



# Energies: towards a greener future for Africa?

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Overview of renewable energy development in Africa

**APRIL 2025**



AFRICA CEO FORUM  
ANNUAL SUMMIT



**OKAN**  
STRATEGY | FINANCE



# Introduction

Amaury de Féligonde, co-founder, Okan Partners  
Frédéric Maury, Director, Africa CEO Forum



Okan Partners, in partnership with the Africa CEO Forum, is once again highlighting a key issue for the continent: access to energy. This is a major challenge for African governments, who are often faced with limited financial resources and technical expertise. And yet, thanks to its immense renewable energy potential, Africa has a unique opportunity to accelerate electrification while building a sustainable future. Despite the notable progress achieved over the past 15 years and the growing number of initiatives, it is now essential to accelerate and consolidate this momentum.

Okan Partners, a leading player in M&A and fundraising, collaborates with numerous stakeholders across the renewable energy sector. While conducting research for its clients and partners, Okan identified the lack of a comprehensive document bringing together key data and the latest developments in renewable energy in Africa in a clear and structured way. To address this gap, Okan Partners undertook the creation of an exhaustive database, listing all existing projects and those under development on the continent. This work was based on in-depth discussions with a wide range of players and on documentary research. The present report summarizes this work and was produced in collaboration with the ACF teams.

We wish you a pleasant read!

## About Okan Partners

Okan Partners is a financial advisory and strategy consulting firm dedicated to Africa. Okan Partners provides financial advisory (modelling, M&A, project finance) and strategy consulting services to both public and private clients. Okan Partners covers the major sectors driving growth in Africa: energy, water and sanitation, infrastructure and transport, agriculture and agro-industry, natural resources, industry, hotels and real estate, health and education.

## About the Africa CEO Forum

The Africa CEO Forum is the largest annual gathering of the African private sector. The 2025 edition will take place in Abidjan, with 2,000 business leaders, investors and decision-makers from Africa and around the world. Two days of conferences, debates and high-level meetings dedicated to highlighting the driving role of the private sector in the continent's development.



# Preface

By Hassanein Hiridjee, CEO of AXIAN Group



Nearly one in two Africans still lacks access to electricity — an alarming figure, far below the global average. And the situation could worsen in the coming years, given the still sluggish pace of energy infrastructure development across the continent. Over the past five years, Africa has brought only 14 gigawatts (GW) of power capacity online, twenty times less than what China achieved in a single year, despite having comparable population sizes!

Without electricity, sustainable economic development is simply not possible: no industrialization, no job creation, no improvement in living conditions for the population.

However, there is reason for hope. Some African countries have made remarkable progress in electrification, paving the way for the rest of the continent:


- Morocco achieved universal electrification in just over a decade — a remarkable feat, considering that in 1995, only half of all households had access to electricity. Several major energy infrastructures in Morocco, such as the Noor Ouarzazate solar complex and the Tarfaya wind farm, were developed by private companies or international consortiums. Implemented through Independent Power Producers (IPPs) or concession models, these projects have significantly increased the country's electricity generation capacity.
- Kenya's electrification rate has risen from 10% in the 1990s to over 75% today. The country also stands out for its exceptionally high share of renewable energy, which now accounts for over 80% of its installed electricity capacity, a level that surpasses many European nations. This progress is the result of various private investments, including landmark projects such as the Lake Turkana Wind Power plant and the Olkaria III geothermal power station, to name just a few.

These examples demonstrate that rapid progress is possible when proactive policies, targeted investments, and support for the emergence of national champions are put in place.

The “Mission 300 - Africa Energy Summit”, which brought together the main players in the sector in Dar es Salaam to accelerate the electrification of the continent, is part of this drive to connect 300 million Africans to reliable energy by 2030. At the summit, partners pledged to mobilise more than \$50 billion in financing to accelerate energy expansion efforts.

Electrification remains a massive challenge for African governments, often constrained by limited resources and technical capacity. In this context, the private sector is emerging as a key driver, playing an unprecedented and vital role in bridging the continent's energy gap.





At AXIAN Energy, as an Independent Power Producer (IPP) and a leading pan-African renewable energy player, we support public authorities by mobilizing private capital and providing technical expertise to design and deploy sustainable, high-impact projects for local communities. With a proven track record, we manage the entire energy development value chain, from design to commissioning, ensuring rigorous execution and long-term performance optimization. We develop and operate large-scale solar and hydropower infrastructure, support businesses in their energy transition through tailored Commercial & Industrial (C&I) solutions and actively contribute to rural electrification through innovative and inclusive models.

Our commitment began in Madagascar, where we helped develop NEA Ambatolampy, the largest solar power plant in the Indian Ocean (45 MWp). Building on this experience, we have expanded our ambitions across the African continent. In Casamance, Senegal, we are currently constructing NEA Kolda, the largest solar power plant with battery energy storage (BESS) in West Africa, a 60 MW plant with 72 MWh of storage that will deliver clean and reliable electricity to 235,000 people.

Our expansion continues with other large-scale projects in Senegal, as well as in Burkina Faso, Côte d'Ivoire, and Rwanda. Our subsidiary WeLight, a pioneer in rural electrification in Africa, is electrifying over 180 villages in Madagascar and Mali through the deployment of innovative and sustainable solar mini-grids. WeLight aims to deploy and operate 400 mini-grids and 50 MetroGrids by 2030 as part of the DARES program (Distributed Access through Renewable Energy Scale-Up), supported by the World Bank and the African Development Bank. This initiative will provide 1.5 to 2 million people with first-time access to electricity or significantly improved service quality. These projects reflect our strong commitment to clean and affordable energy access as part of the M300 program.

However, several challenges must still be addressed to build a sustainable energy future. On the side of local utilities (electricity off-takers), it is essential to optimize financing mechanisms to strengthen their financial health, and to modernize electricity transmission and distribution infrastructure. As for the private sector, it requires a stable regulatory environment and more effective financing tools to unlock greater investment. By bringing together private investors, governments, and financial institutions, we can accelerate the continent's energy transformation.

Okan and the Africa CEO Forum have joined forces to produce this report, which provides an in-depth analysis of the dynamics of the renewable energy sector in Africa, highlighting regional specificities and the strategic role of independent power producers (IPPs).

We wish you a pleasant read!





# Energies: towards a greener future for Africa?

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1

Introduction

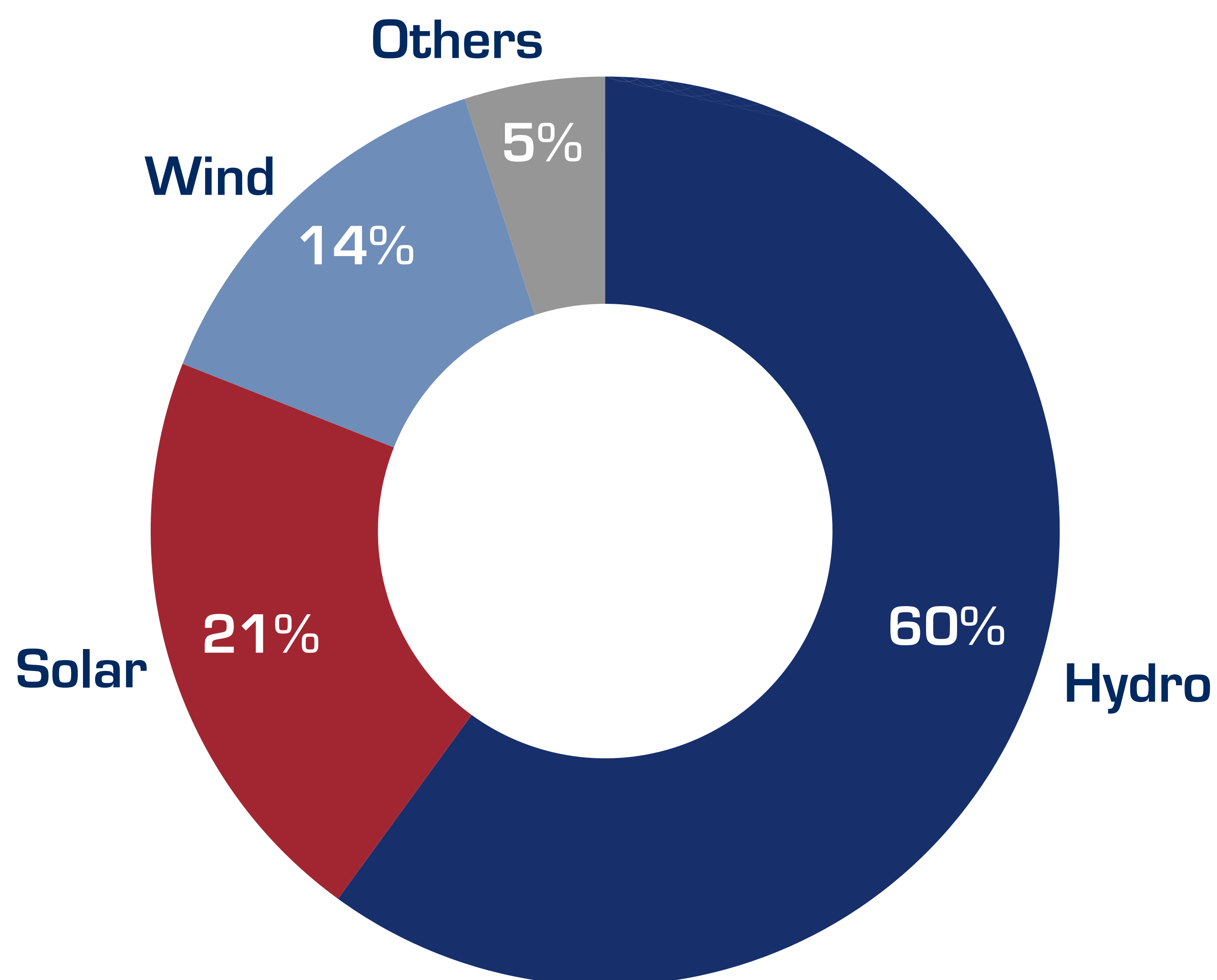
**General overview**



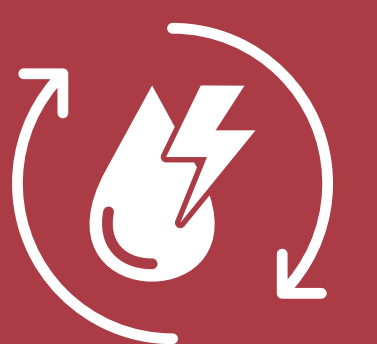
## I – The transition to green energy in Africa is underway

**In just ten years, Africa has doubled its installed renewable energy capacity...**

*Renewable energy mix [%] – 2023*



**Hydropower still dominates**



**...Increasing from 31 GW in 2013  
to 62 GW in 2023**

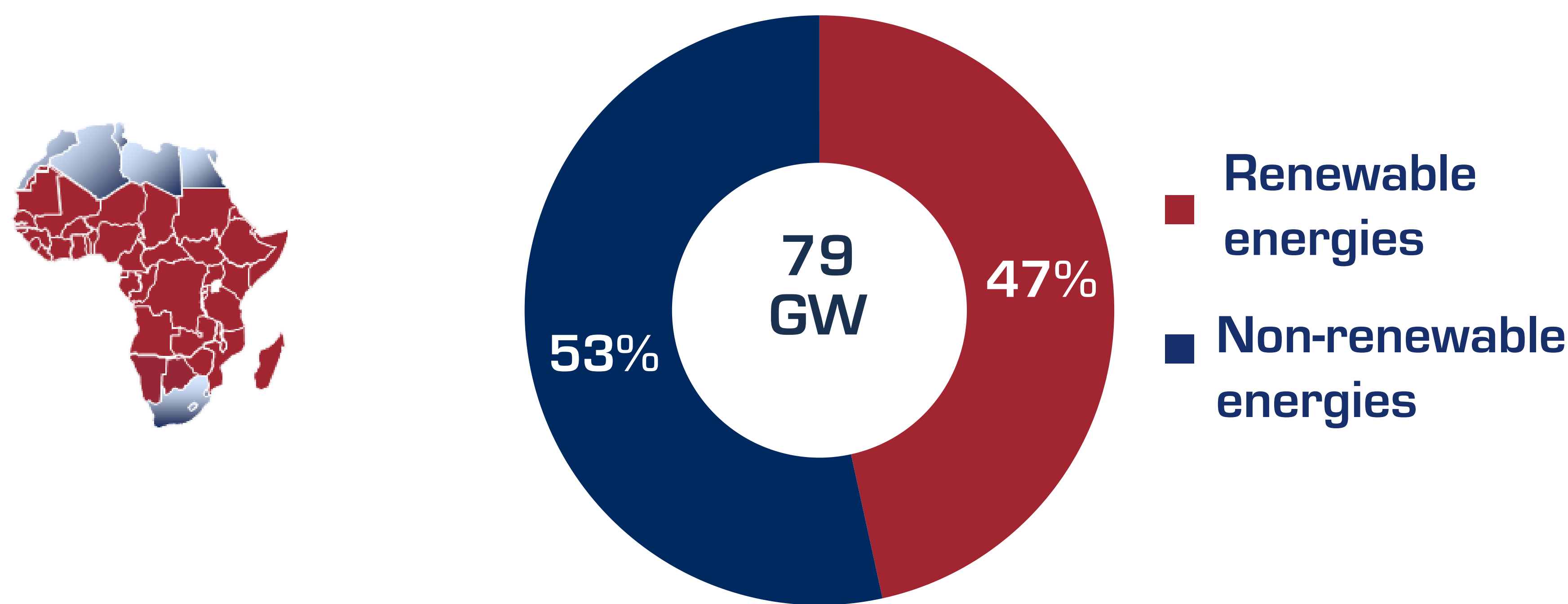


# I – The transition to green energy in Africa is underway

## ...And has significantly improved its energy mix

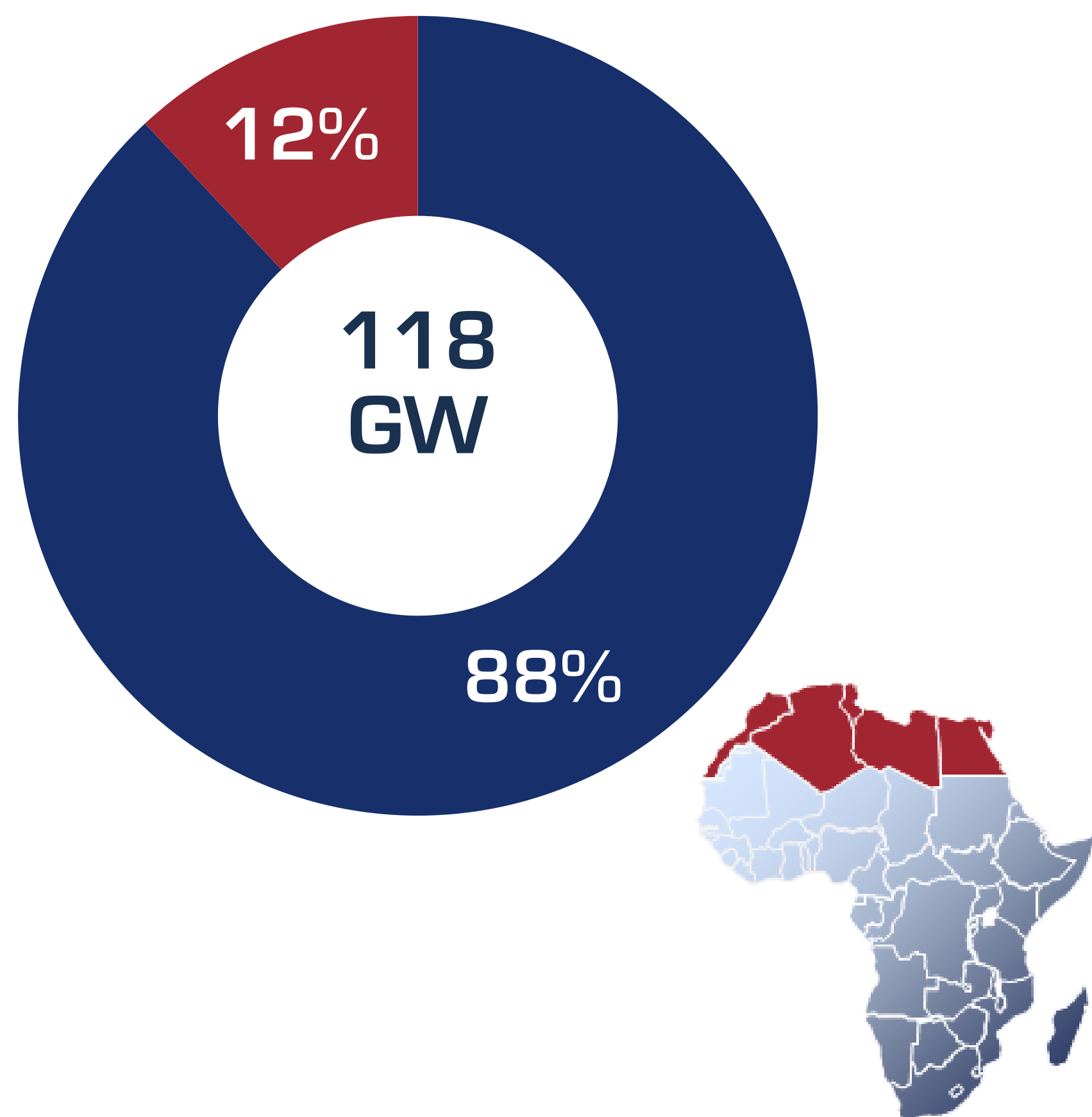
Nearly 50% of its generation capacity now comes from renewable sources

Sub-Saharan mix – excluding South Africa [%] – 2023

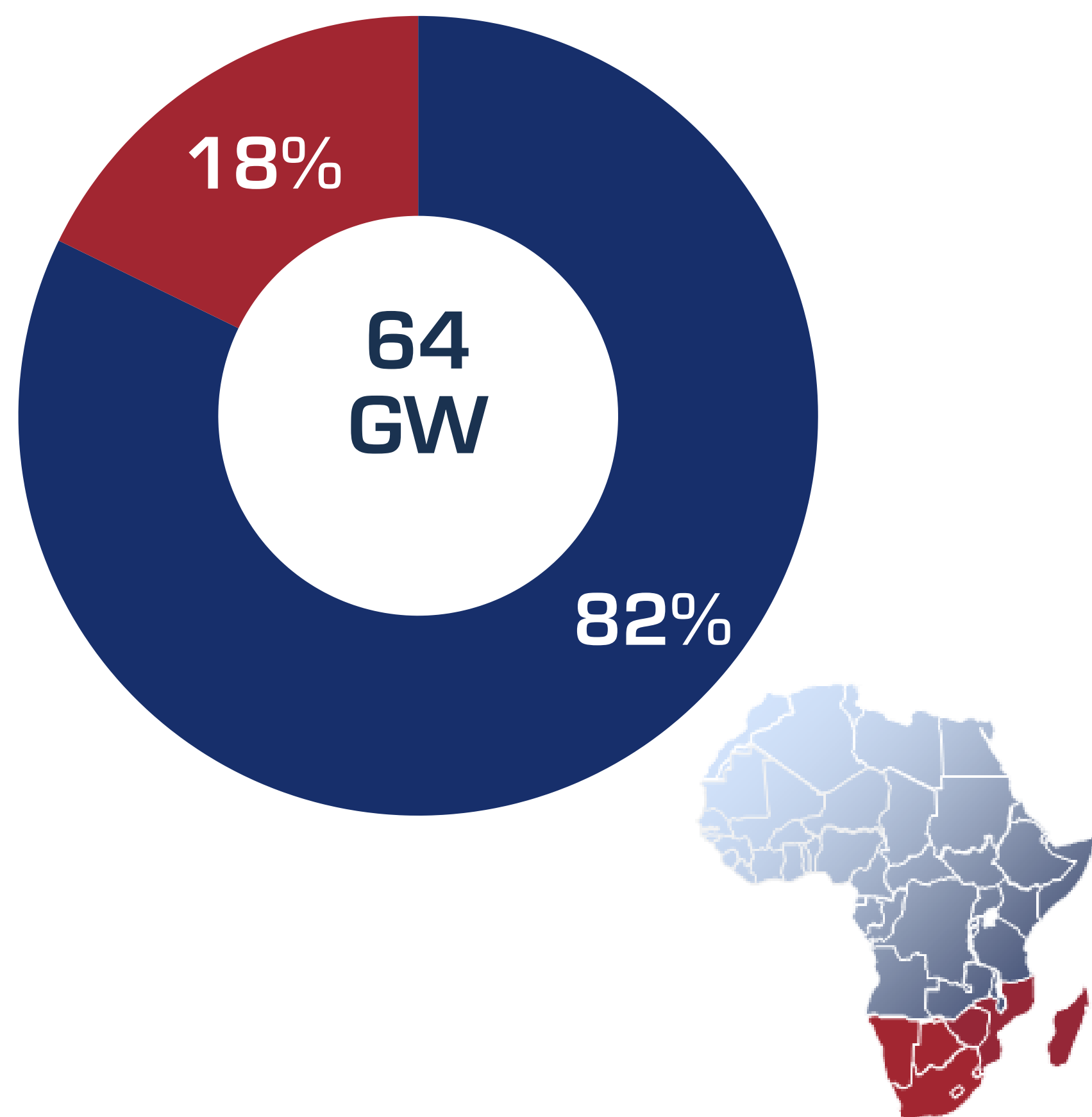


However, some regions remain dependent on fossil fuels

North Africa mix [%] – 2023



Southern Africa mix [%] – 2023





# I – The transition to green energy in Africa is underway

## Several continent champions stand out

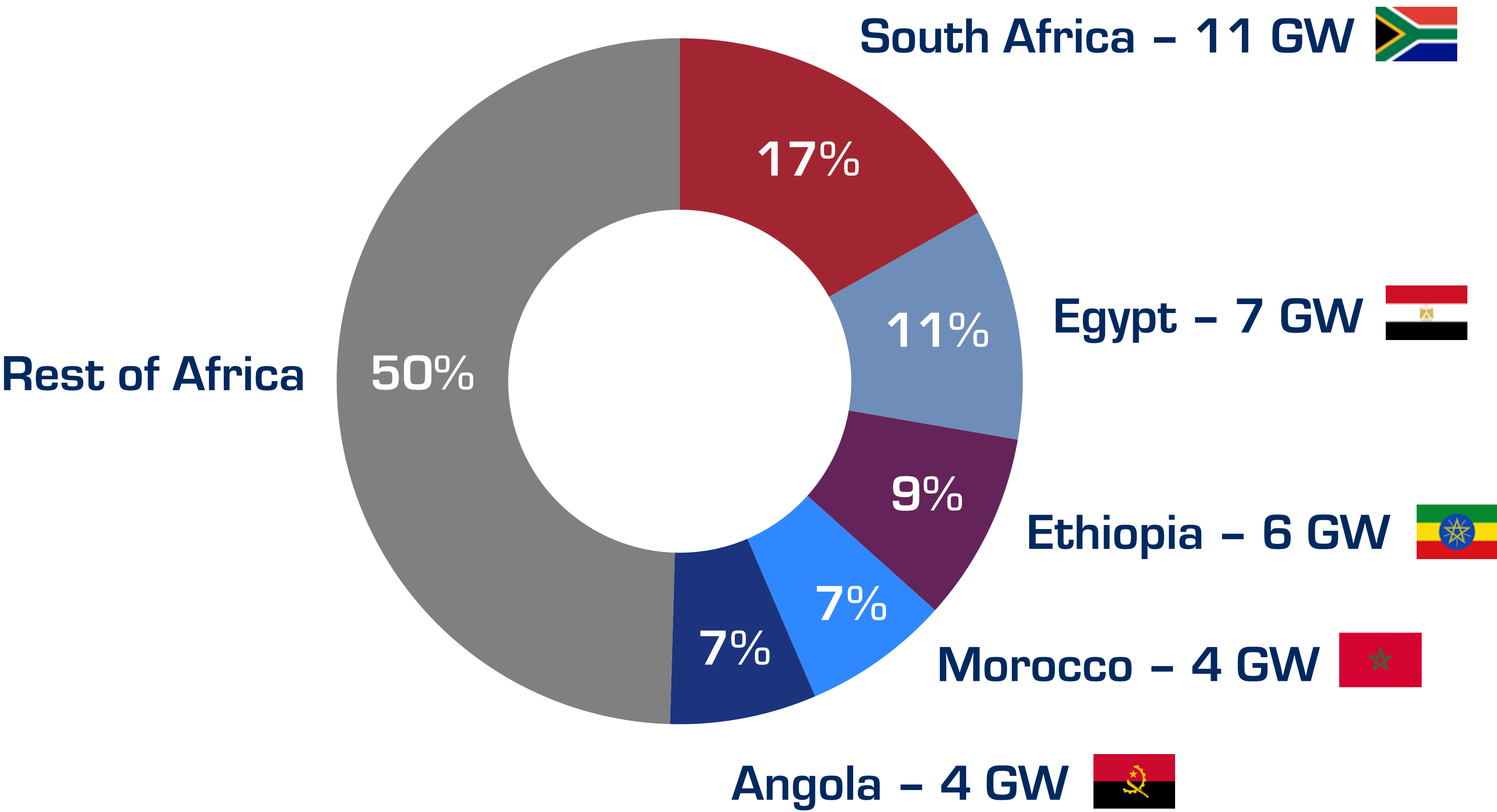
+5 countries have over 80% of renewables in their energy mix

Share of renewables in the energy mix [%] – 2023



5 countries account for +50% of the continent’s installed renewable energy capacity

Breakdown of installed renewable energy capacity [%] – 2023



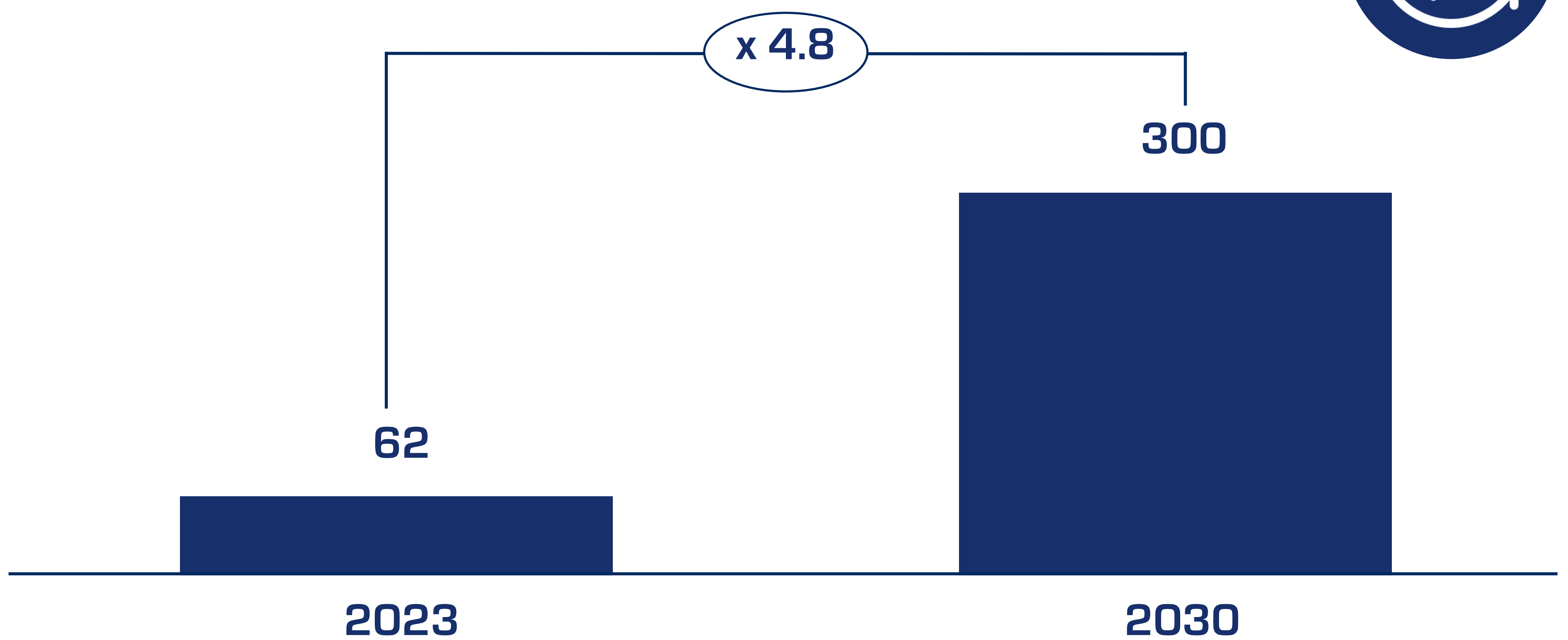


# I – The transition to green energy in Africa is underway

## An ambitious goal: multiplying installed capacity fivefold by 2030

An exponential growth in installed capacity is expected...

*Installed capacity of renewable energies  
(in GW) – 2023*



...To meet the demands of population growth and urbanization



## II – Several challenges remain

### A still modest growth rate

1.5 bn  
inhabitants



**14 GW**

Installed capacity over

**the last 5  
years**

1.4 bn  
inhabitants



**300 GW**

Installed capacity in

**1 year (2023)**

**In 5 years, Africa has commissioned less than 5% of what China added in 2023 alone**



## II – Several challenges remain

# Public energy companies often overwhelmed

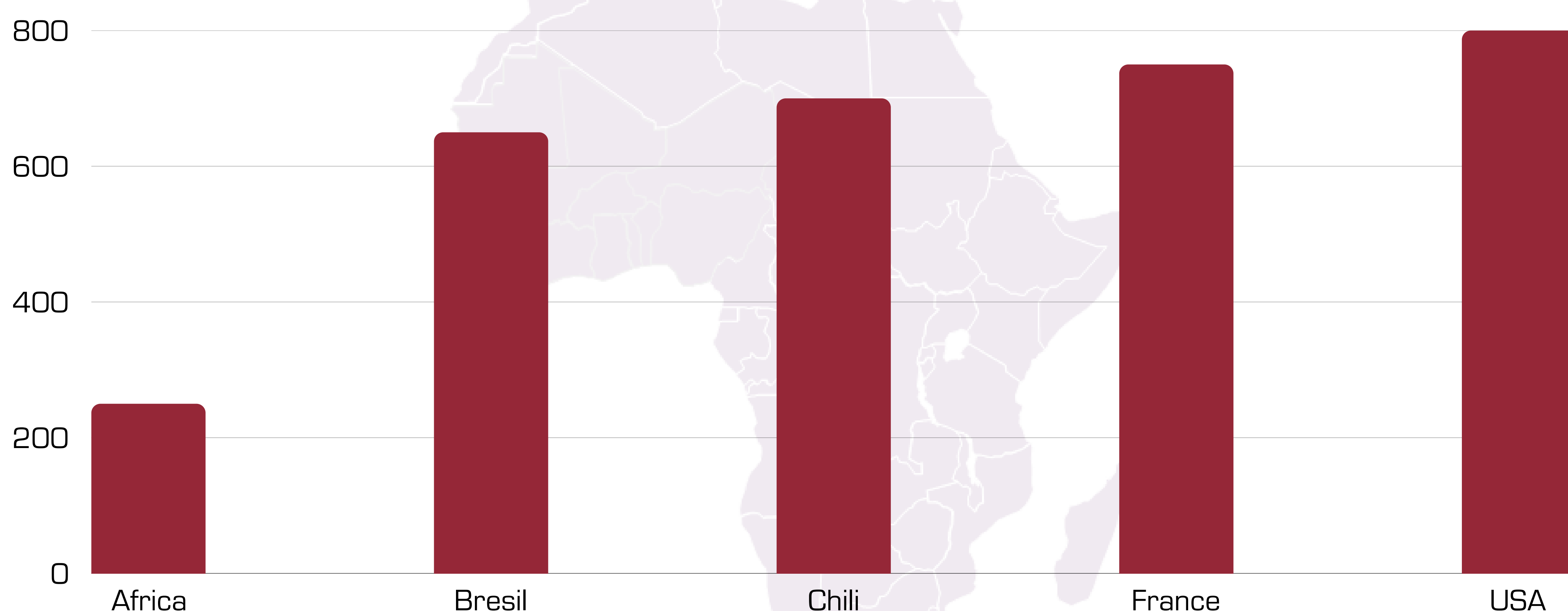
## 1 Many failing state-owned companies

**21 billion dollars**

spent each year by governments to cover losses of utilities  
and to subsidise hydrocarbons

## 2 Undeveloped and unreliable networks and infrastructure

*Transmission lines per million inhabitants (in km)*



- **80%** of businesses in Sub-Saharan Africa face **frequent power cuts**
- **42%** of countries experienced **blackouts lasting over 24 hours** and **79%** had cuts **longer than 2 hours** in 2023

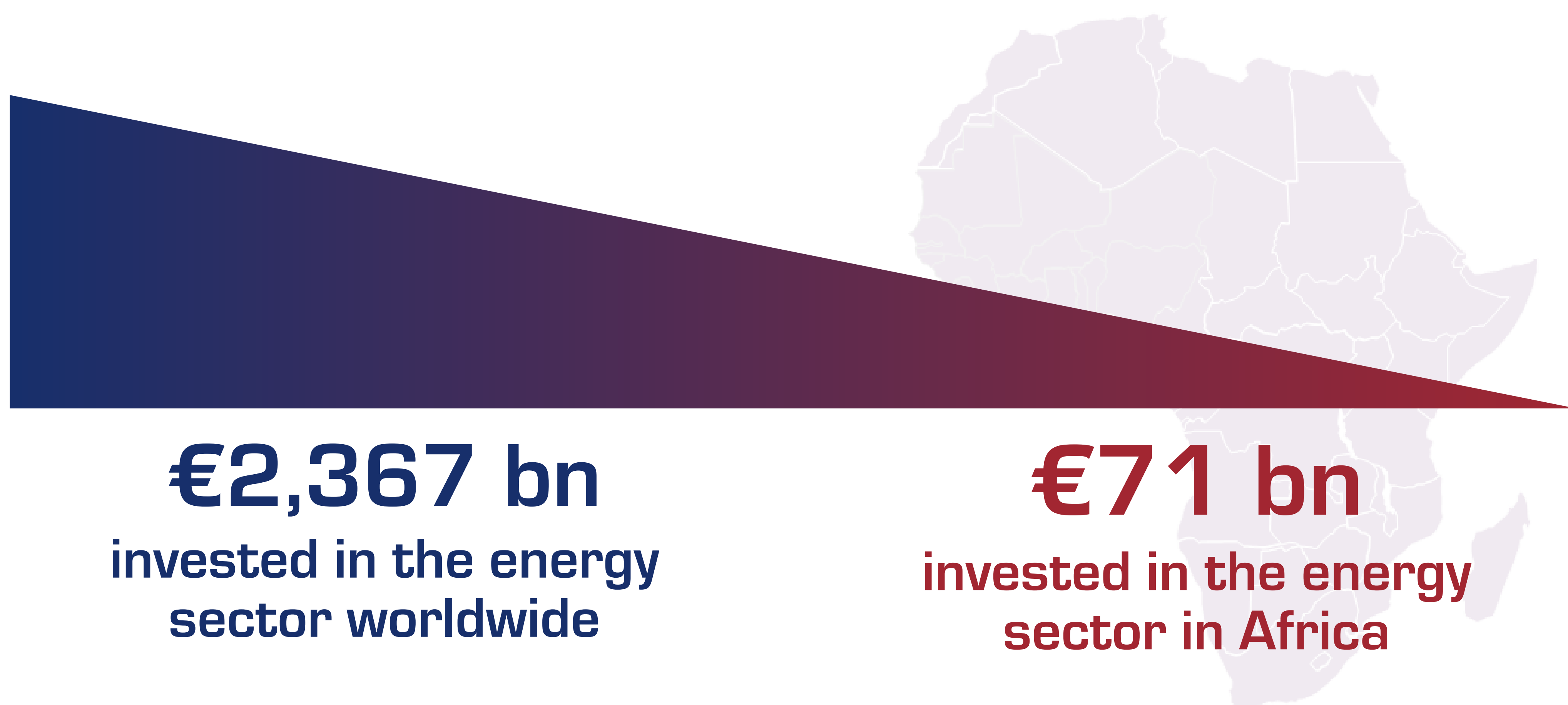


## II – Several challenges remain

### A lack of private investment

**3%**

**Africa attracts only 3% of global energy sector investments**



**€2,367 bn**

**invested in the energy sector worldwide**

**€71 bn**

**invested in the energy sector in Africa**

**Several factors for limited private investment:**



**Unharmonized legal and regulatory frameworks**



**Fragile political and economic situation, preventing the provision of solid financial guarantees**



**Sharp decline in the profitability of « IPP » since the Covid-19 crisis**



### III – Our methodology

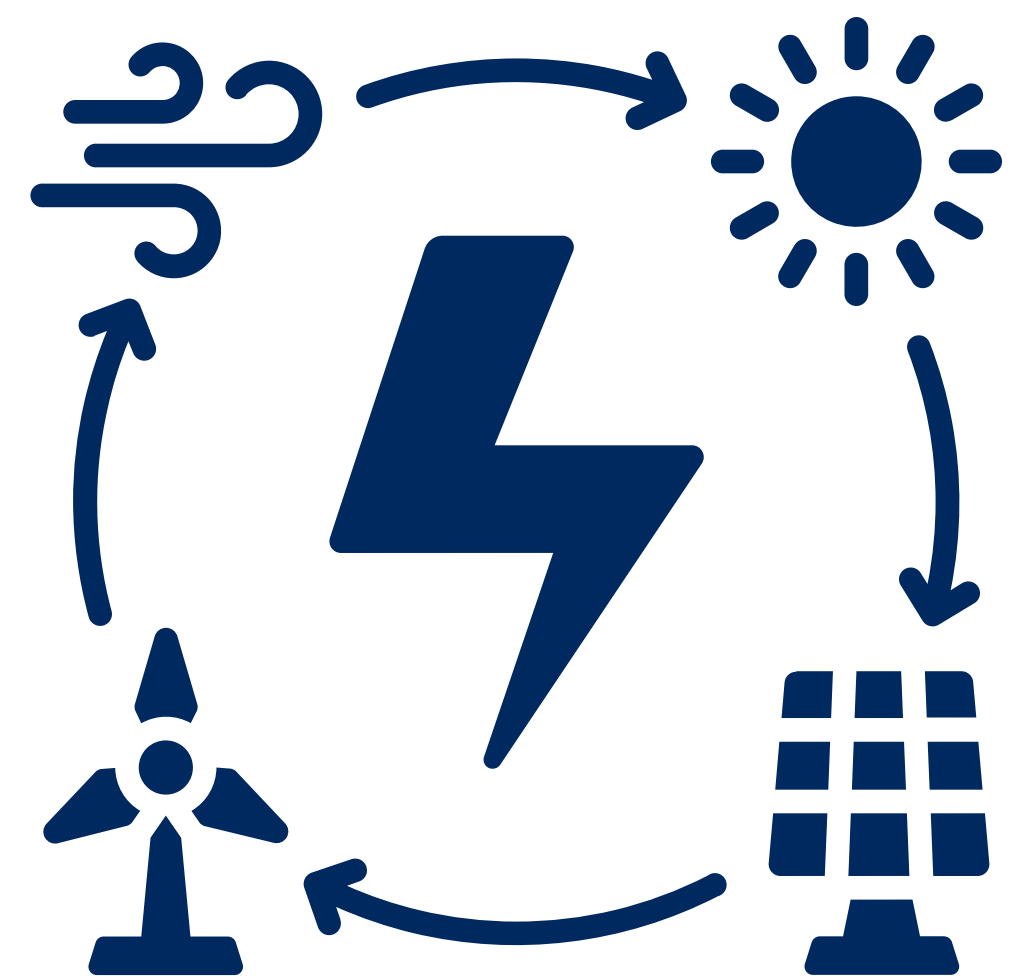
## Mapping and analysis of +550 renewable energy projects across the continent



Various project types  
(operational, under  
construction, announced)



54 countries



3 major renewable energy  
(hydro, solar and wind)

This enables a multi-criteria analysis of the sector:

#### 5 regions across Africa

- West Africa
- North Africa
- Central Africa
- East Africa
- Southern Africa / Indian Ocean

#### Analysis methodology

- Installed capacity and energy mix
- Projects in progress
- Most active private players





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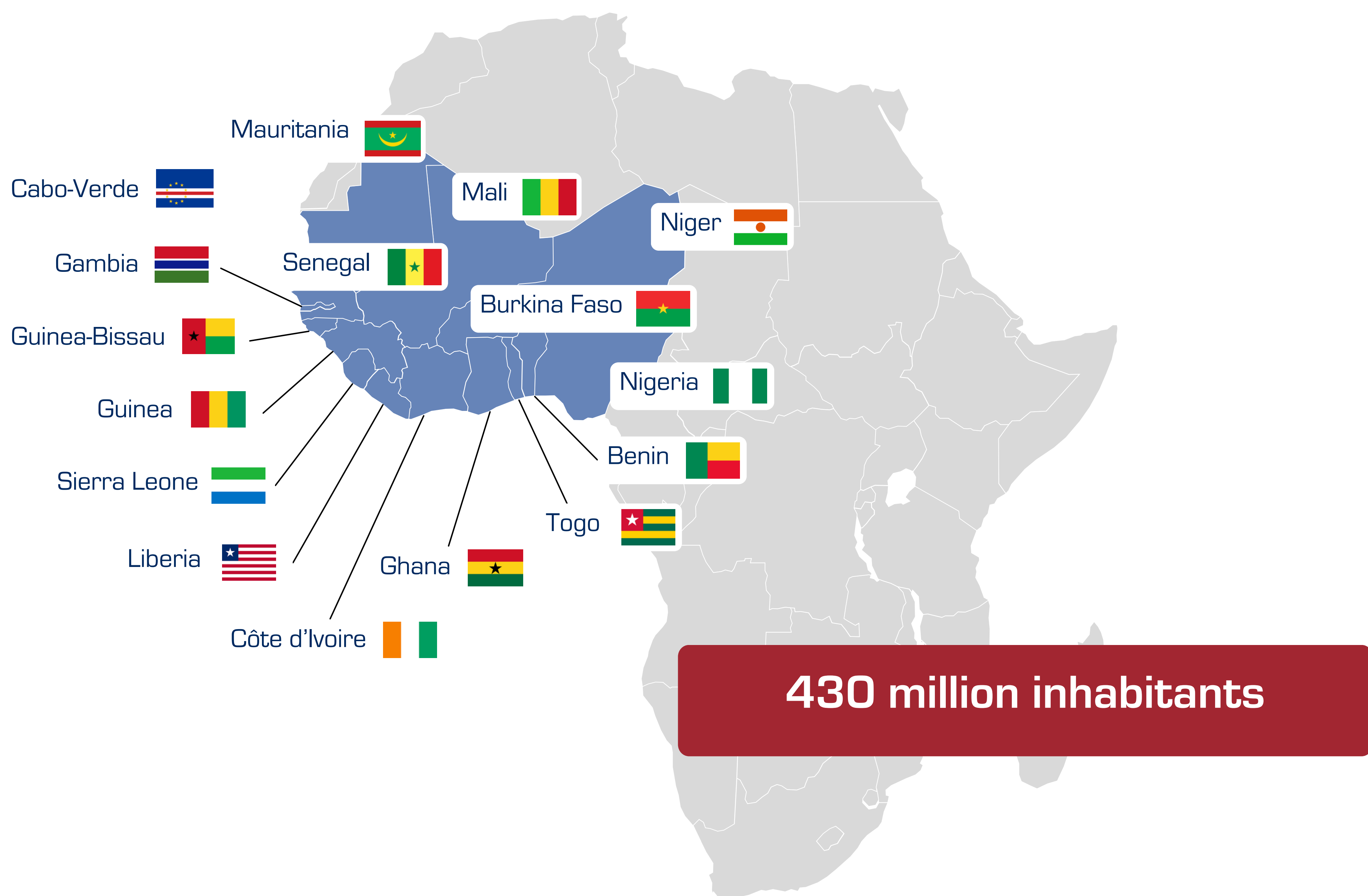
2

