

UAE's AI infrastructure build-out supports ambitions for economy

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The UAE has set ambitious goals to become a global leader in Artificial Intelligence (AI). AI is expected to contribute over USD 96 billion to the country's GDP by 2031, with annual growth projected between 20-30%. According to PwC, AI is expected to account for 13.6% of the UAE's GDP, the highest among GCC countries—compared to 12.4% in Saudi Arabia and 8.2% in the rest of the GCC.

Ranked fifth globally in Stanford's Global AI Vibrancy Tool, the UAE has emerged as a global AI pioneer through a range of strategic initiatives. In 2017, the UAE launched its National AI Strategy 2031 to become a global leader in AI. The strategy targets enhanced productivity and cost reduction across sectors such as transportation, space, renewable energy, water, technology, education, environment, and healthcare—particularly in combating chronic and life-threatening diseases.

UAE's 2031 AI strategy

As part of its AI 2031 strategy, the UAE established the world's first Ministry of Artificial Intelligence, appointing Omar Al Olama as its minister. It also founded the Mohamed bin Zayed University of Artificial Intelligence (MBZUAI), the world's first graduate-level AI university. MBZUAI has developed the PAN World Model—a physically realistic simulation environment for training AI agents. This model plays a crucial role in supporting autonomous driving, drone navigation, and domestic robotics. It aligns with Dubai's Autonomous Transportation Strategy, which aims for 25% of all transport to be autonomous by 2030.

MBZUAI also launched Jais, an Arabic large language model (LLM), and has expanded globally by opening research centers in Paris and Silicon Valley. These centers, part of its Institute of Foundation Models (IFM), focus on multilingual AI, generative AI, and AI safety.

Infrastructure investment fueling the AI ecosystem

To support AI's growth, the UAE has significantly invested in information and communication technology (ICT) and internet infrastructure, through public, private, and foreign direct investments (FDI). During US President Donald Trump's visit to Abu Dhabi in May 2025, G42, an AI holding company based in Abu Dhabi, announced a partnership with OpenAI, Nvidia, Cisco, SoftBank,

and Oracle to develop Stargate UAE—a 5GW AI data center campus. Phase one, with 200 MW capacity, is expected to be completed by 2026.

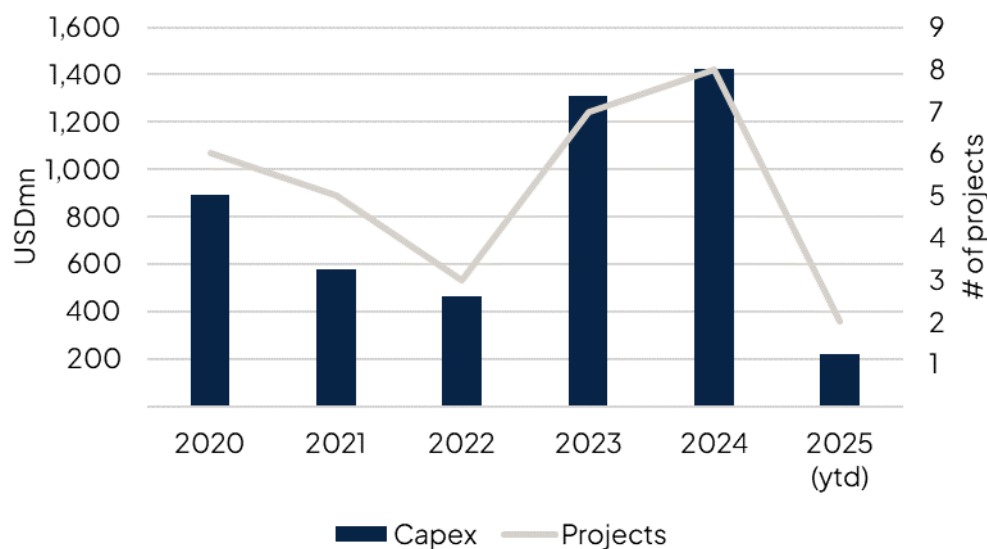
Building such AI data centers is capital-intensive. For example, Nvidia's H100 GPUs cost around USD 30,000 each, and a hyperscale center may need at least 10,000 GPUs, totaling USD 300 million. For context, OpenAI used approximately 20,000 GPUs to train GPT-4, while Meta and Microsoft each have centers with over 100,000 GPUs. These centers also consume vast amounts of energy—100MW data centers consume electricity equivalent to 350,000–400,000 electric vehicles annually according to IEA estimates.

