Saudi Arabia: Diversification to drive infrastructure investment

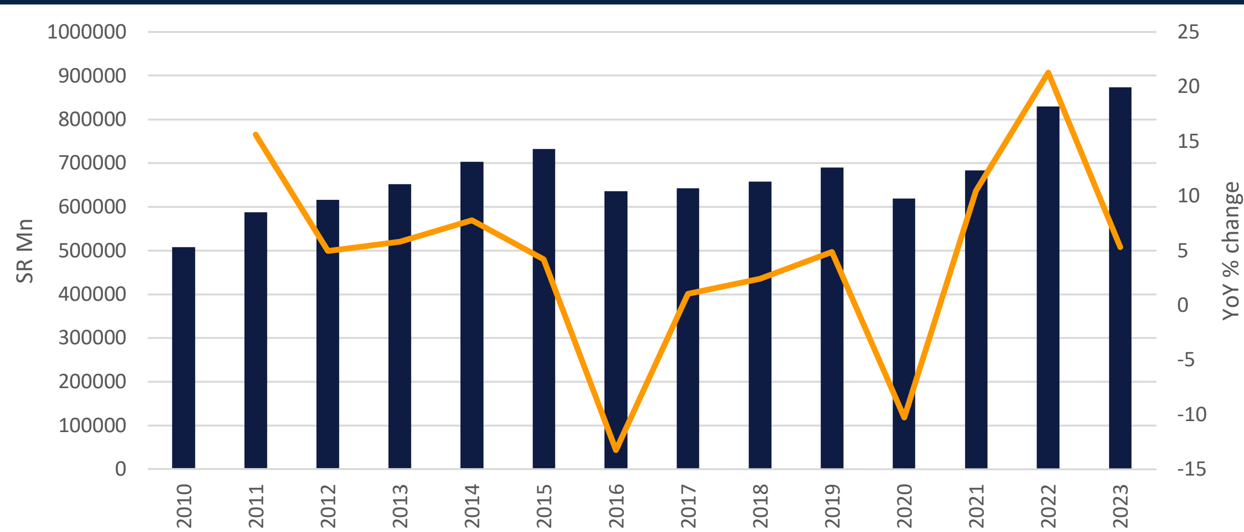
Sector economics | 15 May 2024

Infrastructure has been an important source of growth in recent years

As highlighted in our first note of this series, the need to invest in infrastructure has come into sharp focus in many economies across the globe. Saudi Arabia is no exception to this trend, both in terms of investments made in recent years as well as future plans.

Spending on large scale infrastructure projects is likely to have underpinned economic growth in Saudi Arabia in recent years. Although national accounts data can't explicitly identify infrastructure investment, it does provide an indication of how aggregate investment is changing. The KSA national accounts show a 5.3% y/y rise in real gross fixed capital formation (GFCF) in 2023. This follows annual growth of 10.5% in 2021 and 21.3% in 2022, leaving total real GFCF at a historic high.

