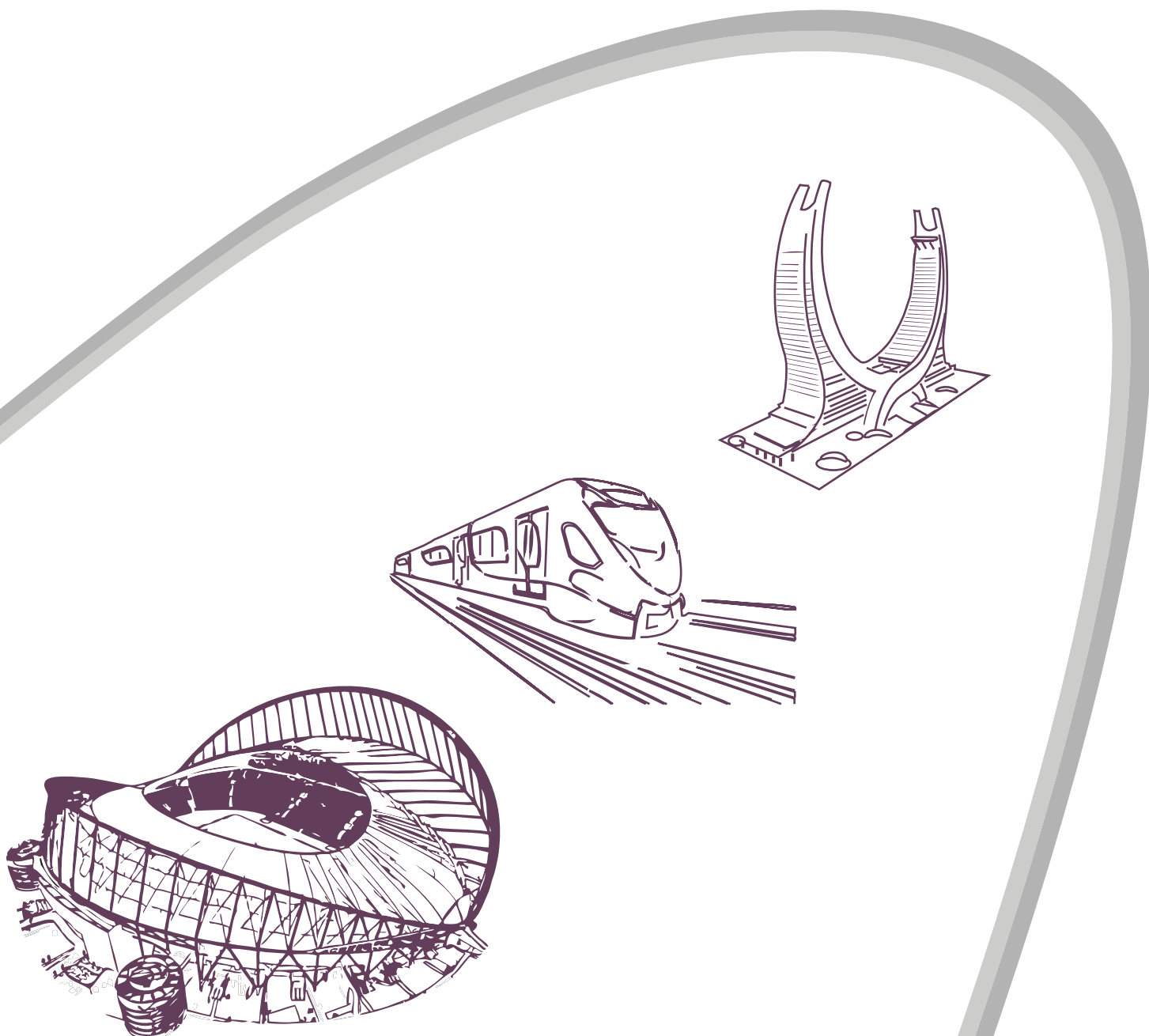


QATAR: LUCRATIVE OPPORTUNITIES IN ENGINEERING SERVICES

BUSINESS OPPORTUNITIES FOR ENGINEERING SERVICES COMPANIES



مركز قطر للمال
QATAR FINANCIAL CENTRE

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MESSAGE FROM THE CEO AND BOARD MEMBER

Beginning with the launch in 2008 of the Qatar National Vision 2030, Qatar embarked on an ambitious infrastructure programme. Approximately 80% of projects in Qatar are government funded, and these include the new rail network and metro system; football stadia; road improvements and expansions; and utilities upgrades among others. It is this public sector programme that is increasing the nation's private sector growth as service industries move in to realise these multibillion dollar construction and transport projects.

The engineering sector in particular is anticipated to experience strong growth over the next decade, and there is no doubt that this is an exciting time to be an engineering services provider in Qatar.

A catalyst for the current unprecedented expansion, and a major driver of engineering in the country, is the 2022 FIFA World Cup. Nevertheless, with Qatar's upward trajectory forecast to continue for many years to come, the opportunities available will continue long past the last ball being kicked into play.

As the authority on doing business in Qatar, the Qatar Financial Centre (QFC) has published this report on the engineering sector, offering expert insight into the market and operating conditions, coupled with analysis of the opportunities available.

I hope you find this report useful and also look forward to welcoming you at the QFC soon.

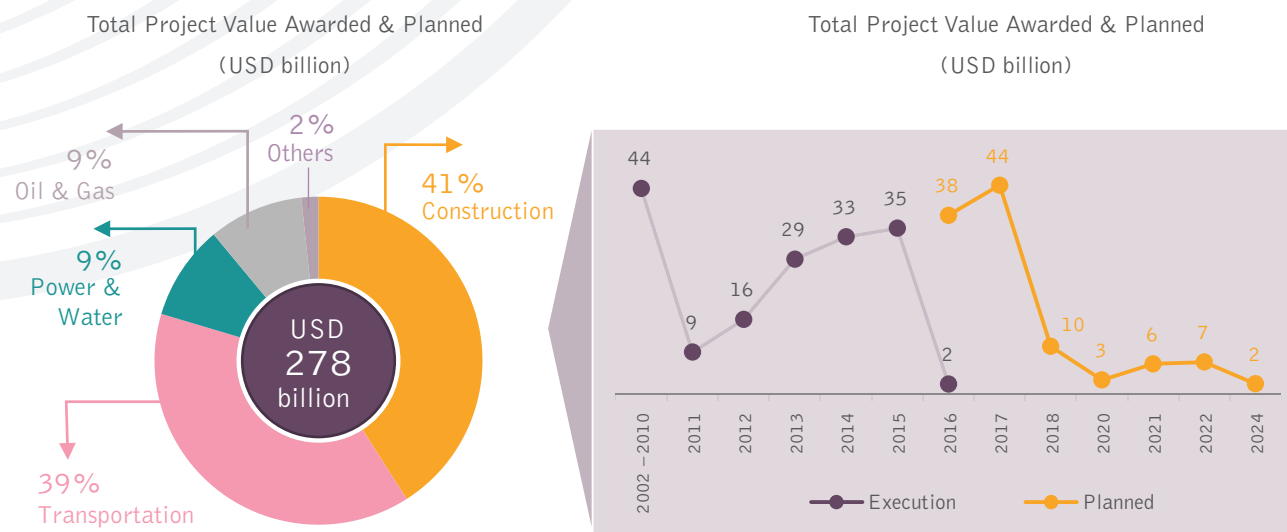
Yousuf Mohamed Al-Jaida

Chief Executive Officer, QFC Authority

KEY HIGHLIGHTS

Qatar is an attractive destination for engineering services companies, with Qatar National Vision (QNV) 2030 opening up avenues for investment in infrastructure development. Through the launch of QNV 2030 in 2008, Qatar embarked on a massive infrastructure build-up and upgradation programme to realise its objective of economic diversification and long-term sustainable growth. The sheer scale of new projects in the pipeline is expected to propel the engineering sector and make Qatar a lucrative market for engineering companies over the next decade.

Engineering Services Statistics¹



The pivotal role played by the construction and transportation sectors in the economic development has made them the main recipients of investment in the country. QNV 2030 and 2022 FIFA World Cup are the two major catalysts for the engineering service industry in Qatar.

Qatar National Vision (QNV) 2030

QNV 2030 provides the framework for national strategies, policies, planning, and fund allocation for various projects. The programme has boosted the development of social infrastructure, such as educational, healthcare, and cultural projects. Overall, QNV 2030 is the primary driver of the engineering services market in Qatar.

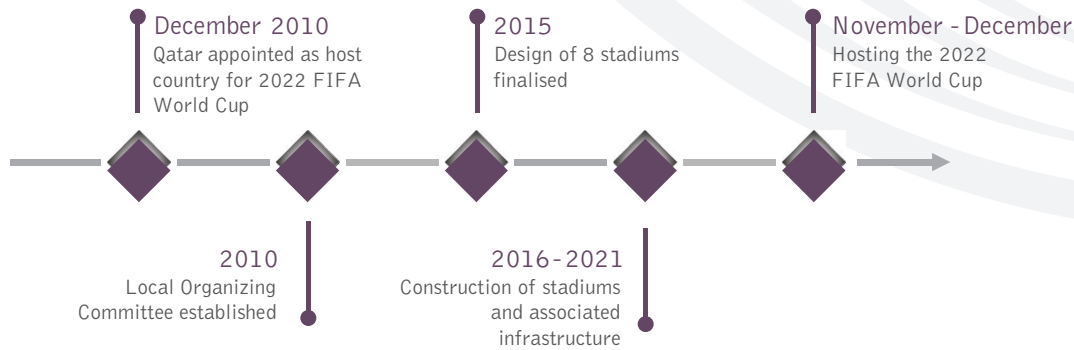
Human Development	
Social Development	
Economic Development	
Environment Development	

¹ MEED database

2022 FIFA World Cup

As Qatar gears up to host the 2022 FIFA World Cup, the construction of sport facilities and transportation infrastructure, such as the Doha Metro is expected to accelerate in the coming years. This event is one of the biggest drivers of engineering services and has imposed a time frame for the completion of key projects to successfully host the world’s biggest sporting event. 2022 FIFA World Cup will further help Qatar Tourism Authority (QTA) to achieve its aim of becoming a major tourist destination by 2030.

Timeline



Engineering Services Landscape

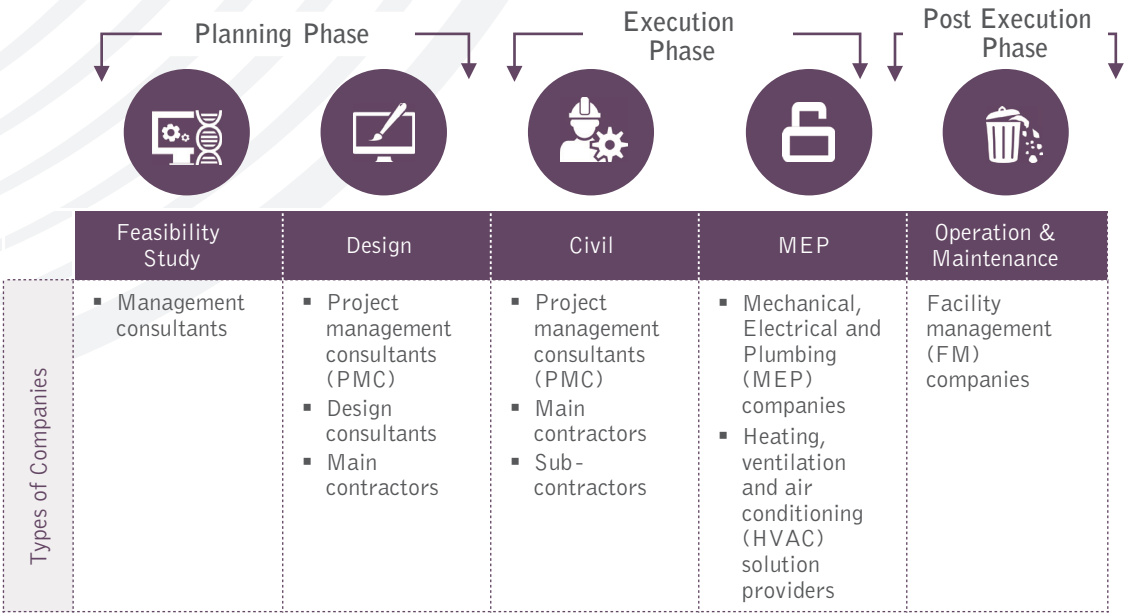
Qatar is focusing on completing its crucial infrastructure projects before 2022 FIFA World Cup and is therefore infusing the required investment despite a decline in oil prices. About 80% of the projects in Qatar are government-funded.¹ The below-mentioned public agencies are the largest spenders on engineering services and play a vital role in the industry’s development.

Qatar Engineering Services Landscape					
Name of Entity	Qatar Public Works Authority (Ashghal)	Qatar Rail Company	Supreme Committee for Delivery & Legacy (SC)	Qatar Petroleum (QP)	Qatar General Electricity & Water Corporation (KAHRAMAA)
Key Responsibilities	Delivers and manages infrastructure and public buildings	Rail network and systems	2022 FIFA World Cup infrastructure	Activities in oil and gas industry	Transmission and distribution system for electricity and water sectors
Key Projects	- The Expressway Programme - Dukhan Road / Khalifa Avenue - Lusail Expressway	- Doha Metro - Passenger & Freight Rail	Al Wakrah, Al Bayt, Khalifa, Qatar Foundation, Al Rayyan, Lusail Stadiums	- Qatar Petroleum District - Bul Hanine Project - Dukhan Facility	- Water Security Mega Reservoirs - Qatar Transmission Project

1 MEED database

A host of opportunities lie across the value chain of projects for engineering service firms, from feasibility studies to civil works to operation and maintenance.

Engineering Services Value Chain



The allure of the Qatar market can be surmised by understanding the different layers and segments of engineering services involved in infrastructure projects. Each stage of engineering services involves different companies offering specific skill sets.

Business Opportunities – Across the Value Chain

Although engineering firms find opportunities across the value chain of infrastructure projects, considering factors such as competition, long-term sustainability, and project opportunities, companies engaged in other activities such as design, MEP, and facilities management are more likely to benefit in the coming years.

Type of Companies	Not Attractive -----> Very Attractive				
Design Consultants				●	
Main contractors and Sub -contractors			●		
Mechanical, Electrical, and Plumbing (MEP) contractors				●	
Project Management Consultant (PMC)			●		
Facilities Management (FM) companies				●	

Business Opportunities – Solutions

Although the overall engineering service sector in Qatar seems bullish, a few specialised services are expected to gain more traction compared to others. Therefore, irrespective of the overall attractiveness of a particular solution category, a few of the niche solutions are always expected to witness high demand, even in a competitive market.

