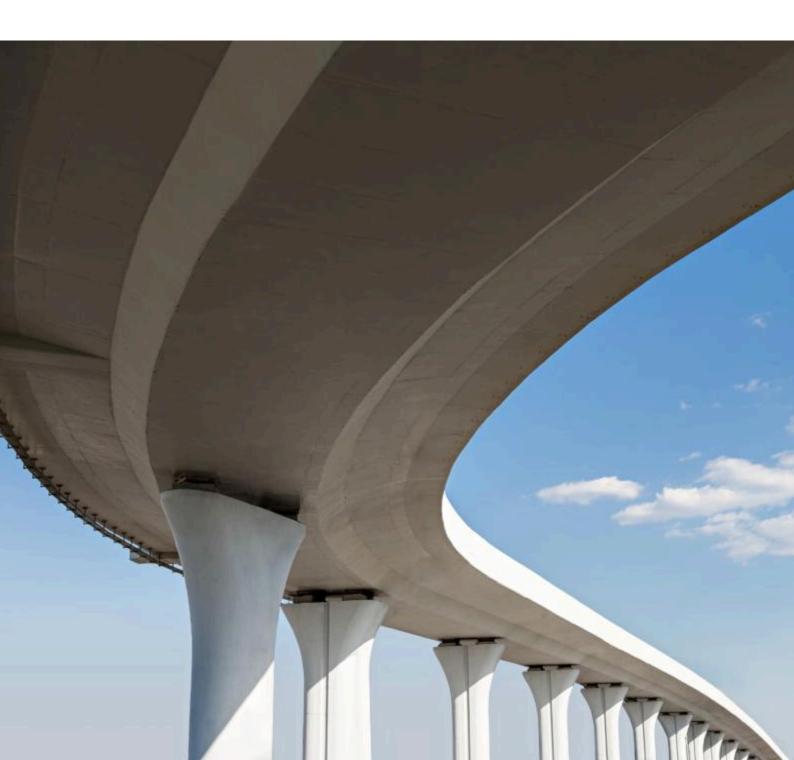


Q3 2024 www.fitchsolutions.com/bmi

# Egypt Infrastructure Report Includes 10-year forecasts to 2033



Exclusively for the use of Asmaa Gamal AbayaZeed Abdoon at Banque Misr (S.A.E). Downloaded: 14-Jul-2024

# **Contents**

Key View	4
SWOT	0
Infrastructure SWOT	6
Industry Forecast	7
Construction And Infrastructure Forecast Scenario	7
Transport Infrastructure	
Energy & Utilities Infrastructure	
Residential/Non-Residential Building	26
Egypt Infrastructure Risk/Reward Index	29
Egypt Infrastructure Risk/Reward Index	29
Middle East And North Africa Infrastructure Risk/Reward Index: Robust Outperformance On Rewards	31
Competitive Landscape	38
Company Profile	42
Egypt Infrastructure Profile: China Railway Construction Corporation	42
Egypt Infrastructure Profile: European Bank For Reconstruction And Development	
Egypt Infrastructure Profile: China Communications Construction Company	61
Infrastructure Methodology	70

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## **Key View**

**Please Note:** BMI is enhancing its risk analysis with a new scoring system following its acquisition of GeoQuant, a market-leading provider of political risk data. From March 27 2024, risk scores are inverted: zero now represents the lowest risk and 100 represents the highest risk. This allows for clearer, industry-standard assessments. For further details, please refer to our updated methodology document.

Key View: We continue to expect construction industry growth to recover in the near term, although a potential escalation of the Israel-Hamas war and the Red Sea crisis pose considerable downside risks for investment and growth in Egypt's building sector. In FY2023/24 and FY2024/25, we forecast Egypt's construction industry to grow by 7.5% y-o-y and 7.9% y-o-y respectively, up from 4.2% y-o-y real growth in FY2022/23 but still below the sector's historical growth rates which averaged 9.9% between 2015 and 2019. We expect public infrastructure spending to remain robust in the near- to medium term. In the long term, the high debt load incurred over an extended period of large-scale infrastructure investment could weigh on spending. In the near term, high inflation and tight monetary policy will limit residential and non-residential building growth, as it undermines households' purchasing power and high interest rates will squeeze access to financing. In the medium term, we expect that the government's privatisation drive will increase the scope for private sector participation in the country's infrastructure sector and support construction growth.

