KSA Construction Industry- Capable of Sustaining Strong Currents

February 2015

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Executive Summary

Amid the global turbulence in oil prices and the smooth transition of leadership following the demise of the former King Abdullah to King Salman, The Kingdom of Saudi Arabia, the largest in terms of area and GDP in the Gulf Cooperation Council (GCC) region and the Middle East, has continued its expansionary development. Though falling oil prices impacted oil revenues that continue to comprise 90 percent of the state's revenues, and eroded growth, the government has continued its expansionary spending programme in its budget for the financial year 2015 announced in December 2014, along with the new king doling out two month salary bonuses to public sector employees in a bid to boost growth.

The strong growing demand base of one of the youngest and fastest growing population in the region, continues to bolster the economy while heavy allocations toward building social infrastructure, such as education and healthcare, the stringent Saudiization scheme that enforces employment of a given percentage of Saudi labour force in a bid to boost domestic employment and build domestic competencies for the economy as a whole in the long run, have shaped the growth trajectory of Saudi Arabia in their unique ways.

For the first time since 2011, the rising government expenditures and falling revenues have forced the Kingdom to project a deficit of US$ 154 billion for 2015, which can however be comfortably financed by the huge reserves of billions of dollars stored up by the Kingdom in public funds amounting to nearly US$ 700 billion. The other cushion is the direct result of its years of sustained investment in its non-oil sector which has begun to yield results and grown in share to account for up to 10 percent of government revenue as of 2014.

Given the continued activity witnessed by the Kingdom across its diversifying sectors, including its existing attraction as a hub for religious tourism, and the host of world renowned events being hosted in the surrounding countries such as Qatar and the UAE, that are bound to have their spill overs on tourism and investment in the Kingdom, growth across the Saudi construction industry and its subsectors is likely to continue at a moderate pace, unlike the hectic frenzy of the earlier years, given the tight market conditions and the strict Saudiization measures imposed on the labour market that have hit the construction industry in the short run.

The construction industry of Kingdom of Saudi Arabia (KSA) therefore is likely to witness a slight fall in construction contract awards from US$ 79.1 billion in 2013, to US$ 52.1 billion likely in 2015. Thereafter, with growth moderating and a fall in oil revenues prompting the government to spend more judiciously, the pace of project development too is likely to moderate. It has also been realized that the earlier six years of unparalleled expansion have begun to yield results necessitating a gradual reining in of spending and allowing self-sustained growth.

The KSA Construction Industry Overview – February 2015 is a study by Ventures Middle East based on its vast experience of the GCC construction market and its extensive projects database across the countries of the Middle East and North Africa (MENA) region. It provides a strategic insight into the various political, economic, social, technical, legislative and environmental factors impacting this dynamic market that promises long- run potential. Besides an analysis into the market drivers and restraints culminating in a probability impact matrix of the occurrence of these drivers and restraints on the construction market, the study also provides key statistics of the construction contract awards across the various sectors of the KSA construction market namely, buildings, oil and gas, power and water, industrial and infrastructure.

Key statistics also include market size and forecasts of KSA construction contracts awarded in the key segments and a listing of the top consultants, contractors and clients in the building construction market of Saudi Arabia. The study also provides description of the sector wise ongoing construction projects in addition to the proposed new projects thereby serving as a wealth of information for all key stakeholders of construction sector vying to enter this market.

The latest ongoing projects in each sector are also provided for an insight into the latest goings on in the construction industry of Saudi Arabia and the sectors to watch out for. This report helps the reader understand how some of the sectors such as residential real estate with the fillip provided by social housing programmes of the government, and infrastructure, form the cornerstone of the growth plans of Saudi Arabia, with energy and utilities sectors also expanding alongside at a pace matching the growth of the core sectors, thus keeping the growth process sustainable and high.

Chapter1. Strategic Overview of KSA Construction industry 2015

The Kingdom of Saudi Arabia in 2015

As one of the world's largest producers and exports of oil, as also a fast expanding and diversifying economy, the global focus is on the Kingdom of Saudi Arabia and how it is likely to perform under the recent drastic falling oil prices hitting US$50 per barrel in January 2015, the lowest since 2009. Saudi Arabia has however, continued to signal strongly that a fall in oil prices are unlikely to affect its growth model given its strong surplus reserves accumulated over the years, and the cost–price advantage it enjoys over its costlier global counterparts such as Venezuela, Russia and its more recent competition from Shale gas from the United States.

The 2015 budget announced by the Saudi government in December 2014 too has signalled a marginal increase in expenditure over the previous year. However, analysts believe that the budget deficit of US$14.4 billion projected by it in view of the rising expenditure amid falling oil prices too can be comfortably met by the Kingdom from its US$736 billion of net foreign assets held as a strong reserve as of November 2014. Moreover, with its consistent investment over the years across sectors leading to a fast diversifying economy, the contribution of the non-oil sector to its GDP has been gradually increasing over the past decade, further bolstering its growth.

The smooth transition of leadership from the late Saudi monarch King Abdullah bin Aziz Al Saud to his brother King Salman bin Aziz Al Saud, despite it being perceived as a change back to conservative leadership from the erstwhile liberal and reformist leadership of King Abdullah, has also ensured a gradual shoring up of oil prices and sent out strong signals on the continued stability of the Kingdom and the continuity of its strong economic development plans. It is expected that the expansionary plans for sustained government spending are likely to continue unabated under the changed leadership and help the economy retain its leading role in the region as the top destination for investments in the long-run.

The following table provides the key statistical indicators and forecasts for the Saudi Arabian economy for the period 2012-2017.

Table 1: Saudi Arabia Economy at a Glance- Key Macroeconomic Indicators, 2012-2017

Saudi Arabia	2012	2013	2014	2015	2016	2017
Nominal GDP (US$ billion)	711	748.8	773.9	823.9	879.1	938.4
Real GDP Growth (%)	5.1	4	4.3	4.3	4	3.9
CPI Inflation (%)	2.9	3.6	3.7	3.8	3.8	3.5
Population (Million)	28.3	28.8	29.4	29.9	30.4	30.9
GDP per capita (US$)	25,113.00	25,962.20	26,351.10	27,558.40	28,908.60	30,353.40
External debt (% of GDP)	11.7	11.1	10.6	9.8	9	8.2
Exchange rate to US$	3.8	3.8	3.8	3.8	3.8	3.8
Current account balance (% of GDP)	23.2	16.4	15.4	14.4	13.4	12.2
Fiscal balance (% of GDP)	14	8.3	5.5	2.8	1.1	1.2

Source: Oxford Economics, Ernst & Young

The IMF too has projected a growth rate of 4.5 percent for the Saudi economy for 2015 and 2016, strongly fuelled by the 5.75 percent growth in the non-oil private sector projected by the IMF for KSA for the corresponding period. However, analyst and government estimates are more conservative at 4.3 percent for 2014 and 2015 and a lower growth rate into 2016 as the impact of falling oil prices in the latter half of 2014 and early 2015 is likely to impact future growth plans to a moderate extent in the long run.

In a consistent effort over the period 2002 to 2012, the Kingdom has made large scale investments across sectors, including industries, infrastructure, social infrastructure and energy that have helped its non-oil sector grow and account for over 14 percent of the government revenues by 2014. The most recent budgets of 2014 and 2015 too have made massive allocations toward upgrading physical and social infrastructure. Over US$3 trillion worth of developmental projects have been scheduled to begin across the Kingdom by 2020, as per its developmental plans, and while the Kingdom faces a number of short-term challenges toward ensuring the growth trajectory continues unabated toward achieving its developmental goals, in the long run it is likely to remain one of the most promising markets in the region.

Saudi Budget 2015

For the first time since 2011 Saudi Arabia has announced a budget on 31st December 2014 for the fiscal year 2015 with a projected deficit of SR 145 billion (US$ 38.6 billion) based on revenues of SR 715 billion (US$ 190.7 billion) and expenditures of SR 850 billion (US$ 229.3 billion). The deficit however would be comfortably financed with the Kingdom's large stock of net foreign assets which stood at US$ 736 billion as of November 2014. The largest allocation of 43.8 percent of the budget expenditure was made toward education and healthcare, highlighting the importance of social infrastructure in the country's developmental agenda. The fiscal year 2014 also ended on a deficit of SR 54 billion despite the earlier year's high oil prices and exports on account of rising expenditures (highest in the past three years) as against the falling revenues during the period.

Growth in fiscal 2014 as estimated by the government in real terms was 3.59 percent as against 2.67 percent in 2013. Oil sector grew by 1.72 percent while the government and private components of non-oil sector grew by 3.66 percent and 5.7 percent, respectively. All components of non-oil GDP grew at a healthy pace, Non-oil industrial sector was estimated to have grown by 6.54 percent; construction by 6.7 percent though lower than the 8.1 percent of 2013; transport, storage and communication sector by 6.13 percent; wholesale, retail, restaurants, and hotels by 5.97 percent; and finance, insurance and real estate by 4.46 percent, respectively. However, export revenues continued to decline for a second year in a row by 4.4 per cent over 2013. The primary reason for this trend was the declining oil production along with the steep fall in oil prices though nonoil exports registered a healthy 3.1 percent increase as compared to 2013.

Though the Saudi budget continues its expansionary phase for the seventh year in a row, with shrinking trade surpluses and a lower GDP growth as in 2014, in the longer run it would be difficult to sustain at the record high levels of yesteryears. Therefore in an effort to compensate the expansion by rationalizing recurrent expenditures, the government had decided to curb increases on salaries, wages and allowances that contribute over 50 percent to the budget expenditures. However, with the change of leadership and the accession to the throne of King Salman to the throne, it has been announced in January 2015 to provide a two month bonus on salaries and wages of public sector employees. This move, though in direct contrast to the austerity measures proposed in December, is expected to result in a ripple effect benefiting the retail and construction sectors of the economy hugely, according to analysts who studied the trend in 2011 when the previous such bonus was doled out which had resulted in a spurt in retail and construction growth through its effect on infrastructure spend and consumer spending.

The Kingdom is however been facing a clear downward trend with respect to foreign direct investments, according to the World Investment Report 2014 by the United Nations Conference on Trade and Development (UNCTAD). Despite the massive investments across capital projects, infrastructure, the petrochemical and refinery segments in oil and gas, FDI flows to the Kingdom registered its fifth successive year of decline, falling by 24 per cent to US$ 9.3 billion thus pushing the country to the third largest host economy in the region from second in 2013. FDI inflow in the region had peaked at the highest in the region at US$ 29 billion in 2010 according to the report. Regional turmoil and socio-political uncertainties and tightening oil conditions are cited as the key reasons for the declining FDI inflow into the country in the period. Another key reason cited in the report is the Saudiization scheme introduced since 2011 that forced the departure of over 1 million expatriate workers from the country in 2013, exacerbating the mismatch between demand and supply in the Kingdom's private sector job market, giving a blow to the private businesses in the Kingdom. However, the regional factors challenging FDI growth have also led to a similar decline in Qatar in 2014 according to the report.

However, the Kingdom has slipped in the World Bank's Rankings for 2015 in the '*Ease of Doing Business'* Report 2015 to 49th position from 44 assigned on a comparative scale for 2014, out of 165 countries in terms of parameters for ease of doing business such as, obtaining of construction permits, its tax laws and industrial climate and reforms in regulations and legislative framework. Though it has made giant strides in complying to various requirements of the WTO and undertaken a massive diversification and reform program since 2001, improving its ranking of 67 in 2005, the slow pace of reforms, implementation of important legislations such as the mortgage law, and most importantly, the restrictions on labour employment and private and foreign participation across certain sectors have led the economy to move lower in rankings for the second year in a row.

The government however, has firmly assured that given its consistent investment and incentives to industry and economy at large, through developing infrastructure and supporting the residential segment, and improved credit flow, the Kingdom's construction sector is expected to perform strongly in the coming periods, though likely to be overtaken by the economies that are hosting events of a global nature in a bid to attract greater global investments.

According to a press release by the Saudi Ministry of Finance, appropriations for new and existing project are likely to total an estimated US$ 49.3 billion for fiscal 2015. Of this, the main allocations are likely to include education US$ 57.9 billion (25 percent) an increase of US$ 1.8 billion over the previous year, health and social affairs US$ 42.7 billion, a huge increase of 87 percent over 2014, infrastructure and transportation US$ 16.8 billion, municipality services US$ 10.7 billion, water, agriculture, industry, and other economic resources, US$ 16 billion.

The allocations in the education sector includes 164 new projects costing US$ 3.7 billion apart from additions worth US$ 1.8 billion apart from projects already under construction for which earlier allocations are being utilized. The budget includes allocations for general education that involves 500 projects for rehabilitation of school buildings and 11 projects for rehabilitation of sports centres at estimated cost of

US$ 108 million. For higher education the appropriation is US$ 3.28 billion that would be used for rehabilitation and completion of college campuses across universities and opening of three new universities apart from scholarship for students at a cost of US$ 6 billion. New projects for building of new technical and vocational colleges have also been planned for.

In the healthcare space, appropriations have been made toward construction of new primary health clinics, medical centres, three new hospitals, three blood banks, 11 medical centres and 10 comprehensive care clinics to add to the present number of 117 hospitals and 8 medical cities under construction at the end of 2014. In FY 2014, 26 new hospitals have been completed across the Kingdom.

Basic municipality infrastructure upgrades planned under the budget include new projects for inter-city roads, bridges, drainage and control system, and spending on existing projects under construction for which allocations have already been made including those allocated for rainwater drainage and protection from rain floods. Infrastructure projects also include new projects for an additional 2,000 kilometers of roads, upgrades, expansion and modernization of existing ports and building additional births, railroads, regional and international airports, apart from additional infrastructure projects to spruce up the industrial cities of Jubail, Yanbu and Ras Al-Khair.

The appropriations for the water, agriculture, industry and other economic resources sectors of US$ 16 billion apart from existing projects with appropriations already made of over US$ 6 billion in the previous year, are aimed at increasing existing water resources to meet the demand of the growing population through building dams, desalination, utilizing deep aquifers wells, and expanding and improving water and water treatment. New projects to equip the industrial cities will also be carried out apart from construction of new grain silos and expansion of existing ones as a part of the allocations for this sector.

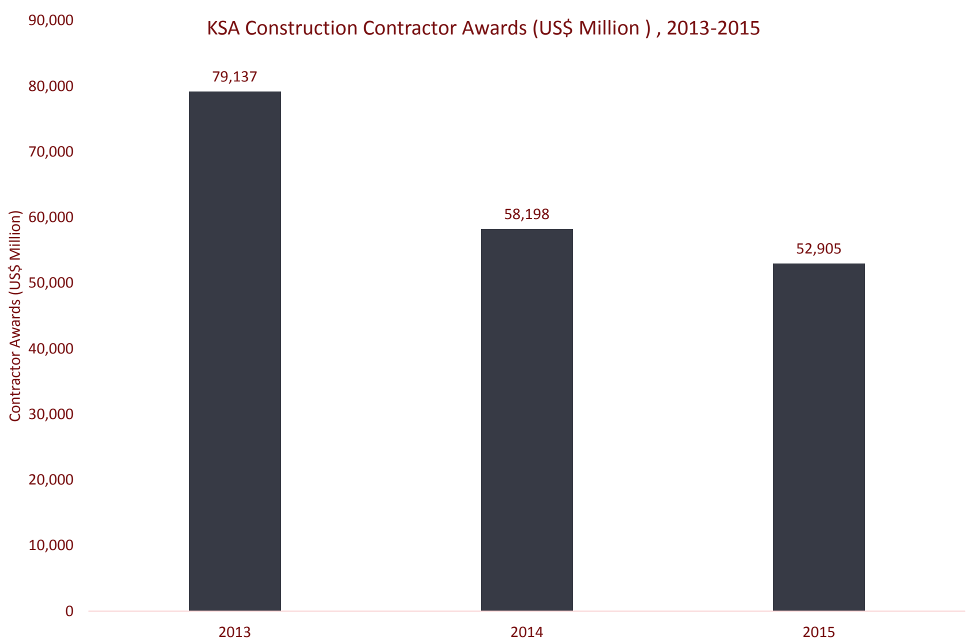
Overall, though appropriations have been enhanced in relevant spheres to continue developmental spending to boost growth, the overall budget has cautiously slowed down the expansion to taper off the government spend gradually without affecting development.

Though growth across the Saudi economy has slowed down as compared to earlier years owing to a fall in the output as well as the most recent sustained drop in oil prices and revenues from the oil sector and tightening of labour restrictions to ensure greater employment of local labour that has acted as a likely deterrent to foreign investment in the economy in 2013 and 2014 and the slow pace of implementation of government projects, Saudi Arabia is likely to continue to post attractive returns for investors in the construction industry owing to the continuation of large appropriates across strategic sectors and the growing role of the private sector with the seeds of diversification beginning to yield returns and growth in the future.

KSA Construction Industry in 2014 and Beyond

The Saudi Construction Industry accounts for a 5 percent share of the Kingdom's GDP as of 2014. Amid a consistently expansionary budget, that continued to increase expenditure despite squeezing the buffers amid falling oil prices in 2015, contracts worth US$ 79.1 billion were awarded across sectors of the construction industry in 2013. The following figure presents the contractor awards across sectors between 2013 and 2015 for the Kingdom of Saudi Arabia.

Figure 1: KSA Construction Contractor Awards across Sectors (US$ Million), 2013-2015



Source: Ventures Onsite MENA Projects Database www.venturesonsite.com

Contracts awarded began falling slightly to US$ 58.2 billion in 2014, propelled largely by the supply constraints and strict Saudiization measures imposed on the industry that accentuated the labour shortage and delayed existing projects from 2013, resulting in slower pace of fresh contracts awarded in 2014. Slowing oil prices by the end of the year are further likely to slow down the contractor awards in 2015 to US$ 52.9 billion though, growth is likely to continue at a moderate pace until oil prices recover and the earlier frantic pace of development is restored. The primary slant of construction activity is likely to be based across the building construction and infrastructure sectors.

