# The Africa Climate Summit:

### Nairobi 4th – 6th September 2023



Mo Ibrahim Foundation



## **Reconciling global** climate goals and Africa's development agendas

Facts & Figures from MIF forthcoming publication On the Road to COP28: Articulating Africa's case in the global climate debate



## Key findings

- 1. For Africa, the climate challenge is a development challenge
- Africa is the least responsible for the climate crisis
- Yet Africa is most affected by climate change impacts
- Lack of economic development drives Africa's high climate vulnerability and low responsibility
- Adaptation not mitigation is Africa's priority
- Resilience means reliable food systems
- Resilience means energy security
- Demographic and development trends can only increase Africa's energy demand
  - Development requires growth growth means more emissions

#### 2. The world cannot go green without Africa

- Biodiversity: Africa is home to critical global ecosystems
- Africa's carbon-sinking potential: key for net zero
  - Congo Basin rainforest is the world's primary tropical carbon sink
  - But without protection Africa's forests risk becoming a net carbon source rather than a sink

- Africa's minerals: critical for the global green energy transition
- Renewable power: an abundance of solar, wind and hydro potential
- Africa can be at the forefront of climate-friendly technologies

#### 3. Reconciling climate and development in Africa

- Finance, finance: delivering on financial pledges is key
- Transforming the global financial system
  - In Africa, you can't address climate without addressing debt
  - The global financial architecture must work for Africa too
- Governance frameworks are key
  - Resource governance frameworks must be improved
  - Carbon markets must be utilised effectively
  - Local and indigenous communities must be at the centre
- Regional integration for green growth
- Sound data to identify priorities and monitor progress

#### 4. Articulating an African Common Position ahead of COP28

# 1. For Africa, the climate challenge is a development challenge

Africa has a small carbon footprint and does not bear responsibility for the current crisis.

Rather than focussing on reducing emissions – for Africa the priority is adaptation, which implies development.

Africa's development needs cannot be excluded from climate discussions. Development agendas (SDGs + Agenda 2063) and demographic trends mean Africa needs some leeway on emissions, as well as support to maximise its green economic potential. 66

First, no country should have to choose between fighting poverty and protecting the planet. Second, each country must follow its own path because there is no single model. Third, we need to take on a public funding shock. And fourth, we need more from the private sector to mobilise a lot of money.

*Emmanuel Macron, President of France, Summit for a New Global Financing Pact, 22-23 June 2023* 

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No other continent in history has been tasked with the challenge of developing without polluting, whilst being simultaneously the major victim and the lowest contributor to emissions.

Olusegun Obasanjo, former president of Nigeria

## **1.1** Africa is the least responsible for the climate crisis

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



Africa was only responsible for 2.8% of global fossil fuel emissions between 1850 and 2021 – and still only accounts for 4.0% of territorial emissions from fossil fuels in 2021.

World region

- Oceania
- North America
- Middle East
- 🗕 Europe
- Asia
- South America
- Central America
- Africa

0 **TCO2** 

Africa currently still has the lowest fossil fuel emissions per person of any region globally

Even when including land-use change and forestry, Africa's per capita greenhouse gas emissions were less than 1/5 of that of the US's in 2019

OECD countries, Russia, and China collectively account for over <sup>3</sup>/<sub>4</sub> of historic fossil fuel emissions

## 1.2 Yet Africa is most affected by climate change impacts



e for F gy of I	Research Disasters	
De	Region	

Africa is the world region most affected by droughts and 2<sup>nd</sup> most affected by floods since 2010

**7 of** the 10 most climate vulnerable countries globally are African

Cyclone Freddy that hit Malawi in February/March 2023 caused at least \$700 million in damage and impacted 700,000 people

### 1.3 Lack of economic development drives Africa's high climate vulnerability and low responsibility



#### World regions: GDP per capita vs climate vulnerability (2021)

Less climate vulnerable

0.25

300

0.20

Climate vulnerability (ND Gain score)

0.45

0.35

0.40

0.30

0.50

0.55

0.60

More climate vulnerable

0.65

0.70

Africa's specific vulnerability is not just rooted in the high frequency of climate disasters but in the limited capacity to respond and adapt due to lower levels of economic development.