#### **Key Forecasts And Latest Updates**

- In FY2023/24 (July 2023 June 2024) and FY2024/25 (July 2024 June 2025), we forecast Egypt's construction industry to grow by 7.5% y-o-y and 7.9% y-o-y respectively, up from 4.2% y-o-y real growth in FY2022/23 but still below the sector's historical growth rates, which averaged 9.9% between 2015 and 2019.
- This outlook is stable on last quarter, but we note the Israel-Hamas war and the Red Sea crisis continue to pose considerable downside risks for our construction industry growth outlook as of May 2024, as an escalation of the war and/or lower Suez canal traffic would dampen government revenues and investment in Egypt. Currency risks will also likely discourage foreign investors.
- The economic outlook however is set to slowly improve over the coming quarters however, which should provide a boost to the construction industry overall. Our Country Risk team expects that Egypt will have secured a new and larger IMF programme by FY24/25. They think that direct funding from the IMF could reach USD8.0bn in addition to funding from the EU and other multilateral and bilateral sources. They expect the new IMF programme and the associated funding will help reduce uncertainties, which will support private and foreign investment, especially through the privatisation programme. They forecast economic growth will pick up from 3.2% in FY23/24 to 4.2% in FY24/25 largely driven by private consumption on the back of higher social spending and higher remittance inflows.
- We remain optimistic regarding Egypt's construction industry growth outlook over the forecast period, with our forecasts showing a yearly average growth outlook of 6.5% over 2024-2033. Our positive medium- to long-term view on the sector is informed by strong underlying factors, including rising demand for infrastructure from an expanding economy and population, government commitment to infrastructure funding and the greater adoption of public-private partnership financing frameworks. Pressure from a growing urban population on Egypt's existing transport and energy infrastructure will continue to necessitate a need to address the country's historical infrastructure deficit via fresh investment.
- We hold a bullish outlook for Egypt's transport infrastructure sector, driven by robust port and rail infrastructure investment. We anticipate significant investment in container terminal infrastructure across all of Egypt's key Mediterranean ports, benefitting both Egypt's transhipment hub status and trade. Asian, Western and Arab companies seek to increase their footprint in the country's port sector. Rail infrastructure construction growth will also benefit from upgrading of existing infrastructure and the development of a high-speed railway.
- The government's divestment programme will most likely create scope for greater private sector participation in the country's power sector. The government has set out ambitious targets to expand the role of renewable energy in its power mix to 42% by 2035. Under its Integrated Sustainable Energy Strategy, it aims to phase out gas in support of increasing renewable electricity capacity, providing significant investment opportunities in the sector. Plans to build the country's green hydrogen production capacity will offer significant upside risk to our long-term electricity demand and renewables investment projections. The

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government also continues to prioritise investment in the water infrastructure sector, including the development of irrigation

- The current context of high inflationary pressures and tightening monetary policy will continue to weigh on the buildings sector over 2024 and 2025, and notably on the residential building sector, given these factors directly impact purchasing power and the affordability of housing.
- Our Country Risk team notably expects that after hiking the benchmark policy rates by 200 basis points, the Central Bank of Egypt (CBE) will increase the overnight deposit and lending rates by a further 300 basis points to 24.25% and 25.25% respectively by end-2024. Strong inflationary pressures and the need to support the currency will provide impetus for the CBE to tighten monetary policy. Inflationary pressures will remain strong due to increases in administered prices designed to reduce the subsidy bill, particularly fuel and most importantly a weaker exchange rate. This provides a negative short-term context for the buildings sector.
- Past 2026, we believe the long-term fundamentals of Egypt's residential construction market remain favourable. The key underlying factors informing our long-term view are an economic diversification agenda allied to strong population fundamentals and an urbanisation rate growing at 2.0% a year. With a young and growing population of around 91mn, Egypt is the most populous market in the Middle East and North Africa region and offers a level of housing demand that is sustainable over the medium-to-long term.
- The Israel-Hamas war poses significant downside risks for investment in non-residential construction, should the conflict escalate. In the medium-to-long term, government reforms and divestiture plans as well as an expected IMF programme will most likely support investor sentiment and investment in the buildings industry. As Egypt seeks to expand its manufacturing sector, we expect foreign direct investment in the industrial building sector to support overall growth.

#### Infrastructure - Construction Industry Forecasts (Egypt 2023-2033)

Indicator	2023e	2024f	2025f	2026f	2027f	2028f	2029f	2030f	2031f	2032f	2033f
Construction industry value, EGPbn	740.5	955.3	1,102.9	1,260.3	1,436.2	1,635.1	1,858.0	2,113.4	2,394.7	2,708.4	3,057.4
Construction industry value, real growth, % y-o-y	4.2	7.5	7.9	6.8	6.5	6.4	6.2	6.3	5.9	5.7	5.5
Construction industry value, % of GDP	7.3	7.2	7.1	7.3	7.4	7.6	7.8	7.9	8.1	8.2	8.3

e/f = BMI estimate/forecast. Source: UN, BMI

#### Risk/Reward Index

Egypt currently ranks seventh regionally and 29th globally in our Infrastructure Risk/Reward Index. Egypt's score of 58.8 is well above the regional and global averages of 50.7 and 50.0 respectively. However, key challenges remain regarding the legal environment, the labour market and the country's ability to complete large announced projects, which will continue to weigh on its score. The Israel-Hamas war poses considerable downside risks for our construction industry growth outlook, as an escalation of the war would dampen investment in Egypt.

