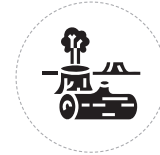
On the sidelines of the summit, Congo Republic established a partnership with the EU that aims to increase its sustainably managed forests, create more forest-related jobs and curb the rate of forest loss by 2030.

The Summit of the Amazon Cooperation Treaty Organisation (ACTO)

The Brazzaville Summit builds on the ACTO Summit in August 2023, where 12 rainforest nations collectively called for global financial mechanisms to provide compensation for the essential services provided by rainforests. They also urged developed countries to meet the commitment at the 15th United Nations Biodiversity Conference to mobilise \$200 billion per year for biodiversity preservation.



Gabon was the 1st African country to receive payment for reducing deforestation, receiving over \$17 million from the UN-backed Central African Forest Initiative



The Congo Basin has lost over 22 million hectares of forest cover since 2000 – equivalent to over 30 million football pitches

Nairobi Declaration Objectives:

- Recognise that Africa's vast forests, especially the Congo Basin rainforest, are the largest carbon sinks globally
- Properly measure Africa's natural capital wealth by recognising its contribution to reducing global carbon emissions
- Strengthen actions to halt and reverse biodiversity loss, deforestation and desertification

Local communities must be at the heart of leveraging Africa's green assets

Africa's green assets can only be leveraged effectively if local communities situated near those green assets are at the heart of these efforts. Top-down green investments and climate projects have at times had adverse impacts on the local population.

- Reforestation and conservation initiatives have caused loss of income for indigenous communities.
- Cobalt mining in DR Congo is causing pollution of local water systems and increased prevalence of disease among local populations.
- Green hydrogen has diminished local water supplies in drought-stricken areas in Northern Africa.

By putting local communities at the centre and taking a bottom-up approach, green initiatives can bring local opportunities and local support.

- Local communities must be consulted on and benefit from renewable energy projects and mining activities.
- Action must be taken to mitigate impacts on the local environment.



 In DR Congo, almost 1/3 of carbon is managed by indigenous and local communities

Nairobi Declaration Objectives:

- Support smallholder farmers, indigenous peoples and local communities in the green economic transition, given their key role in ecosystems stewardship
- Embrace indigenous knowledge and citizen science in both adaptation strategies and early warning systems
- Incentivise global investment to locations that offer the most substantial climate benefits, while ensuring benefits for local communities

Incorporating local and indigenous knowledge is key to a holistic climate response

In Africa, the vast amount of indigenous and local knowledge is a key resource for enhancing sustainability and climate adaptation. Across Africa, communities for a long time relied on this knowledge to cope with climate variability and reduce vulnerability. For example, pastoralists and herders might use up to more than a thousand different indicators for weather forecasting, such as the behaviour of trees, insects and other animals. Research suggests that local and indigenous knowledge could be more effective at reducing climate risks than other knowledge types.

Priority 3.

Break the
debt-climate
nexus and
grow Africa's
domestic
revenues

Limited domestic revenues force African countries to turn to external borrowing to fund development goals, either at punitive interest rates from the private sector, with burdensome policy conditions from MDBs, or reinforced dependency from bilateral partners.

At the same time, illicit financial flows and capital flight continue to bleed the continent of resources. Ever more costly debt servicing triggers a further drain of resources from the continent and subsequently prevents the investment needed to generate climate resilience. Reforming the global financial architecture, breaking the debt-climate nexus and boosting Africa's revenues is critical to reconciling climate and development.



3.1. STRUCTURAL DEBT CHALLENGES CREATE A VICIOUS DEBT-CLIMATE CYCLE

African governments have limited fiscal revenues

Pursuing global climate goals and national development agendas is a costly process. African governments have far less revenue at their disposal to achieve these goals than in other regions.

- In 2023, German government revenues (\$2056.8 billion) were more than three times the total for every African country combined (\$580.4 billion).
- If South Africa's revenues (\$102.1 billion) are excluded, the remaining countries (\$478.3 billion) have roughly the same government revenues as the Netherlands (\$471.6 billion).