**13 of** the 20 most climate vulnerable countries are also among the 20 poorest countries in GDP per capita terms

**15 of** the 20 least climate vulnerable countries are also among the 20 richest countries in GDP per capita terms

North America's GDP per capita is over 28 x the size of Africa's, Europe's is over 15x, and Asia & the Pacific are over 4x

## 1.4 Adaptation – not mitigation – is Africa's priority

Africa: share of urban population living in slum households (2020)



\*Refers to 39 African countries with data in UN Habitat dataset

More than 45% of Africa's urban population live in slum households. Slum households and informal settlements are particularly vulnerable to flooding Adaptation to the impact of climate change and progressing in development agendas are the priorities – not reducing emissions.

- By 2030, an estimated 108 -116 million people in Africa will live in low elevation coastal zones vulnerable to rising sea levels.
- Climate change is forecasted to push an additional 78 million people into chronic hunger by 2050, over half of them in sub-Saharan Africa.

#### A business case - leapfrogging to climate resilient economies:

- Invest in early-warning systems
- Invest in flood defences
- Invest in climate-resilient infrastructure
- Invest in climate-resilient cities

## 1.5 Resilience means reliable food systems

Over 850 million people in Africa are affected by moderate or severe food insecurity – exacerbated by climate change.

Scaling up climate-resilient agricultural production in Africa and reducing dependency on food imports will be key to resolving food insecurity.

Food security in Africa is already affecting large shares of the population



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

Africa has 65% of the world's remaining uncultivated arable land

41 out of 54 African countries are net importers of basic food items

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

**Rainfed food production** sits at the centre of 70% of Africa's livelihoods leaving populations vulnerable to drought



## 1.6 Resilience means energy security

#### World countries: access to electricity (2021)



With the lowest rates of energy access globally, ending energy poverty and realising SDG7 – 'Ensure access to affordable, reliable, sustainable and modern energy for all' - is a priority for African countries.

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



Addressing this energy deficit requires the mobilisation of a wide range of resources, utilising both the continent's vast renewable resources, as well as natural gas, the least polluting fossil fuel.

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

#### Natural gas: a key transition fuel

By far the least-polluting fossil fuel, gas can provide a stable baseload for renewable energy and can be used in hard-to-abate sectors such as steel, cement, and fertilisers which renewables have yet to penetrate.

We have got to be practical. Renewable energy alone cannot power Africa. We have to have an energy mix and gas is fundamental to that

Dr. Akinwumi A. Adesina, President of the African Development Bank Group

# 1.7 Demographic and development trends can only increase Africa's energy demand

World regions: population change (2030-2100)



Africa's population in 2050 is projected to be almost double 2023 levels

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

- Between 2030 and 2100, Africa's population will increase by over 2 billion, more than in every other world region combined.
- Delivering on development for this growing population will see demand for food, housing, infrastructure and energy rise.
- Meanwhile Asia, Europe, and Latin America & the Caribbean will all see declining populations and a subsequent decline in such demands.

Increased population growth = increased demand for housing, infrastructure, food = increased demand for energy.





#### 1.7.1 Development requires growth – growth means more emissions

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



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

To realise Agenda 2063 and the SDGs, and cater for Africa's growing population, economic growth will be necessary - growth means higher energy demand and emissions.

- There are no examples of absolute decoupling (between emissions and growth) among lowincome countries with a population of over 1 million.
- 22 African countries are low-income, collectively accounting for almost 600 million people.

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.





## 2. The world cannot go green without Africa

Africa has clear needs in terms of climate and development. But Africa is not just the most impacted by this crisis. The continent has the potential to act as a catalyst for the global green transition that keeps the world on track for 1.5°C. However, engagement in the green economy must work for Africa – and not replicate historic exploitative models.