#### Infrastructure Risk/Reward Index (Egypt 2024)

	RRI	Industry Rewards	Country Rewards	REWARDS	Industry Risks	Country Risks	RISKs
Egypt	42.8	17.8	47.8	29.8	61.1	63.5	62.3

# **SWOT**

#### Infrastructure SWOT

S	trengths	Weaknesses
•	Strong future domestic demand for infrastructure owing to a young and growing population.  Emerging public-private partnership (PPP) market, with new laws improving procurement and legislation.  Several strong domestic construction companies, with high levels of technical ability.  A sizeable project pipeline creates numerous investment opportunities.  Major tourism sector driving demand for transport and tourism-related infrastructure (subject to political and security stability).	<ul> <li>Uncertainty over the security situation will affect investor sentiment towards the country.</li> <li>Legal grey area in terms of land ownership and the process by which it is awarded.</li> <li>High levels of corruption, particularly relating to public sector tenders.</li> <li>Weaknesses in power sector could impact delivery of construction projects.</li> </ul>
0	pportunities	Threats
•	Strong demand for housing, increasing population and urbanisation have resulted in the government undertaking major urban planning programmes.  Loans from the UAE, Saudi Arabia, Qatar and the IMF will help provide liquidity for infrastructure projects.  The US and the European Bank for Reconstruction and Development have offered financial support (loans and loan guarantees) for infrastructure projects, including financing to help support PPPs.  The government's use of special economic zones will pay construction dividends by further incentivising foreign investment.	<ul> <li>Inflation is expected to rise and the purchasing power of Egyptians will be curtailed in the coming years, setting the stage for potential unrest.</li> <li>The country's security situation remains precarious, with terrorist attacks a key risk.</li> <li>Continued political instability in the Middle East could act as a destabilising force for the economy, with particularly negative consequences for tourism.</li> </ul>



### **Industry Forecast**

#### Construction And Infrastructure Forecast Scenario

Key View: We continue to expect construction industry growth to recover in the near term, although a potential escalation of the Israel-Hamas war and the Red Sea crisis pose considerable downside risks for investment and growth in Egypt's building sector. In FY2023/24 and FY2024/25, we forecast Egypt's construction industry to grow by 7.5% y-o-y and 7.9% y-o-y respectively, up from 4.2% y-o-y real growth in FY2022/23 but still below the sector's historical growth rates, which averaged 9.9% between 2015 and 2019. We expect public infrastructure spending to remain robust in the near- to medium term. In the long term, the high debt load incurred over an extended period of large-scale infrastructure investment could weigh on spending. In the near term, high inflation and tight monetary policy will limit residential and non-residential building growth, as it undermines households' purchasing power and high interest rates will squeeze access to financing. In the medium term, we expect that the government's privatisation drive will increase the scope for private sector participation in the country's infrastructure sector and support construction growth.

#### **Latest Developments**

- In FY2023/24 (July 2023 June 2024) and FY2024/25 (July 2024 June 2025), we forecast Egypt's construction industry to grow by 7.5% y-o-y and 7.9% y-o-y, respectively, up from 4.2% y-o-y real growth in FY2022/23 but still below the sector's historical growth rates, which averaged 9.9% between 2015 and 2019.
- This outlook is stable on last quarter, but we note the Israel-Hamas war and the Red Sea crisis continue to pose considerable downside risks for our construction industry growth outlook as of May 2024, as an escalation of the war and/or lower Suez canal traffic would dampen government revenues and investment in Egypt. Currency risks will also likely discourage foreign investors.
- The economic outlook however is set to slowly improve over the coming quarters however, which should provide a boost to the construction industry overall. Our Country Risk team expects that Egypt will have secured a new and larger IMF programme by FY24/25. They think that direct funding from the IMF could reach USD8.0bn in addition to funding from the EU and other multilateral and bilateral sources. They expect the new IMF programme and the associated funding will help reduce uncertainties, which will support private and foreign investment, especially through the privatisation programme. They forecast economic growth will pick up from 3.2% in FY23/24 to 4.2% in FY24/25, largely driven by private consumption on the back of higher social spending and higher remittance inflows.
- We remain optimistic regarding Egypt's construction industry growth outlook over the forecast period, with our forecasts showing a yearly average growth outlook of 6.5% over 2024-2033. Our positive medium- to long-term view on the sector is informed by strong underlying factors, including rising demand for infrastructure from an expanding economy and population, government commitment to infrastructure funding and the greater adoption of public-private partnership (PPP) financing frameworks. Pressure from a growing urban population on Egypt's existing transport and energy infrastructure will continue to necessitate a need to address the country's historical infrastructure deficit via fresh investment.

#### Construction And Infrastructure Industry Data (Egypt 2023-2033)

Indicator	2023e	2024f	2025f	2026f	2027f	2028f	2029f	2030f	2031f	2032f	2033f
Construction industry value, EGPbn	740.5	955.3	1,102.9	1,260.3	1,436.2	1,635.1	1,858.0	2,113.4	2,394.7	2,708.4	3,057.4
Construction industry value, real growth, % y-o-y	4.2	7.5	7.9	6.8	6.5	6.4	6.2	6.3	5.9	5.7	5.5
Construction industry value, % of GDP	7.3	7.2	7.1	7.3	7.4	7.6	7.8	7.9	8.1	8.2	8.3

e/f = BMI estimate/forecast. Source: National sources, BMI



#### **Structural Trends**

In FY23/24 and FY24/25, we forecast Egypt's construction industry to grow by 7.5% y-o-y and 7.9% y-o-y, respectively, up from 4.2% y-o-y real growth in FY22/23 but still below the sector's historical growth rates, which averaged 9.9% between 2015 and 2019. The Israel-Hamas war and the Red Sea crisis continue to pose considerable downside risks for our construction industry growth outlook, as an escalation of the war would dampen investment in Egypt. Currency risks will likely discourage foreign investors.

