

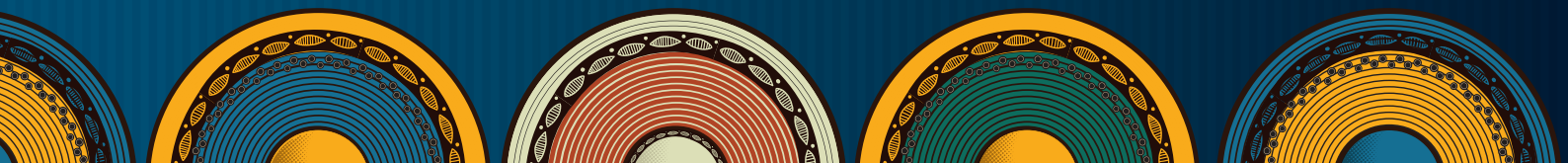
AFRICA HORIZONS

THE CONTINENT'S UNIQUE GUIDE TO REAL ESTATE
INVESTMENT TRENDS AND OPPORTUNITIES
2023/24



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WELCOME TO

AFRICA HORIZONS

AFRICA IS ON THE MOVE.

**IN TERMS OF TRADE, GLOBAL INFLUENCE, WEALTH CREATION,
TRANSPARENCY, AND EASE OF DOING BUSINESS, ALL THE
INDICATORS ARE TRENDING UPWARDS.**

With the shackles of the pandemic now behind us, renewed global interest in Africa is evidenced by the recent engagement and investment commitments made by major global powers such as the US, UK, South Korea, UAE, Saudi Arabia, Turkey, and China.

For instance, the UK has announced plans to invest US\$ 2bn in sustainable projects across Africa, while the US has pledged an initial US\$ 200bn for its partnerships for Global Infrastructure Initiative. These efforts are expected to trigger an influx of multinational corporations into major hub cities, including Lagos, Nairobi, Cairo, Johannesburg, and Accra.

For private and institutional investors, this sovereign-level interest provides a springboard for taking advantage of emerging opportunities across individual real estate sectors, including Data Centres, Manufacturing, ESG, Infrastructure developments and Agro-processing.

Our 2023/24 Africa Horizons explores these sectors in more detail and highlight five stand-out investment opportunity areas as we see them.

In addition, we spotlight Cairo not only as the latest node in our Africa network but also as North Africa's rising star and a darling for Middle East sovereign wealth funds who have announced plans to invest as much as US\$ 120bn over the next few years.

We hope you find our research both informative and stimulating, and I look forward to discussing the opportunities we have highlighted with you in more detail.

James Lewis
Managing Director, Middle East and Africa



INTRODUCTION

BONIFACE ABUDHO

THE AFRICAN OPPORTUNITY

In many parts of the world, extensive urbanisation has already taken place, and Africa is at the cusp of starting this journey. Cities like Cairo, Lagos, Luanda, Dar es Salaam, Nairobi, and Addis Ababa are together home to over 65 million people. By 2030, the combined population of these African activity hives will expand to 100 million, according to the United Nations estimates. Overall, sub-Saharan Africa's population is growing at a rate of 2.7% p.a., more than twice as fast as South Asia (1.2%) and Latin America (0.9%) (World Economic Forum).

Indeed, according to the World Bank, by 2050, Africa's population is forecast to rise to 2.4bn and will continue to grow to 4.2bn in the next 100 years, four times its current size.

The projected population boom is set to unleash a wealth of real estate investment opportunities as Africa's mega-cities enter their next phase of growth.

MULTI-DIMENSIONAL PARTNERSHIPS KEY TO UNLOCKING INVESTMENT

A significant hurdle to overcome will be securing funding to drive the expansion of Africa's cities. The continent faces significant challenges in attracting private-sector investments. Long-standing investment barriers include political instability, corruption, and inadequate road and energy infrastructure. However, there are also numerous opportunities for investment, particularly in agriculture, data centres, and manufacturing.

In our view, multi-dimensional partnerships can play a significant role in addressing some of the challenges faced by investors eyeing opportunities on the continent, particularly those with little or no experience in Africa. Public-private partnerships are a case in point, exemplifying collaborations that embrace diverse areas of interest, including financial, operational, technological, social, and environmental.

Their overarching objective is to foster a mutually advantageous alliance aiming to address a wide range of issues or challenges. Consequently, public-private partnerships have the potential to yield positive outcomes for local communities, such as augmenting employment opportunities and developing critical infrastructure.

Dubai's DP World, for instance, a world leader in global supply chain solutions, strives for partnerships that enhance employment, local infrastructure, and national GDP. One such example is the new Road Transport Centre for delivery trucks in Kigali, Rwanda, which has reduced waiting times for land transport from weeks to days. It has also lowered storage costs, helping to position Kigali as a significant logistics hub in East Africa and facilitating connections between regional businesses and global markets.

Over the last 10 years, DP World has invested over US\$ 1.8bn in Africa and plans to invest a further US\$ 3bn over the coming years.



IN FOCUS: UAE INVESTMENT IN AFRICA

Trade between the UAE and Africa has registered steady growth in recent years. Based on the latest data published by the Ministry of Foreign Trade in the UAE, the total trade volume between the UAE and six non-Arab African countries, Angola, Kenya, Nigeria, Ethiopia, South Africa, and Tanzania, surpassed US\$8 billion in 2020.

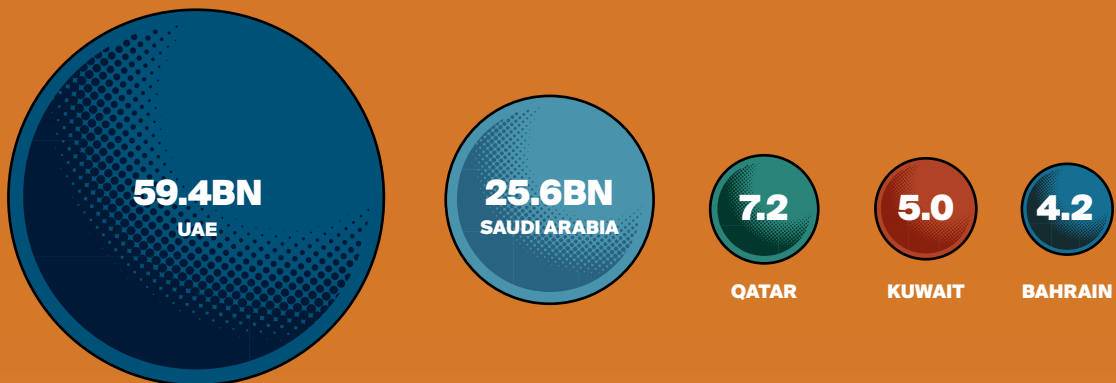
In 2021, the UAE invested in 71 projects worth US\$ 5.6bn, with the most significant being The Agtech Park in Egypt, where UAE's Abu Dhabi Fund for Development (ADFD) supported the establishment of an agricultural technology (ag-tech) park to enhance Egypt's agricultural productivity and promote innovation in the sector.