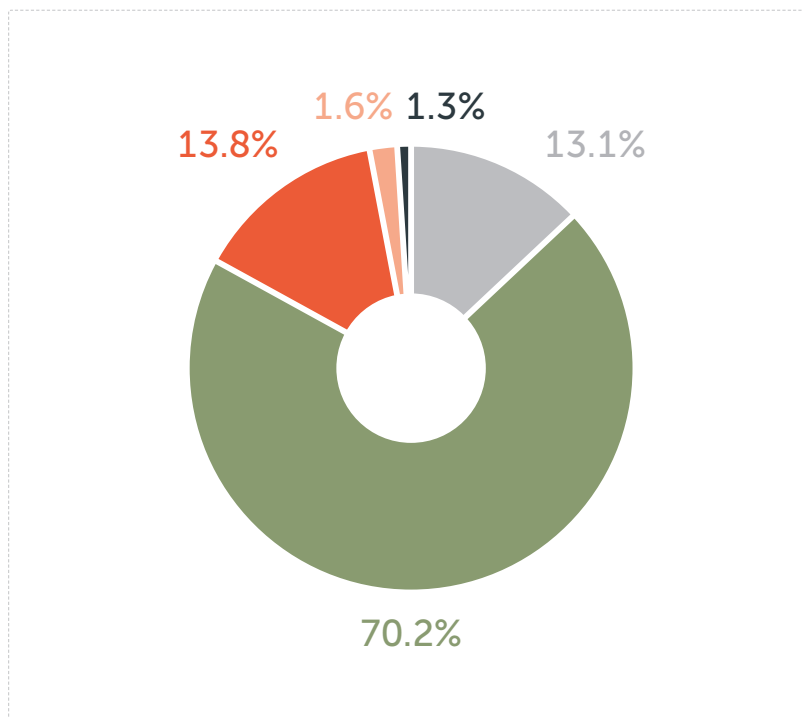
This leaves many reliant on external sources of income, often from loans or other financial mechanisms with conditions that undermine domestic policies, national sovereignty and development agendas, while reinforcing external dependency.

African countries are forced to borrow on unfavourable terms

African countries that turn to the market usually find themselves borrowing on unfavourable terms, with exorbitant interest rates, and primarily in foreign currencies that carry exchange rate risks.

- As of October 2023, bond yields were over 10% in at least seven African countries: South Africa (10.8%), Namibia (11.0%), Nigeria (15.0%), Uganda (15.9%), Kenya (16.7%), Egypt (25.6%), and Zambia (26.6%). No European country had yields over 10%.
- 31 African countries have more than 50% of their public external debt denominated in US dollars. In contrast, in the UK (£), China (CN¥), Canada (C\$), and the US (US\$) over 98% of central government debt is denominated in the local currency.

Africa: currency of public external debt (2021)



Excluding South Africa, the combined revenues for all other African governments in 2023 (\$478.3 billion) are roughly equivalent to those of the Netherlands (\$471.6 billion)

Over 70% of Africa's public external debt is US dollar-denominated

Currency

- Other/multiple currencies
- US dollar (\$)
- Euro (€)
- Japanese Yen (¥)
- SDR

Source: MIF based on World Bank

Inadequate risk assessments cost Africa billions

Of the 32 African countries with a sovereign credit rating, only Botswana and Mauritius are deemed 'investment grade'. With a lack of relevant data and presence in Africa, questions have been raised about the accuracy and fairness of these ratings.

- UNDP estimates the full cost of credit rating idiosyncrasies in Africa to be \$74.5 billion in excess interest and foregone funding – equivalent to 80% of Africa’s annual infrastructure investment needs.
- Of the 'big 3' rating agencies - Fitch, Moody's and S&P - only Moody's and S&P have offices in Africa, both in South Africa.

Sovereign rating agencies need to acknowledge the weaknesses in their institutional structures by having more analysts in Africa to curb challenges of foreign-based assessments.

The African Union (AU) is moving forward through the African Peer Review Mechanism (APRM) with a plan to establish an African Credit Rating Agency as an independent entity to provide alternative and complementary rating opinions for the continent.

Only 2 African countries - Botswana and Mauritius - are rated as 'investment grade' by the main ratings agencies

Credit rating idiosyncrasies cost Africa \$74.5 billion - more than 2.5 times Africa's annual climate finance (\$29.5 billion) over 2019/2020

Despite debt not being uniquely high, unfavourable terms leave many African countries in debt distress

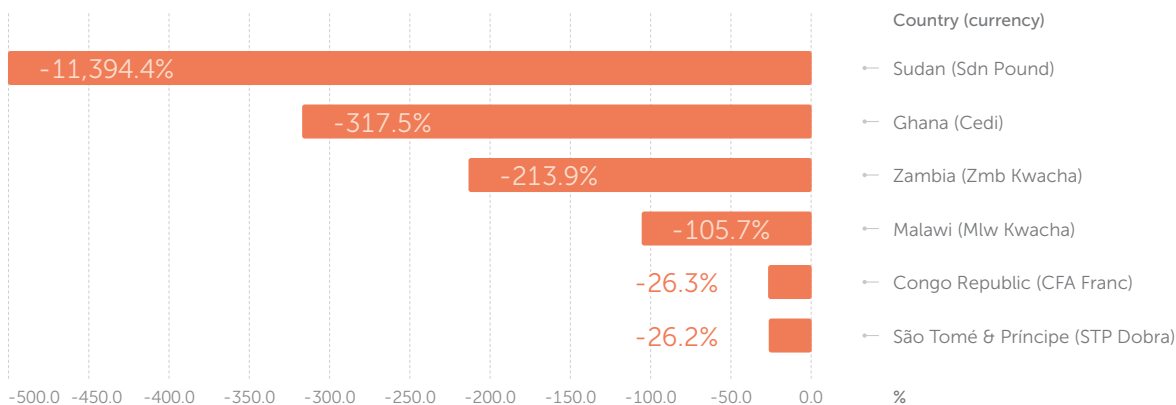
In absolute terms Africa's public debt is lower than any other world region and does not stand out as being uniquely high when adjusted for GDP. Yet eight of the ten countries listed by the IMF as being in 'debt-distress' in 2023 are African. This is due to the unfavourable borrowing terms.

