

# FROM INFRASTRUCTURE TO IMPACT: MAKING GHANA'S \$250 MILLION AI COMPUTING CENTRE A CATALYST FOR DIGITAL TRANSFORMATION

## POLICY BRIEF

### Executive Summary

Ghana's approval of a \$250 million National AI Computing Centre marks a pivotal step in its ambition to become a leader in responsible artificial intelligence (AI) innovation in Africa. Announced by Hon. Samuel Nartey George in April 2026, the initiative forms the computational backbone of the broader \$1 billion Ningo-Prampram AI and Innovation Hub, developed in partnership with the UAE. Its launch alongside the National AI Strategy (2023–2033) on April 24, 2026 signals a decisive shift toward a digitally driven economic model.

While the investment positions Ghana as a potential regional hub for AI, its success will depend on whether the country transitions from a procurement-led infrastructure model to a production-led innovation ecosystem. Without deliberate policy alignment, the centre risks becoming a high-cost, underutilized asset.

This brief argues that sustainability and impact will hinge on three pillars: commercial viability, data sovereignty, and institutional readiness. It proposes actionable measures to transform the centre into a self-sustaining digital economy engine capable of serving both domestic and continental markets.

## 1 Strategic Context

The AI Computing Centre is designed to provide high-performance computing (HPC) capacity to support large-scale AI research, development, and deployment. It is expected to drive productivity across key sectors:



- **Agriculture:** predictive analytics for crop yields and climate adaptation
- **Healthcare:** AI-assisted diagnostics and health system optimization
- **Education:** adaptive learning platforms and digital skills development
- **Finance:** fraud detection and financial inclusion tools

The initiative aligns with Ghana's broader ambition to become a digital trade gateway under the African Continental Free Trade Area (AfCFTA), leveraging its position as host of the Secretariat.

## 2 Financing and Partnerships

The project is supported through a mix of international partnerships and technical collaborations:

- UAE-backed \$1 billion Ningo-Prampram AI Hub
- Infrastructure and training support from Huawei
- Technical and policy assistance from UNESCO and the European Union

While these partnerships reduce upfront fiscal pressure, they also raise important questions regarding technology dependence, data ownership, and long-term value capture.

## 3 Key Structural Challenges

### 3.1 Infrastructure Constraints

Persistent energy instability (“dumsor”) and high electricity costs pose a direct threat to AI infrastructure, which requires uninterrupted power. Similarly, high internet costs risk excluding smaller innovators.

### 3.2 Data Sovereignty Deficit

AI systems trained on non-African datasets risk poor performance in local contexts. Ghana currently lacks sufficient high-quality, localized datasets, limiting its ability to build competitive models.



### **3.3 Governance and Ethical Risks**

Concerns around data privacy, algorithmic bias, and inequality remain unresolved. Institutional capacity to regulate AI is still evolving.

### **3.4 Policy Gaps**

The absence of a comprehensive legal framework, particularly the pending Emerging Technologies Bill creates uncertainty for investors and innovators.

## **4 Policy Recommendations: From Cost Centre to Growth Engine**

### **4.1 Commercialization and Regional Market Integration**

Position the centre as a regional digital infrastructure provider by offering HPC services to startups, universities, and SMEs across West Africa. This “digital landlord” model can generate recurring revenue streams.

### **4.2 Data as a Strategic National Asset**

Develop a national framework for data collection, curation, and licensing. High-quality African datasets should be monetized through controlled partnerships with global firms, ensuring both revenue generation and ethical compliance.

### **4.3 Local Demand Creation (“AI First” Policy)**

Mandate public institutions to prioritize locally developed AI solutions in procurement. This guarantees a domestic market, strengthens local firms, and enhances export readiness.

### **4.4 Operationalizing Fiscal Incentives**

Move beyond policy announcements by implementing targeted tax incentives, grants, and venture support for startups within the AI ecosystem, particularly those under the Ghana AI Startup Studio.



#### **4.5 Energy Security for Digital Infrastructure**

Establish dedicated renewable energy systems (e.g., solar + battery storage) for the AI centre. Reliable power is not optional, it is foundational to operational viability.

#### **4.6 Deepening Technical Talent**

Refocus the One Million Coders Programme toward advanced AI competencies, including machine learning engineering and model development. The ecosystem requires high-skill talent, not just basic digital literacy.

#### **4.7 Inclusive Digital Expansion**

Extend affordable high-speed internet and 5G infrastructure beyond urban centres. Without decentralization, AI-driven growth risks widening inequality.

#### **4.8 Leveraging AfCFTA for Scale**

Use Ghana's strategic position within AfCFTA to export AI services, standardize digital trade rules, and position the country as a continental hub for AI-driven solutions.

## **5 Conclusion**

Ghana's \$250 million AI Computing Centre represents a high-stakes but high-reward investment in the country's digital future. If effectively implemented, it can transform Ghana into a regional leader in AI innovation, converting data into economic value across critical sectors.

However, infrastructure alone is insufficient. The long-term success of this initiative will depend on policy coherence, institutional capacity, and ecosystem development. Without these, the project risks becoming a stranded asset in a rapidly evolving global AI landscape.



With the right reforms, Ghana can shift from being a passive consumer of digital technologies to an active producer and exporter of AI-driven solutions, anchoring its role in Africa's digital economy.

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## About CERPA

The Centre for Economic Research and Policy Analysis (CERPA) is a think tank dedicated to providing independent, data-driven economic research and policy recommendations to foster sustainable

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