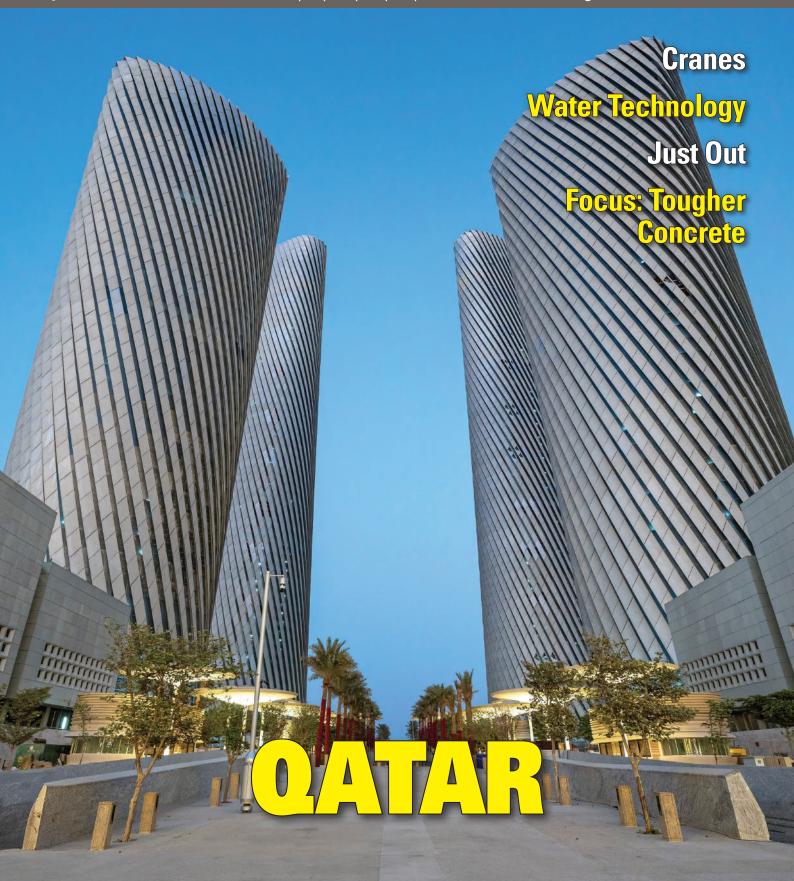
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Qatar's construction sector is experiencing a resurgence following the completion of major projects for the 2022 FIFA World Cup. Despite a temporary downturn in 2023, the industry is poised for significant growth in the coming years, driven by investments in infrastructure, energy and tourism projects.

ATAR'S construction sector, which witnessed a significant transformation in the lead-up to the 2022 FIFA World Cup – when the nation invested heavily in infrastructure projects to cater to the mega event – is now facing a period of adjustment.

Having staged the World Cup, Qatar is left with a lasting legacy of world-class infrastructure, which the construction sector is now focused on maintaining. The stadiums, transportation systems, and accommodation facilities built for the event have not only enhanced the country's tourism appeal but have also provided a solid foundation for future economic growth.

Qatar has grown as a global tourism destination driven by hosting such large-scale sporting events and the continuous development of tourism-related infrastructure over the past two years, according to Alpen Capital's latest report on 'GCC Hospitality Industry'. Its hospitality sector is projected to rise at a compound annual growth rate

(CAGR) of 11 per cent (from \$900 million in 2023) to \$1.5 billion in 2028.

While the construction industry saw a contraction in 2023 due to the completion of major projects for the World Cup and a slowdown in new building permits, analysts in the country have noted an upswing in the sector this year which is estimated to surge by 4.4 per cent, according to a recent report by Researches and Markets.

These views were echoed by data analytics and consulting company Global Data which stated that the Qatar construction market size was \$49.3 billion in 2023 and is expected to achieve an annual average growth rate (AAGR) of more than four per cent during 2025-2028. Investments in renewable energy, oil and gas, and industrial projects will result in the growth of the construction market over the period, it added.

After the lull, in fact, the total value of contracts awarded in Qatar increased by 68.5 per cent y-o-y to reach \$6.1 billion during Q1 2024 as compared to \$3.6 bil-

lion in Q1 2023, according to MEED Projects data. The growth in contract awards was primarily due to the jump in value of projects awarded in the oil sector during Q1 2024 which represented 80.5 per cent of the total contracts awarded in the country during the year.