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SHORT –TERM OUTLOOK FOR THE KSA CONSTRUCTION INDUSTRY

The key market drivers over the next six months are likely to be as follows:

1. Strong demand base: The most important driver to the Saudi market is its strong demand base (nearly 40 percent of its population are under the age of 14) and the population is growing at over 2 percent.
2. Infrastructure push – The Kingdom has over a decade ago realized the need to upgrade its roads, rail, port and airports in an effort to attract private investment. The 2015 budget has made its third largest allocation toward the transport and infrastructure sector of US$ 167.82 billion. Current Projects that are in focus include rail and road projects such as Riyadh Metro, Dammam Haramain rail, Makkah railway, Saudi-Bahrain causeway, Airport construction and upgrades including Riyadh's King Khaled International Airport and Jeddah's King Abdul Aziz International airport and other regional airports across KSA including a new airport at Madinah and Abha governorates, mega cities such as King Abdullah Economic City and upgrades to roads and building of new ones across the Kingdom and infrastructure projects across the industrial cities of Jubail, Yanbu and Ras al Khair.
3. Strong build-up of social Infrastructure – It has also been realized that in order to sustain development and feed the need for skilled labor, the skills have to be built and sustained from within the economy requiring investments in education (28 new universities and about 10,000 new generation schools expected over next decade), healthcare and affordable housing projects (the current need is nearly 5.5 million new homes required as of 2015) to drive growth in medium and long term. The 2015 budget has allocated nearly 44 percent toward education and healthcare expenditures, with health expenditure alone accounting for 19 percent of the budget, that will include healthcare infrastructure such as three new hospitals, three blood banks, 11 medical centres, ten comprehensive care clinics and numerous primary care centres constructed across the various governorates of the Kingdom. New educational projects under the 2015 budget include 164 new projects, including construction of 3 new universities and refurbishment of others, schools and sports centres, apart from scholarships to students studying abroad and allocations for vocational and technical colleges.
4. Making the best of its religious tourism potential by developing Makkah-Madinah corridor with projects such as the Pilgrim City project

5. Easing of regulations on stock market and allowing international contractors to operate with minimal restrictions in Saudi construction market are some measures to attract private investment that are likely to shape the short term growth
6. The expansionary two month bonus given out to the public sector employees by the new King, which are likely to provide a significant boost to the retail, tourism, real estate and building construction sectors as a whole through higher consumer spending and confidence in the economy.

While drivers are aplenty, the Kingdom has also been facing certain short term challenges. These are:

1. Supply bottlenecks: 2013 onwards as construction activity heated up, shortage of labour and construction materials such as cement manifested itself in the economy, delaying projects across the region. It even necessitated heavy imports of construction material by the government to meet shortfall in 2013 and 2014 and a strict supervision and regulation by the Ministry of commerce to prevent price speculation and inflationary tendencies. The strict Suadiization measures imposed across the industry resulted in large scale and acute shortage of skilled labour to meet the needs of the growing construction, causing delays in projects for which contracts had been awarded across 2013 and 2014. There have even been requests to the government put across by the industrial bodies to postpone the strict implementation of the Suadiization drive for a short period to allow the industry to adjust to the growing needs and avoid further delays in 2015.
2. The sharp oil price decline though likely to cut into the economy's buffers, is not likely to check KSA's growth plans as it has substantial oil surpluses accumulated to withstand a prolonged decline unlike its global counterparts such as Venezuela Russia and its recent competition in the form of shale from the US. However, with oil prices continuing to drop and the 2015 budget projecting a deficit of US$ 14 billion, a sustained drop could prove detrimental to long term developmental plans for the construction industry.

Market Drivers and Restraints and Probability Impact Matrix

The resilience and the strength of the Saudi Construction market is a function of the number of factors that shape its growth on the one hand and act as a deterrent to its reaching its full potential. These factors which have been analyzed in the PESTLE above, act as market drivers and restraints.

These market drivers and restraints can be evaluated through their probability of occurrence and impact on either driving the growth of the Saudi Construction market or their acting as a market restraint. The main drivers and restraints and their impact is listed below:

Market Growth Drivers

Macroeconomic Indicator	Impact High	Impact Low	Probability High	Probability Low
Government Non-oil Sector Diversification and Investment Plans Cushion against Global Fluctuations	★		★	
Demography –Young, growing, urbanizing population-fuels demand	★		★	
Ease of doing business with easing of regulations, and speed of obtaining construction permits	★			★
New Legal and Regulatory framework on Par with International Standards to encourage Business and Investment in pipeline	★			★
Sustainability , Green building and technology advancements spur growth	★		★	
Low inflation and low input prices	★		★	

Market Growth Restraints

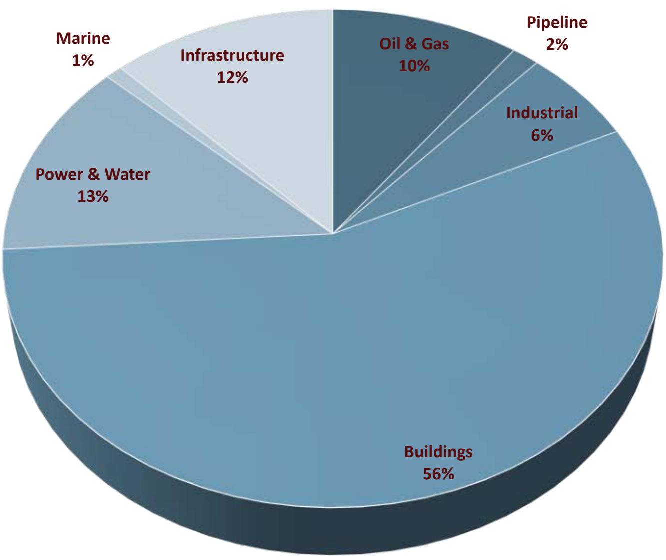
Macroeconomic Indicator	Impact High	Impact Low	Probability High	Probability Low
Saudiization and restrictions on foreign labour employment to hit construction sector growth in the medium term	★		★	

Macroeconomic Indicator	Impact High	Impact Low	Probability High	Probability Low
Slow process of legislative reform and simplification likely to deter investment among competing regional partners		★	★	
Shortage of skilled green building engineers slowing the pace of growth of sustainable construction market		★	★	
Fall in hydrocarbon revenues and increasing public expenditure likely to result in future deficits and impact growth		★		★

The following figure depicts the size and share of the Saudi construction market in terms of budget totals as of February 2015.

Figure 2: KSA Construction Industry Budget Totals by Sector (US$ Million), February 2015

KSA Construction Industry Budget Totals (US$ Million), February 2015



Source: Ventures Onsite MENA Projects Database www.venturesonsite.com

The value of Building construction sector comprises more than half of the total projects value in the construction industry. With the growing population and the need to increase the supporting infrastructure to meet the rising demand for housing, office, and retail space, the burgeoning tourism and hospitality sectors have all contributed to the healthy growth of the Saudi building construction sector in 2014. Combined with the continued government focus on building educational and healthcare infrastructure with sustained government spending in all budgets up to 2015 are also translating into greater projects in the building construction sector.

Infrastructure and utilities are also likely to be the next largest beneficiaries of planned government spending translating into projects with shares of 12 and 13 percent, respectively of the budget total. Continued economic growth would be the primary result, just when the fast-paced growth, induced by the large increase in capacity in the hydrocarbon sector in recent years, was set to come to an end. With greater diversification and a wider role for the private sector, sectors such as industry and energy too are likely to benefit over the years.

Chapter2. KSA Oil and Gas Sector Overview

Apart from continuing to be one of the largest producers and exporters of hydrocarbons in the world, Saudi Arabia also plays the role of a swing producer those steps in to bridge sudden gaps in oil production despite remaining unaffected by global fluctuations in oil prices given its past surpluses reaped over the years. Given the tightrope the Kingdom has to walk in order to balance the growing domestic consumption needs for the fuel and the resultant reduction in exportable surplus while ensuring the mature hydrocarbon fields are not pumped too fast, analysts expect that after the sharp consistent drop in oil prices through 2014, there is likely to be a steadying in oil in 2015, resuming its cautious upward trend. Along with the rise of gas production and projects in the pipeline, and the burgeoning domestic consumption of hydrocarbons, production levels could resume its upward trend after the brief resistance currently to raise output by OPEC countries, to maintain exportable surplus in future.

While continuing its efforts of diversification of the economy in the past decade, Saudi Arabia remains heavily dependent on its oil wealth, with oil accounting for 90% of the country's exports and almost 75% of Government revenues. The oil industry produces about 45% of GDP, compared to 40% accounted for, by the private sector.

Organization of the KSA Oil & Gas Sector

The regulatory environment in the oil and gas sector is attractive for foreign investment with no restrictions on foreign investment across the refining and petrochemicals development segment and large scale investment pouring into the Saudi downstream energy sector in recent years.

The oil and gas sector in Saudi Arabia is controlled by state owned oil company Saudi Aramco, which is also the world’s largest holder of proven oil reserves and oil production. The regulator and overseer of the oil and gas industry as well as Saudi Aramco is the joint responsibility of the Ministry of Petroleum and Mineral Resources and the Supreme Council comprising members from the royal family, industry leaders and Government ministers who are assigned with natural gas policy-making, including contract review and Saudi Aramco’s strategic planning. The Ministry is assigned with the task of national planning in the area of energy and minerals including petrochemicals.

The Saudi oil industry entered a new era since 1980, when the Government assumed full ownership of Aramco, renaming it Saudi Aramco in 1988. The company began exploring in areas that had previously been untouched, and discovered vast deposits of high grade crude oil. Saudi Arabia's national oil & gas company is widely viewed as the most valuable company in the world, with an estimated value of US$10 trillion and generates over US$1 billion every day in revenues. Saudi Aramco can boast a number of firsts, including the world's largest crude oil reserves, the largest daily production of oil, the world's largest hydrocarbon network, and ownership of the Ghawar field, the world's largest oilfield. Saudi Aramco's average daily crude production in 2013, was 9.4 million bpd, with total oil production for the year of 3.4 billion barrels, being about 12% of the world's crude oil production.

Together with its subsidiaries, the company owns or has equity interest in domestic and international refineries with a total worldwide refining capacity of 4.9 million bpd, of which its equity share is 2.6 million bpd, making Saudi Aramco the world's sixth largest refiner. In 2013, the company exported 2.5 billion barrels of crude oil and produced 494 million barrels of refined products, of which 121 million barrels were exported, with 53.8% of that total exported to Asia.

According to an Arab Petroleum Investments Corporation (APICORP), 2015 study, of the total investments forecast by it for the Gulf region for the period 2014-2018 to the tune of US$ 760 billion to be spent on construction projects, 31 per cent would be spent on energy projects led by Saudi Arabia with the most projects with an outlay of US$ 127 billion. However, since most of its energy projects are nearing completion and the Kingdom and Saudi Aramco's decision to cut capital outlay by 20 per cent amid falling oil prices and revenues, the latter years between 2015 and 2018 would see a gradual decline in the Kingdom's share in the energy projects pie.

Upstream Segment and upgrading refining capacities

Major investment in new refining capacity is also taking place at a number of locations in Saudi Arabia, as the Kingdom seeks to consolidate its enviable position as the world's largest oil producer, with its proven reserves of more than 260 billion barrels representing a quarter of the world's known oil reserves. Three new refineries, each able to process 400,000 bpd of mainly heavy crude, could consume 10% of the Kingdom's current officially declared production capacity of 12.5 million bpd when they are all fully operational in 2017. They will complement the country's nine existing refining complexes, which produce gasoline, fuel and diesel oil, liquefied petroleum gas (LPG), jet fuel, kerosene and other petroleum products, for the domestic market and for export. The trio is among the most technologically advanced in the world, and have a combined output of eight million bpd of petroleum products, principally for export.

Among the country's refineries is the Ras Tanura, the ninth largest oil refinery in the world, with a crude distillation capacity of 550,000 barrels per day (bpd). It is operated by Saudi Aramco and is located on the Gulf coast near the industrial port city of Jubail. Most of this refinery's is used for the country's domestic use, while the remaining is exported.

The largest of the country's three new refineries is the Saudi Aramco Total Refining and Petrochemical Company (SATORP) refinery, at Jubail on the Gulf coast, the result of a US$ 10 billion joint venture between Total and Saudi Aramco. This new facility, which has come fully on stream and hit full capacity of 400,000 bpd by September 2014, processes heavy crude oil to supply markets in Asia and the Middle East. While petroleum product consumption in Europe is declining, demand is growing rapidly in Asian markets. The SATORP refinery is strategically located close to oilfields and to the city of Jubail's infrastructure, which includes an industrial port and power and water supply systems. To safely refine this crude oil with a high sulphur content and a large proportion of heavy residues into products that meet market requirements, the new refinery is equipped with a range of technologies that converts the crude into a wide variety of products, including very light hydrocarbons such as propylene and LPG. The rationale for SATORP's location can be seen in its proximity to the largest new oilfield currently being developed in Manifa, which was expected to reach full production capacity of 900,000 bpd of heavy crude during 2014. Most of Manifa's output during this period is likely to be consumed by the new SATORP refinery, although raising output from Manifa, beyond the Jubail facility's maximum processing capacity, could make more Arabian heavy crude available for export.

The expected start up in late 2014, of another of the new refineries, Saudi Aramco's Yasref refinery, which is being built on the Red Sea coast with China's Sinopec, is expected to use up most of what is left of Manifa's output from 2015, with the heavy and medium-crude Jizan refinery on the Red Sea set to absorb 400,000 bpd of more Saudi crude from 2017.

Opening of the new refineries means exports of Saudi Arabian crude oil are set to decline over the next five years. That could be cause for concern, given the Kingdom's longstanding role as a swing producer and regulator of global oil prices, although increased supplies from the US and Iraq are expected to make up the resultant shortfalls. The three new refineries will continue to generate major exports of petroleum as diesel and gasoline, offsetting any loss of Saudi impact on crude oil markets.

Saudi Arabia exported more crude oil in 2013 at 7.54 million barrels per day, more than any year since 2002, according to data by the Joint Organization for Data Initiative (JODI), even as Saudi average crude production declined to 9.63 barrels per day in 2013 as against 9.76 million barrels per day in 2012.

Downstream Segment

Saudi Arabia is also the world's second largest exporter of petroleum liquids in the world and the second largest exporter of petroleum to the United States after Canada. Besides its domestic refineries, Saudi Arabia also has interests in downstream operations in a number of other countries, including South Korea, the Philippines, Greece, India, and China. Motiva, a joint venture between Shell Oil Company and Saudi Refining Inc., refines, distributes, and markets oil products in the United States. Although the country boasts in excess of 100 oilfields, more than 50% of Saudi Arabia's oil reserves are contained in just eight fields, including the giant Ghawar field, with estimated remaining reserves of 70 billion barrels, meaning it contains more proven oil reserves than all but seven other countries in the world. The Kingdom also has the world's fifth largest natural gas reserves, although natural gas production remains limited. Following construction of the three new export orientated refineries, at a total cost of US$ 18 billion and through partnerships between Saudi Aramco and foreign companies, Saudi Arabia is keen to attract further overseas investment in oil related services. Unlike many refineries elsewhere in the world, these new facilities will offer large scale capacity to process local heavy and sour crude. New technologies will significantly reduce their environmental impact, compared to older facilities elsewhere in the world. The outlook for crude oil refining is good. The global demand for refined petroleum products is expected to remain very strong, driven by rapid and resilient growth in emerging markets. Meanwhile, tight capacity worldwide has elevated utilisation rates and pushed margins to historic highs. Refinery utilisation rates are high, demand is currently at 93 million bpd but set to double by 2030.

By owning the world's largest proven oil reserves, as well as an expending refinery infrastructure, Saudi Arabia offers international investors in the petrochemicals sector competitively priced feedstock and unparalleled long term supply security. At the same time, its strategic location between Asia, Europe and North America is a significant logistical competitive advantage as it offers low cost access across a diverse portfolio of markets. Saudi crude oil for export, is shipped on super tankers to refineries around the world from three principal ports. Ras Tanura is the world's largest offshore oil loading facility, with a capacity of six million bpd. The Ras al-Ju'aymah facility, on the coast of the Persian Gulf, loads nearly 75% of the exports, while the third major terminal, Yanbu, is on the Red Sea. Petrochemicals is one of a number of industry sectors targeted by the Saudi Government to attract foreign investment. In recognising this opportunity for British business, UKTI highlights two projects in particular that represent real and immediate opportunities. These are the Sadara Petrochemical project, a US$ 20 billion joint venture between Dow Chemicals and Saudi Aramco, where there are opportunities in engineering and procurement, and Saudi Aramco's planned US$ 25 billion investment in Red Sea natural gas production over the coming decade.

Table 2: KSA Oil & Gas Indicators, 2014

KSA Oil & Gas Indicators	2014
GDP at market prices (billion $)	727.31
Value of exports (billion $)	388.37
Value of petroleum exports (billion $)	336.12
Current account balance (billion $)	164.76
Proven crude oil reserves (billion barrels)#	268.29
Proven natural gas reserves (trillion cu. feet.)#	294.31
Crude oil production *(1,000 b/d)	9763
Marketed production of natural gas (billion cu. m.)	99.33
Refinery capacity (1,000 b/d)	2,107
Output of petroleum products (1,000 b/d)	1,927.10
Oil demand (1,000 b/d)	2,873
Crude oil exports (1,000 b/d)	7,557
Exports of petroleum products (1,000 b/d)	862.1
Natural gas exports (billion cu. m.)	--

Source: #EIA September 2014, OPEC Annual Statistical Bulletin 2013,
** including share of production from Neutral Zone.*
b/d (barrels per day), cu. m. (cubic metres)

As of January 2015, Saudi Arabia had proven oil reserves of 263 billion barrels excluding the 2.85 billion barrels from the Partitioned Neutral Zone (PNZ) shared with Kuwait, comprising over one-fifth of the world's total proven oil reserves and over 8,235 Billion cubic metres of gas reserves, the fifth largest in the world. While Saudi has around 100 oil fields, more than half of its output comes from eight of its fields alone including the world's largest Ghawar oil field with estimated reserves of 70 billion barrels. Saudi's main oil producing fields as of 2011 included Ghawar (onshore), Safaniyah (offshore) the third largest in the world, Khurais (onshore), Qatif, Shaybah and Abqaiq (onshore) and Zuluf (offshore).