Focus

**West Africa**

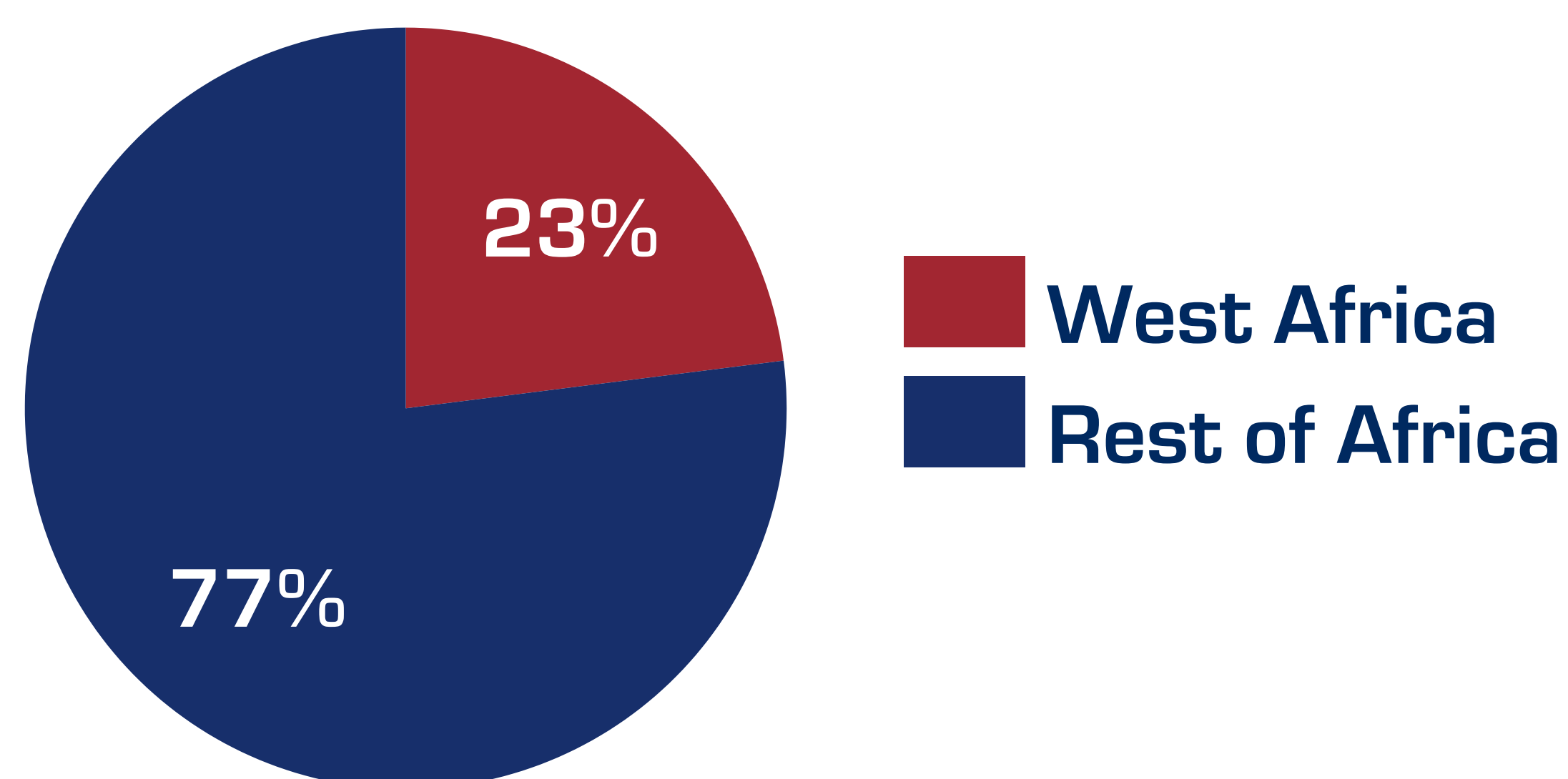


## West Africa accounts for almost **30% Africa's population...**

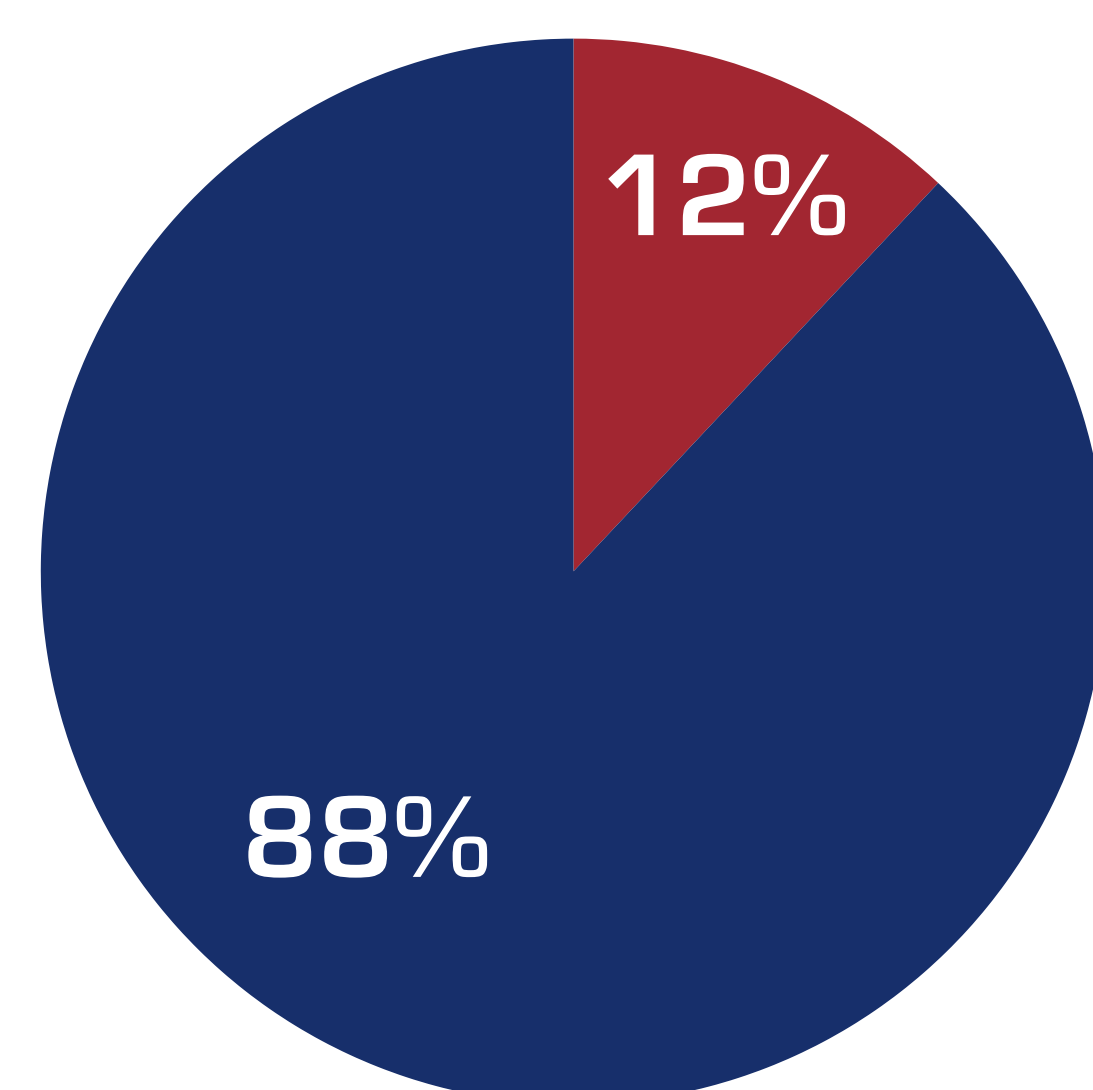


**...And represents around 20% of its GDP  
but only 12% of installed capacity**

*GDP breakdown [%] – 2023*



*Installed capacity  
breakdown [%] – 2023*

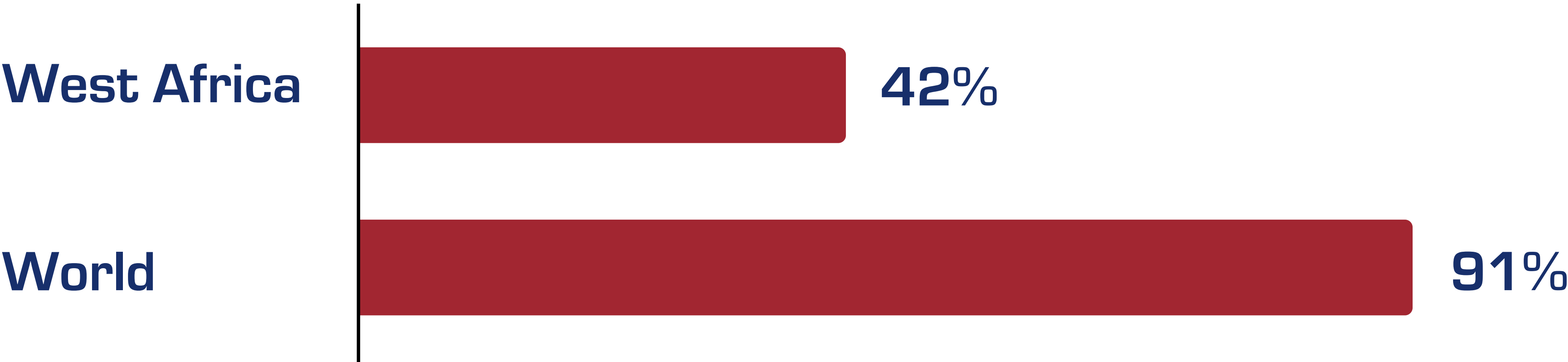




This region has a low level of access to electricity...

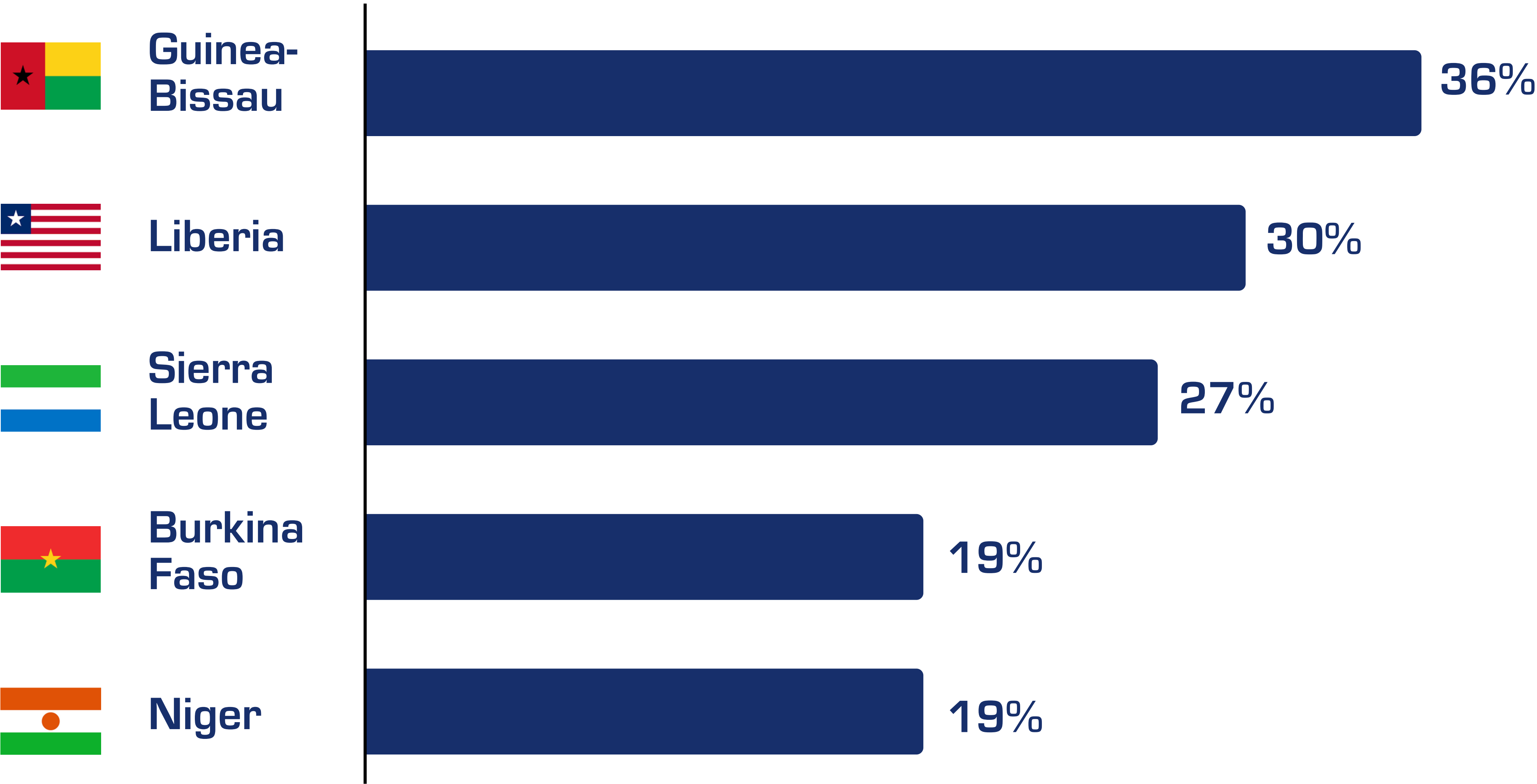


Electrification rate [%] – 2023



...With several countries recording some of the lowest rate of access to electricity in the world

Electrification rate [%] – 2023

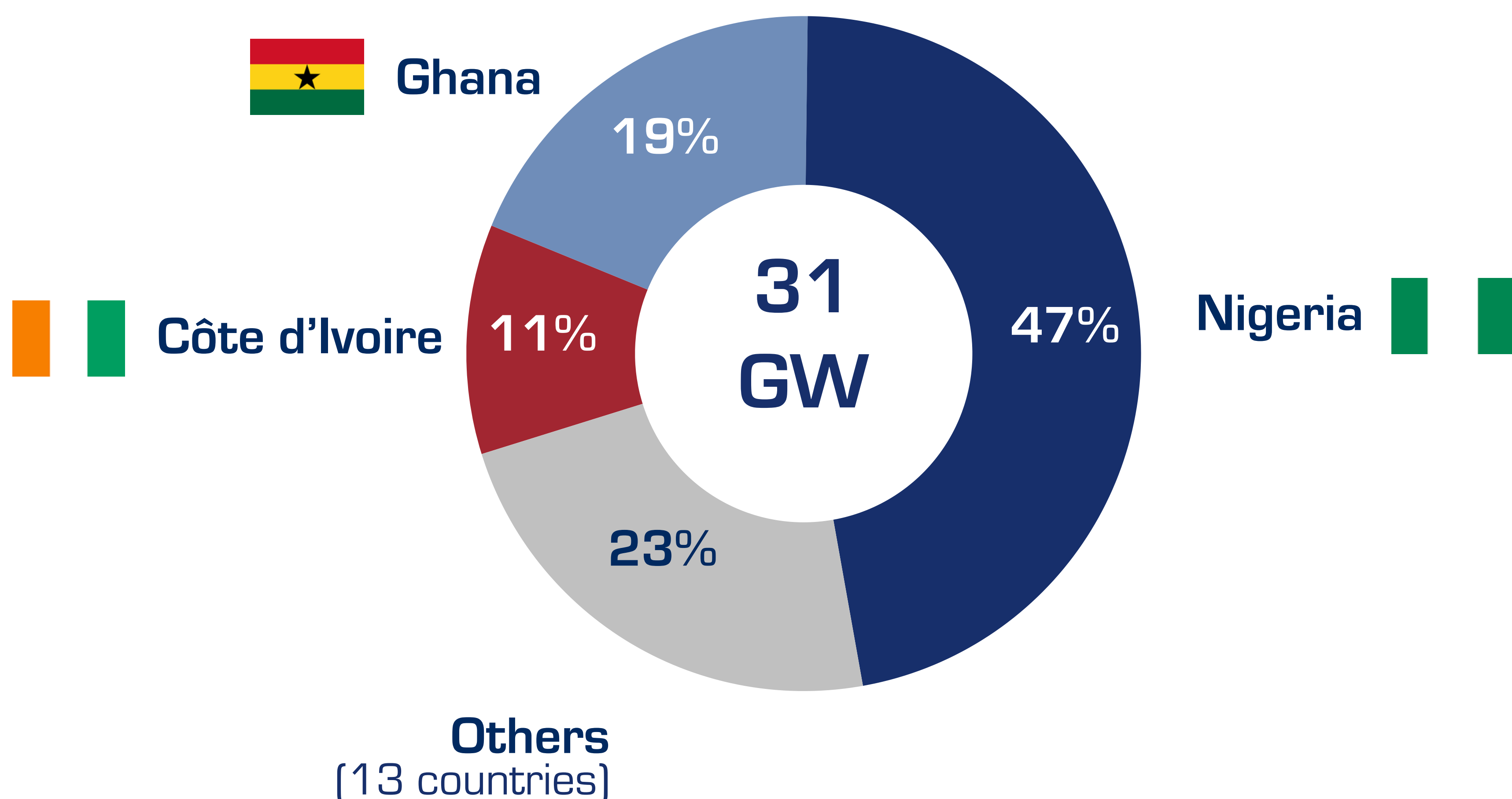




Over the past 10 years, the region has increased its installed capacity by 55%, rising from 20 GW to 31 GW

**80% of this installed capacity is located in 3 countries**

*Installed capacity breakdown [%] – 2023*



**13 others share the remaining 20%**



**The energy in the region is generally unreliable and very expensive...**



Power cuts can exceed 80 hours per month

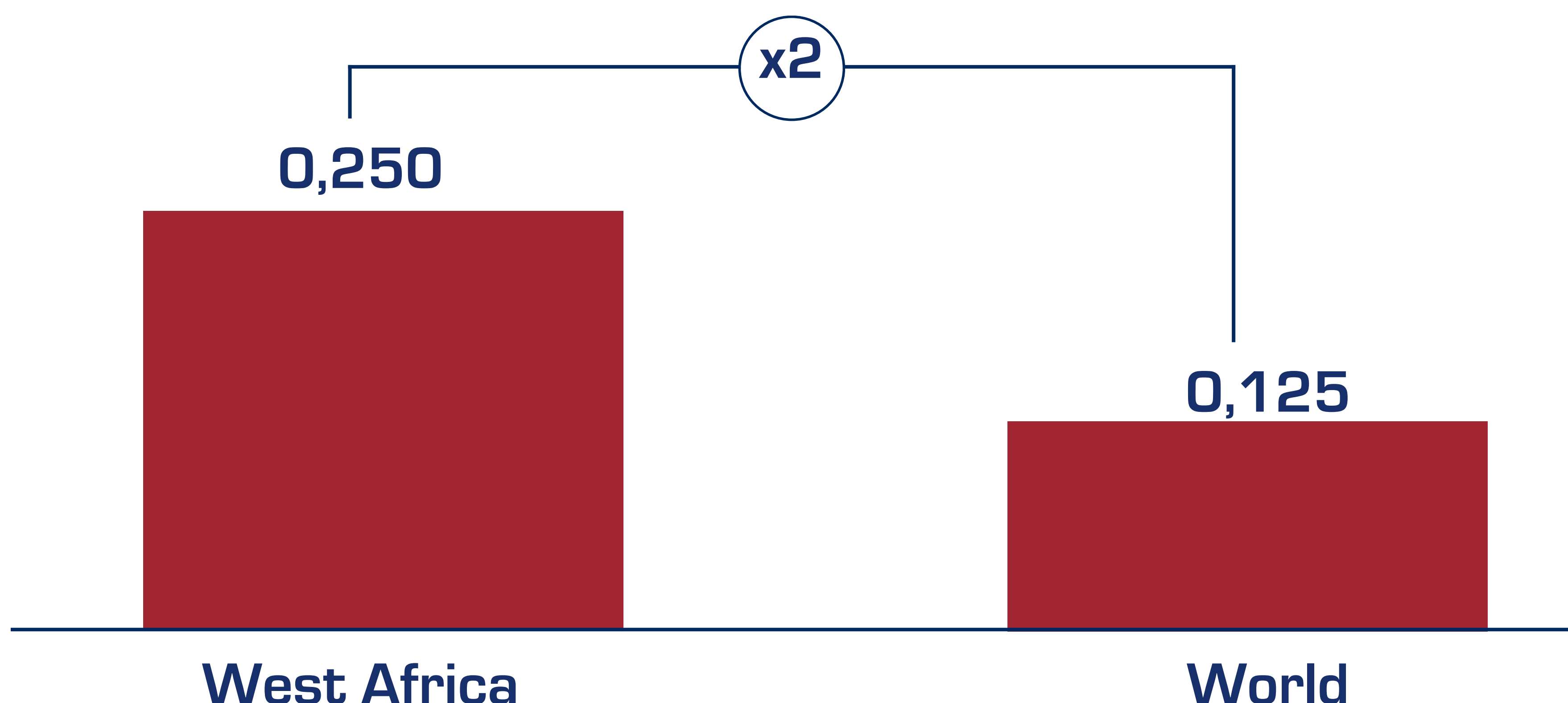


Grid unreliability carries a significant cost  
for industrial players

\$29 bn spent by Nigerian companies  
(>5% of the country's GDP)

**...Hindering economic development**

*Price of kWh for households (\$)*

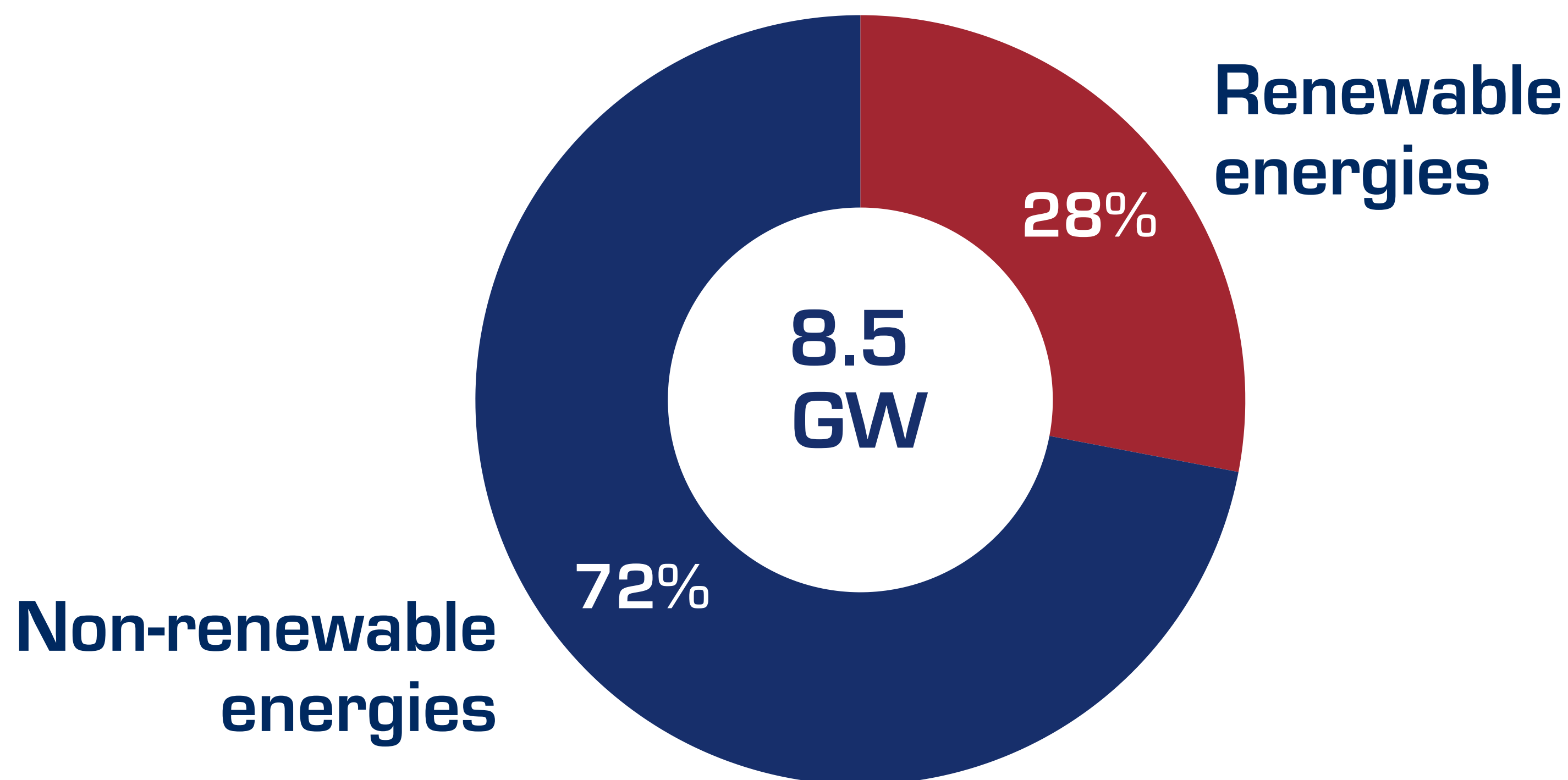




## II – Overview of renewable energy development

### The share of renewables is still low in the energy mix...

*Energy mix - installed capacity in MW (%) – 2023*



### ...Despite significant potential

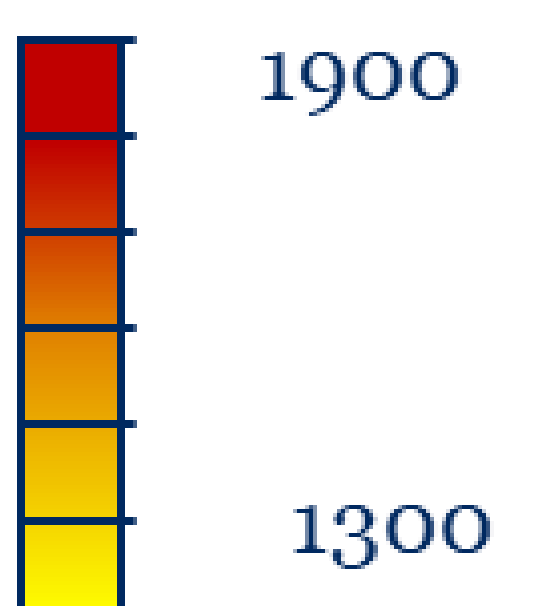
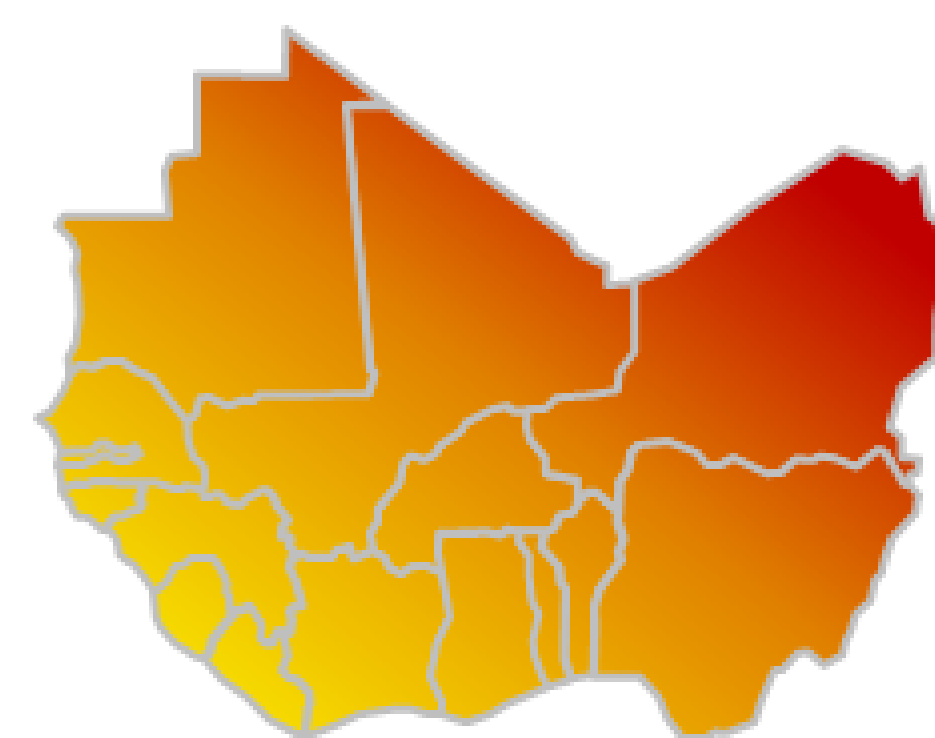


Hydropower potential of +25 GW in West Africa



Huge solar energy potential, with 2 of the sunniest countries in the world:

- Niger 
- Mali 



Productible (kWh / kWe)

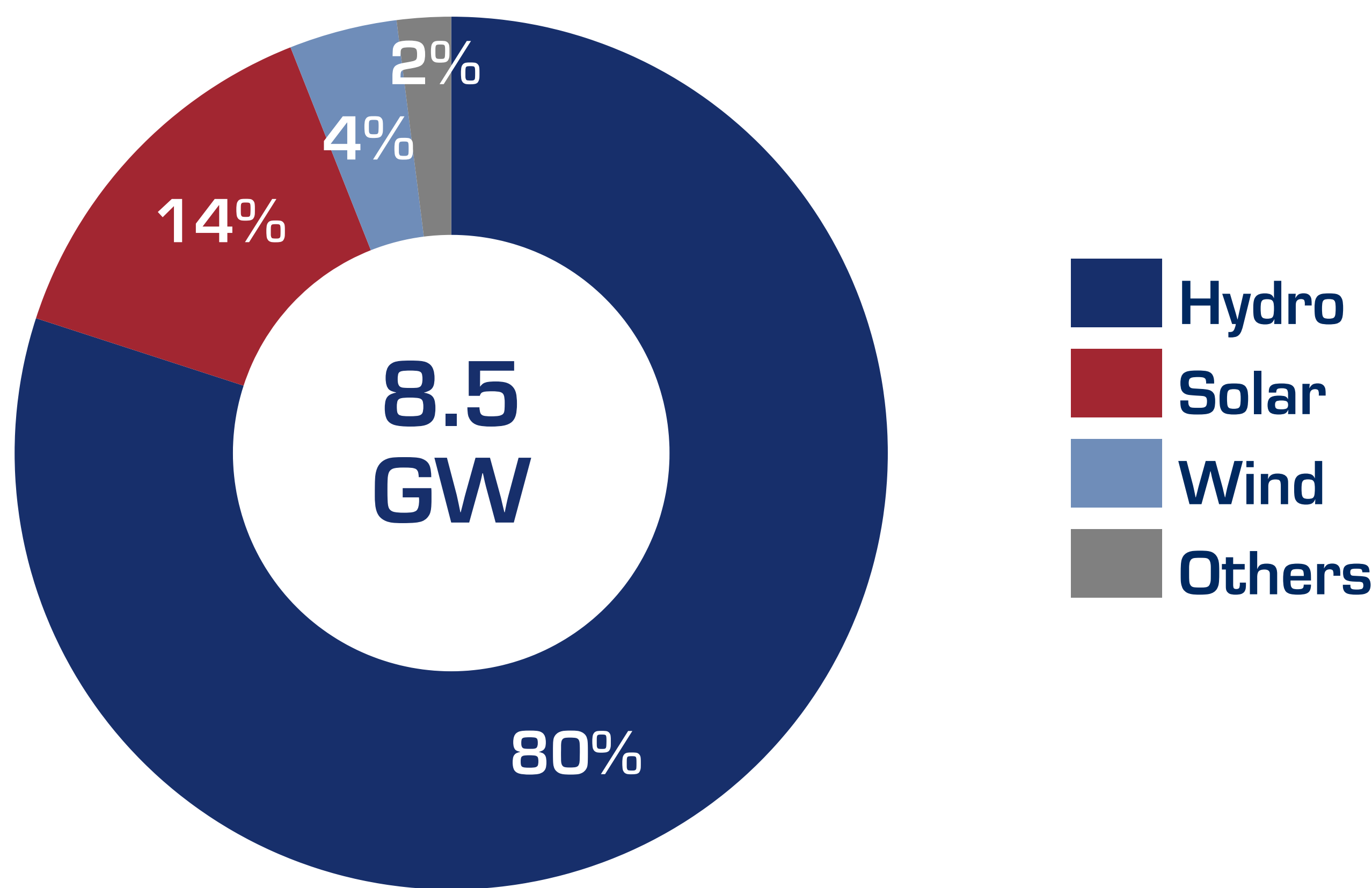


West Africa has +6 000 km of coastline



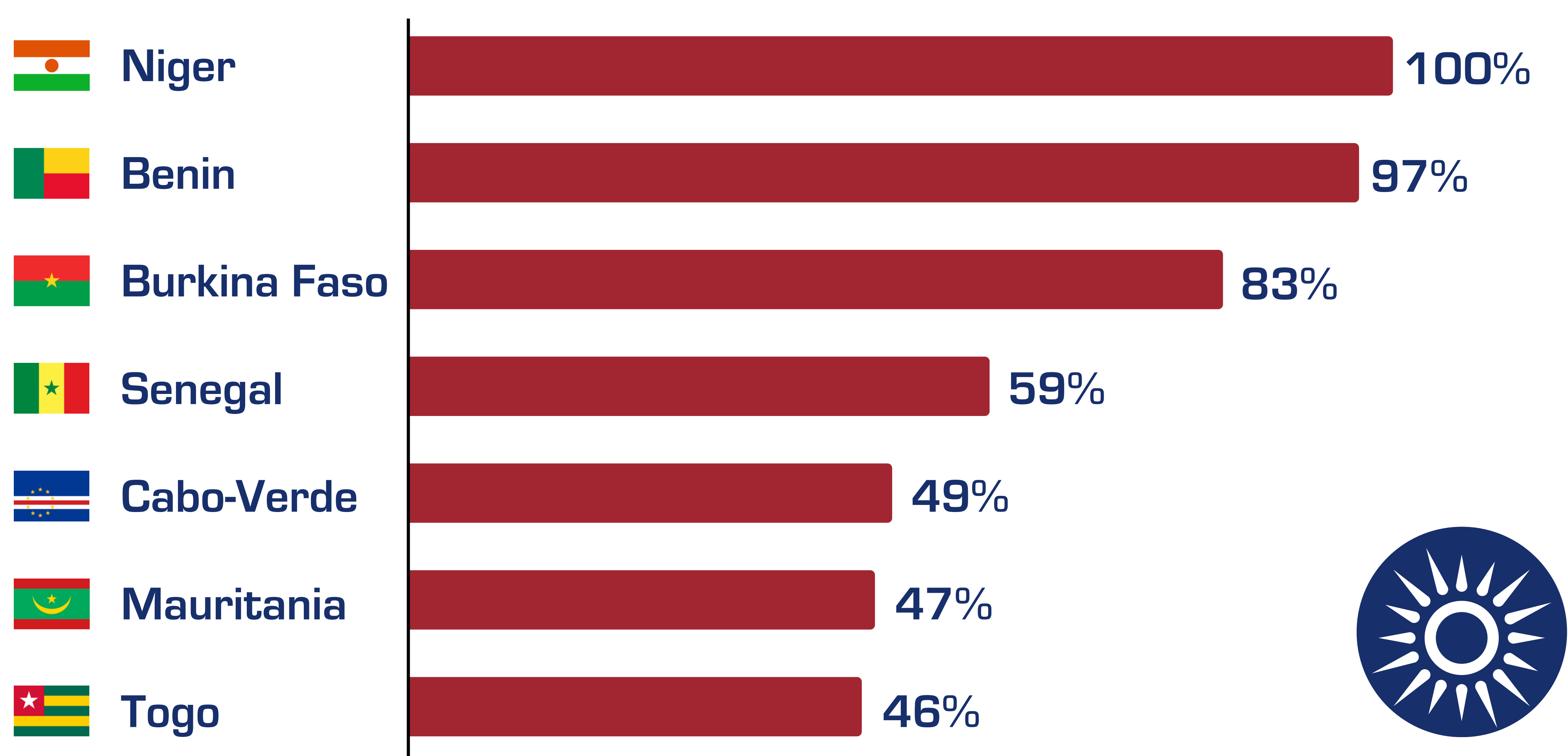
# Hydropower is the most strongly represented...

Energy mix - installed capacity in MW [%] – 2023



## ...Except in a few countries where solar energy dominates

Share of solar energy in renewables [%] – 2023





# To compensate for the lack of public investment, governments have opened up their markets to private players

*Lifting the ban on electricity production by private companies - examples*



**Senegal**

**1998**



**Mali**

**2000**



**Burkina Faso**

**2017**



**Mauritania**

**2022**



## **12 countries out of 16**

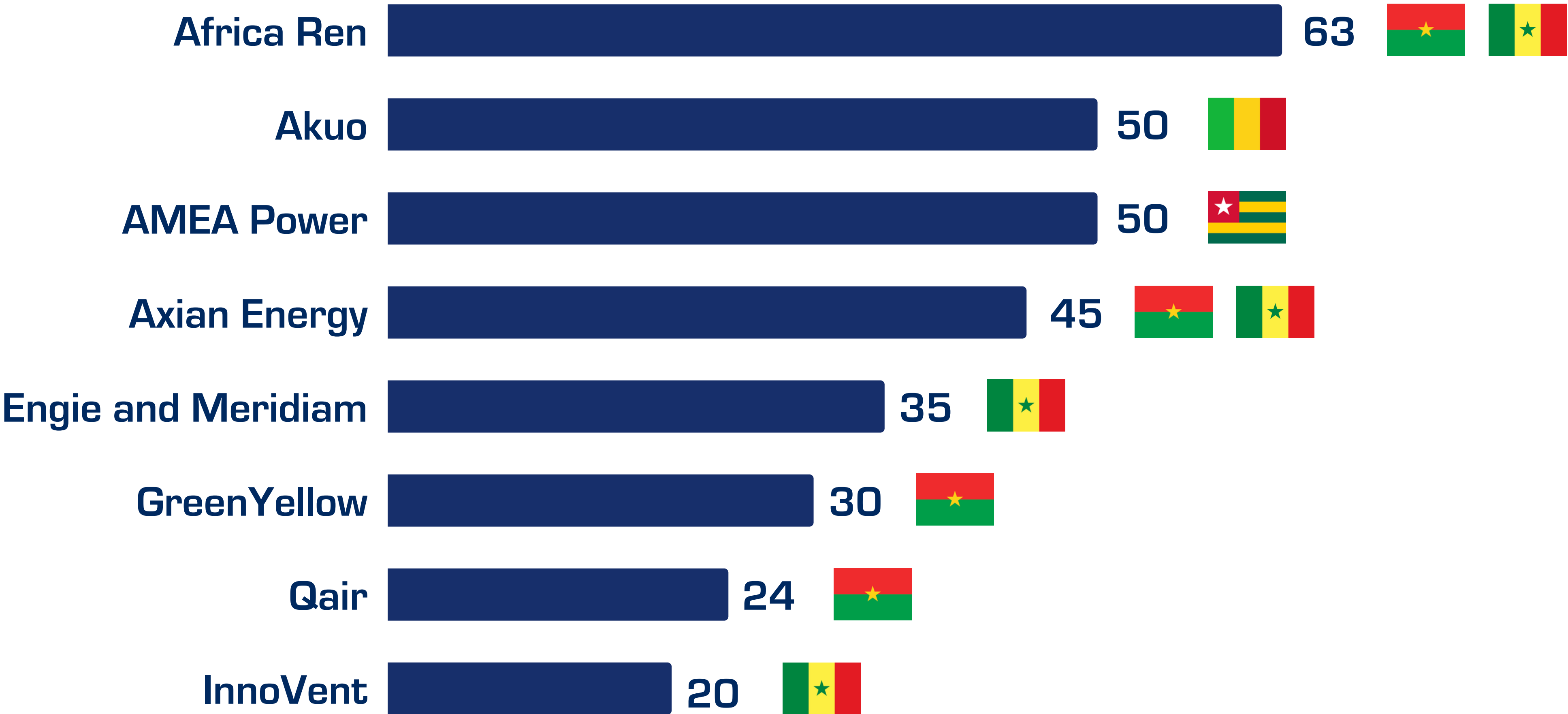
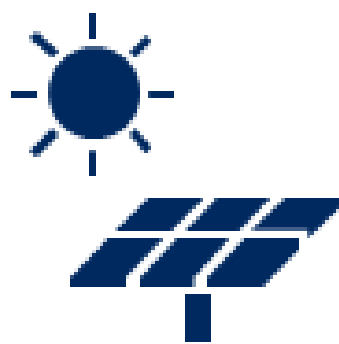
**host developed or in progress  
projects led by Independent  
Power Producers (IPP)**



# The region has succeeded in attracting several private players

Examples of private companies producing utility-scale electricity, installed capacity (MW)

## Solar projects in operation<sup>1</sup> (MW) – 2024



## Wind projects in operation<sup>1</sup> (MW) – 2024



## Hydro project in operation<sup>1</sup> (MW) – 2024



Sources: Data base Okan – non-exhaustive list  
Note: (1) Excluding governments and public entities

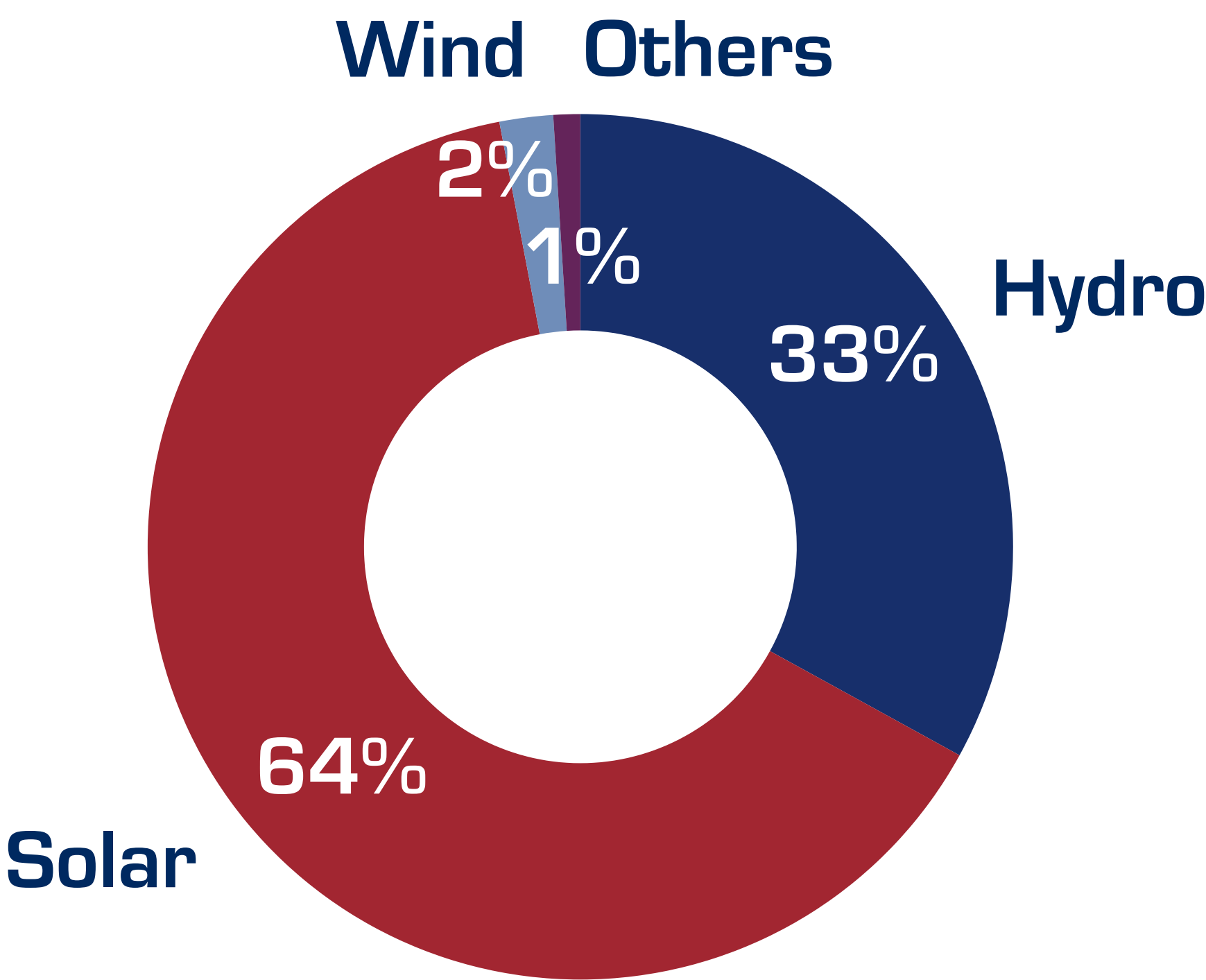


### III – Futur development of renewable energies

An increase in renewable energy capacity is expected, with almost 20 GW of additional capacity, of which around 1/3 is already under construction

