WHITE PAPER

# AI Data Centers: An Opportunity in the Middle East

**Nov 2025**

By: Thibault Werlé, Faisal Hamady, Marc Nasr, Hamza Najmi, Pia Biagini

Boston Consulting Group partners with leaders in business and society to tackle their most important challenges and capture their greatest opportunities. BCG was the pioneer in business strategy when it was founded in 1963. Today, we work closely with clients to embrace a transformational approach aimed at benefiting all stakeholders—empowering organizations to grow, build sustainable competitive advantage, and drive positive societal impact.

Our diverse, global teams bring deep industry and functional expertise and a range of perspectives that question the status quo and spark change. BCG delivers solutions through leading-edge management consulting, technology and design, and corporate and digital ventures. We work in a uniquely collaborative model across the firm and throughout all levels of the client organization, fueled by the goal of helping our clients thrive and enabling them to make the world a better place.

Since the beginning of the year, several GCC countries have made significant advances in their AI capabilities. The Kingdom of Saudi Arabia's (KSA) introduction of HUMAIN, aiming for 1.9GW in AI Data Center (AI DC) capacity, the UAE's announcement of a 5GW AI campus, and similar critical milestones confirm that AI DCs, the crucial hardware foundation of the global AI race, are a clear focus area for the Middle East.

These recent moves in the Middle East reflect the rapid growth in demand for AI computing power. Despite market disruptions (e.g., Deepseek) and gains in chip efficiency,[1] industry experts predict that AI adoption and its increasing complexity will continue to fuel a steep growth trend. BCG's research projects that global data center power demand will reach 198GW by 2030, up from 86GW in 2025. By 2030, over half of the total DC power demand in 2030 will support AI, with more than 81% of this used for inferencing, the repeated and widespread use of an AI model.

## Multi-billion-dollar partnerships driving unprecedented capacity growth

The pace and scale of such demand, along with the investments being made to meet its growth, underscore a structural shift in how nations are preparing for the next era of digital competitiveness. Once isolated announcements, are now coordinated, multi-billion-dollar programs focused on securing compute capacity and accelerating time-to-market for AI applications. These moves signal a decisive transition in which AI infrastructure, previously viewed simply as an enabler, has become a key determinant of economic advantage.

Recent developments have further highlighted the unprecedented momentum building across the global ecosystem. In September, OpenAI announced it would buy approximately $300 billion of computing capacity from Oracle to train AI models and run future systems, including the Stargate data center project, which is expected to require 4.5 GW of power capacity. Spanning roughly five years and starting in 2027, the deal is among the most sizable cloud contracts in history.[2] Later in October, OpenAI also announced a multi-year partnership with AMD to deploy up to 6GW of Instinct MI450 GPUs, from which OpenAI will receive warrants for up to 160 million AMD shares, a roughly 10% potential equity stake. As a critical supplier in OpenAI's compute roadmap, the deal is estimated to generate AMD over $100 billion in revenue across the life of the partnership.[3]

Similarly, Meta announced a $27 billion joint venture with Blue Owl in October to develop its 2GW 'Hyperion' AI campus in Louisiana. The agreement will see Meta sell an 80% stake in the project to secure a long-term lease for dedicated compute capacity. The structure provides Meta with approximately $3 billion in upfront cash, enabling the company to shift substantial capital-expenditure risk to its investment partner while still ensuring access to the large-scale AI compute required for future model development and deployment.[4]

[1]NVIDIA's planned Rubin series with 8x performance vs. GB300 systems
[2]Oracle, OpenAI Sign $300 Billion Cloud Deal
[3]AMD signs AI chip-supply deal with OpenAI, shares surge over 34%
[4]Meta forms $27bn joint venture with Blue Owl to fund gigawatt-scale AI data center campus in Louisiana

# Unique funding models driven by upside potential and risk diversification

To serve a burgeoning demand and market potential, companies are expanding their global footprint to meet escalating computing requirements while also tapping into increasingly sophisticated financing vehicles. This dual strategy of geographic diversification and funding innovation enables operators to manage risk more effectively, leverage new sources of power, land, and funding, and position themselves for long-term advantage as AI adoption accelerates worldwide. Examples of this include:

- **Asset/mortgage or corporate-backed debt:** Led by JP Morgan Chase and Mitsubishi UFJ, a record $38bn debt sale for two Oracle-tied data centers is funding part of the Stargate initiative.[5]
- **Vendor-led funding:** Nvidia will invest up to $100bn to take a stake in OpenAI and supply it with high-end data center chips.[6]
- **Funds from private securities & bonds:** Meta's Hyperion JV raised capital from debt as well as bonds, with an A+ rating by S&P and a 6.58% yield.[7]