Solutions	Overall Attractiveness	Specific Opportunities
Feasibility	↓	▪ Geotechnical investigations and geophysical surveys
Design	↑	▪ Sustainable designs, safety design, building information modeling (BIM), shop drawings, modular design, and acoustic design
Civil work	↔	▪ Construction and disposable waste management (C&D); drainage, sewerage and stormwater management
MEP	↑	▪ Sustainable HVAC, building management system (BMS), fire safety systems and services; surveillance
Operation & maintenance	↑	▪ Geotechnical investigations and geophysical surveys

Business Opportunities – Industry

While the greater part of the current infrastructure projects belongs to the construction sector, the transportation sector in particular offers huge opportunity. The need for a state-of-the-art public transport system before the start of 2022 FIFA World Cup has augmented the demand for engineering firms specialising in rail and road transport. Also, since the completion of crucial transport and sports infrastructure projects is essential to successfully host the World Cup, Qatar has streamlined its regulatory agencies to accelerate the investment process as well as to remove regulatory hurdles. Similarly, to achieve the goals of QNV 2030, the government has accelerated projects in the construction sector, mainly related to residential, healthcare, and education infrastructure development.

Construction Industry¹:



LREDC- Lusail Development
Value – USD 23.0 billion



Barwa Al Khor Development
Value – USD 9.9 billion



UDC - Pearl Qatar
Value – USD 3.0 billion



Manateq - Qatar Economic Zone (QEZ): QEZ3
Value – USD 2.7 billion

¹ MEED database

Transport Industry:¹



Doha Metro: Gold Line: Tunneling Works
Value – USD 4.4 billion



Doha Metro: Systems, Rolling Stock and Track Work
Value – USD 4.1 billion



Expressway Programme
Value – USD 3.4 billion



Hamad International Airport
Value – USD 3.3 billion

There is a plethora of small-to-big ongoing and planned projects which will keep the growth momentum for engineering companies for the next few years. At present, Lusail City is the largest ongoing project in the country, along with the Doha Metro, which is progressing rapidly. Other notable projects include the overhaul of the national road network and the construction of a new port. All these activities are a small manifestation of the larger opportunities in Qatar for engineering services.

Sub-industry Opportunity:

Under each industry there are specific sub-segments which offer bright business opportunities for engineering firms. Following are the main sub-segments offering immense business prospects:



¹ MEED database

CHAPTER 1: ENGINEERING SERVICES IN QATAR

Macroeconomy

Qatar has gained the status of a high-income economy over the last decade because of its spectacular economic growth, driven by its vast oil and gas reserves. For the past 15 years, oil upsurge supported the large fiscal surpluses and rapid economic expansion. During 2000–2014, Qatar’s real GDP rose at a CAGR of 19.3%, and with consecutive years of fiscal surpluses, the country’s total foreign reserve reached USD 41.8 billion as of December 2015. However, this growth momentum slowed in 2015 as falling oil prices led to a decline in GDP growth to 3.7% as compared to 4.0% in 2014.¹ Furthermore, in 2016, the country is expected to run a ‘moderate’ budget deficit, reflecting the fall in oil prices.

To tackle these short-term headwinds, Qatar has taken a number of austerity measures to curb government spending and increase alternate revenue sources. Key initiatives include hiking prices for utilities (water and electricity) and energy and increasing the fine levied on water wastage in order to control its usage and subsidy, among others.

In order to achieve sustainable growth, authorities undertook significant policy overhaul at the national level in 2008, driven by the launch of the Qatar National Vision (QNV) 2030. Under this initiative, Qatar used significant surplus from the hydrocarbons sector and invested in the non-hydrocarbons sector, predominantly infrastructure projects. This strategy paid off in 2015, when non-hydrocarbon sectors contributed 63.8% to the country’s GDP.² The building and construction sector continues to be the key beneficiary of this programme, making strong contribution to non-hydrocarbon GDP growth.

Project spending, required for the development of world-class infrastructure as well as to meeting the deadlines ahead of the 2022 FIFA World Cup, has created a large influx of expatriate workers and tourists, generating strong demand for services such as finance, insurance, real estate, restaurants and hotels.¹ However, owing to the recent fiscal consolidation efforts, new projects awarding has slowed and some of the major non-critical projects such as ‘Sharq Crossing’ have been put on hold. Nevertheless, this phase will help Qatar focus on critical projects, particularly those associated with the World Cup.

Although falling oil prices affect the economy, the impact will be offset by the availability of sizeable financial buffers and continued public investments. According to an IMF report, Qatar has sufficient financial reserves to fund its fiscal deficit for 20–30 years.² Also, according to the latest Qatar National Bank (QNB) economic forecast, oil prices are expected to recover as the excess supply declines, leading to an average oil price of USD 56.0 per barrel in 2018.

This will further improve the country’s financial health. Moreover, Qatar’s GDP growth is expected to accelerate 2017 onwards and reach 4.2% in 2018, mainly driven by large investment spending and increased gas production from Barzan field.¹ Despite all these factors, Moody’s credit rating agency adjusted the country’s rating from ‘Aa2’ with stable outlook to ‘Aa2’ with negative outlook in May 2016.

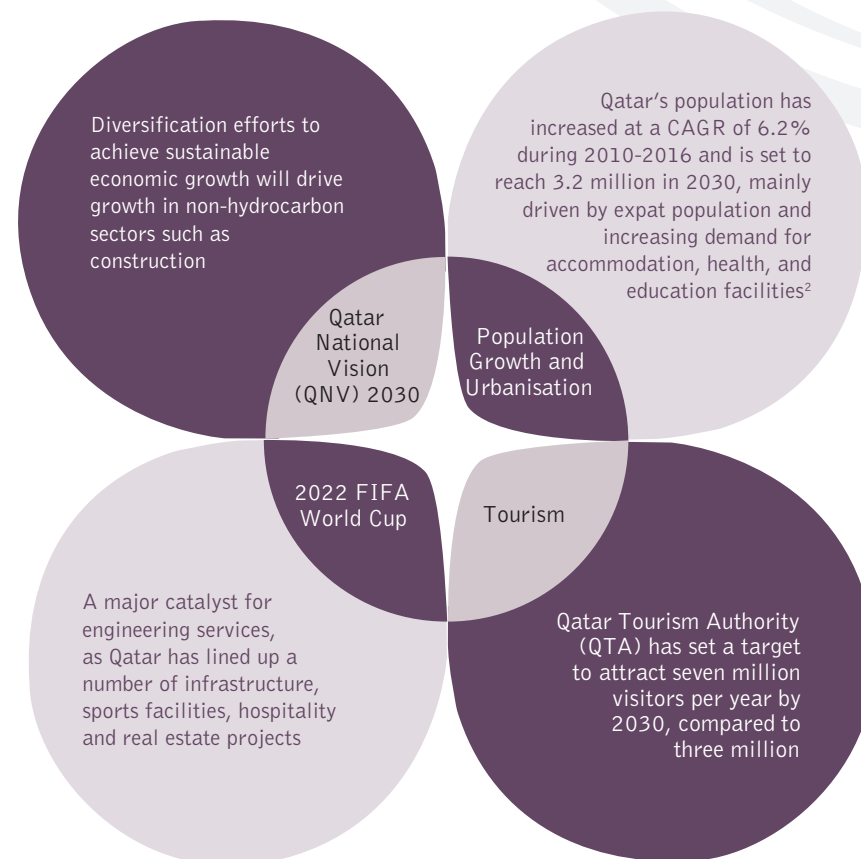
¹ QNB Qatar Economic Insight 2016
² IMF 2016 Report on MENA & CCA

Overall, the macroeconomic foundation of the country is sustainable in the long term amid short-term challenges on account of a high national savings rate, stable exchange rate, and low inflation. Qatar’s key economic features are as follows:



Engineering Services Sector in Qatar

Engineering services are the backbone of infrastructure projects, and are involved in every stage of a project – from feasibility study, design, construction, and quality assessment to project management. The potential for engineering services can be gauged from the magnitude of construction activities involved in a particular industry. Transportation industry, especially the road and rail sectors, involves large construction activities and thus offers a huge opportunity in engineering services. The country's efforts to build world-class infrastructure before the start of the 2022 FIFA World Cup, and its objective of sustainable development highlighted in the Qatar National Vision 2030 are further opening up the prospects for engineering companies in Qatar. Important market drivers for engineering services in Qatar are:



Fuelled by the above-mentioned factors, Qatar's engineering sector has been buoyant with 709 projects in the stage under execution and 452 projects in planning stage.¹ Along with new developments, the country is also improving its infrastructure through investment in technology and capacity expansion project such as Bul Hanine Field Redevelopment Project, which will increase the production capacity of the field.

¹ MEED database

² Euromonitor International, United Nations Department of Economic and Social Affairs: Population Division

The flourishing investment environment in Qatar offers rewarding business opportunities to engineering firms, enabling them to participate in several small- and large-scale projects. Moreover, the government is streamlining and simplifying its regulatory policies to enhance the ease of doing business in Qatar.

Key Engineering Services Trends

Although Qatar has also seen rationalisation of projects, it continues to invest in infrastructure development. Moreover, this continuity is less likely to be impacted by major global headwinds such as declining oil prices, as Qatar can leverage its high foreign reserves and low public debt to borrow funds from international market if the need arises.

Design-build is the most widely used procurement model in Qatar. However, the country is now witnessing emergence of the engineer-procure-construct (EPC) model, which is estimated to account for a 16% share of the total future project value, compared to 10% for ongoing project value.¹

Moving towards the expectations from engineering services firms, the sector is experiencing the following trends:

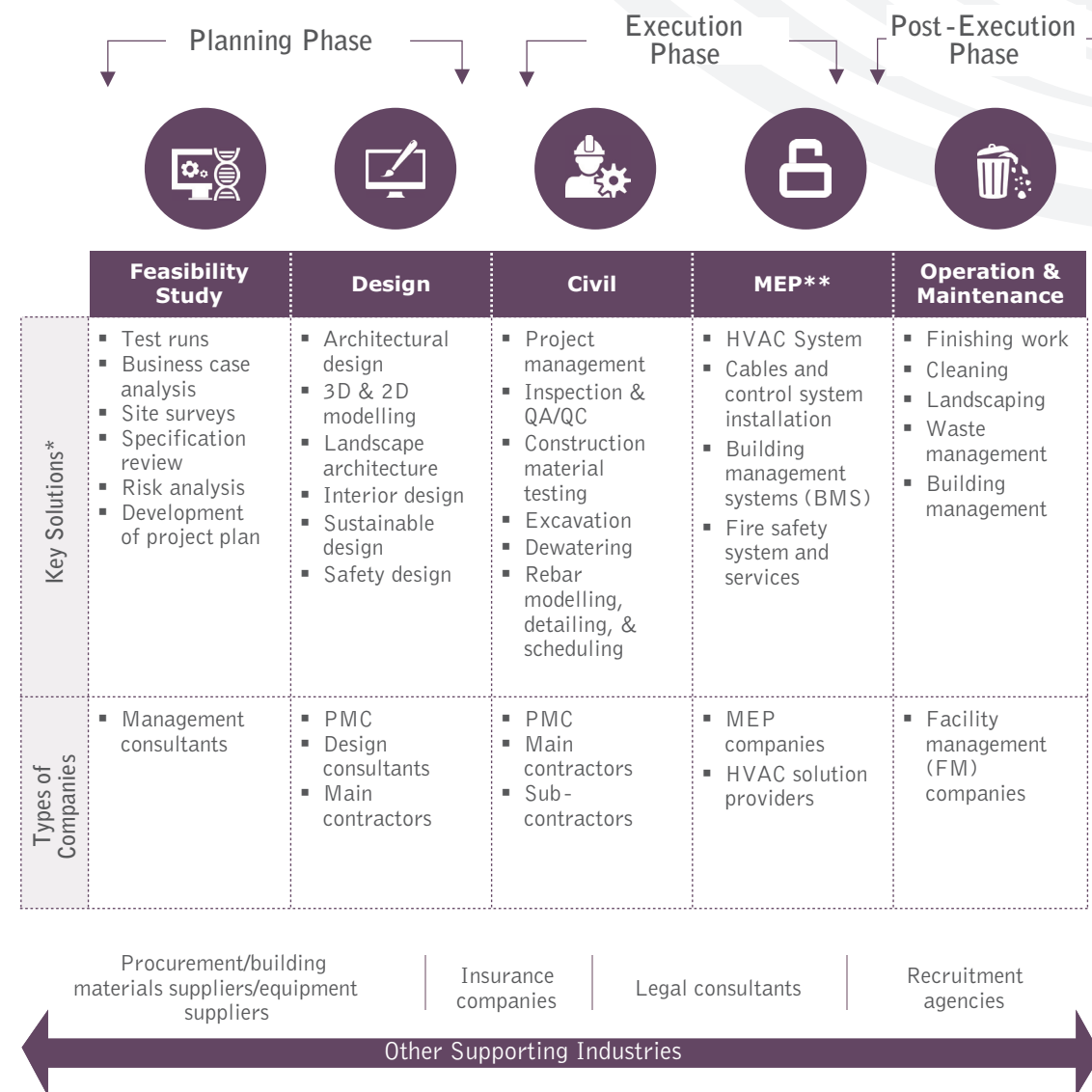


In Qatar, the top government agencies – Qatar Rail, Ashghal, Qatari Diar, KAHRAMAA, and Qatar Petroleum – dominate the demand, contributing to nearly half of the market spend on engineering services. However, on the supply side, the space is highly fragmented, with top 10 contractors accounting for only 18% of the total project value under execution. Overall, the engineering services market is highly competitive, with more than 300 contractors working on different projects in Qatar. The market leader, QD-SBG Construction Company, accounts for only 3% share of total project values under execution.

