Global Gateway

African Union

GHANA
DATA CENTER MARKET BRIEFING

A strategic overview of the data center investment opportunity in Ghana

A Xalam Analytics Country Report

July 2025

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DATA GOVERNANCE IN AFRICA

This report is part of a series of market briefs developed by Xalam Analytics at the behest of Digital Investment Facility (DIF) under the Data Governance in Africa Initiative, on the data center market opportunity in sub-Saharan Africa ("SSA"). This analysis aims to provide key insights into market demand and supply patterns for data center markets, business landscape, regulatory impact and investment returns. The research aims to provide potential investors and stakeholders with the latest information on the data center market in the SSA region.

This country review is based on our assessment of information and data as available to our research. It is further underpinned by our understanding of the marketplace along with market data and insights collected through continuous research. The numbers and estimates in this report are derived from a mix of sources, including estimates from Xalam Analytics' economic models, data providers, regulator data and other sources as may be indicated.

This report is prepared with funds from the Data Governance in Africa Initiative, a project financed by the European Union, Germany, Belgium, Estonia, Finland and France under the Digital for Development (D4D) Hub. Its contents are the sole responsibility of Xalam Analytics and do not necessarily reflect the views of the funders.

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XALAM FRONTIER MARKETS

The Ghana data center investment case

A compelling opportunity to deepen Internet and cloud infrastructure in one of Africa's most open economies and most dynamic ICT markets

THE OPPORTUNITY

- **Good market scale;** Ghana has the third largest economy in West Africa, and a $1.5bn+ ICT services market.
- **Stable institutions and regulatory frameworks.**
- A developed and diverse terrestrial and subsea fiber infrastructure.
- Good government support, government push for use of cloud services.
- Good power IPP presence.

CHALLENGES & RISKS

- **Economy still relatively fragile**, strong inflationary pressures.
- Relatively high cost of power.
- Some oversupply and demand size risk, with small enterprise base, slow enterprise digital transformation, limited international player deployments.
- A highly competitive market – Equinix, Digital Realty, PAIX, ADC, MTN are all active in Ghana.

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Ghana data center market overview

Estimates as of 2024

~8-10	Live DC facilities
4.8MW	Live critical IT load (1)
7MW	Capacity in construction (2)
~1MW+	Long term pipeline (3)
~2	Facilities in construction or in pipeline
~60%	Facility occupancy (4)
$12m	Annual Commercial Data Center Revenue
22%	Data center market CAGR (2024-30)

(1)Capacity that is active, under lease or readily available for lease by third-party customers.
(2)IT load capacity from facilities currently in construction; construction has broken ground; ongoing civil works, installation and commissioning phases are in progress.
(3)Facilities explicitly announced or listed as in development. Some execution phases have been initiated (e.g. land control, energy supply commitments, etc.), but no actual civil works have been undertaken. Capacity expected to be available by the end of 2030.
(4) Percent of available capacity that is effectively being used by third party customers.
Sources: Xalam Analytics estimates, provider data

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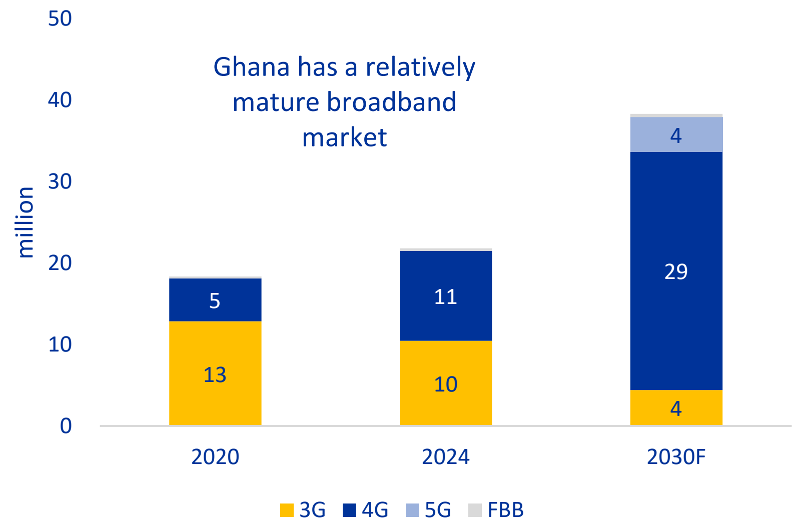
Key drivers of demand for data centers

Despite recent macro pressures, Ghana remains a large, diversified economy, with a dynamic, increasingly mature digital marketplace