The total value of oil sector projects awarded jumped from no contracts awarded in Q1 2023 to \$4.9 billion during Q1 2024 with the EPC contracts to increase oil production from Al Shaheen offshore oil field.

The total value of contracts awarded in the building and infrastructure construction sector increased by 347.4 per cent to reach \$519 million in Q1 of this year against \$116 million in Q1 2023. Similarly, the aggregate value of contracts awarded in the power sector improved by 49.1 per cent to reach \$489 million during the period.

The construction and real estate sectors have contributed significantly to Qatar's GDP in 2023 and are expected to remain



important drivers of the non-oil economy. According to leading real estate platform Property Finder's Residential Real Estate annual report, the construction and real estate sectors together grew by 3.4 per cent in 2023, contributing to almost 19 per cent of Qatar's GDP.

The outlook for residential construction is promising with the rising foreign direct

investments in the realty sector, primarily by expatriates and foreign businesspersons, with the West Bay Lagoon and The Pearl being regions of interest.

The country is now enhancing its infrastructure and industrial projects in line with the national strategy vision and to host the Asian Games 2030.

This apart, Qatar's 2050 Transport Plan includes big-ticket projects such as an expansion of the existing Doha Metro network as well as the ambitious \$12-billion Sharq Crossing, which comprises a unique bridge-tunnel connection between Katara Cultural Village and Hamad International Airport.

Growth in Qatar has essentially been public sector-led. However, the National Vision 2030 envisions an increasing more diversified, private sector-driven model. Achieving this transformation requires bold reforms to boost productivity, foster a more conducive business environment, and leverage progress in digitalisation and climate actions, according to the IMF's latest annual economic review.

Qatar's economic diversification efforts are anchored by the Third National Development Strategy (2024-30), launched in January, which plays a crucial role in the recovery of government revenues, reducing economic dependence on hydrocarbons and enhancing resilience to price fluctuations, the report said.

Qatar's non-oil economy comprises twothirds of Qatar's gross domestic product (GDP) and has seen significant contributions from sectors such as real estate and construction, financial services, trade, manufacturing, logistics and tourism. Such sectors have not only created new revenue streams but also provided employment opportunities, supported by substantial infrastructure investments, according to IMF.

The nation has implemented a series of reforms to improve the investment climate, including easing restrictions on foreign ownership, establishing free zones, and enhancing the legal and regulatory framework for businesses – all of which have successfully attracted significant infrastructure and energy sector investments from around the world, the report added.

A number of analysts concur that the market will recover as the country persists in investing in a diverse range of infrastructure and industrial projects, aiming to meet the numerous pillars of Vision 2030.

However, key challenges for the industry remain despite a forecast for growth. Some of them include rising costs of construction, excessive lead times, and a shortage of skilled labour.

Looking ahead to 2030, industry experts noted that the current activities under way across the Middle East will see Qatar compete for labour and resources and this could potentially lead to construction cost escalation.

According to an international construction market survey by Turner & Townsend, Doha is positioned as the second-most expensive city in the Middle East to build in.

Although the mega sporting event in 2022 played a pivotal role in increasing construction prices, the industry analyst noted a downward trajectory shift for costs this year.

ROADS & METRO

Qatar's investments in its Transportation Master Plan 2050 (TMPQ) are expected to foster a range of construction projects, aiming to increase the number of visitor arrivals, said a research analyst.

In a recent interview with *The Peninsula*, Colin McBride, Director of Cost Management, Qatar at Turner & Townsend, said Qatar's transport networks are undergoing expansion as the government is investing QR9.7 billion (\$2.7 billion) in its Transportation Master Plan.

Among the major projects he cited are the Doha Metro, the Bahrain-Qatar causeway,



Lusail City offers significant potential for real estate investment.



Work on upgrading the E Ring Road comprises the Mesaimeer Interchange, the first-of-its-kind project in Qatar.

and the Sharq Crossing.

12-km-long Sharq Crossing, which was officially launched in December 2013. counts among the largest infrastructure projects in Qatar. Designed by Spanish architect Santiago Calatrava, the bridgetunnel connection across Doha Bay consists of three bridges, two immersed tunnels with a total length of approximately 6 km and three cut-and-cover tunnels, and a marine interchange. Work on the ambitious development was put on the backburner as it wasn't considered a priority project for the FIFA World Cup and was expected to be restarted in the third quarter of 2020, but further updates on the project have not been released.

