

# ROAD TO COP 28

BASIC GUIDE TO COP28 FOR BUSINESSES IN ZAMBIA



NOVEMBER 2023



## ENGINEERING SUSTAINABILITY BEYOND BOUNDARIES

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## FOREWORD

Nations from around the world come together annually at the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) with a unified aspiration to address climate change. This year's COP28 concludes the first global stocktake of the progress made in achieving the Paris Agreement goals of holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels. In the ever-evolving and interconnected landscape of global business, this presentation examines how businesses in Zambia can respond to the action agenda arising from COP 28.



The presentation presents an overview of climate change focused on how we got to where we are and the possible scenarios that may arise depending on our collectively action from here on. COP28 presents an opportunity for businesses to understand the global stance on climate action, possible climate risks that may affect the business, risk management strategies and opportunities available to foster innovation and resilience.

A key focus area of COP28 is inclusivity and I hope that the insights in this presentation inspire transformative innovative action from the business community to enhance climate resilience and support the mobilization of climate finance in Zambia.

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# ABOUT US

Women-led sustainability, corporate finance and analytics firm based in Lusaka, Zambia. We are a market enabler focused on advancing the role of the private sector in achieving the United Nations Sustainable Development Goals (SDGs) across Africa.

We offer advisory, mentorship and corporate training on sustainability reporting, sustainable business models, SME business development, climate action, financial modeling, impact, strategy and corporate social responsibility.



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# TABLE OF CONTENTS

01

DEFINING CLIMATE CHANGE

02

UNDERSTANDING COP28

03

UNDERSTANDING CLIMATE RISK

04

SDGS, VISION 2030 AND THE 2024 BUDGET

05

COP 28 FOCUS AREAS

06

OVERVIEW ON ZAMBIA

07

STATUS OF CLIMATE FINANCE - ZAMBIA

08

CONCLUSION

# 1/DEFINING CLIMATE CHANGE

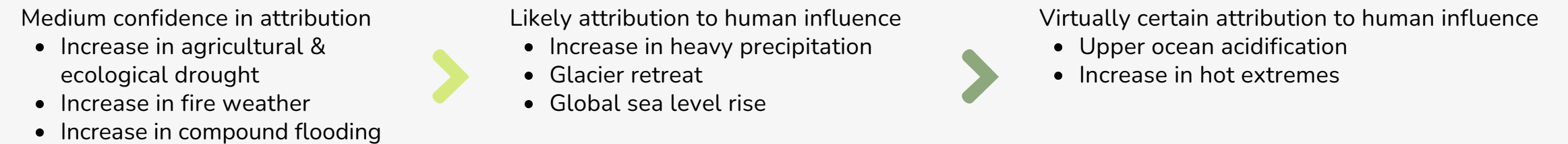
“Climate change refers to long-term shifts in temperatures and weather patterns. Such shifts can be natural, due to changes in the sun’s activity or large volcanic eruptions. But since the 1800s, human activities have been the main driver of climate change, primarily due to the burning of fossil fuels like coal, oil and gas. “

United Nations

Source: <https://www.un.org/en/climatechange/what-is-climate-change>



According to the Intergovernmental Panel on Climate Change (IPCC), changes in physical climate conditions are increasingly attributed to human influence



From these changes in physical climate conditions, the following impact and damages are attributed to climate change with general medium to high confidence:



Water availability and food production

- Physical water availability
- Agriculture/crop production
- Animal and livestock health and productivity
- Fisheries yields and aquaculture production

- Inland flooding and associated damages
- Flood/storm induced damages in costal areas
- Damages to key economic sectors



Cities, settlements and infrastructure



Water availability and food production

- Infectious diseases
- Heat, malnutrition and harm from wildlife
- Mental Health
- Displacement

