

# Infrastructure investment: A thematic overview

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Global demand for infrastructure investment expected to be robust

Economies across the globe rely on a network of infrastructure to keep daily activity ticking over, covering everything from energy generation, manufacturing facilities, schools, hospitals, and transportation via road, rail, and ports.

Infrastructure is often thought of as a critical element in encouraging both productivity and economic growth, with a recent study from the World Bank suggesting that this type of investment spending has a large multiplier effect, with every dollar of public sector infrastructure investment leading to 1.5 dollars of economic activity.

Despite the existing stock of infrastructure, the Global Infrastructure Outlook (GIO) suggests that the world nonetheless has substantial infrastructure investment needs, with estimates of an investment gap of around USD 15trn by 2040<sup>1</sup>. These infrastructure needs are not just centered in emerging markets, with several advanced economies such as the USA and the United Kingdom requiring significant investment in coming years to maintain or upgrade their stock of ageing infrastructure. The potential size of the investment gap is even larger when considering the investment required in many developing nations to meet the Sustainable Development Goals (SDG) of access to clean water, basic sanitation, and electricity.

While most large-scale infrastructure projects are financed by governments, the sheer scale of the required global investment, together with already stretched public budgets, means that the private sector is increasingly playing an important role.

Consistent with this, there have been a set of announcements by private equity firms highlighting their plans to increase activity in the sector, such as BlackRocks's recent announcement of plans to purchase of Global Infrastructure

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<sup>1</sup> Global Infrastructure Outlook - A G20 INITIATIVE ([github.org](https://github.org))



Partners for USD 12.5bn, and the Canadian Brookfield group raising USD 28bn at the end of 2023 for an infrastructure investment fund.

### What are the factors driving the need for more infrastructure?

Putting aside the ageing stock of infrastructure in advanced economies and the investment required to meet SDG in emerging economies, there are several other factors that will drive the need for further large-scale infrastructure investment, whether privately or publicly funded.

The first, and most widely publicised, is the global push towards decarbonisation. The International Renewable Energy Agency (IRENA) estimates that to limit global warming to 1.5°C above pre-industrial averages, CO<sub>2</sub> emissions will need to fall by 37 gigatonnes and the energy sector will need to achieve net-zero emissions by 2050. This in turn is estimated to cost USD 5trn a year, out to 2050.

While global investment in energy transition reached a record high of USD 1.3trn in 2022, a significant spending gap nonetheless remains. For economies that have historically relied heavily on extractive oil industries, the transition poses an additional challenge, one of diversifying economic activity away from a reliance on hydrocarbons, which may bring with it additional infrastructure investment requirements in other sectors of the economy.

The second factor is a move towards increased regionalisation. This is being driven by rising negative sentiment toward globalisation, US-China trade tensions, and concerns about supply chain fragility (a full discussion on these topics can be found in [this previous Emirates NBD report](#)). This emerging trend is likely to see at least a portion of production facilities being moved back to domestic markets (reshoring), to geographically close neighbours (near-shoring) or to political and economic allies (friend-shoring); thereby increasing the need for new manufacturing infrastructure.

The final factor driving the need for more infrastructure is the increasing digitisation of the global economy. The Covid-19 pandemic highlighted the need for access to reliable high-speed internet connectivity, all of which requires significant physical infrastructure, including fibre-optic cables and data centres. Added to this is the growing development of technologies such as Artificial Intelligence (AI), which may require investment in data storage solutions and networks.

### How are major economies responding?

Several large economies have made commitments to increasing investments in infrastructure in recent years.



In late-2021 the US passed the USD 1.2trn “Infrastructure Investment and Jobs Act”. The law will see the disbursement of money to state and local governments to spend on a variety of infrastructure projects. The bill includes USD 550bn in new spending, over and above what congress would have routinely authorised. The spending will include investments in roads, bridges, and other major projects (USD 110bn), high-speed internet (USD 65bn), airports (USD 25bn), rail services (USD 66bn) and the refurbishment of power infrastructure to allow for clean energy transmission (USD 74bn).

As part of the objectives set out in the European Union’s “Green Deal” – which seeks to eliminate or offset the bloc’s greenhouse gas emissions by 2050 – there is a proposed USD 1.2trn worth of investment spending, across 10 years. Roughly half of this spending is expected to come from a combination of the EU’s emissions trading scheme and the EU budget; with the remainder coming from private investment.

Encouraging corporates to invest in infrastructure is an important way in which governments can increase investment without taking on the full cost of that spending themselves. Governments in both the US and Europe are supporting investment in decarbonisation infrastructure via the use of incentives. In the US, the Inflation Reduction Act (IRA) will provide over USD 390bn in tax credits, grants and loans, with the aim of encouraging corporates and households to invest in clean energy, transport and manufacturing.