The Public Works Authority 'Ashghal', which is spearheading Qatar's infrastructure ambitions, has been responsible for the nation's impressive road and metro network.

Ashghal is implementing 33 projects to serve 30,000 plots of citizens through its Local Areas Infrastructure Programme across Qatar. In May, Ashghal announced that it completed infrastructure services for 7,833 plots in the north, west and south of Qatar under the programme.

Ashghal's Local Areas Infrastructure Programme is a na-

tionwide programme that aims to develop the roads, drainage networks and overall infrastructure in all areas of Qatar.

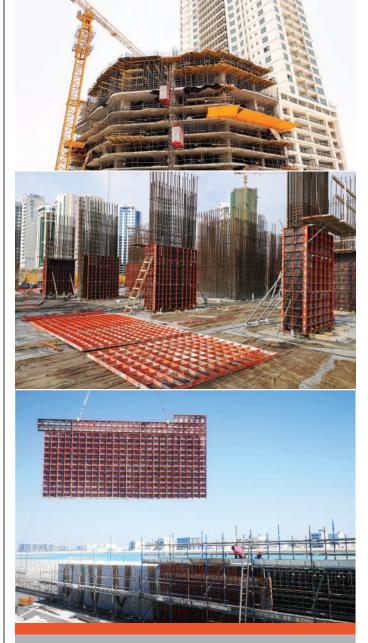
Among the projects completed are the Roads and Infrastructure Development projects at East Al Wajba (Package One), West Semaisma (Package One), Al Ebb and Leabaib (Package One and Package Five), West Muaither (Package 2), and the main works in Al Egda, Al Heedan and Al Khor (Package One), located west of Al Bayt Stadium.

Another major development is the construction and upgrading of E Ring Road, which comprises the Mesaimeer Interchange, the first-of-its-kind project in Qatar connecting six main roads and providing a vital traffic link between the south, central and north of the country.

OIL, GAS & INDUSTRY

Qatar is reliant on its hydrocarbon exports, which have propelled the nation to become one of the world's wealthiest economies. Hence, it is but natural that the country is making massive investments in boosting its oil and gas upstream and downstream sectors.

Last month, QatarEnergy LNG awarded Saipem a \$4-billion offshore EPC con-



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Bahrain

PASCHAL Concrete Forms Co. W.L.L.
Tel: +973 17 672580
paschal@batelco.com.bh

Dubai-UAE

PASCHAL Emirates (L.L.C.) Tel: +971 4 2861 139 paschal@emirates.net.ae



tract aimed at sustaining the production of the North Field offshore natural gas reservoir, located off the north-east coast of Qatar.

This followed the four main engineering, procurement, construction, and installation (EPCI) contract packages worth a total of more than \$6 billion awarded by QatarEnergy for the next development phase of the offshore Al-Shaheen field (Qatar's largest oil field) to increase production by about 100,000 barrels of oil per day (bpd). These EPC packages were for:

- Nine wellhead platforms valued at about \$2.1 billion and awarded to a consortium of McDermott Middle East and Qingdao McDermott Wuchuan Offshore Engineering;
- A central processing platform valued at about \$1.9 billion assigned to a consortium of McDermott Middle East and Hyundai Heavy Industries;
- A riser platform worth about \$1.3 billion and awarded to Larsen & Toubro;
- Subsea pipelines and cables valued at about \$900 million to be carried out by China Offshore Oil Engineering Co (COOEC).

Late last year, HH the Amir Sheikh Tamim bin Hamad Al-Thani laid the foundation stone of the North Field expansion, which will raise Qatar's LNG production capacity from the current 77 million tonnes per year (mtpy) to 126 mtpy by 2026.

Claimed to be the world's largest LNG project, the project includes six mega trains, each with a production capacity of 8

Qatar's real estate sector is experiencing significant growth, driven by factors such as economic development, infrastructure projects, and government initiatives

mtpy of LNG. In addition, it will produce 6,500 tons per day of ethane gas, which will be used as a feedstock in the local petrochemical industries.

In line with these developments, in February this year the Amir laid foundation stone for the \$6-billion Ras Laffan Petrochemical Complex at the Ras Laffan Industrial City. The complex will house an ethane cracker with a capacity of 2.1 million tons per annum of ethylene.