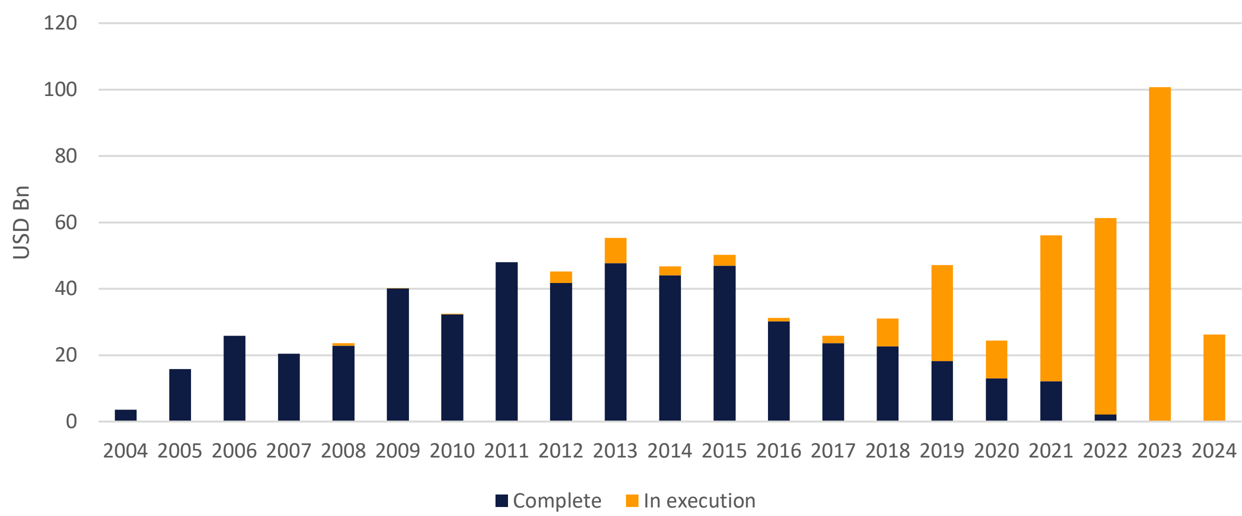
Gross fixed capital formation



Source: GSTAT, Emirates NBD Research

Consistent with this, project-level data from MEED shows a sharp post-Covid upswing in the value of contracts awarded from 2021 onwards. Given that these contracts are likely to be completed over multiple years, this is consistent with a rise in infrastructure investment spending both in 2021 and beyond. Indeed, the MEED data suggests that the majority of contracts awarded in 2021 are still in the execution phase, with only 22% of contracts awarded in 2021 having been completed at this time. More recently, the value of projects awarded rose materially in 2023, with just over USD 100bn worth of projects being awarded, up 70% y/y.

Value of projects by project status and year of award

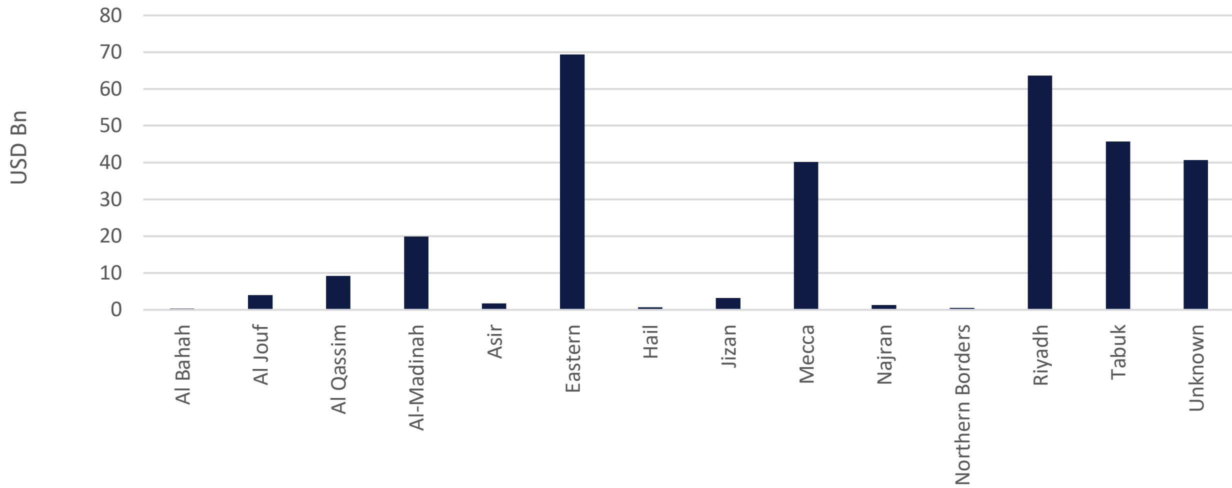


Source: MEED, Emirates NBD Research

The bulk of these projects are in the construction, power and transport sectors, which account for almost 61% of the value of projects in execution, awarded between 2021 and 2024. A sizeable share of the total value of projects currently in execution are in the Eastern Province, Riyadh, Tabuk and Mecca areas.

The spending that has taken place in recent years has largely been driven by the government, with 83% of the projects that are currently in execution being government projects.

Value of projects in execution, by area



Source: MEED, Emirates NBD Research

A significant pipeline of infrastructure spending is planned

In addition to the value of projects that have been awarded and are currently in execution, there is a significant pipeline of planned projects in the Kingdom. MEED data point to the value of projects in planning stages – both public and private – being in the region of USD 720bn at the time of writing. The bulk of these projects are however in a design or study phase, with a significantly smaller share in more advanced stages, meaning that potentially not all these projects will make it to the execution phase.

As is the case with projects currently in execution, the sectors with the largest share of the total value of projects in pre-execution phases include construction, power and transport.

In addition to the projects which are currently defined by MEED as being in planning stages, there are also projects which fall under a master project (such as the Neom master plan) but which have yet to be defined in any meaningful way, meaning that they are not currently defined as being in pre-execution. This means that the potential pipeline of projects may, in fact, be bigger than the picture painted by looking solely at the value of projects in pre-execution phases. Across Saudi Arabia, this group of projects is worth just over USD 833bn, with the vast majority in the construction sector. Adding together projects in pre-execution phases, together with budgeted but as-yet unallocated projects leaves us with a potential Saudi project pipeline of USD 1,554bn.