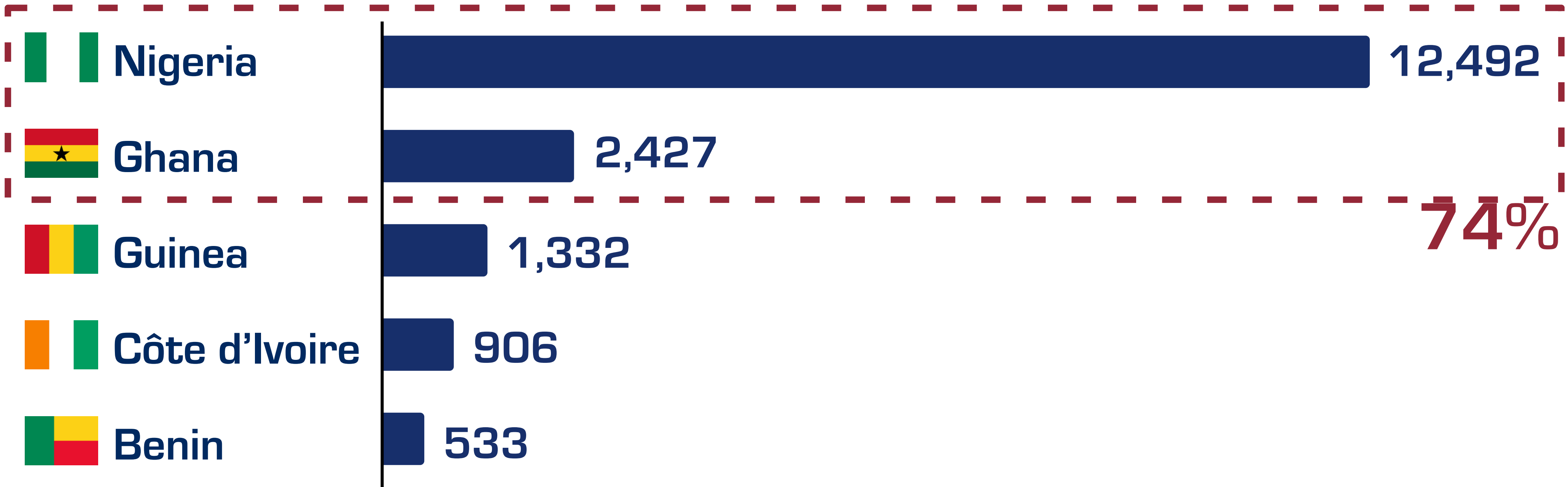
64% of the capacity under construction and announced comes from solar energy

Breakdown by type of energy of projects announced and under construction [%] – 2024



2 countries account for 3/4 of projects announced and under construction

Ranking of projects announced and under construction by country (MW) – 2024





### III – Futur development of renewable energies

## Private players<sup>1</sup> with projects announced and under development in the region





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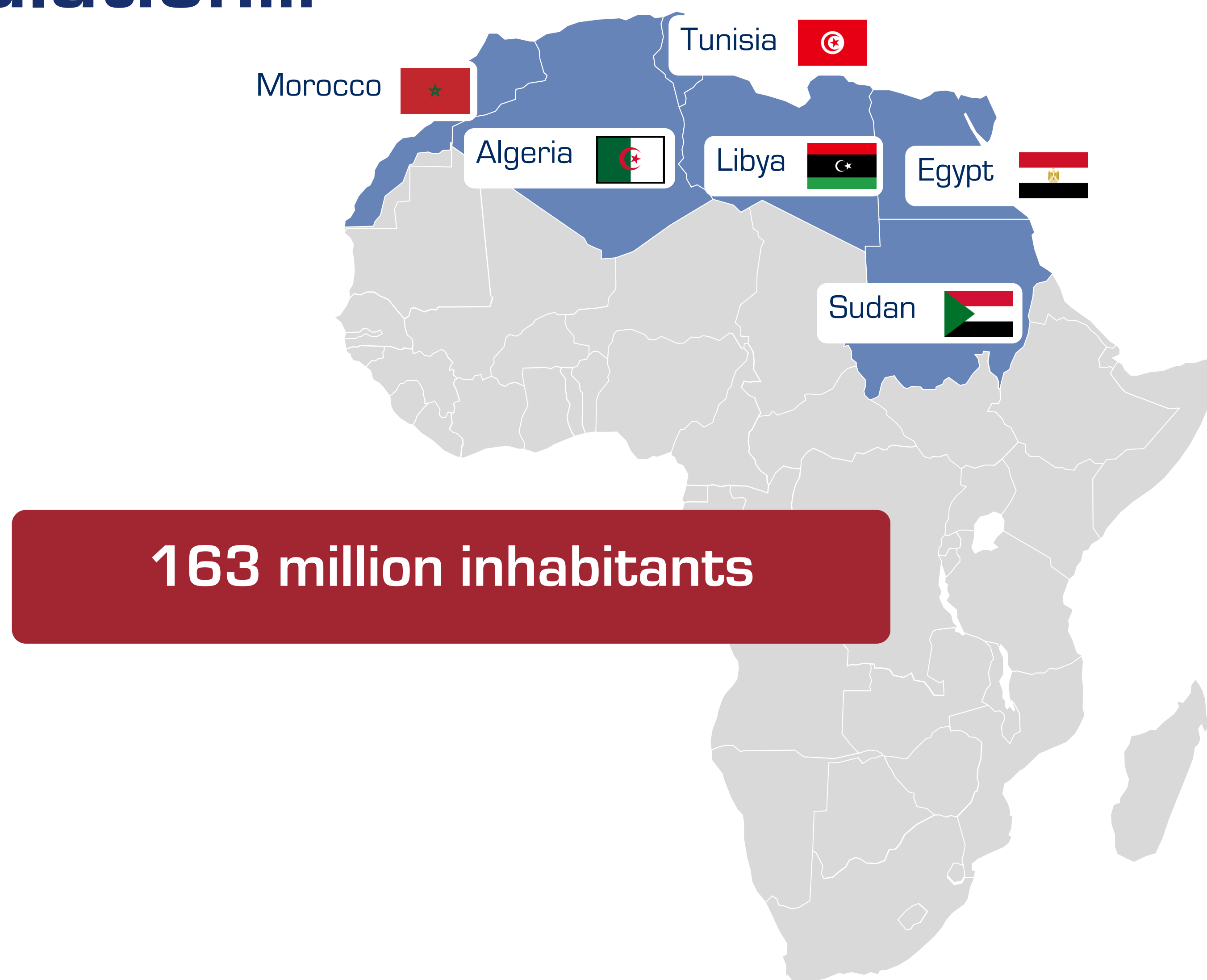
Focus

North Africa



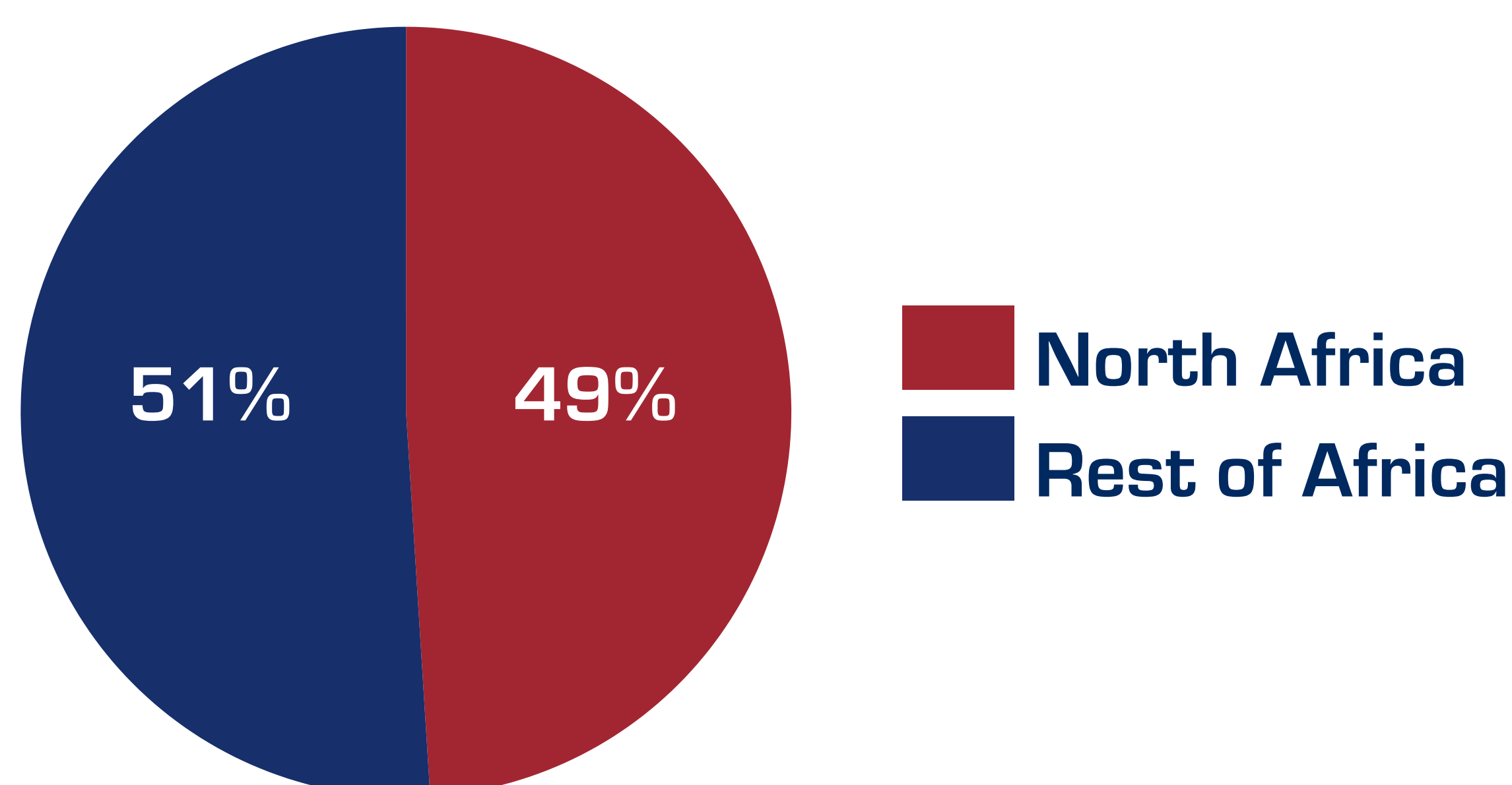
## I – Access to energy in North Africa

**North Africa accounts for <15% of Africa's population...**

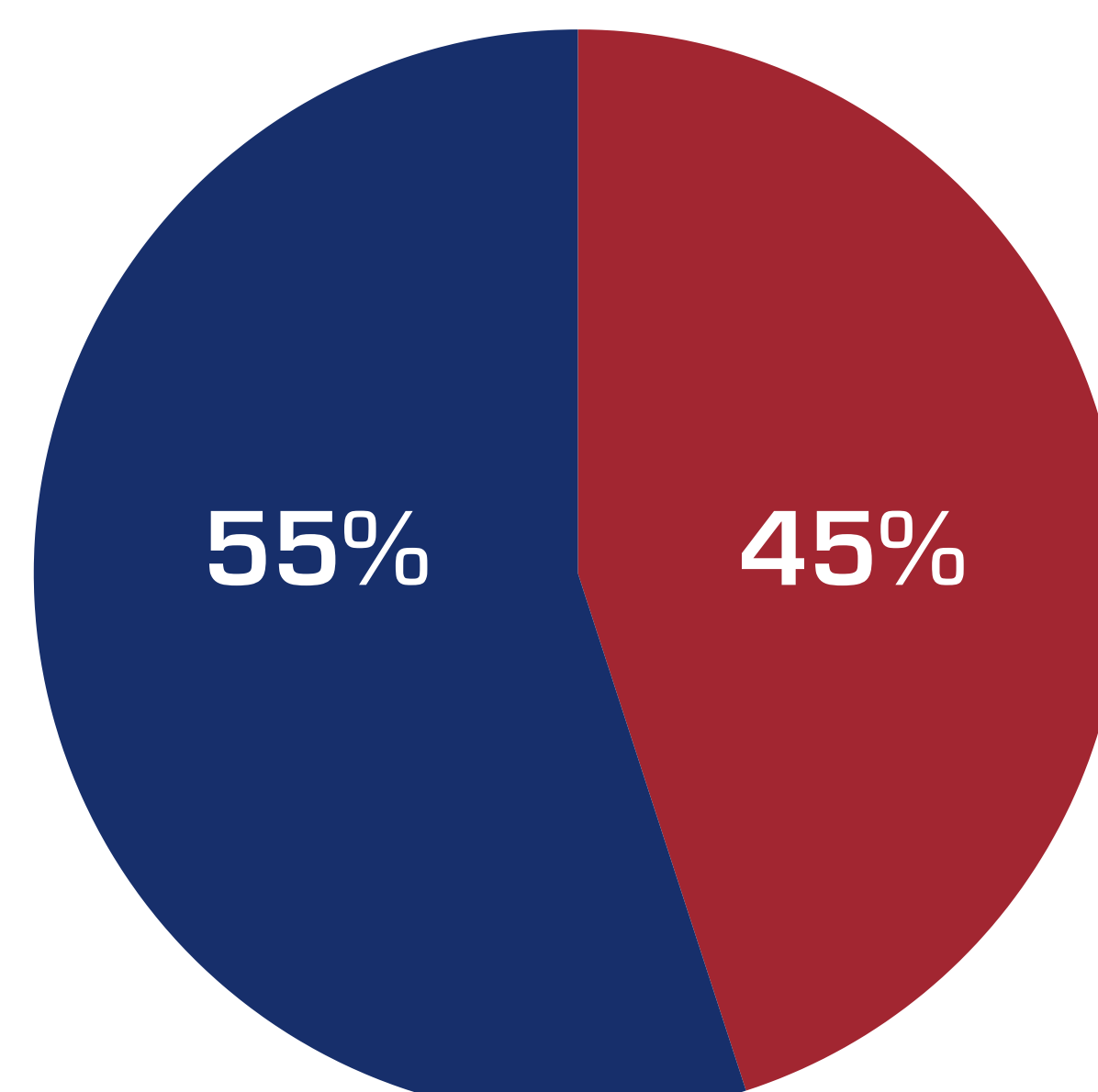


**...But accounts for almost 50% of its GDP and >45% of its installed power generation capacity**

*GDP breakdown (%) – 2022*



*Installed capacity breakdown (%) – 2022*

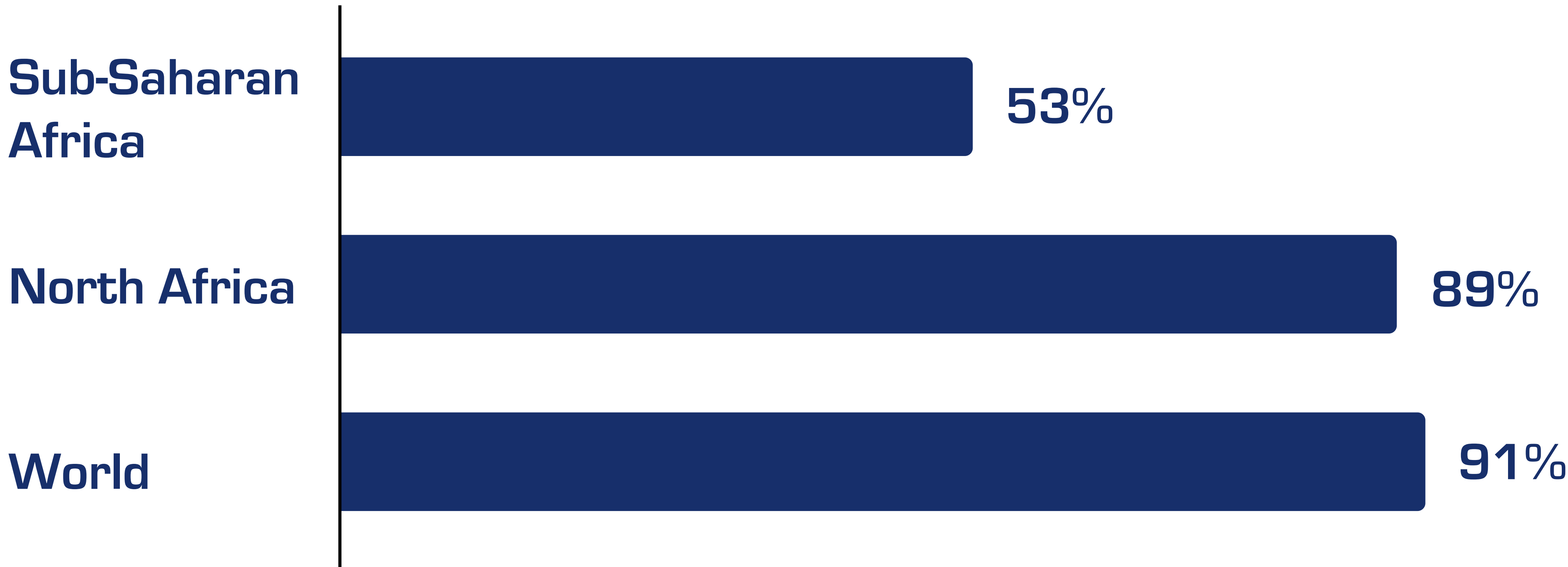




This region has a high level of access to electricity...



Electrification rate [%] – 2022



...With 4 countries (out of 6) having achieved universal access to electricity

Electrification rate [%] – 2022

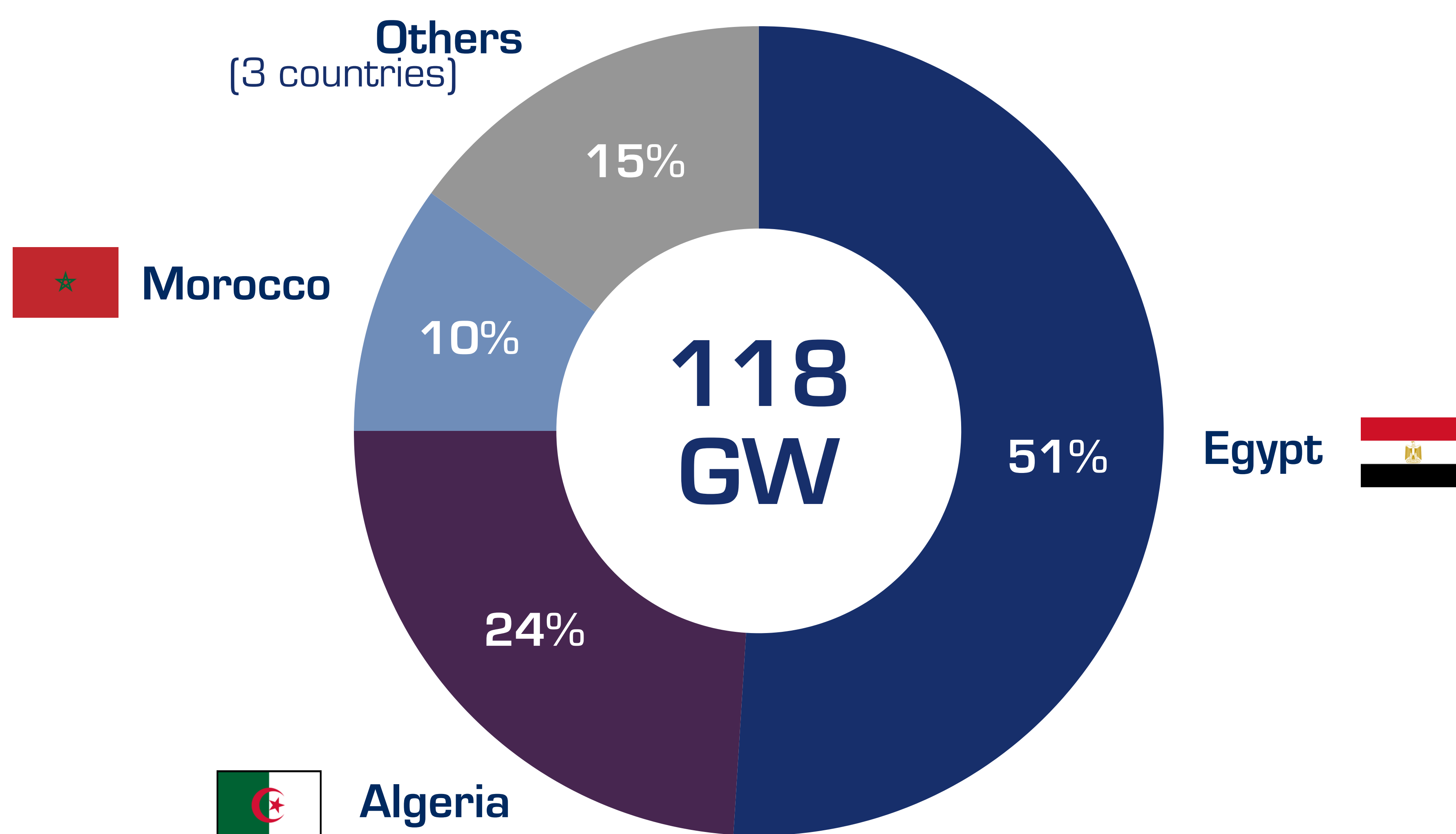




Over the past 10 years, the region has increased its installed capacity by 72% to reach 118 GW

**85% of this capacity is located in 3 countries**

*Breakdown of installed capacity [%] – 2023*

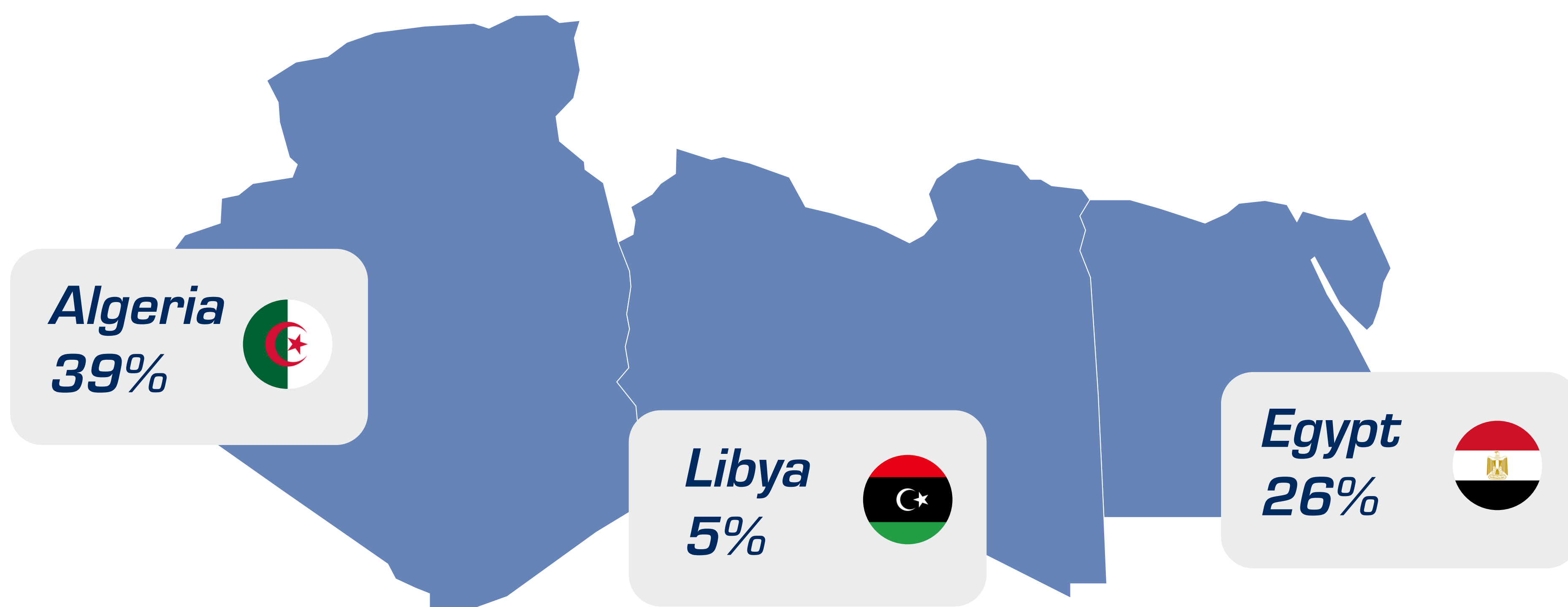


**3 others share the remaining 15%**



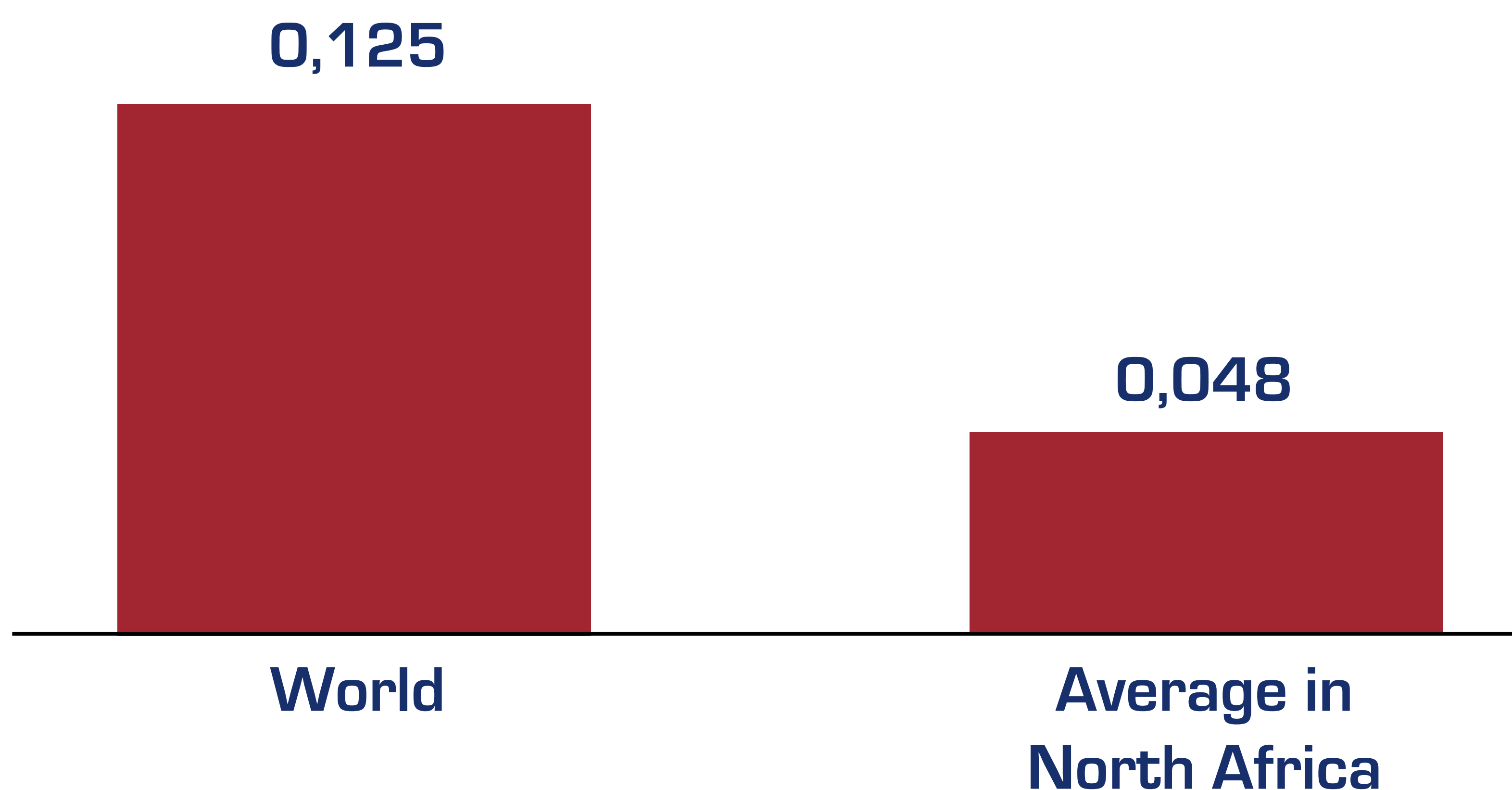
## I – Access to energy in North Africa

The region is home to 3 of the 4 countries with the largest gas reserves in Africa...



...Which enables it to produce affordable electricity

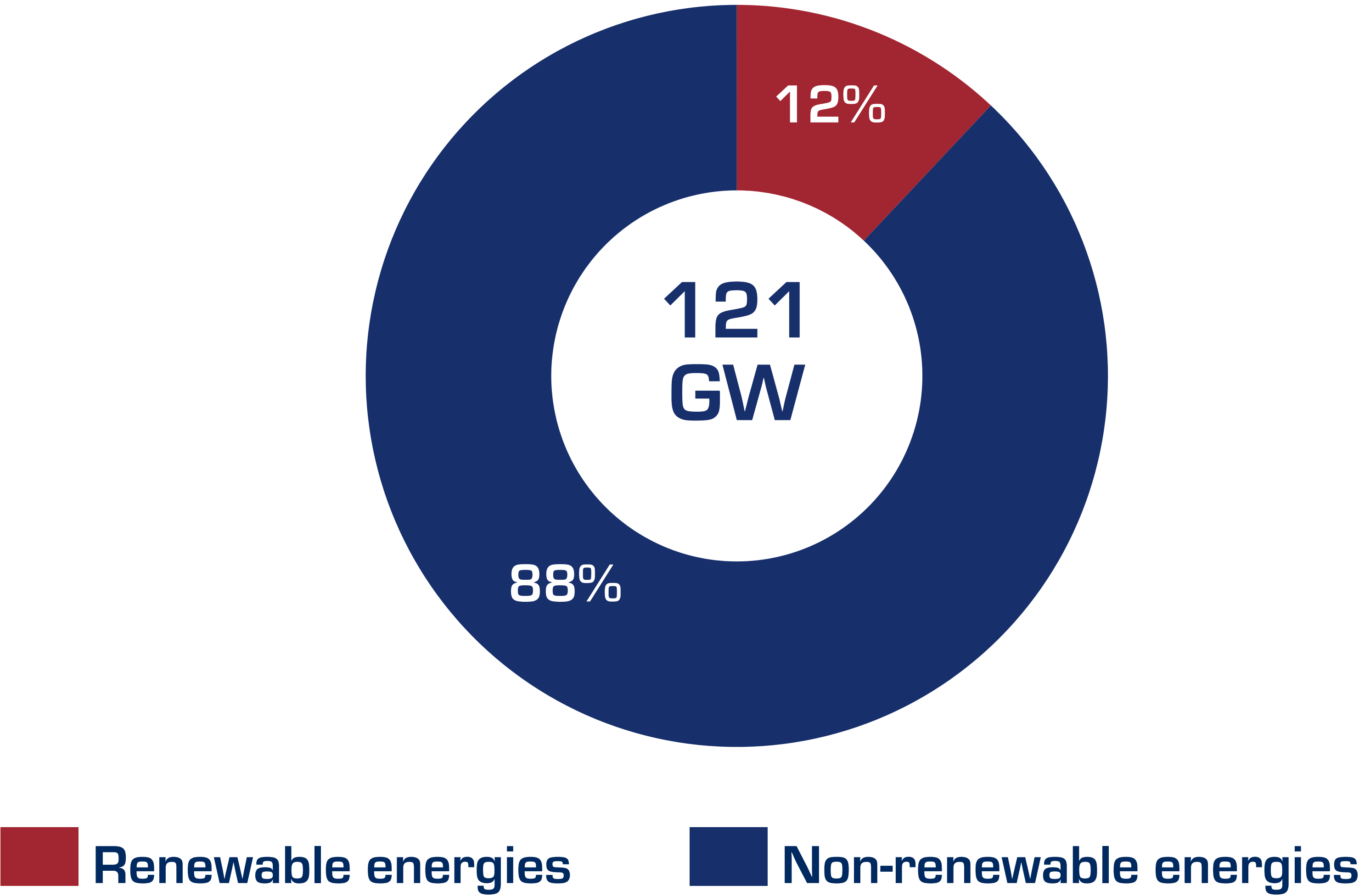
Price of kWh (\$) – 2021





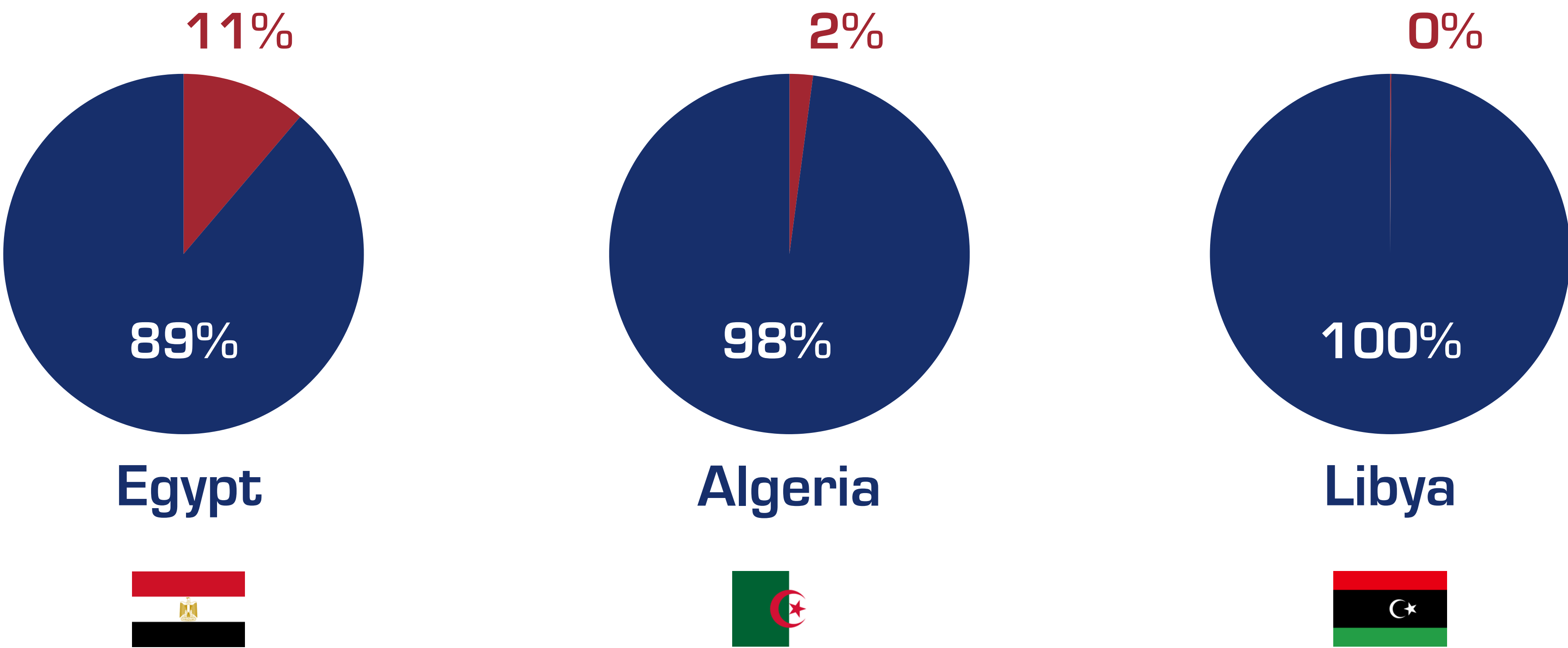
The share of renewable energy in the region's energy mix is still very low...

Energy mix [%] – 2023



...In particular due to the influence of 3 countries with significant gas resources

Energy mix [%] – 2023

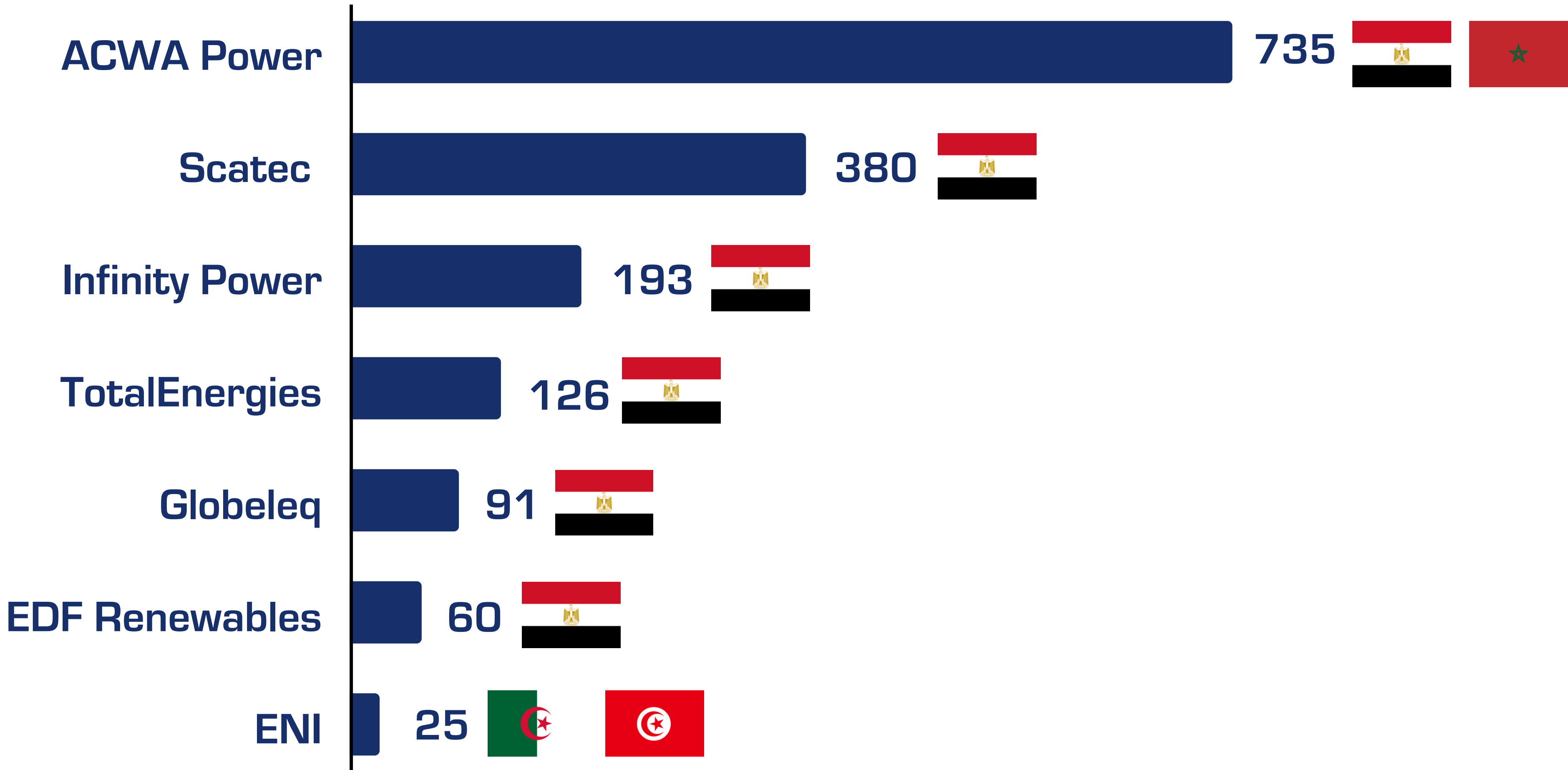
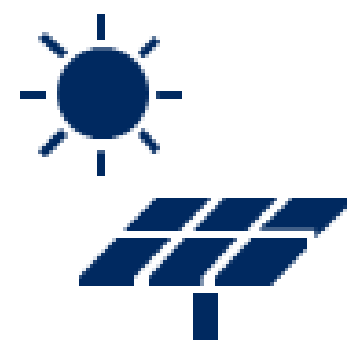




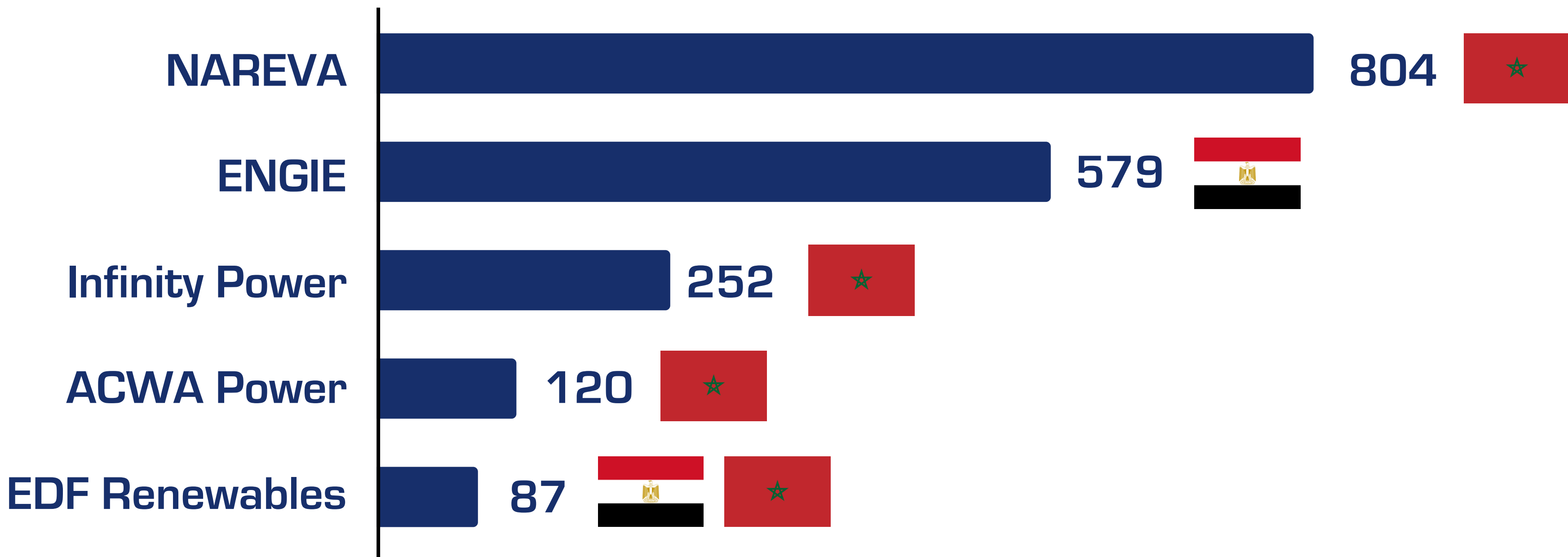
## II – Overview of renewable energy development

And yet, the region has succeeded in attracting a large number of private renewable energies players...