In particular, the UAE remains focused on high-growth sectors, including infrastructure, energy, transport, logistics, and technology.

Over the past decade, the UAE has emerged as one of the largest investors in Africa among the Gulf Cooperation Council (GCC) states (Bahrain, Kuwait, Oman, Saudi Arabia, and the United Arab Emirates). It is also the fourth-largest investor globally, according to FDI Markets.

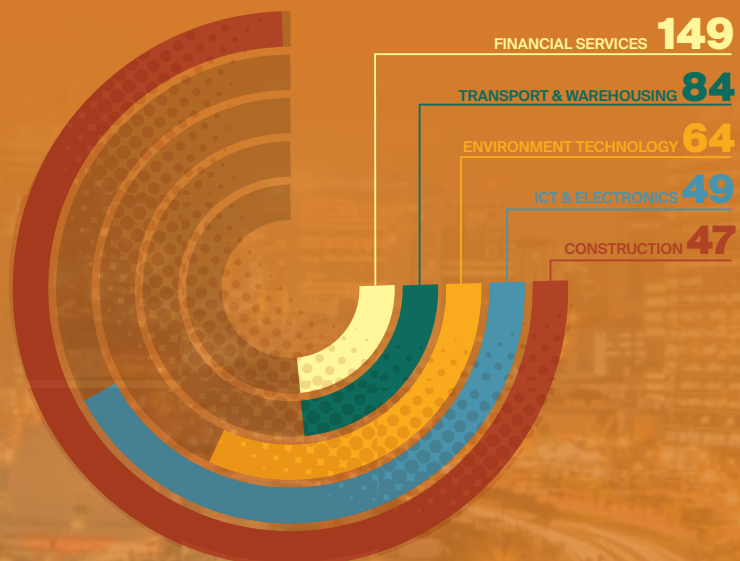
Saudi Arabia has equally made significant investments in energy and mining projects in Africa. A recent example is the signing of significant agreements with South Africa to foster the growth of the country's nascent hydrogen industry alongside other renewable energy and oil initiatives. In total, the agreements totalled around \$15 billion in Saudi financing. These developments served as a continuation of the pledge made by Saudi energy company ACWA Power to invest in South Africa's green hydrogen sector and to collaborate on the establishment of a renewable energy facility within the country.

TOP FIVE SOURCE COUNTRIES OF FDI FLOWS FROM GCC TO AFRICA BY VALUE US\$ BILLION



SOURCE: FDI MARKETS

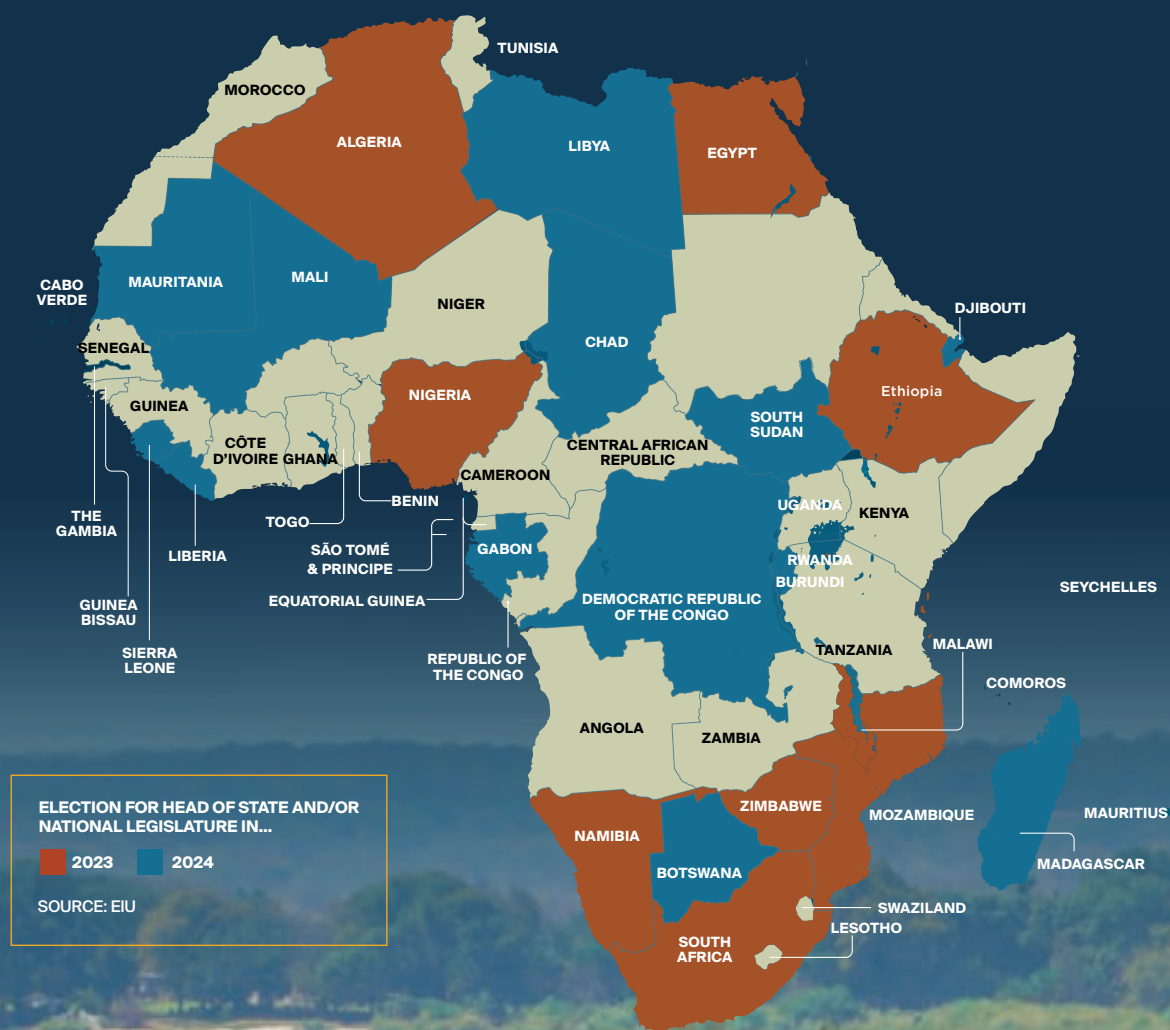
TOP FIVE SECTORS OF FDI FROM GCC TO AFRICA FROM 2012 TO 2022 BY NUMBER OF INVESTMENTS



SOURCE: FDI MARKETS

TRENDS TO WATCH IN 2023

AFRICAN ELECTION CYCLE





I. ELECTION UNCERTAINTIES IN AFRICA:

The outcome of any African election can often have significant implications for the real estate sector. With 17 countries scheduled to hold the head of state (presidential or prime ministerial) or national legislature elections in 2023 and preparations ramping up for national elections in 13 other countries in 2024, a lot is at stake.