The promise of economic upside and strategic importance for long-term competitiveness is driving the surge in AI infrastructure demand. Yet, even as national ambitions rise, investors remain disciplined, evaluating data center opportunities through four critical lenses:

- **Total Cost of Ownership (TCO):** Locations and designs that require less than $10mn/MW in capex for core and shell works, along with the lowest achievable lifetime TCO.
- **Time to Market:** Markets and partners that can reliably deliver first MW availability within 12–24 months from investment.
- **Scalability:** Sites with clear pathways to scale to 1-5GW and beyond, supported by land availability, as well as permitting and grid commitments.
- **Risk Profile:** Hedging against geopolitical, infrastructure, and supply-chain vulnerabilities, with growing emphasis on jurisdictional stability and allied-market alignment.

[5]Record US$38b debt sale nears for Oracle-tied data centres
[6]Nvidia to invest up to $100 billion in OpenAI, linking two artificial intelligence titans
[7]BlackRock Among Biggest Investors in Meta's Giant Data-Center Debt Deal

**By 2028, approximately 35% of all global data center power capacity will be housed outside the United States.**

# Skin in the Game, Chips on the Table: The Middle East AI Push Is On

It is crucial to understand that while the US will continue to be a major center for both AI computing power demand and capacity, BCG forecasts that by 2028, approximately 35% of all global data center power capacity will be housed outside the country, in response to:

- Drive for AI sovereignty, leading to increasingly localized AI DC aspirations
- More geographic options for accessing reliable, low-cost power, including renewable energy sources
- Expansion of AI applications without latency requirements, making proximity to users less important and allowing operators to prioritize other factors like cost or sustainability

Along with geopolitical considerations, these factors will influence US company strategies for building overseas DCs in certain countries, a practice that former Federal Reserve Chair Janet Yellen has called “friendshoring”. In addition to safeguarding the safety of major capital investments, friendshoring acknowledges the strategic geopolitical significance of developing AI capabilities and infrastructure.

In this context, the Middle East is quickly emerging as a key AI DC nexus. Major governments in the region are pursuing large-scale national AI strategies and investment, and enjoy long-standing cordial relationships with the US and many other countries. Events this year, including President Trump’s visit to the Middle East, have led to a series of recent announcements related to the development of data center capacity and broader AI infrastructure. These include:

## Saudi Arabia:

- Launch of HUMAIN that will invest and operate across the AI value chain[8]
- HUMAIN and NVIDIA’s partnership to build up to 500 MW AI DC over the next five years[9]
- $10bn HUMAIN and AMD collaboration for 500 MW AI DC over the next five years[10]
- $5bn HUMAIN and AWS partnership for an advanced AI zone[11]
- $5bn DataVolt establishment of the region’s first sustainable, net-zero AI campus in Oxagon, sized to 1.5GW total capacity[12]
- $1.5bn Groq and Aramco partnership to build the world’s largest AI computing center[13]

[8]Saudi crown prince launches HUMAIN to position Kingdom as global AI hub
[9]HUMAIN and NVIDIA Announce Strategic Partnership to Build AI Factories of the Future in Saudi Arabia
[10]AMD and HUMAIN Form Strategic, $10B Collaboration to Advance Global AI
[11]AWS and HUMAIN announce a more than $5B investment to accelerate AI adoption in Saudi Arabia and globally
[12]DataVolt signs agreement with NEOM to design and develop the region’s first truly sustainable, net-zero AI factory campus in Oxagon
[13]Groq opens EMEA's largest AI compute centre in Saudi Arabia

## UAE:

- 5GW AI campus in Abu Dhabi as part of the US-UAE AI Acceleration Partnership, the largest AI DC outside the US[14]
- 500,000 GPUs to be imported, 20% for G42 and the rest for US companies building AI DCs[15]
- Microsoft's plan to invest $15.2 billion by 2029, primarily to expand AI cloud and data center infrastructure across the country[16]

## Qatar:

- Qatar's sovereign fund, Qatar Investment Authority's (QIA) partnership with Blue Owl Capital on a $3 billion global platform for investing in DCs to accelerate cloud and AI capacity worldwide[17]
- QIA as a backer in Anthropic's record $13bn funding round (Series F), which valued the AI startup at $183 bn[18]