¹ MEED database

Engineering Services Companies Landscape (Value Chain)

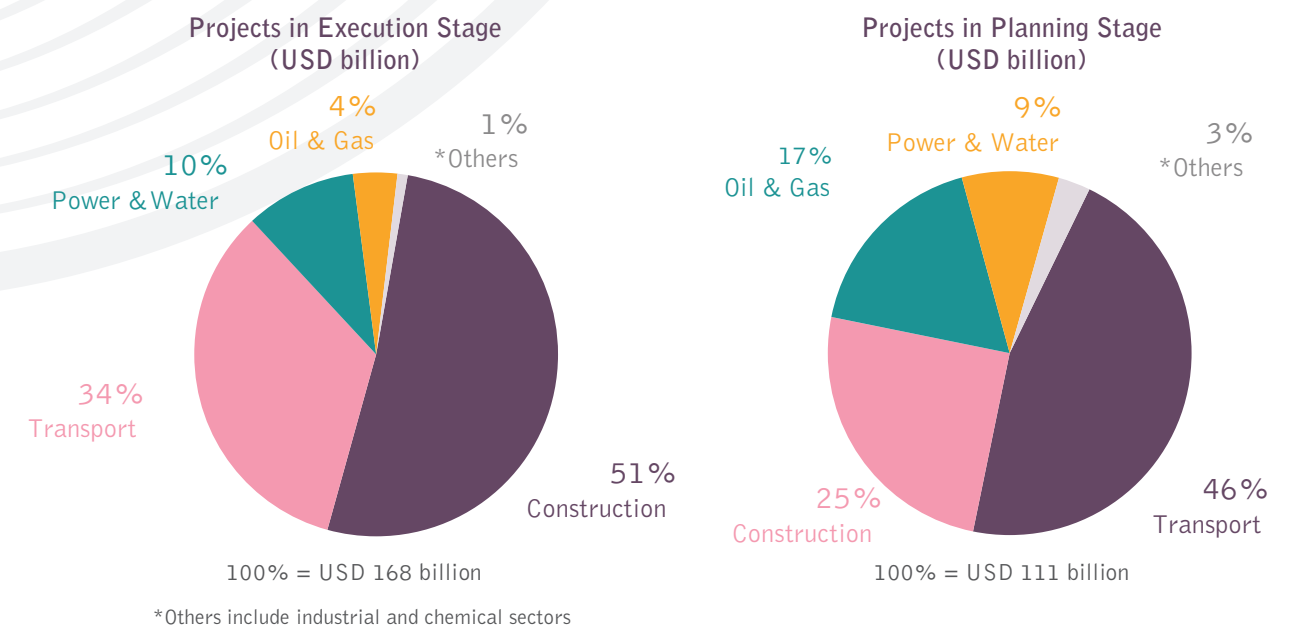
The engineering services landscape in Qatar is highly competitive with a number of international and regional players vying with each other for a market share. However, the government's strong commitment towards continued infrastructure spending on key projects will ensure that both existing and new players get enough opportunities for growth. Furthermore, in spite of a saturated market, there exists a host of niche business opportunities across the engineering services value chain. Hence, players with an established local partner and strong delivery capabilities are expected to take advantage of this situation to remain ahead of the competition.



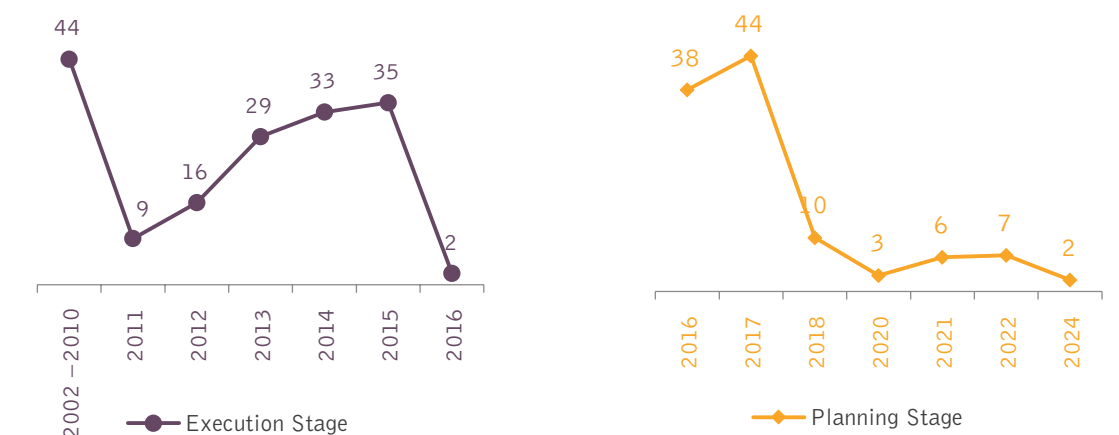
*Indicative list of basic activities
 **MEP: Mechanical Electrical and Plumbing

Projects Opportunities for Engineering Services¹

Infrastructure development for sustainable economic growth remains the biggest priority for Qatar, with major focus on the construction and transportation sectors. This focus is helping the country in its preparation to host mega events such as the 2022 FIFA World Cup. Between 2011 and 2016, a total of 714 projects worth USD 90.4 billion were completed, while 709 infrastructure projects with a combined value of USD 167.7 billion are under execution. The largest ongoing project is Qatari Diar's Lusail Development project, with a total value of USD 23 billion.



Total Projects Value Awarded/Planned (USD billion)



Note: Data as of June 2016
 1 MEED database

CHAPTER 2: QATAR NATIONAL VISION 2030

2.1 Overview

The Qatar National Vision (QNV) 2030 is a broad visionary framework, emphasizing the sustainable and comprehensive development of Qatar, with four focal areas: Human Development, Social Development, Economic Development and Environmental Development. Its long-term development objective is to transform Qatar into an advanced country by 2030. This policy roadmap has opened up a plethora of opportunities for engineering services companies.



To align Qatar's development with the long-term objective of the QNV 2030, a total of 14 sector strategies, including that of the infrastructure sector, were built around the four focal areas, comprising details of the current situation and future needs of the sectors.

2.2 Infrastructure Sector Strategy

Government budget for 2016 forecasts revenues of USD 42.9 billion and expenditure of USD 55.6 billion, leading to a fiscal deficit of USD 12.8 billion—the first in 15 years. This figure is in sharp contrast to 2015 revenues of USD 62 billion and expenditure of USD 60 billion, indicating a fiscal surplus of USD 2 billion. The government expects to cover the 2016 deficit by way of local and international debt issuances. It has indicated, however, that there would be no spending cuts in sectors such as healthcare, education, infrastructure and transport, a special focus on projects tied to the 2022 FIFA World Cup event.

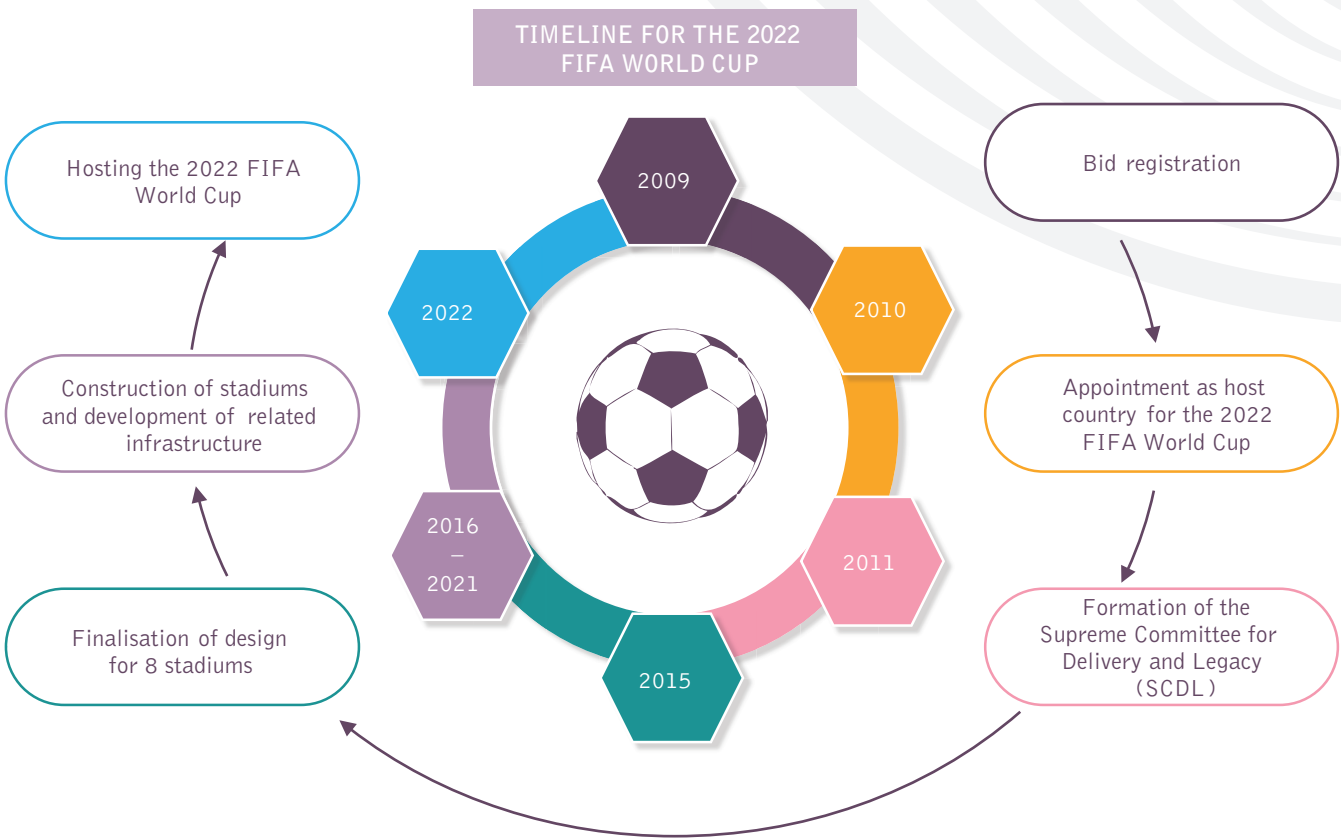
The development will include adding new infrastructure capacity as well as increasing efficiency of the existing ones in the country. Qatar's winning the right to host the 2022 FIFA World Cup has also supported its strategic alignment of infrastructure development within the timeline of the event. It has created the urgent need for faster implementation of necessary programmes and projects in order to successfully deliver the event. Accordingly, Qatar rescheduled its flagship projects to bring them in line with the present need for developing modern infrastructure for the event. For instance, the development of the Doha Metro project was put on fast track in order to get it ready before the start of the event.

Under the strategic framework, the country has made more investments in its non-hydrocarbon sectors to achieve economic diversification. Major projects in these sectors include the Hamad International Airport, internal and regional rail and metro systems, eight stadiums to host the 2022 FIFA World Cup, Lusail City, Education City and Msheireb Downtown Doha, and mixed-used developments in Doha. The country is also investing USD 6.4 billion in tourism infrastructure, which includes construction of hotels, resorts, sports facilities, theme parks, convention centres and shopping venues.

Investment in infrastructure projects is expected to be USD 110.8 billion between 2016 and 2024, majority of which will be in the construction and transportation sectors.² In addition, electricity, water and sewerage networks will be expanded to cater to the growth in the country's urban areas. Furthermore, projects worth USD 167.8 billion are currently under execution. To enhance the efficiency of present infrastructure, the country is investing in improvement of technology, restructuring of regulatory framework, and improving market and economic activities such as subsidies and charges applied in the sector.

CHAPTER 3: 2022 FIFA WORLD CUP

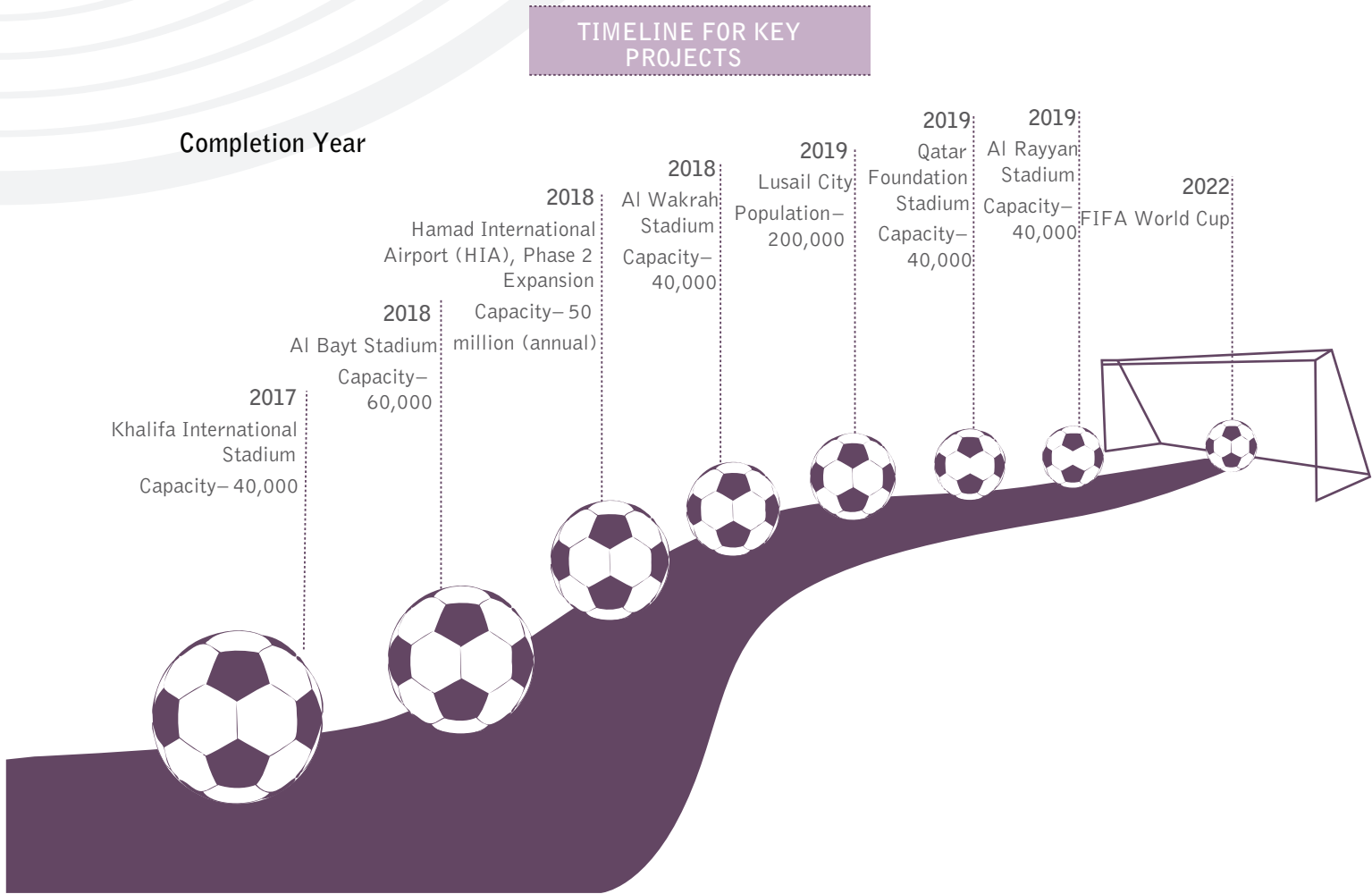
In December 2010, Qatar was the first Middle Eastern and the smallest country in the world to win the right to host a FIFA World Cup tournament, beating stiff competition from the US, Australia, South Korea and Japan. The mega event will involve 32 national teams from six confederations to play 64 games. It will be the first World Cup to be hosted during the winter season and will last for 28 days.



Qatar requires at least eight venues to host 64 matches for the World Cup, and for that it has earmarked USD 4 billion for the construction of stadiums and other linked facilities. As of now, the country has finalised designs of five stadiums: Al Rayyan, Qatar Foundation, Khalifa International, Al Bayt and Al Wakrah. Owing to the extremely hot climate in Qatar, stadium authorities plan to develop a cooling technology that will keep the stadiums at optimal temperature for playing and watching. Even though all stadiums constructed for the World Cup will be air-cooled, the 2022 FIFA World Cup will be a carbon-neutral event in which the energy requirements will be met through renewable sources. During matches, energy from the solar system, which will be embedded in the structure of these stadiums, will be harnessed for use; while on off-game days, it will be exported to power grids.