However, almost 50 to 60 percent of Saudi's gas fields are located on the same fields as crude oil and therefore are closely linked to changes in oil production, with 57 percent of gas is located at the Ghawar, Safaniyah and Zuluf fields. Of the remaining free gas of 100 Tcf, three fourths is sour (of high sulphur content making it difficult to develop), leaving only 25 percent that can be developed easily.

Saudi Arabia's Saudi Aramco operates the world's largest oil processing and crude oil stabilization facility at Abqaiq with a crude processing capacity of over 7 million bbd. The Kingdom altogether has seven domestic refineries with a combined capacity to process 2.1 million bbd. The Kingdom has recently announced plans to invest US$ 70 billion towards increasing its domestic capacity to 3 million bbd and international holdings capacity by 1-2 million bbd to meet the growing requirements of energy both from within the economy as well as the Asian economies.

While Saudi Arabia has only committed to OPEC and the world for an increase in capacity to 12.5 million bbd, it has discussed internally plans to increase capacity to 15 million bbd to offset declines arising from sharp increases in domestic demand and thereby maintain current capacity levels as the country now requires at least 700,000 bbd of additional capacity annually, given the 6 to 8 percent natural decline rates of its oil wells, to compensate for the decline and maintain capacity. Saudi Aramco has also set aside a budget worth US$ 20-30 billion for this purpose. Key Saudi Aramco projects include Khurais, Nu'ayyim, Shaybah expansion, Khursaniyah, Neutral zone expansion and Manifa.

Many of Saudi Arabia's gas refineries are to be integrated into petrochemical projects. As oil production is constrained by OPEC targets and bulk of the gas production too is associated gas, capacity expansion and targets such as increasing capacity so as to meet 10 percent of global gas demand by 2015 are hard to meet with such constraints. The Petroleum Ministry of Saudi Arabia has therefore planned to expand capacity by 50 Tcf from free gas reserves at a total cost of US$ 9 billion by 2016 through new discoveries and another 50 Tcf from associated reserves. They also plan exploration activities in unexplored areas such as the Red Sea, northern and western Saudi Arabia and the Nafud basin situated at the north of Riyadh. Offshore fields are also likely to be expanding capacity as a part of Saudi Aramco's five year plan for expanding non associated gas including the Karan, Arabiyah and Hasbah gas fields. Though none of the efforts of exploration for Saudi Arabia have as yet been successful, its Jalameed 3 exploration in February 2010 yielded gas, the first successful venture since January 2009.

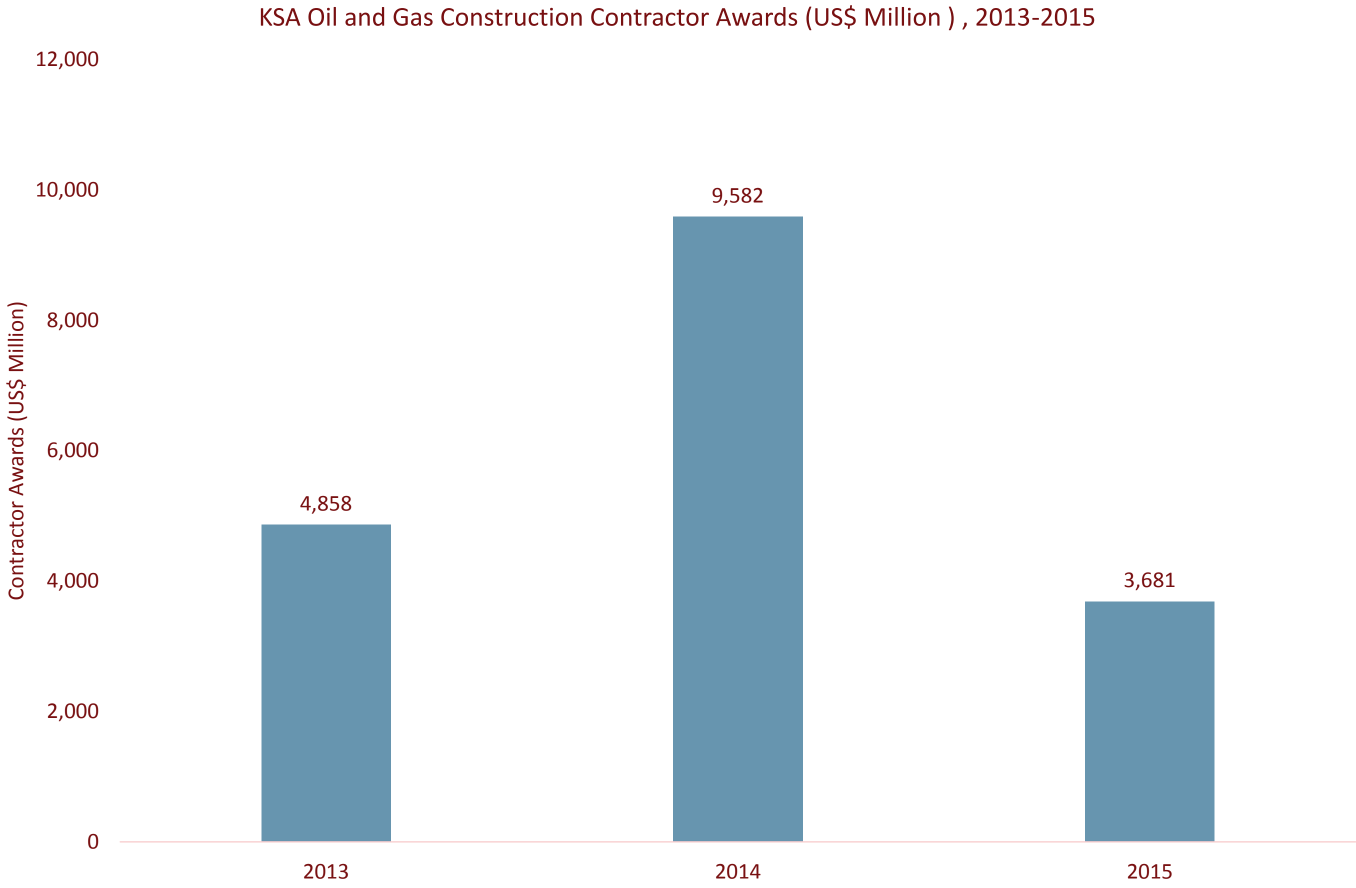
The Kingdom is also undertaking exploration efforts across the neutral zone with a focus on gas. Even efforts to allow private ventures in the Empty Quarter as Rub al Khali including four joint ventures have as yet not yielded any hydrocarbons. Facing competition from shale gas from the United States, Saudi Arabia has also embarked on its own shale gas projects to combat the North American shale gas boom which turned the latter from a net importer of natural gas to an exporter in recent years. It plans to commercialize its own shale gas deposits to replicate the model used by America to meet its burgeoning domestic demand for feedstock. The Kingdom estimates its unconventional gas reserves at around 600 trillion cubic feet, ranking it fifth in the 32 countries currently declared as producers of the fuel, and amount to more than double its conventional reserves. Saudi Aramco in its efforts to explore unconventional reserves has carried out appraisal, drilling and piloting of three prospective areas for unconventional gas in the northwest, in south Ghawar and for condensate-rich shale gas in the Rub' al-Khali, to be used as feedstock for a power plant in Jizan, that in turn would be connected to a 400,000 barrels per day refinery by 2017. Alongside, Saudi Aramco is also successfully increasing its conventional oil production capacities and average recovery rates of its conventional oil to 70 percent, at double the world recovery rates, in an effort to meet the likely doubling of oil demand by 2030.

Moreover, under a Suadiization initiative to improve the technical capabilities of its projects, the Government termed as General Engineering Services Plus, the Government has planned a number of developmental projects as joint ventures including refineries at Jubail and Yanbu scheduled for completion over 2013 and 2014, relocation of a petrochemical project from Ras Tanura to Jubail, a US$ 10 billion expansion of its integrated Petro Rabigh Refinery and Petrochemical plant and a relaunch of its 400,000 bbd Jazan refinery without any petrochemicals component.

Market Size of KSA Oil and Gas Sector

Construction Contract Awards For Oil and Gas Sector in KSA (2013 - 2015)

Figure 3: KSA Oil and Gas Sector Construction Contractor Awards (US$ Million), 2013 - 2015

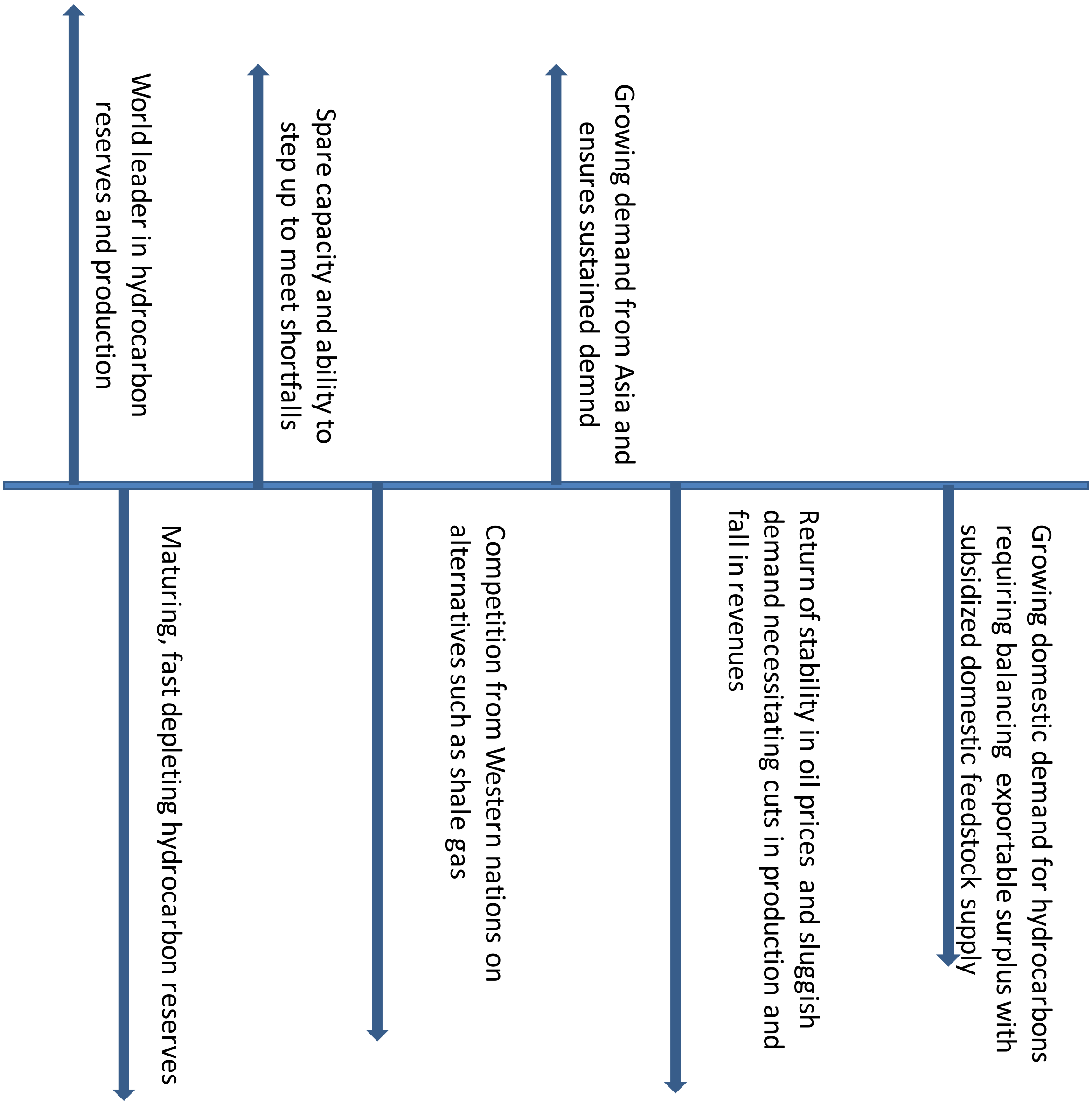


Source: Ventures Onsite MENA Projects Database www.venturesonsite.com

The estimated values of construction contract awards on oil & gas projects in 2012 stood at over US$ 22.3 billion. With the return to normal global oil conditions, Saudi Arabia cut back on its production by end of 2013 and slowed down the pace of further explorations in line with its overall strategy to use its existing hydrocarbon resources judiciously for the future, though returning disruptions in world supply and growing domestic demand have prompted the Kingdom to again step up capacities and augment production though at a more gradual pace, in contracts awarded in 2014 and with the falling oil prices and refusal to step up production which some analysts believe is a move to drive off its cheaper competitors, contractor awards in 2015 are again likely to be lower in the current year.

A diagrammatic representation of the opportunities and challenges posed for the oil and sector in the Kingdom of Saudi Arabia is presented below, summarizing the state of Saudi's hydrocarbon sector in 2015. Upward arrows denote opportunities, size of which is depicted in the length of the arrows and downward arrows represent challenges.

Figure 4: Opportunities and Challenges in KSA Oil and Gas Sector



Source: Ventures Onsite www.venturesonsite.com

OPPORTUNITIES	CHALLENGES
Long-term forecasts suggest oil and gas will maintain their position within the primary energy mix and growing demand for hydrocarbons from Asia ensure	Oil reserves though still the world's second largest are estimated to be mature and on the decline necessitating careful monitoring of further expansions, use of

Opportunities	Challenges
sustained demand	advanced exploration techniques to enhance capacity and checking uncontrolled domestic usage to maintain exportable surplus
Kingdom's dominant oil reserves position and low cost of production combined with strategic role as supplier of oil to bridge disruptions in world supply helps boost oil wealth and surpluses to fund government funding on development and diversification	Saudi Arabia has shown one of the highest oil demand growth in recent years. Growth driven by population, strong GDP, low official fuel prices. The continued absence of sufficient power generation and transmission regionally has and will continue to support the use of diesel and crude-fired captive power. If product demand continues to rise at 5-7% annually, oil available for exports will eventually be squeezed, with regional export refineries switching to meet local demand. Export revenues in 2013 have declined due to this trend as a red signal to the government to step up focus on alternative sources of energy to meet domestic demand
KSA's strategy of maintaining spare oil production capacity through the economic cycle confers it with pricing powers.	Role of private sector as yet limited and all forms of private participation strictly monitored by government. Reforms and privatization proceeding at a slow pace
KSA 's diversification and broadenings its downstream sector while lowering its exportable surplus, would help it widen its base acting as cushion against global fluctuations	The role of KSA as a supplier of last resort is now being challenged as global oil prices show a consistent downward trend.

Major Oil and Gas Projects in KSA

The table below lists the major oil and Gas projects in the Kingdom of Saudi Arabia as of 2015.

Table 3: Major Oil and Gas Projects in the KSA by Project Value (US$ Million), February 2015

Project Name	Client	Consultant	Contractor	Value (US$ Million)
Rabigh Refinery Expansion - Phase 1	Rabigh Refining & Petrochemical Company (Petro-Rabigh)	Foster Wheeler Arabia Ltd., / JGC Gulf International Co. Ltd.	JGC Gulf International Co. Ltd. / Tecnicas Reunidas Gulf (Tecnicas Reunidas -TR)	9,900
Jubail - 2 Export Refinery	Saudi Aramco / Total, Saudi Arabia / Jubail Refinery and Petrochemical Company	Technip	Multiple Contractors	9,600
Ras Tanura Refinery	Saudi Aramco	WorleyParsons	-	8,000
Petrochemical Complex - Polymer Package	Saudi Chevron Phillips Petrochemical Company (SCP) / Saudi Polyolefins Company (SPC)	Parsons Engineering Corp. (Parsons International) / WorleyParsons	Daelim Industrial Company / JGC Gulf International Co. Ltd.	5,000
AFK Field Developments	Saudi Aramco	Bechtel / Snamprogetti	Consolidated Contractors International Company (CCC) / Bechtel / Snamprogetti / Technip / Hadi Haider	3,600
Petrochemicals Complex in Yanbu	Saudi Aramco / Saudi Basic Industries Corporation (SABIC)	-	-	3,000
Petrochemical Complex at Jubail	Sinai Petrochemical Company	-	-	3,000
Integration of Yanbu Refinery	Saudi Aramco	-	-	3,000
Manifa Oil Field Redevelopment - GOSP	Saudi Aramco	Foster Wheeler Arabia Ltd.	Saipem Limited	2,400

Project Name	Client	Consultant	Contractor	Value (US$ Million)
Manifa Oil Field Redevelopment - Onshore Package	Saudi Aramco	Foster Wheeler Arabia Ltd.	Snamprogetti / JGC Gulf International Co. Ltd. / Tecnicas Reunidas Gulf (Tecnicas Reunidas -TR) / GS Engineering & Construction Company	2,360
Yanbu Export Refinery - Gasoline Unit Package	Saudi Aramco	Kellogg Brown & Root (KBR) / WorleyParsons	Daelim Industrial Company	2,300
Jubail - 2 Export Refinery - Package 2	Saudi Aramco / Total, Saudi Arabia / Jubail Refinery and Petrochemical Company	Technip	Technip / Daelim Industrial Company	2,100
Upgrade of the Oil Refinery at Yanbu - Main File	Saudi Aramco Mobil Refinery Company Ltd. (SAMREF)	WorleyParsons	WorleyParsons	2,000
Core Venture 2 - Red Sea Gas Development	ExxonMobil Saudi Arabia Red Sea (EMSARS)	Fluor Arabia Limited	-	2,000
Haradh Gas Development	Saudi Aramco	Foster Wheeler Arabia Ltd.	Technip / JGC Gulf International Co. Ltd. / J & P Saudi Arabia	2,000
Petrochemicals Complex in Jubail	INEOS / Delta Oil Company	Technip	-	2,000
South Rub Al Khali (SRAK) Gas Exploration - Phase 1	South Rub al Khali (SRAK) Company	-	KCA Deutag Drilling	2,000
Hawiyah NGL Plant - Phase 1 - Package 1	Saudi Aramco	Jacobs Engineering Group Incorporated	JGC Gulf International Co. Ltd.	1,800

Source: Ventures Onsite MENA Projects Database www.venturesonsite.com

Chapter3.The KSA Power and Water Desalination Sector Overview

The Kingdom of Saudi Arabia (KSA), with a large agricultural and industrial base and a fast growing population, is one of the largest producers and consumers of desalinated water in the world owing to its scarcity of surface water and limited ground water resources. With the growing demands on the limited water sources due to industrialization and urbanization, the Government alone was unable to expand capacity fast enough to meet the growing demands of water . The wholly Government owned Saline Water Conversion Corporation (SWCC) under the Ministry of Water and Electricity (MOWE) of the Kingdom, that had been operating nearly 36 desalination plants mostly located along the Red Sea coast, has been marked for privatization as a part of the Kingdom's plan to usher in privatization to speed up the development of the water sector. Currently, with domestic water consumption estimated at around seven billion cubic meters per day, 60 percent of which is met through desalinated water, and the remaining from aquifers and the sparse fresh water sources and surface water a meagre 10 percent. Of the desalinated water supplied to the Kingdom's population, 40 per cent is produced from SWCC stations and 20 per cent by private sector operated plants.