Solar projects in operation<sup>1</sup> (MW) – 2024



Wind projects in operation<sup>1</sup> (MW) – 2024



...By offering large-scale projects, driven by a market larger than elsewhere on the continent

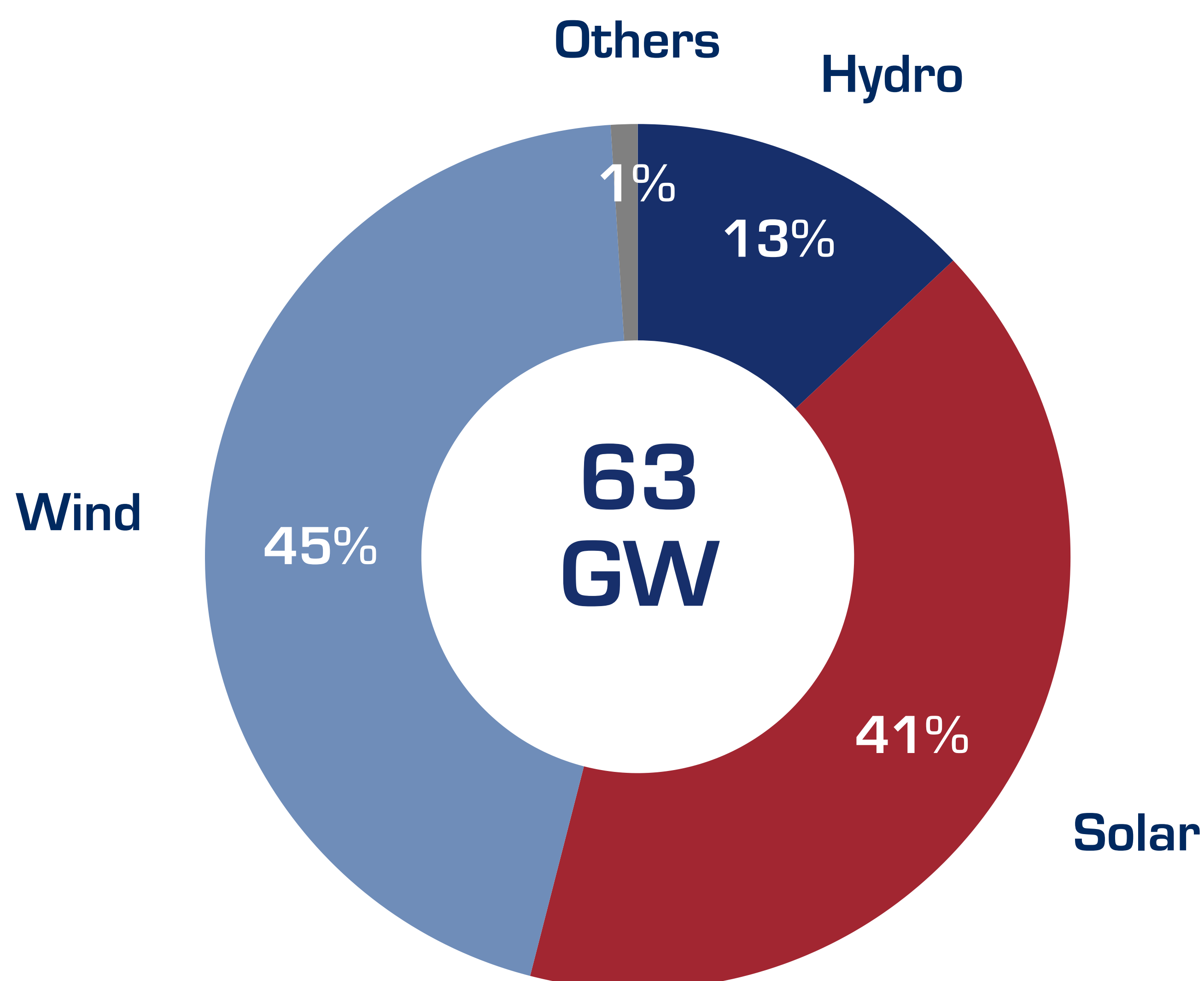
Sources: IRENA – non-exhaustive list  
Note: (1) Excluding governments and public entities



**Countries in the region are determined to improve their energy mix:**

**63 GW announced, mainly solar and wind power projects (86%)**

*Breakdown by type of energy of projects announced and under construction (%) – 2023*





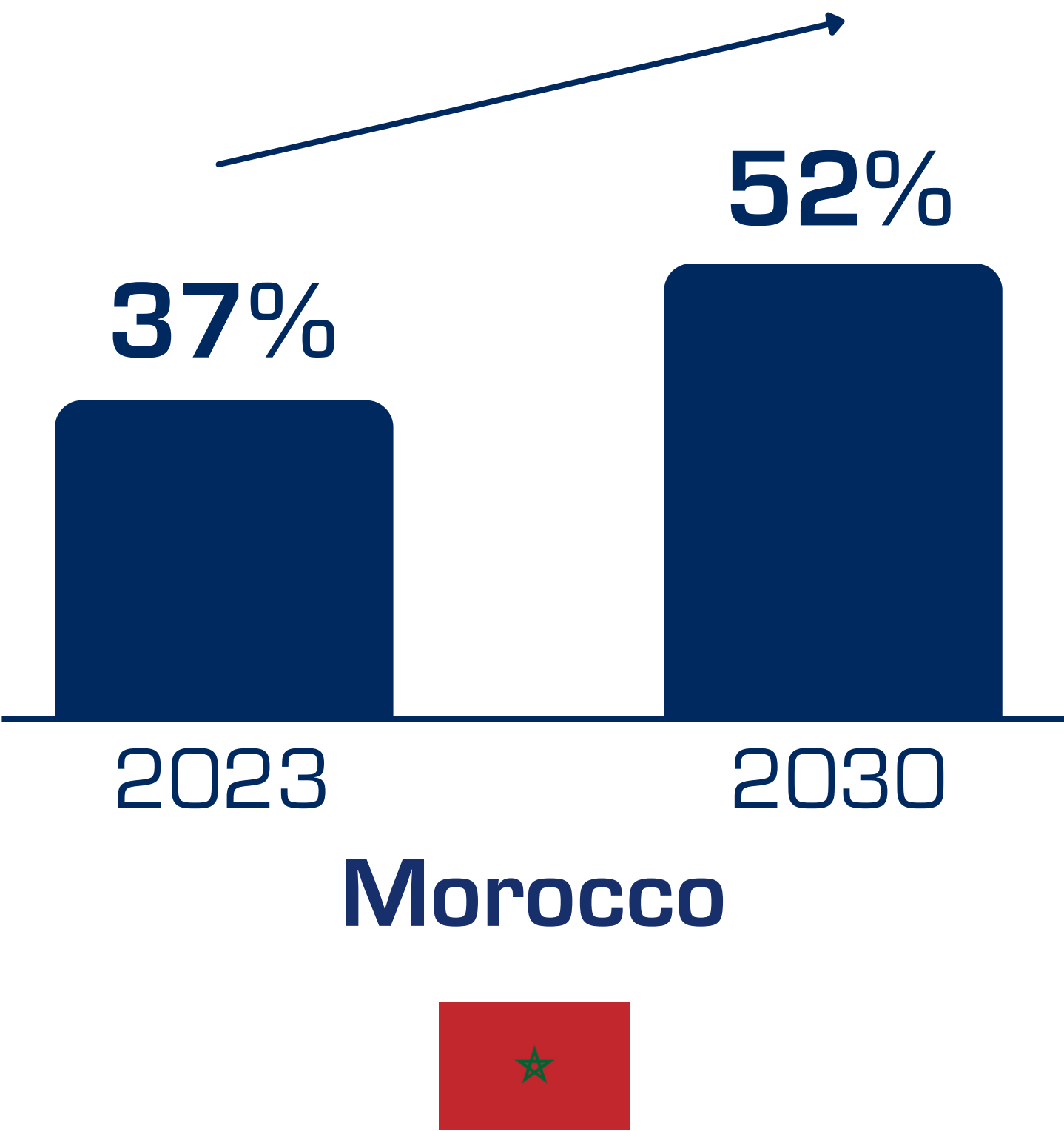
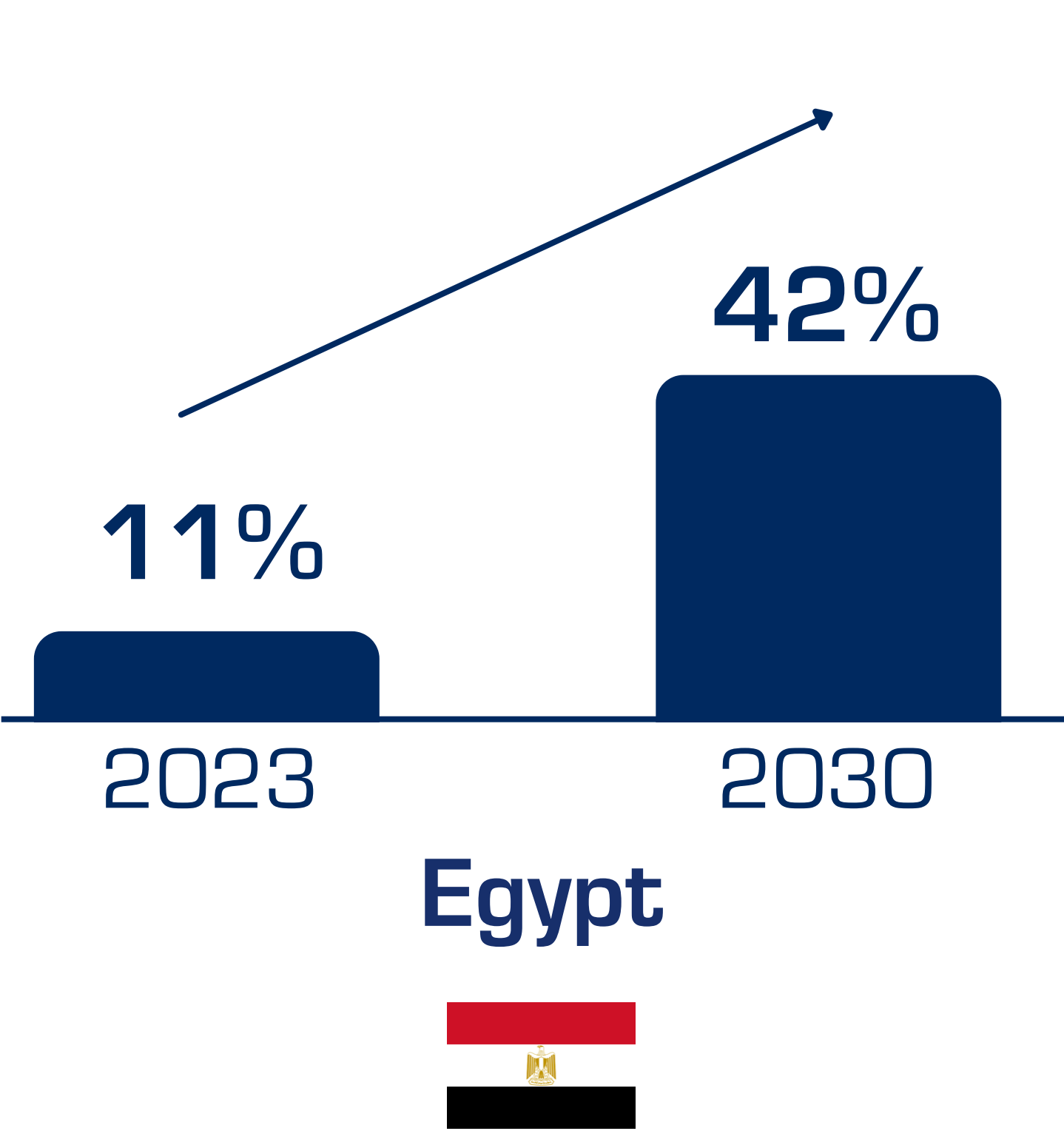
# Egypt and Morocco host +75% of projects announced and under construction...

Ranking of projects announced and under construction by country (MW) – 2023



...In line with their energy mix objectives

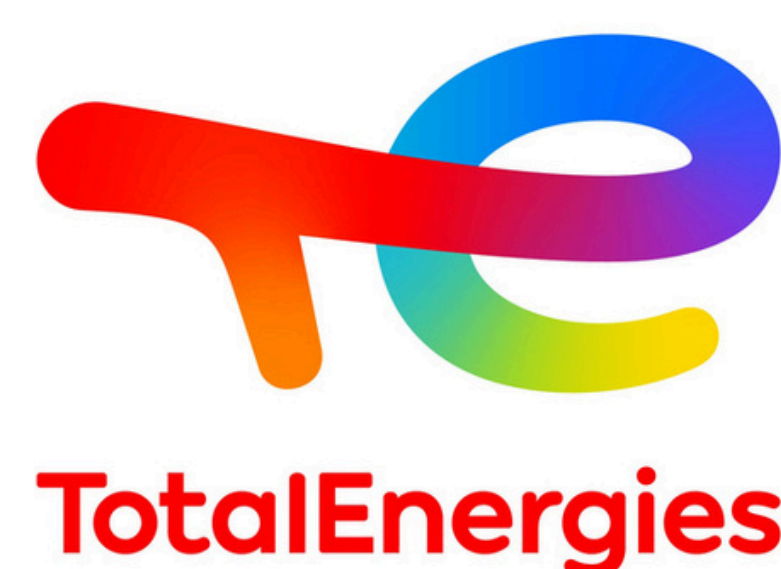
Energy mix (share of renewable energies, %) – 2023





### III – Futur development of renewable energies

## Examples of private renewable energy players<sup>1</sup> with projects announced or under construction in North Africa





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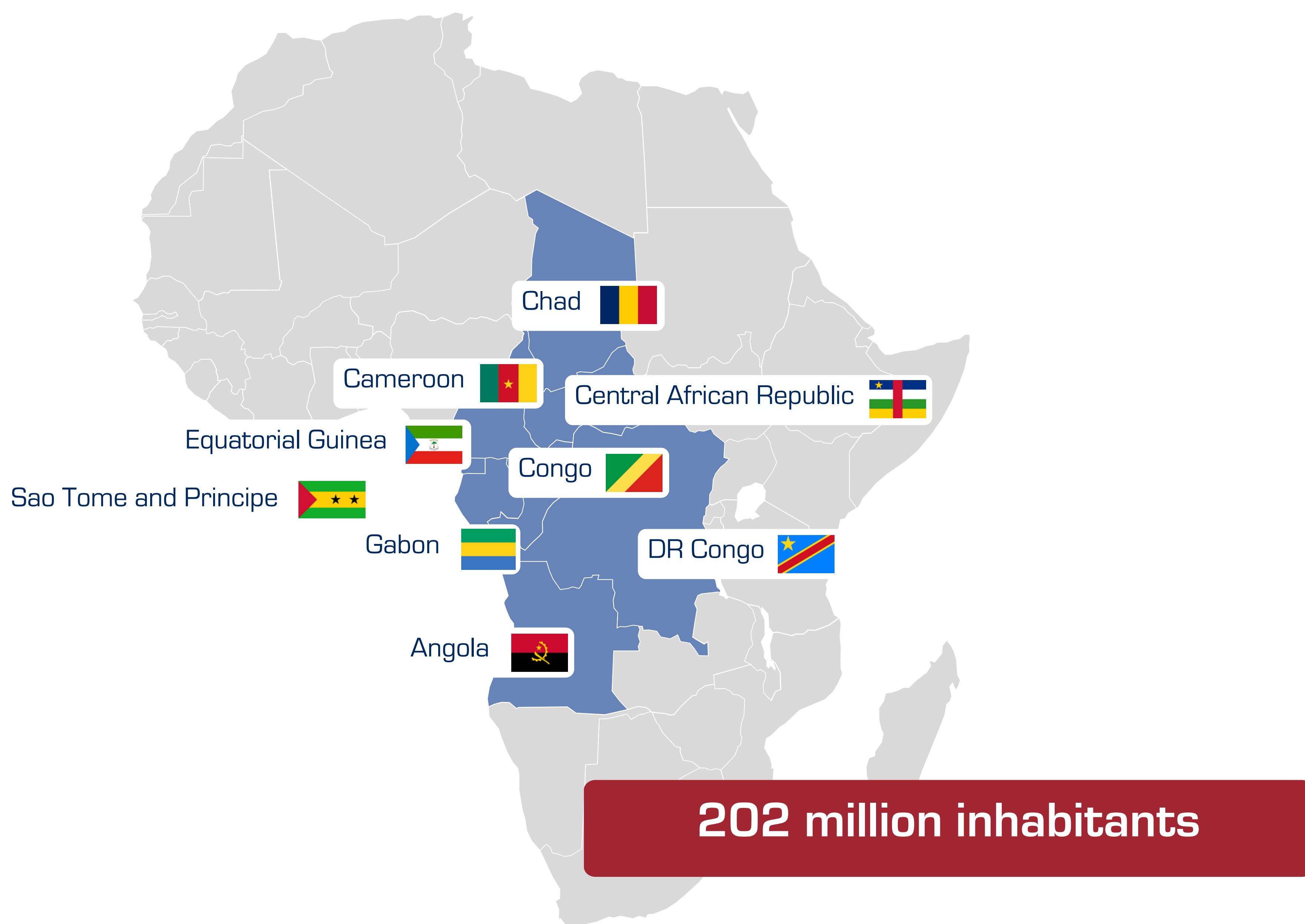
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Focus

Central Africa

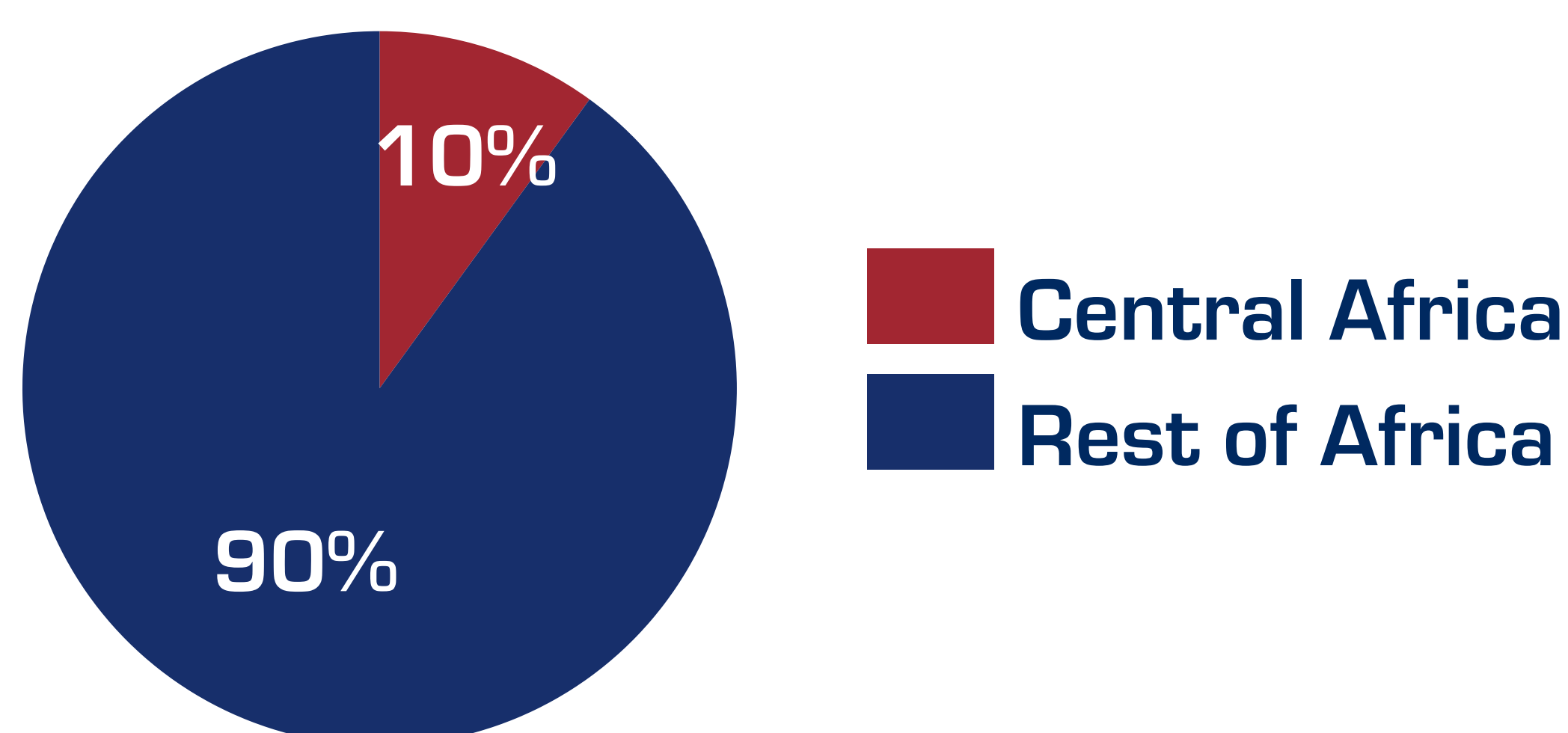


## Central Africa accounts for +15% of Africa's population

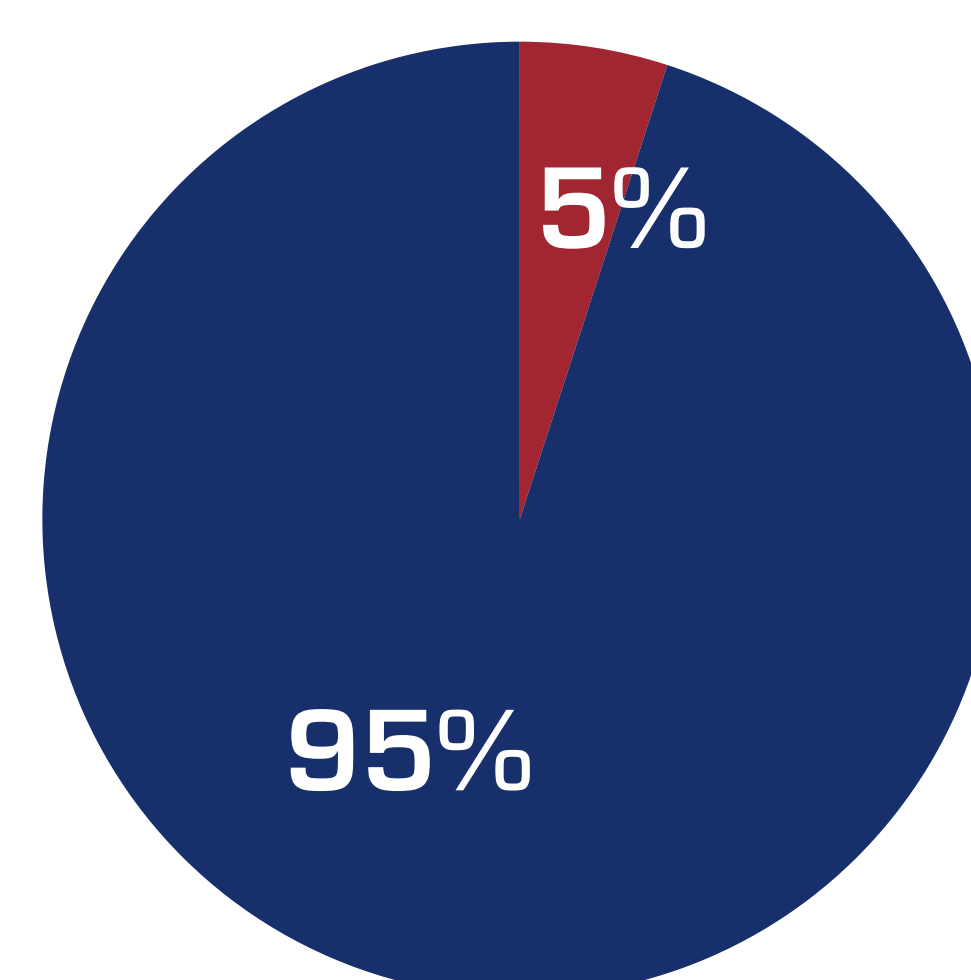


Yet it represents only 5% of its installed energy production capacity and <10% of its GDP

*GDP breakdown [%] – 2023*

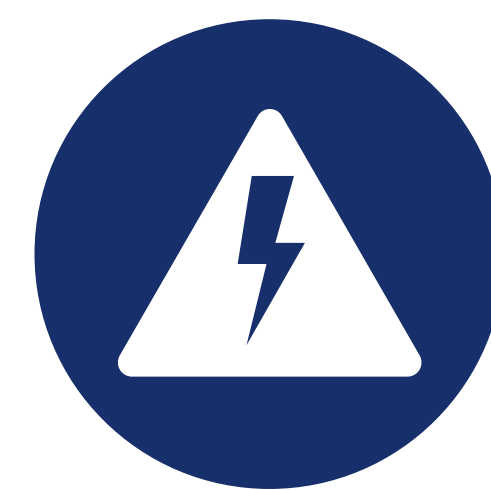


*Installed capacity breakdown [%] – 2023*

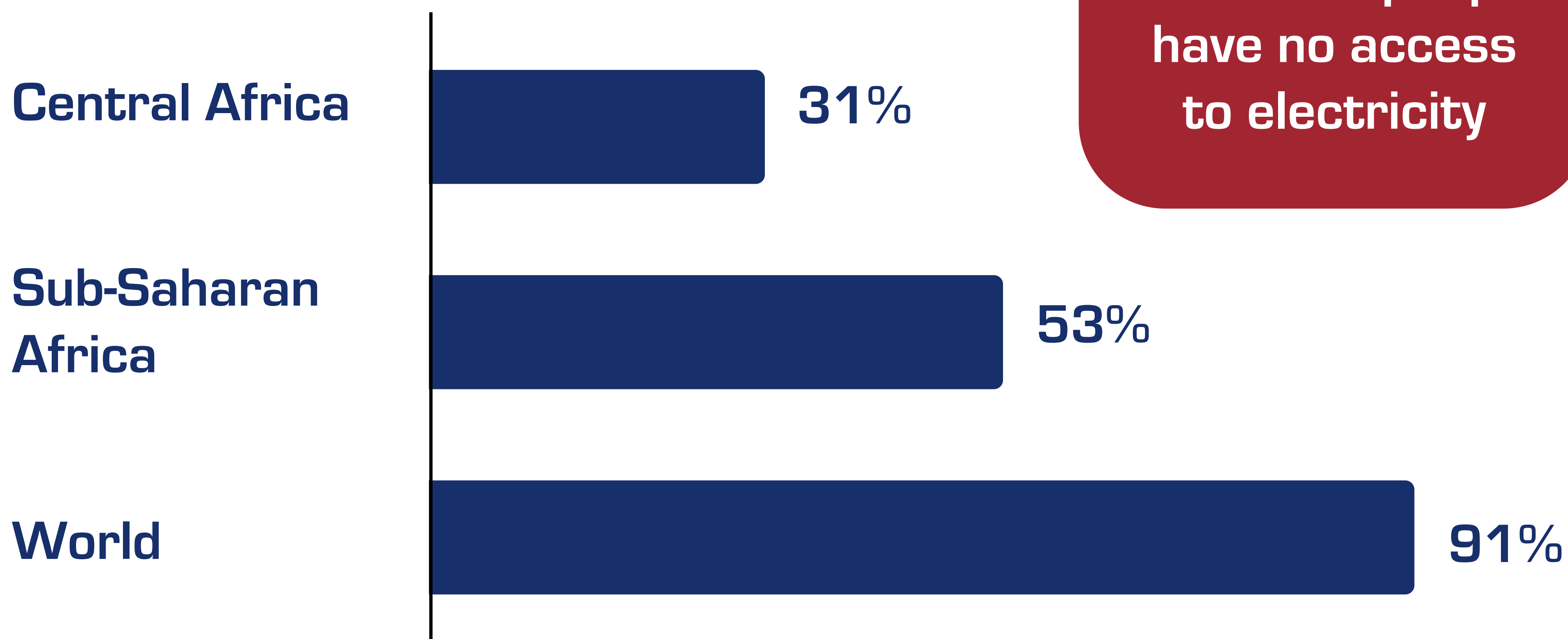




## This region has a low level of access to electricity...

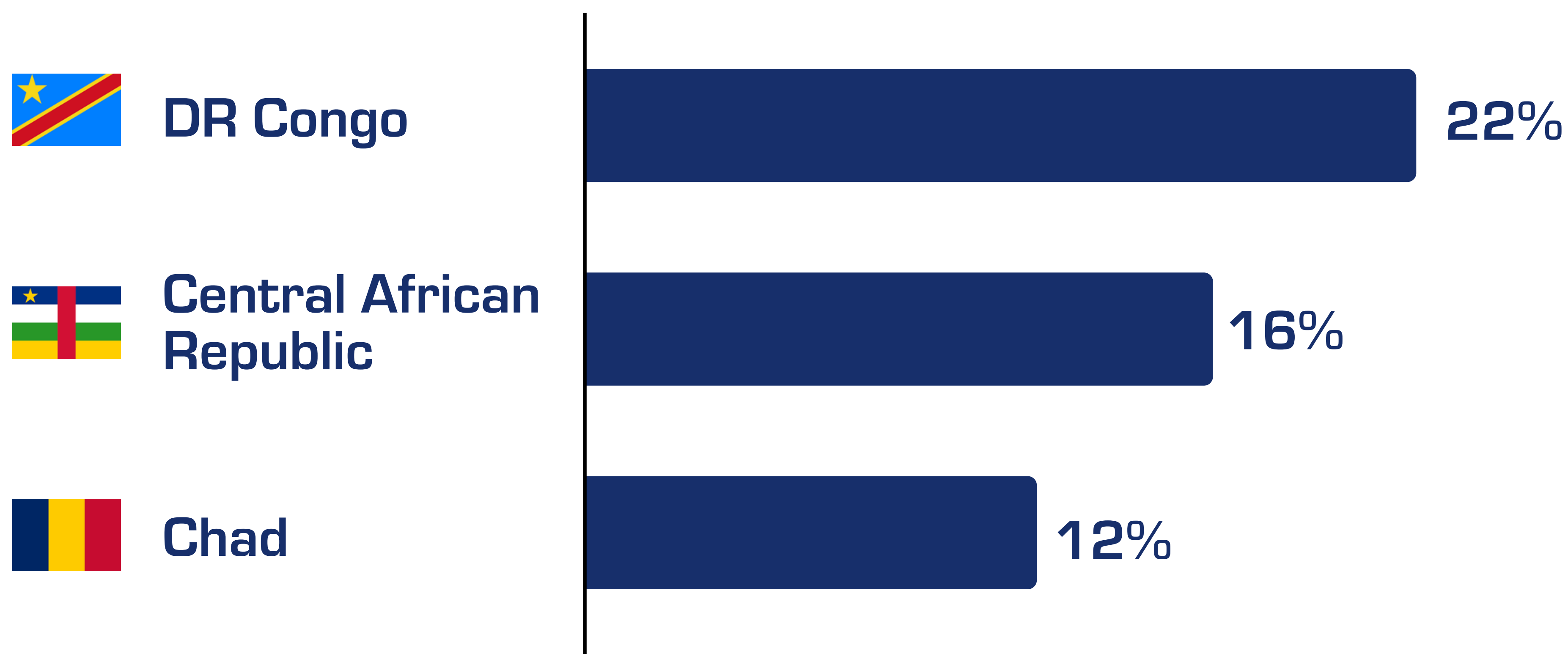


*Electrification rate [%] – 2023*



...With some countries having among the lowest electrification rates in the world.

*Electrification rate [%] – 2023*

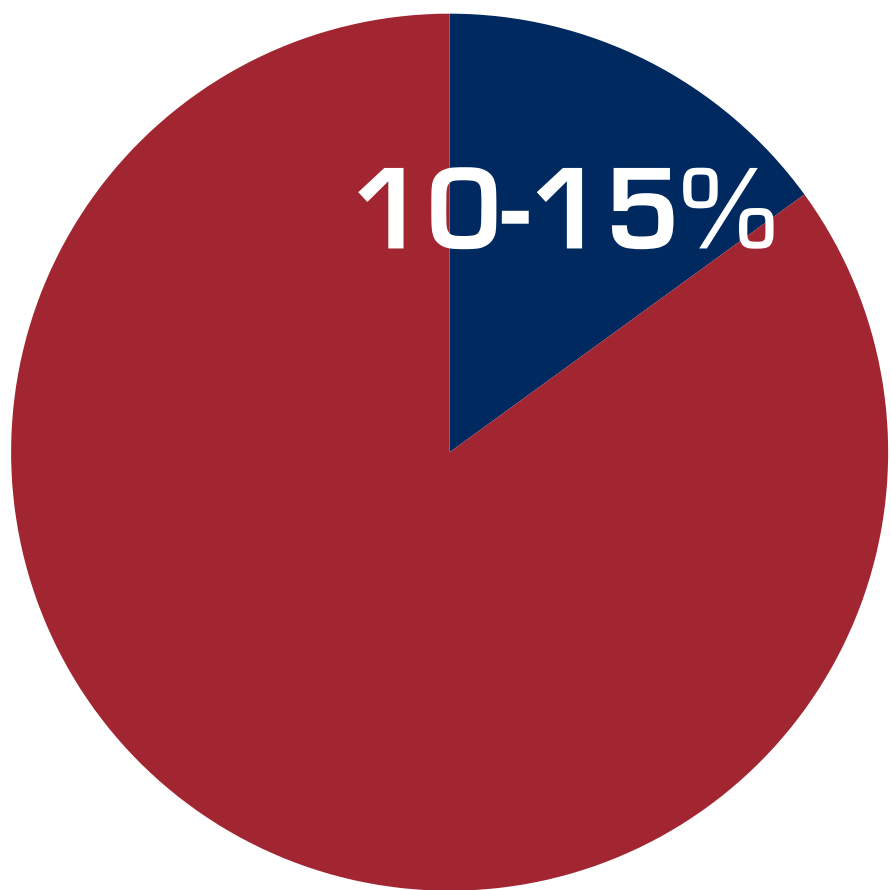




# This situation has a significant impact on the competitiveness of local manufacturers



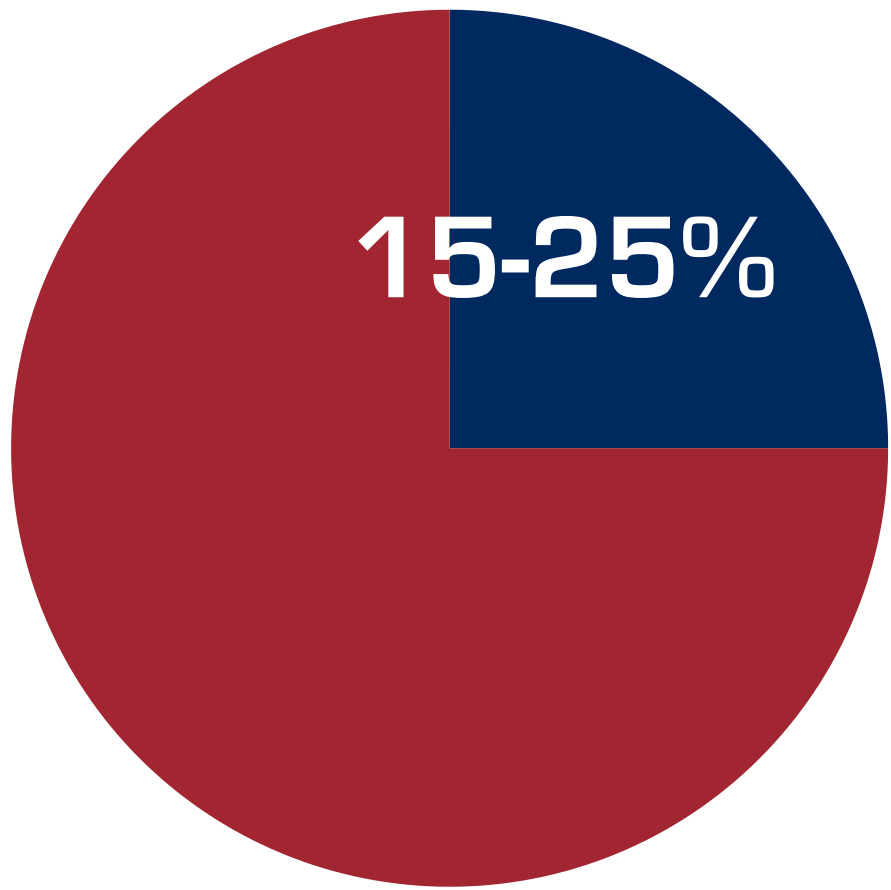
Due to limited access and unreliable energy supply, manufacturers resort to **diesel generators** — in Gabon, their capacity reaches **80 MW**, accounting for **10–15%** of the country’s total installed capacity.



*Diesel generators as % of installed capacity in Gabon – 2023*

The **cost of electricity per diesel generator** is **2 to 3 times higher** than the cost of electricity **via the grid**...

...Affecting **the competitiveness** of industrial companies: **15-25% of the production costs** of industrial operators (particularly in the mining sector) are **linked to electricity**...



*Share of energy costs, % operating costs – 2023*

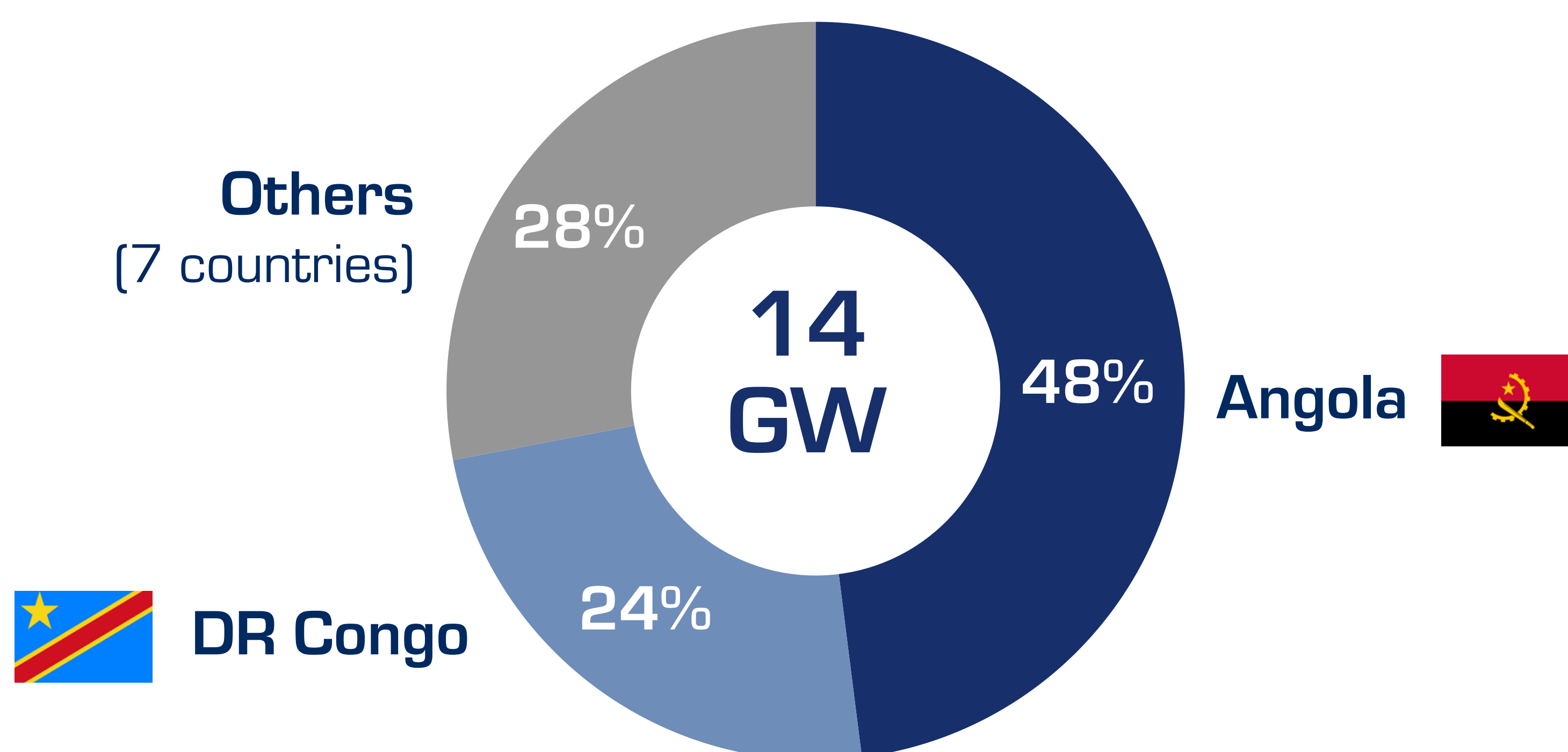


However, the region has almost doubled<sup>1</sup> its installed capacity over the last 10 years, reaching 14 GW in 2023 ...

...But the distribution of this capacity remains uneven.