- Foreign currency debt has become more expensive as African currencies devalued, often due to external crises or fluctuations in global markets outside of government control.
- Hikes in central bank interest rates in the Global North have also seen the already high cost of borrowing increase.

Africa accounts for less than 2.0% of global public debt in 2023

49 African countries have lower public debt-to-GDP ratios than the US (122.2%) in 2023

African countries in debt distress: loss in currency value relative to the \$ (2013-2022)



Note: Somalia and Zimbabwe not included due to data gaps. Latest data year for Malawi is 2020.

Source: MIF based on World Bank

Climate vulnerable countries locked in a vicious debt-climate cycle

This problem is particularly acute for climate-vulnerable countries, who are locked in a debt-climate cycle.

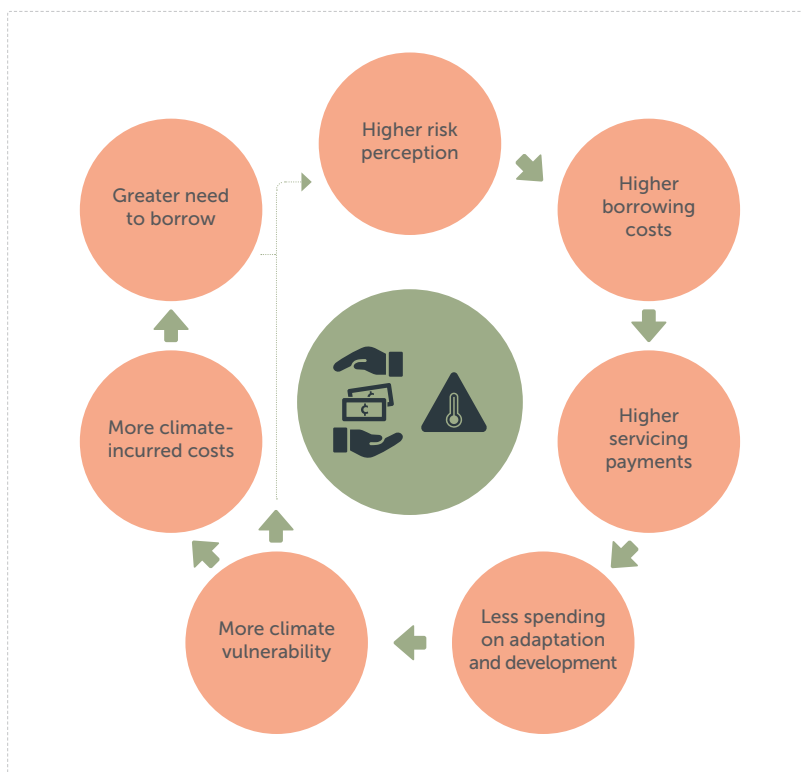
Debt servicing costs eat into already limited revenues, leaving governments unable to meet daily costs, let alone fund national development agendas, or build adaptation and resilience.

- Across the 49 African countries with data, external debt servicing costs in 2023 equated to 14.0% of revenue. In 13 countries it was over one-fifth. By comparison, debt servicing costs in the US equate to 6.8% of revenue.
- Low-income countries are spending over five times more on external debt payments than on adaptation.

When climate disasters hit, they are more costly, and countries are forced to take on more debt to cover their costs.

This is particularly unjust given that much of the debt is being paid to the biggest historic polluters.

The vicious debt-climate cycle: higher borrowing costs mean low resilience, lower resilience means higher borrowing costs



Between 2010 and 2021, external debt servicing costs for governments grew at over 60 times the pace of average fiscal revenues

Since 2010, all but 2 African currencies have lost value against the US dollar, increasing the size of dollar-denominated debt

Over 60% of debt service payments in Somalia, the world's most climate vulnerable country, go to the US, the world's biggest historic polluter

Nairobi Declaration Objectives:

- Adopt principles of responsible sovereign lending and accountability encompassing credit rating, risk analysis and debt sustainability assessment frameworks and urge the financial markets to commit to eliminate this disparity by 2025
- Improve debt management through the inclusion of 'debt pause clauses'

3.2. BREAKING THE CYCLE MEANS BOOSTING REVENUES: NEW SDRS, A GLOBAL CARBON TAX, AND GLOBAL ACTION ON IFFS

For African countries, borrowing more for global climate goals risks undermining their own climate resilience. To break the debt-climate nexus, Africa needs:

- Improved government revenues that leverage domestic resources.
- More grant and concessional finance from international donors.
- A fairer global financial architecture, that enables African countries to pursue their development goals.