Also, the stadiums will be designed using a modular structure, in which parts can be disassembled after the event and will be used to construct new stadiums in developing countries to promote the sport.

This global event requires a multitude of infrastructural facilities, which has raised the demand for specialised companies in different engineering fields. The event will use 84,000 tonnes of structural steel, 70,000 outdoor lights, 2.3 million metres of fibre optics, and 10,880 doors, along with 9,200 trees planted around the stadium areas.¹



¹ Supreme Committee of Delivery and Legacy

CHAPTER 4:
BUSINESS OPPORTUNITIES – ACROSS VALUE CHAIN

Within the engineering services landscape, companies with sustainable business models and strong project opportunities and prospects will be at the forefront and will benefit the most from the government’s infrastructure development drive. Therefore, to establish the overall attractiveness of participants across the value chain, business competitiveness, long-term sustainability and project opportunities parameters were considered.

Based on these factors, businesses characterised by low competition, recurring demand, and positive growth outlook are benchmarked to be more attractive compared to others.

4.1 Design Consultants

Design consultants are typically engaged by the main client/contractor depending on the procurement model. On average, design activities account for approximately 5% of the total project spending. At present, there is high demand for designers who can deliver modern buildings/infrastructure projects with a traditional flavour in Qatar. In addition, design consultants are required to have strong knowledge of local laws and protocols. Specific and unique opportunities lie in sustainable designs, safety designs, shop drawings, modular designs and acoustics design practices. Furthermore, there is high demand for design consultants offering integrated BIM solutions.

Considering all market parameters, the overall market attractiveness for design consultants is ‘high’ based on the high number of upcoming residential and healthcare projects and high preference for design companies capable of delivering iconic projects.

Parameters*	Not Attractive -----> Very Attractive				
1. Business competitiveness			●		
2. Long -term sustainability				●	
3. Project opportunities				●	
Overall attractiveness				●	

*Business competitiveness parameter indicates the level of market saturation and competition intensity, long-term sustainability signifies source of revenue (i.e. the type of service offering accounting for majority of a company’s revenue) and future growth prospects, and the project opportunities parameter indicates the potential to win upcoming project tenders.

4.2 Main Contractors and Sub-contractors

This engineering services space is characterised by high competition, however players with international experience and a reputation of executing projects on time with the required quality standards can always prevail. Within this space, specific business opportunities are excavation; dewatering; construction and demolition (C&D) waste management; drainage, sewerage, and stormwater management.

Overall, business opportunities for main/sub-contractors remain ‘medium’ based on taking into account numerous ongoing/planned small-to-medium projects across the transportation and construction industries.

Parameters	Not Attractive -----> Very Attractive				
1. Business competitiveness		●			
2. Long -term sustainability			●		
3. Project opportunities				●	
Overall attractiveness			●		

4.3 Mechanical, Electrical, and Plumbing (MEP) Contractors

The MEP market in Qatar is expected to expand at a CAGR of about 15% to reach USD 15.5 billion in 2025 from USD 4.4 billion in 2016.¹ MEP works account for approximately 25-30% of project spending for building & construction. Typically, though main contractors have an internal MEP division, it is not large enough to execute all projects by itself. Hence, in spite of high competition, smaller and niche MEP contractors are always in demand.

By and large, business opportunities for MEP contractors are ‘high’, particularly in specialised services such as fire safety and services; surveillance systems; sustainable heating, ventilation and air conditioning (HVAC) solutions; building management systems (BMS); and intelligent traffic signal (ITS) and smart parking system.

Parameters	Not Attractive -----> Very Attractive				
1. Business competitiveness		●			
2. Long -term sustainability					●
3. Project opportunities				●	
Overall attractiveness				●	

1 Ministry of Economy and Commerce, Qatar

CHAPTER 5:
BUSINESS OPPORTUNITIES – SERVICES

4.4 Project Management Consultants (PMCs)

PMCs with international experience are typically engaged by government agencies. Factors such as a large number of government projects in the planning stage coupled with government agencies’ high reliance on PMC highlight this space’s ‘medium’ potential, offset by high competition.

Parameters	Not Attractive -----> Very Attractive				
1. Business competitiveness		●			
2. Long -term sustainability			●		
3. Project opportunities			●		
Overall attractiveness			●		

4.5 Facilities Management (FM) Companies

The FM market in Qatar is expected to expand at a CAGR of approximately 8.5% to reach USD 6.9 billion in 2025 from USD 3.3 billion in 2016.¹ Post the completion of large infrastructure and residential projects, there would be huge requirement for facilities management companies.

Parameters	Not Attractive -----> Very Attractive				
1. Business competitiveness		●			
2. Long -term sustainability				●	
3. Project opportunities				●	
Overall attractiveness				●	

1 Ministry of Economy and Commerce, Qatar

Overall Engineering Services Opportunities by Services

The surge in construction in Qatar has made available a wide range of opportunities for all types of engineering companies. However, in difficult economic conditions, such as declining oil prices, companies offering niche and critical services are expected to perform better.

	Feasibility	Design	Civil	MEP*	Operation & Maintenance
Specific Opportunity Areas	Geotechnical investigations and geophysical surveys	▪ Sustainable designs ▪ Safety designs ▪ Building information modeling (BIM) ▪ Shop drawings ▪ Modular designs ▪ Acoustics designs	▪ Construction and disposable waste management (C&D) ▪ Drainage, sewerage and stormwater management	▪ Sustainable HVAC ▪ Building management system (BMS) ▪ Fire safety systems and services ▪ Surveillance system ▪ Intelligent traffic systems (ITS) and smart parking system	Facilities management (FM)

Note: Above opportunities have been indentified based on primary interviews with industry stakeholders

5.1 Feasibility

– Opportunities in geotechnical investigations and geophysical surveys: Upcoming events, 2019 Athletics World Championship and 2022 FIFA World Cup, have spurred infrastructure development activity in Qatar substantially, thereby creating major opportunities in the engineering services space, predominantly in the transportation industry. This development has generated high demand for companies offering geotechnical investigations and geophysical survey services. Companies offering these services can leverage opportunities in planned mega transportation projects, such as the Qatar Rail Passenger and Freight Rail (award year 2017; budget USD 5.5 billion), Doha Metro: Phase 2 (award year 2022; budget USD 5 billion). Among these companies, those specialising in surface and underground rail projects are the most sought-after.

5.2 Design

– Sustainable design requirements: Qatar’s legislation mandating ‘greener buildings’ and rewarding them with a higher floor area ratio further underpins the government’s sustainable design initiative. In keeping with the global trend, Qatari clients now focus more on cost-effectiveness and high-quality designs, thereby creating more opportunities in the sustainable engineering design space. Furthermore, Qatar has witnessed increasing adherence to international sustainability rating systems, such as Leadership in Energy and Environment Design (LEED), as well as the local green building certification system ‘Qatar Sustainability Assessment System’ (QSAS), thereby driving demand for sustainable designs.

– Safety design requirements: The construction industry in Qatar is now focusing more on parameters such as safety design, evacuation planning, and fire safety during project planning. This need is driven by the changing landscape of major Qatari cities, characterised by a large number of skyscrapers, and the occurrence of a few high-profile fire accidents in Qatar and the GCC region; parameters like safety design, evacuation, and fire safety are gaining importance in the construction industry. This has brought into focus building architecture, and also thrown open more opportunities for fire consultants, facade designers, and testing experts. Furthermore, Doha plays host to international conferences such as ‘Safety Design in Buildings’ to further increase the awareness of safety standards and practices.

– Modular designs: Qatar has a small population and geographical area. Therefore, the country would not require all the high-capacity football stadiums it constructs for the 2022 FIFA World Cup once the event is over. Keeping this in mind, the government plans to build these stadiums with detachable (modular) parts, which will permit downsizing of capacity so that the venues can be used for local/smaller events after the World Cup. This gives rise to high requirement for innovative designs for the construction of these stadiums, thereby bringing design firms specialising in modular design systems into limelight. Furthermore, EPC firms are increasingly adopting the modular design approach while executing projects in oil, gas, and petrochemical industries. Under this approach, design companies opt for modular standardisation to apply common design specifications and guidelines across refinery or production platform projects as it significantly saves cost and time for energy projects. Therefore, the future of design companies focusing on modular designs looks very bright.

– Acoustic designs: Major clients in Qatar place very high importance on acoustics design: a design technique that helps minimise sound pollution in and around buildings. The role acoustics play in building construction has grown in recent years, and it is viewed as an important value addition to a project. Acoustics services are typically provided by specialised firms or acoustic consultants. The key acoustic services are professional guidance on appropriate sound isolation, interior acoustic design, acoustic surveys, and noise measurements. Increasing awareness, coupled with large-scale construction activities, has led to demand for companies offering acoustic design services. Sectors such as hotels and stadiums infrastructure are likely to be key adopters of these services.

– Shop drawings: Infrastructure projects offer opportunities in many engineering streams, including ‘shop drawing’, which refers to a detailed drawing of the construction and fabrication work and includes proposed material, shape, size, and assembly of the parts and instruction on the installation of the complete unit. Mega real estate projects such as Lusail City, Barwa City and Al Waab City involve a large number of shop drawings; for instance, primary research indicates that the Al Waab City project alone required about 4,000 shop drawings. While the main contractor has the primary responsibility for the final project design, there exists a huge untapped potential for outsourcing the task of shop drawings. These are typically executed by third-party smaller niche design companies based in India.

– Building Information Modeling (BIM): Qatar’s construction sector is witnessing rising implementation of Building Information Modeling (BIM), a technique that provides digital representation of physical and functional characteristics of the structure. Large-scale projects and clients such as Lusail City, Qatar Rail, Ashghal’s Doha Expressways, Qatar Foundation, Qatar Economic Zones, and the Supreme Committee are leading the adoption of BIM. Currently, almost all large-scale projects in the country use BIM across the building lifecycle: planning, designing, construction, management, and maintenance. However, there is supply-side constraint in this domain as very few consultants offer engineering design services with a holistic BIM approach. Furthermore, an increased number of tenders have been mentioning BIM as a pre-qualification criteria and a standard that bidders are required to comply with. BIM consultants can use this situation to their own advantage and plug the supply-side gap.

5.3 Civil

– Construction and demolition (C&D) waste management: Large-scale construction activities in Qatar have created significant quantities of construction waste. On average, approximately 10–12 million tonnes of solid waste is generated in a year in the country, of which almost 80% comes from C&D activities. Qatar, being a small country, faces land shortage in its cities and the authorities have realised that disposing C&D waste into landfills is not a long-term solution. It currently processes only 4% of its solid waste, which it plans to increase to 38% by 2030, and coupled with the fact that Qatar imports most of its construction raw materials, creates significant opportunities for recycling companies. Furthermore, the government has strongly backed this industry by funding a project called ‘Innovative Use of Recycled Aggregate in Construction’ and by amending its latest version of Qatar Construction Specifications (QCS 2014), which allows construction companies to use recycled aggregate. Currently, the Rawdat Rashed facility, the only major facility in the country, recycles approximately 2 million tonnes of waste per year, which represents only a small proportion of the total demand in the country. This leaves a larger pie of the recycling waste market for civil construction companies offering waste recycling systems in Qatar.

– Drainage, sewerage and stormwater management: ¹ Qatar has over 200 road projects in the planning phase over the next 5–7 years, worth USD 17.6 billion. Timely and successful execution of local roads and drainage systems are a key focus area of the Qatar National Vision 2030. Existing sewerage networks are undergoing maintenance, scheduled to be completed by 2019. All these developments provide excellent opportunities for the drainage, sewerage and stormwater management industry.

– Dewatering: Management of construction dewatering – the process of water removal from solid material or soil – has acquired preeminence in Qatar, following a growing concern over the environment.

5.4 Mechanical, Electrical and Plumbing (MEP)

– Fire safety systems and services: The risk of fire and associated hazards is high in Qatar due to its dry and hot climate condition. Hence, the infrastructure needs to be equipped with competent fire security systems to avoid any injury to people and property. Additionally, older buildings need to be retrofitted with new and upgraded fire safety systems. This will provide major thrust to the growth of companies offering fire safety systems and services.

– Surveillance systems: In order to fortify security of its citizens and protect critical state properties and infrastructure, the Ministry of Interior (MOI) has made it mandatory to install and maintain closed-circuit camera surveillance for business establishments. This directive has significantly boosted demand for superior security systems in the country. Industries such as banking, hospitality and retail will constitute the majority share of the security solutions market. Another emerging sector is transportation, which is witnessing increasing investments in security networks for road infrastructure including transport networks and traffic surveillance. Also, hosting of the 2022 FIFA World Cup will need more state-of-the-art security and surveillance systems, with high focus on safety and security of players and tourists expected to visit the country during the event. Such a critical scenario has put in a sweet spot industry players involved in providing products and services such as CCTV/IP surveillance cameras, burglar alarms, access control systems, elevator control systems, communications solutions and information management as gate barrier systems.

– Sustainable heating, ventilation and air conditioning (HVAC): As Qatar is a desert country, use of HVAC is unavoidable in residential and commercial buildings—HVAC consumes approximately 70% of the total electricity in the country and accounts for about 28% of the initial cost of the MEP segment. As Qatar works towards sustainability, advanced HVAC technologies that can substantially reduce energy consumption will witness more demand in the future. A few examples of these technologies are district cooling (DC), variable refrigerant flow, central AC technology, geothermal cooling, absorption chiller technology, solar photovoltaic, and solar water heating, among others. At present, major projects such as Lusail City, Msheireb Downtown, Qatar Internal Security Force developments, Qatar Foundation, Qatar Rail and FIFA-related projects have either implemented or plan to implement sustainable HVAC solutions. The future looks promising for players offering these services owing to the adoption of district cooling systems in large-scale projects such as Lusail City. Also, huge spending on construction

projects including hospitals, schools, real estate, and sports facilities will provide substantial business opportunities for the HVAC industry, especially for sustainable green solutions.

– Building management system (BMS): A rise in the number of high-rise commercial and residential buildings, coupled with the rising installation of HVAC and fire and safety systems, has led to higher implementation of BMS in Qatar. It is typically used as a control system to monitor installed mechanical and electrical equipment in buildings.

– Intelligent traffic signal (ITS) and smart parking system: Under its National Vision 2030, Qatar has highlighted improvement in overall transportation facilities as a major focus area given its cruciality from the point of view of hosting a successful 2022 FIFA World Cup. The Qatari government has earmarked investments totaling USD 17.6 billion for developing road infrastructure over the next five years.¹ Infrastructure projects also include major improvements such as stormwater drainage networks, communications networks, and street lighting. Also, road development schemes will offer a wide range of business opportunities for companies offering smart technologies such as intelligent traffic signal (ITS) and smart parking systems. Additionally, the development of smart cities (a core component of the Qatar National Vision 2030) will further drive the demand for these smart technologies.