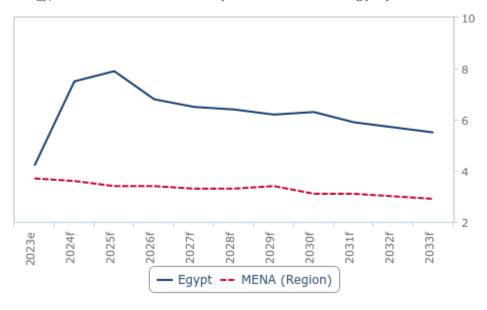
The economic outlook however is set to slowly improve over the coming quarters however, which should provide a boost to the construction industry overall. Our Country Risk team expects that Egypt will have secured a new and larger IMF programme by FY24/25. They think that direct funding from the IMF could reach USD8.0bn in addition to funding from the EU and other multilateral and bilateral sources. The implementation of reforms under the IMF programme, such as moving towards a managed exchange rate and closing the gap between the official and parallel market exchange rates, will provide support to the economy and close Egypt's external financing gap. They therefore expect the new IMF programme and the associated funding will help reduce uncertainties, which will support private and foreign investment, especially through the privatisation programme. They forecast economic growth will pick up from 3.2% in FY23/24 to 4.2% in FY24/25, largely driven by private consumption on the back of higher social spending and higher remittance inflows.

However, we maintain as of May 2024 that the Israel-Hamas war and the Red Sea Crisis continues to pose considerable risks to our outlook for Egypt's construction sector. Under our baseline scenario to which we assign a 60.0% probability, we expect that the war will remain confined to Gaza with low-intensity fighting on other fronts. We also expect that the intensity of the war will ease by the end of 2024. If the war lasts beyond our expectation, then this would result in a more pronounced slowdown in investment activity than we currently expect. If the war escalates (40.0% probability), then this would bring investment and tourism to a halt, fuel inflationary pressures and further weigh on goods exports.

The Red Sea crisis is putting strain on Egyptian finances. Our Country Risk team notes that lower traffic through the Suez Canal has materialised over the past months, which prompted them to revise their FY23/24 current account deficit forecast from 2.6% of GDP (USD8.0bn) to 2.9% of GDP (USD8.5bn). The Houthi attacks on ships around Bab al Mandeb significantly reduced the numbers vessels crossing the Suez Canal. They estimate that Egypt loses a minimum of USD300mn per month (0.1 % of GDP and 0.3% of current account receipts) as long as the disruptions endure.

#### Egypt Construction To Outperform Wider Region

Egypt & MENA - Construction Industry Value, Real Growth, % chg y-o-y (2023-2033)



e/f = BMI estimate/forecast. Source: National sources, BMI

Our positive medium- to long-term view on the sector is informed by strong underlying factors, including rising demand for infrastructure from an expanding economy and population, government commitment to infrastructure funding and the greater adoption of public-private partnership (PPP) financing frameworks. Pressure from a growing urban population on Egypt's existing transport and energy infrastructure will continue to necessitate a need to address the country's historical infrastructure deficit via fresh investment. The government is committed to meeting pressing infrastructure needs by providing financial support for key projects.

The government acknowledges the need for private investment to assist with financing efforts, particularly where the state is unable to provide sufficient support. Egypt will see a greater role for private capital, especially under the PPP framework managed by the Ministry of Finance. This has been successful in improving transparency in the tendering process, which has translated into greater certainty for investors and a rise in business sentiment.

Support for construction industry growth will be provided by ongoing large-scale infrastructure projects, such as the Ain-Sokhna-Marsa Matrouh High Speed Rail project. In the medium term, we expect that the government's privatisation drive will increase the scope for private sector participation in the country's infrastructure sector and support construction growth. Associated improvements to the operating environment in the sector will likely draw in foreign and local investment as the prospect of greater private sector ownership of key entities in the industry poses upside risks for transparency and bureaucracy in the sector. We expect that Saudi and UAE-based investors will be key strategic partners for the Egyptian government throughout the early stages of the divestment programme, likely creating significant opportunities for contractors and other infrastructure companies from those markets.

We believe the long-term fundamentals of Egypt's residential construction market remain favourable for increasing demand. The key underlying factors informing our long-term view are an economic diversification agenda allied to strong population fundamentals and an urbanisation rate growing at 2.0% a year. With a young and growing population of around 91mn, Egypt is the most populous market in the Middle East and North Africa (MENA) region and offers a level of housing demand that is sustainable over the medium-to-long term.

The rise in investment in manufacturing industries and key infrastructure projects through the development of special economic



zones (SEZs) is one emerging area of investment for the country. Infrastructure development continues to gain traction. Egypt established an economic area in the Suez Canal Economic Zone (SCZone), with business-friendly regulations such as more liberal and efficient administration, tax incentives, the facilitation of registration and customs procedures, and better infrastructure.