- Terrestrial ecosystems
- Freshwater ecosystems
- Ocean ecosystems



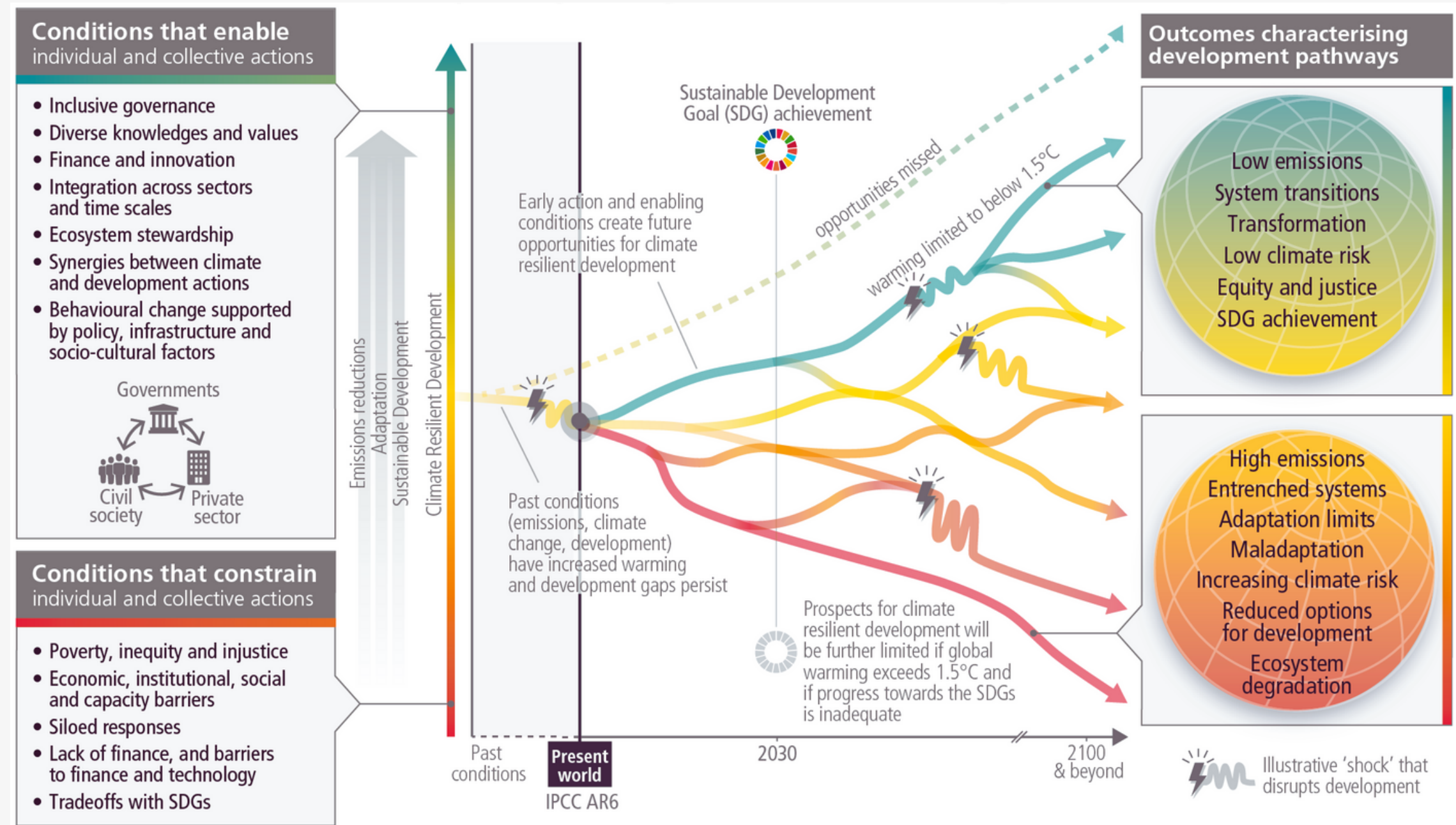
Biodiversity and ecosystems

Source : Source : IPCC 2023, AR6 Synthesis Report Climate Change 2023 Figure 1, <https://www.ipcc.ch/report/ar6/syr/figures/figure-spm-1>

# 1/DEFINING CLIMATE CHANGE

Global surface temperatures between 2011 - 2020 are estimated to be 1.1°C warmer than temperatures between 1850 - 1900. The future trajectory in global warming depends on collective action to curb human activities driving climate change. Figure 1 illustrates five emission pathway scenarios ranging from a best-case scenario of limiting the increase in global surface temperatures to below 1.5 °C to the worst-case scenario of warming exceeding 4°C. Adverse impacts of climate change are expected to intensify in the worst-case scenario.