This massive investment will also increase Qatar's overall petrochemical production capacity to nearly 14 million tons per annum. The project is among the largest globally includes two polyethylene trains with a combined annual output of 1.7 million tons of high-density polyethylene (HDPE) polymer products.

In addition, QatarEnergy last month announced its decision to build a world-scale

urea production complex that will more than double the country's urea production. The new mega project entails building three ammonia production lines that will supply feedstock to four new world-scale urea production trains in Mesaieed Industrial City.

REAL ESTATE

Qatar's real estate sector is experiencing significant growth, driven by factors such as economic development, infrastructure projects, and government initiatives. The country's focus on sectors like logistics, tourism, and manufacturing, as outlined in the Third National Development Strategy (NDS3), has also boosted demand for real estate.

The real estate sector is expected to continue growing steadily, reaching a value of \$41.6 billion by 2028.

Qatar's robust economy and high GDP per capita provide a solid foundation for real estate growth while the government's recent initiatives to promote real estate development, including the establishment of RERA to regulate the sector and Real Estate Platform of Qatar (QREP) – a centralised online portal offering accurate data and statistics about real estate sector – are playing a crucial role in enhancing transparency and attracting investment.

Ongoing infrastructure projects, such as the expansion of Lusail City, are creating opportunities for real estate development. As a major economic hub and entertainment destination, Lusail City offers significant potential for real estate investment.

Read more at www.gulfconstructiononline.com

PROJECTS AT A GLANCE

Package name	Owner	Status*	\$ Million **
Al Shaheen Offshore Field Development Plan — Phase 2.3 (Gallaf Phase 2.3) — Wellhead Platforms and Modifications — Overview		Construction	1200
Al Shaheen Offshore Field Development Plan — Ruya Development	NOC	E&P	6,000
Al Sharq Crossing	Ministry of Transport & Communication	Design	8,000
Al Wakra and Al Wukair Sewage Treatment Plant (STP)	Ashghal	E&P	840
Bul Hanine Offshore Oilfield Expansion	QatarEnergy	EPC ITB	3,000
Bul Hanine Redevelopment	QatarEnergy	Construction	11,000
Carbon Capture Hub	QatarEnergy	Feasibility Study	800
Doha Metro Network – Green Line Extension Phase 1A	Qatar Railways Company	Design	1,000
Doha Metro Network – Overview	Qatar Railways Company	Construction	37,000
Expansion of Idd El-Shargi North Dome (ISND Phase-5) — Overview	QatarEnergy	Construction	1,400
Expansion of Idd El-Shargi North Dome (ISND Phase-5) — Package 2 — Wellhead Platforms	QatarEnergy	E&P	610
Facility E Independent Water and Power Project (IWPP)	Qatar General Electricity & Water Corporation (Kahramaa)	EPC ITB	3,000
Gewan Island Development	United Development Company (UDC)	Construction	824
Hamad International Airport – Expansion Works – Cargo Terminal 2	New Doha International Airport (NDIA) Steering Committee	Design	807
Hamad International Airport – Expansion Works – Overview	NDIA Steering Committee	Construction	18,000
Hamad International Airport – Expansion Works – Western Taxiways and Stands Package	NDIA Steering Committee	Construction	870
Industrial Cities Solar Power Project (IC Solar)	QatarEnergy Renewable Solutions	Construction	640
Lusail City Development	Lusail Real Estate Development Company	Construction	45,000
Maydan Mahzam Oil Field — Redevelopment	QatarEnergy	Feed	1,000
Mozoon Towers	Al Sarri Trading Company, Qatar General Insurance and Reinsurance Company	Design	700
North Field Expansion (NFE) Topside Facilities and Offshore Pipelines — Topside Facilities Package	QatarEnergy LNG	Construction	500
North Field Production Sustainability (NFPS) – Overview	QatarEnergy LNG	Construction	4,000
NFPS - Phase 1 — Wellhead Platforms, Topsides, and Jackets	QatarEnergy LNG	Construction	1,000
NFPS - Phase 2 - Offshore Facilities Package	QatarEnergy LNG	Construction	2,000
NFPS – Phase 2 – Overview	QatarEnergy LNG	E&P	3,000
NFPS – Phase 2 – Subsea Pipelay Package	QatarEnergy LNG	Construction	1,000
NFPS Compression Project – Overview	QatarEnergy LNG	E&P	7,000
NFPS Compression Project – Package 2 – Platforms	OatarEnergy LNG	Construction	4,500
NFPS Compression Project – Package 3 – Offshore Platforms and Pipelines	QatarEnergy LNG	EPC ITB	700
NFPS Compression Project – Package 4 – Platforms	QatarEnergy LNG	EPC ITB	4,000
Qatar Art Mill	Qatar Museum Authority	Design	550
			4.000
Qatar PPP Schools Development Program — Overview	Ashghal	Construction	1,000
Qatar PPP Schools Development Program – Overview Special Economic Zone – Overview	Ashghal Manateq	Construction Construction	3,550