If the world is going to solve the existential threats it is facing, Africa has to be part of the solution.

Zein Abdalla, Chair of the Mastercard Foundation, 2023 IGW Nairobi



It has been shown very convincingly... you can't do the green transition without Africa.

Koen Doens, Director-General for International Partnerships (DG INTPA) at the European Commission, 2023 IGW Nairobi 66

I don't think we should always discuss Africa as simply a source of raw materials...I would like us to change the narrative to Africa as an opportunity for the rest of the world to grow their economies.

Donald Kaberuka, Managing Partner at Southbridge Group, former President of the African Development Bank (AfDB), 2023 IGW Nairobi

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We are telling the globe that we have ideas on how to sort out this problem (climate change) and we want Africa to be part of the answer. We are not going to accept to continue to be labelled as victims.

H.E. William Ruto, President of Kenya, 2023 IGW Nairobi

## 2.1 Biodiversity: Africa is home to critical global ecosystems

Africa's wide range of green and blue wealth assets are key for the planet's climate goals.

Africa: biodiversity assets in terrestrial ecosystems (2022)



Africa hosts approximately 45,000 plant species, roughly 25% of the world's plant genetic resources, the secondlargest global plant diversity after Southern America Africa is home to around 1/6 of the world's remaining forests

#### Africa: biodiversity assets in marine & freshwater ecosystems (2022)



**3** of Africa's 6 large marine ecosystems rank within the 4 most productive large marine ecosystems in the world Africa is home to the 2<sup>nd</sup> largest and longest rivers and aquatic areas in the world (the Nile and Congo)

## 2.2 Africa's carbon-sinking potential: key for net zero

### 2.2.1 Congo Basin rainforest is the world's primary tropical carbon sink

The Congo Basin is the only remaining tropical forest globally that is a strong net carbon sink.

 Net carbon sequestration in the Congo Basin rainforest is more than in the Amazon and Southeast Asia combined.

Protecting the Congo Basin is critical to global climate goals.



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

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

#### **Southeast Asia**

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

### 2.2.2 But without protection, Africa's forests risk becoming a net carbon source rather than a sink

When forests are cut-down they release emissions into the atmosphere.

Agricultural expansion, logging, increased energy demand are the key drivers of deforestation.

- Africa has lost almost 10% of its tree cover since 2000.
- If this trend continues Africa's forests could become a net carbon source rather than a carbon sink.
- Investing in clean cooking fuels and sustainable agriculture is key to preserving the continent's forests.





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

The number of people using biomass as their primary cooking fuel has increased by over 45% in Congo Basin countries since the year 2000

In the Congo Basin countries over 2/3 of the population lack access to electricity or clean cooking fuels

- With access Without access

Source: MIF based on WHO & WB

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

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



Mineral	Leading uses
Bauxite*	Solar
Chromite*	Geothermal/Solar/ Wind
Cobalt*	Batteries/EVs
Copper	Geothermal/Hydro/ Solar/Wind
Graphite*	Batteries/Solar/Nu- clear
Lithium*	Batteries/EVs
Manganese*	Batteries/Solar
Phosphate Rock*	Batteries/Fertilisers
Platinum Group Metals (PGMs)*	Green hydrogen
Uranium	Nuclear

\* listed as a "critical mineral" by the EU or IEA.

To meet the expected rise in global demand for low-carbon technologies, production of graphite and cobalt will need to increase by nearly 500% by 2050.

This cannot be achieved without African minerals.





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

Africa: primary source of electricity generation (2021)



22 African countries already use renewables as their primary source of electricity.

There is still much untapped potential that could decrease energy poverty and limit increases in emissions.

- **Solar**: Africa has 40% of world solar potential but just above 1% of installed capacity.
- Wind: Full mobilisation of technical wind potential would increase electricity capacity more than 30-fold in Chad, Mauritania, Niger and Mali.
- Hydro: Grand Inga, in the 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

But if investment is not forthcoming in energy production - as well as storage, maintenance and distribution – this potential will remain untapped.