**2 countries alone account for 72% of installed capacity**

*Installed capacity breakdown [%] – 2023*

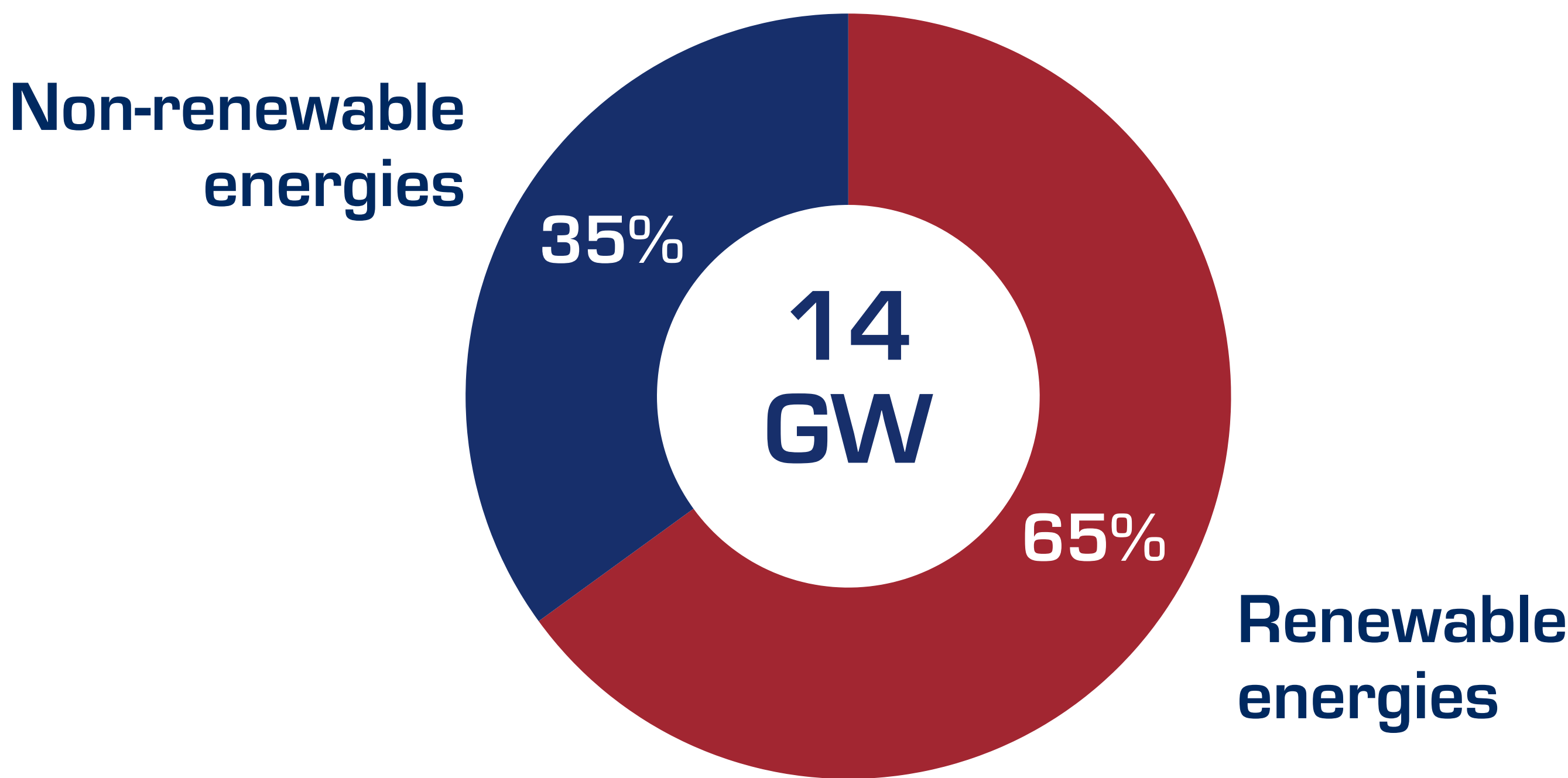


**7 others share the remaining 28%**



# Renewable energies account for a significant proportion of the electricity mix...

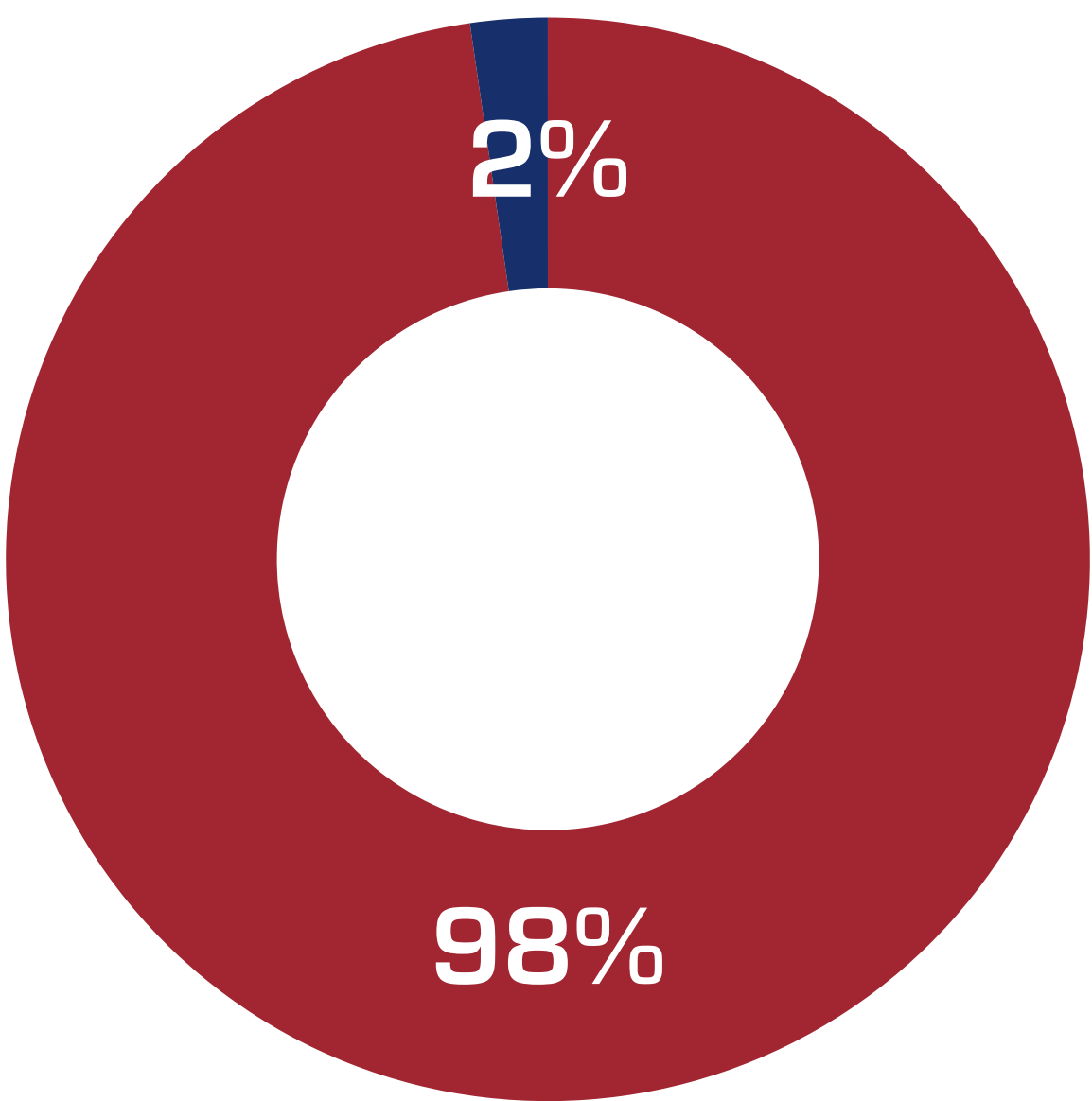
Electricity mix (%) – 2023



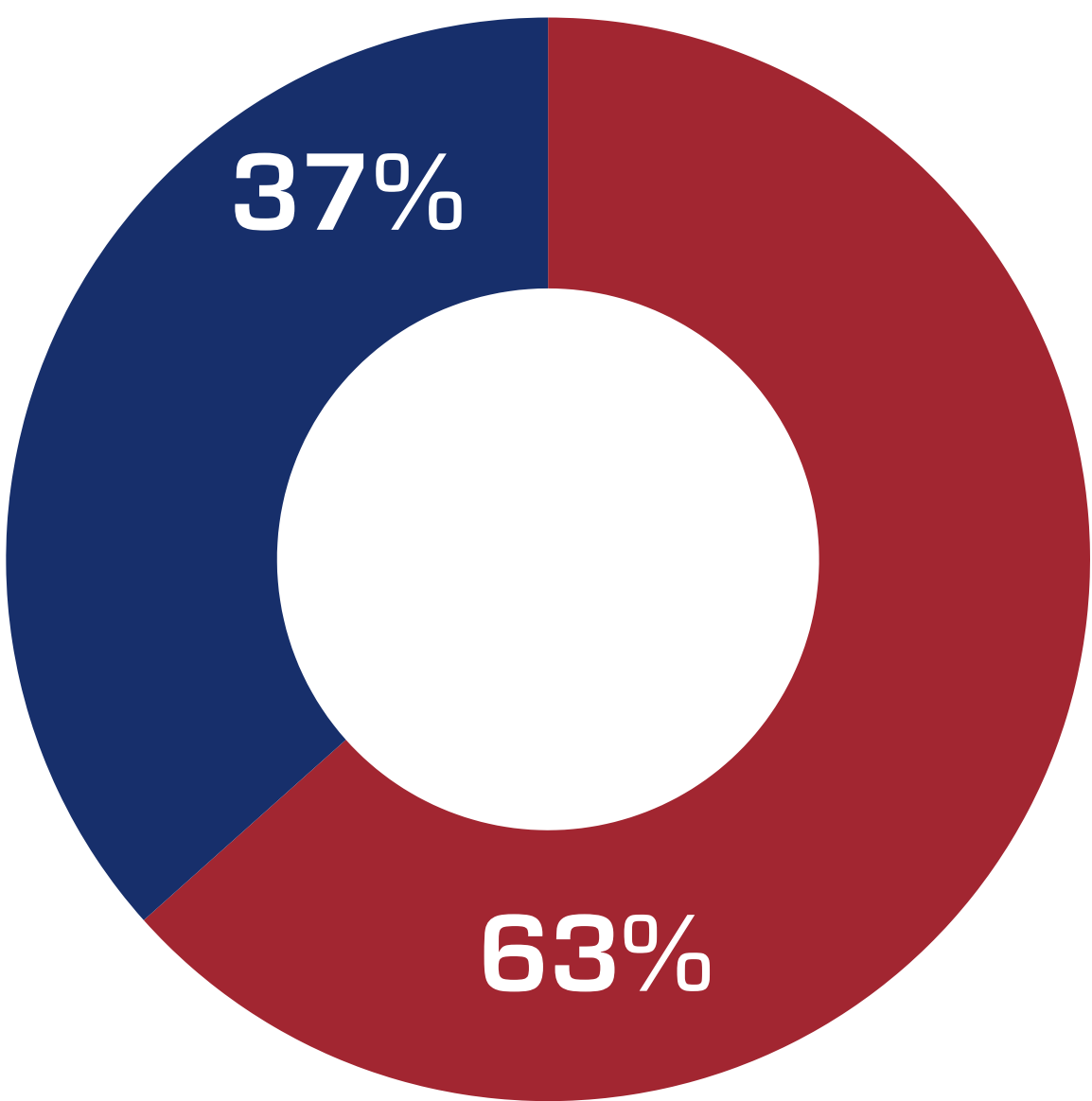
## ...Thanks to a few regional champions with major hydroelectric projects

Top 3 countries in electricity mix (%) – 2023

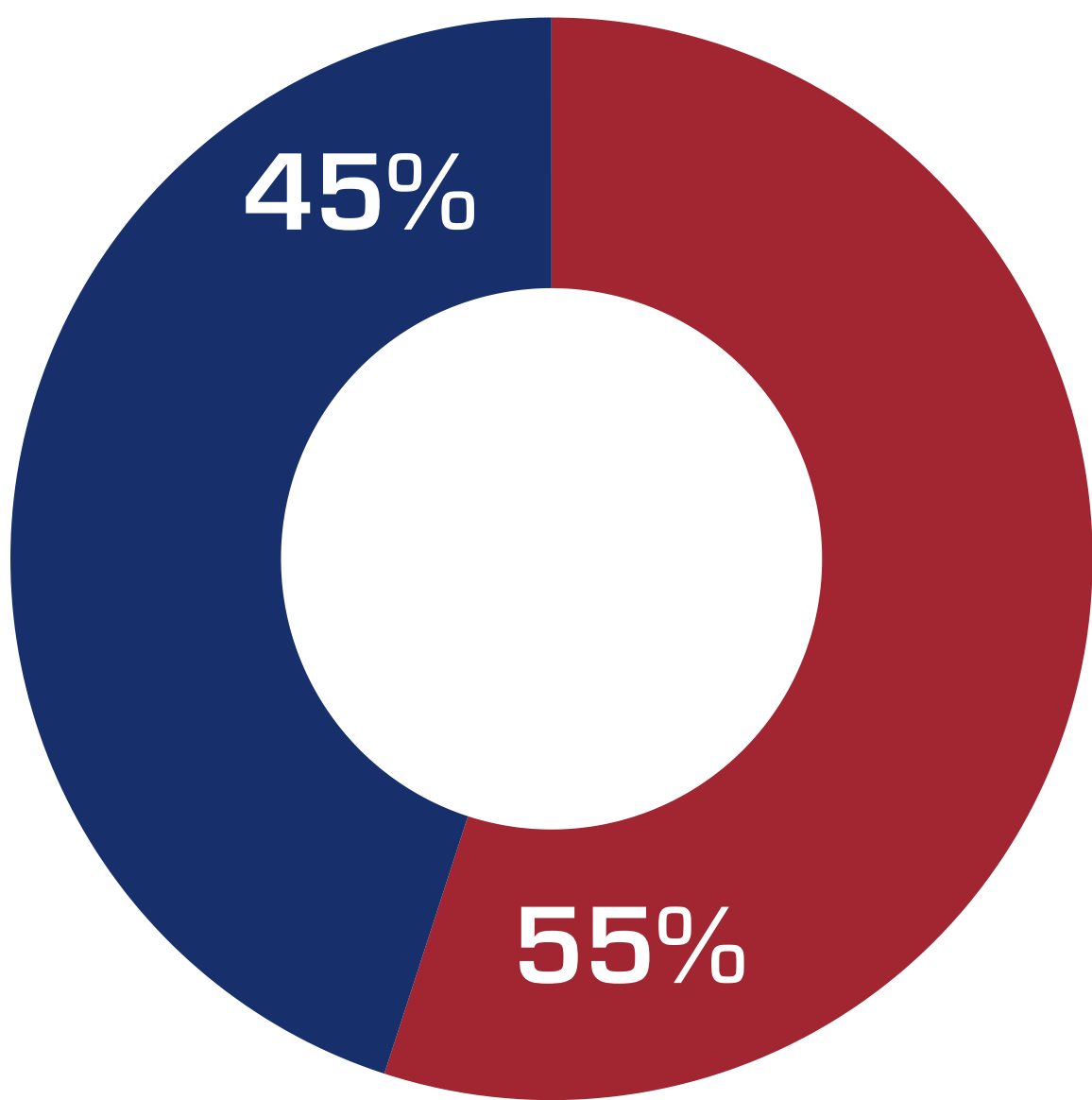
Renewable energies  
Non-renewable energies



DR Congo



Angola



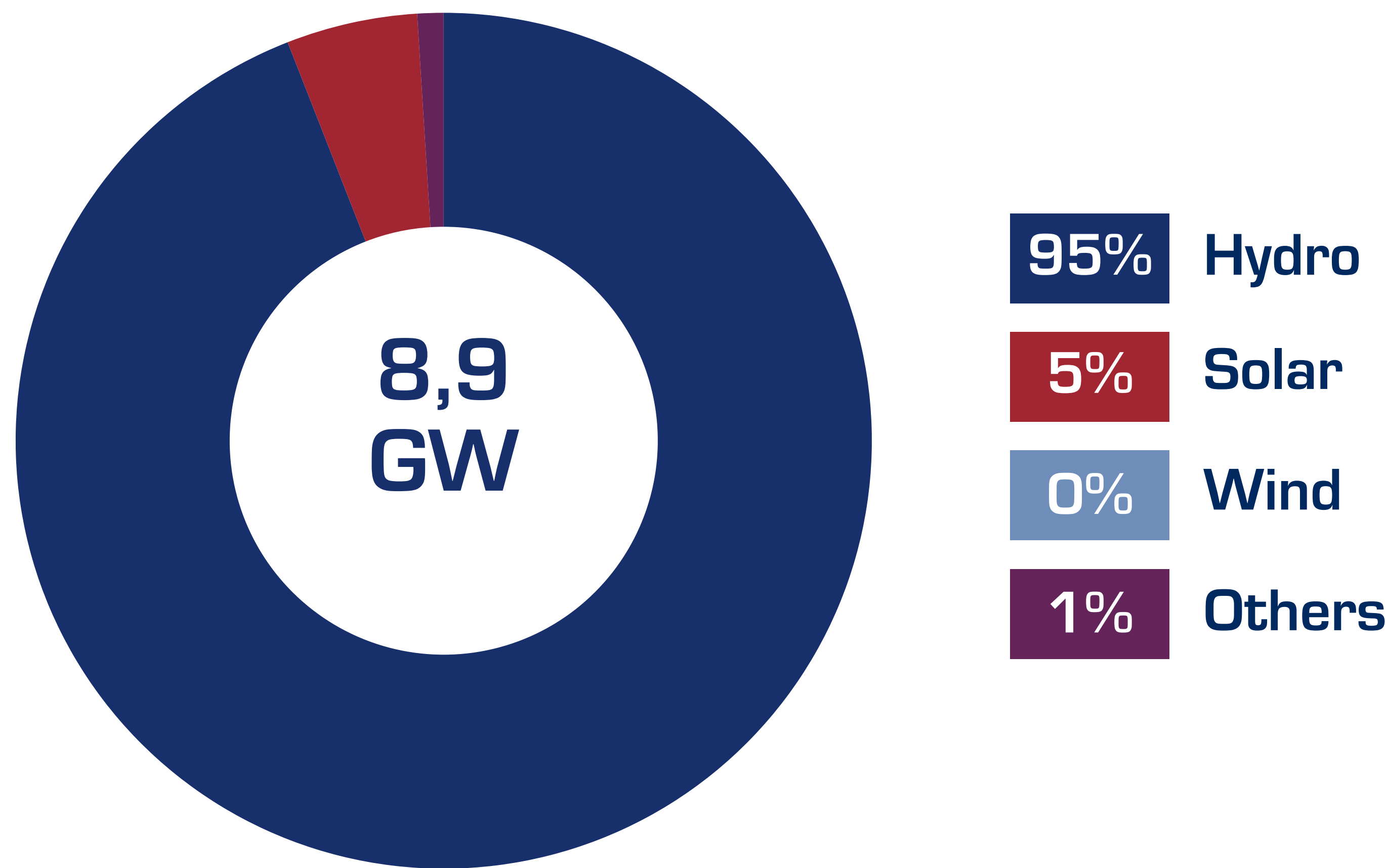
Cameroon





# Hydropower is the main source of energy in the region...

Renewable electricity mix (%) – 2023

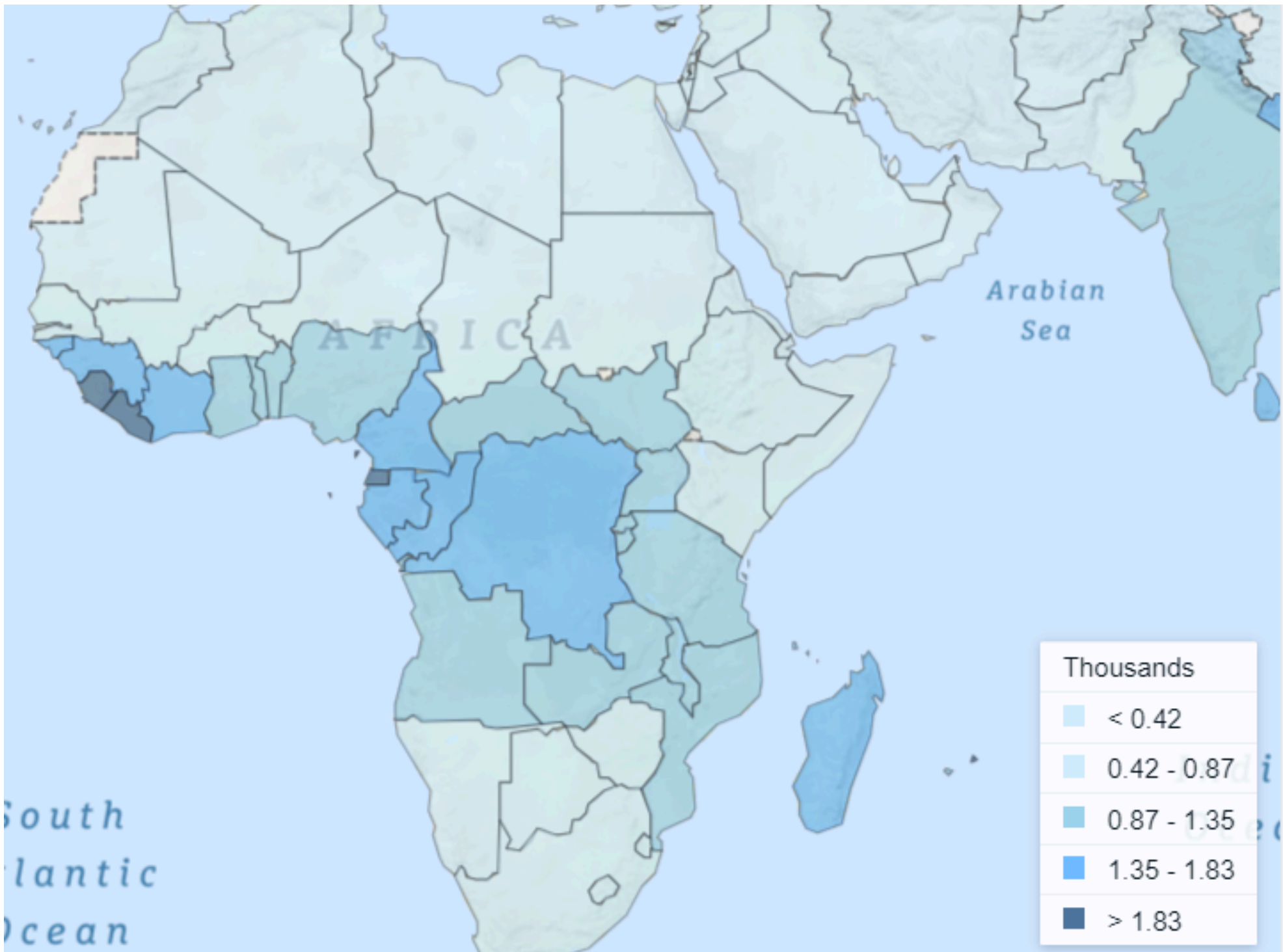


... Notably due to abundant hydropower resources.



The Congo River basin is the second largest in the world, after the Amazon

Average precipitation (mm per year) – 2023

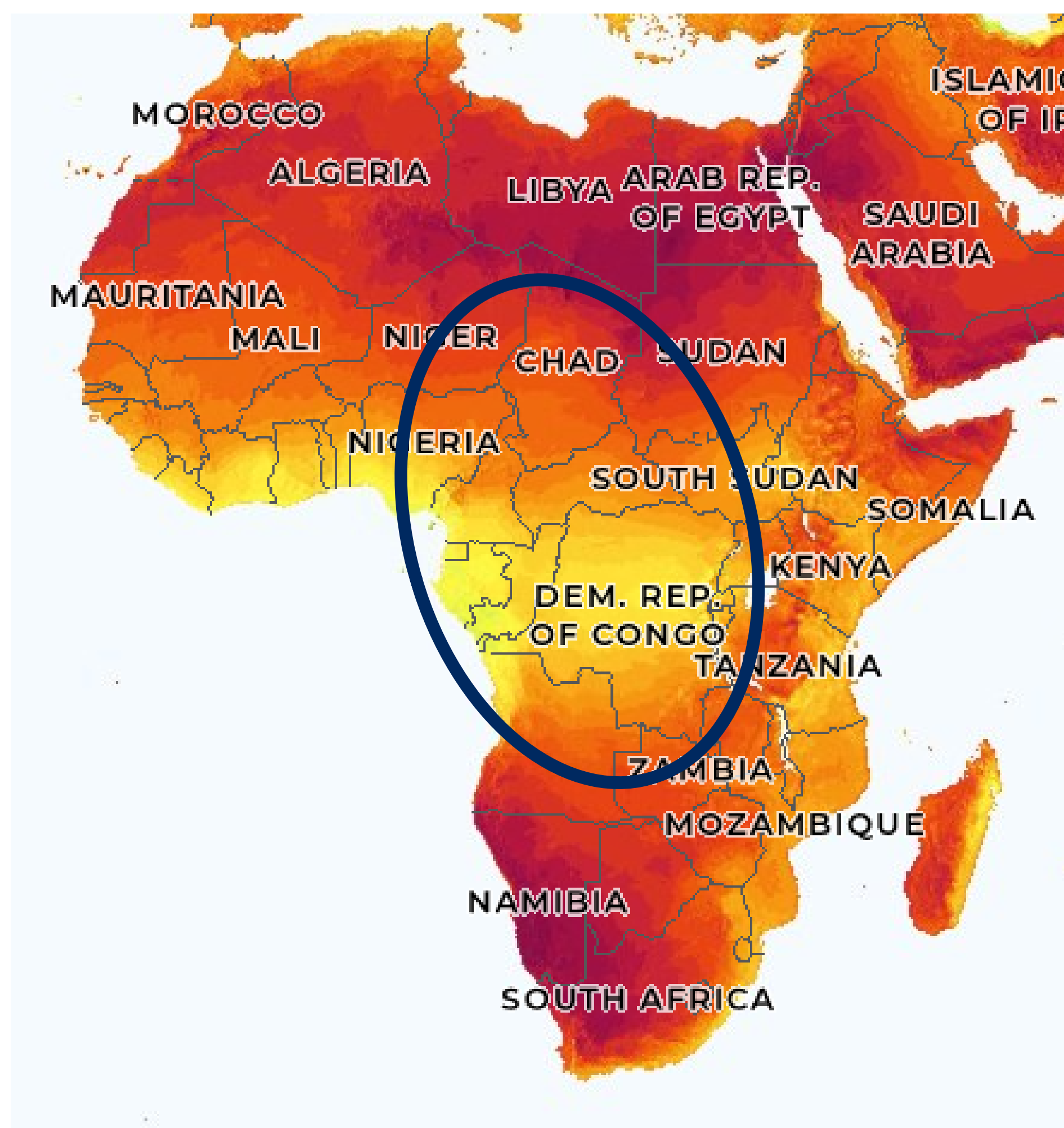




## II – Overview of renewable energy development

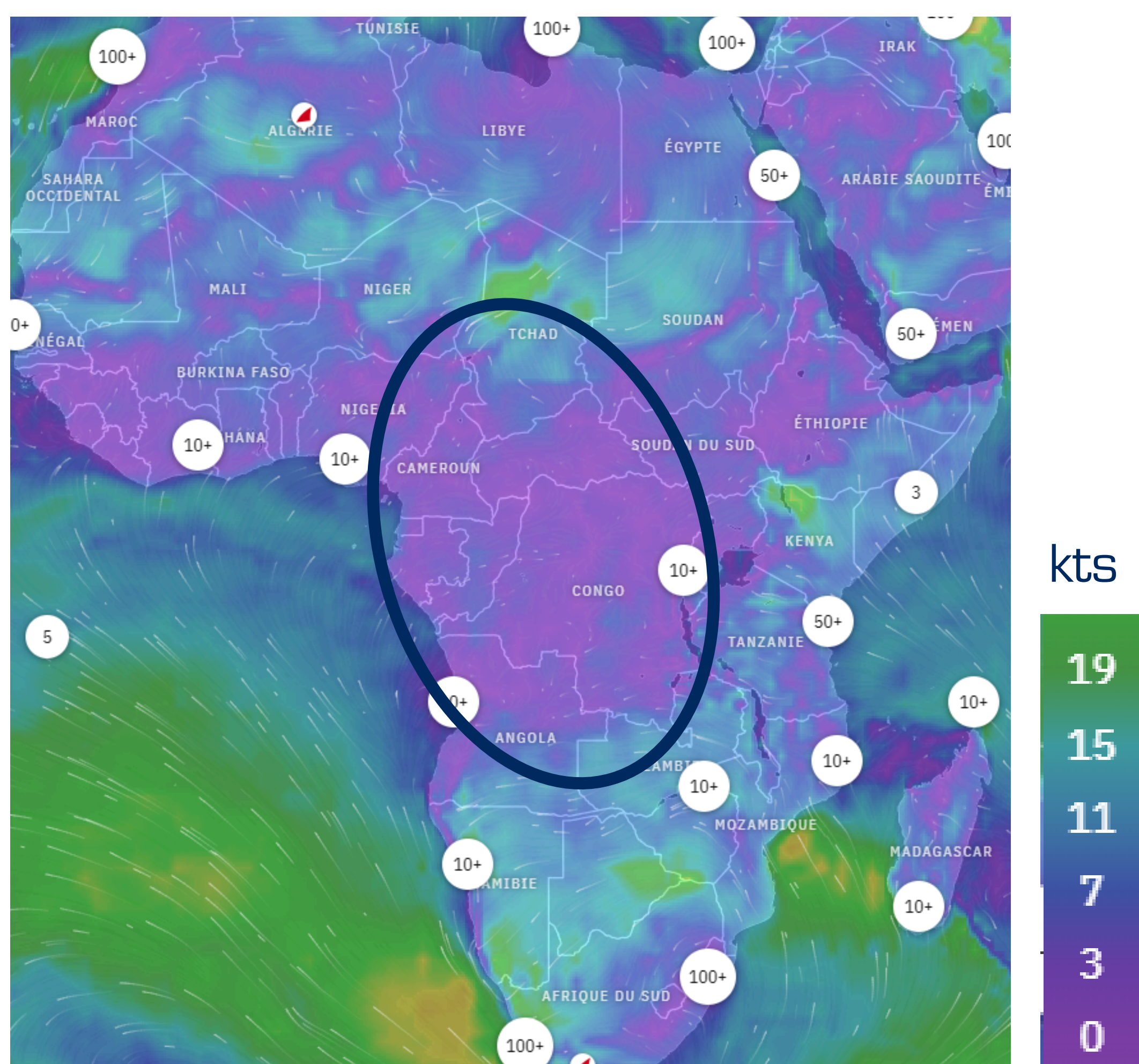
On the other hand, solar and wind energies are underdeveloped due to the scarcity of resources

*Sunshine map - Africa*



Central Africa is one of the least sun-drenched regions on the continent

*Average wind speed - Africa*



Wind speeds are also lower than in other regions



## II – Overview of renewable energy development

To compensate for the lack of public investment, governments have opened up their markets to private players. This strategy has not yet produced significant results...

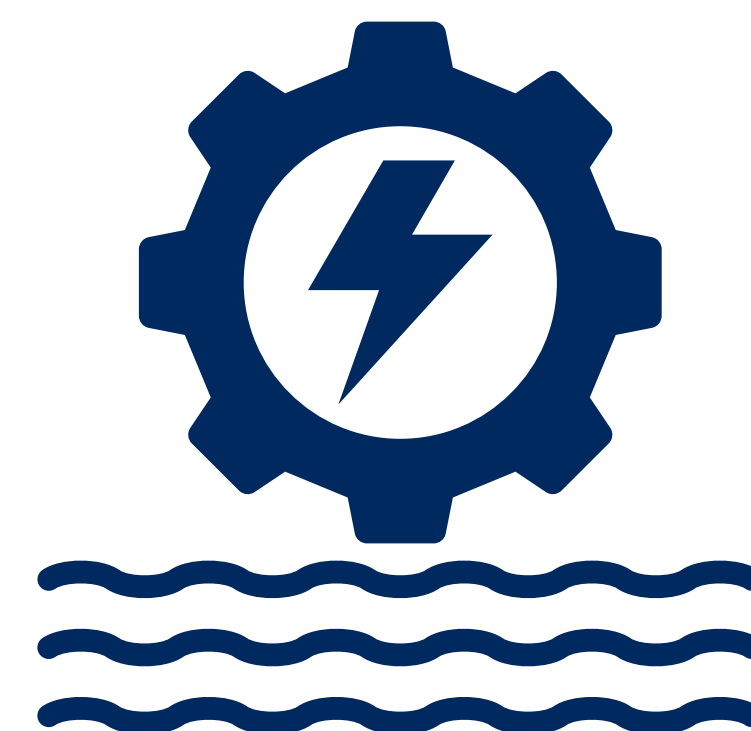
...Although some major projects are beginning to take shape.

### Example - Nachtigal hydroelectric power station

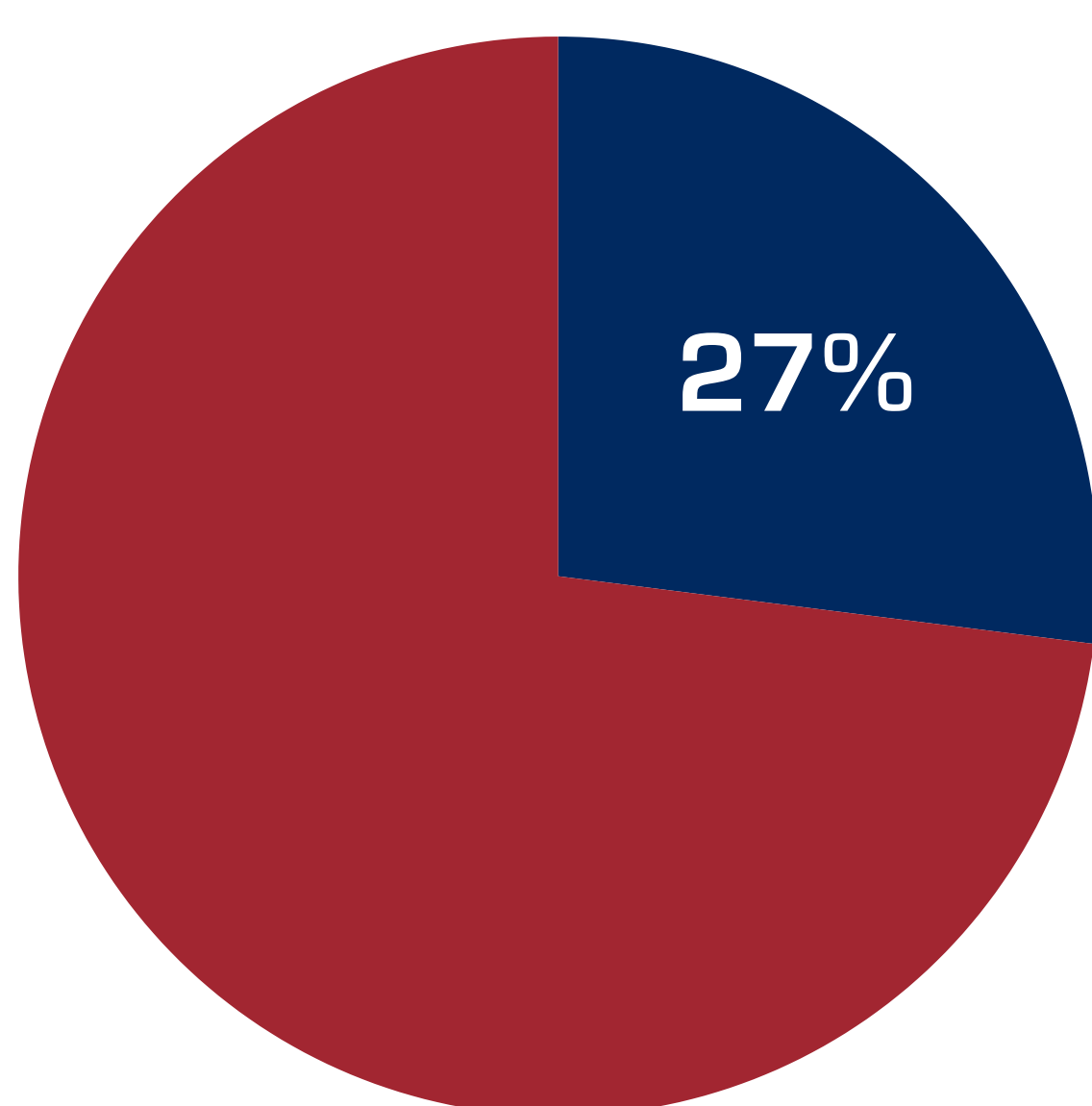


# 420 MW

of which 60MW commissioned in June 2024, gradual commissioning until the end of 2024

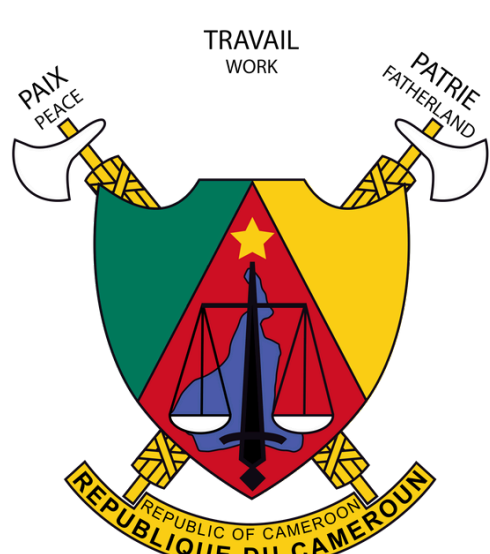


*Cameroon's installed capacity (MW) – 2024*



Nachtigal hydroelectric power station accounts for **Almost 30%** of Cameroon's installed capacity

### Project sponsors



AFRICA50

stoa  
INFRA & ENERGY

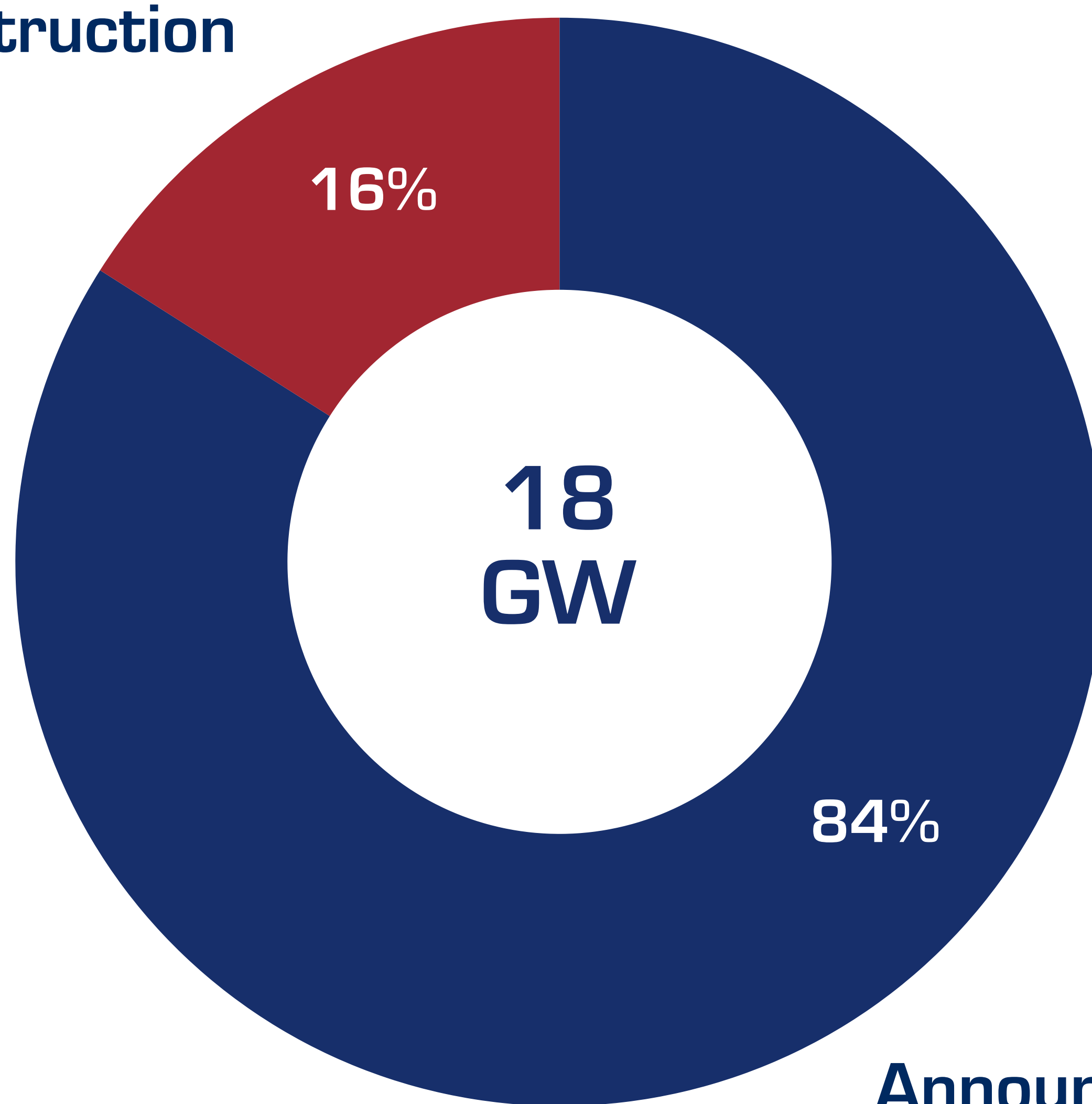
edf



# Renewable energy capacity set to increase by more than 18 GW...

*Breakdown of projects announced and under construction [%]  
– 2024*

Under construction



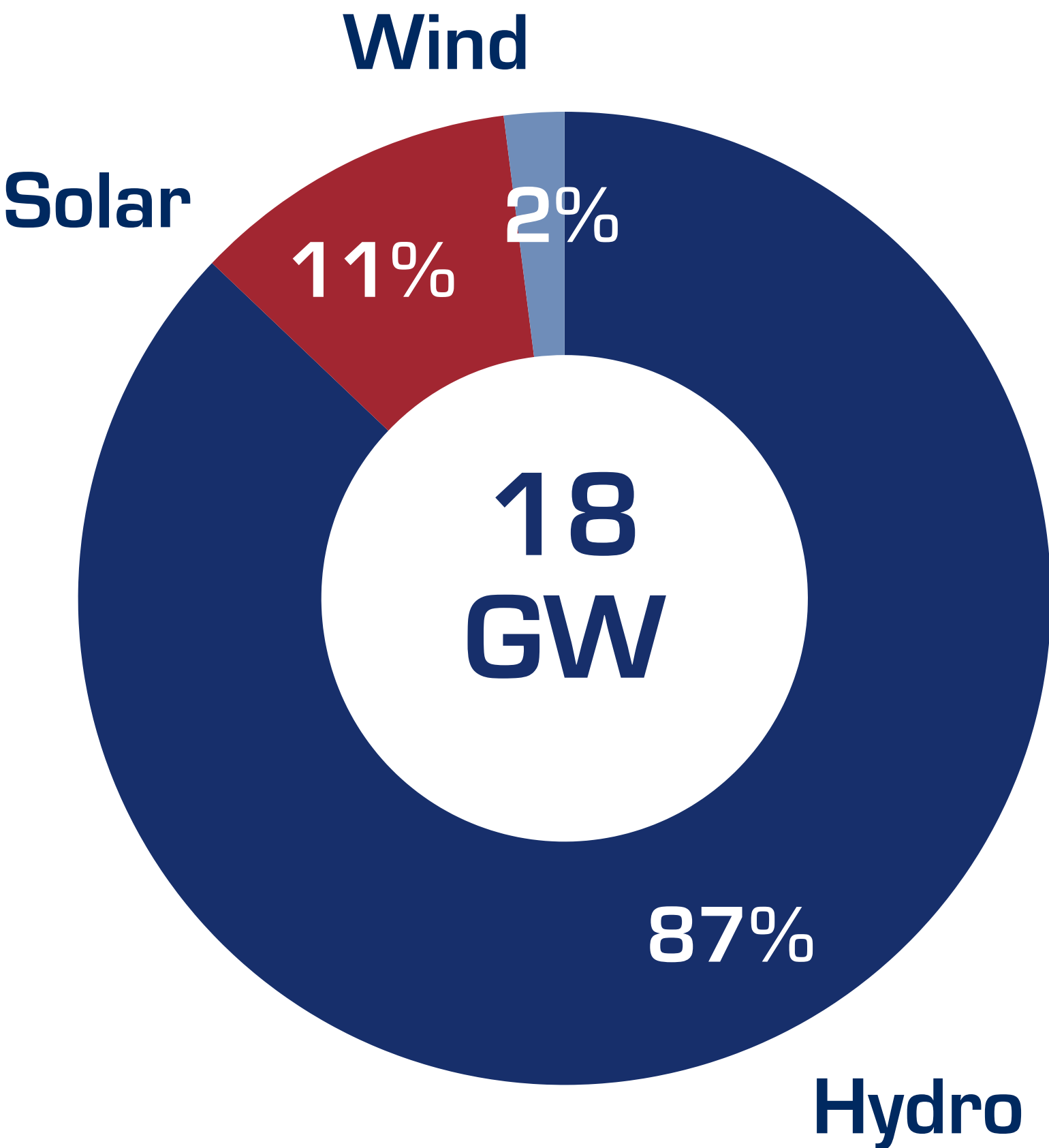
Announced projects

...Of which around  
**3 GW under construction**



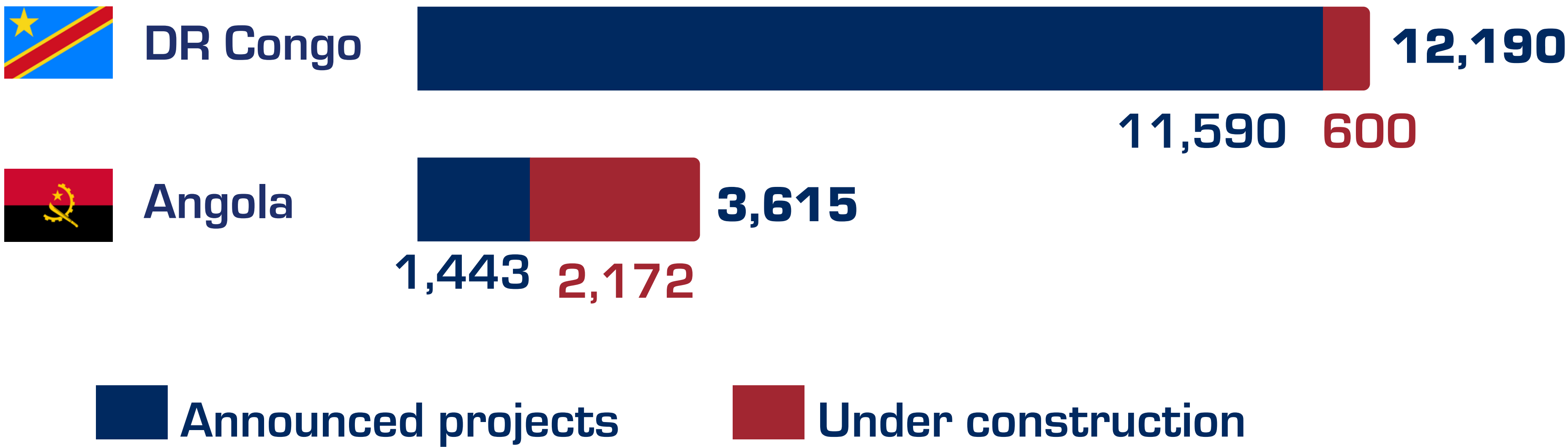
# Capacity under construction and announced still concentrated on hydropower

Breakdown by type of energy of projects announced and under construction [%] – 2023



## 2 countries account for almost 90% of projects announced and under construction

Projects announced et under construction (MW) – 2023





### III – Futur development of renewable energies

## Private players<sup>1</sup> with projects announced and under development in the region



TotalEnergies





Energies: towards a greener future for Africa?