Breaking the cycle means boosting domestic revenues

Ultimately, to be able to take on more debt sustainably and to increase ownership and autonomy over their climate and development goals, African countries need to boost domestic revenues.

Boosting revenues will mean bold action to tackle key issues, often requiring cooperation with international partners. Key reasons for African governments' low revenues include:

- Illicit Financial Flows (IFFs) – capital flight via illegal channels such as the misappropriation of public funds invested into assets abroad by corrupt officials or trade mis-invoicing. The United Nations Conference on Trade and Development (UNCTAD) estimates \$88.6 billion leaves the continent annually as illicit capital flight, over eight times the continent's annual finance for adaptation.
- Capital flight – assets and capital legally move from one country to another, often from developing countries into more advanced economies. UNCTAD estimates that curbing capital flight could generate enough capital by 2030 to finance almost 50% of the \$2.4 trillion needed for climate change adaptation and mitigation measures.
- Informal economies - the informal economy contributes between 25-65% of GDP in sub-Saharan Africa. However, it tends to contain relatively low productivity activities, that are difficult to tax and regulate.
- Weak tax systems - Africa has a low tax capacity with the Africa Tax Administration Forum reporting an average tax-to-GDP ratio of 15.6% in 2021, compared to 34.1% in the Organisation for Economic Cooperation and Development (OECD). This is due to inefficiencies in revenue collection and tax policy.
- Race to the bottom - African governments have lowered corporate tax rates to attract investment, though there is little evidence of the strategy's impact. As of 2022, the African average corporate tax rate is 28.0%, in comparison to 44.3% in 1980.

Nairobi Declaration Objective:
the development of a new Global Climate Finance Charter through UNGA and COP processes by 2025

Almost \$90 billion leaves Africa annually as IFFs, over 8 times the continent's annual adaptation finance inflows

Africa's average tax-to-GDP ratio in 2021 was 15.6%, in comparison to 34.1% in the OECD

Make the polluter pay: a global carbon tax to boost revenues and cut global emissions

Bold new policies such as a global carbon tax or tariff regime can also play a key role. The Nairobi Declaration calls for a global carbon tax on fossil fuel trade, shipping and aviation. However, no concrete proposals have been made as to how this would function in practice.

At COP28, progress is needed on a global carbon tax proposal. African countries must choose a model to rally around to prevent models unfavourable for the continent being imposed upon them.


International carbon taxes or carbon tax proposals

Scheme	How it works?
EU Emissions Trading Scheme (ETS)	The EU ETS works with an annual cap on the total amount of greenhouse gases that can be emitted by the operators, who then buy or receive emissions allowances, which they can trade with one another.
EU Carbon Border Adjustment Mechanism (CBAM)	The CBAM works by imposing a tariff on carbon-intensive products being exported into the EU single market, to prevent the risk of carbon leakage and to encourage trade partners to adopt green practices.
IMF International Carbon Price Floor	The largest emitters would unilaterally agree a price floor and then expand this out to other countries with two or three different price levels that vary according to accepted measures of a country's development.
UNITAID tax on air tariffs	A surcharge on airline tickets depending on destination and class of travel. The money raised then directly funds UNITAID, which purchases drugs to treat AIDS, malaria and tuberculosis.
A global levy on petrostates windfall profits	Large oil-producing countries would pay a small percentage of the windfall profits they have made in recent years to help with climate mitigation and development.
Paris Summit proposal for a levy on shipping	A levy would be placed on international shipping. The International Maritime Organisation explored a levy of up to \$100 per tonne of CO ₂ , which could raise between \$50-60 billion per year.

However, not all these models and proposals work favourably for Africa.

- Carbon border adjustments such as the EU CBAM have been critiqued for damaging the competitiveness of African industrial exports and provide administrative hurdles for African countries in gaining market access.
- A global levy on oil-producing countries could adversely hit countries like Nigeria and Angola, already facing revenue pressures.
- A global levy on shipping could raise prices in Africa in the short term, with 85.8% of imports coming from outside the continent.

Nairobi Declaration Objective: consider the proposal for a global carbon taxation regime, including a carbon tax on fossil fuel trade, maritime transport and aviation

 **The EU's CBAM could reduce Africa's GDP by 0.9%, equivalent to a decline of \$25 billion at 2021 levels, while only reducing global emissions by a maximum 0.16%**

South Africa's carbon tax: a slow but steady start

South Africa's Carbon Tax Act of 2019 has been imposed on entities that generate emissions at a capacity equal to or above the designated carbon tax threshold. In total, 37.8% of emissions in South Africa were subject to a carbon tax in 2021, up from 13.1% in 2018. The carbon tax is being implemented in three phases, however the government has extended the first phase until December 2025, meaning sectors such as agriculture and forestry will avoid the tax for now.

Carbon credit markets: still a flawed solution

A carbon credit is a token representing the avoidance or removal of greenhouse gas emissions, measured in tonnes of carbon dioxide equivalent (TCO₂e).