Any political instability has a direct and almost immediate impact. A decline in foreign investments, falling values, and lower transaction volumes often ensue, as has been the case in the Democratic Republic of Congo (DRC).

Conversely, newly elected governments can also be positive for the property industry. New policies stimulating the real estate sector to attract foreign investors have become a hallmark of some of the continent's new leaders. Zambia is an example. The country's recently elected administration has garnered significant attention from international investors with its economic policies, stable political infrastructure, and robust currency that has bolstered business confidence. According to International Monetary Fund (IMF) data, the Zambian kwacha witnessed an impressive appreciation of 33% over the 12 months to June 2022.



II. ZIMBABWE'S EMERGENCE AS AN OFF-SHORE FINANCIAL HUB

Zimbabwe's economy is expected to become super-charged following the government's decision to establish an offshore financial services centre in the resort city of Victoria Falls. The move is part of broader plans to attract foreign investment and position the country as a hub for international finance. The offshore financial centre will be modelled on Dubai, Mauritius, and the Isle of Man and will offer investors an environment comparable to these jurisdictions. The centre operates in US dollars and offers tax incentives, making it an attractive destination for global banks' African headquarters.

The Victoria Falls Stock Exchange has already seen a surge in listings, driven by the trade in US dollars, tax exemptions on capital gains, and the ability to repatriate funds from a country where foreign exchange is in short supply.



NEW POLICIES STIMULATING THE REAL ESTATE SECTOR TO ATTRACT FOREIGN INVESTORS HAVE BECOME A HALLMARK OF SOME OF THE CONTINENT'S NEW LEADERS."

OPPORTUNITY AREA 1: DATA CENTRES

BONIFACE ABUDHO AND STEPHEN BEARD

THE NEW ASSET CLASS OF CHOICE

With the rise in online retailing, catalysed largely by the pandemic and the subsequent boom in demand for storage, distribution and last-mile logistics facilities, requirements for data centres too have flourished across the continent. Data centres provide a cheaper and more efficient IT capability than inbuilt servers, which is aiding their popularity. They also offer cloud services and allow organisations to focus on their core functions.

Investors have already recognised the growing demand for additional data centres in Africa. Investment into the market is projected to have a Compound Annual Growth Rate (CAGR) of approximately 15% from 2020 to 2026. In 2020, the data centre market size in terms of investment was valued at US\$ 2 billion, and it is anticipated to reach US\$ 5 billion by 2026. (Source: Africa Data Centres)

Earlier in the year, global real estate industrial and logistics developer, Agility Logistics Park (ALP), launched masterplans for four new data centre campuses in Egypt, Ghana, Saudi Arabia, and Kuwait, one of the largest investments to date. The completion of these campuses will contribute a total of approximately 275,000 sqm of cutting-edge data centre capacity to ALP's existing infrastructure in the Middle East and Africa.

In addition, ALP also announced plans to open more data centres in other rapidly growing markets, including Nairobi, Casablanca, and Lagos. Currently, the industrial developer has a presence in the Middle East, South Asia, and Africa, with a total of approximately 140,000 sqm of warehousing facilities and 12 million sqm of industrial land spread across twelve countries.

Across Africa, there is also increasing demand for high-quality data centres that are both ESG-compliant and cost-effective.



LOCATION



SIZE (M2)



AMENITIES

	LOCATION	SIZE (M2)	AMENITIES
Egypt	CAIRO	15,480	25 MW TOTAL DAY 1 CAPACITY (CAN GO UP TO 45 MW) SOLAR POWER
Ghana	TEMA	87,639	30 MW TOTAL DAY 1 CAPACITY (CAN GO UP TO 150 MW) HYDROELECTRIC AND SOLAR POWER
Saudi Arabia	RIYADH	82,000	25 MW+ TOTAL CAPACITY SOLAR POWER
Kuwait	KUWAIT	100,000+	80 MW+ TOTAL CAPACITY SOLAR POWER

SOURCE: ALP

INVESTOR INTEREST

Unsurprisingly, Africa's data centre market is also attracting interest from institutional investors. Over the last twelve months, multiple transactions have been registered across the continent, including the \$3.5 billion acquisition of Terraco by Digital Realty.

The acquisition follows Digital Realty's acquisition of iColo, a leading Kenyan-based platform with facilities in Nairobi and Mombasa (a central subsea cable Africa access point). In addition, Equinix entered the Africa market by acquiring MainOne data centres, which has a presence in Ghana, Côte d'Ivoire, and Nigeria, for \$320 million.

In addition, NTT and Vantage Data Centres have together committed in excess of US\$ 500 million to new data centres in Johannesburg and its environs.

Africa Data Centres, Raxio, PAIX, and other pan-African players also continue to enter new markets, including the Democratic Republic of Congo (DRC), Congo, Ghana, and Côte d'Ivoire. WINGU also continues to make great strides through the Horn of Africa in countries such as Somaliland. It's a market that is often regarded as challenging. These operators typically lead with c.2-5MW developments, allowing them to illustrate proof of concept in anticipation of further foreign investment.

Chinese "cloud players" are also increasingly active in the market, targeting South Africa as a gateway to the continent. China Mobile and Alibaba, for instance, are both already operational here. South Africa, and specifically Johannesburg, has dominated the African data centre landscape for many years due to its geographical location, the abundance of sub-sea cable landing stations (connecting Africa to the rest of the world), political stability, mature enterprise, and corporate markets. However, other hubs are emerging in Nigeria, Egypt, Kenya and Morocco.

NIGERIA: Demand from the financial services sector is underpinning and driving expansion of data centre capacity. Several local and pan-Africa data centre operators have and continue to announce new projects, such as the recently unveiled Tier IV Data

Centre, designed and built to support private businesses and public sector organisations. The new digital infrastructure in Kano will serve as a first-level backup to the Tier III data centre in Abuja.