# 2.5 Africa can be at the forefront of climate-friendly technologies

- Africa has several locations that are optimal for effective carbon capture and storage technologies: Rift Valley, Zululand Basin, Rovuma Basin, Ethiopia's Blue Nile region.
- Africa is uniquely suitable for green hydrogen production due to the high potential for renewable energy and available space.
  - Green hydrogen technology could be used to replace fossil fuels in hard-to-abate sectors such as cement, steel, and fertiliser.
- 3D printing can be utilised in Africa to leapfrog emissions-intensive heavy machinery manufacturing and localise supply chains.

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

Octavia Carbon is working to build the world's 2nd largest direct air capture (carbon capture) plant in the Rift Valley

## 3. Reconciling climate and development in Africa

Properly managed, Africa's green, blue and mineral wealth could generate net gains for the continent including local jobs in core sectors, and fiscal revenues for governments to spend on other development priorities. For the world it is an opportunity to work towards climate goals.

But tapping this potential and reconciling development with climate goals requires key underlying conditions to be met - firstly, adequate financing, but also sound data, continental integration, resource governance, and local transformation. Nearly 80 years later [after its inception], the global financial architecture is outdated, dysfunctional, and unjust. The global financial system perpetuates and even exacerbates inequalities. [Its] rules have become profoundly immoral.

H.E. António Guterres, Secretary General of the United Nations (Paris Summit for a New Global Financial Pact,22-23 June 2023)

# 3.1 Finance, finance, finance: delivering on financial pledges is key

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.

- Almost 15 years later they have not delivered: \$83 billion is the most mobilised in a single year to date (2020).
- 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)

\$ billions



Annual climate finance flows to Africa currently equate to only 10.7% of the continent's finance needs

Africa only accounts for 5.0% of climate finance flows globally Loss & Damage (L&D) Fund: Promised at COP27, still to be delivered

With the African Development Bank estimating that L&D costs could equate to up to \$440.5 billion between 2020 and 2030, the long overdue decision to establish a L&D Fund on the final day of COP27 was welcome. However, the Fund is still not operational.

#### Finance

- ---- Annual cost to implement Africa's NDCs to 2030
- Copenhagen Pledge
- ----- Climate finance actually mobilised for developing countries
- ----- Total climate finance for Africa

Source: MIF based on Climate Policy Initiative & OECD



## **3.2 Transforming the global financial system**

### 3.2.1 In Africa, you can't address climate without addressing debt

African countries find themselves borrowing at exorbitant rates or priced out of global capital markets – leaving them unable to secure affordable finance for climate and development, with debt servicing costs eating into budgets.

- Between 2010 and 2021, external debt servicing costs for governments grew at over 60 times the pace of average fiscal revenues.
- Over 2019 and 2020, external debt servicing costs for governments were almost double climate finance flows in Africa.
- Climate vulnerable countries who pay even more to borrow find themselves locked in a debt-climate cycle.

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





#### World region: share of IMF votes (2023)



At the IMF, Africa has most members, the most programmes, but only 6.5% of the voting share

The global financial architecture is failing Africa and failing the planet.

A new system is needed that reflects the findings of initiatives such as the Africa High-level Working Group on Global Financial Architecture or the **Bridgetown Initiative**:

- Increase the representation of Africa at the IMF and World Bank.
- Unlock more liquidity at affordable rates.
- Re-channel Special Drawing Rights (SDRs) and revise the allocation formula.
- Reform the global debt architecture including a disaster suspension clause on debt instruments.
- Create a disaster relief fund to provide immediate liquidity to affected countries.





## **3.3 Governance frameworks are key**

#### 3.3.1 Resource governance frameworks must be improved

The potential benefits of Africa's minerals have yet to be realised and in many cases have even led to the so-called 'resource curse'.