Figure 1 : IPCC Illustration on development pathways and associated outcomes

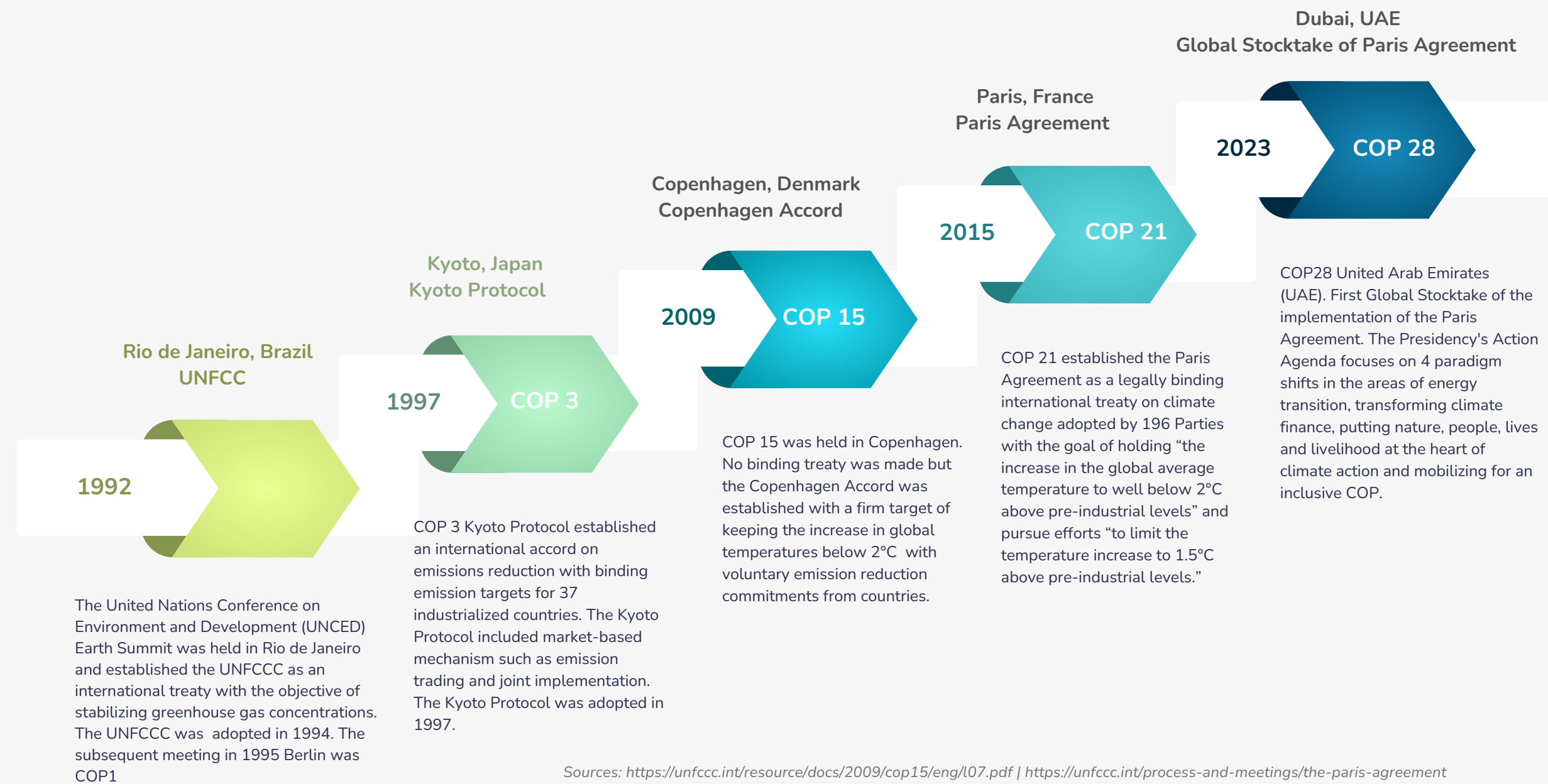


Source : Reprinted from IPCC 2023, AR6 Synthesis Report Climate Change 2023 Figure 6, <https://www.ipcc.ch/report/ar6/syr/figures/figure-spm-6>

## 2/UNDERSTANDING COP28

Collective action, negotiation and international agreement are crucial for climate action. In 1992, the United Nations Framework Convention on Climate Change (UNFCCC) was adopted as an international treaty with the objective of stabilizing greenhouse gas concentrations. COP stands for Conference of Parties and refers to the annual meetings of the member countries of the UNFCCC. The UNFCCC laid the foundation for subsequent international consensus on climate action with the latest agreement being the Paris Agreement (2015).

The international community has made progressive steps to establish internationally binding agreements on addressing climate change. Below are key COP meetings and the developments made. Our current reference point for the global goal in climate change is the Paris Agreement. In 2015, the Paris Agreement was established as a legally binding international treaty on climate change adopted by 196 Parties with the goal of holding “the increase in the global average temperature to well below 2°C above pre-industrial levels” and pursue efforts “to limit the temperature increase to 1.5°C above pre-industrial levels.”



Sources: <https://unfccc.int/resource/docs/2009/cop15/eng/l07.pdf> | <https://unfccc.int/process-and-meetings/the-paris-agreement>



### 3/UNDERSTANDING CLIMATE RISK

“Climate risk refers to the potential for adverse consequences for human and ecological systems which can arise from the potential impacts of climate change as well as human responses to climate change”

Source: IPCC 2020, *The Concept of risk in the IPCC Sixth Assessment Report*, [https://www.ipcc.ch/site/assets/uploads/2021/02/Risk-guidance-FINAL\\_15Feb2021.pdf](https://www.ipcc.ch/site/assets/uploads/2021/02/Risk-guidance-FINAL_15Feb2021.pdf)

Businesses climate-related financial risks include losses and diminished asset values which can result from physical and transition risks.