The SCZone has four unique zones and six strategically located ports. The four zones are:

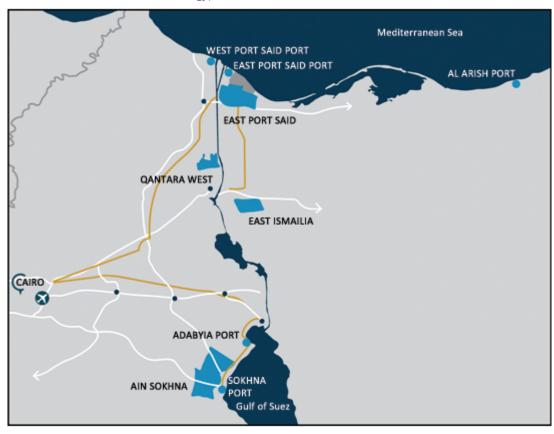
- Ain Sokhna: Set aside for heavy industry and renewable energy manufacturing (being near Egypt's windiest region).
- East Port Said: Allocated to light industry and logistics.
- Qantara West: A coastal area reserved for logistics.
- East Ismailia: Targeted at agri-business, textiles, and information and communications technology industries.

#### Main incentives include:

- reduced income tax rates for businesses and individuals
- a one-stop shop for completing bureaucratic procedures
- special customs services
- proximity to ports

#### Suez Canal To Be Infrastructure Investment Catalyst





Note: Blue zones denote development free zones. Source: BMI

The announcement that DP World will develop an integrated industrial zone within Egypt's SCZone will support our positive construction sector outlook for the country and highlights the increasing proliferation of SEZs throughout the MENA region as a means of stimulating infrastructure investment. The industrial zone will host light- and medium-sized industries, ranging from



medical devices to food processing. The zone will aim to provide an international hub for manufacturers, providing access to European and African markets.

The announcement that DP World will commission a SEZ at Sokhna aligns with the broader infrastructure development strategy of the Egyptian government, which has designated the area surrounding the Suez Canal as a focus for investment. DP World's planned SEZ will form a component of the wider SCZone, which pairs logistics infrastructure and access to one of the world's premier maritime trade routes with business-friendly policies in an effort to entice global companies to establish operations there. We have already seen this policy begin to be productive, with Russia-based companies pledging USD4.6bn out to 2035 in a designated economic zone in Port Said. The participation of DP World in further building out the SCZone solidifies our already positive outlook regarding its ability to attract the hoped for levels of capital investment. DP World is a market leader in the development of similar zones around the world, most notably in emerging markets (such as Azerbaijan, Kazakhstan, Rwanda and Somalia).

The hydrocarbons and petrochemical sector remains an important area of the economy and there is considerable activity from multinational oil majors in the domestic industry. This industry will also support industrial construction, as shown by recent developments regarding petrochemical facilities in the SCZone. Egypt's state-run Red Sea National Refining and Petrochemical Company signed an agreement with the SCZone's development company for the construction of a new petrochemical complex in Egypt. The estimated investment for the project is USD7.5bn. The complex will come up on a 3.6sq km area in the Ain Sokhna industrial zone. The facility will produce polyethylene, polypropylene, polyester, bunker fuel and other petroleum and chemical products.

Anchorage Investments has awarded a contract to Lummus Novolen Technology to provide Novolen gas-phase polypropylene technology for a polypropylene unit at Anchor Benitoite's proposed USD2.0bn petrochemical complex in Suez. Lummus will also provide basic engineering design, training, catalyst supply and other services for the unit. The polypropylene unit is expected to produce 590,000 tonnes of polypropylene per annum. Honeywell UOP secured a contract at Anchor Benitoite's petrochemical complex to provide its proprietary C3 Oleflex technology for a propane dehydrogenation (PDH) unit. Honeywell will also provide basic engineering design, equipment, catalysts, adsorbents and other unidentified services for the unit. The PDH unit is likely to produce 750,000 tonnes of propane per annum. The complex will feature five main units to provide 1.8mn tonnes of petrochemical products per annum.



#### Transport Infrastructure

Key View: We hold a bullish outlook for Egypt's transport infrastructure sector, driven by robust port and rail infrastructure investment. We anticipate significant investment in container terminal infrastructure across all of Egypt's key Mediterranean ports, benefitting both Egypt's transhipment hub status and trade. Asian, Western and Arab companies seek to increase their footprint in the country's port sector. Rail infrastructure construction growth will also benefit from upgrading of existing infrastructure and the development of a high-speed railway.