It has been suggested carbon credit markets can facilitate the protection of critical ecosystems such as the Congo Basin and provide a valuable source of climate finance to the continent.

However, the idea of carbon credits is not new and to date it has yet to deliver significant income to Africa, while providing limited environmental benefits. The concept has faced criticism from Civil Society Organisations (CSOs) as being inherently flawed:

- In practice, carbon markets act as pollution permits and shift focus away from the critical need to reduce emissions.
- Fossil fuel emissions are not interchangeable with carbon temporarily stored in biological systems that is released when trees burn, or land degrades.
- Africa's voluntary carbon markets are unregulated and there is an incentive to overstate avoided emissions and for 'carbon cowboys' to capture most of the value.
- Nature commodification shifts power away from local communities and risks undermining land rights and food security.
- Double counting can result from reduced emissions being counted where they take place and by the country/company that purchased the offset.

If carbon markets are to be effectively leveraged to protect Africa's critical ecosystems and build revenues it would require:

1. A globally standardised, transparent and accountable carbon credit trading system.
2. A minimum price floor to provide African countries with a fair price.
3. Building capacity in carbon accounting.

An Emissions Inefficiency Tariff (EIT) on those most responsible for the climate crisis

A global carbon tax would penalise current emissions only. But elevated global temperatures reflect historic emissions. Accordingly, unlike a carbon tax, an EIT would place the burden of addressing global warming on those responsible for the stock of emissions—thus respecting the 'polluter pays' principle and boosting Africa's development agendas.




All but the OECD and the biggest emerging country emitters would be freed entirely of emissions targets through 2050. These two blocs—overwhelmingly responsible for the global stock of emissions—would have to target net recapture from the 2040s rather than net-zero from 2050. They would be given collective annual emissions efficiency targets (CO₂ to GDP ratio). If they fail to meet these targets, the three worst offenders from each bloc would be subject to heavy tariffs, which all other countries could levy on the offenders' exports and use to finance development goals.

Why might this model be best for Africa?

1. It will provide Africa with multiple new revenue streams without adding to the debt burden.
2. It is more 'just' than a carbon tax – the biggest historic polluters take on the biggest burden.
3. The tariff can be enforced on the exports of liable countries without their agreement.
4. African countries will not be liable to pay, except for potentially Egypt and South Africa.
5. African countries' development pathways will be unconstrained by global emissions targets, leaving them free to utilise gas reserves without penalty.
6. Can unite Africa's fossil fuel exporters with Africa's renewable rich countries, as well as 'greening economies' in the Global North.
7. The emissions targets create one key reference figure to hold governments accountable.
8. The structure establishes a global enforcement mechanism to ensure that global temperature targets are met—minimising the warming damage to the continent.

New financing proposals: some promise but over-reliant on debt based mechanisms

Climate Finance was the buzzword at the Africa Climate Summit and is set to be a critical issue at COP28. Several innovative financing options are being explored – but ultimately, these cannot provide a long-term solution while adding to the debt burden.

Green Finance Mechanism	How it Works	Cons
Debt-for-Climate Swaps 	A portion of a country's debt is refinanced at a lower interest rate to free up and earmark funds for green projects.	Often small-scale and conducted without second- or third-party inspection. The mechanism impinges on sovereignty and does not reduce the overall debt stock.
Green Bonds 	Bond instrument where the proceeds will exclusively finance, in part or in full, new and/or existing eligible green projects.	The lack of regulation can lead to 'greenwashing'. The bonds also add to the existing national debt stock and debt servicing costs.
Special Drawing Rights (SDR) Reallocation 	The IMF set up a new fund – the Resilience and Sustainability Trust (RST) to 'recycle' SDRs from high-income countries, who received excess SDRs during the 2021 issuance to low-income and middle-income countries.	Despite the ambition and several announced pledges, the actual reallocation of SDRs remains limited. Additionally, while new SDRs are a liquidity source for low-income countries during crises, reallocation through the RST would add to the debt burden and require borrowing countries to take on burdensome conditionalities.

What are SDRs and who gets them?

SDRs are international reserve assets issued by the IMF that function as a medium of exchange between states, central banks and MDBs. They can be traded for any of five currencies, widely used for payments in international transactions: Chinese Renminbi (¥), Euro (€), Japanese Yen (¥), Pound Sterling (£), US Dollar (\$).

New SDRs are allocated to nation states based on a country's IMF quota, meaning most go to the wealthiest countries. In August 2021, the IMF approved \$650 billion worth to address the COVID crisis.