# The Middle East's growing AI DC clout leverages key strengths

With some of the fastest economic growth rates in the world, the Middle East's adoption of transformational technology has played a pivotal role in its rapid advancement. However, this time, the region is not merely participating, but poised to become a critical new center of AI DC investment and innovation, especially when considering its unique advantages:

- **Strategic location:** Located within a 2,000-mile radius of more than 3 billion people (roughly 40% of the world's population) across Europe, Asia, and Africa, ideal for hosting non-latency-sensitive inferencing services at scale,[19] and as a provider of AI computing services to the Global South.
- **Lower costs:** Up to 50% lower leasing costs compared to the global average, as well as lower taxation, and some of the world's lowest power tariffs, allow world-beating power usage efficiency (PUE),[20] and substantial reductions in TCO.
- **Quicker time-to-market:** Dedicated investment teams, DC clusters within Special Economic Zones (e.g., Stargate campus in Masdar city), and streamlined regulatory processes, including fast-track permits that simplify licensing and shorten time to DC completion.
- **Capacity and scalability:** Expansive land banks, scalable power supply infrastructure, and planned international connectivity capacities of roughly 720tbps via the Fibre in Gulf (FIG) submarine cable project.[21]
- **Low risk:** Minimal natural disaster risks and supportive regulatory frameworks, including free flow of data, ensure operational continuity and security for investors.

[14]U.S. Unveils Sweeping A.I. Project in Abu Dhabi
[15]US weighs letting UAE buy over a million advanced Nvidia chips
[16]Microsoft to invest over $15 billion in UAE, secures US export licenses for Nvidia chips
[17]Qatar's wealth fund teams up with Blue Owl for $3 billion data centre push
[18]QIA participates in Anthropic's Series F $13 billion fundraise
[19]A Geopolitical Lever to Dominance in Compute and Chips
[20]Datavolt ksa facilities
[21]Ooredoo Group and CITRA Sign Landmark Agreement to Land FIG Submarine Cable in Kuwait

As the global AI capacity rollout continues, governments in the Middle East can build on their strengths by deploying additional measures that would create an even more enabling environment for innovators and investors. These can include:

1. **Tailoring investment packages:** Minimizing investment risk by pooling resources (land, power, water, and connectivity) in time-bound packages

2. **Supporting a diverse ecosystem:** Encouraging business models across a varied and thriving ecosystem that includes GPU-as-a-Service providers, hyperscalers, and colocation providers, as well as equity, debt, bond, and other financing models to provide investors and off-takers the flexibility to commit capital as part of go-to-market strategies

3. **Securing ecosystem partnerships:** Foster further collaboration (e.g., among chipset companies, component providers, and research institutions) throughout the AI DC value chain to strengthen local value propositions and capabilities.

4. **Developing and retaining talent:** Creating a deep pool of world-class talent to ensure long-term AI leadership via innovation in models, platforms, and applications.

## The Bottom Line

AI is reshaping economies and geopolitics, and infrastructure is proving to be the foundation for its rapid advance. The Middle East's strategic location and adoption of transformational technology have enabled it to maintain a strong position as a leading hub of growth and economic potential. It is now also uniquely positioned to become a global AI DC powerhouse, combining its inherent natural advantages with low costs, policy momentum, and geopolitical alignment. However, seizing this moment will require more than megawatts; it will require partnerships, ecosystem depth, and a long-term talent pipeline to ensure continued leadership in the field. By prioritizing these strategies, the Middle East can capitalize on the AI DC boom and become an epicenter of AI infrastructure investment and innovation.

# About the Authors

**Thibault Werlé** is a Managing Director and Partner in the firm's Toronto office. He is a core member of BCG's Technology, Media & Telecommunications practice. You may contact him by email at **werle.thibault@bcg.com.**

**Faisal Hamady** is a Managing Director and Partner in the firm's Middle East office. He is a core member of BCG's Technology, Media & Telecommunications practice. You may contact him by email at **Hamady.Faisal@bcg.com.**

**Marc Nasr** is a Managing Director and Partner in the firm's Middle East office. He is a core member of BCG's Technology, Media & Telecommunications practice. You may contact him by email at **Nasr.Marc@bcg.com.**

**Hamza Najmi** is a Principal in the firm's Middle East office. He is a core member of BCG's Technology, Media & Telecommunications practice.

**Pia Biagini** is a Project Leader in the firm's Middle East office. She is a core member of BCG's Technology, Media & Telecommunications practice.

## For Further Contact

If you would like to discuss this report, please contact the authors.


BCG