5.5 Operation and maintenance

– Facilities management: As a number of mega residential and commercial projects are expected to be completed in the coming years, facility management services will be in high demand. In terms of the competitive landscape, the industry is already crowded with a number of established players and will see influx of new players with established local presence or with support of strong local sponsors. However, both types of players can co-exist as opportunity potential in the industry remains high, with a number of high-rise commercial and residential buildings, stadiums and malls nearing completion.

6.1 Transportation Industry¹

¹ MEED database

CHAPTER 6: BUSINESS OPPORTUNITIES – INDUSTRY

Sub -sectors	Ongoing Projects		Planned Projects		Sector Priority	Overall Attractiveness
	# of Projects	Value (USD billion)	# of Projects	Value (USD billion)		
Rail	16	24,052	11	25,971	↑	↑
Road	114	28,778	215	17,616	↑	↑
Airport	1	3,316	7	6,400	↑	↔
Port	3	536	2	1,000	↔	↓

The railway sector is one of the priority sectors for Qatar and offers big-ticket business opportunities for large engineering firms and also for smaller sub-contracting firms. Projects in this sector are typically of a higher net value as compared to other sub-sectors. As the rail sector in Qatar is at the nascent stage of its development, it offers opportunities across all engineering fields such as civil, electrical, electronics, control, environmental, material, mechanical, power systems, and telecom.

Similarly, the road sector has a healthy project pipeline with a total of 329 projects in the planning and execution phases, with the average project size of USD 82 million. Firms specialising in a particular road infrastructure area such as excavation or lighting may benefit from subcontracting of this work from main contractor.

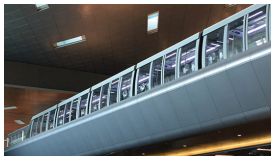
6.2 Construction Industry¹

Feasibility	Design	Civil	MEP
Geophysical surveys	- Safety design - BIM	- Smart parking system - Stormwater drainage networks - Intelligent traffic systems (ITS) - Excavation	NA

6.2 Construction Industry¹

¹ MEED database

Top upcoming projects in the transportation industry¹

QIRP Passenger & Freight Rail		
	Value/Award Year	USD 5.5 billion/2017
	Client	Qatar Rail Company
	Scope of Work	Long-distance passenger and freight rail transportation system in Qatar, part of the wider GCC rail network
QIRP Doha Metro: Phase 2		
	Value/Award Year	USD 5.0 billion/2022
	Client	Qatar Rail Company
	Scope of Work	Construction of 60 stations and extension of the Red, Green, Blue, and Gold line of the Doha Metro
Hamad International Airport Expansion: Doha Metro Connection		
	Value/Award Year	USD 3.0 billion/2017
	Client	New Doha International Airport (NDIA)
	Scope of Work	Transit link to the Red line of Doha Metro, along with construction of a pedestrian bridge, escalators underground station etc.
Hamad International Airport Expansion: Main Terminal		
	Value/Award Year	USD 2.5 billion/2017
	Client	New Doha International Airport (NDIA)
	Scope of Work	New facility area for premium passengers, wide concourses and a connection to the Doha Metro

Sub -sectors	Ongoing Projects		Planned Projects		Sector Priority	Overall Attractiveness
	# of Projects	Value (USD billion)	# of Projects	Value (USD billion)		
Healthcare	11	3,225	25	5,689	↑	↑
Residential	153	6,882	24	3,885	↑	↑
Sports Facilities	7	1,712	19	3,336	↑	↑
Mixed Use	50	52,153	12	2,948	↔	↔
Hotels /resorts	55	4,178	12	1,634	↑	↔
Commercial Buildings	30	5,482	16	1,627	↔	↔
Education	25	1,696	15	1,386	↑	↔
Offices	65	3,008	17	1,298	↔	↓

Feasibility	Design	Civil	MEP	Operation & Maintenance
• NA	• Sustainable designs • Safety designs • Shop drawings	• Construction and demolition waste management (C&D) • Dewatering	• Sustainable HVAC solutions	• Facilities management

The construction industry is of foremost importance to Qatar as the country embarks on the path of sustainable development. At present, the sector has 439 projects under execution, and is waiting for 165 planned projects to be awarded in the next six years.

Within the construction industry, healthcare is the most lucrative sub-sector for engineering firms in terms of value and volume of projects planned. It has about 36 projects including construction of research facilities and rehabilitation centres in the planning and execution stages.

Residential construction is another rewarding sub-sector for engineering companies, with high demand for green building, which is in line with the Qatari government’s goal to achieve sustainable development. Further, as the country prepares to host the 2022 FIFA World Cup, and other major sporting events, engineering services companies are set to gain from increasing development activities of sport facilities.

The event opens up a host of opportunities in different engineering fields for companies involved in mechanical,

1 MEED database

electrical and plumbing (MEP) works, lighting systems, equipment manufacturing, and security systems.

Top upcoming projects in construction industry¹

Qatar has been an attractive destination for global investors thanks to its growing economy, well-developed

Lusail Development: Dara Phase 2		
	Value/Award Year	• USD 2.2 billion/2017
	Client	• Barwa Real Estate Company
	Scope of Work	• Construction of 53 residential buildings having 2,000 modern apartments
Msheireb Downtown Doha: Phase 4		
	Value/Award Year	• USD 1.2 billion/2016
	Client	• Msheireb Properties
	Scope of Work	• Construction of 12 mixed - used buildings with 4 -star hotel, retail and civic buildings, healthcare, and associated facilities

CHAPTER 7: OPERATING CONDITIONS IN QATAR

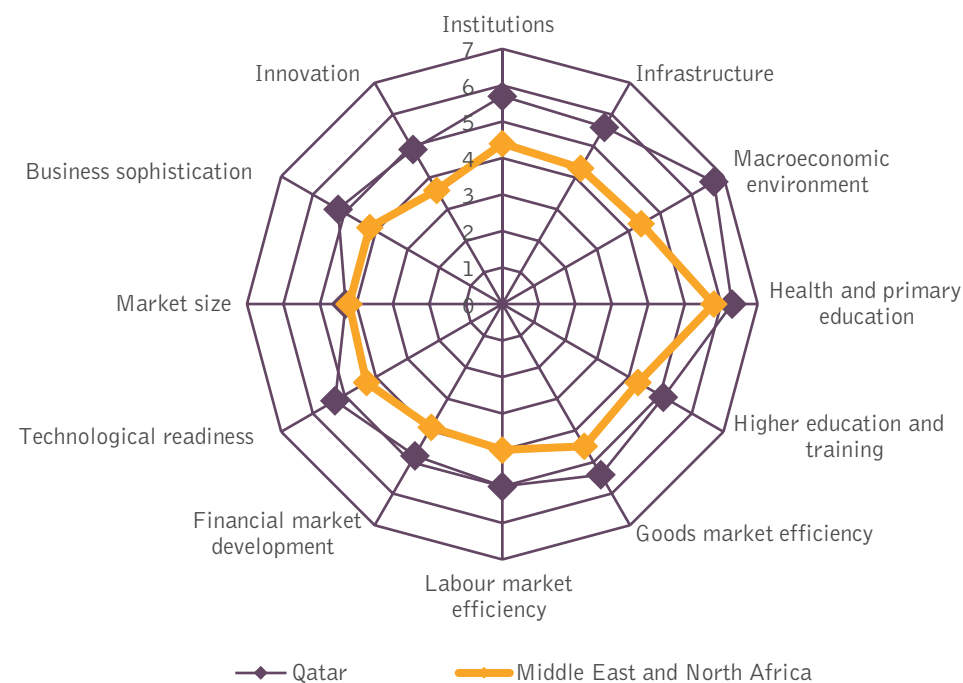
infrastructure, stable macroeconomic environment, high labour productivity and simple tax system with low tax rates.

7.1 Qatar Business Competitiveness

According to the World Economic Forum’s Global Competitiveness Report 2016–2017, Qatar ranks 18th in global competitiveness, second only to the UAE in the MENA region. It surpassed the UAE in macroeconomic environment, a category in which it ranks second, driven by budget surpluses and low government debt.

Furthermore, Qatar leads the MENA region in some vital competitive parameters such as health and primary education (ranks 27th globally), higher education and training (30th), financial market development (21st), and innovation (18th). Globally, Qatar ranks fourth in terms of the availability of scientists and engineers who are vital assets for engineering service firms. Moreover, the country ranks second in MENA in terms of strength of government institutions, with an efficient legal framework for settling disputes (ranks 13th globally) and is among the countries that have a highly transparent government policymaking process. Other key strengths are the goods market efficiency (7th), total tax rate (2nd), and FDI and technology transfer (7th).

Global Competitiveness Index Ranking by Category, 2016-2017



7.2 Efficient Licensing

Simplified licensing procedures are a stepping stone to create a favourable business environment. In this regard, the government has worked to ease business regulations by reducing the number of business activities subject to licensing and permitting regimes. In Qatar, the Engineering Law governs the activities related to engineering services. This law makes it mandatory for the entities involved in construction-related work to register with the Ministry of Business and Trade. A firm can register either as an international or a local engineering consultancy. A construction office can be registered in Qatar only after obtaining government mandated insurances, especially professional indemnity insurance.

Two structural options to obtain licences are available to companies seeking to establish commercial presence in Qatar. They can either register through the Ministry of Economy and Commerce or through the Qatar Financial Centre (QFC). Registration through QFC offers distinct advantages as listed below:

- 100% foreign ownership
- 100% repatriation of profit
- No restrictions on the currency used for promotions
- One-stop-shop for licensing, commercial registration, immigration and related services
- 10% corporate tax on locally sourced profits
- Ability to conduct business in the mainland
- Operate from Doha’s new financial city alongside QFC and non-QFC firms
- Best-in-class legal regime backed by an independent judiciary comprising the Civil and Commercial Court and the QFC Regulatory Tribunal
- Transparent, accessible and predictable operating environment based on English common law
- Independent judiciary in the form of the Qatar International Court and Dispute Resolution Centre (QICDRC)
- The QFC legal regime continually reviews and improves its legislative framework by using a consultative process that enables all stakeholders to voice their opinions on legislation.
- 10% corporate tax on locally generated profits
- Tax exemptions:
 - No tax on dividends received and returns on public treasury bonds
 - No tax on capital gains in respect of the majority of shareholdings
 - No tax on profits of most Holding Companies, Special Purpose Companies and Investment Funds including investments in property
- No personal income tax, wealth tax
- No withholding tax on payment out of Qatar
- Double taxation agreement with over 60 countries
- Advance ruling service providing QFC licensed firms with a greater certainty

QFC offers the licence in regulated and non-regulated permitted activities such as architectural activities, engineering design activities for industrial process and production, engineering-related scientific and technical consulting activities, urban planning and landscape architectural activities, project management, specialised design activities, and estate planning.

7.3 Business-Friendly Regulations

Improved regulation system is aimed at ensuring economic growth based on liberalisation, which is one of the chief goals of economic policy of the Qatari government. To that end, the government has drafted a number of important regulations:

Key Regulations	Detail
Decree No. (17) of 2007	The parties are obliged to adopt legislative and other measures to establish the act of bribing a public official as a criminal offence.
Public Tender Law	Government entities and bidders on public-sector contracts must comply with anti-corruption laws and ethical standards of integrity and transparency.

7.4 Simplified Taxation System

Qatar is close to being a tax haven for companies and its status is further bolstered with its least demanding tax framework and the lowest average total tax rate. According to a PwC report, Qatar and the UAE share the topmost position globally for having the least demanding tax framework, followed by Saudi Arabia in the Middle East region. The companies are not subject to any specific taxes related to the construction sector. A tax of 5% is applicable on ‘technical fees’, which include fees for design consultancy services. A tax of 7% is applicable on non-resident interest income, commissions, brokerage fees, and other payments made to non-residents for services carried out partly or wholly in the country. A 10% corporate tax is applicable on non-Qatari nationals’ attributed profit. The tax rate may differ for entities in the oil and gas sector, as activities in this sector are carried out in accordance with specific government agreements.

Simplified corporate taxation and low tax rate have contributed towards improving Qatar’s rank in the Global Competitiveness Index (GCI) parameter on ease of doing business.

7.5 Labour-Friendly Environment

Qatar stands 17th in labour market efficiency, only trailing the UAE (11th) and followed by Bahrain (35th) and Saudi Arabia (65th) in the GCI. With the reformation of the Kafala system and the introduction of the Wage Protection System (WPS), labour standards in the country have further improved.

Foreign workers

Under the new labour law (Law No. 21 of 2005), non-resident workers in Qatar are allowed to leave the country after obtaining the required permission from the Ministry of Interior and also to switch jobs at the end of their fixed-term contracts.

High labour productivity with improved and efficient labour practices contributes immensely to the Labour market efficiency of GCI. This is seen as a positive factor towards improving the ease of doing business in Qatar.

7.6 Effective Dispute Resolution

Qatar offers one of the best institutional frameworks in the Middle East region, with a highly efficient legal framework for settling disputes (13th), preceded by only the UAE (10th) and followed by Saudi Arabia (24th) in the GCC region. Most public sector contract disputes, especially those of Ashghal, in Qatar courts are resolved through the litigation method. However, many large projects, such as Qatar Rail, the Doha New Port, and Hamad International Airport, all have arbitration clauses in their contracts.

Arbitration has become the most favourable method to resolve disputes in the engineering services industry. Most companies in this sector adopt the International Chamber of Commerce (ICC) Rules, with Doha as the seat of arbitration. Engineering services disputes are resolved by civil courts, often with court-appointed experts (who form an internal panel) advising the judge.

Alternative Dispute Resolution (ADR), depending on the circumstances, comes in different dispute resolution forms like negotiation, mediation, early neutral evaluation, and expert determination. With a high emphasis on commercial relationships and market reputation in Qatar, ADR offers a very powerful means of resolving disputes cheaply, quickly, flexibly and privately. Such simplified dispute resolution methods provide an enabling environment for engineering services in the country.

CHAPTER 8: KEY CLIENTS

8.1 Qatar Public Works Authority (Ashghal)

Year of Establishment April 2004	Key Personnel Nasser bin Ali Al Mawlawi (President)
Web link: www.ashghal.gov.qa	

INTRODUCTION

Headquartered in Al Dafna, Doha, Ashghal is an autonomous body that designs, delivers and manages local roads, drainage systems, highways and public buildings such as mosques, schools, hospital, health centres and parks. With projects worth USD 24.5 billion to be delivered within the next 5–7 years, Ashghal has an important role to play in the realization of the Qatar National Vision 2030.