Businesses can be affected by the physical effects of climate change such as extremities in weather patterns as well as the shifts in consumer preferences, policy changes and technological changes arising from the globally agreed transition to lowering emissions through climate action. Businesses need to assess their risk exposure and vulnerability to climate risks grounded in a thorough understanding of the physical changes driven by climate change and the global agreements being made to address climate change which will be implemented in domestic policy. An overview on climate risk is provided:

Climate Risk	Drivers	Exposure	Vulnerability
Physical Risk	<p>Acute weather hazards - e.g. droughts, flooding and other natural disasters</p> <p>Chronic weather hazards - e.g. rising temperatures, rising sea levels</p>	Assets or facilities in hazard zones that may be adversely affected if the risk materializes	Level of adaptability and resilience which include considerations of insurance available and contingency planning
Transition Risk	<p>Policy changes - e.g. changes to taxation to deter or encourage a sector based on its effects on climate change</p> <p>Technological changes - e.g. increased adoption of renewable energy</p> <p>Consumer pressure - e.g. consumer demand for low GHG emission products</p>	Assets, facilities, business processes, supply chain etc that may need to adapt to changing policy, technology and consumer preferences.	Level of adaptability and resilience which include considerations regarding the viability of transition plans, ability to adapt by say changing product offerings or operations.

Sources: Adapted from - Caldecott B, Clark A, Koskela K, Mulholland E, Hickey E 2021 *Stranded Assets: Environmental Drivers, Societal Challenges, and Supervisory Responses*, *Annual Review of Environment and Resources* 2021 46:1, 417-447

## 4/SDGS, VISION 2030 & THE NATIONAL BUDGET 2024

Zambia, as a party to the Paris Agreement on climate change submits the Nationally Determined Contribution (NDC) outlining intentions and mitigation strategies for climate change. Climate action is also addressed in Zambia's commitment to the Sustainable Development Goals (SDGs) which are integrated using a multi-sectoral approach into the National Development Planning Framework and National Budgetary process.

Sustainable Development Goals	Zambia's Nationally Determined Contribution	Eighth National Development Plan (8NDP) and 2024 Budget
<p>Goal 13 Climate Action</p> <p>Targets include:</p> <ul style="list-style-type: none"> <li>• Strengthening resilience and adaptive capacity to climate -related hazards and natural disasters.</li> <li>• Integrating climate change into national planning.</li> <li>• Improving awareness and institutional capacity.</li> <li>• Implementing the NDC</li> </ul>	<p>Zambia's NDC outlines the following:</p> <ul style="list-style-type: none"> <li>• Zambia aspires to become a prosperous low carbon and climate resilient middle income country by 2030.</li> <li>• Zambia intends to reduce its greenhouse gas emissions by 25% and towards 47% compared to 2010 levels.</li> <li>• Adaptation measures include (i) the adaptation of strategic productive systems (agriculture, wildlife, water), (ii) adaptation of strategic infrastructure and health systems and (iii) enhanced capacity building, research, technology transfer and finance for adaptation.</li> <li>• Actions under adaptation programs include promoting climate smart agricultural practices, developing a National Wildlife Adaptation Strategy, mainstream climate change in the National Health Policy and Water and Sanitation Policy, Sustainable Forest Management, Renewable Technologies and Early Warning Systems.</li> </ul>	<ul style="list-style-type: none"> <li>• Zambia's Vision 2030 includes the aspiration to be a nation that promotes and provides sustainable security against deprivation and extreme vulnerability by 2030.</li> <li>• Strategies in the 8NDP relating to climate action include alternative fuel promotion, green and renewable energy promotion, strengthening climate change adaptation, nature-based solutions, sustainable land, forest and water management, sustainable agriculture, climate-resilient infrastructure development, greenhouse gas transparency framework, enhancing Disaster Risk Reduction and Response , programmes for climate information services and early warning systems.</li> <li>• Government aspirations also include enhancing the regulatory framework and guidelines for green finance, incorporating environmentally friendly practices in the financial sector and carbon market guidelines.</li> </ul>

Sources: Zambia NDC Updated 2021, [https://unfccc.int/sites/default/files/NDC/2022-06/Final%20Zambia\\_Revised%20and%20Updated\\_NDC\\_2021\\_.pdf](https://unfccc.int/sites/default/files/NDC/2022-06/Final%20Zambia_Revised%20and%20Updated_NDC_2021_.pdf)

## 5/COP 28 FOCUS AREAS

COP 28 is scheduled for the 30 November to 12 December 2023 in Dubai, United Arab Emirates. The first global stocktake to assess the collective progress towards meeting the goals of the Paris Agreement is set to conclude at COP28. By taking inventory of where countries are in meeting the goals of the Paris Agreement; areas of improvement, resources required and solution pathways can be identified and agreed upon.