A growing digital customer base

Ghana broadband connections by type - million

Broadband penetration	60%	67%	107%



A fast-growing economy, with strong inflationary pressures

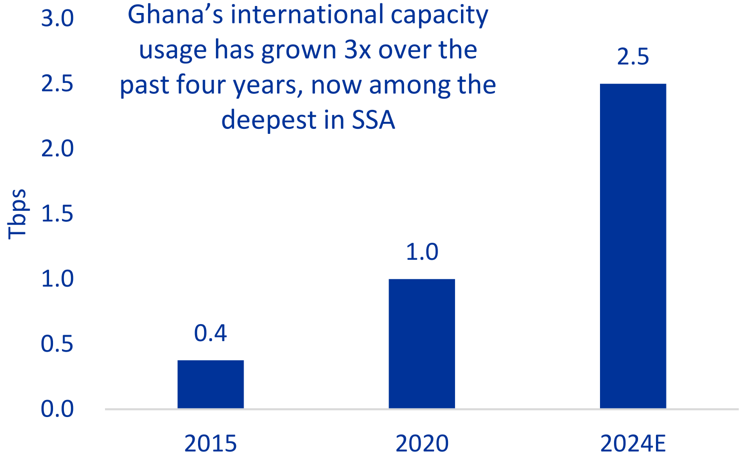
Sample Ghana economic indicators - 2024

~$60bn GDP	**5.7%** Real GDP growth
67% Broadband penetration	**23%** Annual inflation

Accelerated digital infrastructure build

Ghana international capacity usage - Tbps

Submarine cables	5	5	6



Sources: IMF, GSS, NCA and provider data, Xalam Analytics estimates

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Data center market conditions

A government taking more proactive steps to set the foundations for accelerated digital infrastructure build

Data privacy, hosting & investment incentives

- The government aims to establish Ghana as a regional digital hub "where digital entrepreneurs can thrive in a secure, hyperconnected, and inclusive ecosystem, creating sustainable jobs and supported by efficient, user-friendly government digital services".
- The Data Protection Act (DPA) was passed in May 2012 and went into effect in October of that same year, making Ghana one of the first countries in Africa to pass data protection legislation.
- The DPA established the Data Protection Commission and sets guidelines for data collection, processing, and storage while ensuring individuals' privacy rights are upheld.
- Cyber Security Policy and Strategy (2014): aimed at addressing growing cybersecurity threats, this strategy provides a foundation for cybersecurity management in Ghana.

Electricity Markets

- Overall generation capacity of ~6GW, a relatively solid base; nonetheless, power generation and transmission challenges mean only around half of this capacity reaches the end user.
- A relatively strong IPP base, contributing ~60%+ of installed capacity.
- ~35% of the energy mix is generated from renewable sources (mostly hydro).
- Ghana has developed an energy transition framework, looking to increase the contribution of non-hydro renewables to ~10%.
- Relatively high electricity prices - $0.12/kWh.

Fiber markets

- One of West Africa's most open and competitive wholesale markets, with good diversity on international and domestic routes.
- Besides MTN, both Telecel and CSquared have invested in metro fiber backbones.
- CSquared has installed over 1,300km of fiber in Ghana's four largest metros. Accra is connected to six submarine cables.
- A broadband penetration of ~70% – in the upper quartile of African markets.
- 100% 4G coverage of the population, accelerated FTTH deployments.

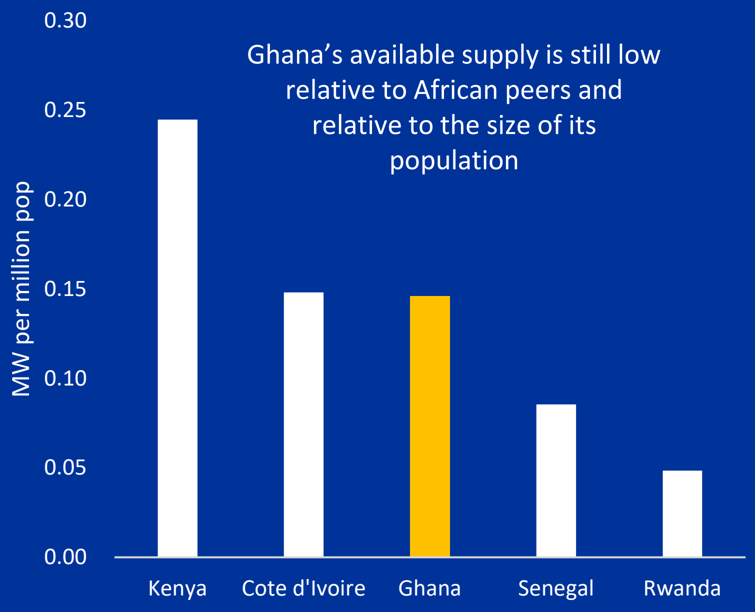
State of data center supply

Ghana's recent growth of commercial data center capacity has been robust as new facilities come to market