Similarly demand for power too increased at a rate of 8 percent annually over the 2006 -2011 periods, requiring expansion of capacity at an accelerated pace. As a result, the country's Government owned Saudi Electric Company (SEC) was slated for privatization, unbundling its generation and distribution business by converting it into a holding company to facilitate private participation and competition to improve the pace and efficiency of expansion.

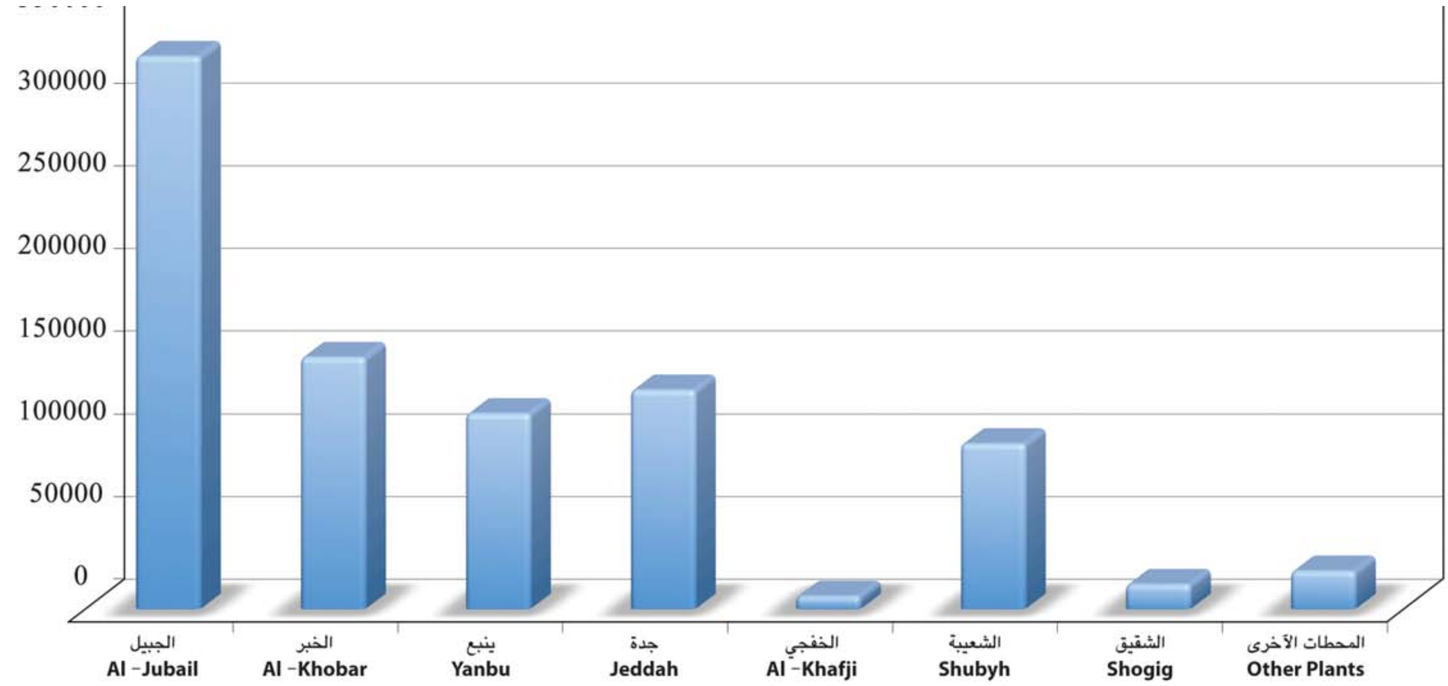
Extensive industrial development across Saudi Arabia is set to increase the Kingdom's total power production capacity to more than 120 Gigawatts by 2030. Six major economic cities currently being built across the Kingdom at a cost of more than US$60 billion already require massive energy resources.

The new projects will drive up electricity demand to an estimated 67,000 megawatts by 2020 in the Kingdom. An exponential growth of capacity and auxiliary services is needed to support the energy needs of the multi-billion-dollar projects materializing across the Kingdom.

According to estimates by Saudi analysts, demand for water in the Kingdom is growing at an annual rate of 8 percent and likely to double over the next two decades which in turn is likely to exert massive pressure on domestic oil consumption. It is estimated that nearly 300,000 barrels of oil is required to operate the Kingdom’s desalination plants on its eastern and western coasts, to receive 3.3 million cubic metres of water from SWCC (Saline Water Conversion Corporation)

The following figure provides a diagrammatic representation of the capacities of Saudi Arabia’s desalination plants as of 2011 in terms of quantity of desalinated water.

Figure 5: KSA Quantity of Desalinated Water by Desalination Plant (Thousands of Cubic Meters), 2011



Source: NWC, Saudi Arabia

Saudi Arabia, which averages 4 inches of rain a year, is considered the largest producer of desalinated water in the world. Desalination plants supply 116.6 million cubic feet a day, or 18 percent of the global total, through a supply network covering around 2,500 miles. They also supply 43 percent of the combined reservoir of the six-member Gulf Cooperation Council. Kingdom's water supply has increased from 26.77 billion cubic feet in 2008 to 36.66 billion cubic feet in 2011. Privatization was identified as the fastest means to bridge the demand and supply gap in the industry. Privatization took the form of Public Private Partnerships (PPP) and though initially like most infrastructure projects worldwide, private participation was slow in coming, owing to trepidations on its profitability and long gestation periods, forcing the Kingdom to take over a number of private projects that suffered due to the global economic slowdown in

2009, under its umbrella. PPP and the Independent Water and Power Projects (IWPP) remain the key to the rapid development of the sector. The sector is likely to present a myriad of opportunities in the form of Build Operate and Transfer (BOT) projects for foreign investment for companies operating in the power and water sector. A Water and Energy Corporation (WEC) was established to purchase all the power and water from the Integrated Water and Power Projects (IWPPs) and meet the demands of energy for the operation of these plants, with a Government guarantee to all payments due from WEC to the IWPPs.

Policies concerning the Kingdom's power and water industry had been the sole responsibility of the Ministry of Water and Electricity (MOWE) since its inception in 2003. Since 2008, the Electricity and Cogeneration Regulation Authority (ECRA) was also set up to establish a license and regulatory framework for the industry as and to regulate the operations of the privately owned desalination plants in the Kingdom.

Sector Organization

The Main Players in the Power and Water Desalination Industry are:

- The Ministry of Water and Electricity (MOWE)- The policy and planning authority
- The Electricity and Cogeneration Regulation Authority (ECRA)-The regulating and licensing authority.
- The Saudi Electricity Company (SEC) – the largest joint stock company electricity provider with activities including power generation, transmission and distribution
- The Saline Water Conversion Corporation (SWCC)-The second largest power generator and the largest joint stock water Desalination Company and also distribute and trade in the products generated by the desalination plant, namely water, power and steam.
- The Private Sector Independent Power Projects (IPPs) –private ventures producing only power and selling their output to the WEC.
- The Private Sector Independent Power and Water Projects (IWPPs)-Private desalination plants producing both power and water and selling the output to the WEC.
- The Water and Electricity Corporation jointly owned by SEC and SWCC to fuel the IPPs and IWPPs need for power and purchase all the power and water produced by the licensed power and water projects for distribution

Market Size of KSA Power and Water Desalination Sector

Saudi Arabia's National Water Company plans to spend US$ 66.4 billion on water and wastewater projects over the next eight years as water consumption grows faster than the Kingdom's burgeoning population. The projects will focus primarily on the oil-rich country's bulging biggest cities. Some US$ 11 billion will be spent on more desalination plants, which convert sea water into fresh water, as natural supplies run out.

To continue efforts to reduce the amount of water and energy consumed, the Kingdom's Ninth Five-Year Plan contains measures to nearly double the capacity of desalination plants from 1.05 billion cubic meters per year to 2.07 billion cubic meters per year and increase the rates of reusing treated wastewater by 50 percent. Similarly, electricity production would be increased by 20,400 megawatts by the end of the plan.

To help address the growing demand for water, Saudi Arabia’s Minister of Water and Electricity, Abdullah Al-Hassein, announced in March 2014, an US$8.8 billion investment in upgrading of the country's desalination network. This will include a desalination plant in Jubail with a capacity of 178,000m3 per day and the laying of pipelines between Jubail and Riyadh, and Rabigh and Mecca via Briman.

The National Water Co. (NWC), also announced US$ 533 million of water infrastructure projects in the tourist area of Ta’if. Ta’if already has 30 water projects which were started during 2013 including supply networks, sewage systems, treatment plants and a reservoir. Among projects currently underway is construction in Rabigh on the Red Sea, near Ta’if, of the world’s largest desalination plant, which by 2018, will be able to supply 600,000 cubic meters of water per day

Power demand in the Kingdom is set to increase about 8 percent annually over the 2011-2016 periods, according to Government estimates. The country has about 45,000 megawatts of generating capacity, according to the 2009 annual report of state-run Saudi Electricity Co. (SECO). To satisfy future demand, capacity must expand to 75,000 megawatts by 2018 and more than 120,000 megawatts over the next two decades. KSA plans to spend more than US$ 100 billion on power plants and distribution networks by 2020 to meet domestic electricity demand that’s growing twice as fast as the Arab world’s largest economy. The Ministry of Water and Power expects to raise by 30 percent an earlier forecast of US$ 303 billion in power-related expenditures over the decade. The projected increase reflects in part Saudi Arabia’s need to electrify 500,000 new homes that its king ordered to be built as the Government tried to forestall potential unrest, amid protests for better employment opportunities and democracy that have engulfed the Middle East.

As demand for power surges, the country is also burning greater quantities of crude oil and refined products in its power plants. It uses crude and other liquid fuels to supply about 60 percent of its electricity.

The Kingdom is also looking to renewable energy such as solar power and to nuclear plants in its program of expanding output. Saudi at the end of 2011 had announced that it would be investing US$ 100 billion to erect 16 nuclear energy plants across the country in the coming years. It comes on the heels of Saudi officials discussing the potential of solar and other renewable energy technology in the country in an effort to reduce the country's reliance on oil and gas.

The budget for FY 2014-15 allocated SR 60 billion toward, Water, agriculture and (related) infrastructure spending (7 percent of the total budget), a decrease of 1.6 percent compared to 2014 budget. Funds to the tune of SR23 billion have been set aside for new and expansion of existing projects; including increasing water resources, building dams and expanding/improving water and water treatment networks. Some of the budgeted amount was also set aside for projects that have been approved in previous years and that are under construction.

The allocations for the power sector are inclusive of construction of new power plants, completion of projects already under construction and maintenance of existing units and those for water are inclusive of execution of new projects, operation and maintenance of desalination plants and sewage networks. Funding for the projects is planned through an interest free government loan of US$ 18.7 billion supplemented by financing from local banks and private sector investment. According to MOWE, over the next 10 years nearly US$ 133.3 billion is required to be invested by the Kingdom on power projects, of which nearly US$ 40 billion is expected to be funded by the private sector.

Renewable Energy

Renewable energy has also received renewed focus as the Kingdom begins to feel the pinch from the growing domestic demand for hydrocarbon as feedstock for domestic consumption, not only by industries but by the housing sector, with Saudi electricity requirements estimated currently at three times the world average. The housing sector consumes about 50% of the Kingdom's electricity supply, followed by industries, who consume 21%, the trade sector 15% and Government facilities, 12%. Moreover, the Kingdom's peak time energy demand is expected to treble between 2011 and 2032 from 46,000 MW to 120,000 MW. The Government also provides subsidised fuel worth US$ 40 billion to the Saudi Electricity Co. for power generation. The Kingdom has also invested heavily in research and development for projects in the solar, wind and nuclear energy generation areas, geothermal and energy from waste projects, approximating US$ 109 billion, and aiming to meet at least a third of its energy needs from these sources by 2032. Developing new and cleaner energy technologies is an area of focus for the Kingdom's state oil producer, Saudi Aramco, which is focusing its efforts on the potential for solar power, for which Saudi Arabia is known to have huge potential.

The Kingdom plans to generate solar electricity equalling the amount of its energy from crude exports, and has the potential by 2020, to produce enough solar power to meet more than four times global demand for electricity. Saudi Aramco is spearheading a number of solar power projects. Solar projects include, a 500kW solar farm has been installed on Farasan Island in the Red Sea, use of solar power in the Saudi companies such as the new Al-Midra Complex at Dhahran, where solar panels that double as sunshades over its 4,500 parking spaces, the King Abdullah Petroleum Studies and Research Centre, built by Saudi Aramco, will feature solar panels capable of generating 3.5MW of energy. A new Saudi Aramco built solar facility at the King Abdullah University of Science and Technology (KAUST) will generate 2MW of energy. KAUST was established by Saudi Aramco to drive innovation in science and technology and to support research in areas such as energy and the environment.

The King Abdulaziz City for Science and Technology (KACST), an independent scientific organisation, announced in January 2011, to develop solar powered desalination plants using advanced nanotechnology. The main aim of this programme is to produce low-cost water treatment and electricity production.

Nuclear power is also a major feature of the Kingdom's headlong push into renewable power generation. In June 2012, KACARE announced plans to build 16 nuclear reactors by 2030, and aims to have the first two in ten years, and then to establish two more in each following year. The estimated cost of each reactor would be US$ 7 billion and Saudi Arabia plans to cover 20% of its electricity needs using nuclear energy.

Wind power is another technology that has a part to play in the development of renewable energy sources. A study in 2005, of five potential locations demonstrated that the cities of Dhulum and Arar were sites for off grid, remote wind turbines. The same study also concluded the viability of using grid connected wind turbines to partially power two coastal cities, Yanbu and Dhahran. Research into the potential for wind energy undertaken at the King Fahd University of Petroleum and Minerals concludes that the best sites are on the Arabian Gulf near Dhahran. As evidence of its commitment to becoming a world leader in renewable energy production, Saudi Arabia will soon begin exporting electricity, following the signing of a linkage agreement with Egypt.

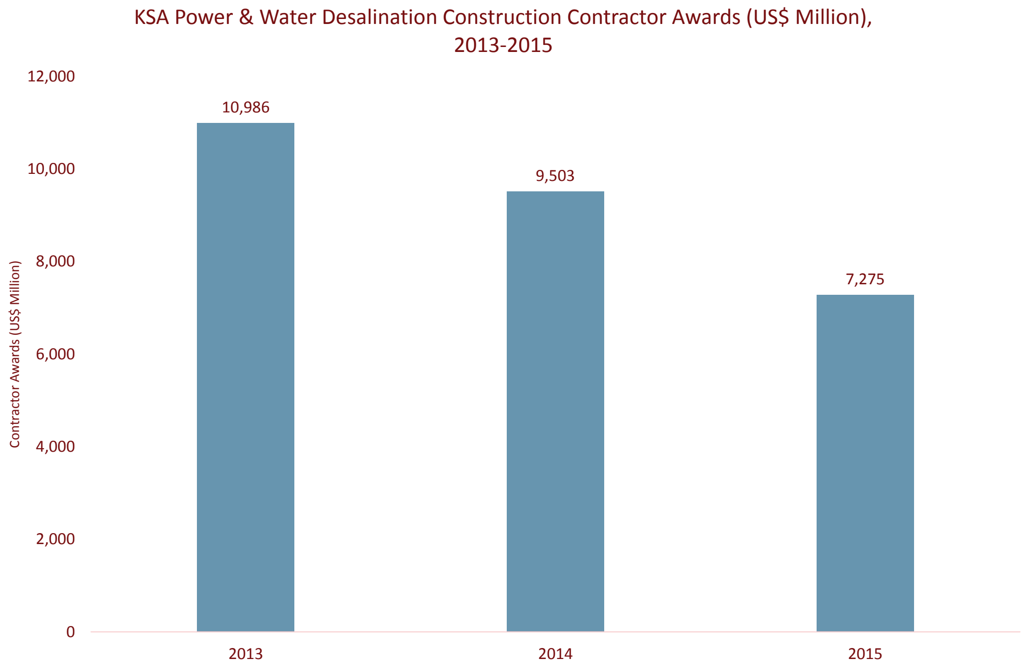
Traditional Energy

Alongside its heavy investment in renewable capacity, Saudi Arabia continues to develop traditional power generation capacity to meet the growth in energy demand. In July 2014, for example, ABB Ltd Swiss engineering giant was awarded a US$ 78 million contract from Saudi Electricity Company (SEC) for providing transformers for a two new combined cycle power plants which will enhance the transmission capacity in the Riyadh area. These new plants are part of persistent efforts to boost the country's power-generation capacity. SEC aims to increase the capacity by as much as 50%, to produce about 91GW by 2020. Longer term the national power transmission and distribution company plans to increase generation capacity by 100%. SEC stated in 2014 that the Kingdom would save 200 million barrels per year of liquid fuel by switching its power stations to more efficient combined cycle turbines, a process which SEC began in 2009. Saudi Arabia continues to be the largest crude oil feedstock user as compared to other countries in the world that have switched over to gas and other forms of more easily and cheaply available fuels to fire their industrial needs.