In October 2021, the G20 committed to mobilising \$100 billion in SDRs for reallocation

Nairobi Declaration Objectives:

- Re-channelling of at least \$100 billion of SDRs to Africa, through institutions such as the AfDB
- Consider a new issuance of SDRs for the climate crisis of at least the same magnitude as for COVID-19 (\$650 billion)

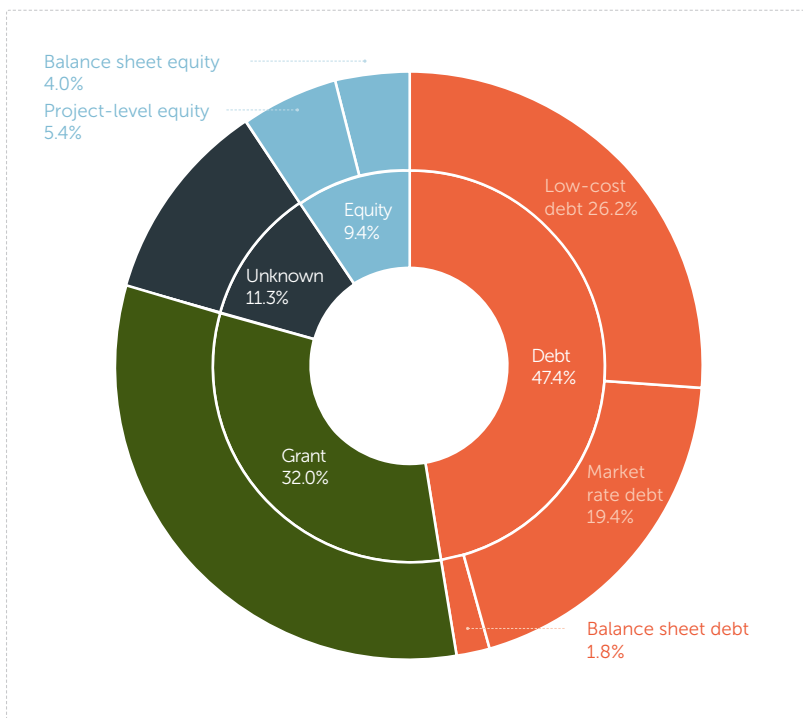
At the Paris Summit for a New Global Financial Pact in June 2023, the IMF claimed the \$100 billion in re-allocated SDRs had been made available for on-lending. The next step is delivering these to African institutions and governments

3.3. DELIVER ON EXISTING CLIMATE FINANCE PLEDGES - WITHOUT ADDING TO DEBT BURDEN

However, this does not mean that developed countries who have polluted the most can shirk their responsibilities. At COP15 in Copenhagen, wealthy nations made a pledge to commit \$100 billion a year to developing nations by 2020, to help them adapt to climate change and mitigate further rises in temperature. Preliminary OECD data suggest that this target has only been met once in 2022.

Even then, almost half of climate finance to sub-Saharan Africa (47.4%) over 2019 and 2020 was debt, with almost one fifth (19.4%) at market rates. Going forward developed countries must ensure climate pledges are met on time, without adding to the debt burden. The \$100 billion target must be consistently met and shortfalls of previous years accounted for.

Sub-Saharan Africa: climate finance by financing instrument (2019/2020)



In 2020 and 2021 wealthy countries delivered just \$83.0 billion and \$89.6 billion respectively to developing countries in climate finance - a shortfall of almost \$30 billion over two years

44.9% of bilateral climate finance to sub-Saharan Africa was project-level debt over 2019/2020, in comparison to just 5.4% in grant format

- Debt
- Grant
- Unknown
- Equity

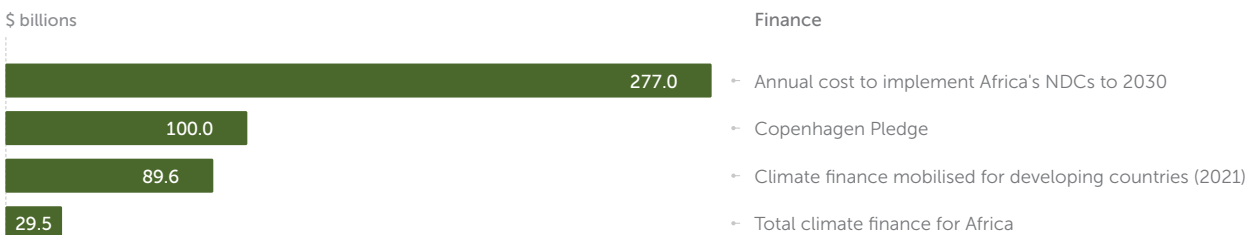
Source: MIF based on Climate Policy Initiative

Even if realised, pledges would be insufficient

Implementing the nationally determined contributions (NDCs) for Africa alone requires \$277 billion per year to 2030 – over 2.5 times the Copenhagen pledge.

Africa: annual climate finance needs vs annual climate finance mobilised (latest data year)

Source: MIF based on Climate Policy Initiative & OECD



Loss & Damage (L&D) Fund: outstanding questions must be resolved at COP28

Climate-related loss and damage has been and continues to be a drain on Africa's resources, diverting critical revenues away from development agendas.