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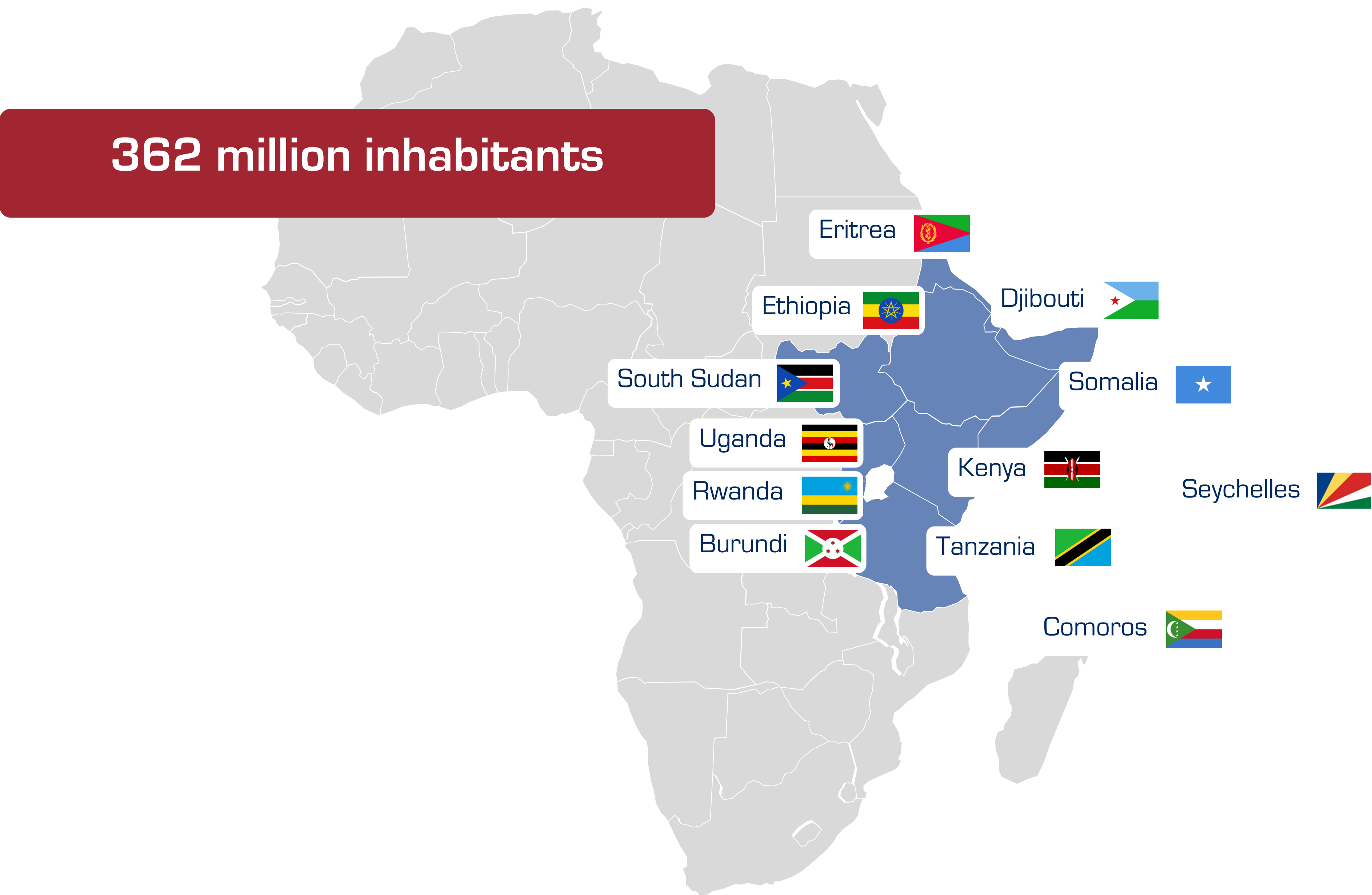
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5

Focus  
**East Africa**

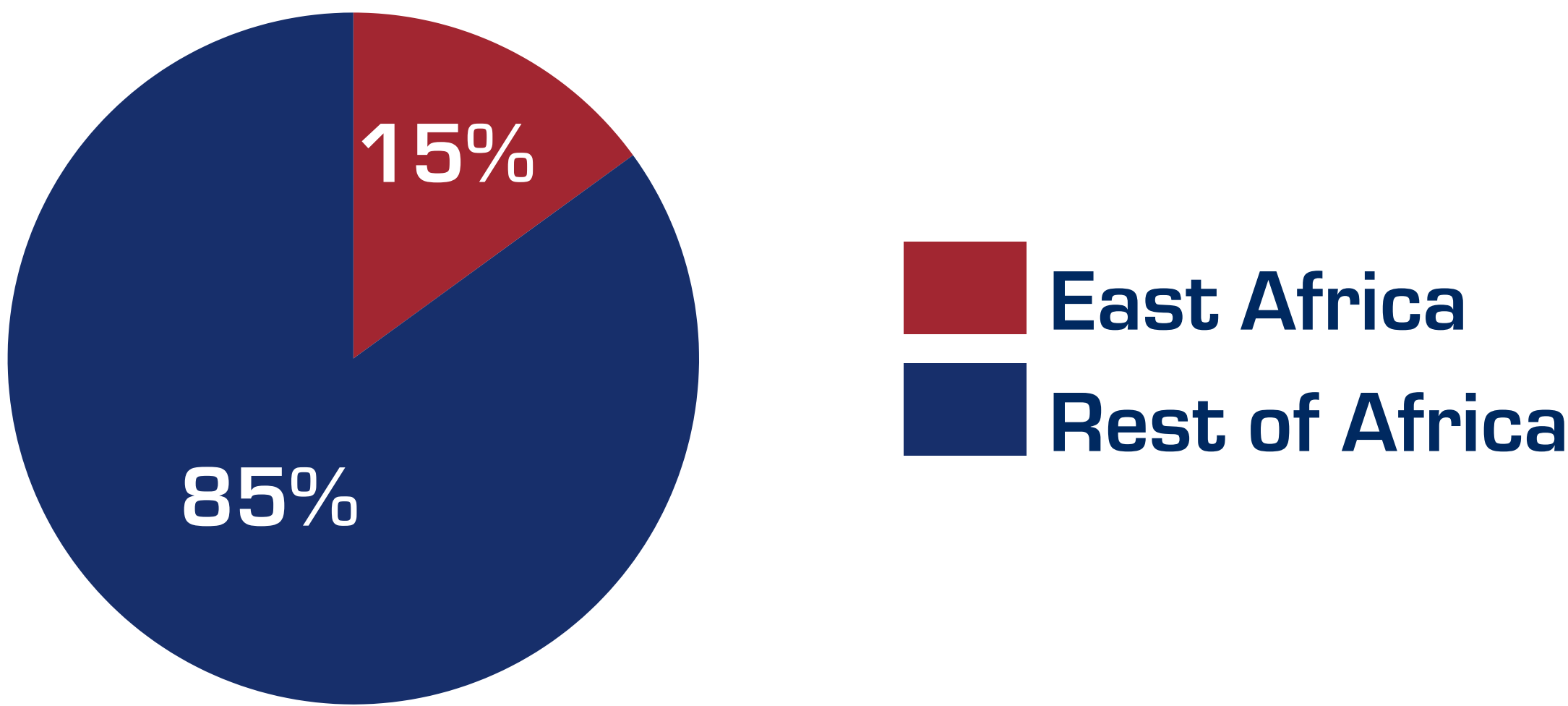


East Africa is home to 1/4 of Africa's population

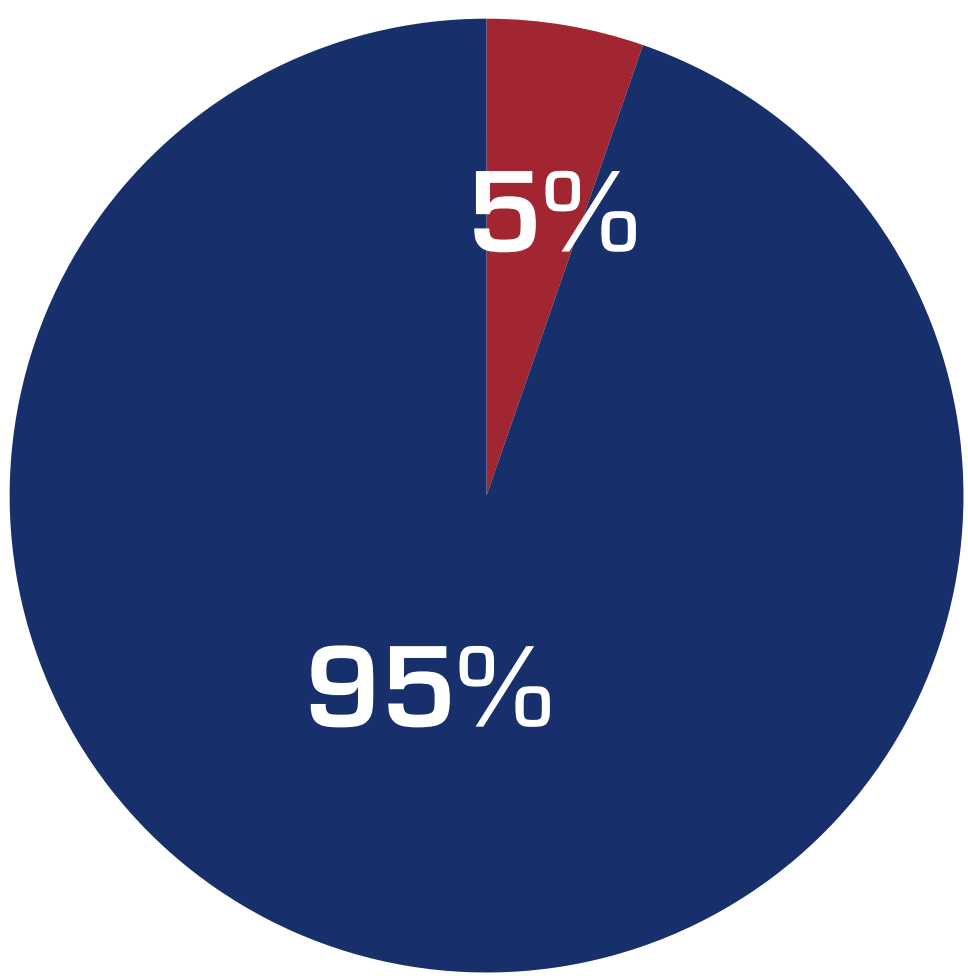


Yet it represents only 5% of its installed capacity and just under 15% of its GDP

GDP breakdown – 2023 (%)

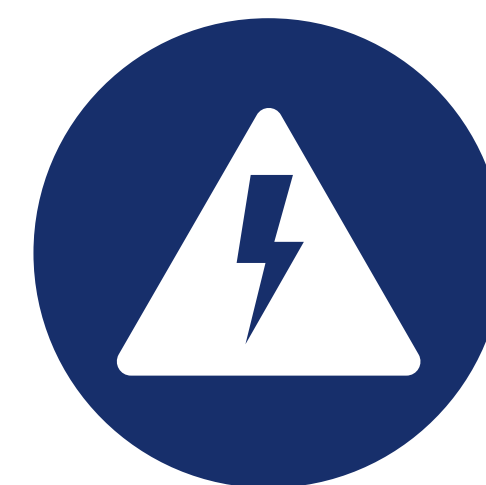


Installed capacity breakdown (%) – 2023

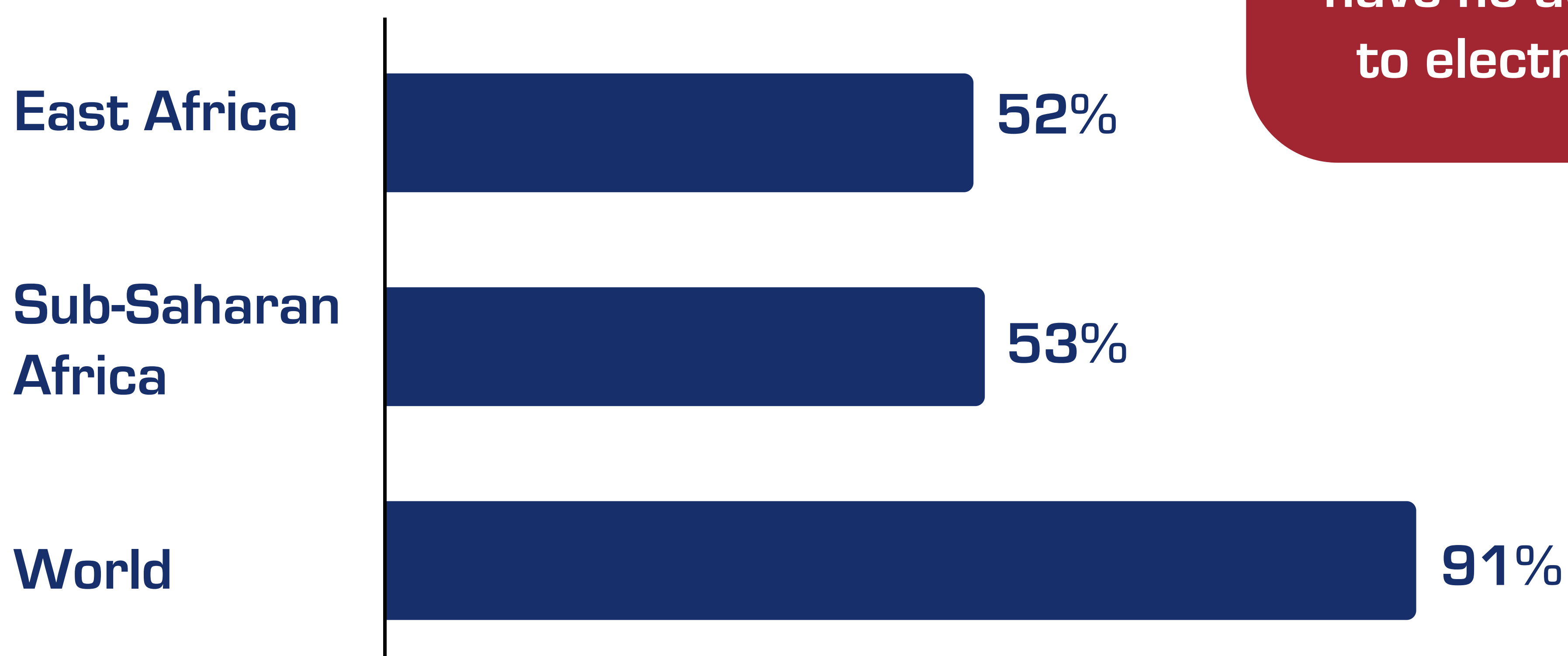




## Access to electricity in the region is generally poor...



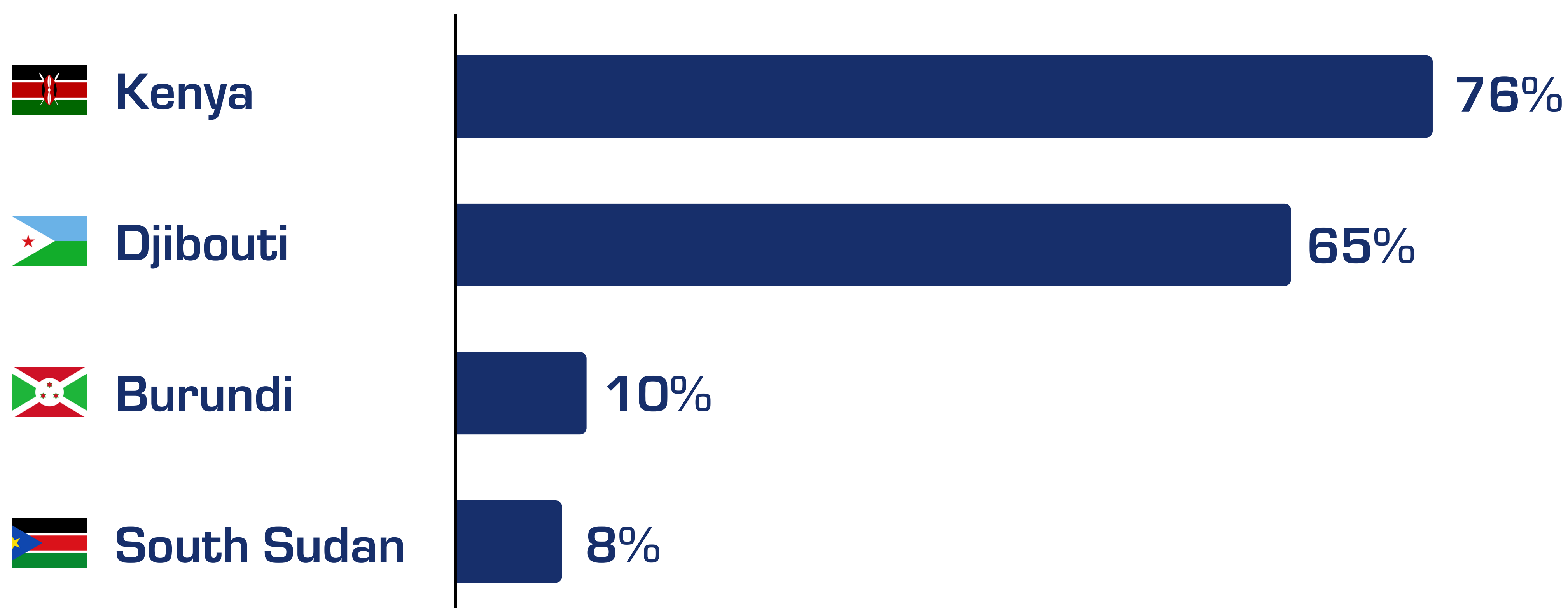
*Electrification rate [%] – 2023*



1 in 2 people  
have no access  
to electricity

...With major disparities between countries in the region

*Electrification rate [%] – 2023*



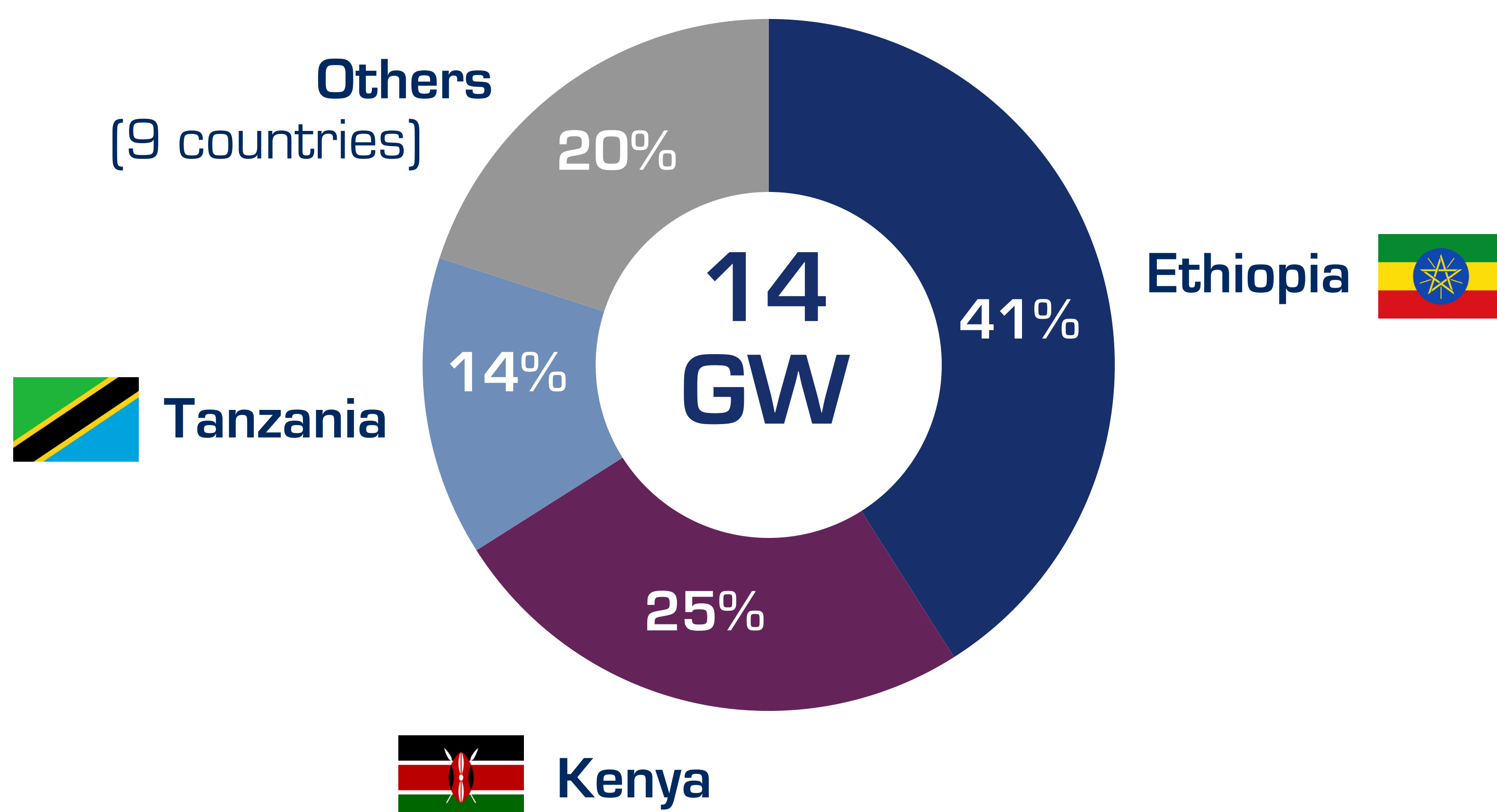


Over the last 10 years, the region has doubled<sup>1</sup> its installed capacity, reaching 14 GW in 2023...

...But the distribution of this capacity remains uneven

**80% of installed capacity  
is located in 3 countries**

*Installed capacity breakdown (%) – 2023*



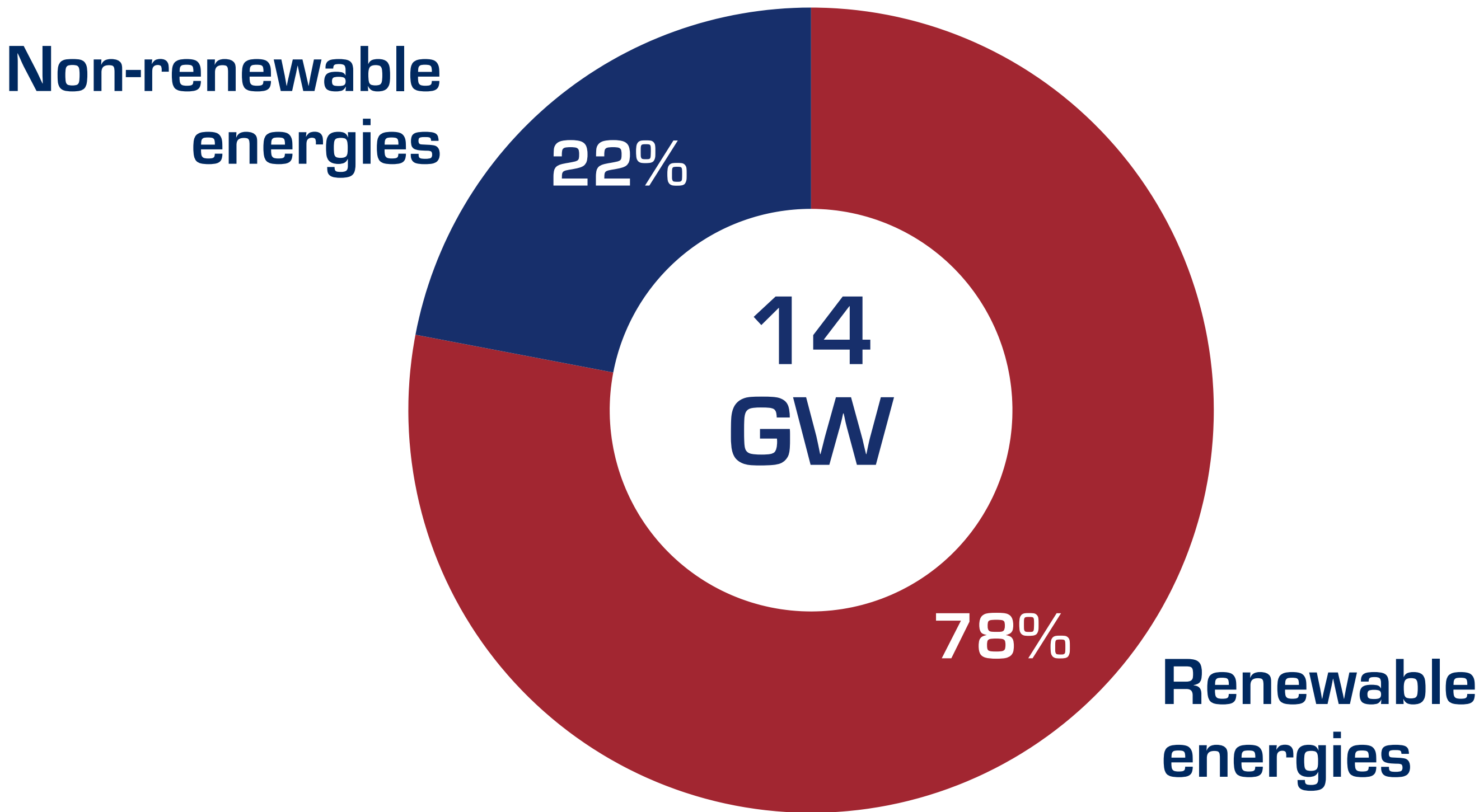
**9 others share the remaining 20%**



II – Overview of renewable energy development

Renewable energies account for almost 80% of the region's electricity mix...

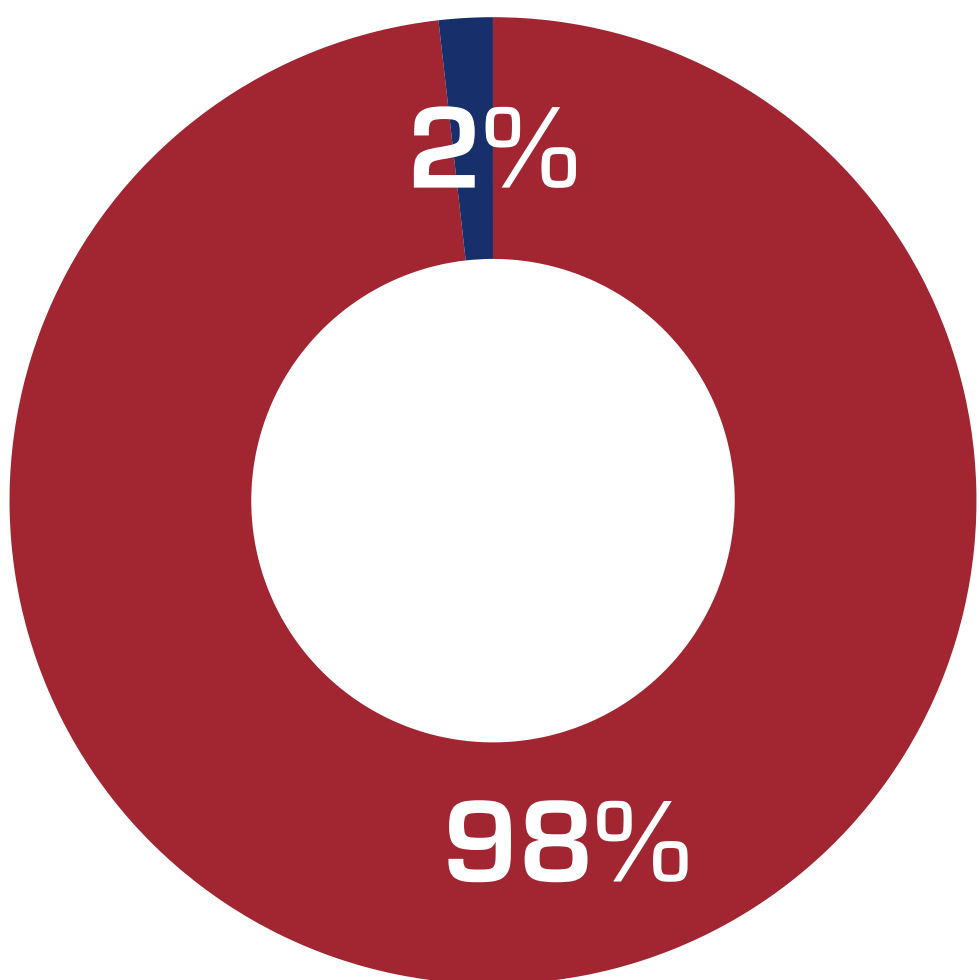
Electricity mix [%] – 2023



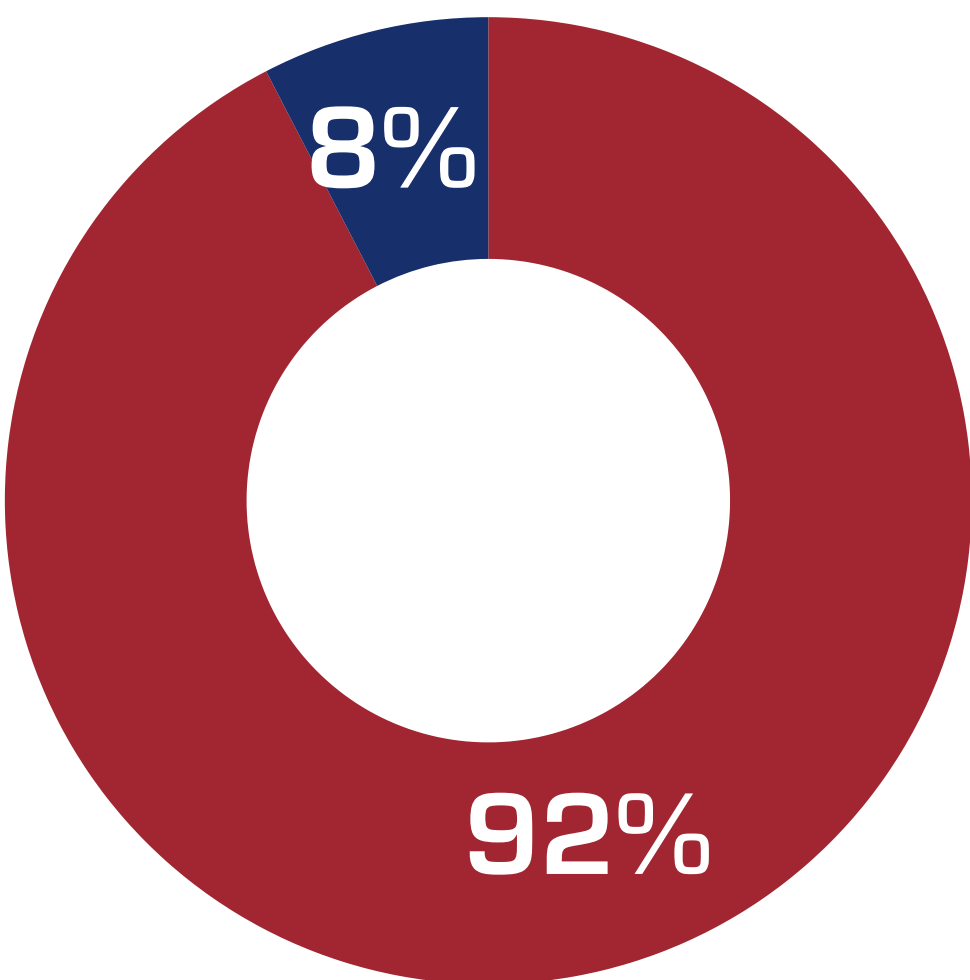
...In particular thanks to a number of regional leaders

Top 3 countries in electricity mix [%] – 2023

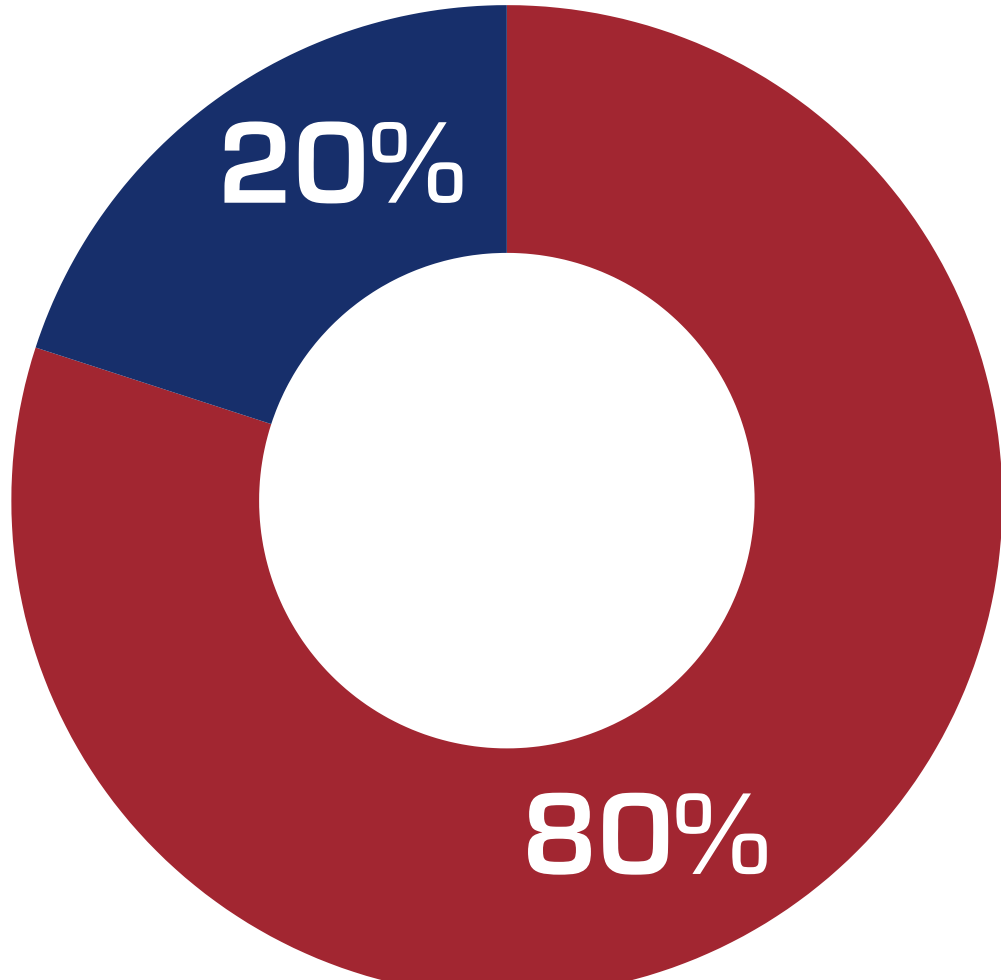
Renewable energies  
Non-renewable energies



Ethiopia



Uganda



Kenya

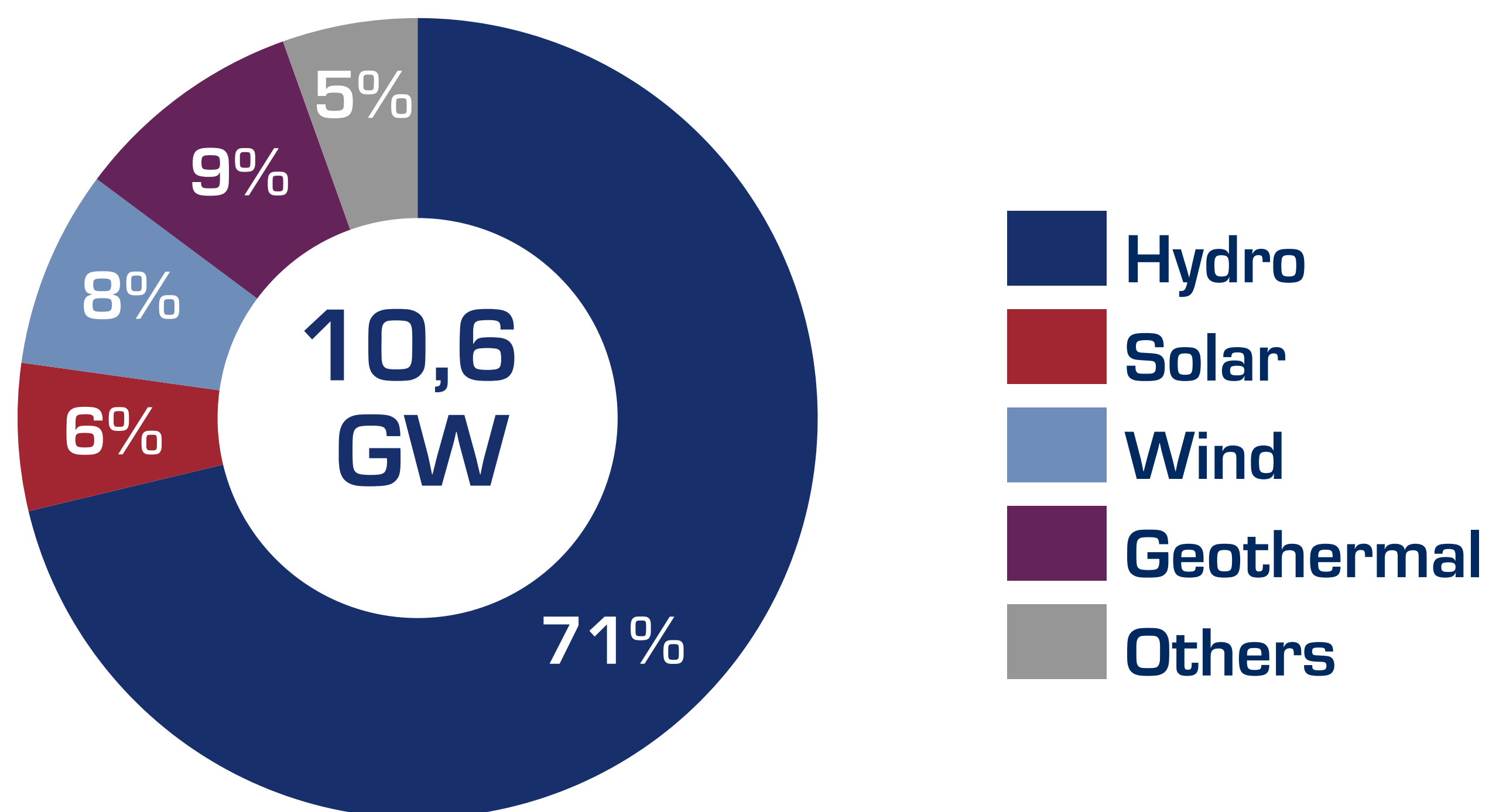




## II – Overview of renewable energy development

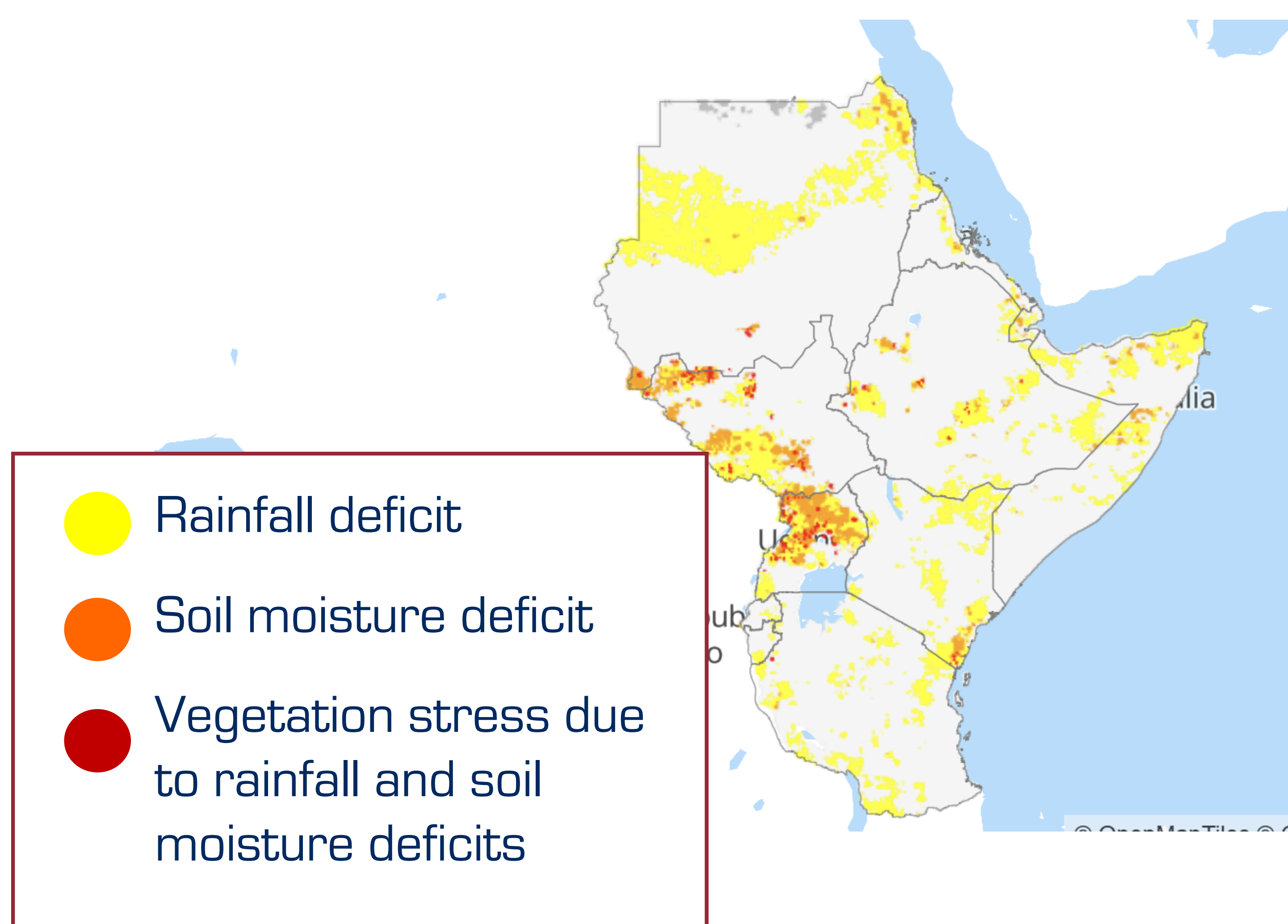
### Hydropower is the main source of energy in the region

*Electricity mix (%) – 2023*



However, recent droughts and heavy dependence on hydroelectricity have led to frequent power cuts

*Last drought conditions analyzed – July 2024*



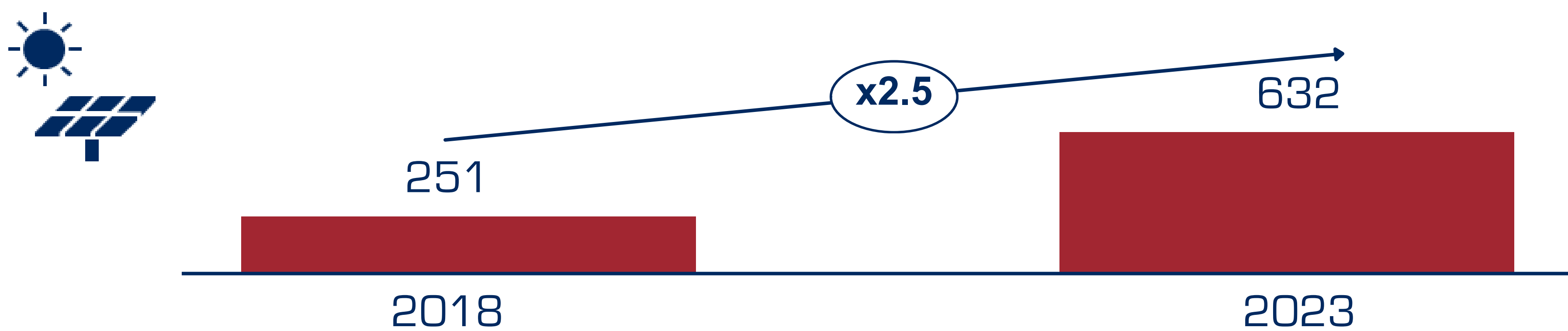
In Tanzania, power cuts last between **6 and 12** hours a day in times of drought