With the large scale budget allocations and expansion plans in the utilities sector, the power and desalination market is likely to witness a healthy growth in contracts awarded during the 2013-15 periods. The following figure shows the trends in major contracts in the KSA power and water desalination market over the period 2013 to 2015.

Construction Contract Awards For Power and Water Sector in KSA (2013-2015)

Figure 6: KSA Power and Water Sector Construction Contractor Awards (US$ Million), 2013- 2015



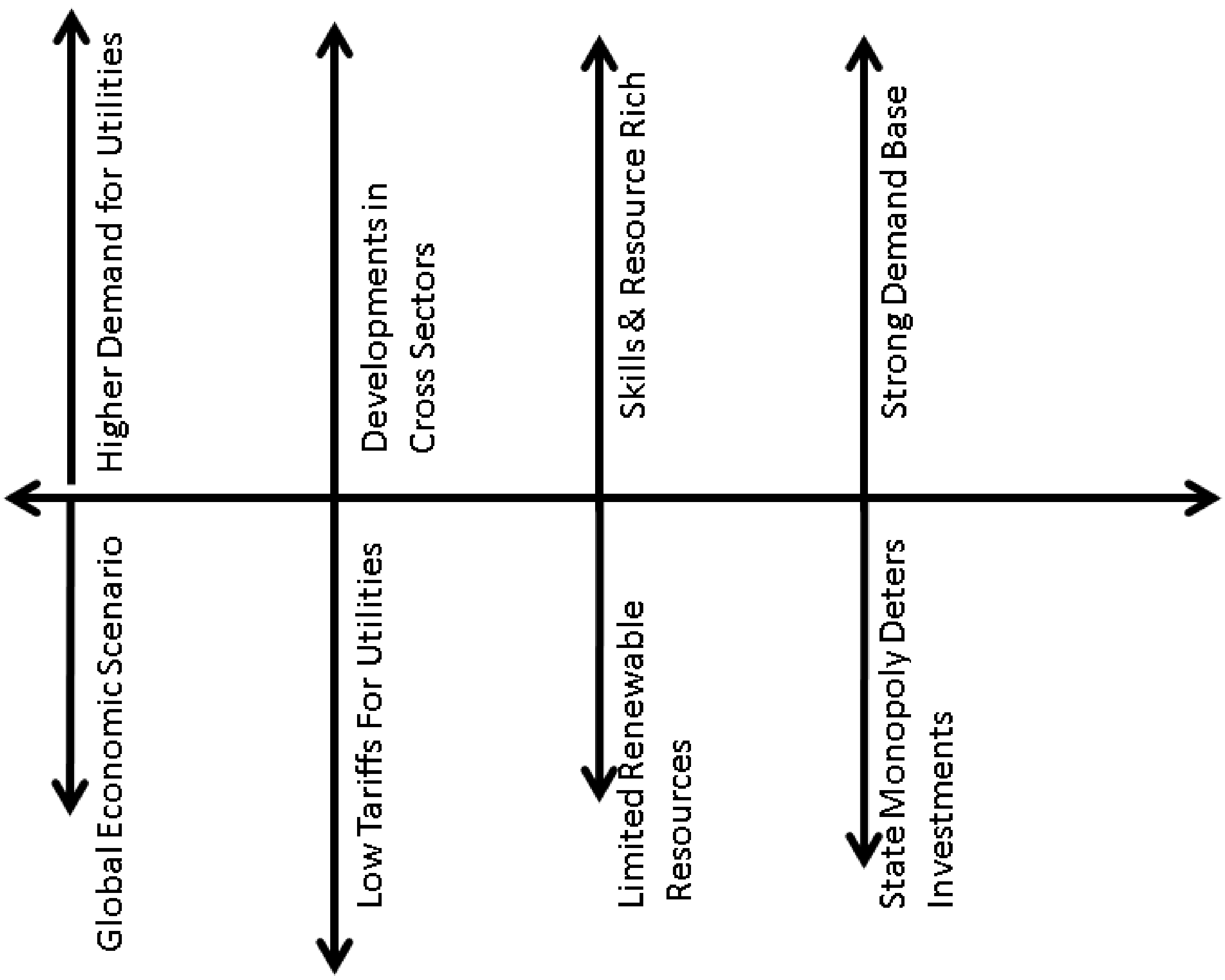
Source: Ventures Onsite MENA Projects Database *www.venturesonsite.com*

Population growth, diversification and industrialization following consistent investment and expansion planned by the government over the past six years following the economic slowdown have led to a growing demand for power and water to meet the needs of the population and to power the industries. Anticipating this trend, Saudi Arabia has earmarked large investments across the power and water sector along with clear measures to encourage private participation for the steady development of this sector as supportive infrastructure to support the planned growth of its economy.

The large scale investments across the power transmission and distribution segments (T&D) as a part of the ten year investment plan by the Kingdom from 2010 to 2018 at a cost of US$ 80 billion, makes it the most attractive segment for investors in the Kingdom. It is expected that the Kingdom plans to add another 30 GW of capacity to its current capacity of 51,600 MW by 2020 with ample financial support to the public private partnerships (PPPs) in the sector promised alongside. However with the initial spur in investments between 2010 and 2013, the contracts awarded are likely to gradually peter out with existing projects already building up capacities for the longer term and allocations only toward completion of existing projects growing.

A diagrammatic representation of the opportunities and challenges posed for the power and water sector in KSA is presented below, summarizing the state of Saudi's utilities sector in 2014. Upward arrows denote opportunities, size of which is depicted in the length of the arrows and downward arrows represent challenges.

Figure 7: Opportunities and Challenges in KSA Power and Water Sector



Source: Ventures Onsite www.venturesonsite.com

OPPORTUNITIES	CHALLENGES
Heavy budget allocations to build infrastructure sector to translate into greater projects in the power and water sector and help growth	Global economic slowdown and greater integration with global economy impacts private investment
Renewed government focus on renewables likely to	Low consumer power and water tariffs encourage

present wide opportunities across nuclear, solar, wind, geothermal and energy from waste segments	wastage and discourage private investment
Ease of legal and regulatory business start-up procedures attracting global investors	Role of private sector as yet limited and all forms of private participation strictly monitored by government. Some failures in noted PPPs and strong efforts at Suadiization also deterring investors.
Availability of a strong demand base owing to a young, growing, and affluent population.	Limited renewable sources to fuel the power and water desalination plants, mostly gas fired, reducing exportable surplus of oil-

Major Power and Water Projects in KSA

The table below lists the major power and water projects in the Kingdom of Saudi Arabia as of February 2015.

Table 4: Major Power and Water Projects in the KSA by Project Value (US$ Million), February 2015

Project Name	Client	Consultant	Contractor	Value (US$ Million)
King Abdullah City of Atomic and Renewable Energy(KA-Care) - Alternative Energy Projects - Phase 2	King Abdullah City of Atomic and Renewable Energy (KA-care)	-	-	10,920
King Abdullah City of Atomic and Renewable Energy(KA-Care) - Alternative Energy Projects - Phase 1	King Abdullah City of Atomic and Renewable Energy (KA-care)	-	-	8,400
Nuclear Power Reactors : Reactor 1	King Abdullah City of Atomic and Renewable Energy (KA-care)	-	-	7,000
KA-Care - Alternative Energy Projects - Nuclear Plant	King Abdullah City of Atomic and Renewable Energy (KA-care)	-	-	7,000
Al- Uqair (South) Power Plant	Saudi Electricity Company (SEC)	-	-	5,200

Project Name	Client	Consultant	Contractor	Value (US$ Million)
Alumina Refinery in Ras Al Khair - Power and Water Plant	Saudi Arabian Mining Company (Maaden), Eastern Province / Saline Water Conversion Corporation (SWCC) / Saudi Electricity Company (SEC)	-	Al Arrab Contracting Company / Doosan Heavy Industries & Construction Co. / SEPCOIII Electric Power Construction Corporation	3,880
2800MW Rabigh Power Plant - Phase 6	Saudi Electricity Company (SEC)	Parsons Brinckerhoff	Doosan Heavy Industries & Construction Co.	3,420
South Jeddah Power Plant	Saudi Electricity Company (SEC)	Parsons Brinckerhoff	Hyundai Heavy Industries (HHI) / Mitsubishi Heavy Industries (MHI)	3,120
Jazan Economic City (JEC) - Power & Desalination Plants	Saudi Arabian General Investment Authority (SAGIA)	Mott MacDonald / Parsons Brinckerhoff / Perunding Alam Bina (PAB), Malaysia	-	3,000
Yanbu Power and Desalination Plant - Phase 3	The Power & Water Utilities Company for Jubail & Yanbu (Marafiq) / Saline Water Conversion Corporation (SWCC)	Fichtner Consulting Engineers	Al Jaber Engineering / Samsung Engineering / Al Toukhi Company for Industry, Trading & Contracting	3,000
KA-Care - Alternative Energy Projects - CSP Plant	King Abdullah City of Atomic and Renewable Energy (KA-care)	-	-	3,000
KA-Care - Alternative Energy Projects - PV Solar	King Abdullah City of Atomic and Renewable Energy (KA-care)	-	-	3,000
Ras Al Khair Power Plant	Saudi Electricity Company (SEC)	Parsons Brinckerhoff	-	2,500
Rabigh IPP	Saudi Electricity Company (SEC) / ACWA Power International / Korean Electric Power Corporation (KEPCO)	Fichtner Consulting Engineers / Sean K Simms Planners	DongFang Electric Corporation / SEPCOIII Electric Power Construction Corporation	2,500
KA-Care - Alternative Energy Projects - Wind Power	King Abdullah City of Atomic and Renewable Energy (KA-care)	-	-	2,500

PROJECT NAME	CLIENT	CONSULTANT	CONTRACTOR	VALUE (US$ MILLION)
Combined Cycle Power Plant in Ras Al Khair	Saline Water Conversion Corporation (SWCC) / Saudi Arabian Mining Company (Maaden), Eastern Province	Fichtner Consulting Engineers	Al Arrab Contracting Company / SEPCOIII Electric Power Construction Corporation	2,420
Shuqaiq IPP	Saudi Electricity Company (SEC)	-	Hyundai Heavy Industries (HHI)	2,000
Jazan Economic City (JEC) - Aluminum Complex - Power Plant	Saudi Binladin Group, Saudi Arabia / China Aluminium Limited Corporation (CHALCO) / MMC Corporation Berhad, Malaysia	-	CPI Power Engineer	2,000
PP13 Power Plant - Combined Cycle Power Plant	Saudi Electricity Company (SEC)	-	-	2,000
Al Raies 1 Power Plant	Saudi Electricity Company (SEC)	-	-	2,000
Second Power Plant in Al Rais	Saudi Electricity Company (SEC)	-	-	1,800
Jizan Refinery - IGCC Power Plant	Saudi Aramco	KBR Middle East	SEPCO III Electric Power Construction Corporation	1,800
Al Rais Power Plant	Saudi Electricity Company (SEC)	-	-	1,800

Source: Ventures Onsite MENA Projects Database www.venturesonsite.com

Chapter4. KSA Building Construction Sector Overview

For the past few years, Saudi Arabia has consistently allocated unparalleled amounts in the state budgets between 2012 and 2015 with a clear focus on upgrading social infrastructure. As a part of its larger program of diversification and reducing dependence on oil and building competencies from within, the Kingdom has also realized the need to build skills from within, necessitating massive upgrades to its educational infrastructure, as it strongly enforces Saudiization measures for the employment of domestic labour across sectors.

The massive shortage of affordable housing and quality healthcare in the region have also prompted KSA to spearhead the Gulf region's efforts at upgrading healthcare infrastructure and provide government funding to encourage affordable housing programs across the country. These measures have translated into the Kingdom becoming one of the fastest growing construction markets in the region in 2013, though the dampener in the form of falling oil prices in 2014 have slowed down the pace of capital investment and growth of projects into 2014 and 2015. As a number of mega projects such as the six new "smart" economic cities planned at a cost of US$ 110 billion to support facilities for 4.5 million people and on upgrading social infrastructure that includes primarily investments across the large scale social housing, unparalleled educational infrastructure investment and the development of healthcare systems including the establishment of a medical city and a number of hospitals and healthcare centres alongside upgrades to existing ones have already underway, investments across the building construction sector continue to sport strong growth during the period 2013 to 2015.

Moreover, the government has also increased its focus on tourism, tapping its existing potential for religious tourism with its two world renowned pilgrimage destinations of Mecca and Medina taken as a starting point, extending development to regions surrounding it and ushering in the necessary infrastructure for development of tourism in the area as well as surrounding regions of the Kingdom, with upgrades to the necessary transportation, airport, roads and highways apart from the energy and sewage systems required to build developments in the area. Leveraging the tourist inflow from Hajj and Umrah seasons, the Kingdom has introduced incentives such as extending the Umrah visas to enable visitors to take advantage of tourism around rest of the Kingdom. Added to these developments are plans for a number of mega cities One of them is Makkah Gate, a new city to house 600,000 people near Mecca, under PPP (Public Private Partnership) on the Mecca Jeddah Highway comprising 45 districts including educational institutions, government offices, shopping centres, housing units and a national park. Then there are ongoing plans for the 1.6 million square metres "Pilgrim City" in Medina with a capacity to accommodate 200,000 pilgrims during Hajj and Umrah seasons that will include hotels, furnished apartments, a railway and bus station, government offices and a 400-bed hospital.

Also underway are the Kingdom's plans to upgrade the Riyadh King Khaled International Airport from its current capacity of 12 million passengers up to 35 million by 2017. Including other airport expansions and US$ 12.5 billion already appropriated for the upgrades to its four main international airports of Jeddah, Riyadh, Dammam and Medina, the Kingdom has planned to spend US$ 30 billion on airport expansions and upgrades alone by 2020 in its other governorates as well such as Arar and Abha, of which US$ 10 billion is expected to come from private investments.

Saudi Arabia is also attracting its share of luxury retailers, mainly owing to its highly affluent and young, domestic population of 29 million growing at over 2 per cent annually apart from the 12 million religious tourists its receives annually on account of the Hajj and Umrah seasons, that offers a huge and growing demand base. Analysts have also forecast a strong upward trend in lifestyle spending including growth of restaurants and hotel spending, furnishing and home décor spend. It has also become a leading destination for fast food retailers accounting for over 65 percent of the GCC fast food market in 2013.

It is also attracting furnishing retailers and international brands across products such as the coffee retailer Tim Hortons to open over 100 stores across the Kingdom over the next five years and the United Electronics Company's plans to add its 31st store in the Kingdom. The Kingdom has been ranked 19th in AT Kearney's Global Retail Competitiveness Index of 80 countries. With significant developments in this sector such as the opening of the store employment to women, are likely to help the retail sector perform much better than others such as petrochemicals and agriculture, in terms of attracting global investments. The large scale salary bonuses doled out in January 2015 announced by the new King are also further likely to boost the retail sector's prospects in the short-term providing it with the fillip to sustain growth over the next few years and spill over into other segments of the building construction market.

It is expected, according to a MENA tourism report by Aranca, a market consulting company, that investment in the travel and tourism sector will increase at a CAGR (Compound Annual Growth Rate) of four percent to SR 30.9 billion between 2013 and 2023 along with an increase in number of incoming tourists to the Kingdom at a CAGR of 2 percent to 21.3 million over the same period garnering tourism revenues of an estimated SR 60.9 billion by 2023.

Moreover, social infrastructure such as healthcare have also begun to take centre stage in Saudi Arabia's building construction projects pie as the healthcare market has begun to present huge opportunities for investors. One study by Alpen Capital forecast that the healthcare market is expected to expand at a compound annual growth rate (CAGR) of 11.4%, from US$ 18.3 billion in 2013 to US$ 31.5 billion by 2018.

The government has also consistently spent vast amounts of upgrading social infrastructure that are likely to mainly translate into massive project contracts across the building construction sector between 2013 and 2015. For example, the main allocations in the budget for 2015 comprised education US$ 57.9 billion (25 percent) an increase of US$ 1.8 billion over the previous year, health and social affairs US$ 42.7 billion, a huge increase of 87 percent over 2014.

More specifically, the government has made massive appropriations toward construction of new primary health clinics, medical centres, three new hospitals, three blood banks, 11 medical centres and 10 comprehensive care clinics to add to the present number of 117 hospitals and 8 medical cities under construction at the end of 2014. In FY 2014, 26 new hospitals have been completed across the Kingdom. These have all translated into huge opportunities for the building construction sector and likely to continue into 2015 and beyond.

The allocations in the education sector includes 164 new projects costing US$ 3.7 billion apart from additions worth US$ 1.8 billion apart from projects already under construction for which earlier allocations are being utilized. The budget includes allocations for general education that involves 500 projects for rehabilitation of school buildings and 11 projects for rehabilitation of sports centres at estimated cost of US$ 108 million. For higher education the appropriation is US$ 3.28 billion that would be used for rehabilitation and completion of college campuses across universities and opening of three new universities apart from scholarship for students at a cost of US$ 6 billion. New projects for building of new technical and vocational colleges have also been planned for.

The Kingdom of Saudi Arabia took the most sweeping and largest steps in the residential markets with over 10,000 housing loans toward the construction of 12,000 affordable homes across the Kingdom and finally bringing on board the much awaited mortgage law that is expected to help ease credit to the housing sector.

With all this activity across the residential, educational, commercial, healthcare, hospitality and retail segments of the KSA buildings market offer varied prospects for investors as the large scale government matched by growing private investment have made Saudi Arabia a growing destinations for global and regional investors with projects progressing at rates faster than the entire region and Saudi Arabia has gained the distinction of having the best record for completion of projects in the region as well.