^{*} E&P = Engineering and procurement; EPC ITB = Engineering, procurement and construction invitation to bid: FEED = Front-end engineering and design; PMC = Project management consultancy

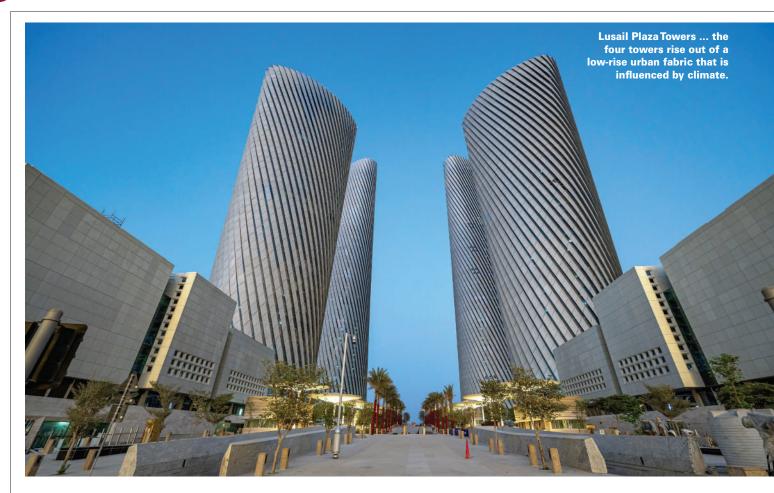






Consultant	Contractor	Start date	End date
-	Hanwha Ocean, PTSC M&C, Rosetti Marino, Subsea 7	2020-Q1	2024-Q3
-	China Offshore Oil Engineering Company (COOEC), Hyundai Heavy Industries, L&T, McDermott International	2021-Q4	2028-01
Fluor Corporation	-	2012-Q1	2029-Q1
Mott MacDonald	Calik Enerji, Elegancia Arabia, Metito	2019-Q1	2026-02
-	-	2022-01	2029-04
QatarEnergy	McDermott International	2014-02	2027-Q4
-		2022-03	2025-03
-	-	2017-Q1	2027-Q4
Astad Project Management, Atkins, Egis, Hill, Louis Berger Group, Parsons, Systra Consulting, Worley	Aktor, Al Jaber, Archirodon, CCC, Darwish Engineering, FCC Construction, Galfar Al Misnad, GS Engineering, HBK, Impregilo, Larsen & Toubro (L&T), Obrascon, Huarte Lain (OHL), Petroserv, PORR Construction, Qatari Diar, Redco, Samsung C&T Engineering, SBG, SK Engineering, STFA, Yapi Merkezi, Yuksel Insaat	2008-02	2026-Q1
-	COOEC, Qatar Engineering and Construction Company, Saipem	2014-Q1	2027-Q1
-	COOEC	2021-Q3	2027-Q4
-	-	2016-Q3	2027-Q4
Faithful + Gould	Midmac Contracting, PORR Construction	2018-02	2024-Q3
Aecom	-	2019-Q4	2025-Q1
Bechtel, Hill	Aktor, Al Jaber Engineering, Arabian Bemco, Bahadir, Boskalis, Cebarco, CCC, Darwish Engineering, Dredging International, Gamuda, Great Lakes Dredge & Dock, Gulf Housing, Midmac, Muhibbah Engineering, Punj Lloyd, Sinohydro, Taisei, Takenaka, TAV, Urbacon	2003-Q2	2025-03
-	Bahadir, Urbacon Trading & Contracting	2018-Q4	2024-04
-	Samsung C&T Corporation	2022-03	2024-Q4
EllisDon, Parsons	Al Ali Projects, Al Jaber Engineering, HBK, Hochtief, Midmac, Qatar Building Company, QD, SBG Construction, Samsung C&T, WCT Engineering, Yuksel Insaat	2002-Q4	2025-01
-	-	2017-Q4	2029-Q4
General Real Estate Company (GREC)	Orientals Enterprise	2010-Q1	2027-Q4
-	McDermott International	2019-02	2024-04
-	McDermott International, Saipem	2018-02	2027-03
-	McDermott International	2018-02	2024-04
-	Saipem	2019-Q1	2025-Q1
-	Saipem	2019-Q1	2024-Q4
-	Saipem	2019-Q1	2027-Q3
-	McDermott International, Saipem	2019-Q4	2025-Q4
-	Saipem Italy	2019-Q4	2025-Q4
-	-	2019-Q4	2027-Q3
	-	2022-04	2027-Q4
-	-	2015-02	2030-02
-	Al Jaber Trading, Barwa Real Estate Company, Dar Al Uloom Real Estate	2019-Q1	2025-03
Aecom, Astad Project Management	Egis, Sacyr Vallehermoso, Urbacon	2014-02	2025-Q4
- ** List includes projects worth over \$450 millio	- an aniv	2018-02	2029-Q4 Source: DMS Projects
List includes projects worth over \$450 millio	ni only.		Source. Divis Projects