- Many minerals bring little added value: DR Congo is the world's largest producer of cobalt but involved in less than 1% of refining.
- Major human rights issues: child labour is present in almost all artisanal cobalt mining in DR Congo accounting for 20% of production.
- Environmental degradation: the mining sector can lead to biodiversity loss, water depletion and pollution, waste-related contamination, and air pollution.
- Illicit financial flows: profit shifting by mining companies in sub-Saharan Africa is costing governments between \$450 - \$730 million per year.

Africa will only benefit from its critical minerals with effective resource governance frameworks and a shift away from historic extractive trade models.

Congolese cobalt underpins China's world leading battery industry



### 3.3.2 Carbon markets must be utilised effectively

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.

Effectively leveraging carbon credits and protecting Africa's critical ecosystems requires:

- A globally standardised, transparent and accountable carbon credit trading system.
- A minimum price floor to provide African countries with a fair price.
- Building capacity in carbon accounting.
- A rethink of the philosophy of carbon credits compensation for environmental preservation, rather than a carbon offset.

The Africa Carbon Markets Initiative (ACMI) intends to produce 1.5 billion carbon credits annually in Africa, unlocking over \$120 billion and supporting over 110 million jobs by 2050.

Africa accounts for only 2% of carbon trading globally, most of which occurs in just 5 countries

Green investments and climate projects have caused adverse impacts for local communities.

- 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, green initiatives can bring local opportunities and local support.

- Carbon credit projects must take a bottom-up approach.
- 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.

## 3.4 Regional integration for green growth

Selected Free Trade Agreements: total population covered (2023)



The African Continental Free Trade Agreement (AfCFTA) – the world's largest free trade agreement in country terms, can be leveraged to realise Africa's green growth potential by:

- Boosting intra-regional supply chains with fewer transport-based emissions.
- Increasing the potential for regional renewable energy pooling.
- Replacing cash crops such as tea with more sustainable regional food supplies.

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

# 3.5 Sound data to identify priorities and monitor progress

Now more than ever, data should not be forgotten when it comes to addressing climate goals:

- 2023 is a key year for the data for climate agenda: the first Global Stocktake (GST) to measure progress in the implementation of the Paris Agreement will be conducted at COP28.
- The GST should be harnessed to identify where concerted action and investments are needed to fill key long-standing climate data gaps.
- The case for data: investments in strengthening data systems can offer a rate of return of \$32 of economic benefits for \$1 invested.

Of the 3 SDGs pertaining to climate change (SDG13, SDG14 and SDG15), only SDG 15 "Life on land" has data for more than 33 African countries



Without sound data, governments drive blind.

Mo Ibrahim

### 2022 Ibrahim Index of African Governance shows climate a major data gap

Data gaps include - climate change resilience, climate change mitigation and adaptation policies, sustainable management of marine and freshwater ecosystems, natural resource governance, recycling and waste management.

Weather stations and early warning systems key to improving climate data in Africa

- Africa has only one eighth of the minimum density of weather stations recommended by the World Meteorological Organization (WMO).
- According to WMO, Africa, alongside South America, faces the largest early warning system capacity gaps with less than half of the continent's population covered by early warning systems.

## 4. Articulating an African Common Position ahead of COP28

The Africa Climate Summit is an opportunity to reset the discussion and shift the narrative surrounding Africa ahead of COP28 - from one of simply crisis and charity, to one of collaboration and opportunity – while clearly articulating the continent's needs.

- Africa's development priorities need to be acknowledged and streamlined into climate discussions.
- Narrative needs shifting: While Africa is most impacted by the climate crisis, it offers valuable climate solutions for the world.

- Global collaboration needed to protect and mobilise Africa's climate assets.
- Climate finance pledges need delivering and upscaling.
- Global financial system needs transforming: Africa and much of the Global South cannot secure the resources they need from the current order.
- Africa needs and deserves a seat at the table: Africa has a critical role to play in the global green transition. The continent must have a bigger role in multilateral institutions.