A dedicated L&D fund had been long overdue for vulnerable countries and the decision at COP27 to finally establish the fund is welcome. However, there is still a lack of clarity on the structure and financing of the fund that will need to be resolved at COP28:

- **Who will contribute?** Should the contributing nations base be broadened by including high emitting countries like China and India? The EU is among those who have called for China to contribute to the fund, while the Alliance of Small Island States (AOSIS) called for India to contribute.
- **Who should receive funding?** The COP27 agreement is not specific about who will receive funds. The G77 and China bloc are in favour of all developing countries, the EU is in favour of only particularly vulnerable developing countries.
- **How will the fund be structured?** Some have suggested a mosaic funding source be organised rather than one central fund. However, critics argue this would cause further delays and that this is not suitable for L&D.
- **What are the focus areas of the fund?** Countries such as the US want the fund to focus on slow onset disasters and non-economic losses. Climate justice campaigners argue for the fund to deal with the humanitarian response to climate disasters.

Climate damages equate to lost revenues and resources that African countries can no longer use to pursue their development goals.

Establishing an L&D fund is not an issue of charity. It is about damages and reimbursing countries who have lost their own resources due to the emissions of others.

Big polluters can curtail loss and damage by cutting emissions

Going forward, curtailing loss and damage will require that the biggest polluters bring their emissions down to a sustainable level.

Current NDCs would see warming of 2.4°C above pre-industrial levels. Even a temporary overshoot of the 1.5°C target could see irreversible thresholds crossed that further worsen L&D. At COP28, it is crucial that we see big action from the big polluters.

Research suggests that GDP per capita is 13.6% lower across Africa than it would have been without global warming from 1991-2010

L&D costs could equate to up to \$440.5 billion between 2020 and 2030

If emissions are not reduced, warming could see economic growth in Africa reduced by 20% by 2050 and 64% by 2100

Nairobi Declaration Objective: operationalise the L&D Fund as agreed at COP27

COP28: another milestone to transform the global financial system?

COP28 comes in a year where calls for a transformed multilateral system have been growing. Africa, and the Global South more broadly, have made their voices heard. This has resulted in several key milestones being reached at numerous global summits, including the Africa Climate Summit, that pave the way for a more just multilateral and global financial system, fit for the challenges of the 21st century. But there is still more to be done and COP28 is an opportunity to build on this momentum.

The Paris Summit on a New Global Financing Pact (22-23 June 2023, Paris, France):

- A pledge to create a \$100 billion climate finance fund comprised of IMF SDRs was finalised.
- The World Bank announced the launch of a 'catastrophe toolkit' that would include climate insurance and debt repayment pauses following extreme climate events.

BRICS Summit (22-24 August 2023, Johannesburg, South Africa):

- The BRICS group was expanded to include two new African countries and six new members overall – Argentina, Egypt, Ethiopia, Iran, Saudi Arabia, and the United Arab Emirates.
- The BRICS New Development Bank pledged that 30% of everything the bank lends will be in local currency.

G20 Summit (9-10 September 2023, New Delhi, India):

- The G20 became the G21 as the African Union was made a permanent member of the group.

IMF/World Bank Annual Meetings (9-15 October 2023, Marrakech, Morocco):

- The IMF announced the appointment of a third executive board seat for Africa within their respective institutions.

Africa High-level Working Group pushing for further reform of global financial architecture

On the sidelines of the 2023 IMF/WB Annual Meetings, the Africa High-level Working Group, made up of African finance ministers and AU, AfDB, IMF, and WB representatives, advocated for significant reforms within the Bretton Woods institutions during a UNECA side meeting. The IMF reforms they proposed encompassed increased liquidity access, enhanced resource mobilisation for the Resilience and Sustainability Trust, suspension of IMF surcharges, SDR system reform to allow channelling into MDBs, and improvements in the Common Framework for debt restructuring.

Additionally, the World Bank reforms proposed emphasised the need to increase financing for infrastructure and regional integration, reduce transaction costs, foster collaboration with other MDBs, and expand guarantees to lower borrowing expenses.

The Bridgetown Initiative, proposed in June 2022 and spearheaded by Prime Minister of Barbados Mia Mottley, has gained increasing traction. The Initiative calls for MDBs to better leverage their balance sheets, for climate and pandemic debt suspension clauses, and for the creation of a global mitigation trust seeded with SDRs.