Gulf Construction, October 2024



LUSAIL'S LOFTY LANDMARK

TOWERING landmark project comprising four distinctive high-rise buildings, which is envisioned as the catalyst for a new central business district in Lusail city, is now receiving its final touches.

The Lusail Plaza Towers now boasts two of the tallest towers (Tower 3 and Tower 4) in Qatar standing at 301 m tall, claiming the title from the 300-m Aspire (Torch Tower) which was completed in 2007. With the exterior construction of the two of the taller buildings having been successfully completed, the focus has now shifted to finalising the interior, according to Hyundai E&C, the Korean contractor responsible for these two high-rises.

The other two towers that rise to a height of 219 m have been built by Midmac Contracting.

The 1.1-million-sq-m Foster + Partnersdesigned development is expected to host the headquarters of the Qatar National Bank, Qatar Central Bank and Qatar Investment Authority, alongside several other global organisations including Qatari Diar, while creating a new downtown district that is sensitive to the climate. The project is part of a larger masterplan also designed by the leading UK-based architectural practice.

Located at the end of the commercial boulevard that links the new Lusail football stadium to the corniche, the two taller towers stand at 70 storeys, while the other two are 50-storeys high, all arranged symmetrically around a central plaza that seeks to complement the existing public spaces in Lusail City, according to the designer.

At the base, a network of three-, fourand five-storey podium buildings surround each tower. Providing support facilities for the towers with shops, cafes, events and exhibition centre, gym facilities, training facilities, banks and restaurants, they animate the public realm, and are carefully placed to form human-scale streets and a shaded, pedestrian-friendly ground plane. The plaza contains a new metro station with pedestrian links to the towers above and access to several event spaces that draw life to the waterfront, according to Foster & Partners.

DESIGN

Luke Fox, Head of Studio, Foster + Partners, said: "We have created a new symbol for the Lusail City. The towers, with their heavily shaded envelopes, are both sculptural and designed for their location and climate. The four towers rise out of a low-rise urban fabric that is influenced by climate, creating an intimate human-scale streetscape while responding to the city on an urban scale."

The project is an exemplar of Foster + Partners' integrated approach to design. The practice carried out the architectural and environmental design alongside structural and MEP engineering for the entire project and is also working on the fit-out of a significant portion of the building.

The project is underpinned by innovation, exemplified by the technological tools developed by the practice to assist the integrated design team. Foster + Partners' team deployed an in-house software system called 'Hermes' that coordinates design data for the project and facilitates sharing of this data in real time across different applications, disciplines, organisations and locations around the world. Using specially created plug-ins for the different software applications used by architects, engineers and other consultants, design changes made by one group would automatically and instantly be available to the digital models being used by others.

The elliptical footprints of the towers morph through 90 degrees as they rise up, gently shifting the viewing axis outward and offering stunning views of the surrounding city and waterfront.