EGYPT: In North Africa, a number of mature Middle East-based colocation platforms, such as Khazna and GDH, are gearing up to enter Cairo. The significant undersupply here - just c.20MW serving in excess of 22m people, is a clear draw. Historically the Egyptian market has been challenging to enter, given the monopoly held by the incumbent telecoms company, Telecom Egypt.

KENYA: Nairobi still attracts significant investor attention, and we anticipate fresh development announcements by new colocation operator entrants to the market. However, the government or other significant public sector bodies are yet to declare any intention to migrate IT infrastructure onto the public cloud (Google, AWS & Microsoft), which is ultimately the catalyst for data centre growth. Separately, Kenya's access to renewable transmission power, which represents at least 80% of total power production, is another significant pull factor. With environmental, social and governance considerations (ESG) at the forefront of stakeholders' minds, Kenya's focus on sustainability should safeguard its position as Africa's next hyperscale market.

MOROCCO: Our team is working with two international data centre operators on land acquisition projects in Casablanca, where the proximity to continental Europe and the presence of an open terrestrial fibre market offers significant benefits to both the developers and end users. Unlike other parts of Africa, Morocco's economy and general GDP have performed relatively well in recent years. Furthermore, the underlying power infrastructure is reliable, unlike many other locations in Africa.

The next twelve months look extremely promising for the African data centre landscape as the social, political, and economic landscapes mature. We anticipate that 2023/24 will see more M&A activity, led predominately by the US data centre Opco, with all stakeholders seeking viable (power, fibre, and permit potential) brownfield and greenfield development sites throughout the continent.

IN FOCUS

KENYA'S DATA CENTRE MARKET

Kenya's data centre capability is expanding at a rapid pace, with projected growth from US\$ 190 million in 2021 to US\$ 434 million by 2027, representing nearly a 15% increase (Kenya Data Centre Report). Inland connectivity is also improving, and the country has made strides in deploying a 5G network. However, high land prices have been a challenge for some investors.

Nairobi is the primary location for data centres due to its strategic position as the country's capital city. Mobile banking and electronic financial services have been significant drivers for the country's data centre market, with Safaricom's M-Pesa emerging as one of the primary catalysts for the increase in requirements.

Furthermore, the growth of fintech companies and partnerships between banks and mobile network operators has also underpinned demand for data storage facilities.

The Kenyan government is quickly moving to nurture the data centre sector and has plans to increase infrastructure growth and improve nationwide internet connectivity by laying 100,000 km of fibre optic cable by 2027. Additionally, 1,450 digital hubs and 25,000 free hotspots will be established to boost e-commerce. This will undoubtedly create more opportunities for data centre operators and other digital service providers to expand their services.

OPPORTUNITY AREA 2: **MANUFACTURING**

CHARLES MACHARIA

AFRICA'S MANUFACTURING POTENTIAL

The continent has a huge potential to industrialise and make its manufacturing industry one of the most vibrant in the world. However, despite this potential, the manufacturing sector in Africa has not fully realised its potential and instead still relies heavily on imports to meet its industrial needs.

According to the United Nations Industrial Development Organization (UNIDO), Africa's manufacturing output grew at an average annual rate of 4.6% between 2005 and 2018. However, the sector still accounts for a relatively small share of Africa's GDP, with manufacturing value added representing only 11% of total GDP, compared to 22% in Asia and 15% in Latin America in 2019.

There are significant variations in manufacturing performance across different African regions and countries. According to the African Development Bank, North Africa is the most industrialised sub-region, with manufacturing accounting for over 20% of GDP in some countries. East Africa has also made significant progress in industrialisation, with manufacturing accounting for around 10% of GDP in some countries. West and Central Africa, however, lag, with manufacturing contributing less than 5% of GDP in most countries.

CHALLENGES:

One of the major obstacles to the emergence of a flourishing manufacturing industry is the lack of access to affordable and reliable energy. The high cost of energy makes it difficult for manufacturers to operate competitively. Inadequate infrastructure is another challenge that the manufacturing sector faces in Africa. Poor transportation systems and

inadequate storage facilities increase production costs, limit market access, and often discourage international businesses from entering the market.

OPPORTUNITIES:

Despite these challenges, several positive developments are driving the growth of the manufacturing industry in Africa. Many African countries have adopted policies to attract foreign investment into the sector.

Governments are also implementing policies that encourage local entrepreneurs to invest, and African countries are working together to create a conducive environment for investment. One of the initiatives is the African Continental Free Trade Area (AfCFTA) agreement, which aims to create a single market for goods and services, making it easier for African countries to trade with each other.

The manufacturing sector in Africa is also benefitting from the advancement of technology. Adopting new technologies means African manufacturers can compete more effectively with their global counterparts. The use of digital technologies such as the Internet of Things (IoT) and Artificial Intelligence (AI) is increasing efficiency and productivity. The rise of e-commerce in Africa has also made it easier for local manufacturers to promote and sell their products to a wider customer base.

Another positive development in Africa is the emergence of industrial parks and Special Economic Zones (SEZs) for manufacturing activities with incentives and benefits for investors. They provide investors access to basic infrastructure and utilities, making setting up and running manufacturing operations easier. Industrial parks also



**THE CONTINENT RETAINS THE
POTENTIAL TO EMERGE AS ONE OF
THE MOST VIBRANT MANUFACTURING
CENTRES IN THE WORLD."**

provide a platform for collaboration between investors, government agencies, and other stakeholders in the manufacturing sector.

SEZs in Africa have played a significant role in promoting industrialisation and increasing the manufacturing sector's competitiveness. Some of the major SEZs in Africa include:



SPECIAL ECONOMIC ZONE	NUMBER OF COMPANIES	YEAR ESTABLISHED	SIZE	COST OF CONSTRUCTION
Tanger Med Industrial Zone (Morocco)	1100	2002	5000 hectares	US\$ 2.5 Billion
Lagos Free Trade Zone (Nigeria)	23	2002	850 hectares	US\$ 1.5 Billion
Coega Special Economic Zone (South Africa)	36	1999	11,500 ha	US\$1.05 billion
Tatu City Special Economic Zone (Kenya)	60	2011	2,000 ha	US\$ 1.5 Billion

Overall, the manufacturing industry in Africa has huge potential for growth and development. With the right policies in place, we expect to see the international investment taps open further, and the continent retains the potential to emerge as one of the most vibrant manufacturing centres in the world.

African countries also need to work together to create a conducive environment for investment in the manufacturing

industry. Governments need to continue investing in infrastructure, education and technology to create a skilled workforce that can drive the growth of the manufacturing sector. In turn, this has the potential to aid job creation, reduce poverty and achieve sustainable economic growth and development, reducing the often widespread reliance on hydrocarbons and minerals.