Source: UNFCCC Global Stocktake, <https://unfccc.int/topics/global-stocktake>  
 COP 28 Letter to Parties I, <https://www.cop28.com/en/letter-to-parties>



*The Action Agenda for COP28 focuses on four paradigm shifts (Letter to Parties I), with highlights outlined below:*

### **1. Fast-tracking the energy transition and slashing emissions before 2030**

- Develop systems for decarbonization pathways
- Operationalize carbon market and non-market approaches to incentivizes higher mitigation ambition and investment
- Launch and accelerate work on the Just Energy Transition package, accelerate the phasedown of all fossil fuels and scale up investments in clean energy.

### **2. Transforming climate finance, by delivering on old promises and setting the framework for a new deal on finance**

- Address and maintain the momentum of the long-standing financial commitments from developed countries
- New financial framework that can deliver on the net zero transition in an inclusive way with considerations for private capital mobilization, reduced risk, reduced cost of capital and foreign exchange risk mechanisms.
- Innovative and holistic solutions for private capital and technology-led growth in developing countries with harmonized regulatory systems.

### **3. Putting nature, people, lives, and livelihoods at the heart of climate action**

- Catalyze collaborative action on adaptation (including driving adaptation finance), preservation of ecosystems, climate-proof food systems, and the protection and empowerment of the most vulnerable communities by investing in practical solutions to improve lives and livelihoods.

### **4. Mobilizing for the most inclusive COP ever.**

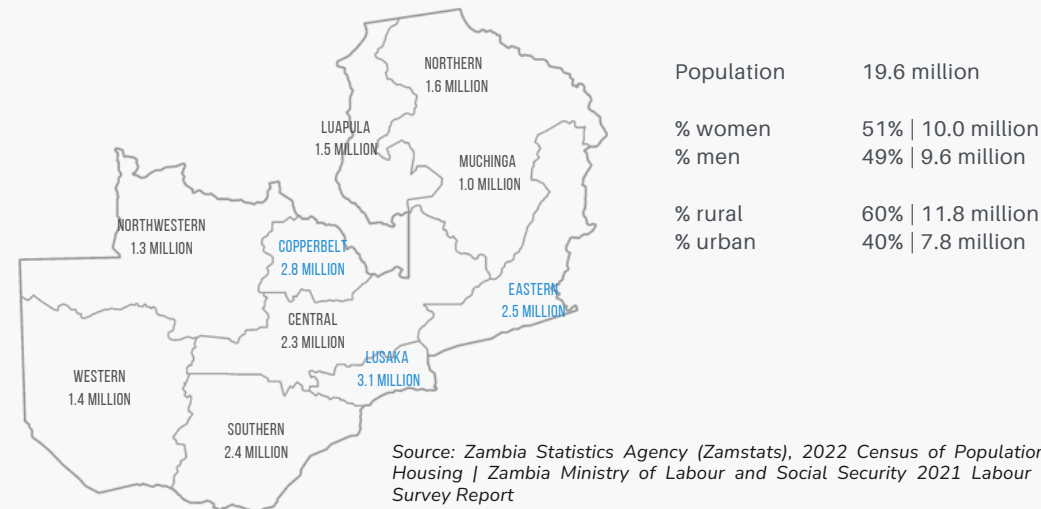
- Ensure inclusion contributions throughout programs and outcomes which include gender-balanced delegations and collaboration with Indigenous communities, youth, local communities and subnational actors.

Source: COP 28 Letter to Parties I, <https://www.cop28.com/en/letter-to-parties>

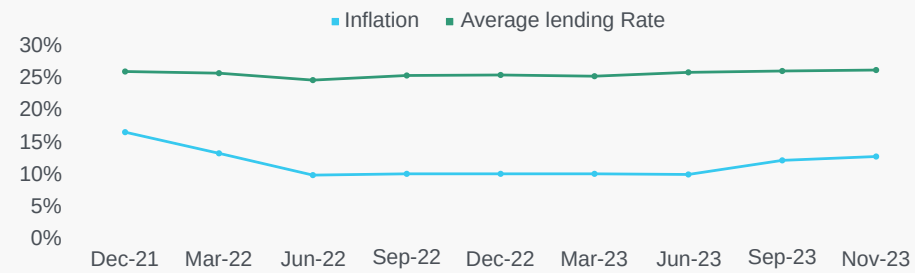
## 6/OVERVIEW ON ZAMBIA

### Population

As of 2022, Zambia's population was 19.6 million of which 60% resided in rural areas. 3.2 million people were employed and of the employed at least 50% worked in the informal sector. The industries with the highest share of employed people were (i) wholesale and retail, (ii) agriculture, forestry and fishing and (iii) manufacturing which collectively 59% of the employed population.