Greenfield FDI inflows in ICT & internet infrastructure have grown substantially

Between 2020–2025, the UAE attracted USD 4.89 billion in greenfield ICT and internet infrastructure FDI, an increase of more than 60% on the existing stock of FDI in the sector. In early 2025 alone, the UAE secured USD 220.6 million in data center investments. In March 2025, Microsoft announced plans to build sovereign cloud and AI infrastructure in partnership with G42, supporting Abu Dhabi's 2025–2027 strategy to become the world's first AI-native government. This infrastructure will process over 11 million daily interactions among government entities, citizens, and businesses. Microsoft also acquired a USD 1.5 billion minority stake in G42 in 2024.

The two largest greenfield FDI projects came from Swiss firms Acronis and Swiss GRC, each investing USD 246 million. Switzerland ranks second behind the US in total capital investment in digital infrastructure and ICT in the UAE (USD 2.86 billion across 20 projects). The UK follows with USD 466 million from three projects, India with USD 356 million from one project, and Germany with USD 245.8 million from one.

ICT & internet infrastructure greenfield FDI Inflows to the UAE



Source: fDiMarkets, Emirates NBD Research

Data center leadership: UAE tops the region

The UAE has the highest number of data centers in the region—35—compared to Oman's 12 and Saudi Arabia's 11. Public cloud spending per employee stands at USD 228, the highest in the region according to data from BCG. Dubai hosts 18 of these centers, while Abu Dhabi has 16. Despite having fewer centers, Abu Dhabi leads in value, with USD 1.23 billion in data center assets versus Dubai's USD 815 million. Fujairah hosts one center operated by Etisalat.

Currently, 11 new data centers worth USD 3 billion are under construction and expected to be completed by 2026. Additionally, 6 data centers are in the pre-execution phase, valued at USD 41 billion (USD 40 billion of which is for the G42 UAE-US AI Campus).

The growth of data centers has been hindered by the US' AI Diffusion Rule which restricted the import of advanced chips such as Nvidia's H100 and H200. However, in May 2025, the Trump administration rescinded this rule, enabling the UAE to import up to 500,000 of Nvidia's most advanced chips annually. This reversal has reinvigorated the UAE's data center expansion efforts and is expected to accelerate the country's AI infrastructure development moving forward.

Khazna: driving UAE's data center expansion

Khazna Data Centers is the largest player in the UAE, operating eight centers. The company plans to build seven more—five under construction and two in planning. Khazna emerged from a merger between G42 and e& Data Centers in 2022. G42 now holds full ownership after acquiring e&'s 40% stake for USD 2.2 billion in February 2025. MGX, a USD 100 billion AI fund, and US-based Silver Lake have also become strategic minority investors in Khazna in April 2025.

UAE's data centers

Company	# of Projects	Total Projects Value (USD mn)
Khazna Data Centers	8	406
Gulf Data Hub	6	182
Etisalat	5	291
Amazon Web Services	3	72
Huawei Technologies	2	33
Moro Hub	2	140
Phoenix Group	1	660
Kizad	1	70
Equinix	1	60
Emirates Aluminium	1	50
Dubai Silicon Oasis Authority	1	40
ZonesCorp	1	32
TECOM Group	1	26
Dubai International Financial Centre	1	20
Du	1	8

Data centers in execution phase

Project	Emirate	Project Value (USD mn)	Project Progress (%)	Cash Spent (USD mn)	Completion Year
Khazna - Al Enhanced Data Centre in Al Amerah	Ajman	800	50	386.5	2025
Moro Hub - Solar Powered Data Center	Dubai	700	51	138.7	2028
Pure Data Centres Group - Yas Island Development	Abu Dhabi	360	93	328.92	2025
Khazna - Data Center at Jebel Ali Village (DXB9 2)	Dubai	300	35	40.83	2026
EITC - Dubai Design District (D3): Project Mercury Data Centre	Dubai	272	69	153.13	2026
ADIO/Khazna - Data Center at Mafraq (AUH04)	Abu Dhabi	240	9	8.57	2026
Khazna - Data Center at Jebel Ali Village (DXB9 1)	Dubai	160	35	21.77	2026
EGA - Al Taweelah Renewable Energy Data Centre	Abu Dhabi	50	68	32.21	2025
Emirates Integrated Telecommunications Co Saturn Data Center	Dubai	40	37	4.42	2026
Equinix - Dubai Production City: DX3.2 Data Centre	Dubai	40	20	2.04	2026
Khazna - Kizad: Khazna Data Center (AUH08)	Abu Dhabi	40	18	21.75	2026