#### **Latest Developments**

- In April 2024, British Steel has secured a contract to supply 9,500 tonnes of track for Green Line railway of Egypt. Spanning 660km from the Red Sea to the Mediterranean, the railway will serve both passengers and goods. British Steel, alongside other key suppliers, will provide rail for the project, with each 60E1 grade R260 rail measuring 18m in length.
- Early 2024, the Arab Bank signed an agreement with Orascom Construction to provide EGP4.2bn (USD136.0mn) in financing for Phase IV (Giza-Fustat) of Greater Cairo Metro Line 4 project. Phase I will connect 6 October City to Fustat, while Phase II will connect the metro line to Nasr City and New Cairo. Phase III will connect New Cairo to the New Administrative Capital Airport. The 42km railway line is expected to serve 2mn passengers per day. Work on the fourth phase is expected to be completed within six years.
- As of early 2024, construction is under way on the USD4.5bn Greater Cairo Monorail project in Egypt. The project, led by National Authority for Tunnels (NAT), will link the old city centre with the New Administrative Capital. The monorail comprises two main lines: a 54km line connecting East Cairo to the New Administrative Capital and a 43km line from 6th of October City to Giza. In 2019, Bombardier, Arab Contractors and Orascom Construction won a USD4.16bn contract to design and build the monorail.
- In November 2023, DP World Sokhna, a part of DP World, broke ground for its USD80.0mn logistics park in the Port of Sokhna. The 300,000sq m logistics park will be integrated with the existing multipurpose terminal of DP World at Ain Sokhna Port to cater to logistics, trading, distribution and value-added activities. Phase I, valued at USD50.0mn, is expected to be completed by the end of 2024.
- In September 2023, a consortium of Orascom Construction and Thales Group signed a contract with Egyptian National Railways to modernise the 125km Cairo-Beni Suef railway corridor in Egypt. The contract, valued at EUR340.0mn (USD367.0mn), includes modernisation of the signalling system and tracks in addition to the complete modernisation of electronic interlocking system at the stations. Works are due to be completed within 60 months.
- In August 2023 the Government of Egypt signed a concession with Suez Canal Economic Zone Authority for a second terminal at Port Said East Port. The concession includes financing, design, construction, management, operation, maintenance and redelivery of the container terminal. Under the USD500.0mn investment deal, Suez Canal Container Terminal (SCCT) will add an extra 955m berth and an additional 510,000sq m container yard to existing 2,400m berth and 1.2sq km yard.
- In July 2023, the Ministry of International Cooperation of Egypt has signed a EUR250.0mn (USD280.0mn) financing agreement with the Asian Infrastructure Investment Bank (AIIB) to develop the Alexandria's Abu Qir Metro. The project is estimated to cost EUR1.5bn (USD1.6bn). It is co-financed by the European Bank for Reconstruction and Development, the European Investment Bank.

#### Structural Trends

Rail infrastructure will remain the primary driver of transport infrastructure growth in Egypt, given the need to diversify the transport network to reduce dependence on an already congested road network. Throughout the decade, we also expect robust investment in container port infrastructure to increase container handling capacity at the Mediterranean and Red Sea ports as the government aims to improve Egypt's position as a transshipment hub. We anticipate significant investment in container terminal infrastructure across all of Egypt's key Mediterranean ports, benefitting Egypt's transshipment hub status and the country's trade. Investment in



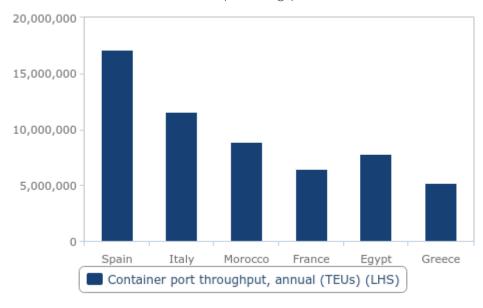
Red Sea port infrastructure will likely reduce pressure on Egypt's Mediterranean container port infrastructure, supported by UAEbased port operators' expansion in the region. In addition to the government's pursuit of greater transshipment, we expect that a positive long-term outlook for containerised exports, as well as imports, will support investment in Egypt's container port infrastructure.

#### **Ports**

Throughout the decade, we expect robust investment in Egypt's container port infrastructure to increase container handling capacity at the Mediterranean and Red Sea ports as the government aims to improve Egypt's position as a transshipment hub. In terms of container ship calls, Egypt currently lags behind other Mediterranean markets with major transshipment ports, such as Spain, Italy, Morocco and France. Investment will likely be focused on expanding existing Mediterranean container port infrastructure at Dekheila, Abu Quir and Said - Egypt's key transshipment port. We also expect increased development of container handling infrastructure in the Gulf of Suez and the Red Sea, diversifying Egypt's container transshipment capacity and reducing pressure on the Mediterranean facilities. Egypt will also benefit from UAE-based port operators' plans to expand within the region.

#### Egypt Lags Behind Mediterranean Transshipment Hubs

Selected Markets - Container port throughput, annual TEUs (2022)



Source: UNCTADstat, BMI



#### Container Terminal Infrastructure Investments Across Key Mediterranean Ports

We expect significant investment in container terminal infrastructure across all of Egypt's key Mediterranean ports, benefitting Egypt's transshipment hub status and the country's trade. At Egypt's Mediterranean ports, we expect investment in Dekheila port, neighbouring Alexandria port and the East Port Said port. In 2022, Hutchison Ports and MSC-owned Terminal Investment initiated agreements for a concession to develop and operate a new container port terminal at Dekheila port. Dekheila currently counts one four-berth container terminal and a multipurpose terminal that receives the majority of container ships. In 2020, Hutchison Ports signed a long-term agreement to develop and operate a new container terminal at Abu Qir port, involving an investment of USD730mn. In 2023, Hutchison also revealed plans for the development of a new container terminal, called B100, at the Port of Alexandria serving as a gateway to the Egyptian market.