Africa's unique climate context

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AAAP	Africa Adaptation Acceleration Programme	MDB	Multilateral Development Bank
ACS	Africa Climate Summit	MERCOSUR	Southern Common Market (Mercado Común del Sur)
ACTO	Amazon Cooperative Treaty Organisation	NDC	Nationally Determined Contribution
AfCFTA	African Continental Free Trade Area	OECD	Organisation for Economic Co-operation and Development
AfDB	African Development Bank	PA	Paris Agreement
AFRI-RES	Africa Climate Resilience Investment Facility	RST	Resilience and Sustainability Trust
AFSA	Alliance for Food Sovereignty in Africa	SDG	Sustainable Development Goal
AfSEM	African Single Electricity Market	SDR	Special Drawing Rights
AMDC	African Minerals Development Centre	SEFA	Sustainable Energy Fund for Africa
AMV	Africa Mining Vision	UNCTAD	United Nations Conference on Trade and Development
AOSIS	Alliance of Small Island States	UNDESA	United Nations Department of Economic and Social Affairs
APRM	African Peer Review Mechanism	UNDP	United Nations Development Programme
AREI	Africa Renewable Energy Initiative	UNGA	United Nations General Assembly
AU	African Union	UNSD	United Nations Statistics Division
CAP	Common Agricultural Policy	USGS	United States Geological Survey
CBAM	Carbon Border Adjustment Mechanism	USMCA	United States-Mexico-Canada Agreement
CMP	Continental Power System Masterplan	WB	World Bank
COP	Conference of the Parties	WTO	World Trade Organization
CSO	Civil Society Organisation		
EIT	Emissions Inefficiency Tariff		
EITI	Extractive Industries Transparency Initiative		
EU ETS	EU Emissions Trading Scheme		
FAO	Food and Agriculture Organisation of the United Nations		
FDI	Foreign Direct Investment		
GCA	Global Centre on Adaptation		
GDP	Gross Domestic Product		
GGA	Global Goal on Adaptation		
GHG	Greenhouse Gas		
ICMM	International Council for Mining and Metals		
IDA	International Development Association		
IEA	International Energy Agency		
IFF	Illicit Financial Flow		
IPCC	Intergovernmental Panel on Climate Change		
L&D	Loss & Damage		

This report puts together the main data-driven facts and figures about the nexus between climate and development in Africa. It builds on the Mo Ibrahim Foundation's (MIF) report 'Reconciling global climate goals and Africa's development agendas' produced in advance of the Africa Climate Summit, in Nairobi, Kenya, September 2023. It also draws heavily on the findings from the 2023 Forum Report 'Global Africa: Africa in the world and the world in Africa' and the 2022 Forum Report 'The Road to COP27: making Africa's case in the global climate debate', as well as research materials from the Foundation's COP27 hub. Insights are also included from the latest Ibrahim Governance Weekend, that took place in Nairobi, April 2023. Further desk-based research was carried out by the MIF Research Team between June and November 2023 to ensure that the report considered the latest discussions and debates and that data was up to date.

This report makes use of the latest available data from a wide range of sources. A reference list containing all the sources used for this document is provided. MIF is not a primary data collector and the insights provided in this report rely on the analysis of publicly available secondary data. Each graph used in this report is accompanied by its respective data source.

The focus of this report is to assess the priorities for Africa ahead of COP28 and explore how Africa's green assets can be utilised to reconcile climate and development goals. The report does not intend, by any means, to be exhaustive. The topics and data selected are those that MIF finds the most relevant.

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Data included in the report was correct at source at the time of research. In some cases, the numbers may not add up to the total due to rounding.

Data for Morocco may or not may include Western Sahara depending on the source.

Dollars (\$) are US dollars unless indicated otherwise.

External debt figures in the report are sourced from the International Debt Statistics (IDS) database. The database is updated annually with the release of the World Bank's International Debt Report (IDR) and provides policymakers and analysts aggregate and country-specific information on trends in external debt in low- and middle-income countries since 1951. Total public external debt stock in the report refers to the sum of all public and publicly guaranteed external debt, in addition to use of IMF credit. Special Drawing Rights (SDRs) values are subtracted from the use of IMF credit. Debt service is calculated through the debt service on external debt, public and publicly guaranteed in addition to IMF repurchases and charges.

Unless stated otherwise Gross Domestic Product (GDP) data has been collected from the International Monetary Fund's (IMF) World Economic Outlook October 2023 dataset.

Emissions data has been sourced from Global Carbon Project and Climate Watch. When referring to latest CO₂ emissions from fossil fuels, data has been taken from Global Carbon Projects 'Global Carbon Atlas'. When data refers to historic CO₂ emissions data has been sourced from Global Carbon Projects 'Global Carbon Budget', the dataset for which dates to 1850. Greenhouse gas (GHG) emissions data is sourced from Climate Watch. Climate Watch data includes emissions other GHGs such as nitrous oxide and methane. It also includes carbon emissions from non-fossil fuel sources such as land-use change and forestry (LUCF). It is important to note, that uncertainty around CO₂ emissions from LUCF is high, at 70%. Uncertainty on emissions from non-CO₂ GHG emissions such as F-gases have relatively 'intermediate' uncertainties of around 30%, while N₂O has a higher uncertainty of around 60%. By contrast CO₂ emissions from fossil fuel only has around 8% uncertainty. For the purposes of this report, emissions data always refers to territorial emissions that take place within a country's borders rather than consumption-based emissions.

Unless stated otherwise, population statistics are taken from the 2022 revision of the World Population Prospects from the United Nations Department of Economic and Social Affairs (UNDESA). For population projections, mid-year medium variant estimates are used. For 2023 population data, 1 July medium variant estimates are used.



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