On the downside, rigorous construction activity around the newly opened up regions of Mecca and Medina have fuelled raw material shortages and inflation in essential construction materials such as cement within a short time span, to control which the government has had to enact hasty price and supply controls. It has also been cited by analysts as the costliest market for construction in 2014 and 2015 in the Gulf region.

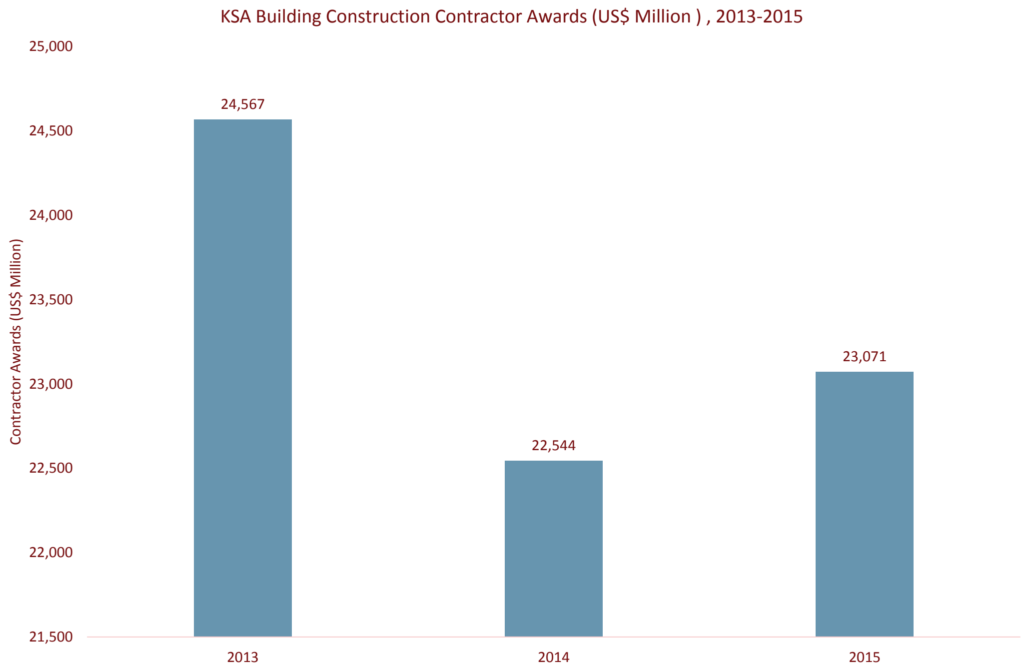
Shortages in the affordable housing sector have also become acute despite the proactive measures by the government over the past. Studies have shown that the Kingdom needs nearly 5.5 million homes by 2015 and the government has had to issue decrees to its own Ministries to hand over land for the housing development to the Ministry of Housing to meet the shortfall.

Market Size of KSA Building Sector

With the large scale budget allocations and expansion plans in the social infrastructure and housing sectors, the building construction market is likely to continue to post a healthy growth in contracts awarded during the 2013 to 2015 periods. And after a brief decline in 2012 due to a slowing down in global financial markets and oversupply in real estate markets, the sustained government spending has resulted in a continual of the frantic pace of building construction activity into 2013 and beyond. The following figure shows the trends in major contracts in the KSA real estate market over the period 2013 to 2015.

CONSTRUCTION CONTRACT AWARDS FOR BUILDING SECTOR IN KSA (2013 - 2015)

Figure 8: KSA Building Sector Construction Contractor Awards (US$ Million), 2013 - 2015

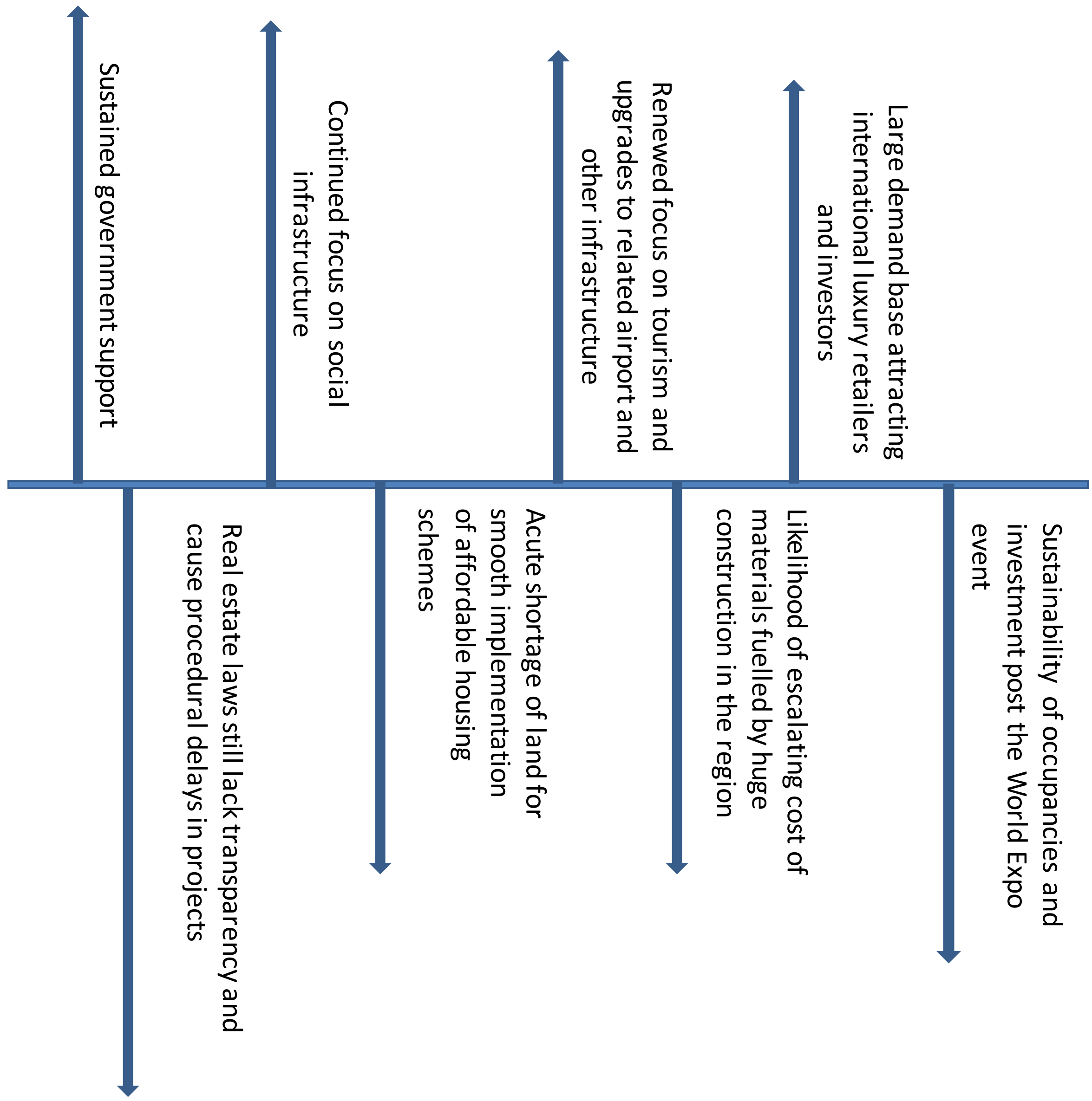


Source: Ventures Onsite MENA Projects Database www.venturesonsite.com

As investments residuals from the Kingdom's massive affordable housing and Ninth Five Year Development Plan (2010-2014) petered out and oil prices tightened government allocations and the adverse effect of stringent Saudiization measures on projects in the short term, construction contractor awards witnessed a moderation in 2014. However, the continued expansionary stance of the Saudi budget with consistent investment across the social infrastructure sectors of education, healthcare and affordable housing sectors are likely to revive the contracts across the building construction market in 2015, though at a moderate pace as compared to earlier years as the Kingdom faces a projected deficit for the first time since 2011 amid falling revenues. Along with the spill-overs effects on associated sectors, and the Kingdom's renewed focus on tourism, the building construction market is likely to grow at a healthy pace between 2013 and 2015.

A diagrammatic representation of the likely opportunities and challenges posed for the building sector in KSA over 2015 is presented below. Upward arrows denote opportunities, size of which is depicted in the length of the arrows and downward arrows represent challenges.

Figure 9: Opportunities and Challenges in KSA Buildings Sector



Source: Ventures Onsite www.venturesonsite.com

Opportunities	Challenges
Government non-oil sector diversification and investment plans cushion against global fluctuations. The Government's continued emphasis is on developing the social infrastructure, which includes the construction of schools, healthcare amenities, housing units etc despite shrinking surplus in budget.	Delays in implementing the Mortgage Law affect the development of residential sector and it's financing.

Opportunities	Challenges
Besides religious tourism, its attractiveness as an investment destination to augment growth in trade, retail, commercial and Leisure and Tourism segments	Oil price fluctuations to impede growth till diversification fully achieved
Government has renewed focus on tourism upgrading relevant airport and other infrastructure and easing regulations for tourist visas to boost tourism and help building construction in this sector	Acute shortage of land for affordable housing is a concern in the Kingdom. The Government further needs to augment the supplies to meet soaring demand and even forced to issue decrees to its own ministries to surrender land for the social housing program
Availability of a strong demand base owing to a young growing and affluent population	Sharp decline in oil prices reduce capital allocations cutting into growth of building construction sector in the short term
	Stringent Saudiization measures to curb employment of foreign labour likely to strongly impact construction market growth in the medium term

Major Building Projects in KSA

The table below lists the major building projects in the Kingdom of Saudi Arabia as of February 2015.

Table 5: Major Building Projects in the KSA by Project Value (US$ Million), February 2015

Project Name	Client	Consultant	Contractor	Value (US$ Million)
King Abdullah City of Atomic and Renewable Energy	King Abdullah City of Atomic and Renewable Energy (KA-care)	Snohetta International	-	100,250
King Abdullah Economic City (KAEC)	Emaar Economic City,Saudi	Multiple Consultants	Multiple Contractors	100,000
500,000 Housing Units in Different Areas of Saudi Arabia	Ministry of Housing, Saudi Arabia	Parsons International	Multiple Contractors	68,000
Jeddah Kingdom City	Kingdom Holding Company	Pickard Chilton Architects / Omrania & Associates (O&A)	Saudi Binladin Group	27,000
Ras Al Khair Minerals Industrial City	Royal Commission for Jubail and Yanbu (RCJY)	Atkins	-	25,000

Project Name	Client	Consultant	Contractor	Value (US$ Million)
Jeddah Central Development Project	Commercial Real Estate Company (Tijaria) / Venture Capital Bank, Saudi / Urban Development Co.LTD (UDC) / Siraj Capital Ltd., Saudi / Jeddah Central District Company JV / Jeddah Development and Urban Regeneration Company (JDURC) / Solidere International Limited	-	-	20,000
South Obhur Project	Rayadah Investment Company	Solaiman Abdullah El Khereiji Architecture & Engineering Consultants (SAK), Jeddah	-	15,000
King Faisal University in Al Ihsa	King Faisal University	Arch-Centre for Architecture & Engineering Consultant	Multiple Contractors	14,721
Al Ruwais Development in Jeddah	Al Ruwais Union Company for Real Estate Development / Raysan Al Arabiah (Amlak Al Ruwais) / Jeddah Development and Urban Regeneration Company (JDURC)	Rasd International Group	-	13,800
Dar Al Hijrah City in Madinah	Dar Al Hijrah Company / Ministry of Finance, Saudi Arabia	Zuhair Fayez Partnership Consultants	-	13,750
Qasr Khozam	Dar Al Arkan Development Company, Jeddah / Jeddah Development and Urban Regeneration Company (JDURC) / Khozam Development Company	Dar Al Handasah Consultants (Shair and Partners)	-	13,331

Project Name	Client	Consultant	Contractor	Value (US$ Million)
Expansion of Makkah Holy Haram - Main File	General Presidency of Holy Mosques Affairs	-	Saudi Binladin Group, Saudi Arabia	11,000
Makkah Gate Cultural Oasis	Al Balad Al Ameen Company for Urban Development / Makkah Municipality / Sumou Real Estate Company / Makkah Gate Company	-	-	10,000

Source: Ventures Onsite MENA Projects Database www.venturesonsite.com

Chapter5. KSA Industrial Sector Overview

The Kingdom has no income tax, no property tax, no sales tax, and no value-added tax. Corporate tax is only 20%, with the ability to carry losses forward indefinitely to offset future taxes", he said, pointing out that there are no constraints on the repatriation of capital and no minimum capital requirements for foreign investors in most sectors. With diversification the cornerstone of its growth model, Saudi Arabia is fast becoming an attractive destination for industrial investors with a GDP of US$ 727 billion as of 2014 ranked 19th in the world and tripling over the past ten years. According to the IMF, Saudi Arabia is the third fastest growing economy among G20 states after China and India, and the largest economy in the Middle East and Northern Africa, accounting for more than one half of the GCC's economic output.

The centrepiece of the Kingdom's industrial strategy also part of its National Industrial Strategy 2020, is the Saudi Clusters Programme, which was initiated by the Government to develop and to provide support to a range of new industries. The aim of the Programme is to grow and diversify the economy by developing targeted industrial clusters that leverage the Kingdom's resources. The Clusters have been selected in areas where the Saudi Arabian fundamentals of abundant, competitive energy and raw materials can be leveraged to create competitive ventures that meet the aspirations of both the country and of potential investors. The sectors have been chosen on the basis that they are where the Government believes that, over time, Saudi Arabia can become competitive on a global basis.

The Government agency established to oversee the Clusters Programme is focusing on five fast growing, export oriented industrial sectors: Automotive; Minerals and Metal Processing; Solar Energy products; Plastics and Packaging; Home Appliances. These industries have been selected based on their potential and their ability to utilize the abundantly available natural resources, raw materials and energy resources of Saudi Arabia to the best use. Manufacturing has been identified as the strategic choice for KSA's diversification programme and it has set itself a lofty goal of improving its share in the GDP from 11 percent in 2014 to 20 percent by 2020. Massive investments also have been made across related infrastructure such as power, water, transportation and communication, with efforts to concentrate connectivity to the key industrial cities of Jubail, Yanbu, Jeddah, Rabigh, Hail and Medina to help buck this trend.

Following consistent investment across the industrial sector over the past six years since the global economic slowdown of 2009, the Kingdom has gradually begun to reap the benefits of diversification and expansion in 2014, as every component of its non-oil GDP witnessed a healthy growth in 2013, with the industrial sector increasing at 4.5 percent. Government focus has provided added incentives to the private sector as job creation helps guarantee a sustainable future.

An industrial revolution continues to sweep in Saudi Arabia with the aim of replacing the country's historic dependence on the import of raw materials and finished products with a diverse portfolio of industrial and manufacturing capabilities. The first phase was completed in 2014 as the vision of diversification gradually have begun to yield results and the investments under the Ninth Five Year Development plan (2010-2014) are implemented.

Saudi Arabia's industry sectors are dominated by petrochemicals and petrochemical based products. The main industries in Saudi Arabia include crude oil production, petroleum refining, ammonia, industrial gases, sodium hydroxide, fertilizers, cement, plastics, metals, construction, commercial ship and aircraft repair.

The efforts exerted by the Government for the support of industrial development covered several basic spheres including implementation of required infrastructure, construction of Jubail and Yanbu industrial cities, construction of industrial cities in various regions of the Kingdom, establishment of Saudi Industrial Development Fund (SIDF), and continued provision of other industrial support and incentives. The response and cooperation of the private sector with the Governmental plans and efforts have an effective impact on actualization of the industrial development's achievements. The industrial base in the Kingdom has experienced a wide expansion over the past four decades. The number of operating industrial units has increased from (198) in 1974 to (4,645) in 2010. Alongside, invested capital has increased from SR 12 billion in 1974 to about SR 404 billion in 2010. At the same time, number of employees also increased from (34,000) in 1974 to (530,000) in 2010.

Providing modern industrial cities is an additional form of support by the Government for the national industries of the Kingdom. The Ministry of Commerce & Industry has constructed and developed several industrial cities in the various regions of the Kingdom and provided them with all required services and utilities. To upgrade the quality of services provided by the industrial cities, the Saudi Industrial Property Authority (*Modon*) was established in 2001, as an independent public agency to supervise the establishment and management of industrial cities and technology zones, in addition to the operation, maintenance and development of these cities in collaboration with the private sector. According to Modon, there is a growing demand for readymade factories for companies to quickly establish operations in the Kingdom's booming industrial sector and it has built nearly 300 such factories across 30 industrial cities in Saudi Arabia.

The table below shows total areas and developed areas of the existing industrial cities in the Kingdom.

Table 6: Developed and Total Areas of Existing Industrial Cities in Saudi Arabia, as of 2010

INDUSTRIAL CITY	DEVELOPED AREA (M2 000)	TOTAL AREA (M2 000)
Riyadh	15.860	19.237
Jeddah	12.974	20.807
Dammam	18.482	28.191
Al Hassa	1.500	1.543
Qassim	60	1.543
Zulfi	2.000	19.000
Sidair	10.000	257.000
Makkah	730	730
Madinah	1.750	9.948
Al Kharj	5.000	99.460
Assir	904	2.663
Taif	3.000	11.000
Al Jouf	629	3.000
Aarar	1.000	2.000
Tabuk	1.350	4.000
Hail	770	2.560
Najran	750	6.560
Gazan	2.000	39.490
AlHai'er	2.000	5.000
AlBaha	3.000	3.000
Total	83.759	536.732

Source: Saudi Industrial Property Authority (Modon).
*(*The table do not include areas of the two major industrial cities of Jubail & Yanbu, in addition to industrial cities of the oil refineries that are belonged to ARAMCO. The two industrial cities of Jubail & Yanbu are considered strategic locations for hydrocarbon and energy intensive industries to develop and exploit the Kingdom's natural advantage by higher rates of economic efficiency. Areas under the two industrial cities (Jubail and Yanbu) are estimated at (1,020) and (185) square kilometers respectively, including a number of basic industrial plants, secondary industrial plants, supporting industrial plants, as well as full-service residential compounds that include housing, schools, hospitals, clinics, recreation centres, roads and other necessary utilities.)*

The Kingdom of Saudi Arabia has been enjoying an obvious boom in its manufacturing sector in the last decade though refined petroleum is still enjoying its strategic importance. The level of investment in the Kingdom in general has been intensified and so was the gross fixed capital formation in machinery and equipment needed for manufacturing. The overall number of factories reached 4765 in 2010 compared to 2113 in 1990 indicating a jump of 125.5% during the last 2 decades. Diversification plans have shown great success to increase other manufactured products versus oil refining. Manufactured exports witnessed a booming trend indicating the Kingdom's success in developing national industry. In fact, Saudi Basic

Industries Corporation (SABIC) is now one of the world's leading manufacturers of chemicals, fertilizers, plastics and metals. The rising trend of imported machinery supports the increasing manufactured output.