OPPORTUNITY AREA 3: **ESG** **CONSIDERATIONS**

M.U.O KADWAR

ESG: IT'S TIME FOR AFRICA

Over the past 20 years, the ESG movement has grown from a corporate social responsibility initiative into a global phenomenon representing more than US\$ 30 trillion in assets under management. Globally, investors are increasingly focusing their attention on ESG-compliant assets; however, the African market still lags behind.

For the continent to reach its ambition of meeting the United Nations' Sustainable Development Goals by 2030, a significant source of sustainable financing is required to help drive the transition to ESG-focused investment. A wide range of financing options is emerging to help achieve this, including the introduction of green bonds in countries such as South Africa, Nigeria and Morocco, which together account for more than 94% of the continent's total issuance of green bonds.

Separately, in 2022 the South African Government announced the construction and implementation of one of the world's largest solar and battery power plants. This project is a first-of-its-kind joint venture between Norwegian renewable energy company, Scatec and local Black Economic Empowerment Company H1 Holdings. The project, being built at a cost of US\$ 200 million, which is part of the government's Risk Mitigation Independent Power Producer Procurement Programme, will have a total solar capacity of 540MW and a battery storage capacity of 225MW/1,140MWh. This scheme is expected to play a major role in helping to drive South Africa's economy and green energy sector.



**OVER THE PAST 20 YEARS, THE
ESG MOVEMENT HAS GROWN
FROM A CORPORATE SOCIAL
RESPONSIBILITY INITIATIVE
INTO A GLOBAL PHENOMENON
REPRESENTING MORE THAN
US\$ 30 TRILLION IN ASSETS
UNDER MANAGEMENT. "**

**IN
FOCUS****URB REVEALS DESIGN FOR AFRICA'S
LARGEST SUSTAINABLE CITY IN SOUTH AFRICA**

URB, a development firm headquartered in Dubai, is to construct Africa's most sustainable city to accommodate 150,000 inhabitants, with a start on site planned for 2024. Dubbed 'The Parks,' the city aims to achieve self-sufficiency by generating all of its energy, water, and food on-site through biodomes, solar-powered air-to-water generators, and biogas production. The 1,700-hectare development will incorporate residential, medical, ecotourism, and educational centres with the aim of expanding the green tech economy in South Africa. Green spaces and parks will also be a hallmark of the development.

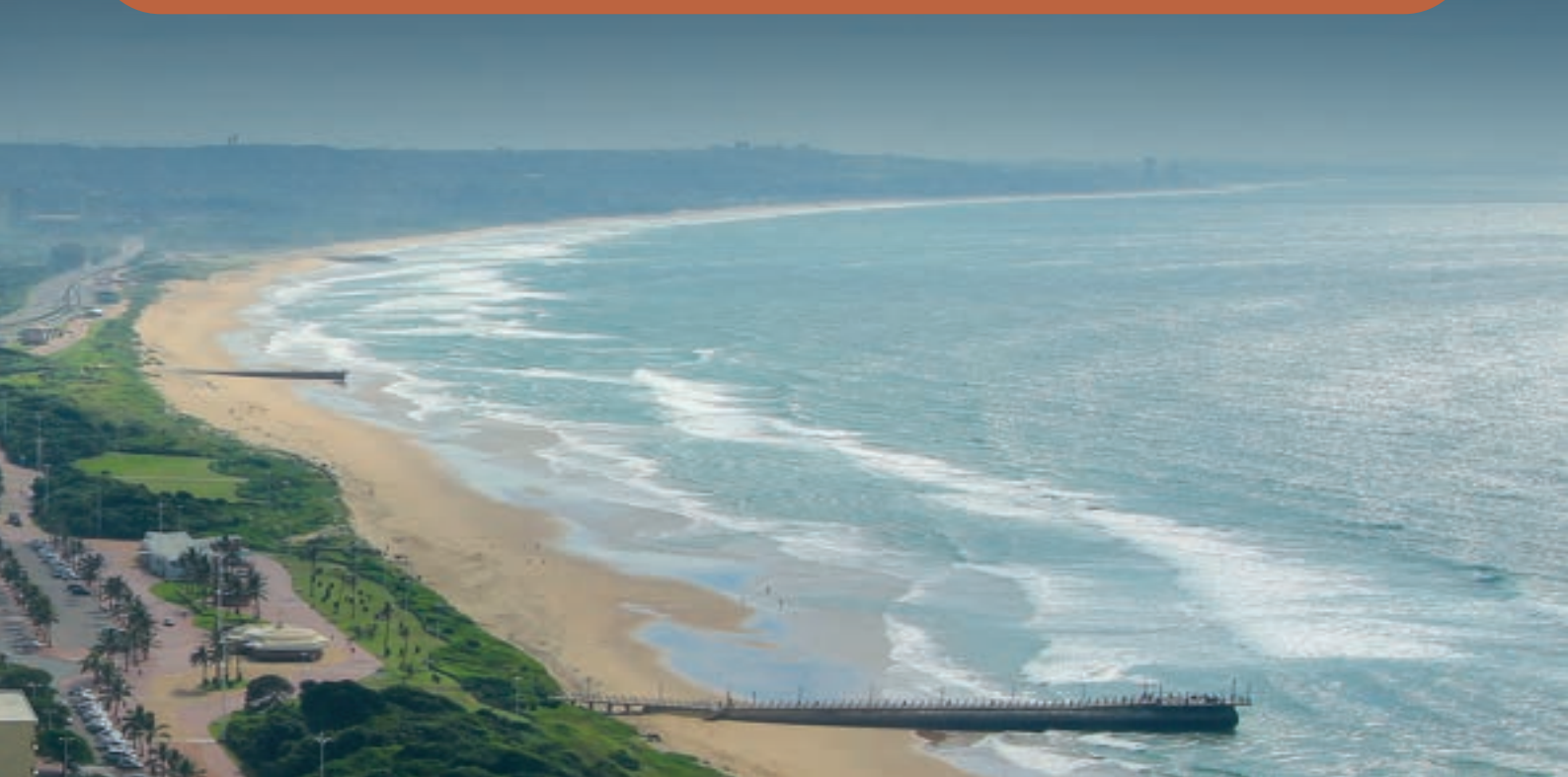
A 5 km long multifunctional green spine will integrate 12 mixed-use biophilic areas to connect residents to all hubs within the city in minutes by walking, cycling, or high-speed autonomous electric vehicle (EV) shuttles.