# To reduce dependence on hydropower, developers are looking at:

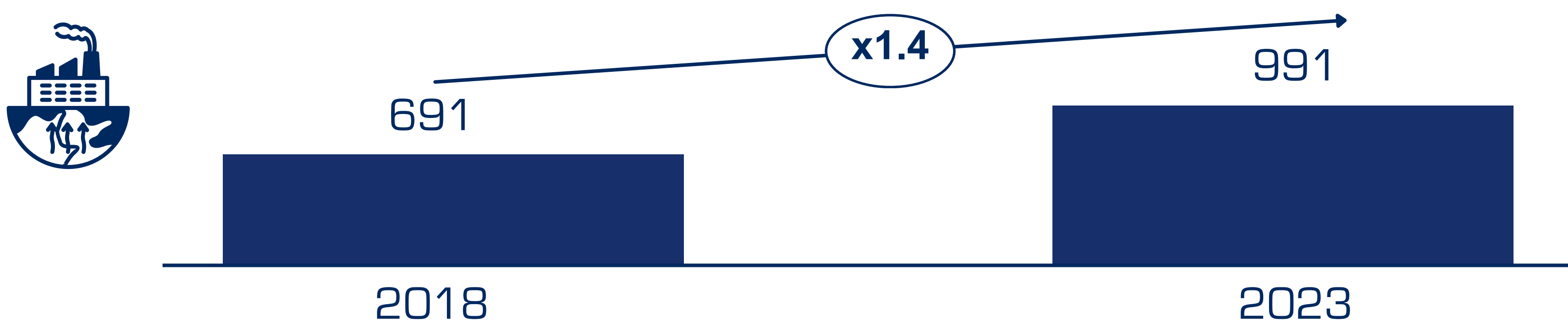
## 1 Solar projects

*Growth in installed solar power capacity 2018-2023, (MW)*

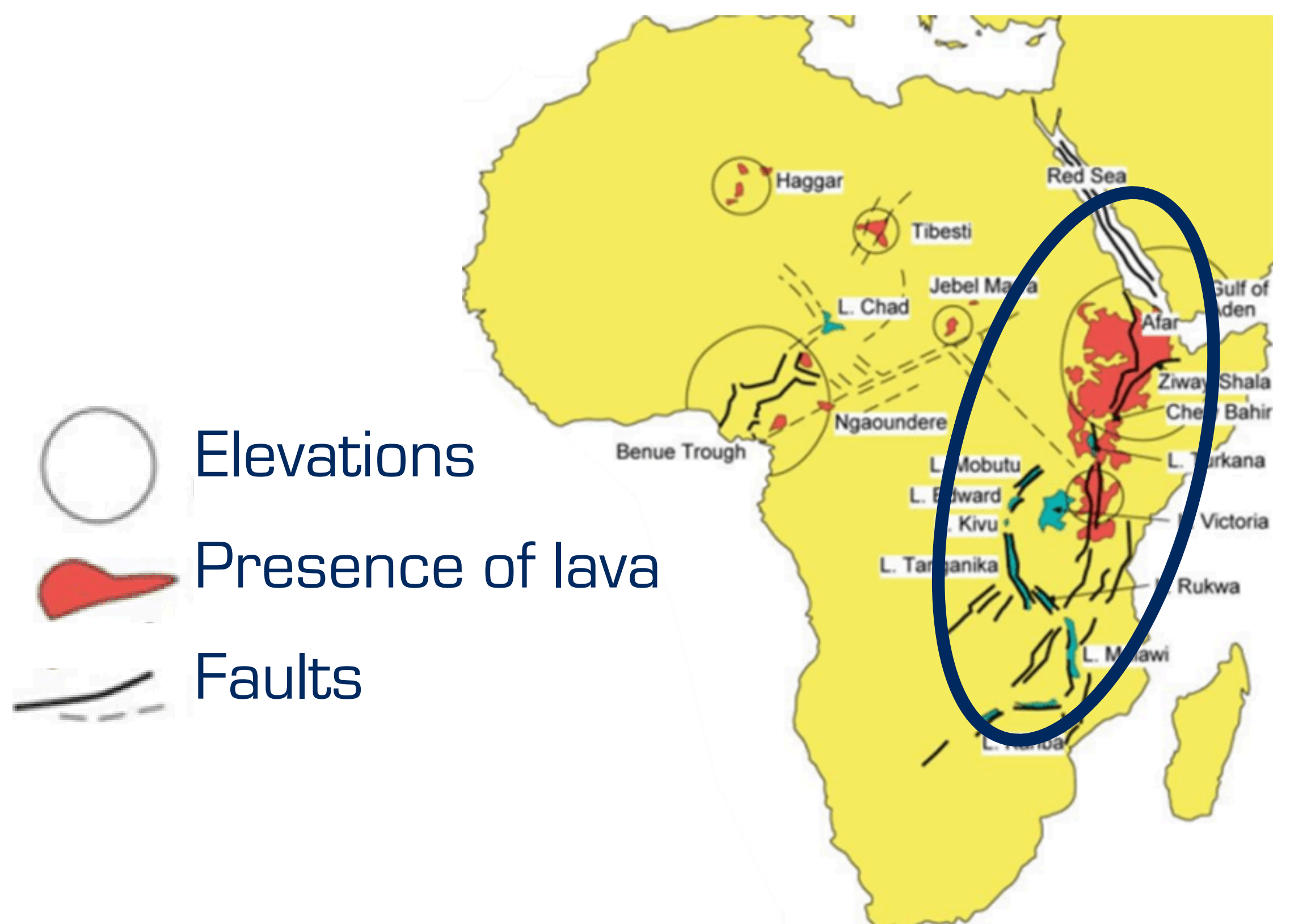


## 2 Geothermal power

*Growth in installed geothermal energy capacity 2018-2023, (MW)*



The Rift Valley, with its intense volcanic activity, has an estimated geothermal potential of **20,000<sup>1</sup> MW**

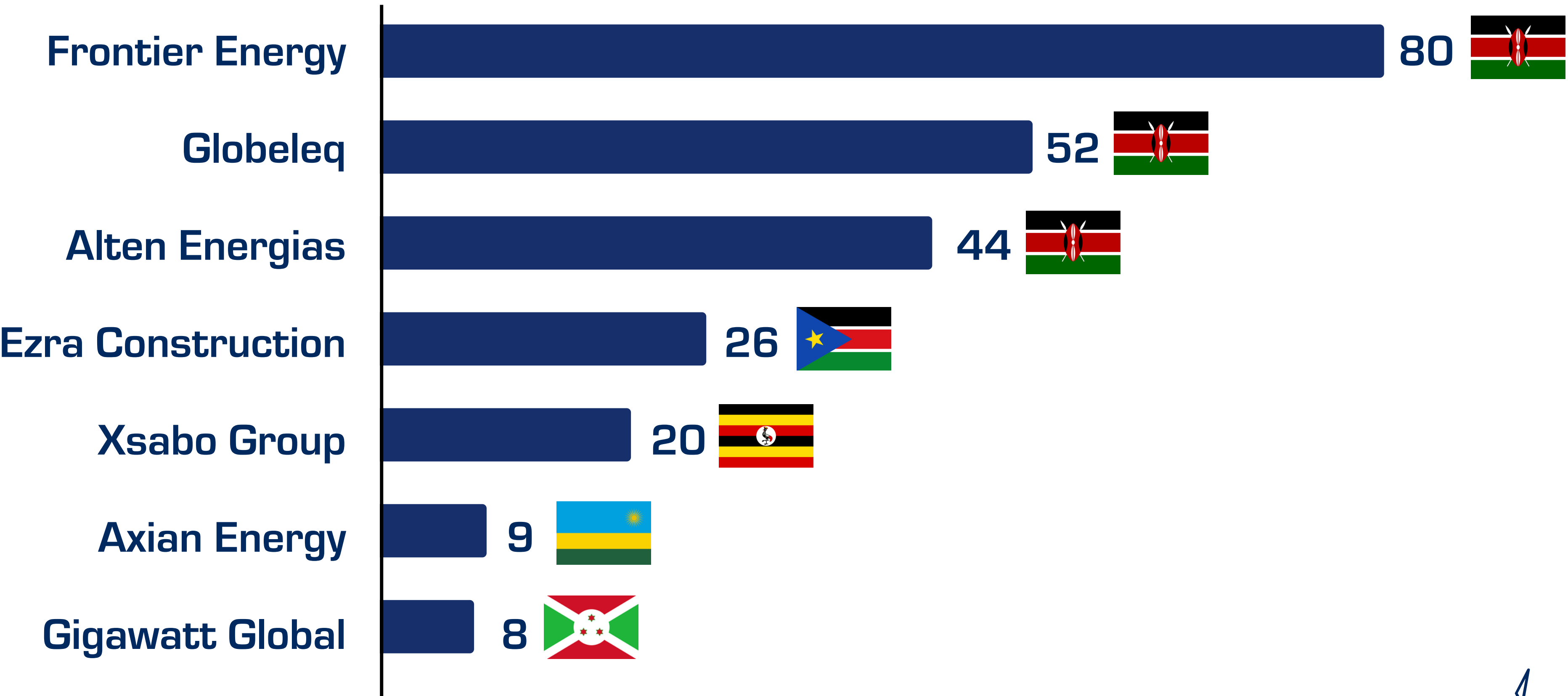
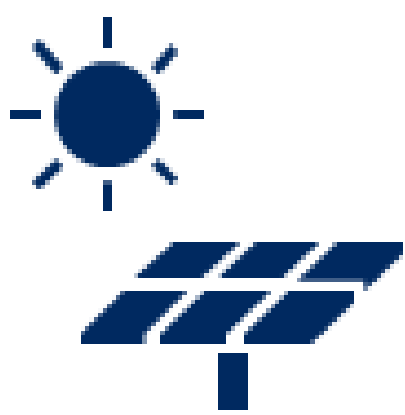




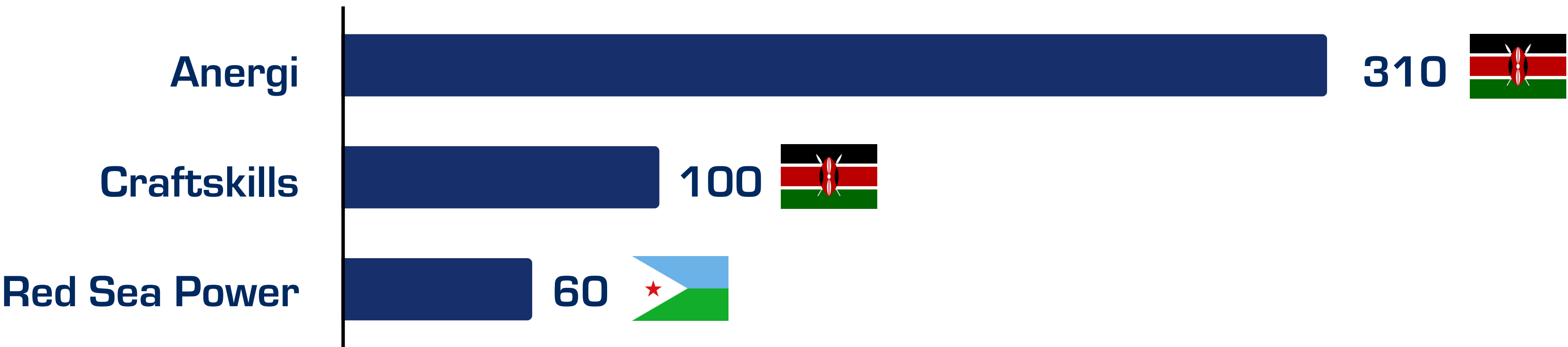
## II – Overview of renewable energy development

# The region has succeeded in attracting a large number of private-sector players for large-scale projects

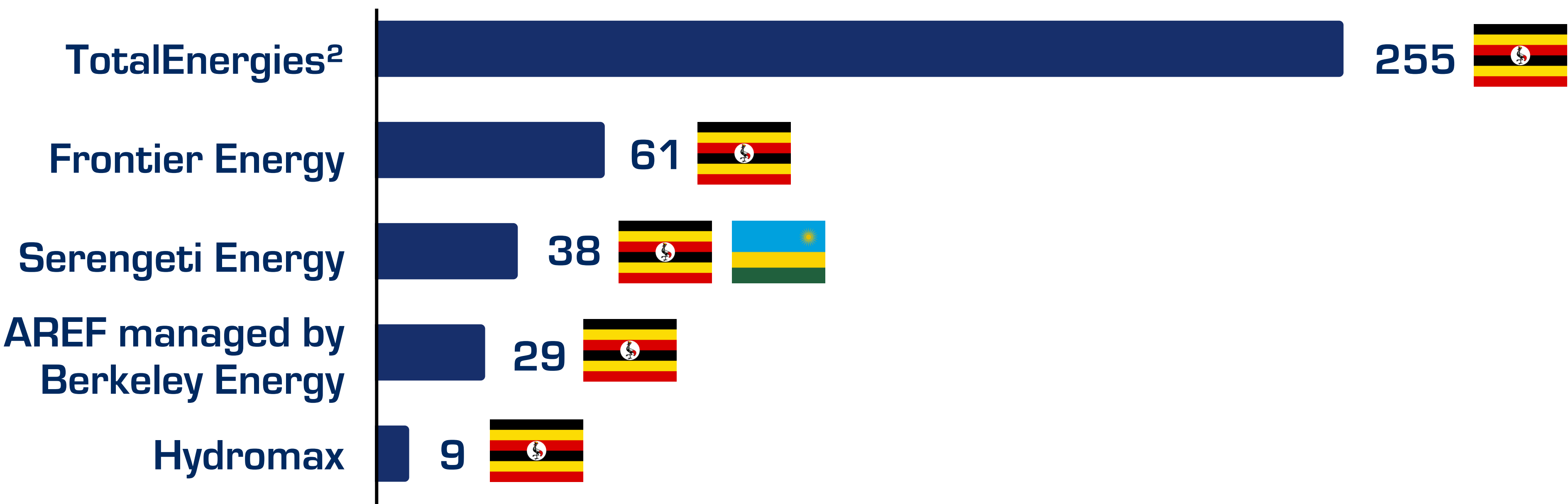
### Solar projects in operation<sup>1</sup> (MW) – 2025



### Wind projects in operation<sup>1</sup> (MW) – 2025



### Hydropower projects in operation<sup>1</sup> (MW) – 2025



Sources: Data base Okan – non-exhaustive list

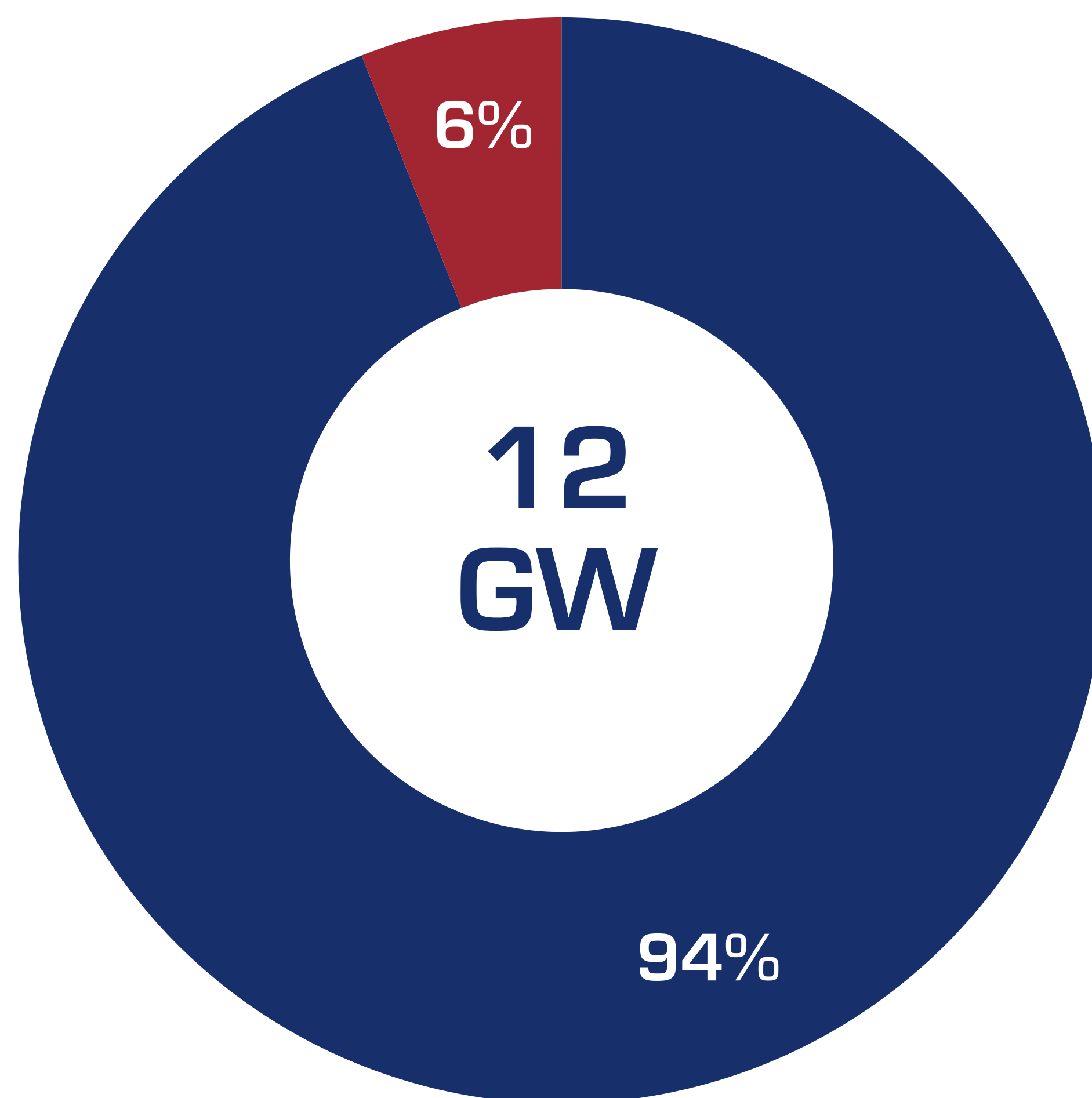
Notes: (1) Excl. governments and public entities (2) Purchased from Scatec in Feb-25



# Planned increase in renewable energy capacity, with almost **12 GW** of additional capacity...

*Breakdown of projects announced and under construction (%) – 2024*

Under construction



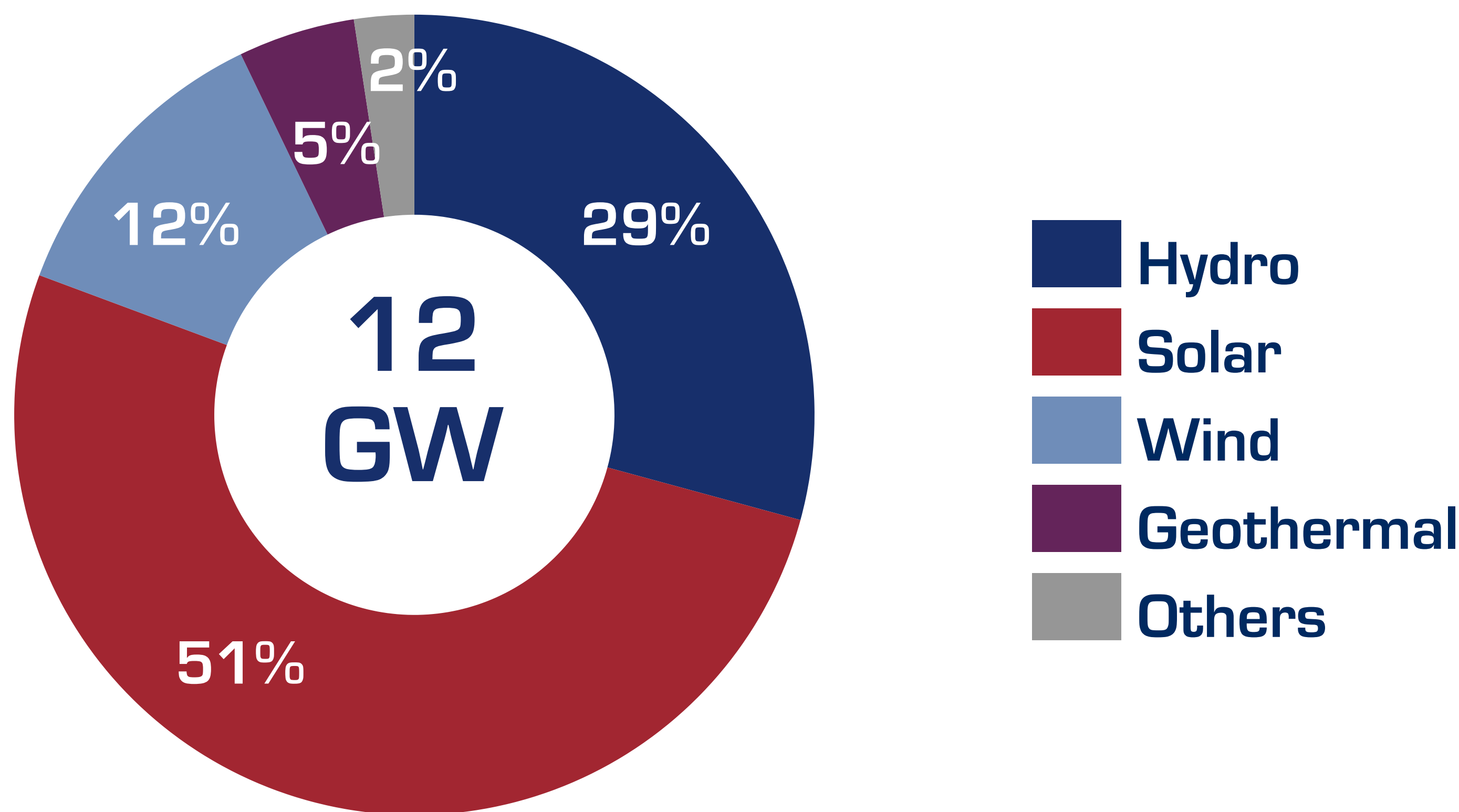
Announced projects

## ...Including around **0.8 GW** under construction



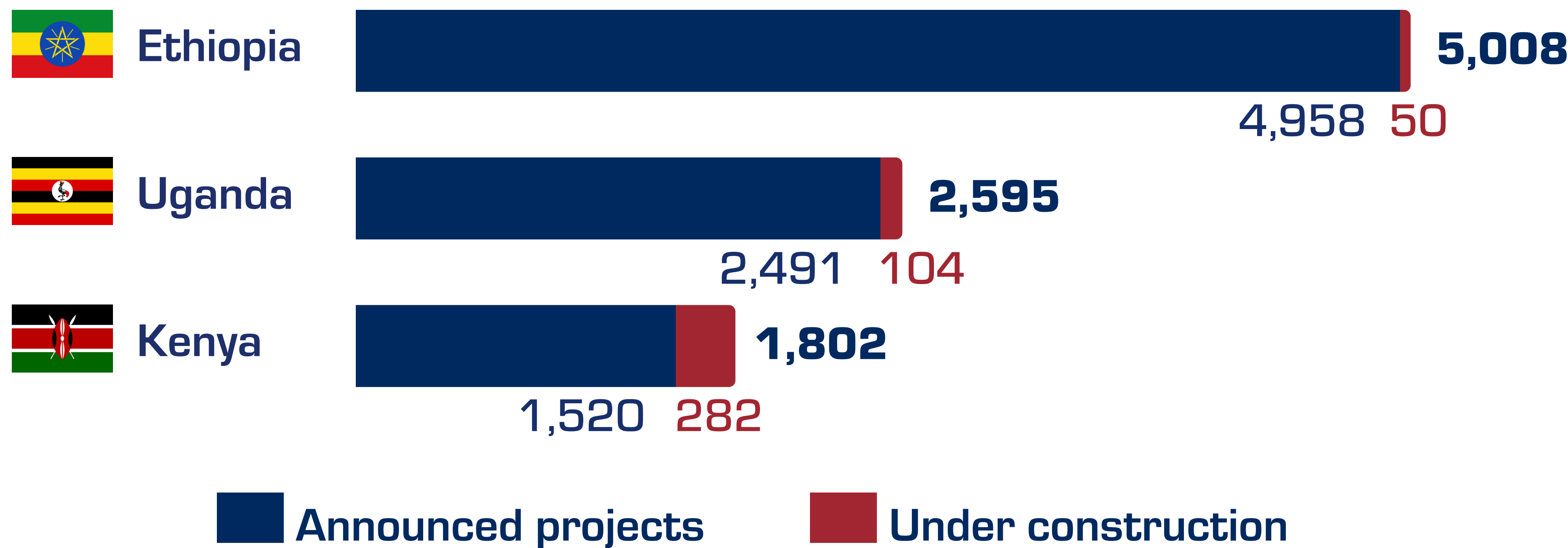
# Capacity under construction and announced mainly for solar energy production

Breakdown by type of energy of projects announced and under construction [%] – 2024



## 3 countries account for around 80% of projects announced and under construction

Projects announced and under construction (MW) – 2024





### III – Futur development of renewable energies

## Private players<sup>1</sup> with projects announced and under development in the region





Energies: towards a greener future for Africa?

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6

Focus

Southern Africa /  
Indian Ocean

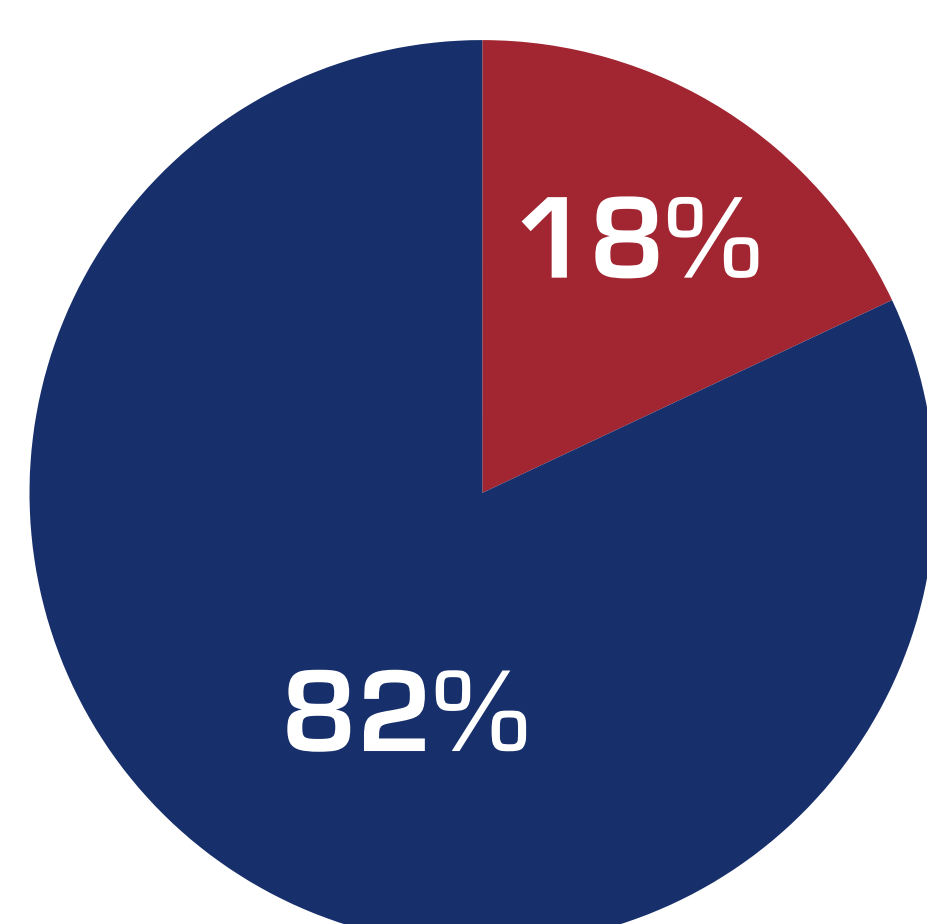


## Southern Africa accounts for nearly 15% of the African population



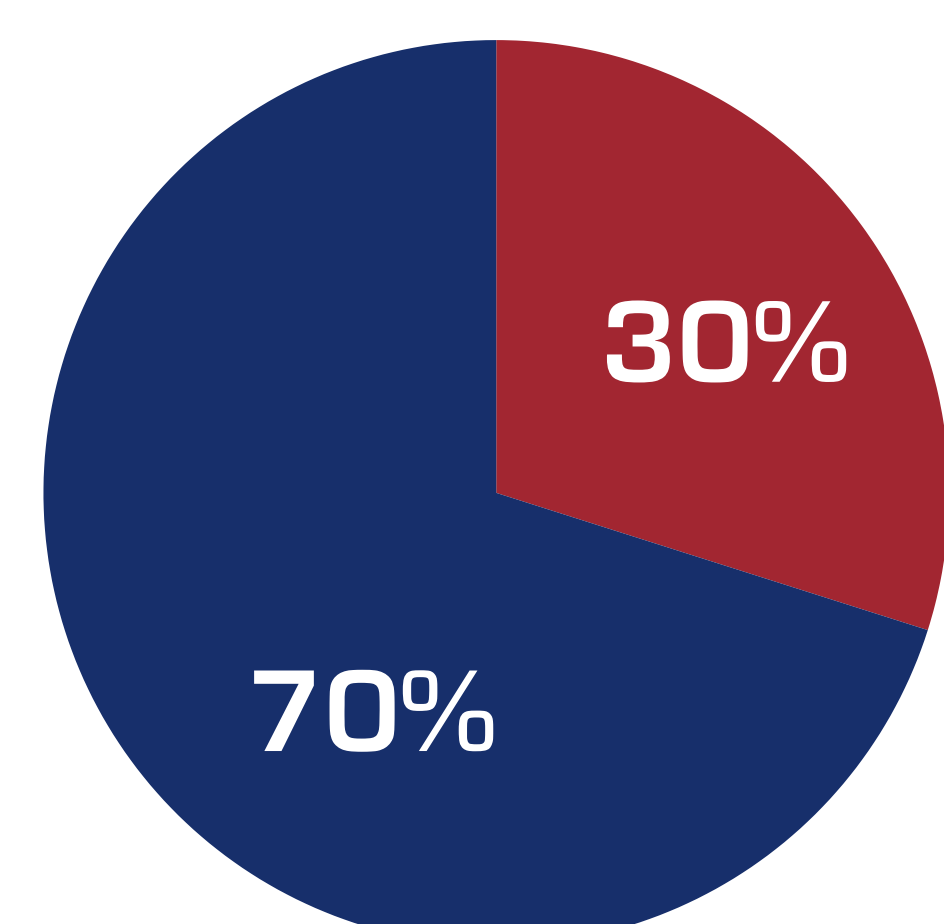
Yet it represents 30% of the continent's installed capacity and around 20% of its GDP

*GDP breakdown [%] – 2023*



**Southern Africa**  
**Rest of Africa**

*Installed capacity breakdown [%] – 2023*





This region has a slightly higher rate of access to electricity than sub-Saharan Africa as a whole...

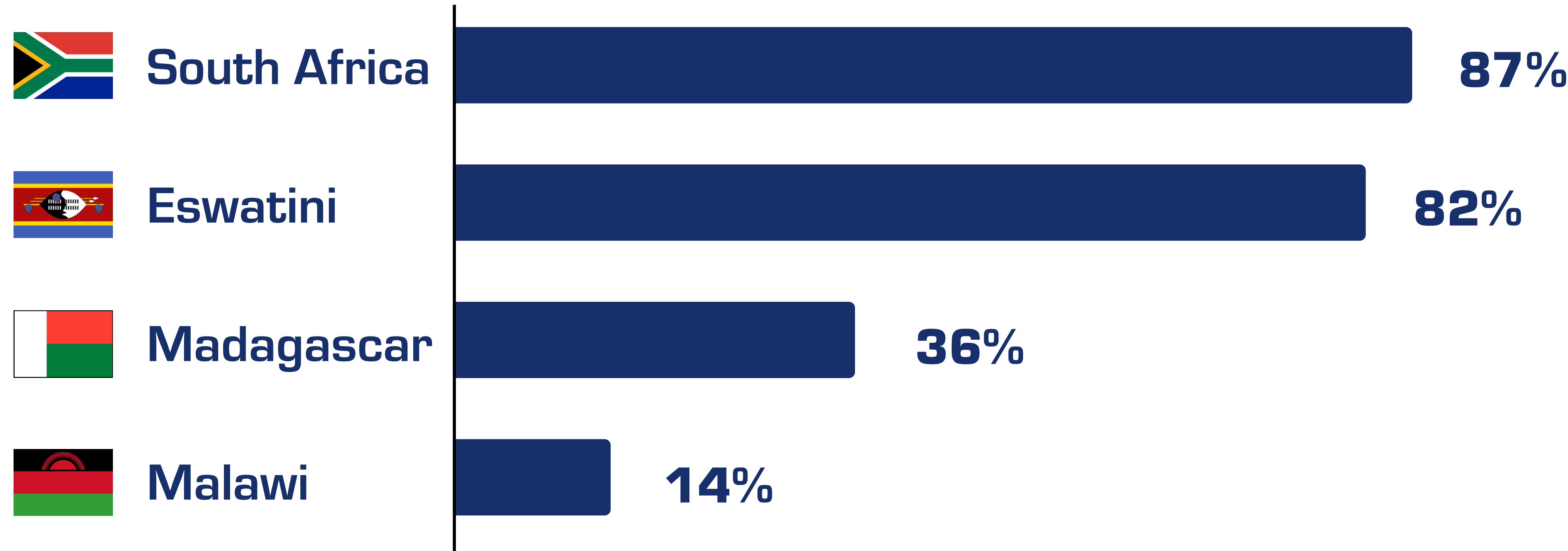


Electrification rate [%] – 2023



...yet significant disparities persist between countries.

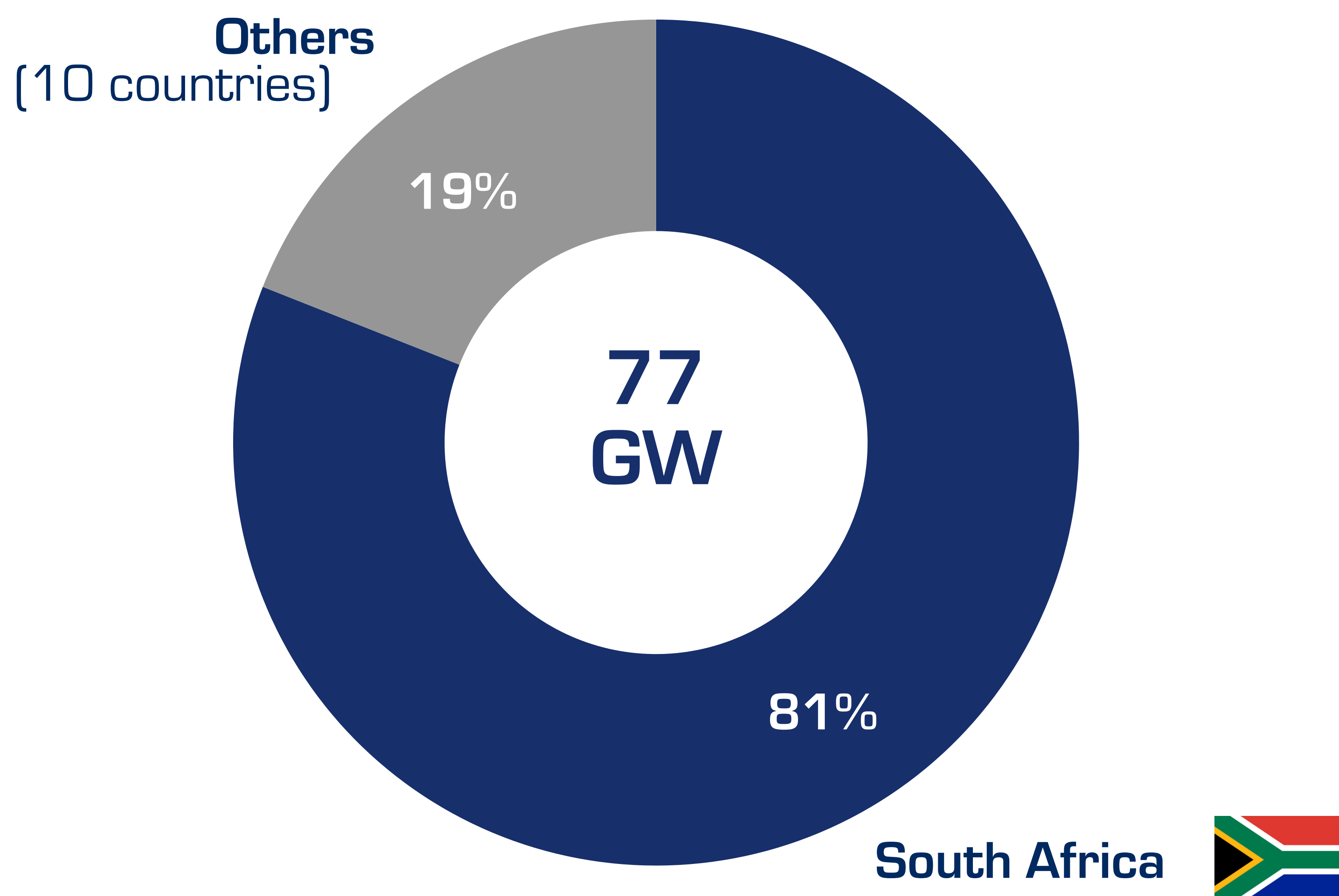
Electrification rate [%] – 2023





# South Africa accounts for 81% of the region's installed capacity

*Installed capacity breakdown [%] – 2023*



**10 others share  
the remaining 19%**



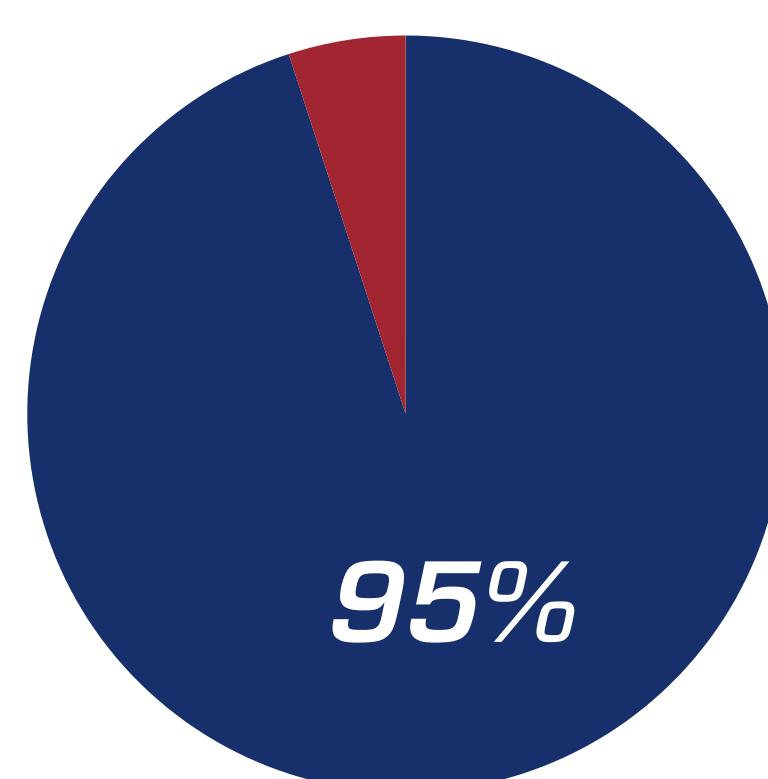
# Despite its significant installed capacity, South Africa is facing a major energy crisis

### Example - Eskom in South Africa



Eskom, the national utility, supplies **nearly all of the country's electricity**

*Electricity producers, % of installed capacity in South Africa – 2023*



■ Eskom  
■ Others

Faced with failing infrastructure and a production shortfall, the company enforces scheduled power cuts



**6 GW**  
Electricity capacity  
shortfall



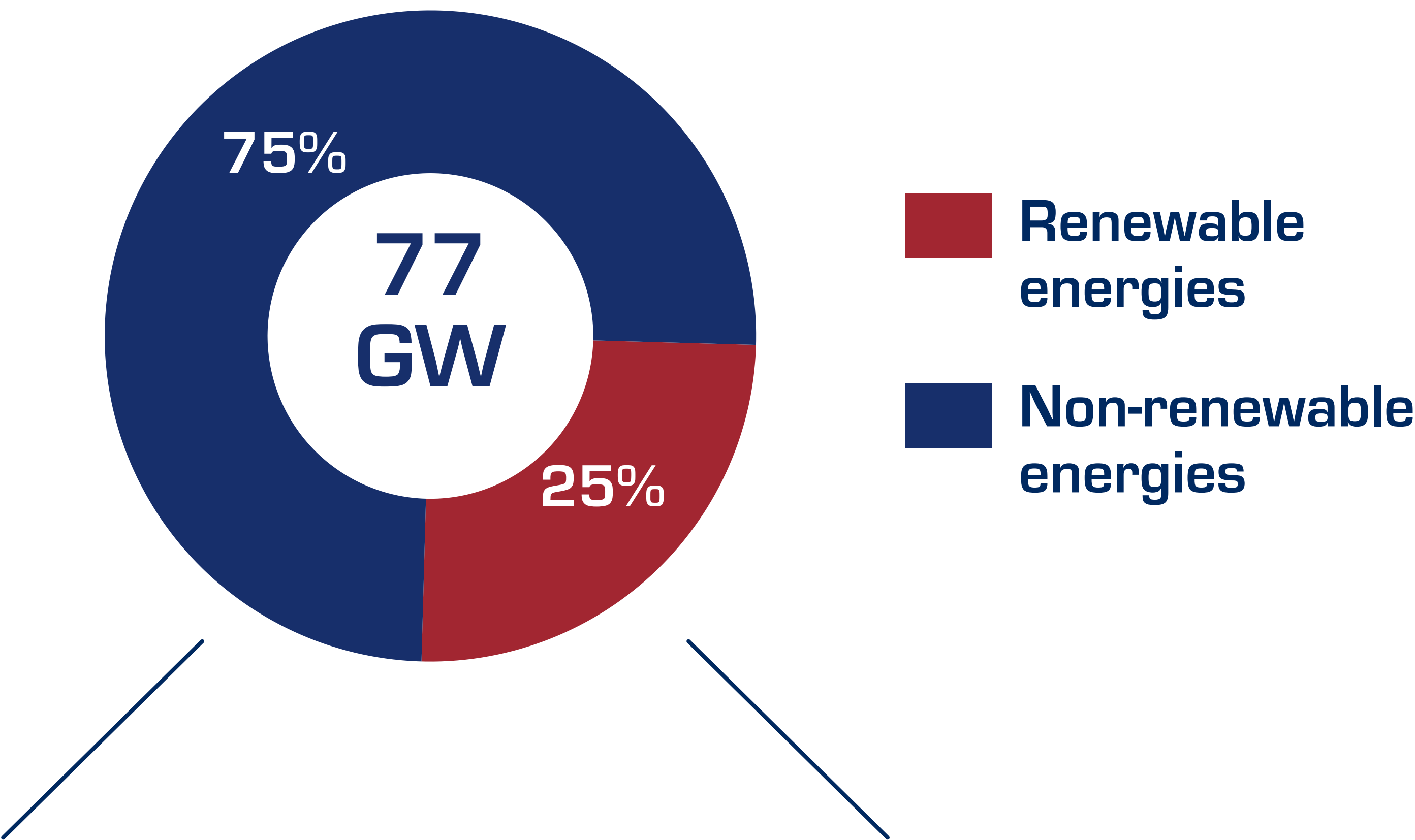
**332 days**  
of load shedding in  
2023

Launched in 2022, the government's energy action plan is showing its first results, with **the end of load shedding since March 2024**



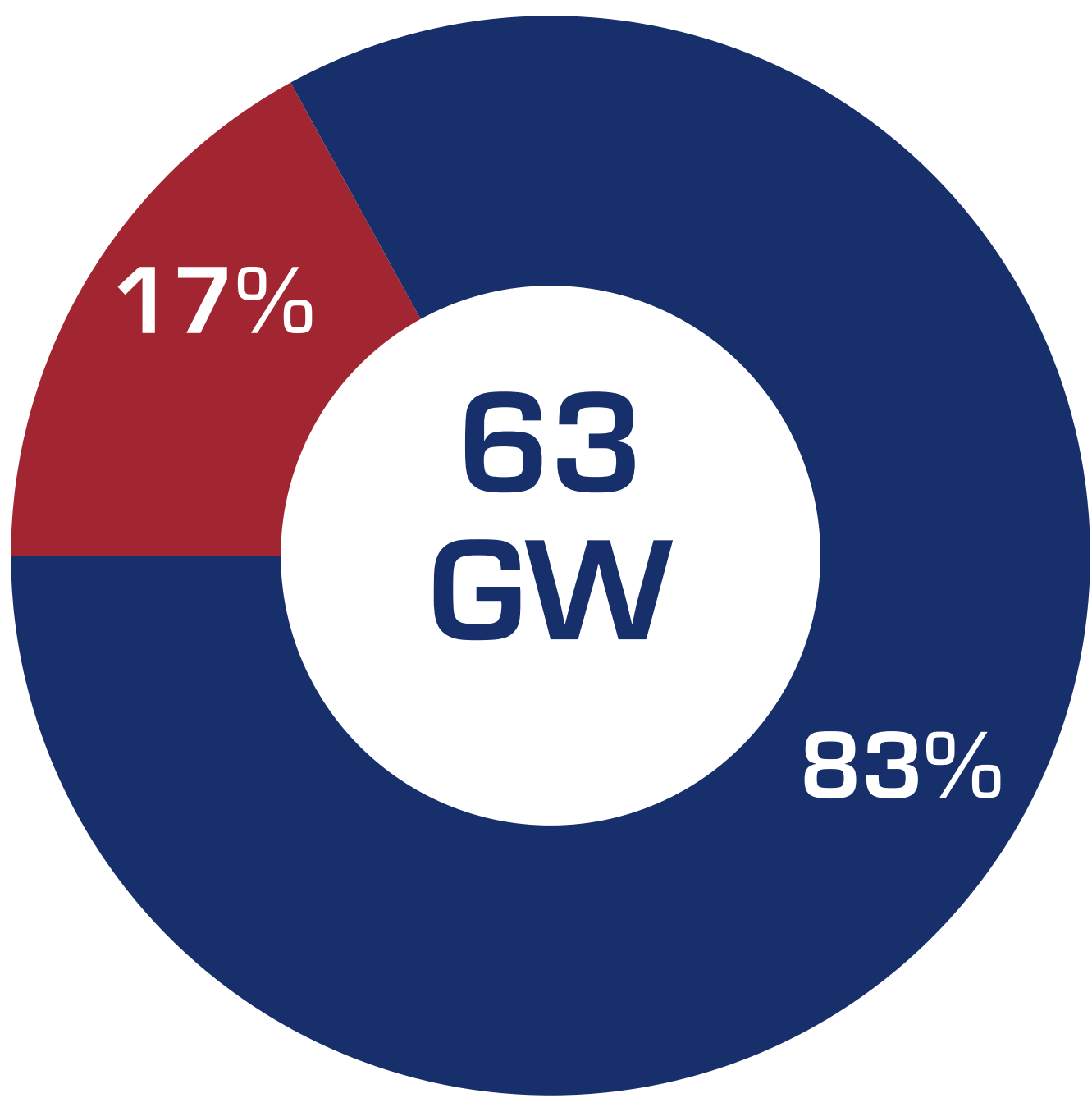
Renewables account for only 1/4 of the region's electricity mix...