"The tower façades - clad in marinegrade aluminium - are designed in response to the sun with projecting profiles that wrap around the building, shading the glazing from the harsh sun, while preserving views out and daylight. The active systems design proposals include centralised thermal storage using innovative phase change materials to reduce cooling energy, high-pressure hydronic systems to reduce pumping energy, demand-controlled ventilation to reduce fan energy, efficient LED lighting and advanced automation controls which contribute to reducing the site energy demand by 35 per cent when compared to a baseline building.

"In response to the increasing water conservation requirement, grey water, rainwater and condensate is recycled and reused



Located at the end of the commercial boulevard that links the new football stadium to the corniche, the two taller towers stand at 70 storeys, while the other two are 50-storeys high

on-site for irrigation and toilet flushing, significantly reducing the demand for water. The Lusail Plaza Towers development targets 4 and 5 stars, the highest level in the regional Global Sustainability Assessment System," says a Foster & Partners spokesman.

The podium buildings feature ultrahigh-performance concrete, lightweight and low carbon-moulded concrete panels, giving the buildings a high thermal mass, with minimal punched windows that reduce the amount of solar heat to the interior spaces.

Some 20 per cent of the site is covered with lush but drought-tolerant landscape, where more than 70 per cent of the species are native. Inspired by the learnings from the region, the narrow human-scaled

streets and shaded terraces create an inviting public realm at ground level, with the building blocks arranged around court-yards that capture cooling breezes, Foster & Partners adds.

CONSTRUCTION

Hyundai E&C constructed the two tallest towers on Plot 3 and Plot 4.

"The stunning exterior boasts a unique curved design that transforms as it rises, making each floor different in size and adding significant complexity to the construction," says a spokesman for Hyundai E&C. "To tackle these challenges, Hyundai E&C utilised Building Information Modelling (BIM) from the early design stages, creating a 3D model to minimise errors. Crucially, the company focused on ensuring the safety of the two towers, by reinforcing their ability to withstand strong winds."

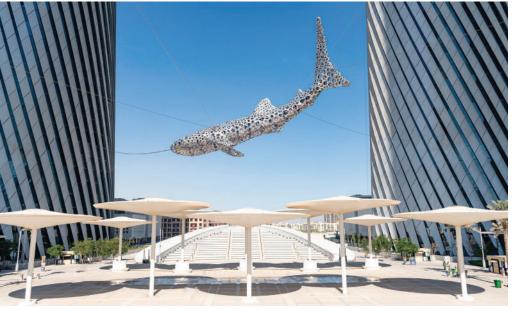
To further enhance wind resistance, the Korean builder conducted wind power and pressure tests on a 1/500 scale model in its own wind tunnel test lab, refining its expertise in wind-resistant design.

In addition to its towering and stunning façade, Lusail Plaza Towers is packed with cutting-edge Hyundai E&C technologies, he says. The building's protruding profiles are designed to respond to sunlight, preserving outdoor views and natural light while providing shade to combat the intense desert heat. Energy efficiency is further enhanced through centralised heat management, a high-pressure hydronic system, demand-controlled ventilation, and automated LED lighting control.

The construction features an outrigger technique to control building vibrations and resist earthquakes.

Midmac was responsible for the construction of the two 50-storey towers that have an elliptical plan. The podiums are designed to cascade down in scale towards the sea and range in height from ground-plus-five storeys to ground-plus-two storeys. The basement contains car parking, services, and links to the Light Rail Transit station. The towers, which have a distinctive fin profile, are crowned with cladded structural steel.

Late last month, Lusail Plaza Towers was recognised with a 2024 Council on Tall Buildings and Urban Habitat (CTBUH) Award of Excellence in both the Systems Award and the Façade Award within the Component category.



The streets and shaded terraces create an inviting public realm at ground level.

Qatar



\$5.5BN CULTURAL AND TOURISM HUB

N ambitious entertainment project that will boast 16 tourism zones, multiple resorts, a mega theme park, a golf course as well as a marina has been launched by Qatar's Ministry of Municipality in partnership with Qatari Diar Real Estate Investment Company, a unit of the Qatar's sovereign wealth fund.

Estimated to be worth QR20 billion (\$5.5 billion), the Simaisma Project will span 8 million sq m, and extend along a 7-km stretch of pristine beachfront on Qatar's eastern coast, in the area known as Simaisma Beach. The new cultural and tourism landmark is expected to offer unique all-year-round experience with outdoor air-conditioning technology.