Data centers in pre-execution phase

Project	Emirate	Project Value (USD mn)	Project Status
G42 - UAE-US AI Campus (4GW)	Abu Dhabi	32000	Study
G42 - UAE-US AI Campus (1GW) Phase 1	Abu Dhabi	8000	Study
Du/ Microsoft - Hyperscale Data Centre in Dubai	Dubai	544	Study
Khazna - Dubai Production City: DXB 04 Data Center	Dubai	408	Bid Evaluation
ADNOC Gas - Habshan and Bab Telecom System Upgrade	Abu Dhabi	70	Contract Award
BEEAH Group/Khazna Data Centers - Data Center in Kalba	Sharjah	50	Design
ADSSC - Disaster Recovery Data Centre	Abu Dhabi	25	Bid Evaluation

Source: MEED, Emirates NBD Research

Powering AI sustainably: the UAE's renewable energy vision

Sultan Al Jaber, UAE Minister of Industry and Advanced Technology and chairman of Masdar, emphasized the critical role of renewable energy in meeting AI's growing energy needs. During Abu Dhabi Sustainability Week in January 2025, he predicted a 250% increase in global energy demand to 35,000 GW by 2050 due to AI.

In January, Masdar announced the world's first 24/7 renewable energy facility. The USD 6 billion plant will generate 1GW of uninterrupted clean power, combining solar photovoltaics, battery energy storage system, AI based grip management, and advanced digital twins. It aligns with the UAE's Energy Strategy 2050, aiming to triple renewable energy's contribution to 32% by 2030 and expand capacity from 14.2GW to 19.8GW by 2030. The UAE will invest AED 150–200 billion to support these goals.

UAE's influence growing in international AI infrastructure

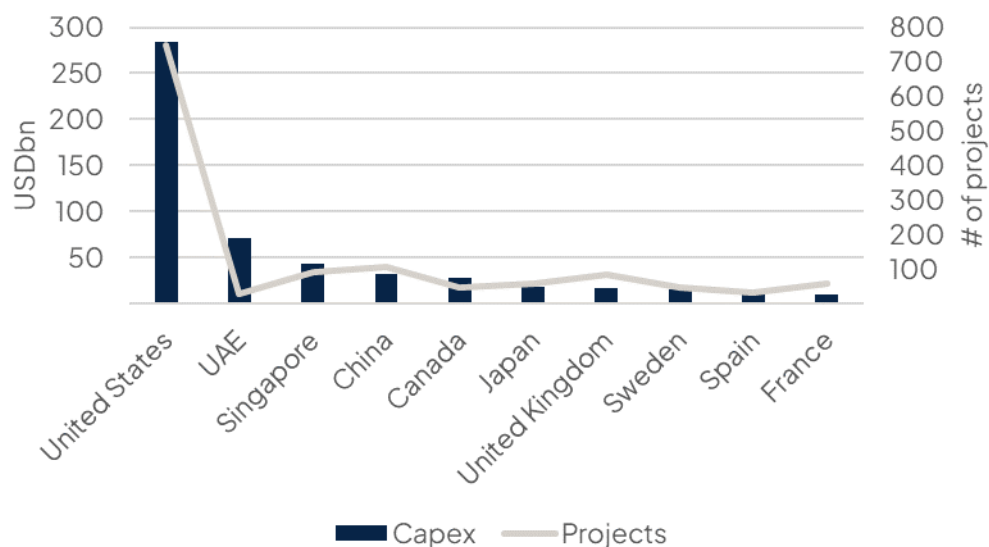
Internationally, the UAE is the second-largest investor in ICT and internet infrastructure greenfield FDI (USD 70.6 billion), trailing the US (USD 283.9 billion). The UAE also leads in average capital expenditure per project at USD 2.35 billion across 30 projects, compared with the US's average of USD 378.6 million across 750 projects.