Value of projects, by project status			
	Project value (USD Bn)		
	In execution	In planning phase	Budgeted but unallocated
Chemical	12.53	39.59	5.59
Construction	94.78	245.36	717.01
Gas	37.14	22.29	15.63
Industrial	7.17	60.24	14.97
Oil	29.28	30.43	7.61
Power	37.36	168.45	14.41
Transport	49.82	122.03	52.46
Water	32.22	32.04	5.60
Total	**300.30**	**720.43**	**833.27**

Source: MEED, Emirates NBD Research

We have previously argued that there are three key trends across the globe that are likely to support infrastructure investment spending, over and above that required to meet the Sustainable Development Goals (SDG) and the maintenance of existing infrastructure. These trends include the global push towards decarbonisation, increased regionalisation and digitization. To what extent do these trends hold in the case of Saudi Arabia?

Diversification away from hydrocarbons is a key driver of infrastructure investment

Arguably the push towards a smaller reliance on hydrocarbons is the most significant driver of Saudi infrastructure investment. This is reflected in both the additional infrastructure required to develop other sectors, as well as investment in clean energy generation itself.

As part of the Vision 2030 plans to diversify the Saudi economy, there are several significant giga projects underway. The largest and most notable of the giga projects is the NEOM development, which seeks to develop a 26,500 sq km area in the North-Western Tabuk province. Development of the Neom project is divided into two phases. Phase one commenced in 2019 and is expected to run until 2030. In terms of construction work, phase one will include five main projects. These projects include a luxury Island resort called Sindalah, a mountain resort called Trojena, an industrial area and port called Oxagon, a 170km long mixed-use building known as “The Line”, and a luxury tourism development in the Gulf of Aqaba.

There are a host of other giga projects, apart from NEOM, currently planned or underway in the Kingdom, an unofficial list of which is provided below. The next largest projects include Diriyah Gate, New Murabba and the ROSHN real estate development.

KSA giga projects

Project name	Description	Estimated Budget (USD Bn)	Value of awarded contracts (USD Bn)
NEOM	Tourism, residential, and industrial	500.0	38.7
Diriyah	Tourism	63.9	5.5
New Murabba	Tourism, retail, residential, hospitality and commercial	50.0	0.1
ROSHN	Residential property	46.3	4.3
Rue Al-Madinah	Tourism, retail, and hospitality	37.0	1.2
King Salman International Airport	Tourism	30.0	0.0
Red Sea Project	Tourism	27.6	9.3
Qiddiya	Tourism and sports	20.5	6.9
Jeddah Central	Tourism, retail, residential, and hospitality	20.0	3.2
Al-Ula	Tourism	15.0	1.7
Saudi Entertainment Ventures	Tourism, retail, and hospitality	13.3	4.6
Soudah	Tourism	13.3	0.1
Other		23.1	9.7
Grand Total		**860.0**	**85.1**

Source: MEED, Emirates NBD Research

The current estimated budget for these giga projects is in the region of USD 860bn, but to-date only about USD 85bn worth of contract awards have been made. NEOM accounts for the majority of the aggregate giga project budget, estimated to be in the region of USD 500bn. To-date just under USD 39bn worth of contracts have been awarded as part of the NEOM development.

In addition to the infrastructure investments being made to diversify the Saudi economy, there are also a variety of investments being made to decarbonize the economy. The Saudi Green Initiative (SGI), launched in 2021 sets out the nation's ambitions to reach net zero emissions by 2060. Specific objectives include reducing carbon emissions by 278mtpa and generating 50% of the Kingdom's power from renewables by 2030.

In some cases, the giga projects intended to diversify the Saudi economy away from a reliance on hydrocarbons also include specific projects to reduce or eliminate emissions. For example, the Amaala and NEOM plans include having these developments being powered entirely by renewable energy sources, including the NEOM Green Hydrogen Company (NGHC) developing a green hydrogen plant.

Using data from MEED, we have categorized the Kingdom's existing, planned and budgeted power and chemical sector projects into those which eliminate or at least go some way towards reducing emissions from hydrocarbons.

At the time of writing there was USD 14.9bn worth of clean energy or energy-transition projects – in the chemical and power sectors - currently in execution in the Kingdom, dominated by USD 13.5bn being invested in solar power farms. There is a further USD 143bn currently in planning phases, with nuclear power accounting for 56% of this planned spend, followed by solar and green hydrogen power plants accounting for 18.5% and 13%, respectively. And finally, there is an additional USD 14bn worth of green hydrogen and solar power plant spending, which has been budgeted for, but as yet remains undefined.