The Parks will also incorporate and encourage different urban farming methods such as community gardens, biodomes,

aquaponics, and vertical farms. The agricultural infrastructure will adopt the world's first high-tech scalable FEW+W smart urban farm using saline water. In addition, the city will host fish and dairy farms enabled by IoT, AI, and automation to produce higher-quality locally-grown foods. Organic waste will support biogas production as an additional source of energy.

3D printing technology will form part of the construction process, minimising waste and increasing efficiencies. In addition, cooking oil from restaurants and kitchens will be recycled into biodiesel and used as fuel in construction for future phases of development.

With an investment of US\$ 20bn, URB intends to create more than 40,000 jobs in the city. The Parks' economy will be automated & digital, with most jobs in green tech. The Parks will become a benchmark of economically viable sustainable living and a positive contribution to the green economic growth of South Africa.



OPPORTUNITY AREA 4: INFRASTRUCTURE

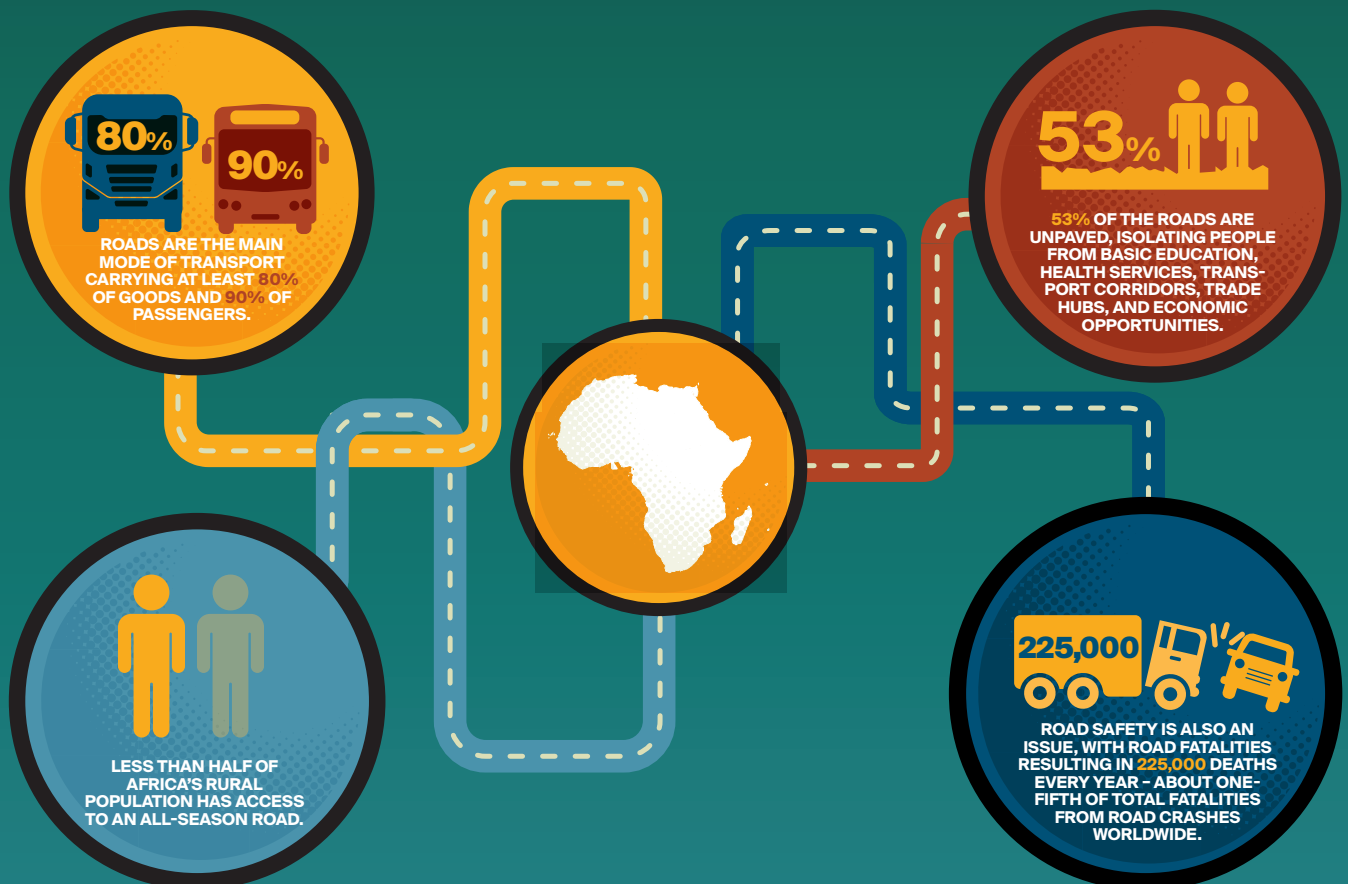
BONIFACE ABUDHO

INFRASTRUCTURE IMPROVEMENTS SLOW TO MATERIALISE

Infrastructure development is pivotal in driving progress across Africa, serving as a vital catalyst for enhanced productivity and sustainable economic growth. Despite the gains in improving regional transport infrastructure connectivity across the continent, Africa still faces infrastructure shortcomings. Poor road, rail, and port facilities contribute an additional 30% to 40% to the costs of goods traded among African countries. It impedes private sector growth and hampers the inflow of foreign direct investments, according to World Bank estimates.

Furthermore, the inadequate infrastructure across many parts of Africa has reduced national economic growth by two percentage points, along with a significant decrease in business productivity of up to 40%, according to the World Bank.

In addition, the African Development Bank (ADB) estimates that a staggering 53% of roads in Africa remain unpaved, isolating individuals and businesses from economic opportunities. Electricity coverage in Africa also varies significantly, with urban areas enjoying a relatively higher rate of 65% compared to a paltry 28% in rural regions, a figure significantly below the global average of 91%.



SOURCE: AFRICAN DEVELOPMENT BANK

GREEN HYDROGEN: THE NEXT BIG THING?

When it comes to green hydrogen, Africa is considered a global hotspot. Its sun, wind, and open land could capture 10% of the global market.

As illustrated in the map below, Morocco, Egypt, Mauritania, and Namibia are among the continent's green-hydrogen leaders.