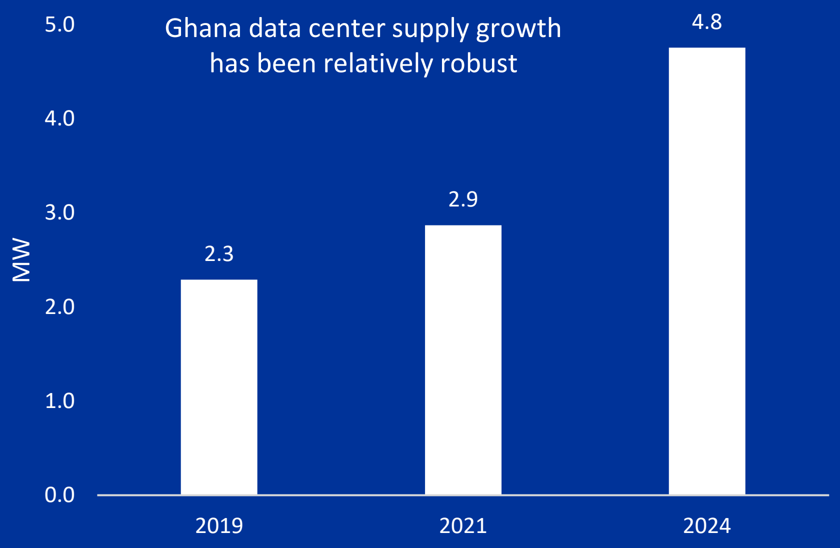
Ghana data center supply – 2024E
Sample market indicators (1)

~8-10 Live commercial DC facilities	**~4.8MW** Live IT load
9MW Potential/Full-build IT load (2)	**~70%** % of supply that is carrier-neutral

Ghana vs. Sub-Saharan Africa peers
Critical IT load – MW per million population



Ghana data center market – evolution of live supply
Critical IT load - in MW



(1)Numbers are rounded up (2) Potential/Full-build load is facility capacity assuming that all phases of development have been completed. Additional CapEx would be needed to make the residual capacity operational.
Sources: Xalam Analytics estimates, provider data

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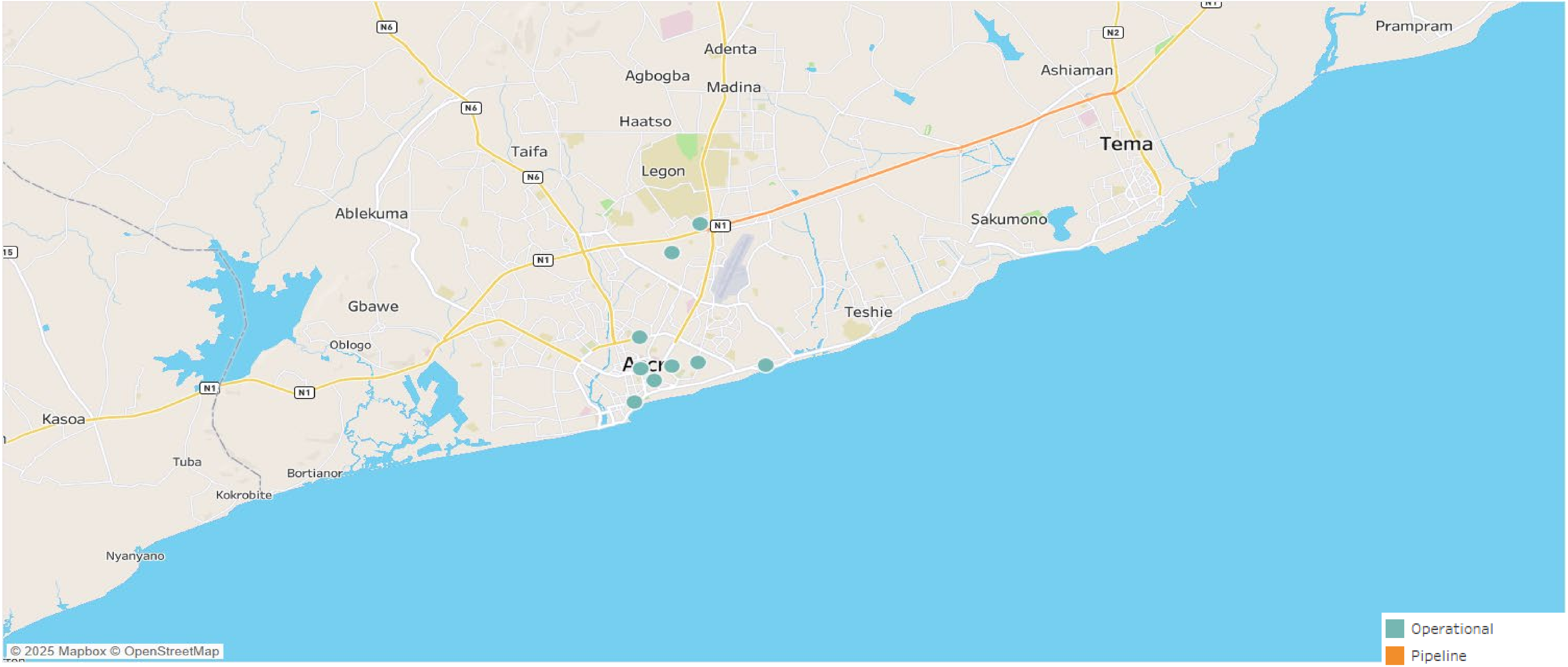
Ghana facility mapping – Accra metro