Clean energy or energy-transition projects

		Value of projects (USD Bn)		
		In execution	Planning phase	Budgeted but unallocated
Hydrogen power, of which:	**Green**	1.38	17.0	2.2
	Low carbon		1.6	
Solar power		13.5	26.6	12.2
Waste to energy power		0.04		
Hydro power			10.3	
Nuclear power			80.0	
Wind power			7.9	
Total value of energy transition projects (USD Bn)		**14.9**	**143.4**	**14.4**
Total value of all KSA projects (USD Bn)		**300.30**	**720.43**	**833.27**
Energy transition projects as a share of all projects		**4.97%**	**19.90%**	**1.73%**

Source: MEED, Emirates NBD Research

Relative to the total amount of spending on infrastructure, the spending on energy-transition projects in the power and chemical sectors accounts for roughly 5% of projects currently in execution but almost 20% of planned projects. The latter is, however, heavily dependent on plans for nuclear power plants being given the green light. In fact, MEED recently reported a delay in bidding for the contract to build the Duwaiheen nuclear plant.

It is worth noting that there may in addition be several other energy-transition projects that aren't captured in the table above, including projects to retroactively refit existing infrastructure with a view to improving energy efficiency, and as such the figures above may underestimate the scale of energy-transition projects in the Kingdom.

Regionalisation and digitisation are also likely to play a role

While the move away from hydrocarbons is likely to be the biggest driver of infrastructure investment growth in Saudi in the near to medium-term, infrastructure is also likely to be boosted by the other global trends of growing regionalisation and digitisation.

The introduction of regional HQ requirements in the Kingdom are a clear sign of the desire to ensure that economic activity increasingly occurs within the borders of Saudi Arabia, rather than simply relying on imports, consistent with regionalisation trends seen in other markets. The legislation, which came into force in January 2024, requires multinational companies wishing to contract with Saudi government entities to have regional headquarters in the Kingdom. A sharp rise in the number of new greenfield FDI headquarter projects is visible between

2022 and 2023, rising from a total of 16 to 29. And as of early-May 2024, the Kingdom had attracted another 10 greenfield FDI headquarters year-to-date. This figure may well understate the impact of the legislation, as not all investment in headquarters is likely to be greenfield, with some foreign firms potentially electing to buy existing businesses through M&A activity as a way of establishing an HQ.

The Kingdom is also arguably expanding domestic economic activity through the types of investments made by the Public Investment Fund (PIF). Clear examples of this can be found in Kingdom's foray into vehicle manufacturing, including the PIF purchase of a majority stake in luxury electric vehicle company, Lucid; and a joint venture with Hyundai. In both cases investments made by PIF will lead to infrastructure spending on manufacturing plants, with both vehicle manufacturers setting up production facilities in the Kingdom as part of the deal.

Saudi Arabia has also set out ambitious FDI targets, which will again build on the country's domestic manufacturing market. Saudi Arabia's greenfield FDI inflows surged by more than 110% to USD 28.78bn in 2023, with China accounting for 58% of this inflow. The biggest investments made with this Chinese capital went into the automotive OEM (USD 5.6bn), metals (USD 5.26bn), and semiconductors (USD 4.26bn) sectors.

Finally, evidence of the role of digitization in driving investment can be found in Saudi Arabia becoming a hub for data centres. This is reflected in the FDI data, with the software and IT services sector being the fifth largest sector for FDI in 2023 with USD 1.87bn in greenfield inflows. US companies, including Oracle, were the main source of the 2023 inflows with USD 1.62bn. Furthermore, Amazon Web Services announced plans for a USD 15bn investment for new Cloud Zones in Riyadh, Jeddah, and Dammam in March 2024.

How will these large-scale investments be paid for?

While some of the infrastructure spending described above will be paid for by the domestic private sector or through FDI, the vast majority of the projects currently in execution or in planning phases are government initiatives. This means that the Saudi government, either directly or via PIF, will need to provide the required capital. The government remains well placed to cover some of the cost, with Saudi debt-to-GDP ratio low by international standards, at just under 27% in 2023. The Saudi government is also likely to continue to tap both domestic and international debt markets over the next several years. In January, the government issued USD 12bn in bonds, its largest since 2017, as it took advantage of lower yields.

PIF also has significant capacity to fund infrastructure investment in the Kingdom, with over USD 925bn in assets under management in Q1 2024. Finally, reports suggest that NEOM could also begin issuing bonds as early as this year and could raise up to USD 1.3bn.

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