GREEN HYDROGEN PROJECT ANNOUNCEMENTS IN AFRICA

End use



Mobility



Industry feedstock¹



Various



Export

Size in MW



N/A



0-10



100-3,000



>3,000

ALGERIA

Sonatrach & Eni H₂ Pilot Project

MOROCCO

HEVO Ammonia

German H₂ & Ptx
Derivatives Project

Total Green
Ammonia
Megaproject

MAURITANIA

Aman Ammonia

Total & Chariot
Nour Green H₂ project

ArcelorMittal DRI MoU

TUNISIA

Amun Vert Project

EGYPT

Maersk Green Fuel

Masdar 4GW

Scatec & Fertiglobe Ammonia

ReNew Power

Alfanar Green Ammonia

Siemens & Egypt

Scatec Green Ammonia MoU

23

GREEN HYDROGEN
PROJECTS

3%

OF GLOBAL
ANNOUNCED
PROJECTS

48GW

ELECTROLYSIS
CAPACITY

\$30BN

ANNOUNCED
INVESTMENT IN
HYDROGEN VALUE
CHAIN

NAMIBIA

Daures Green Village

Hydrogen-Diesel Dual-fuel Locomotive Project

Green Hydrogen Applications in the Port

H₂ Pilot plant / Refuelling Station

SCD1 Green Hydrogen Project

SOUTH AFRICA

Anglo American H₂ Valley

Anglo American Mining Trucks

ArcelorMittal & Salsol
Green Derivatives

¹ Eg, ammonia, refining, H₂-DRI. Note: Only electrolysis-based hydrogen products (excluding eg, waste-to-hydrogen)

SOURCE: HYDROGEN PROJECTS AND INVESTMENT TRACKER. DATA AS OF OCTOBER 15, 2022

ECONOMIC GROWTH TIED TO INFRASTRUCTURE

Governments appear acutely aware of the impact infrastructure improvements can have on growth, and investment in infrastructure over the last decade is responsible for driving over half of Africa's recent improvement in economic growth (ADB).

Separately, The African Infrastructure Investment Fund 2 (AIIF2) plans to raise US\$ 600 million to US\$ 1bn to invest in

unlisted equity and equity-like infrastructure investments in Sub-Saharan Africa. It will take significant stakes in various infrastructure projects, including toll roads, wind power farms, other renewable energy projects, ports, water and sewerage utilities, and social infrastructure.

Recent infrastructure projects in Africa include:



	LOCATION	YEAR LAUNCHED	COST OF CONSTRUCTION	SIZE / LENGTH
Nairobi Expressway	Kenya	2022	US\$ 750 million	27 km
Second Niger Bridge Project	Nigeria	2014	US\$ 540 million	1.6 km
The Marine Drive Project	Ghana	2017	US\$ 1.5 billion.	87 hectares
Walvis Bay Container Terminal	Namibia	2019	US\$ \$344.84m	40 hectares
Ghana Burkina Faso Railway Interconnectivity Project	Burkina Faso /Ghana	2017	US\$ 2.2 billion	1,200 km
Dangote Oil Refinery	Nigeria	2023	US\$19 billion	2,500 hectares
Rwanda airport	Rwanda	To be launched 2026	US\$2 billion	13 hectares



**IN
FOCUS****MOROCCO IS THE NEW 'GREEN AFRICAN LEADER.'**

Morocco is quietly emerging as a renewable energy powerhouse on the continent. The goal is to reduce national greenhouse gas emissions by 18.3% by 2030. The country's solar and wind expansion has been long in the making, dating back to a 2009 energy plan.

Major renewable energy projects include:

- The Noor Ouarzazate complex, the world's largest concentrated solar farm, located in Ouarzazate, which serves as Morocco's gateway to the Sahara Desert. It comprises over half a million curved mirrors arranged in circular patterns. These mirrors pivot at regular intervals to optimise the concentration of sunlight onto tubes filled with synthetic oil. The intense heat generated by this process causes the oil to vaporise, which is then utilised by a turbine to produce ample energy to cater to the needs of 1.3 million people.
- Tarfaya wind farm, located in south-eastern Morocco. Being one of the largest in Africa, the farm benefits from the solar radiance and wind speeds that are among the highest in the world.

Like many African countries, Morocco's carbon emissions are insignificant compared to highly industrialised nations. Nonetheless, the country is experiencing severe impacts of the climate crisis, such as soaring temperatures, prolonged periods of drought, flooding of coastal regions, exacerbation of food insecurity, and heightened water scarcity.

It is noteworthy that North Africa is one of the most vulnerable regions in the world to climate change, with summer temperatures predicted to rise by 4 degrees Celsius (7.2 degrees Fahrenheit) by 2100. Against this backdrop, Morocco's leadership plans to expand the production of renewables. To reduce the country's dependence on imports - 90% of its energy is imported, there remains a heavy reliance on fossil fuels.

To help drive this transition, the renewables sector has recently been opened to international operators to boost competition and drive down production costs.

The country also has substantial potential to generate green hydrogen, which is being promoted as a viable alternative to hydrocarbons.



OPPORTUNITY AREA 5: **AGROPROCESSING**

TIM WARE

THE AFRICAN AGRO-PROCESSING OPPORTUNITY

Agro-processing is a sub-sector of the manufacturing industry that involves the production of goods derived from the agricultural, fisheries, and forestry sectors. It plays a crucial role in adding value to the agricultural sector and is on the rise across the African continent.

The growing population and urbanisation of Africa are driving increased farming, diversification of crops, and higher investment, as well as regional and global export opportunities.

Many nations in sub-Saharan Africa also prioritised agro-processing because of trade disruption during the COVID-19 pandemic, which led to food shortages.

However, agro-processing at the rural level in Africa is either nonexistent or very rudimentary. Consequently, countries in sub-Saharan Africa face substantial post-harvest losses, particularly for perishable agro-commodities like fruits and vegetables, where losses can reach an average of 35-50% of total production. Grain losses range from 15% to 25% (Source: African Development Bank).

The benefits of agro-processing can be seen in West African countries such as Ghana and Côte d'Ivoire, which are major

cocoa producers accounting for 60% of the world's cocoa production. The cocoa industry makes a significant contribution to Ghana's economy, employing around 850,000 farming families and generating over US \$2 billion annually through foreign exchange from cocoa exports (Source: Asoko Insight).

Ghana has shifted its focus from exporting raw cocoa beans to processing more cocoa. This strategic choice aims to reduce Ghana's dependence on producing and exporting raw materials. It also seeks to stimulate industrial growth, create jobs, and enhance Ghana's global position as a trader of processed goods at the higher end of the value chain.

In East Africa, 24% of Tanzania's overall manufacturing sector is food processing. Key activities include the production of vegetable oils, canning or preserving vegetables and fruits, cereals milling and bakery, and canning fish and manufacturing animal feeds. Agriculture generally contributes to approximately 30% of Tanzania's total exports and accounts for roughly 25% of the country's GDP.

Overall, the expansion of the agricultural sector stimulates demand for raw materials, consequently leading to the emergence of new markets. This development generates income for farmers and enables investment in equipment and new technology to enhance productivity.