### Inflation and average lending rates



Inflationary pressure driven by rising fuel, food prices and the depreciation of the Kwacha has resulted in the raised monetary policy in 2023. Zambia's average lending rates in Kwacha terms have ranged between 24-26% over the last two years. Cost of capital is expected to remain high in the short-medium term.

84%

of the 3,777 MW national installed capacity is from hydropower. 34% of the population have access to electricity

### National Priority Sectors



**Agriculture** - large proportion of uncultivated arable land with potential for agro-processing.



**Mining** - one of the world's largest Copper producers. Zambia also has other minerals that include Gold, Zinc, Manganese and gemstones. High potential for mineral extraction and processing.



**Manufacturing** - potential for increased manufacturing which includes food and beverages, textile, energy, transportation - electric vehicles, and handicrafts to reduce reliance on imports and increase exports.

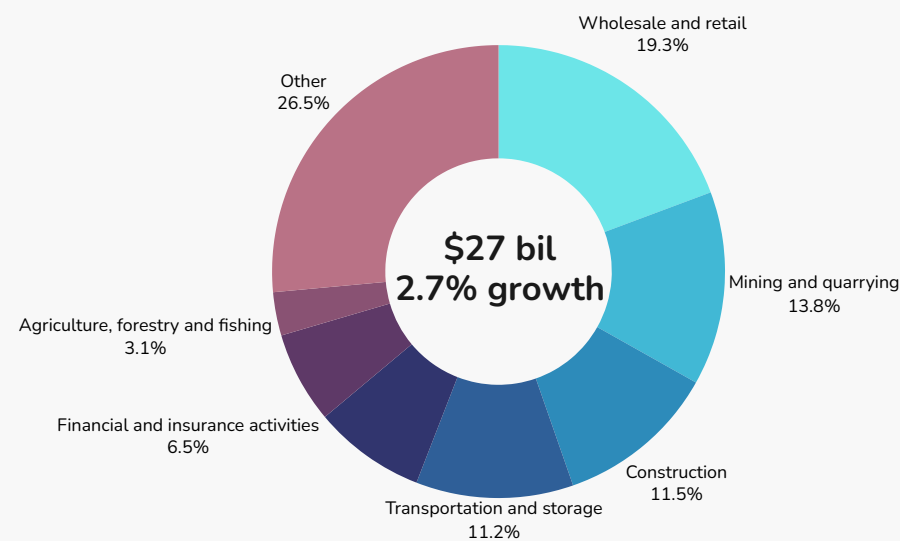


**Tourism** - potential for tourism infrastructure investment, increased cultural tourism and overall sustainable tourism.



**Energy** - growing demand for energy domestically and in the regional market. Zambia largely has hydro power generation with high potential for the development of other renewable energy sources.

### GDP



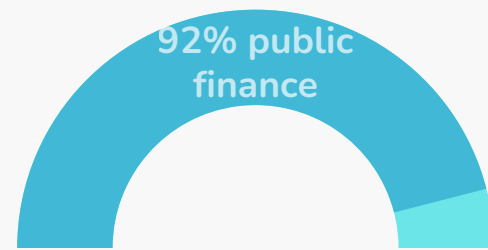
Zambia's economy is largely driven by the copper mining sector which contributed 14% to its Gross Domestic Product (GDP) in 2022. Other key industries include wholesale and retail, construction, transportation and the financial sector. The economy faced challenges in 2023 which include rising inflation driven by elevated fuel and food costs, the depreciation of the Kwacha against major currencies, reduced production in the mining sector, high debt servicing and downside risks from global geopolitical tensions, climate change and tightening global financial conditions. The 2024 National Budget themed "Unlocking Economic Potential" focuses on creating an enabling environment for private sector growth and improved delivery of public services. Together with the nation's debt restructure efforts and strengthening of the mining sector, the short to medium term outlook may bring about economic recovery, growth and economic diversification.