Launched by HH Prime Minister and Minister of Foreign Affairs Sheikh Mohamed bin Abdulrahman bin Jassim Al Thani at the end of June, the project aims to attract investment by offering 16 tourism zones for development by the private sector, including resorts spread out over four zones, each with a unique design and character. In addition, the development will feature a large-scale theme park, an 18-hole golf course, residential villas, a yacht club and marina, as well as luxury restaurants and retailers.

At the launch, Qatari Diar Real Estate Investment Company CEO Eng Ali bin Mohammed Al Ali said: "We have meticulously planned this project under the guidance of the Ministry of Municipality and in alignment with Qatar's trajectory of continuous growth. This project is poised to establish new benchmarks for tourism in the region and write a new, remarkable chapter in Qatar's success story."

According to a *Bloomberg* report, Qatar is starting work on the Simaisma Project which is anchored by the 65,000-sq-m theme park – bigger than Walt Disney's Magic Kingdom in Florida, US – that will be launched in the first phase with the

goal of attracting investors for subsequent phases.

Qatari Diar Real Estate Investment Company is reported to be in discussions with global park operators to manage the amusement park. Saudi Arabia, the UAE, Turkey, the US and European countries have expressed interest in the project, according to Eng Ali.

Sustainability will be a fundamental pillar of the project, with reliance on smart construction systems, in addition to the use of local and recycled materials, as well as the latest in construction technology.



A yacht club and marina are among the many attractions of the Simaisma Project.



UCC taps 3D printing for mega schools project

struction and infrastructure company in Qatar, and Denmark's Cobod, a leading manufacturer of concrete 3D printers, have signed a contract for the supply of the world's largest third-generation 3D printers that will be used to build schools in the country.

The signing ceremony took place last month in Doha, between Ramez Al Khayyat, President of UCC Holding, and Henrik Lund-Nielsen, CEO and Founder of Cobod, along with other dignitaries and key stakeholders.

UCC Holding and Cobod will collaborate to build schools using the third-generation 3D printers. The schools will cover a total area of 40,000 sq m, setting a Guinness World Record for the largest buildings constructed using 3D printing technology worldwide.

The project places a high priority on sustainability, with Cobod's advanced 3D printing technology specifically designed to reduce material waste and improve efficiency, resulting in reduced concrete consumption, a critical factor in minimising

the carbon footprint of the construction process.

By using 3D printing, the schools will be built with fewer raw materials while ensuring structural integrity, making the construction process environmentally friendly, says UCC Holding.

Cobod technology also enables the automated construction of concrete buildings and structures through improved designs that enhance the efficiency of concrete and reinforcement use, which is in line with Qatar's National Vision 2030.

UCC Holding's Chairman Moutaz Al Khayat comments: "The partnership with Cobod is a leap forward not only for the construction sector in Qatar, but also globally. We always strive to adopt the latest technologies that contribute to achieving sustainability and efficiency in our operations, and this project is part of our commitment to achieving Qatar National Vision 2030. Through this advanced technology, we set new standards for sustainable construction and contribute to reducing the environmental impact of our operations."

"Our partnership with UCC Holding

and the schools project represents an exceptional leap forward for the construction industry pushing it years ahead in terms of use of the technology, scale of the projects and aims for a more sustainable future. Through 3D printing, we can reduce waste, minimise the use of materials, cut down on CO₂ emissions, and build in a way that respects the environment," says Lund-Nielsen.

As per the agreement, Cobod will provide consulting on the design, manufacturing, installation, and supervision of concrete printers. It will also provide on-site training and technical support to UCC Holding to ensure the 3D printing process is implemented efficiently.

Construction of the two schools is scheduled to begin in 2025, and the use of Cobod's third-generation 3D printers will ensure a streamlined and efficient process. Each school will have a two-storey structure, featuring a 100×100 -m footprint.

The two BOD XL printers from Cobod will have a record-breaking size of 50 m in length, 30 m in width and 15 m in height each. The printers will operate at the fastest printing speed possible, ensuring rapid completion while maintaining high standards of safety and sustainability.

With more than 80 printers sold on six continents, Cobod technology has been used on some of the world's most prominent 3D construction projects.