Similarly, government policies are also playing a role in encouraging investment in high-tech domestic manufacturing, most notably in the semi-conductor industry. Both the US “CHIPS and Science Act”, and the EU “CHIPS” act, provide incentives to companies who engage in domestic chip manufacturing activity.

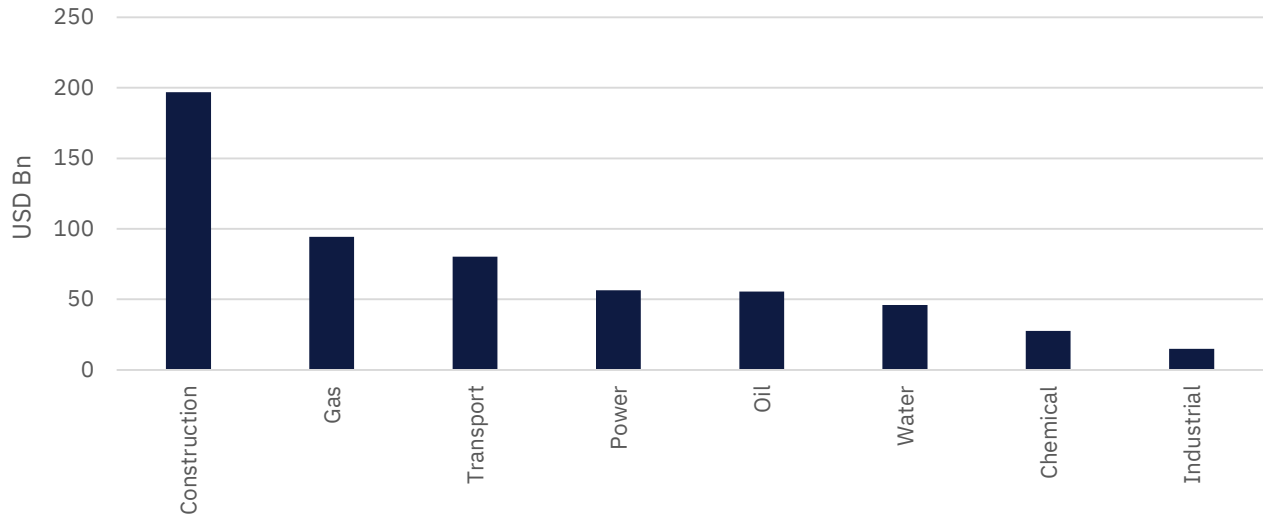
### What’s the picture is the GCC?

As argued in our [GCC 2024 outlook](#) Government spending supported growth in the region in 2023, and is expected to continue playing an important role in the near-to-medium term as countries look to achieve their ambitious development, diversification and net-zero targets.

While the structure of national accounts data makes it difficult to see exactly what government or corporate spending is going on, we can use project-level data, from MEED, to provide a more detailed view of the scale of spending on large projects in the region.



### Value of GCC projects currently in execution



Source: Haver Analytics, ENBD Research

At the time of writing, the value of projects (both private and public sector) in execution in the GCC was over USD 572bn. Projects are dominated by the construction sector, which accounts for 34% of the value of projects currently in execution. The gas, transport and power sectors follow, with smaller but still significant shares for projects currently in execution.

### GCC projects currently in execution

	USD Bn	% share
Saudi Arabia	289.45	50.6%
UAE	157.25	27.5%
Qatar	68.53	12.0%
Kuwait	24.45	4.3%
Oman	21.06	3.7%
Bahrain	11.31	2.0%
<b>Total</b>	<b>572.04</b>	