Source: Zambia Statistics Agency (Zamstats), Bank of Zambia (BoZ), Zambia Development Agency (ZDA) & KPMG Zambia 2024 Budget Highlights



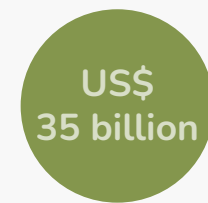
## 7/STATUS ON CLIMATE FINANCE - ZAMBIA

### Climate Finance Flows in Zambia



Private sector flows account for only 8% of climate finance

### Estimated investment required to meet NDC targets by 2030



“Expected to be mobilized through new climate finance mechanisms such as the GCF climate-related bilateral, multilateral and domestic financing, including the private sector” (UNFCCC 2020, AfDB 2023)

### Annual Private Finance Gap



According to the African Development Bank (AfDB), Zambia is among the top 8 countries with the greatest potential for upfront investment and among the top 3 in drought - related investment

42.2

ND-GAIN Index score which illustrates the climate resilience of countries. Zambia ranks 132nd in the world.



\* ND - GAIN - Notre Dame Global Adaptation Index

High

Zambia's vulnerability is ranked high particularly in agriculture (projected change in cereal yields), health (medical staff), ecosystems, human habitat (infrastructure) and energy (hydropower)



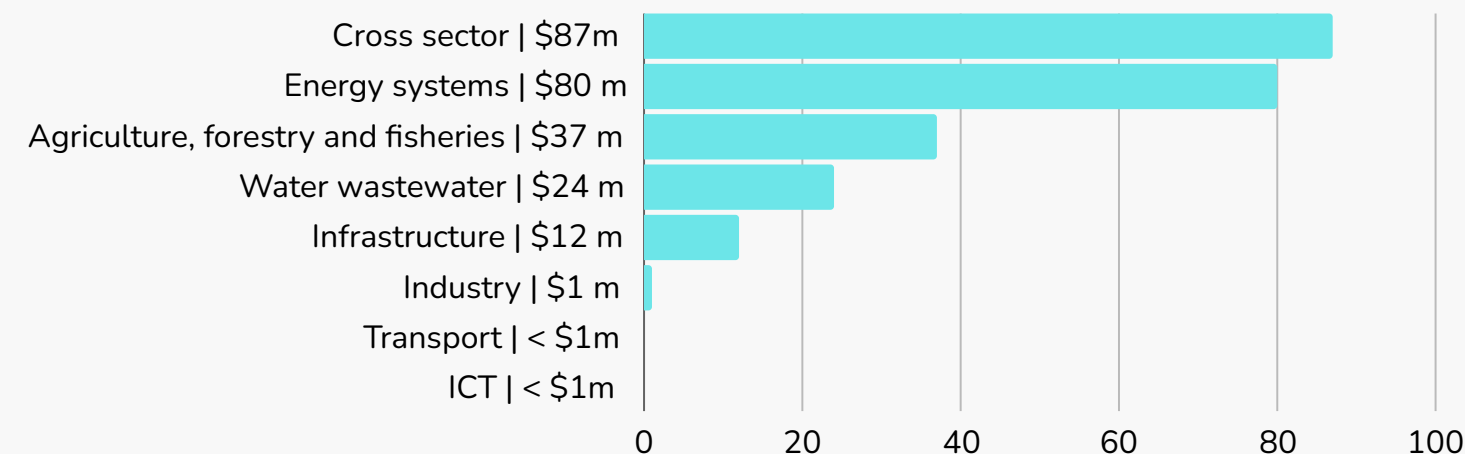
Low

Zambia's readiness is ranked low particularly in education, innovation, and social inequality.



Source : <https://gain-new.crc.nd.edu/country/zambia#:~:text=The%20high%20vulnerability%20score%20and,the%20141st%20most%20ready%20country>.

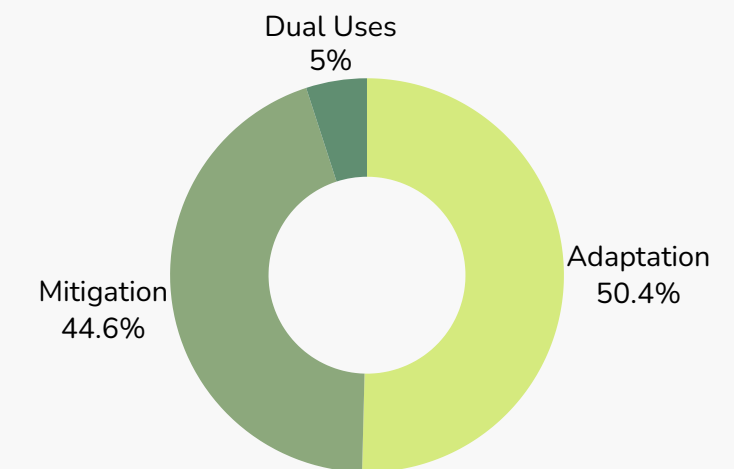
### Private Sector flows



Climate finance flows have been skewed towards the energy (31%), cross sector (36%), agriculture (15%) and water (10%). The investment focus has been balanced between adaptation (adapting to climate change) and mitigation (reducing greenhouse gas emissions).