Electricity mix in the region [%] – 2023

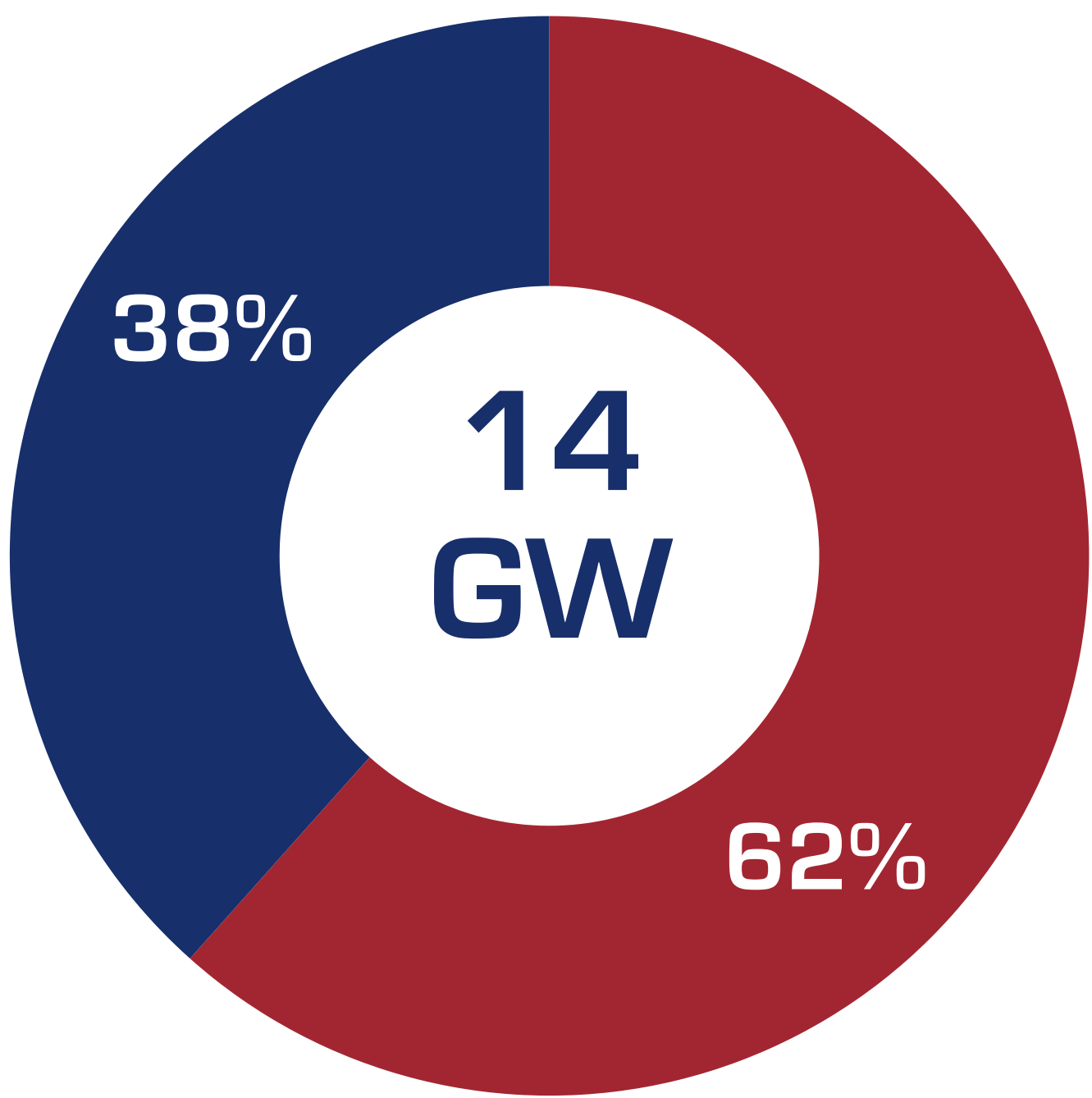


...Due to the strong dominance of carbon-based energy in South Africa's energy mix

1 Electricity mix in South Africa [%] – 2023



2 Electricity mix in Southern Africa<sup>1</sup> [%] – 2023

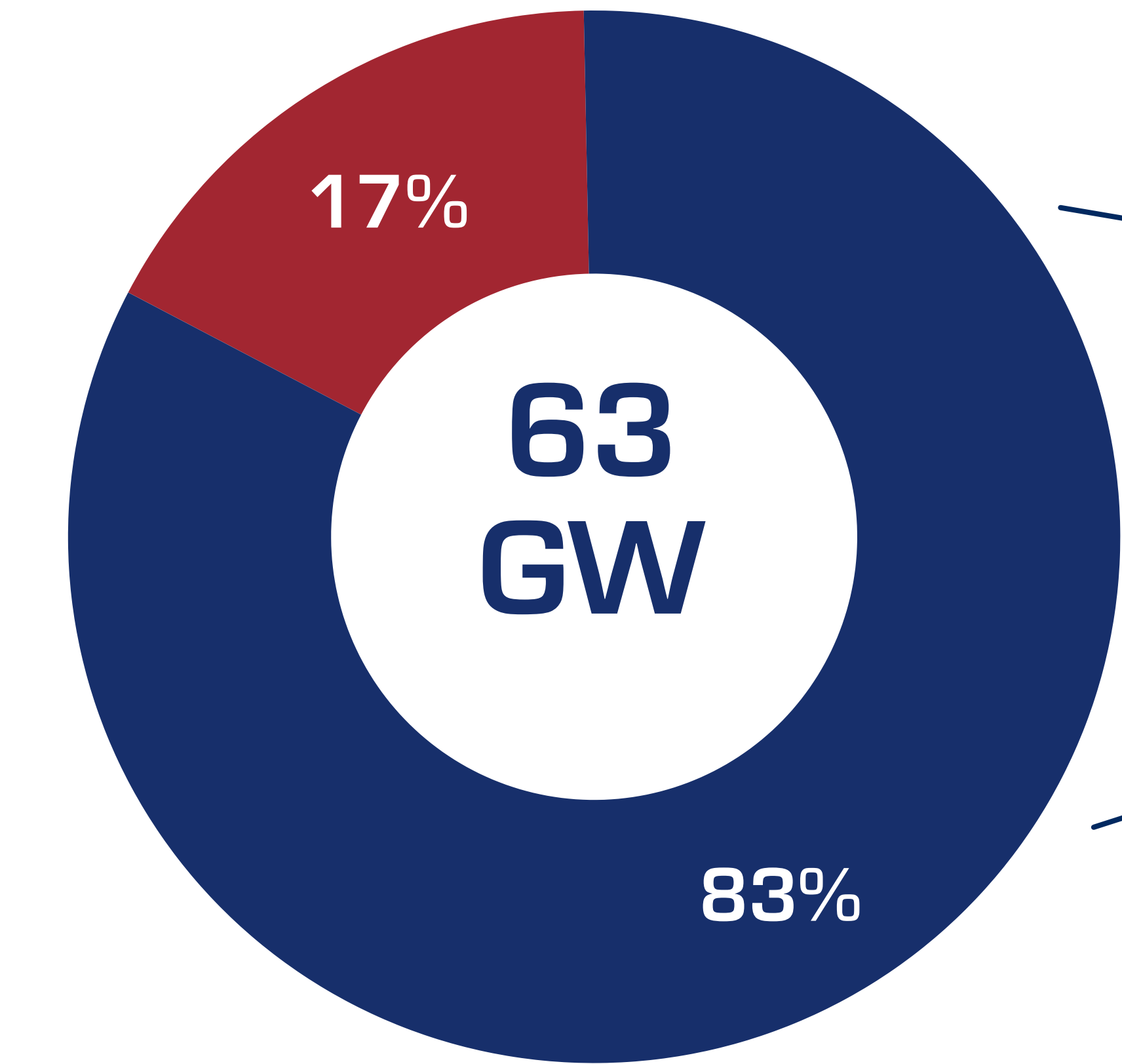




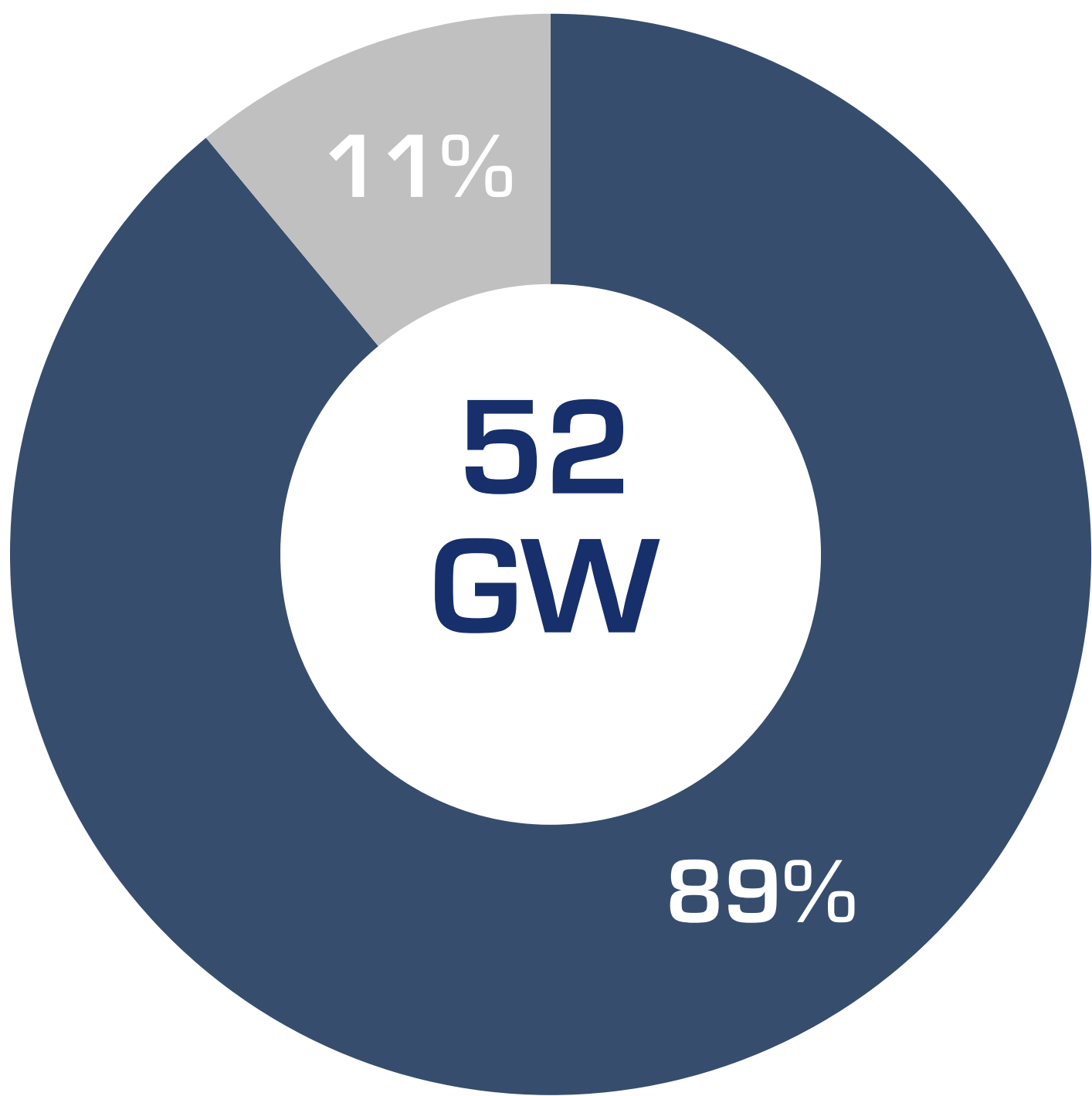
## II – Overview of renewable energy development

### 1 South Africa's energy mix is largely coal-dependant...

Electricity mix in South Africa [%]  
– 2023

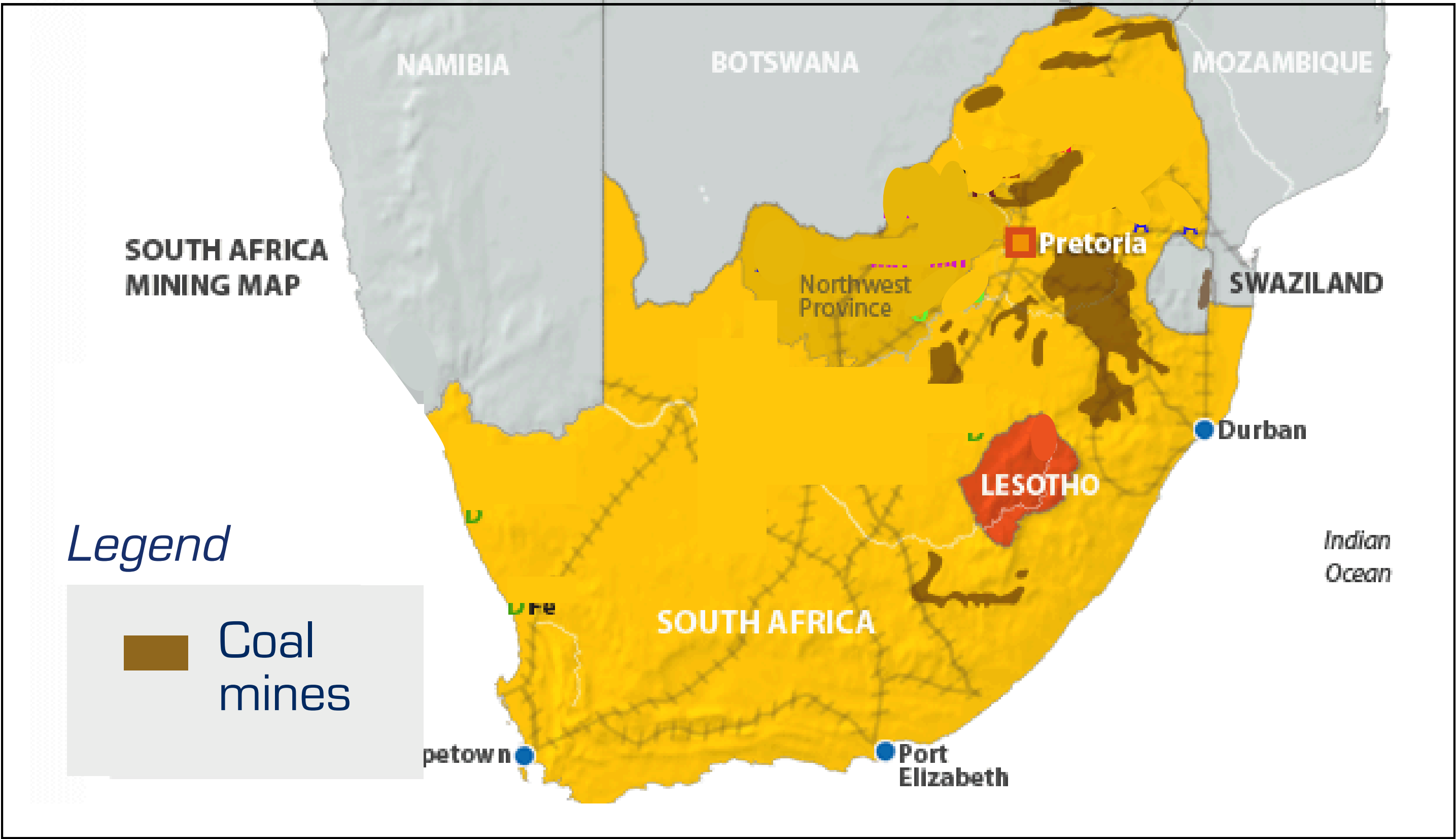


Non-renewable energy mix  
in South Africa [%] – 2023



### ...Due to the abundance of its mineral resources

Mapping of coal mines in South Africa



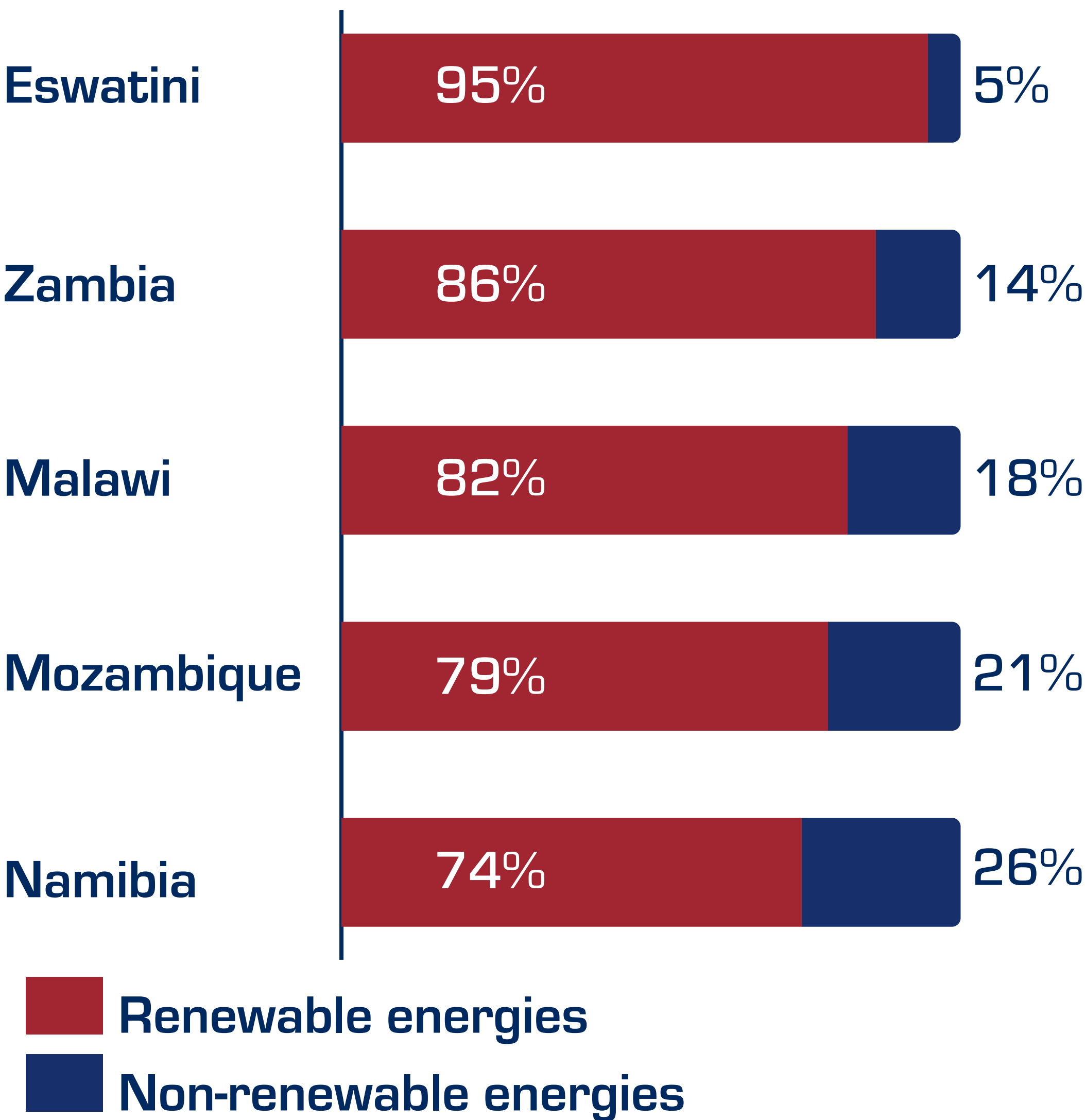
South Africa  
holds  
**c.90%**  
of the  
continent's  
coal reserves



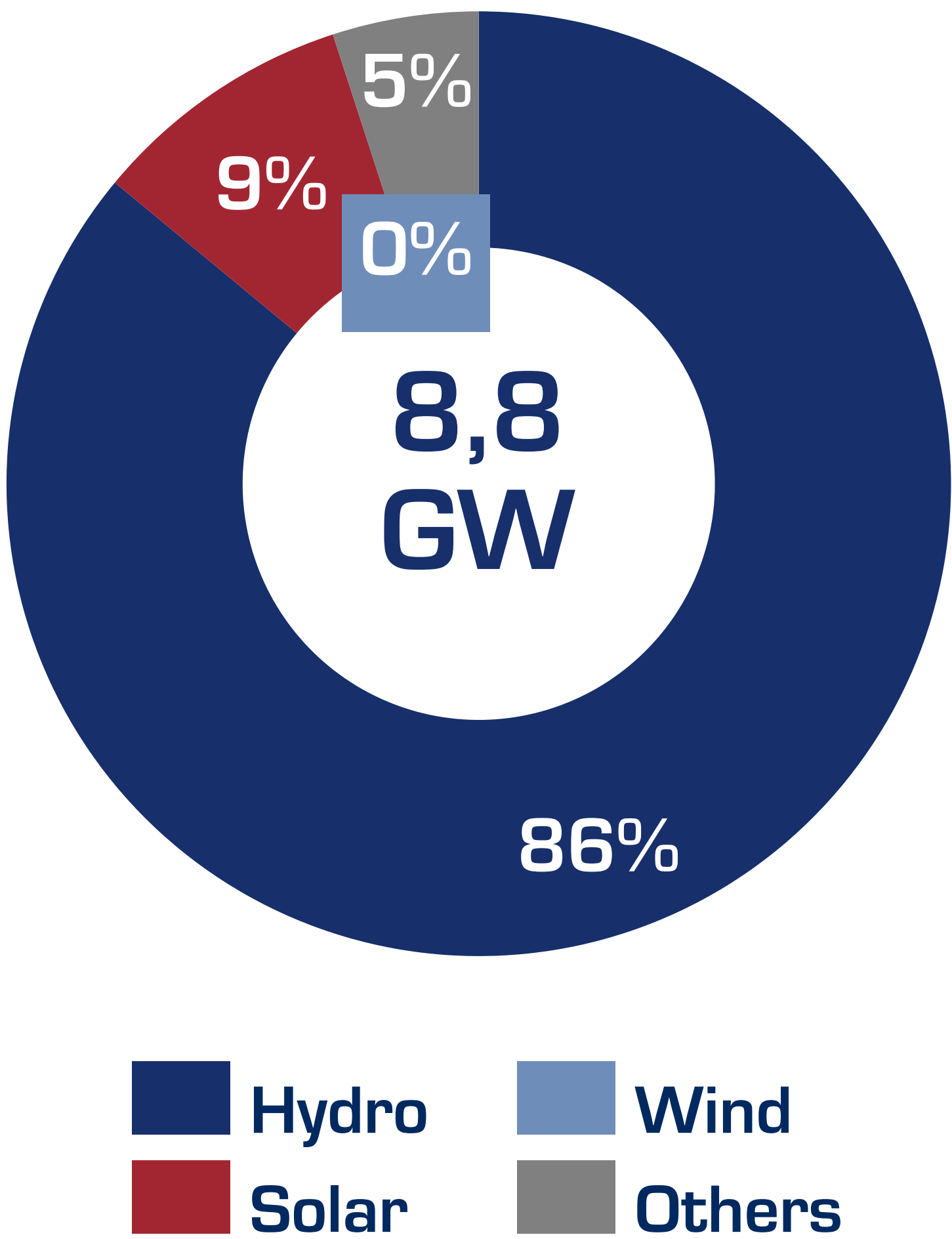
## II – Overview of renewable energy development

### 2 Other countries rely on an energy mix dominated by renewables, primarily hydropower


Electricity mix of Southern African countries<sup>1</sup> [%] – 2023



Electricity mix from renewable sources<sup>1</sup> [%] – 2023



#### Example - Cahora Bassa hydroelectric power station



**1<sup>st</sup> hydroelectric dam in Southern Africa<sup>1</sup>**

**2075 MW** of installed capacity

**Almost 70%** of Mozambique's installed capacity

Installed capacity in Mozambique [%] – 2023

Project	Percentage [%]
Cahora Bassa	69%
Other projects	31%

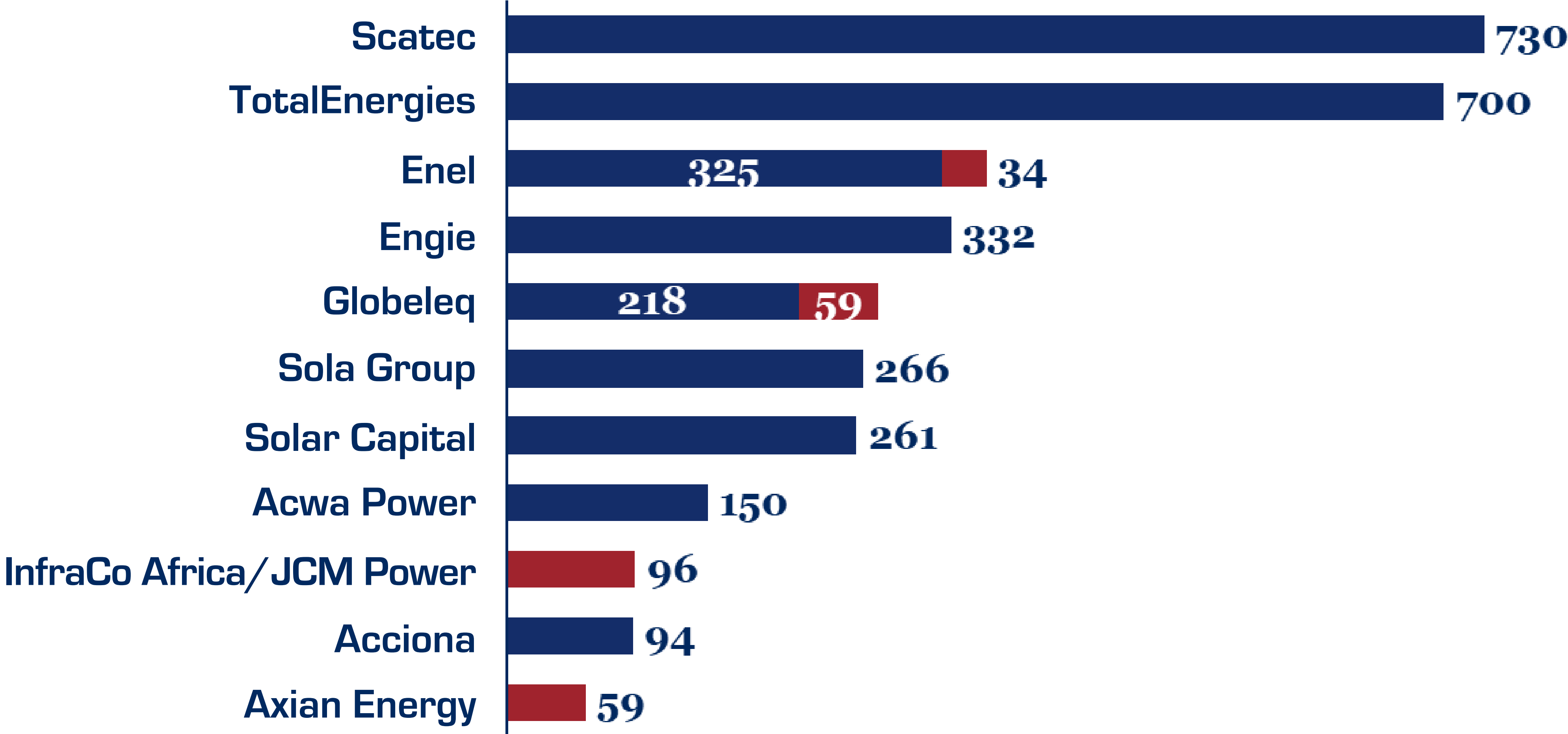
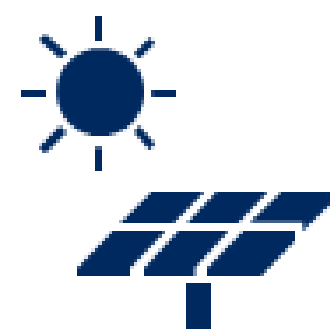
Sources: IRENA, World Bank  
Note: (1) Excluding South Africa



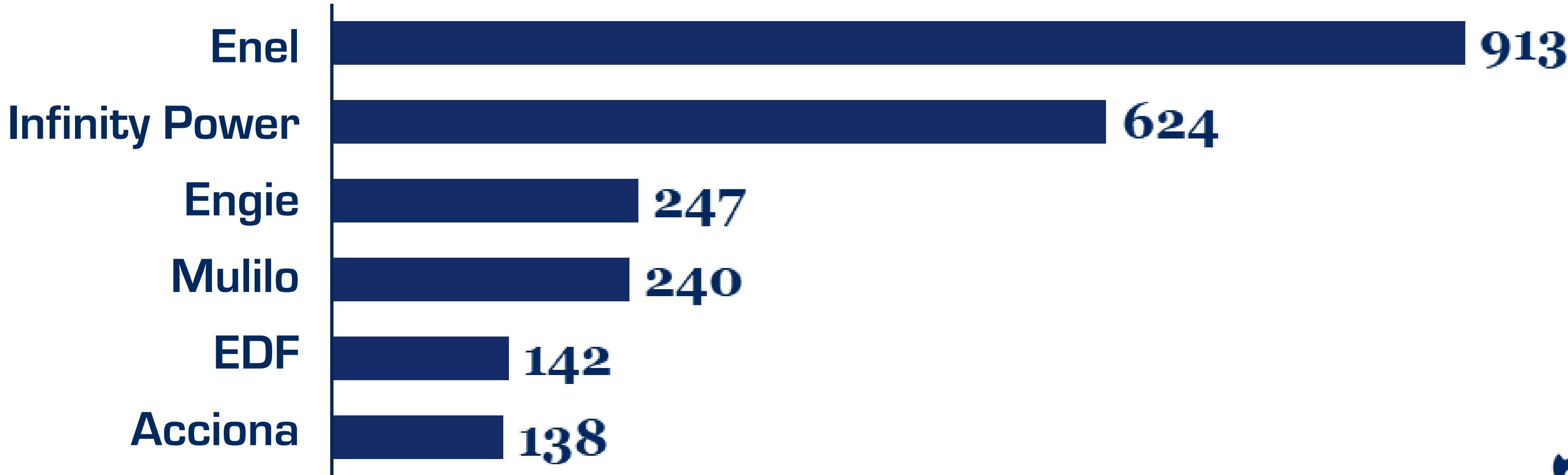
## II – Overview of renewable energy development

The region has succeeded in attracting numerous private players for large-scale projects, mainly in South Africa

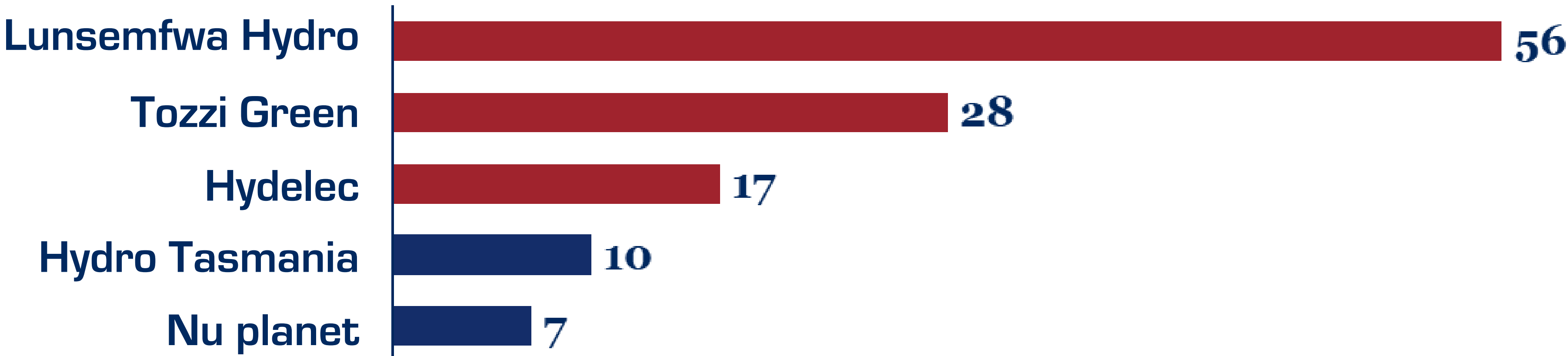
### Solar projects in operation<sup>1</sup> (MW) – 2025



### Wind projects in operation<sup>1</sup> (MW) – 2025



### Hydropower projects in operation<sup>1</sup> (MW) – 2025



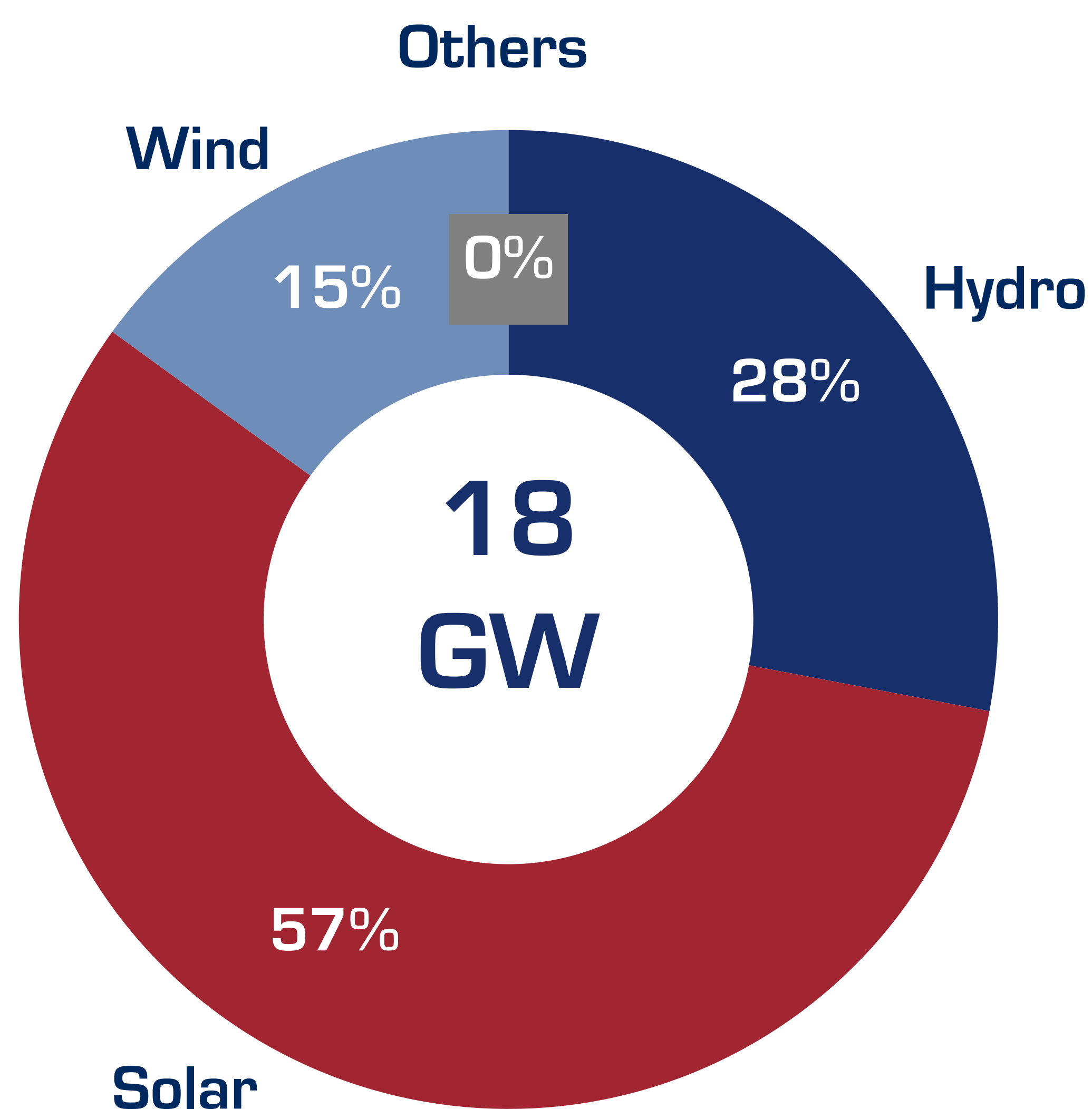
■ In South Africa      ■ In other Southern African countries

Sources: Data base Okan – non-exhaustive list  
Note: (1) Excluding governments and public entities



**An 18 GW increase in capacity is expected, of which around 2.6 GW is currently under construction**

*Breakdown by energy type of announced and under-construction projects (%) – 2024*

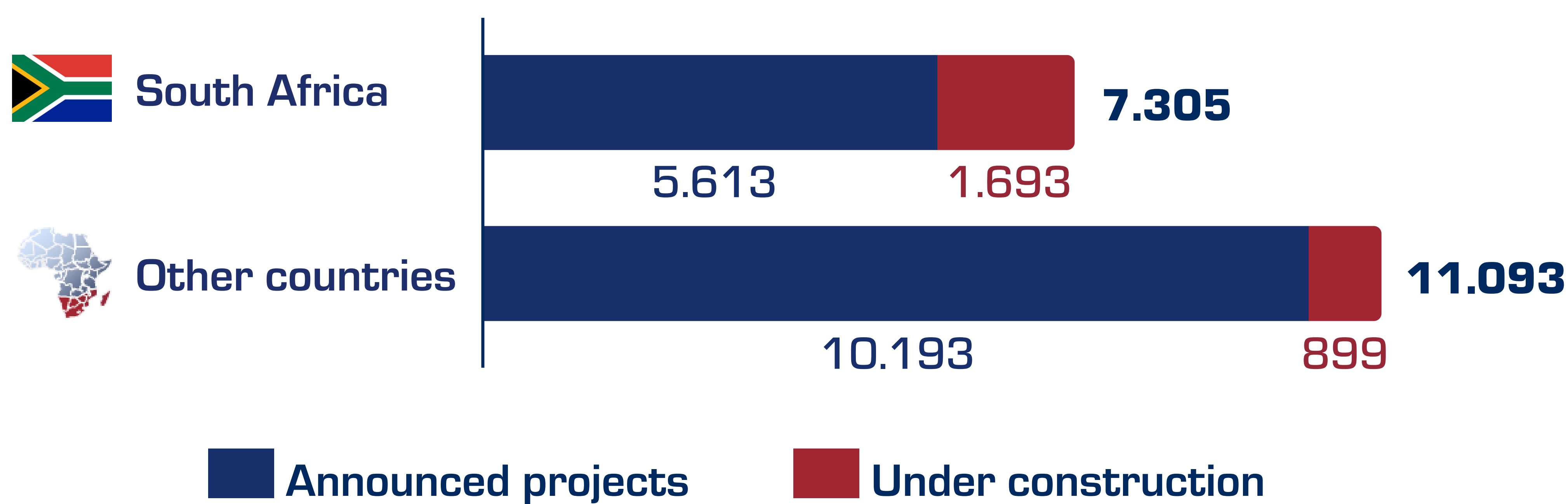


**This increase in capacity comes mainly from solar energy**



# South Africa accounts for nearly 40% of the announced and under-construction projects...

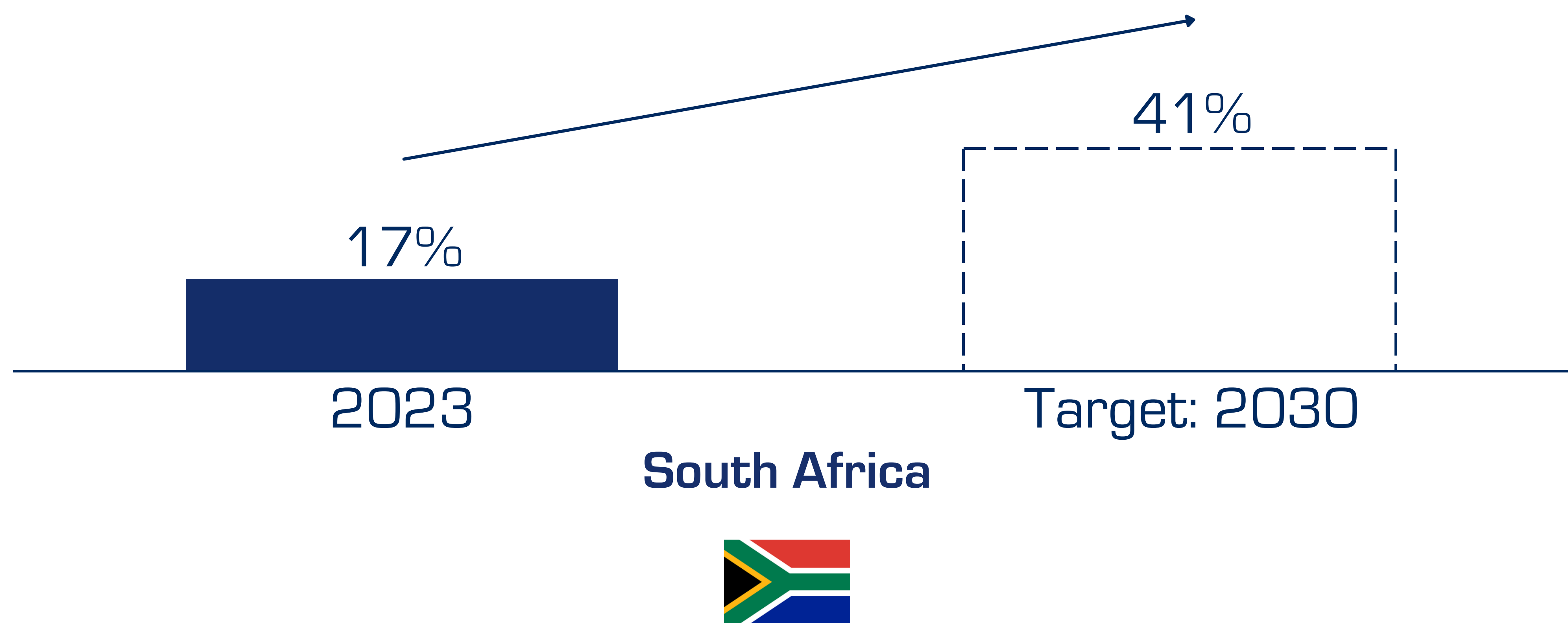
Projects announced and under construction (MW) – 2024



...In line with its objectives to improve the energy mix



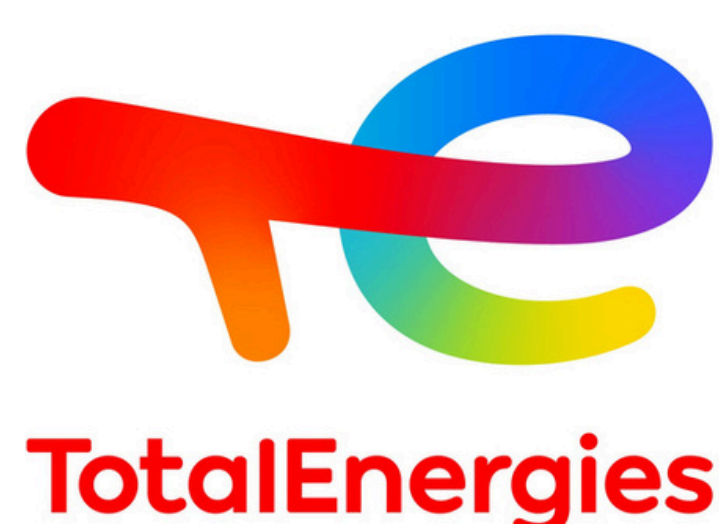
Share of renewable energy in the energy mix by 2030, South Africa (%)





### III – Futur development of renewable energies

## Private players<sup>1</sup> with projects announced and under development in the region





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Formatting (LinkedIn publication):

**Kephane Tchimbakala-Gomas**

Acknowledgements:

**Laetitia Dubois** (Echosys advisory)

for her proofreading and suggestions