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Key data center market players

Ghanaian data center capacity has become predominantly carrier-neutral, an indication of the market's growing maturity

The telcos

Primarily focused on mobility and connectivity - see colocation as an adjacent opportunity.

Government Facilities

State-owned agency focused on public sector compute

Carrier-neutral

A strong carrier-neutral presence - ~70% of available capacity, and the market's largest facilities

Future competition/New entrants

More data center specialists are coming to the market

An increasingly carrier-neutral market

- Ghana's capacity is predominantly carrier-neutral; ~70% of available IT load, a proportion that has increased over the years.
- A small number of legacy telco and state-owned facilities, which are increasingly subscale.
- More carrier-neutral capacity is coming to the market; ~90% of available supply should be carrier-neutral by 2030, the sign of a maturing market.

GLOSSARY & KEY DEFINITIONS

Key definitions

Data center	While there are a variety of definitions for data centers, this market review is focused on commercial facilities , that is, facilities that lease colocation white space and power capacity to third-party customers on open, commercial terms, and in exchange for a fee. Captive facilities (bank data centers, telco switch sites and similar) are excluded from this assessment. Estimates focus on facilities at Tier II standard and above, unless otherwise indicated. Where applicable, these estimates include cloud hyperscaler self-built facilities.
Live critical IT load	Capacity that is active, under lease or readily available for lease.
Full build capacity	Data center facilities are typically built in phases; the full-build capacity is capacity assuming all potential phases of build have been completed and are live.
Capacity in construction	Facilities that have broken ground; ongoing civil works, installation and commissioning phases.
Pipeline	Facilities explicitly announced or listed as in development. Some execution phases have been initiated (e.g. land acquisition, power supply commitments, etc.), but no actual civil works have been undertaken.
Carrier-neutral	Facilities not specifically affiliated to a connectivity or cloud vendor, with capacity available to all third-party customers, on equal commercial terms, without explicit or implicit constraints or favoritism. This market review uses a loose definition for carrier-neutral, referring to facilities that are purely carrier-neutral, recognized by the market or effectively managed as such.

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Glossary

Below are some of the key abbreviations used in this report

AI	Artificial Intelligence
ASN	Autonomous System Number
bn	billion
CAGR	Compound Annual Growth Rate
CapEx	Capital Expenditures
CDN	Content Delivery Network
Colo	Colocation
DC	Data Center
DIF	Digital Investment Facility
EAC	East African Community
EU	European Union
F	Forecast
FBB	Fixed Broadband
FDI	Foreign Direct Investment
FX	Foreign Exchange
GDP	Gross Domestic Product
GDPR	General Data Protection Regulation
ICT	Information, Communications and Technology
ISP	Internet Service Provider
IPP	Independent Power Producer
IT	Information Technology

kW	Kilowatt
kWh	Kilowatt Hour
LLM	Large Language Models
m	million
MNC	Multinational Corporation
MNO	Mobile Network Operator
MRR	Monthly Recurring Revenue
MSP	Managed Service Provider
MW	Megawatts
NDC	National Data Center
OEM	Original Equipment Manufacturer
POP	Point of Presence
PUE	Power Usage Effectiveness
RFS	Ready For Service
SEZ	Special Economic Zone
SSA	Sub-Saharan Africa
USD	US dollar
PUE	Power Usage Effectiveness
RFS	Ready For Service
SSA	Sub-Saharan Africa
YE	Year end

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