Source : AfDB Zambia Country Focus Report 2023, <https://www.afdb.org/en/documents/country-focus-report-2023-zambia-mobilizing-private-sector-financing-climate-and-green-growth>

### Investment focus of climate finance



## 7/STATUS ON CLIMATE FINANCE - ZAMBIA

Zambia has an estimated climate finance gap of US\$3 billion annually up to 2030 and requires innovative financing mechanisms. Key considerations include addressing barriers to investments, de-risking projects and financial viability. Further considerations include existing challenges in the financial sector and capital markets such as the cost of capital, liquidity challenges from limited trading volumes and exit mechanisms, and diversification options.



*Emerging innovative private sector financing mechanisms, barriers and opportunities as outlined in the AfDB 2023 Zambia Country Focus Report are outlined below:*

### **1. Emerging innovative private sector financing mechanisms for green growth and climate action:**

- Debt instruments such as green bonds, sustainable bonds, and social bonds.
- Blended financing instruments that de-risk private climate investments using public/donor finance.
- Carbon markets utilizing finance generated from carbon trading and projects that reduce GHG emissions.

### **2. Challenges and barriers to scaling financing mechanisms**

- Possible high transaction costs and insufficient investment pipeline, ticket sizes and issuer capacity.
- Technical capacity in monitoring and reporting.
- Mitigation of real and perceived risks to increase investor confidence.

### **3. Opportunities for private sector investments in green growth and climate action**

- *Mining sector* - extraction and processing of minerals required in the manufacture of electric vehicles.
- *Sustainable forestry* - primary, secondary and tertiary wood processing sectors for the export market.
- *Fisheries* - development of aquaculture for the domestic and export market.
- *Energy* - investments in renewable energy.
- Carbon markets - development of carbon markets in Zambia.

Source : AfDB Zambia Country Focus Report 2023, <https://www.afdb.org/en/documents/country-focus-report-2023-zambia-mobilizing-private-sector-financing-climate-and-green-growth>

## 8/CONSIDERATIONS FOR BUSINESSES IN ZAMBIA

Challenges in Zambia's climate resilience relating to high vulnerability and low readiness present critical risks for micro, small and medium-sized enterprises (MSMEs). However, MSMEs also play a role in climate action through innovation business models that address climate adaptation and mitigation. Innovations in the private sector may support the development of a viable investment pipeline that attracts climate finance to close the financing gap.

### Key considerations for businesses include:

Area	Overview	Key considerations
Climate Risk - physical risk	The international community's progress in meeting the aspirations of the Paris Agreement affects the likelihood of weather hazards. Businesses need to consider their preparedness in strategic planning, policies and procedures.	Priority sectors (agriculture, tourism, manufacturing, mining and energy) offer strong growth potential but also require consideration of physical risks that may disrupt production, alter business seasonality patterns, limit water supply, disrupt infrastructure, increase insurance claims, disrupt financial markets, strain healthcare systems and disrupt supply chains.
Climate risk Transition Risk	The globally agreed direction towards climate action will result in policy, technology and consumer changes aligned with the goals of the Paris Agreement. Businesses need to consider their business model, product offering, supply chain exposures and understanding of consumer preference. Businesses need to factor in possible costs and losses associated with making necessary changes in their strategic planning and budgeting.	Businesses in high emission industries and/or part of high emission supply chains must consider losses that may arise from policy changes and changes in consumer preferences that align with addressing climate change. Considerations may include the possibility of obsolete technologies, reduced market share and costs associated with adaptation.
Opportunities	Businesses are a significant economic driver through innovation and job creation across Africa and can play a significant role in creating the pipeline that can attract the required private climate finance.	Emerging businesses include but are not limited to, renewable energy, energy efficiency services, carbon trading, green building, circular economy, sustainable agriculture, sustainable tourism, insurance services, research and advisory, alternative fuels, nature-based solutions, climate resilient and monitoring technologies.

## 9/CONCLUSION

Over the last three decades, the international community has made considerable progress in collective action to reduce greenhouse gas emissions in order to curb the increase in global temperatures caused by human activities. In 2023, COP28 will conclude the global stocktake on the progress made in achieving the goals outlined in the Paris Agreement and the actions required to stay on track.

Key focus areas of COP28 include accelerating the clean energy transition,

driving climate finance, centering people, nature and livelihoods in climate action, and ensuring inclusivity. Inclusivity includes businesses. COP28 discussions provide direction on climate-related priorities and policies. Businesses need to consider climate risks, risk management strategies, evolving market expectations, business opportunities, partnership opportunities and areas of innovation required to align, maintain competitive advantages for business survival, and positively contribute to people, planet and profit.





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