Government efforts to promote the national industry included building infrastructure, establishing the Saudi Industrial Development Fund (SIDF), developing industrial cities in various regions within the Kingdom and providing other industrial support and incentives. Beside the high portion of commercial bank loans serving the manufacturing and processing industries, the SIDF established by the Government to support industrial projects have been playing an increasingly important role.

The Ministry of Economy and Planning aimed to further intensify industrial development as per its Ninth Five-Year Plan. The Ninth Five-Year Development Plan (2010-2014), which allocated US$ 385 billion (SR1.4 trillion) to projects across all sectors through 2014 has given priority for substantial investments in the economic resources sector, which includes industries such as manufacturing, mineral resources, and tourism. More progress is planned towards a knowledge-based economy by developing a competitive advantage for Saudi industry; enhancing local, regional and international linkages; and encouraging advanced high value-added industries. At the same time, the Ministry is trying hard to ensure economic diversification, balanced development and employment.

As a part of the next phase of industrial development and diversification the Kingdom plans to focus on downstream industries and enhancing linkages to its well established petrochemicals industry, which is already the largest in the GCC region and worth over US$ 354 billion, as much as the Saudi Stock Exchange Tadawul. It has been estimated that the downstream sector generates employment much more than the mega projects the Kingdom has undertaken so far. The SABIC unveiled plans to make downstream development a national priority with tentative plans for an entity similar to the Royal Commission for Jubail and Yanbu (RCJY), with a dedicated task force, and improvements in infrastructure such as creation of more free zones and financing options lucrative enough for companies to be attracted to establish industries in Saudi Arabia. The next phase of industries was envisioned to concentrate on product slates that support the Kingdom's Suadiization initiatives and create greater employment to young Saudis. A large anchor of industries producing a diverse product range of chemicals would be established that would in turn feed industrial clusters such as automotive, electrical equipment, plastics, renewable energy and metals, with required raw materials.

Market Size of KSA Industrial Sector

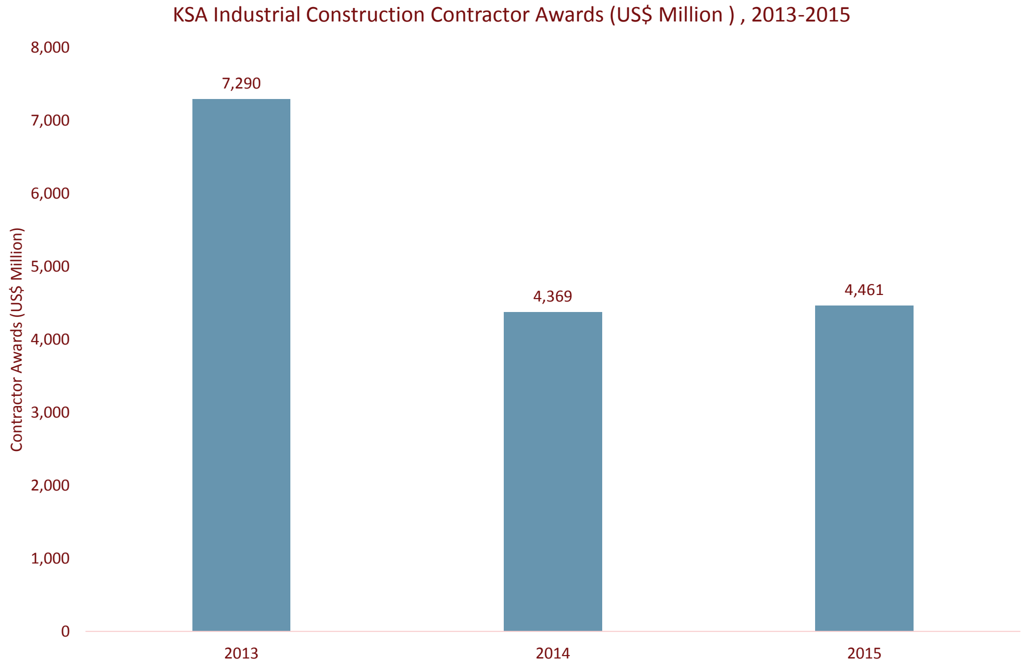
Since 2010, Modon has already racked up project costs of more than US$ 2 billion and is pushing for substantial involvement from the private sector and Saudi Arabia already has some 3,000 industrial projects underway or operational within the country.

The identification of future industrial cities is extremely important, and Modon is creating entire new communities and expanding existing town facilities in order to boost local industry and drive employment opportunities. To drive interest, the Government also offers a number of incentives for industrial initiatives including nominal rent for land, the provision of water and energy at subsidized rates, the granting of loans of up to 50 per cent of capital, as well as custom duty exemption for machinery and raw materials. A number of big deals have made headlines in recent months as the country works on developing its industrial capability with plans to build new refineries and upgrade existing plants, as well as expand steel and aluminium production. Industrial expansion has begun to grow in importance even as the declining contribution of the hydrocarbon sector and the adverse impact of international oil price and demand fluctuations are felt on the government's revenue stream in recent years begin to emphasise the cushion provided by diversification.

The following figure shows the trends in major contracts in the KSA industrial sector over the period 2013 to 2015.

Construction Contract Awards For Industrial Sector in KSA (2013- 2015)

Figure 10: KSA Industrial Sector Construction Contractor Awards (US$ Million), 2013- 2015



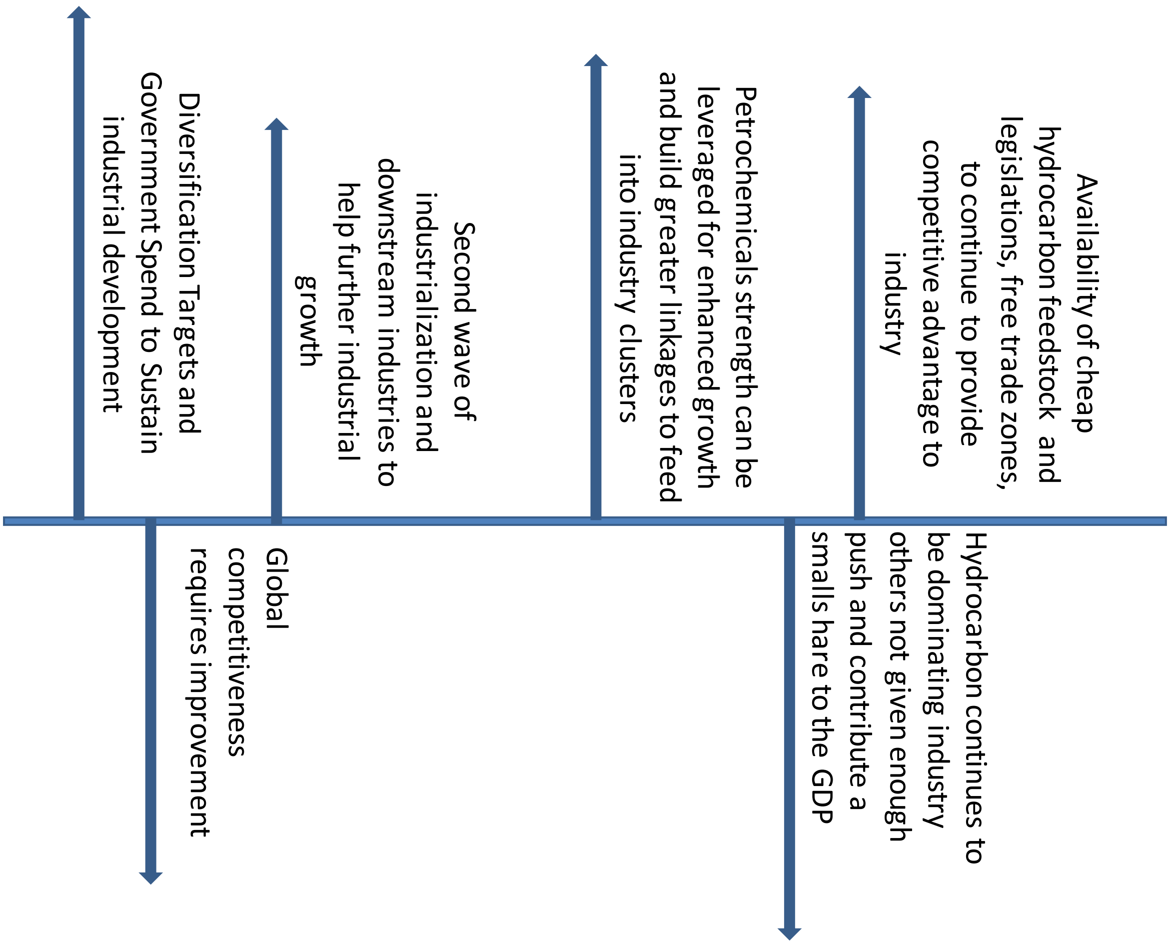
Source: Ventures Onsite MENA Projects Database www.venturesonsite.com

After the effects of the initial phase of diversification, the Ninth five year plan and the continued emphasis of the government on diversification and promoting the non- oil sector industrial construction activities petered out and the oil price squeeze on government revenues have crunched investments in the interim, industrial contractor awards are likely to witness a medium term moderation as government investment is diverted toward areas such as infrastructure and social infrastructure.

Saudi is however likely to continue with further measures for developing its industrial sectors at a moderate pace, mainly through further leveraging its natural advantages of cheap energy, plentiful capital, and a prime geographic location between Asia and Europe. Output of petrochemicals, fertilizers, cement, and aluminium are expected to grow rapidly, and the manufacturing sectors' contribution to real GDP is expected to grow further in the long run. Growth will be facilitated by the development of industrial cities and free trade zones, as well as an increasing emphasis on improving the business and investment climate both for local and foreign investors, and the use of joint ventures.

A diagrammatic representation of the opportunities and challenges posed for the Infrastructure sector in KSA is presented below, summarizing the state of Saudi's industrial sector in 2015. Upward arrows denote opportunities, size of which is depicted in the length of the arrows and downward arrows represent challenges.

Figure 11: Opportunities and Challenges in KSA Industrial Sector



Source: Ventures Onsite www.venturesonsite.com

Opportunities	Challenges
The KSA Government's non-oil sector diversification plans will boost industrial sector activities.	The upgrading of the international competitiveness of Saudi Industrial products is necessary, not only to capture a share of international export markets, but also to maintain and enlarge the market share of the domestic market.
The Kingdom's investments in the industrial sector rose to SR $37.70 billion in 2010. The country is heavily investing and importing industrial machineries to the tune of US$ 15 billion annually. The Ninth Five year plan too had continued focus on industrial diversification and development	To keep pace with the developments, innovations and advancing technologies in international markets, it is important to create flexible mechanisms for the improvement of management, design, production, marketing and all other aspects of the industrial business in the Kingdom.

Opportunities	Challenges
In 2010, Petrochemicals received about 40.8 percent of the total industrial investment or SR 208 billion while chemical industries received SR 79 billion, mineral industries SR 54 billion, and other basic industries SR 43.8 billion. The strength of the petrochemicals sector can be leveraged to create strong forward and backward linkages to industries that feed into other clusters thus helping a broader based industrial development	The Kingdom needs to improve the technical capabilities of its national industries, by means of research carried out by relevant industrial corporations' collaboration with universities and techno-scientific institutions, or by attracting high foreign investments. As the Kingdom of Saudi Arabia is a full member in the W.T.O., an additional need has arisen for the country to adapt and comply with the rules of the Organization, which are binding on all member countries.
	In order to develop Saudi manpower capabilities, it is necessary to revise and intensify the fields and quality of technical education and vocational training, so that their output would match the requirements of industrial firms in all specializations.

Major Industrial Projects in KSA

The table below lists the major building projects in the Kingdom of Saudi Arabia as of February 2015.

Table 7: Major Industrial Projects in the KSA by Project Value (US$ Million), February 2015

Project Name	Client	Consultant	Contractor	Value (US$ Million)
Waad Al Shimal Mining City	Saudi Arabian Mining Company (Maaden), Eastern Province / Ministry of Petroleum and Mineral Resources, Saudi Arabia	Bechtel / Jacobs Engineering Group Incorporated	-	7,000
Aluminum Smelter and Rolling Mill	Saudi Arabian Mining Company (Maaden), Eastern Province / Alcoa, Switzerland	Bechtel / Fluor Arabia Limited / Fluor Corporation	Bechtel / Fluor Arabia Limited / Samsung Engineering	5,000
Polysilicon Plant in Al Khobar	IDEA International for Investment and Development	-	-	4,000
Jazan Economic City (JEC) - Steel Plant Phase 2	South Steel Co.	Corus Consulting (Corus UK Ltd.)	STX Construction	2,000
Wadi Sawawin Iron Ore Project - Phase 1	London Mining Plc / Al Sharif Group for Contracting & Development Trading	-	STX Heavy Industries, Korea	1,800
Hail Integrated Steel Complex	Private Developer	-	-	1,500
Aluminum Smelter and Rolling Mill - Reduction Area	Saudi Arabian Mining Company (Maaden), Eastern Province / Alcoa, Switzerland	Bechtel	Fives Solios, France / Mohammad Al Mojil Group	1,244
Polysilicon Plant in Jubail Industrial City 2	First Energy Bank / Cosmos Industrial Investment Corporation / Project Management & Development (PMD)	Fluor Corporation	-	1,200
TATA Automobile Factory in Ras Al Khair	Tata Motors	-	-	1,200
PTA and PET Plant at Al Jubail	United Petrochemical Company	PCI Consulting Group	-	1,000

PROJECT NAME	CLIENT	CONSULTANT	CONTRACTOR	VALUE (US$ MILLION)
Waad Al Shamal Phosphate City : Phosphate Mines	Saudi Arabian Mining Company (Maaden), Eastern Province / Saudi Basic Industries Corporation (Sabic) / Mosaic Company	Jacobs / Fluor Corporation / Bechtel	-	1,000
Umm Wu'al Phosphate Project	Saudi Arabian Mining Company (Maaden), Eastern Province	Jacobs Engineering Group Incorporated	-	1,000
Tasnee - Metals Smelter Plant in Yanbu	National Industrialization Company (Tasnee)	-	-	1,000

Source: Ventures Onsite MENA Projects Database www.venturesonsite.com

Chapter6. KSA Infrastructure Sector Overview

Saudi Arabia is endowed with one-fifth of the world's oil reserves, and ranks as the largest exporter of petroleum in the world. The rich oil surplus has been used judiciously over the years to fund its ambitious diversification and expansion plans. The country is expected to continue booming, fuelled by two massive fiscal spending packages worth a combined value of US$ 129 billion and infrastructural improvement projects already underway have a total value of US$ 77 billion.

One of the key elements of the transformation of the Saudi economy is development and improvement of infrastructure at all levels, and ensuring that new infrastructure is added to accommodate the rapid changes taking place in the country – changes which include significant population growth.

The Kingdom has made huge investments available for industrial infrastructure development, laying the foundations for the Kingdom's economic strategy over the next 50 years, actively seeking to upgrade and improve its rail, port, airport and other transportation infrastructure. The FY 2015 budget allocated infrastructure and transportation an appropriation of US$ 16.8 billion. Infrastructure projects include new projects for an additional 2,000 kilometers of roads, upgrades, expansion and modernization of existing ports and building additional births, railroads, regional and international airports, apart from additional infrastructure projects to spruce up the industrial cities of Jubail, Yanbu and Ras Al-Khair.

Basic municipality infrastructure upgrades planned under the budget include new projects for inter-city roads, bridges, drainage and control system, and spending on existing projects under construction for which allocations have already been made including those allocated for rainwater drainage and protection from rain floods.

Airports

Saudi Arabia has led to major investment being made in upgrading and developing the network of airports across the vast Kingdom, and currently comprising four international airports at Jeddah, Riyadh, Dammam and Medina and 23 regional airports catering principally for domestic traffic. Saudi Arabia will soon have its fifth international airport, with Al-Ahsa set to compete for Bahraini and Qatari traffic. Statistics from the GACA, the regulatory body in Saudi Arabia, show that the number of passengers using airports across the Kingdom rose by 5.2% to more than 68 million in 2013, while there was a 1.2% rise in aircraft movements compared to 2012. This increase in operations reflected the introduction of new carriers at a number of airports and the launch of international flights from some domestic airports. GACA forecast for Al-Ahsa, suggest that passenger numbers will grow by 300,000 a year between 2015 and 2020. Among the four existing international airports, long term expansion plans at King Abdulaziz International Airport in Jeddah, the business airport in Saudi Arabia, will raise its annual passenger capacity to more than 30 million. Meanwhile, capacity at King Khalid International Airport in Riyadh will rise to 35 million per year after the opening of its fifth terminal. In terms of area, King Fahd International Airport (DMM), located in Dammam is the largest airport in the world. At King Khalid International Airport. The initial US$800 million phase of expansion, to take annual passenger capacity to 25 million, is scheduled to be completed by Together with expansion at Dammam and Jeddah, it is part of a plan to raise the combined capacity of the Kingdom's airports to 140 million passengers per year.