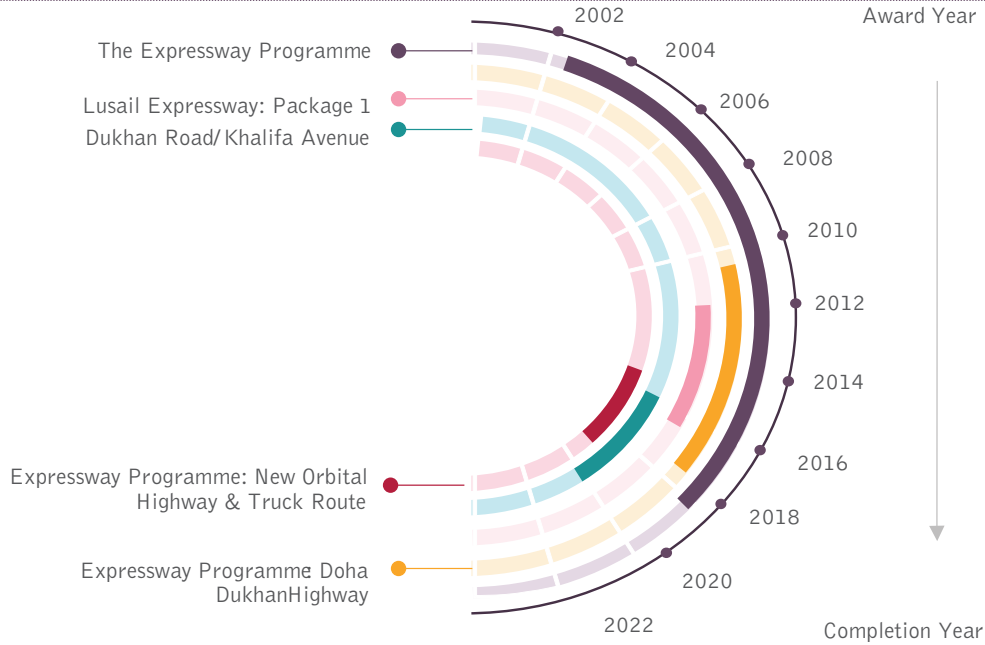
VISION

“Ashghal will be a dynamic, responsive and customer-centric organisation that creates shared value for all stakeholders through outsourcing and partnership with the world’s best.”

MISSION

“To deliver and manage state-of-the-art, sustainable world-class buildings and infrastructure that fulfill the Qatar National Vision 2030.”

Key Project Timeline



Key Initiatives

Ashghal has projects worth US\$ 25.9 billion under the execution stage and US\$ 22.8 billion under the pre-execution stage. The maximum budget of US\$ 12.2 billion has been allotted to the Expressway Programme, which is under the execution stage.

8.2 Qatar Rail Company

Year of Establishment April 2011	Key Personnel HH Sheikh Tamim bin Hamad Al Thani (Chairman) Abdulla Abdulaziz Al Subaie (MD)
Web link: www.qr.com.qa	

INTRODUCTION

Qatar Rail Company has been responsible for the design, construction, commissioning, operation and maintenance of the entire rail network and systems in Qatar.

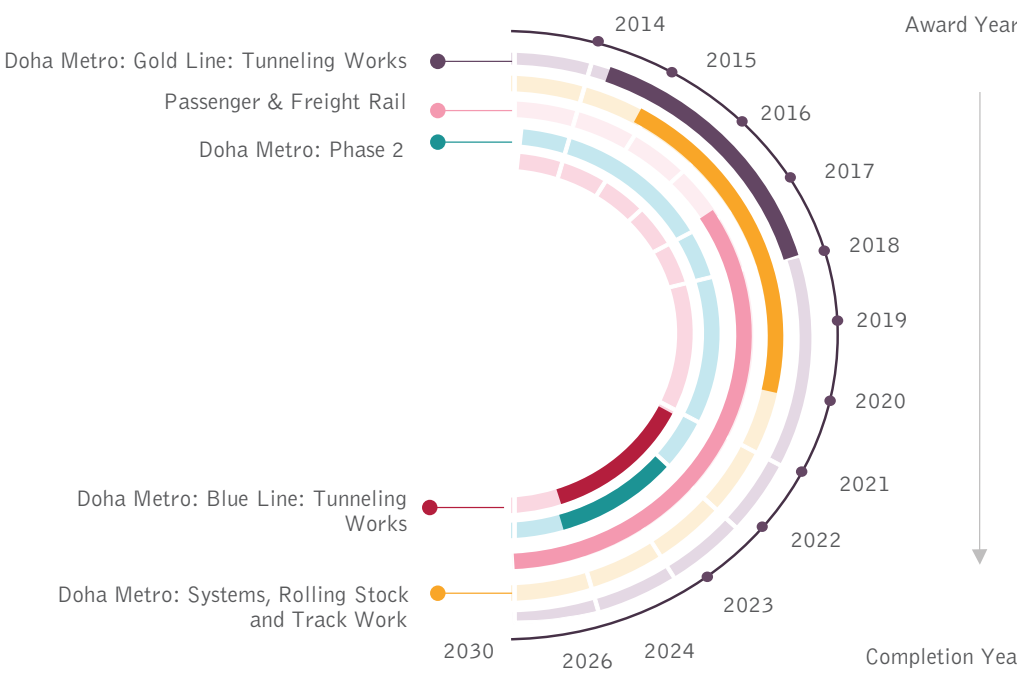
VISION

Develop a state-of-the-art railway infrastructure and rail operations in Qatar as a key element of transport planning and an enabler of economic growth.”

MISSION

“Supporting the Qatar National Vision 2030 in the four major pillars: Human Development, Social Development, Economic Development, Environmental Development”

Key Project Timeline



Key Initiatives

Qatar Rail Company has projects worth USD 23.6 billion under the execution stage and USD 25.9 billion under the pre-execution stage. The maximum budget of USD 5.5 billion has been allotted to QIRP – Passenger & Freight Rail project, which is under the main contract pre-qualification stage. A budget of about USD 5.0 billion has been allotted to Doha Metro Phase II, which is in the study stage.

8.3 Supreme Committee for Delivery & Legacy

Year of Establishment April 2011	Key Personnel HH Sheikh Tamim bin Hamad Al Thani (Chairman) Sheikh Mohammed bin Hamad Al Thani (MD)
Web link: www.sc.qa	

INTRODUCTION

The Supreme Committee has undertaken operational preparations for the 2022 FIFA World Cup, and ensures that all preparations for the tournament align with Qatar’s development programme for the Qatar National Vision 2030.

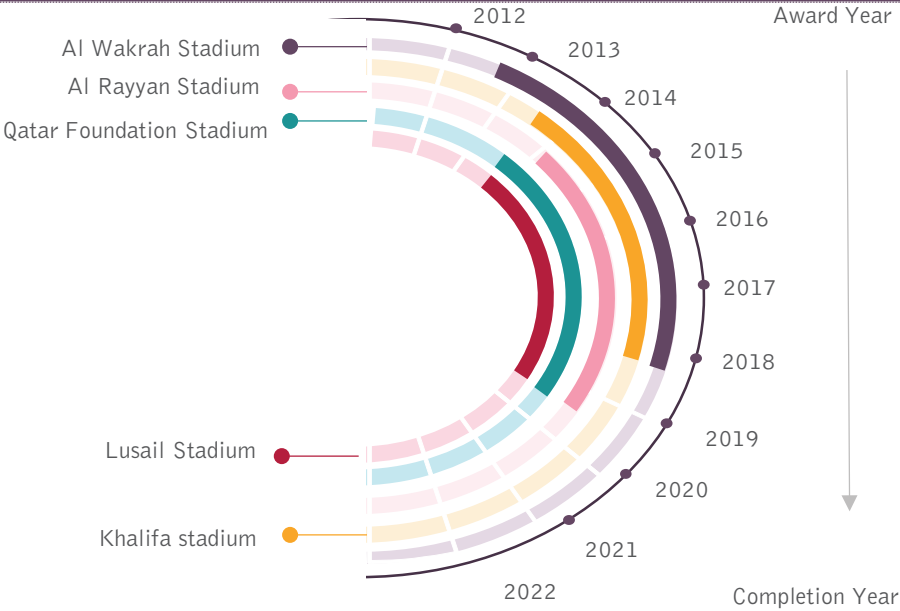
VISION

“Successful delivery of all infrastructures required for Qatar to host an amazing and historic FIFA World Cup that is in line with national development plans and leaves a lasting legacy for Qatar, the Middle East and the world.”

MISSION

“To utilize the power of Qatar’s hosting the FIFA World Cup to drive the successful achievement of the nation’s long-term goals and initiatives, while ensuring that a lasting human, social, environmental and economic legacy is created for 2022 and beyond. By acting as a hub for innovation and the incubation of ideas and talent in all sectors of Qatari industry and society, we will create a unique model for best practice, best operational excellence, best strategic execution and best learning and career development platform. Guided by self-belief, a commitment to excellence and a deep sense of responsibility, we will stay true to our values and promises.”

Key Project Timeline



Key Initiatives

Challenge 22: It is an annual innovation award launched in 2015 by the Supreme Committee (SC) with its strategic programme partners, Silatech & Qatar National Research Fund (QNRF). It aims at bonding, transpiring and challenging creative thinkers to provide innovative ideas for the pivotal event in 2022.

8.4 Qatar Petroleum

Year of Establishment April 1974	Key Personnel Dr Mohammed bin Saleh Al-Sada (Chairman) Saad Sherida Al-Kaabi (President & CEO)
Web Link: www.qp.com.qa	

INTRODUCTION

Qatar Petroleum operates all activities in the oil and gas industry in Qatar. The activities include exploration, production, local and international sale of crude oil, natural gas and gas liquids, refined products, synthetic fuels, petrochemicals, fuel additives, fertilizers, liquefied natural gas (LNG), steel and aluminum.

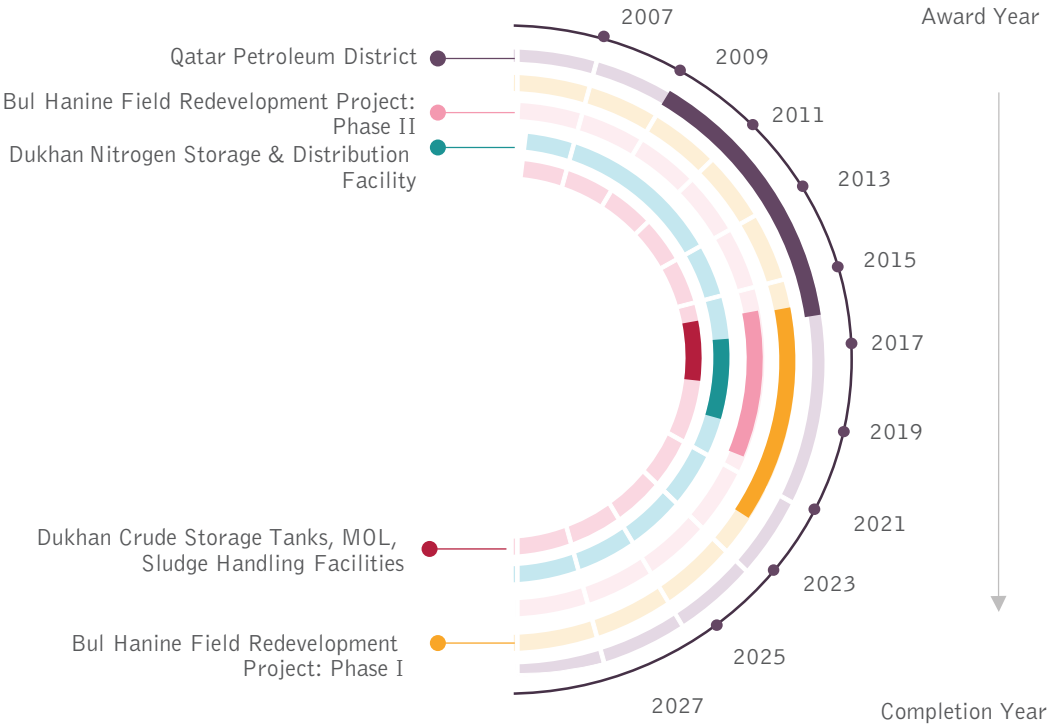
VISION

“To be a world-class oil and gas corporation, with its roots in Qatar, and a strong international presence.”

MISSION

“To ensure that Qatar receives maximum benefit from its oil and gas resources by engaging in activities that add value to these resources. The overall objective is to maximize its contribution to the national wealth of Qatar and its National Vision, through the safe, efficient and environmentally acceptable exploitation of the country’s hydrocarbon resources and related support activities.”

Key Project Timeline

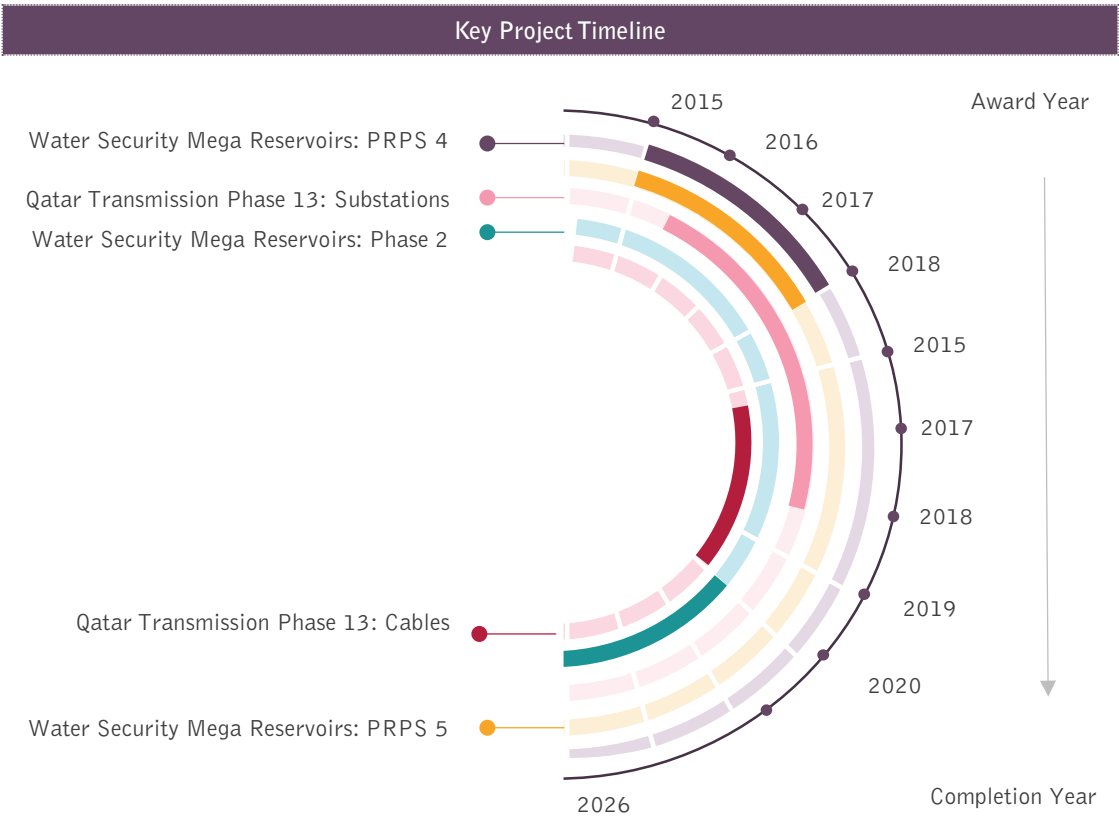


CHAPTER 9: ABOUT THE QFC

8.5 Qatar General Electricity & Water Corporation (KAHRAMAA)

Year of Establishment April 2000	Key Personnel Essa bin Hilal Al-Kuwari (President)
Web Link: www.km.com.qa	

INTRODUCTION
Qatar General Electricity & Water Corporation (KAHRAMAA) is the sole transmission and distribution system owner and operator of the electricity and water sector in Qatar.
VISION
"By 2030, its people, assets, systems and processes will set a global benchmark for performance, technological innovation, environmental sustainability and social responsibility in electricity & water sector."
MISSION
"Providing high quality and sustainable electricity and water for better living in Qatar."