In 2023, the Government of Egypt signed a concession with Suez Canal Economic Zone Authority for a second terminal at Port Said East Port. The concession includes financing, design, construction, management, operation, maintenance and re-delivery of the container terminal. Under the USD500.0mn investment deal, SCCT will add an extra 955m berth and an additional 510,000sq m container yard to existing 2,400m berth and 1.2sq km yard. SCCT is a joint venture (JV) of APM Terminals, China Ocean Shipping, the Suez Canal Authority and the National Bank of Egypt.

Expansion works at the Damietta port are also ongoing. In early 2023, the Hapag-Lloyd-led JV confirmed plans for the construction of a new transshipment terminal in Damietta. The new terminal is expected to handle 3.3mn twenty-foot equivalent units per annum. Hapag-Lloyd Damietta owns a 39% stake in the JV, while Eurogate Damietta and Contship Damietta own 29.5% each. Ship & CREW Egypt and the Middle East Logistics & Consultants Group each own a 1% stake. The terminal is expected to be completed by end-2024 with operations due to start at full capacity in 2025.

#### Investment In Suez Gulf And Red Sea Infrastructure To Diversify Container Capacity

Investment in Red Sea port infrastructure will likely reduce pressure on Egypt's Mediterranean container port infrastructure, supported by UAE-based port operators' expansion in the region. In 2022, a JV between Hutchison Ports and COSCO signed an agreement to develop and operate a new container terminal at Ain Sokhna port, which currently hosts one container terminal. Ain Sokhna has been one focus of a UAE-driven push for investment in port infrastructure in the Red Sea and the Gulf of Suez. In 2022, Abu Dhabi Ports and Egypt-based Group for Multipurpose Terminals agreed that Abu Dhabi Ports would study the operations of Ain Sokhna port with a view to the development of additional infrastructure. In 2023, Hutchison Ports unveiled plans for the development of a new container terminal at Ain Sokhna Port with capacity of 1.7mn twenty-foot equivalent units.

In 2022, Abu Dhabi Ports agreed to develop, operate and mange a multipurpose terminal at Safaga port, and end-2022 the company completed the acquisition of a majority stake in Adabiya port's container operator. In 2023, AD Ports Group and the Red Sea Ports Authority signed a 30-year concession agreement to develop and operate the multi-purpose port in Safaga. The firm also signed two 15-year agreements, a memorandum of understanding (MoU) and three head of terms concerning ports in Red Sea region and the Mediterranean Sea. The terminal will be developed on 810,000sq m area and is set to be operational in Q 20225. AD Ports will invest USD200mn in the project.



We expect that a positive long-term outlook for containerised exports, as well as imports, will support investment in Egypt's container port infrastructure. Despite near-term economic challenges, we expect that the government's plan to increase the country's manufacturing capacity, plans to curb population growth and a more flexible exchange rate regime pose upsides for longterm export growth. We expect that robust long-term economic growth will benefit demand for imports.

#### Rail

We hold a positive view on the realisation of the Ain-Sokhna-Marsa Matrouh high speed rail (HSR) project following the USD4.5bn signed contract between the NAT and a consortium comprising Siemens Mobility, Orascom Construction and Arab Contractors. The project consists of a 660km mainline and freight rail line connecting Ain-Sokhna, on the Red Sea, and the Mediterranean cities of Alexandria and Marsa Matrouh. The project will be executed under a engineering, procurement, construction and finance contract in which the consortium will be in charge of the design, installation, commissioning and maintenance of the line for 15 years. It also covers the structuring and financial arrangement for the project.

Some of the risks faced are related to difficulties securing financing. Egypt has a track record of announcing large-scale infrastructure investments that are ultimately left unrealised.

#### High-Speed Rail Line To Connect Red Sea With Mediterranean

Egypt - High-Speed Rail Planned Network



Source: OpenStreetMap contributors, BMI

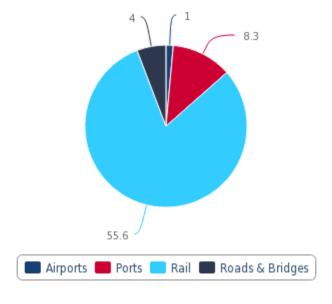
The advancement of the project will likely encourage further development of the Egyptian government's plans to build an HSR network, with the potential for additional projects to advance over the coming decade also posing upside risk to our outlook for Egypt's rail sector. The Ain-Sokhna-Marsa Matrouh HSR project was the first contract signed following the conclusion of an MoU signed by the consortium and the NAT in 2021 to develop the entire HSR network, covering a total of 1,800km. The government is also planning to advance the USD9.8bn Alexandria-Cairo-Aswan HSR line, which envisages close to 1,000km of track between the cities, and the USD4.3bn Hurghada-Luxor HSR line, which would encompass 300km of track. Both projects are currently at the planning stage, with the consortium and the NAT agreeing to discuss and finalise arrangements regarding system integration, rail infrastructure and rolling stock.