Railways

After many decades of focus on road building as its key means of surface transportation, a revolution has taken place that has, during recent years, led to the emergence of a series of major new rail infrastructure developments, amongst which is the largest railway construction project in the world, the North-South Railway (NSR). While this will provide a link from the Jordanian border to the Gulf ports and to Riyadh, principally for the movement of heavy freight, such as phosphate and bauxite, it will also carry passenger traffic. This will also be the case with a second huge rail venture, the Landbridge Project, linking the Gulf and the Red Sea and involving the construction of almost 1,000 kilometers of new track between Riyadh and Jeddah. Completing a trio of major rail schemes within the Kingdom, is the Haramain High Speed Rail Project, or Western Railway. This will provide a link between Mecca and Medina and connecting with the route to Riyadh at Jeddah. It is designed to offer safe and comfortable means of transport for Hajj pilgrims, arriving via Jeddah and will be operated using 320 kmph electric trains.

In addition to this trio of long distance routes, the estimated US$45 billion being committed to rail development also includes plans for the development of new, or extension of existing, metro systems in Riyadh, Mecca and Jeddah. Rail services in the Kingdom are administered by the Saudi Railways Organisation (SRO), a state owned company which currently runs freight services on two principal routes, extending to slightly more than 1,000 kilometers.

Ports

The Kingdom is looking to further its importance as a strategic hub for international trade and furthering its linkages to its oil exporting hubs and the diversification plank it is building for its industries with investments planned up to US$ 10 billion in development of port infrastructure over the next decade.

Responsibility for overseeing the country's ports is in the hands of the Saudi Ports Authority, which has managed a process of privatisation since 1997, by which it began passing responsibility for port management, operation and maintenance to the private sector. The Saudi Ports are now fully managed and operated on a commercial basis, with the Ports Authority retaining its supervisory role. There are nine principal ports in Saudi Arabia, of which five, Dhiba, Yanbu Commercial Port, Yanbu Industrial Port, Jeddah and Jazan on the Red Sea coast, with the other four, Ras Al-Khair, Jubail Industrial Port, Jubail Commercial Port and Dammam, on the Persian Gulf. Total cargo handled at the Saudi ports in 2013 amounted to 194.8 million tonnes, up from a 2012 total of 187.7 million tonnes, according to figures produced by the Saudi Ports Authority.

More than half of Saudi Arabia's sea traffic passes through the Islamic Port of Jeddah, one of the main ports in the Middle East and an entry point for pilgrims. New port facilities at Yanbu Industrial City on the Red Sea have eased Jeddah's load and improved the efficiency of petrochemical exports. New ports development is a major feature of the programme to develop four new Economic Cities, a key element in the country's attempts to attract Foreign Direct Investment (FDI) to diversify the economy. New ports are being developed in King Abdullah Economic City (KAEC) and Jazan Economic City (JEC). Development of US$6 billion Millennium Seaport in KAEC is set to be completed by 2019, by which time the port's total capacity will be ten million twenty foot equivalent units (TEUs).

A landmark in the development of Saudi ports was the opening in early 2014, of the world class sea port at KAEC, which covers an area of 15 square kilometers and is designed to become one of the top ten ports in the world and a major hub for Asian and European shipping lines. The new port will be able to handle about 20 million TEUs per year. It will have 30 wharfs with a water depth of 18m, and will also have the largest cranes in the world and advanced container handling systems. King Abdulaziz Port, also known as Dammam Port, is also undergoing expansion, with more than US$ 750 million being invested, including US$ 535 million for container terminal capacity expansion and US$ 213 million for other facilities, following a 10% year-on-year increase in container handling between 2011 and 2012. Other proposed port developments include a new container terminal, at a cost of US$ 46 million to be built in Dhiba Port, with two others constructed at King Fahd Industrial Port in Jubail at a cost of US$ 38 million, both of which were completed recently. At Yanbu on the Red Sea coast, plans were unveiled in 2014 for the construction of a major new shipyard, as part of a major port expansion, set to be completed in 2018-19, together with a US$ 1.8 billion minerals hub.

Market Size of KSA Infrastructure Sector

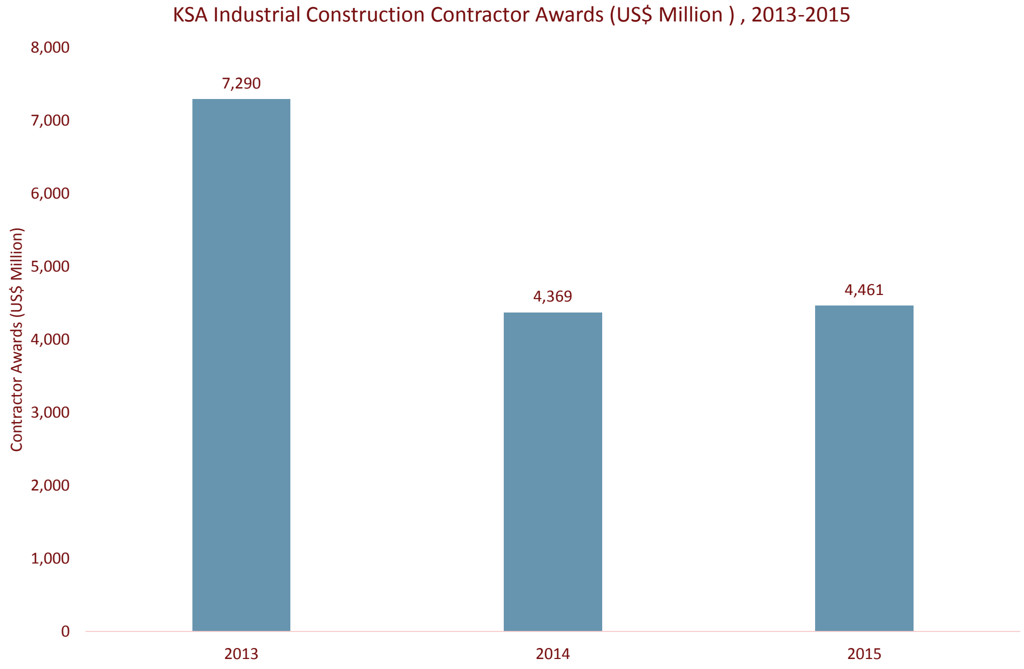
In 2013, the Kingdom awarded contracts worth a total of over US$ 7.2 billion. As a number of the significant airport and railway projects flagged off in 2013, which witnessed the largest allocations since 1970 in the Kingdom's budget toward infrastructure, reach construction stage, investments will likely moderate to a lower pace over 2014 and 2015.

The boost in 2013 came as a result of the Government's desire to fulfil demands for improved services in infrastructure, power and real estate sectors, arising from needs of interconnectivity and urbanization. Such projects include the North-South Railway, the Mashaaer Mugaddassah Metro Project, the Haramain High-Speed Railway also known as the "Western Railway," and the four Economic Cities.

Construction Contract Awards For Infrastructure Sector in KSA (2013-2015)

The following figure shows the trends in major contracts in the KSA infrastructure sector over the period 2013 to 2015.

Figure 12: KSA Infrastructure Sector Construction Contractor Awards (US$ Million), 2013 - 2015



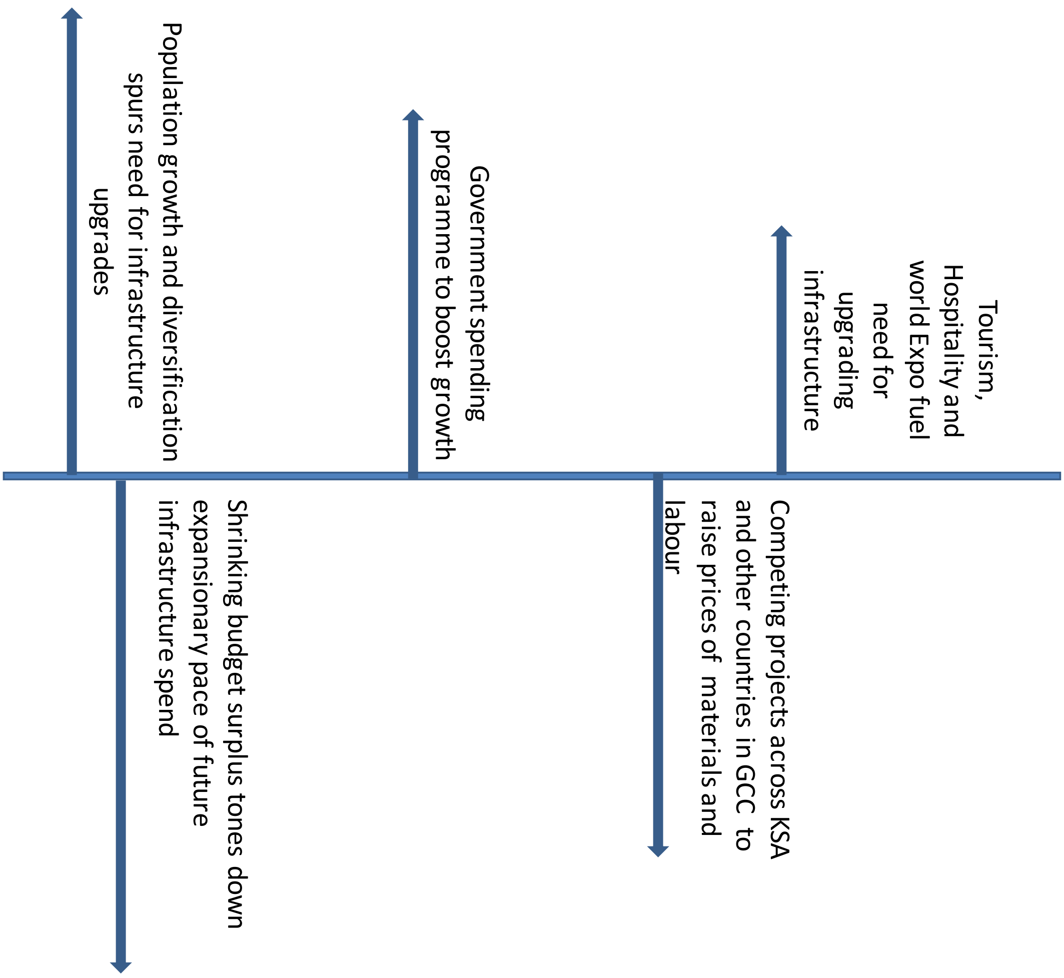
Source: Ventures Onsite MENA Projects Database www.venturesonsite.com

With the focus of the government policy deepening on infrastructure and social programs for transport projects, which included the expansion of a number of the country's airports, and the construction of roads, large scale work on the country's railway projects the contracts awarded across the infrastructure sector grew strongly in 2013. However, despite the 2015 budget allocating US$ 16.9 billion toward infrastructure projects, the pace of contracts is likely to slow down with lower surpluses available for the Kingdom with decreasing oil revenues, and the sustained investments of yesteryears reaching conclusion and other sectors assuming greater importance.

In order to support and ease the hurdles in the frantic pace of contracts awarded in this sector and prevent spread of red tape a Public Transport Commission was also set up in October 2012.

A diagrammatic representation of the opportunities and challenges posed for the Infrastructure sector in KSA is presented below, summarizing the state of Saudi's infrastructure sector in 2015. Upward arrows denote opportunities, size of which is depicted in the length of the arrows and downward arrows represent challenges.

Figure 13: Opportunities and Challenges in KSA Infrastructure Sector



Source: *Ventures Onsite www.venturesonsite.com*

Opportunities	Challenges
Spurt in Demand for Social Infrastructure Development-Social infrastructure such as housing, schools, hospitals offer vast rebuilding opportunities	Shrinking budgetary surplus reduces scope for continued expansionary infrastructure spending, translating into a more moderate growth of infrastructure contracts in the future
Resource and skills rich economy-No dearth of finance and skilled manpower	Competitive demand on raw materials from projects across the Kingdom and the GCC likely to push up input prices
Government continued focus on infrastructure to attract investment and tourism spurs growth	Increasing costs of materials and shortage of skilled labour to man projects in the light of tightening Saudiization measures to impact market
Tourism, real estate developments to spur growth in infrastructure	

Major Infrastructure Projects in KSA

The table below lists the major infrastructure projects in the Kingdom of Saudi Arabia as of February 2015

Table 8: Major Infrastructure Projects in the KSA by Project Value (US$ Million), February 2015

Project Name	Client	Consultant	Contractor	Value (US$ Million)
Riyadh Light Rail Network	Arriyadh Development Authority (ADA)	Multiple Consultants	Multiple Contractors	23,000
Makkah - Madina Railway Link (MMRL) - Haramain	Saudi Railways Organization (SRO)	Multiple Consultants	Multiple Contractors	13,743
Jeddah Light Rail Transit	Makkah Municipality	IBI Group	-	9,000
Jeddah Metro - Orange and Blue Lines	Ministry of Transport, Saudi Arabia	Gulf Engineering House (GEH) / IBI Group / Egis Rail (Saudi)	-	7,600
Landbridge Project	Saudi Railway Company (SAR)	Saudi Consulting Services (SaudConsult) / Parsons Brinckerhoff / Tricorp Engineering & Consulting Corp.	-	7,000
Makkah Mass Rail Transit (MMRT) - Phase 1	Makkah Municipality / Al Balad Al Ameen Company for Urban Development / The High Commission For The Development of Makkah Province	Multiple Consultants	-	6,800
Jeddah Monorail Project	Ministry of Transport, Saudi Arabia / Jeddah Municipality	IBI Group	-	5,600
Madina Monorail Project	Al Salam Group / Madina Municipality	Parsons Brinckerhoff / Istanbul Ulasim / Khatib & Alami Consolidated Engineering Co.	-	4,000

Project Name	Client	Consultant	Contractor	Value (US$ Million)
King Abdulaziz International Airport Expansion - Infrastructure Package	General Authority for Civil Aviation (GACA), Saudi Arabia	Dar Al Handasah Nazih Taleb and Partners	Saudi Binladin Group	3,700
Saudi Landbridge Project : Riyadh-Jeddah Railway Track	Saudi Railway Company (SAR)	Saudi Consulting Services (SaudConsult) / Parsons Brinckerhoff	-	3,000
GCC Railway Network Project : Saudi Arabian Rail Network	Saudi Railways Organization (SRO)	Canarail / Systra / Dar Al Handasah Consultants (Shair and Partners) / Egis Rail / Khatib & Alami / DB International GMBH	-	1,500

Source: Ventures Onsite MENA Projects Database www.venturesonsite.com

Chapter7. Future Outlook for the KSA Construction Industry

After successfully completing seven years of recovery from the global economic slowdown and embarking on a sustained diversification programme that has begun to yield strong results in the form of fortifying the economy from global economic fluctuations caused by recent oil price shocks, Saudi Arabia is at the crossroads to the next phase of growth as of 2015. While the consistent slide in oil prices since the latter half of 2014 has significantly curtailed its revenues, resulting in its first deficit budget since 2011, it has not deterred the Kingdom from continuing its expansionary spending to further growth and development.

While its past diversification efforts and huge oil surpluses are likely to help the Kingdom hold its own amid the current downward oil price spell, the recent change of leadership notwithstanding, the Kingdom is likely to witness a moderation in the construction industry in the mid-term as a number of measures such as the adverse impact of its Saudiization enforcement on the construction industry labour market and pace of projects, the curtailing of capital spending on certain sectors such as oil and gas, the rising construction costs and the losing out to its regional counterparts that are hosting global events to attract investment are likely to challenge the role of the Kingdom as the largest and fastest growing construction market till recently.

While upgrades to its infrastructure, significant easing of controls to allow private investment and the renewed focus on tourism, its core attraction, and social infrastructure such as education, healthcare and housing are likely to sustain the momentum in the industry till growth picks up steam in the long run. These challenges can also be easily overcome, with greater private participation and gradual weaning off of government role across relevant sectors.

Till such point while Saudi Arabia could continue to be one of the dominant markets in the GCC region, it is likely to be overtaken by the UAE and Qatar in terms of attracting investments and growth based on globalization.

Methodology

1. All estimations made for contract awards and construction spend are based on the project schedule as of February 2015.

2. All projects announced and on drawing boards as entered in Ventures Onsite (www.venturesonsite.com) MENA Projects Database as of February 2015 are taken into consideration for compiling the charts.

3. Projects which have a project value less than US$5 million are not taken into account for the calculations.

4. For the computation of Top Clients, Consultants and Contractors, companies have been identified on the basis of projects they are associated with in a lead role. The projects considered for the purpose of ranking include projects in all stages of construction including projects on hold, but exclude completed and cancelled projects.

Code of Ethics

Ventures Middle East and its employees adhere to the practices and ethical standards established by the American Marketing Association (AMA), Charter Institute of Marketing (CIM), and the Society of Competitive Intelligence Professionals (SCIP). The firm and its employees abide by the applicable laws for the jurisdiction of the research, Ventures Middle East, and the client organization. Additionally, any request or requirements are incorporated into the practices of Ventures Middle East for the client's engagement.

END OF REPORT

Ventures Onsite MENA Projects Database

Ventures MENA Projects Database provides detailed, reliable and current project information on more than 13,000 current / future projects in the Middle East and North African Countries (UAE, Qatar, Saudi Arabia, Kuwait, Bahrain, Oman, Syria, Jordan, Lebanon, Yemen, Egypt, Libya, Algeria, Iran, Iraq, Tunisia, Sudan and Morocco) each over US$ 2.5 million in the following industry sectors; Oil & Gas, Pipeline, Industrial, Buildings, Power & Water, Marine and Infrastructure & Sewerage.

Projects are identified from the concept or preliminary study stage, and followed through the various phases of the project. i.e. tender for the design consultancy, design, tender /contract award of consultant / main contractor through to commissioning.

Our projects information typically includes the project scope, overall project value, project schedule i.e. when tenders where issued/closed for consultancy/main contractor and schedule for appointment of consultant/main contractor etc. and key contacts like client/developer/architectural consultant/ main contractor at a later stage all with project manager names/contact details. MEP (Mechanical, Electrical and plumbing) contractor when appointed is also included for all building projects in the database.

For more details, please visit our website: www.venturesonsite.com

If you would like to subscribe to our MENA Projects Database or to know more on how the database can assist your organization, please do not hesitate to contact us. Our contact details are as follows:

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