9.1 Overview

The QFC is a fully onshore business and financial centre located in Doha, and provides an excellent platform for firms to do business in Qatar and the region.

It offers its own legal, regulatory, tax and business infrastructure, which allows 100% foreign ownership, 100% repatriation of profits puts no restrictions on the currency used for trading, and charges a competitive rate of 10% corporate tax on locally sourced profits.

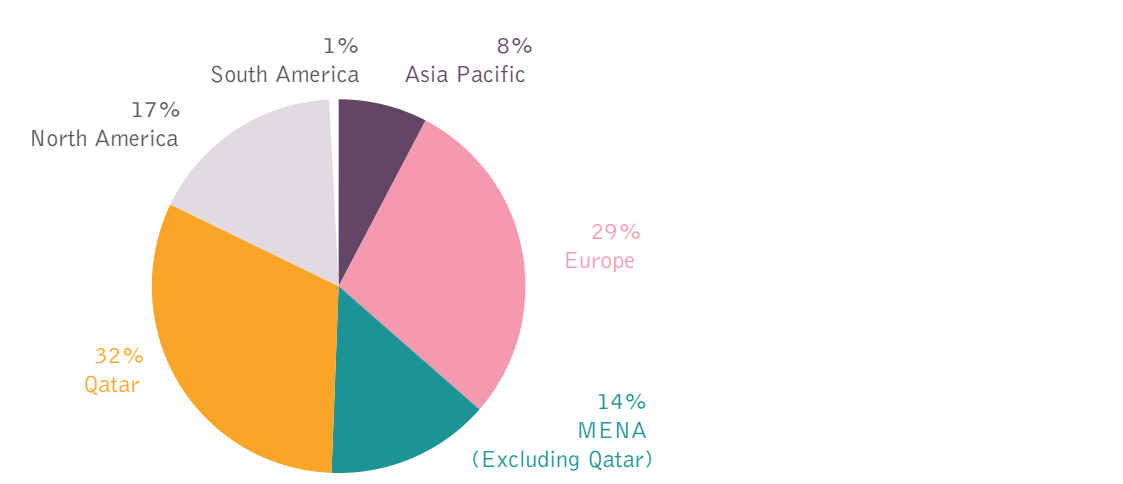
These foundations have helped foster Doha’s world-class business environment. Qatar is currently ranked as the second most competitive economy in the Middle East and the 18th worldwide (Global Competitiveness Report 2016-2017), amongst the top 5 financial centres in the Middle East (Global Financial Centres Index September 2016), 2nd most network-ready country in the Middle East and 27th worldwide (Network Readiness Index 2016), and the strongest economic growth in the GCC (2016 Moody’s Investors Services Outlook).

In 2016, the QFC announced its upcoming relocation to Doha’s new financial city in Msheireb Downtown Doha where QFC and non-QFC firms are expected to set up shop.

About QFC: QFC entities

QFC Authority	- Licenses firms to conduct business in Qatar with no compromise on local business benefits - Manages and maintains the QFC legal and tax environment
QFC Regulatory Authority	Regulates, authorises and supervises QFC firms carrying out regulated activities
Qatar International Court and Dispute Resolution Centre	- Provides a modern civil and commercial court to resolve disputes between institutions and their counter parties - Hears appeals related to decisions made by the QFC authorities or institutions

QFC Firms by Region



9.2 Permitted Activities within QFC

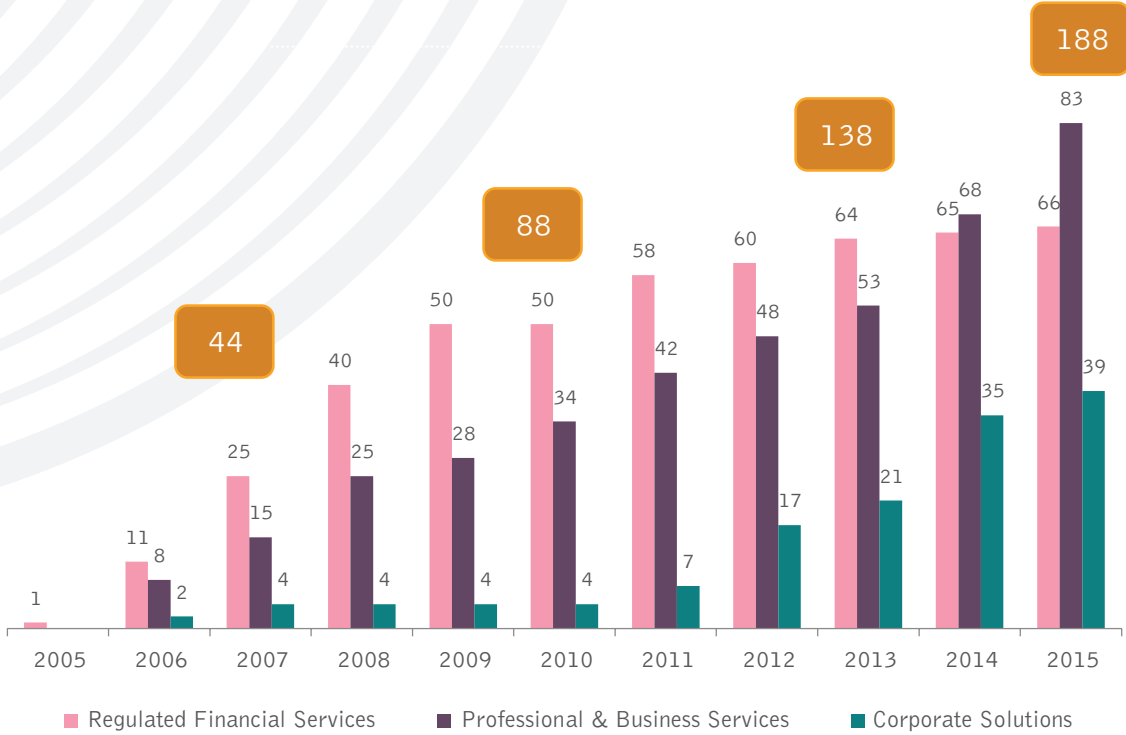
There is a wide range of permitted activities that entities can carry out from the QFC. These activities fall into two broad categories: Financial and Non-Financial Services.

Financial Services	Non-Financial Services
Banking •Corporate & Wholesale Banking •Investment Banking Asset Management •Retail Schemes •Qualified Investor Schemes •Private Placement Schemes Insurance & Reinsurance •Captive Insurance •(Re) Insurance Brokerage •Islamic Finance Investment Advice & Investment Services •Fiduciary Services	Professional and Business Services •Audit and Accounting •Consulting •Human Resources •Risk Management •Marketing & Branding Management •Media and PR •IT Consulting •Project Management •Architectural Services •Engineering and Environmental Consulting Services •Research Corporate Headquarters, Management Offices and Treasury Functions •Special Purpose Companies •Holding Companies •Single Family Offices •Trusts and Trust Services •Corporate Services •Business Councils & Professional Associations

QFC offers the advantage of speedy set-up, 100% foreign ownership and seamless access to the opportunities in Qatar as well as in the region and is an ideal platform for the companies that intend to set up business in Qatar. Businesses can opt to license a firm in any of the activities that are permitted by the QFC. Firms are encouraged to engage with the dedicated QFC Authority’s Business Development team to understand the requirements to setup in the QFC.

Over the years, the QFC has witnessed impressive growth in the number of licensed firms (see chart on the next page). In the last few years, the number of firms setting up in the QFC has increased considerably, with the total number of licensed firms increasing from 89 in 2010 to over 300 in 2016. The QFC is increasingly becoming a preferred choice for professional and business services firms seeking to establish a business in Qatar, as demonstrated by the high growth in the number of such firms being licensed by the QFC.

QFC Licensed Firms



9.3 QFC Proposition

Entities licensed with the QFC have access to several benefits, notably the following:

100% foreign ownership	100% repatriation of profit
10% corporate tax on locally sourced profits	No restrictions on the currency used for promotions
Ability to conduct business in the mainland	One-stop-shop for licensing, commercial registration, immigration and related services
Operate from Doha’s new financial city alongside QFC and non-QFC firms	

Additionally, the QFC offers a strong legal and tax environment based on international best practices.

Legal Environment

- Best-in-class legal regime backed by an independent judiciary comprising the Civil and Commercial Court and the QFC Regulatory Tribunal
- Transparent, accessible and predictable operating environment based on English common law
- Independent judiciary in the form of the Qatar International Court and Dispute Resolution Centre (QICDRC)

KEY CONTACTS

- The QFC legal regime continually reviews and improves its legislative framework by using a consultative process that enables all stakeholders to voice their opinions on legislation.

Tax Environment

- 10% corporate tax on locally generated profits
- Tax exemptions:
 - No tax on dividends received and returns on public treasury bonds
 - No tax on capital gains in respect of the majority of shareholdings
 - No tax on profits of most Holding Companies, Special Purpose Companies and Investment Funds including investments in property
- No personal income tax, wealth tax
- No withholding tax on payment out of Qatar
- Double taxation agreement with over 60 countries
- Advance ruling service providing QFC licensed firms with a greater certainty

9.4 Setting up at the QFC

Establishing a business in the QFC is a relatively simple process and can be completed within 30 days, which is subject to the timely provision of all required documentation and fees. Below is a stepwise guide to set up a business in the QFC.

1	CONTACT THE QFC	• Learn about the process and discuss the plans and needs
2	SUBMIT BUSINESS CASE	• Following guidelines, describe the business and plans for entering the market, so the QFC can ensure that the business activities are permissible and fit in the QFC strategy • Receive recommendation to begin application
3	SUBMIT APPLICATION FOR LICENCE	• Supply all forms and required documentation • Pay application fee
4	RECEIVE LICENCE AND BEGIN OPERATION	• Pay pro-rated annual fee for the first year and full fees thereafter • Receive support with immigration, IT and other set up requirements

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GLOSSARY

Abbreviation	Meaning
ADR	Alternative Dispute Resolution
BIM	Building Information Modeling
BOT	Build Operate Transfer
BMS	Building Management Systems
C&D	Construction and Demolition
EPC	Engineering Procurement Construction
FEED	Front-End Engineering Design
FIFA	Fédération Internationale de Football Association
FM	Facilities Management
GCI	Global Competitiveness Index
HVAC	Heating, Ventilation and Air Conditioning
ICC	International Chamber of Commerce
ICT	Information and Communication Technology
IDRIS	Inner Doha Re-sewerage Implementation Strategy
ITS	Intelligent Traffic Signal
LEED	Leadership in Energy and Environment Design
MEP	Mechanical, Electrical and Plumbing
MOI	Ministry of Interior
NDIA	New Doha International Airport
PMC	Project Management Consultant
QCS	Qatar Construction Specifications
QENFB	Qatar Emiri Naval Forces Base
QFC	Qatar Financial Centre
QIRP	Qatar Integrated Railway Project
QNRF	Qatar National Research Fund
QNV	Qatar National Vision
QSAS	Qatar Sustainability Assessment System
PQ	Pre-Qualification
SCDL	Supreme Committee for Delivery & Legacy

APPENDIX

Appendix 1: Key Planned Projects in Qatar by Budgeted Value

1.1: Transportation Sector

Project	Clients	Value (\$m)	Project Status	Award Year
QIRP: Passenger & Freight Rail	Qatar Rail Company	5,500	Main Contract PQ	2017
QIRP: Doha Metro: Phase 2	Qatar Rail Company	5,000	Study	2022
QIRP: Doha Metro: Blue Line: Tunneling Works	Qatar Rail Company	3,000	Design	2021
QIRP: Passenger Rail: Phase 2	Qatar Rail Company	3,000	Design	2018
Hamad International Airport Expansion: Doha Metro Connection	New Doha International Airport	2,971	Design	2017
Hamad International Airport Expansion: Main Terminal Extension	New Doha International Airport	2,500	Design	2017
QIRP: Passenger & Freight Rail: Phase 4	Qatar Rail Company	2,200	Design	2024
QIRP: Passenger & Freight Rail: Phase 3	Qatar Rail Company	1,800	Design	2022
Hamad International Airport Expansion: Concourse D and E	New Doha International Airport	1,700	Design	2017
QIRP: Passenger & Freight Rail: Phase 1: Phase 1A	Qatar Rail Company	834	Main Contract PQ	2017

1.2: Construction Sector

Project	Clients	Value (\$m)	Project Status	Award Year
Lusail Development: Dara: Phase 2 (B-F)	Barwa Real Estate Company	2,199	Design	2017
QENFB Buildings: Package 2	New Port Project Steering Committee	1,500	Main Contract BID	2016
Msheireb Downtown Doha: Phase 4	Msheireb Properties	1,200	Main Contract BID	2016
Sports City Stadium	Supreme Committee for Delivery and Legacy	883	Design	2017
Al Daayen Women's & Children's Hospital	Supreme Council of Health	686	Study	2018
Lusail Iconic Stadium	Supreme Committee for Delivery and Legacy	662	Main Contract Bid	2016
Abu Hamour Medical City: Phase 1	Supreme Council of Health	658	Study	2018
Sidra Medical and Research Center Expansion	Supreme Council of Health	631	Design	2017
QENFB Buildings: Package 1	New Port Project Steering Committee	600	Main Contract BID	2016
National Centre for Cancer Care and Research	Hamad Medical Corporation JV	500	Design	2017