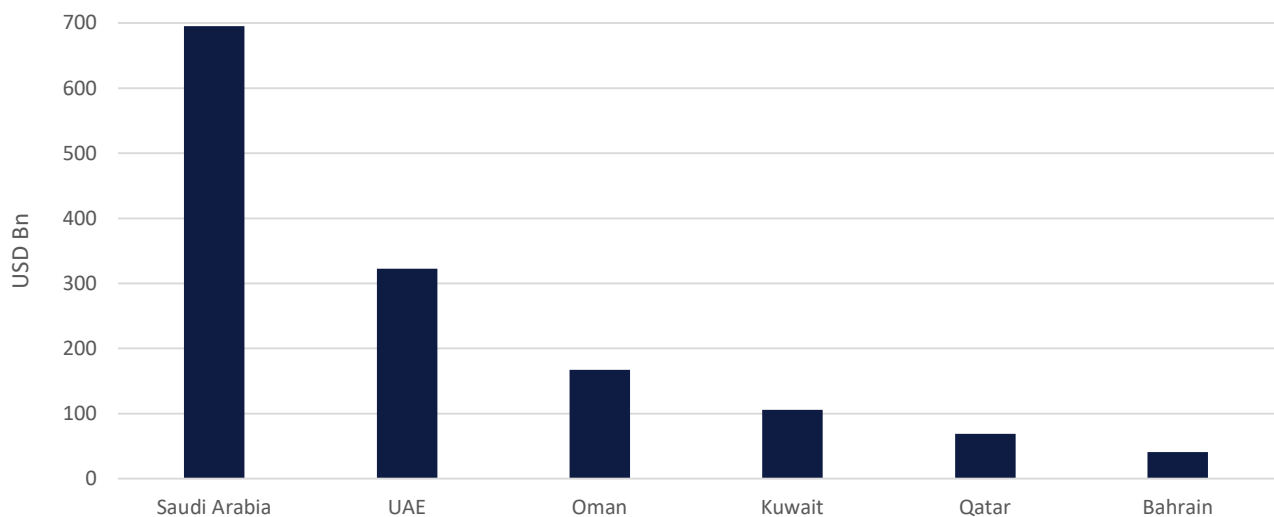
Source: Haver Analytics, ENBD Research

As might be anticipated, the value of projects, is largest in Saudi Arabia and the UAE, with shares equivalent 50.6% and 27.5% respectively. The next largest is Qatar with a 12% share, predominantly driven by Qatar Energy projects.

Looking ahead there remains a sizeable pipeline of projects in the GCC. The value of projects – both public and private – in a pre-execution phase (bid evaluation, design, study etc) amounts to roughly USD 1,400bn, with the majority having an expected completion date before 2031. 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 that not all these projects will make it to the execution phase.

Similar to the pattern observed in projects currently in execution, these pre-execution projects are weighted towards construction (34% share), transport (20% share) and power (15%). Roughly 50% of these projects in pre-execution phases are in Saudi Arabia, while 23% are in the UAE.

#### Value of GCC projects in pre-execution phases

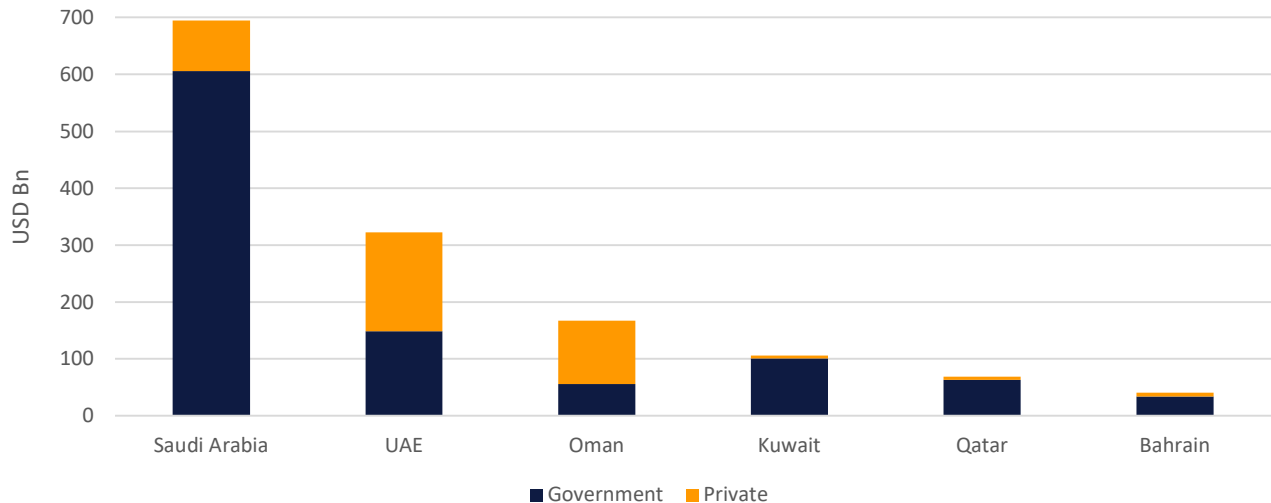


Source: Haver Analytics, ENBD Research

The vast majority of these projects are being initiated and driven by governments in the region, although there are significant differences between GCC countries. The stock of potential projects in Saudi Arabia is heavily skewed towards the government, while in the UAE and Oman the distribution is far more even.



### Value of government vs private sector pre-execution projects



Source: Haver Analytics, ENBD Research

A final point worth highlighting is that the potential pipeline of projects may still be bigger than the picture painted by looking solely at the value of GCC projects in pre-execution phases. This is because there will be a share of projects which fall under a master project (such as the Neom master plan) but which have yet to be defined in any meaningful way, so they are not currently defined as being in pre-execution. This additional money therefore represents the value of potential future projects, for which an overarching master project budget has been assigned but which have yet to be defined.

Across the GCC, this group of projects is worth just over USD 1,344bn. Adding together projects in pre-execution phases, together with these as-yet undefined projects leaves us with a potential GCC project pipeline of USD 2.7trn.

This note represents the first in a series covering infrastructure spending, with the next planned to look at spending in Saudi Arabia in detail.

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