**WE BELIEVE COUNTRIES
CAN INVEST IN A FUTURE IN WHICH
AFRICA IS NOT ONLY SELF-
SUFFICIENT BUT ALSO A PROMINENT
FOOD EXPORTER. AFRICA HAS
ALREADY BECOME THE FASTEST
GROWING AGRICULTURAL
ECONOMY GLOBALLY."**

DR. VICTORIA KWAKWA AND DR. JUERGEN VOEGELE,
THE WORLD BANK

SPOTLIGHT ON ZAMBIA: EXPANDING OPPORTUNITIES IN HONEY AND POTATO PRODUCTION



HONEY PRODUCTION:

From humble beginnings, Zambia's honey sector has grown into an industry which now produces approximately 2,500 tonnes of honey annually. It supports over 30,000 jobs and primarily serves international markets. Zambezi Gold Honey is an example, being harvested from wild bees inhabiting remote forests near the Zambezi River in the North-Western Province of Zambia.



POTATO PRODUCTION:

The Zambian Potato Company began operations in 2022 and has the capacity to process around 90 tonnes of raw potatoes daily. It has made frozen chips a popular delicacy domestically and abroad, finding markets in neighbouring countries such as the Democratic Republic of Congo (DRC), Namibia, and Botswana.

Situated in a strategically advantageous trading position, Zambia shares borders with the DRC, Tanzania, Zimbabwe, Angola, Mozambique, Namibia, Botswana, and Malawi. To foster growth in the agriculture sector, the Zambian government has set the Corporation Tax for agriculture at a favourable 10%, significantly lower than the 35% imposed on other industries. It is worth noting that agriculture already contributes around 19% to Zambia's GDP, underscoring its potential as a key driver of economic development.

However, for Zambia's food processing industries, including cashew nuts, peanut butter, mango, and cassava, to reach their export potential and become major players on the global stage, barriers need to be overcome. If the government reduces export costs, such as air freight charges, it would boost competitiveness. Countries like Kenya and Ethiopia have successfully promoted agricultural exports by eliminating or reducing duties and taxes.

SPOTLIGHT ON EGYPT:

EGYPT'S RESIDENTIAL MARKET OVERVIEW 2023

BY ZEINAB ADEL & ALIAA EL-ESAAKI

Knight Frank is excited to announce that Egypt has joined our Africa Network. With a population of around 110 million, Egypt presents a tremendous opportunity for us. The bustling city of Cairo alone has over 20 million residents, making it a vibrant metropolis. Egypt has approximately 185 million sqm of active real estate, offering immense potential. Middle East Sovereign Wealth Funds have shown significant interest in Egypt, with plans to invest up to US\$ 120 bn in the country in the coming years.

HEIGHTENED DEMAND FOR RESIDENTIAL ASSETS:

The residential sector continues to be the focus of investment, with 2022 alone recording US\$ 20bn of real estate investments in Cairo, US\$ 16bn of which was allocated to the residential sector. The average price of residential properties in Cairo grew by 10% in the same year, highlighting the strong levels of investor demand.

Affected by the depreciation of the local currency, real estate investment in Egypt has become one of the few viable options for preserving savings and their value. The recent legislative amendments allowing foreigners to own real estate in Egypt has also increased demand from international buyers and Egyptian expatriates looking for properties at competitive prices.

In New Cairo, apartment sale prices have risen by 24% year-on-year, reaching around US\$ 450 psm, while villa prices have increased by 8.5% to US\$ 690 psm. Similarly, in Sheikh Zayed City, apartment prices have surged by 27.8% year-on-year, taking values to almost US\$ 430 psm, while villa rates have inched up by 2.1% to US\$ 625 psm, over the same period.



AFFORDABILITY CONSTRAINTS

Affordability remains a significant consideration for most buyers due to the country's hyperinflationary environment – the headline rate of inflation stood at 36.8% as at the end of June 2023 (Central Agency for Mobilization and Statistics). Unsurprisingly, around 60% of the current residential demand is focused on small-sized apartments as buyers grapple with the soaring cost of living as well as rising interest rates, which were unchanged at 19.25% in June.

That being said, there is also demand for small townhouses and twin houses, which account for 30% of market demand. In response, developers are increasingly offering smaller units, priced between US\$ 81,000 - US\$ 112,000.

DEVELOPERS MANAGING COSTS

To reduce risk for developers due to increasing construction and finishing costs, new projects are often semi-finished or shell and core, especially for townhouses and twin houses, in an effort to contain costs and pass on savings to buyers and investors.

Developers are also taking a cautious approach, considering market trends and the depreciating Egyptian pound. As a result, they have reduced payment plans on development finance, which previously stretched up to 14 years, to 7-8 years on average.

OUTLOOK

Looking ahead, the residential sales market in Egypt is expected to experience slower rates of growth, underpinned by the weakness of the pound, rising borrowing costs and the

hyper-inflationary environment, all of which are dampening consumer confidence.

In parallel, many ongoing real estate projects are experiencing construction and finishing delays due to hyperinflationary costs. As a result, there has been a significant increase in demand for resale (cash based) and completed properties, with a 30% year-on-year rise in this market segment alone during Q2 2023.

CAPITAL APPRECIATION DRIVING THE SECOND HOMES MARKET:

The second homes market, particularly summer homes on the North Coast, is expected to experience sustained strong demand in the short to medium term. This is due to the potential for capital appreciation, attractive rental yields in foreign currencies and increased interest from GCC buyers.

In the past few years, there has been a growing interest from GCC nationals in the real estate market on Egypt's North Coast. This increased demand can be attributed to a combination of currency depreciation and the pleasant summer climate that the North Coast offers in contrast to the hot weather in GCC between June and September, as well as the numerous options of entertainment and fine dining.

Currently, chalet prices on the North Coast range from US\$ 950 psm rising to US\$ 3,000 psm for premium units in high-end developments, while villa prices vary between US\$ 1,450 psm and US\$ 3,550 psm in similar offerings.

The total value of summer home sales reached US\$ 2.1bn in 2022 and we expect a further 30% increase during 2023.



THE RESIDENTIAL SECTOR CONTINUES TO BE THE FOCUS OF INVESTMENT IN THE COUNTRY'S REAL ESTATE MARKET. IN 2022, THE TOTAL VALUE OF REAL ESTATE INVESTMENTS IN CAIRO REACHED US \$20 BILLION, WITH US \$16 BILLION ALLOCATED TO THE RESIDENTIAL SECTOR. ”

KNIGHT FRANK IN THE MIDDLE EAST AND AFRICA





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