G42 and Mubadala co-established the MGX Fund—a USD 100 billion vehicle for investing in global ICT, internet infrastructure, and semiconductors. MGX deployed USD 43.4 billion in partnership with Bpifrance, Mistral AI, and NVIDIA to build Europe's largest AI campus in France (1.4GW capacity). MGX is also involved in Stargate USA, a USD 500 billion mega project to build 20 AI data centers across the US, in partnership with Oracle, OpenAI, and SoftBank.

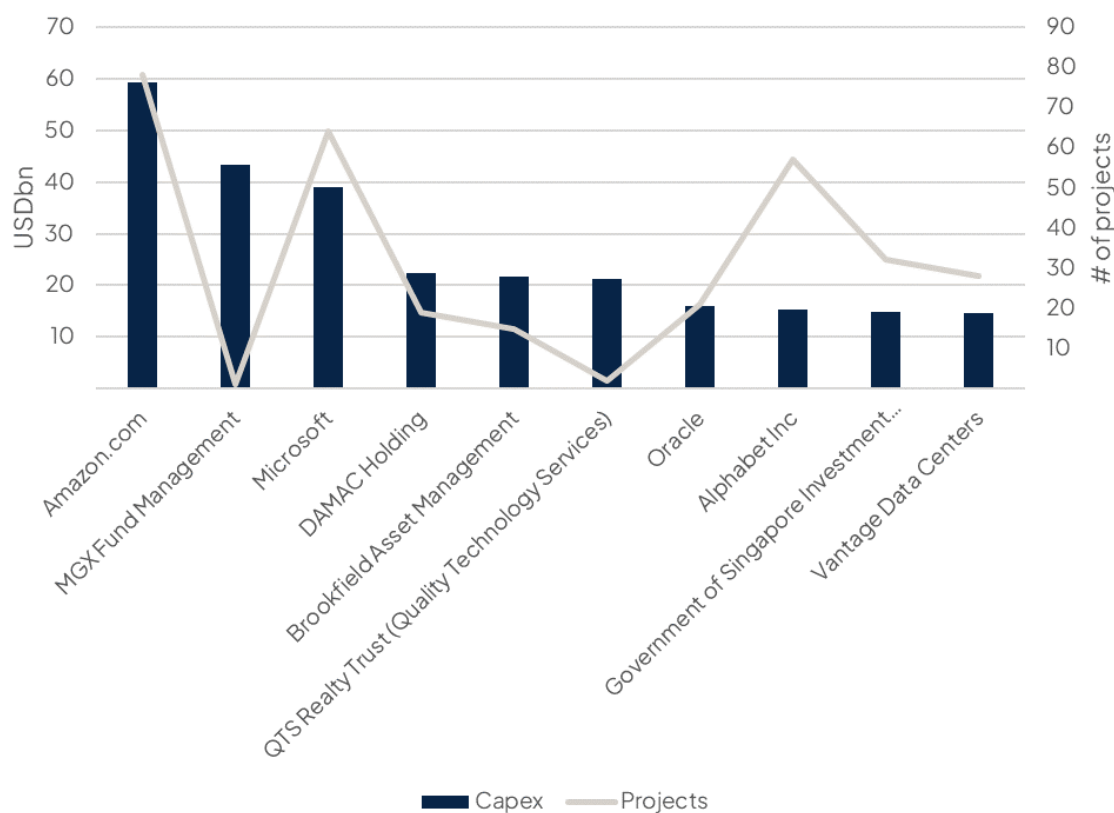
MGX has been active in private deals, investing USD 6.6 billion in OpenAI at a USD 157 billion valuation in October 2024—now nearly doubled to USD 300 billion. MGX also invested USD 6 billion in Elon Musk's xAI at a USD 50 billion valuation.

DAMAC Holding ranks fourth globally in ICT and internet infrastructure FDI, having invested over USD 20 billion in US data centers. Its first phase includes 500MW facilities across states like Texas, Arizona, Ohio, and others. DAMAC also invested USD 852 million across three cities in Saudi Arabia (Riyadh, Dammam, and King Abdullah Economic City) and is active in countries including Greece, Spain, Turkey, Malaysia, Indonesia, Jordan, and Ireland.

Top 10 countries in greenfield FDI in ICT & internet infrastructure 2020 – May 2025



Top 10 companies in greenfield FDI in ICT & internet infrastructure 2020 – May 2025



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