1.3: Power & Water Sector

Project	Clients	Value (\$m)	Project Status	Award Year
Water Security Mega Reservoirs: Phase 2	Qatar General Electricity & Water Corporation	3,000	Study	2020
Qatar Transmission: Phase 13: Substation	Qatar General Electricity & Water Corporation	2,000	Main Contract Bid	2016
Qatar Transmission: Phase 13: Cables	Qatar General Electricity & Water Corporation	1,300	Main Contract Bid	2016
Ras Abu Fontas (RAF) A4 Desalination Plant	Qatar General Electricity & Water Corporation	600	Main Contract Bid	2016
IDRIS (Package-5): TSE Distribution Transfer System	Qatar Public Works Authority	400	Main Contract Bid	2016
IDRIS (Package-4): New Doha South Sewage Treatment Works	Qatar Public Works Authority	400	Main Contract Bid	2016
IDRIS (Package-6): Existing Pump Station Decommissioning	Qatar Public Works Authority	300	Design	2018
Musaimeer Pumping Station and Outfall	Qatar Public Works Authority	300	Main Contract PQ	2017

1.4: Oil & Gas Sector

Project	Clients	Value (\$m)	Project Status	Award Year
Bul Hanine Field Redevelopment Project: Phase I	Qatar Petroleum	7,000	Main Contract Bid	2016
Bul Hanine Field Redevelopment Project: Phase II	Qatar Petroleum	4,000	Main Contract Bid	2016
Barzan Gas Development - Onshore (Phase 3)	Rasgas	3,000	Study	2021
Barzan Gas Development - Onshore (Phase 2)	Rasgas	2,000	Study	2018
Barzan Gas Development - Offshore (Phase 2)	Rasgas	700	Study	2018
Zekreet Gasoline Production Facility-Gasoline Facility: Phase 3	Qatargas	600	Study	2017
Al Shaheen Offshore Field Work Upgrade	Maersk	500	FEED	2017
Dukhan Crude Storage Tanks, MOL, Sludge Handling Facilities	Qatar Petroleum	400	FEED	2016
Dukhan Nitrogen Storage & Distribution Facility	Qatar Petroleum	300	Study	2017

Appendix 2: Report Methodology & Reference to Business Attractiveness

2.1 Classification of Engineering Services

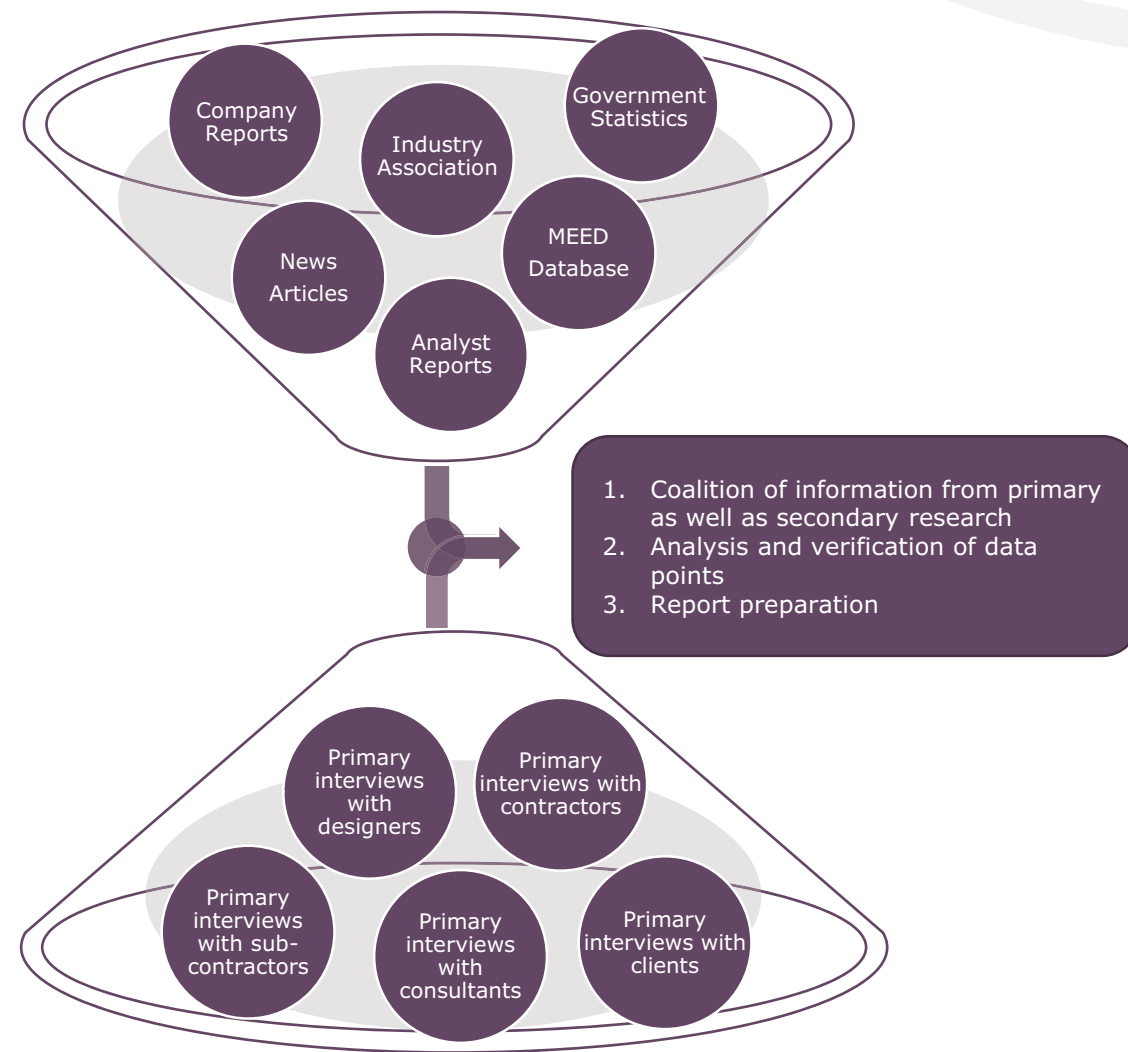
Classification of engineering services considered in this report is based on the definition provided by the World Trade Organization (WTO) in its 'Services Sectoral Classification List'. This classification is in line with the UN Central Product Classification (CPC) at a four-digit code level. The scope of the report covers architectural services (CPC 8671), engineering services (CPC 8672), integrated engineering services (CPC 8673), and urban planning and landscape architectural services (CPC 8674).

Sub-sectors	Services covered	
Architectural services (8671)	86711	Advisory and pre-design architectural services
	86712	Architectural design services
	86713	Contract administration services
	86714	Combined architectural design and contract administration services
	86719	Other architectural services
Engineering services (8672)	86721	Advisory and consultative engineering services
	86722	Engineering design services for the construction of foundations and building structures
	86723	Engineering design services for mechanical and electrical installations for buildings
	86724	Engineering design services for the construction of civil engineering works
	86725	Engineering design services for industrial processes and production
	86726	Engineering design services n.e.c
	86727	Other engineering services during the construction and installation phase
	86729	Other engineering services
Integrated engineering services (8673)	86731	Integrated engineering services for transportation infrastructure turnkey projects
	86732	Integrated engineering and project management services for water supply and sanitation works turnkey projects
	86733	Integrated engineering services for the construction of manufacturing turnkey projects
		Integrated engineering services for other turnkey projects
Urban planning and landscape architectural services (8674)	86741	Urban planning services
	86742	Landscape architectural services

2.2 Methodology for Identification of Business Opportunities

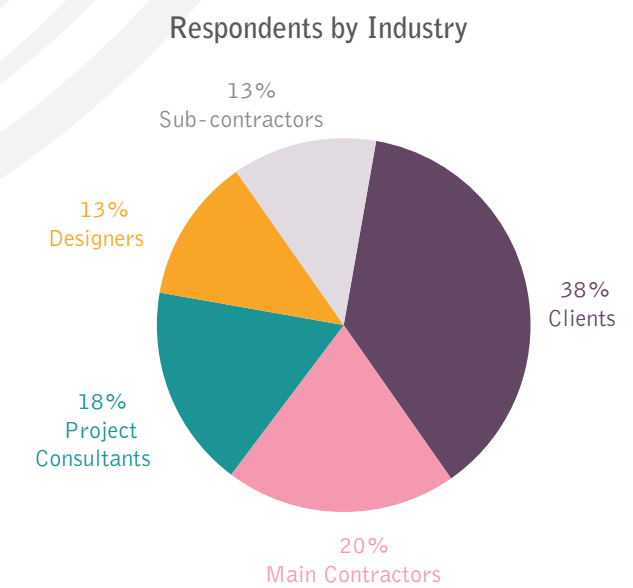
The research methodology to assess the market opportunity is based on a thorough face-to-face discussion with engineering industry stakeholders and comprehensive secondary research. We have used a mix of qualitative and quantitative approaches to understand the opportunities that lie in the current and future projects for engineering services firms. Secondary research includes the understanding of historical, current and future prospect of the engineering services sector in the country by analyzing projects awarded or are in the pipeline/planning stage (MEED database) from all industries.

This is followed by the determination of value chain in projects and the assessment of engineering services required in each step. The collected information is then verified by in-depth interviews with industry experts and stakeholders such as engineering firms and project owners. Furthermore, their views about the individual segment of engineering services in the value chain were gathered and analyzed. The primary objective was to identify specific opportunities for engineering services firms across the value chain.



Primary Research

An extensive questionnaire was designed keeping important aspects of engineering services in focus. The sample was selected to represent various industry segments such as project consultants, designers, sub-contractors, main contractors, and clients. The respondents were identified from across industries to give an overall picture of the engineering services industry in Qatar.



Identification of relative attractiveness across the value chain:

The respective attractiveness of companies was identified based on business competitiveness, long-term sustainability, and project opportunities available for them in the country. High, medium, and low status was assigned based on the assessment of the abovementioned factors through secondary and primary research.

Identification of business opportunities by solutions:

The relative attractiveness of respective engineering solution is based on face-to-face interviews with industry stakeholders. Factors such as diversity of the industry, role in the organisation, industry experience, and size of employers' company were considered while selecting the profile of respondents for interview.

Identification of business opportunities by industry:

Assessment of opportunities in the respective industry and sub-sector is based on factors such as ongoing projects, planned projects, total value of ongoing and planned projects, and the government's priority in terms of development guidelines for that sector. Each factor has been assigned some weightage, and overall the attractiveness was estimated based on the relative scores.

Appendix 3: Key Technical Terms

Technical Term	Definition
High Income Economy	According to the World Bank, it is the economy with gross national income per capita above USD 12,735 in 2014, by calculating through the atlas method
Design & Build	In this type of project agreement, the contractor is responsible for completing the design, as well as carrying out the works, and the employer must provide detailed documents to outline his/her requirements
BOT	It is a type of construction contract where a private party or consortium agrees to finance, construct, operate, and maintain a facility for a specified period and then transfer the facility to a government or other public authority
EPC	It is a form of contracting agreement in which a contractor is expected to design the project, procure the necessary material and equipment and construct the complete functioning facility
BMS	It is a computer-based management system that monitors and controls the mechanical and electrical equipments of the building
District Cooling (DC)	It is a form of cooling technology in which chilled water is produced at a central location and circulated to building via insulated pipelines
Variable Refrigerant Flow	It is a HVAC technology in which refrigerant is used as cooling and heating media
Central AC Technology	In this type of air conditioning technology, cool air is circulated from a central air conditioner to the building through supply and return ducts
Geothermal Cooling	This cooling system is based on heat exchange technology in which heat is transferred from and to ground and air inside the building. The heat pumps circulate the water in underground pumps which then exchange heat with the ground and becomes cool in summer and hot in winter due to the constant temperature of earth irrespective of the weather
Absorption Chiller Technology	It is the cooling technology that uses heat source such as fuel or solar to generate necessary energy for driving the cooling process
Solar Photovoltaic & Solar Water Heating	It is a solar energy based technology in which solar cells are used as a source of energy for performing cooling or heating of the space
FEED	It is an engineering design service focusing on technical aspects and provides rough estimates of the project and is used as the basis for bidding in main contract bid step
Main Contract PQ	It is the process of screening of contractors based on different parameters and then preparing a list of qualified bidders in order to invite them for the bidding process
Main Contract Bid	It is a competitive bidding process in which qualified contractors are expected to quote the amount for project under consideration

Appendix 4: Key Engineering Service Firms

4.1: Oil & Gas Sector Major Contractors

Company	Cumulative Project Value (USD million)	Major Project
JGC Corporation	1,700	Barzan Gas Development - Onshore (Phase 1)
CTCI Corporation/Chiyoda Corporation JV	1,200	Laffan Condensate Refinery: Phase II
Consolidated Contractors	540	QP - Strategic Petroleum Products Storage Project
Kentz Engineers & Constructors	390	Shell - Pearl GTL: Utilities GRVE Improvement
Chiyoda Almana Engineering	340	RasGas - Flow Assurance Project (FAP) Upgrade: Onshore & Offshore

4.2: Transport Sector Major Contractors

Company	Cumulative Project Value (USD million)	Major Project
Aktor/Yapi Merkezi/Larsen & Toubro/STFA/Al Jaber Engineering JV	4,400	QIRP: Doha Metro: Gold Line: Tunneling Works
Mitsubishi Heavy Industries/ Mitsubishi Corporation / Hitachi/Kinkisharyo/Thales JV	4,129	QIRP: Doha Metro: Systems, Rolling Stock and Track Work
QD - SBG Construction	4,050	Dukhan Road/Khalifa Avenue
Saudi Binladin Group/HBK Contracting Company WLL/ Porr Solutions JV	2,764	QIRP: Doha Metro: Green Line: Tunneling & Main Stations Works
Alstom/QDVC JV	2,722	QIRP: LRT: Lusail Light Rail: Phase 2

4.3: Construction Sector Major Contractors

Company	Cumulative Project Value (USD million)	Major Project
Midmac Contracting Co/ Consolidated Contractors JV	2,500	Education City: Research Institute (QEERI) Sidra Medical & Research Center
UrbaCon Trading & Contracting	2,401	Rayyan Mall (Mall of Qatar)
Redco Construction - Almana	1,763	Doha Oasis Mixed Use Development
Construction & Reconstruction Engineering Co	1,730	Entertainment City: Place Vendome
Al Bandary Group	1,518	Lusail Development: Langham Place

4.4: Power & Water Sector Major Contractors

Company	Cumulative Project Value (USD million)	Major Project
Samsung C&T/Siemens JV	1,560	Umm Al Houl Power - Facility D IWPP: Combined Cycle Power Plant
Consolidated Contractors/ Teyseer Contracting JV	1,318	Water Security Mega Reservoirs: PRPS 1 at Umm Birka, Package A
Larsen & Toubro	1,282	Qatar Transmission Phase 11: Stage 1: S1, S8, S10, S11 & C2, C12
Habtoor Leighton Group	908	Water Security Mega Reservoirs: PRPS 3 at Rawdat Rashed, Package D
Hitachi Zosen/Acciona JV	840	Umm Al Houl Power – Facility D IWPP: Water Desalination Plant



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