The largest rail projects currently under development however are metro and commuting projects, which are clear leaders in the rail infrastructure segment growth. The key projects here are the USD4.4bn Cairo Line III (currently under construction) and the planned USD5bn Cario Metro Line IV. In 2022 Alstom signed a framework agreement to design, build and maintain the Line 4 project, and the Transport Ministry is finalizing the terms and conditions of its agreement with Alstom based on end-2023 updates. Latest updates regarding Line 4 date from early 2024 when the Arab Bank reported it signed an agreement with Orascom Construction to provide EGP4.2bn (USD136.0mn) in financing for Phase IV (Giza-Fustat) of Greater Cairo Metro Line 4 project.

As of early 2024, construction is also reportedly under way on the USD4.5bn Greater Cairo Monorail project. The project, led by the NAT, will link the old city centre with the New Administrative Capital. The monorail comprises two main lines: a 54km line connecting East Cairo to the New Administrative Capital and a 43km line from 6 October City to Giza. In 2019, Bombardier, Arab Contractors and Orascom Construction won a USD4.16bn contract to design and build the monorail. More than 90% of the engineering has been completed. Civil works for the East of Nile (EoN) Line are 75% completed and guideway beam construction is 90% completed.

#### Rail Assumes Dominant Role In Transport Infrastructure

Egypt - Transport Infrastructure Value By Sub-Sector, USDbn



Source: BMI Infrastructure Key Projects Data

#### Roads

Although roads and bridges account for a relatively small fraction of project activity in Egypt's transport sector, we see significant scope for future growth in the sub-sector on the back of Egypt's National Roads Project, which aims to construct 39 new roadways



throughout the country with a total length of 4,400km. There are 13 major road projects logged in our Infrastructure Key Projects Data (KPD), with a combined value of USD4.1bn, indicating that there are contract opportunities to be had in the road sector.

Egypt plans to start building the third stage of its national road project. The third phase, estimated to cost USD524.3mn, involves improving routes and building roads totalling 1,154km. The under-construction 400km link between Cairo and Assiut will be a priority and a 37km link road will also be built alongside the Cairo-Suez highway. The plan also covers building the Khatatba Axis Bridge and Benha Bridge.

#### Urban Population Growth Prompting Transport Investment

Egypt - Population & Urban Population



e/f = BMI estimate/forecast\_Source: Local sources\_BMI

#### **Public Transport Key For Electrification Efforts**

Demand for electric vehicles (EVs) in Egypt will face limited upside as low incomes, a lack of charging infrastructure and the absence of consumer-focused incentives intended to stimulate demand remain key impediments. The key to electrifying Egypt's vehicle fleet lies in the public transport system. Electric buses that could be procured by the government stand to gain an advantage over passenger EVs as the government or transport operators would be able to finance such vehicles with revenues generated from commuters. The Egyptian Ministry of Military Production has reportedly partnered with Manufacturing Commercial Vehicles to locally assemble electrified buses. We remain cautious on the announcement as similar developments have occurred in the past without any meaningful progress on the announced projects. Taxis are another possible avenue to introduce EVs in the country as revenues gained from trips could pay for the higher costs of procuring EVs. Taxi operators would most likely require some level of financial support through incentives to replace their existing vehicles.

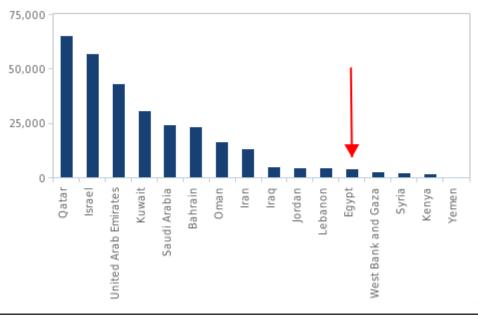
Developments to locally assemble passenger EVs show promise as Dongfeng Motor and El Nasr Automotive Company agreed to begin the local assembly of the former's E70 sedan model at the latter's existing vehicle assembly operations. We believe that the success of launching this EV production plan will rest in the hands of the government to either offer automakers generous incentives to reduce vehicle production costs or offering local consumers incentives to ease the burden of the initial high purchase price of EVs. This is due to the relatively low incomes in Egypt that would render the launch of EVs, without support, an unattainable goal. The level of income in Egypt is below the Middle East and North Africa (MENA) regional average and some of the more developed economies in the region, such as the UAE and Qatar. Low levels of income, coupled with inadequate public charging



infrastructure, will cap the rise in EV sales, especially without any form of support for automakers to reduce their production costs and consumers to ease the higher costs associated with purchasing EVs.

#### Low Incomes Inhibit Development Of An EV Market In Egypt

MENA - Nominal GDP Per Capita, USD



Sources: Local sources, BMI

We believe that EVs could gain an advantage as lower running costs, compared with traditional petrol- and diesel-powered vehicles, will lead to Egyptians favouring EVs in the future. In recent years, the total cost of owning and running traditional internal combustion engine (ICE)-powered vehicles has ballooned in Egypt following the removal of generous fuel subsidies as part of an agreement between the country and the IMF. We believe that this will lead to EVs (although still facing high price points) being favoured by businesses, the middle-class population and the government as charging from home or the workplace reduces the total cost of ownership of EVs drastically compared with higher-end traditional ICE-powered vehicles. Compressed natural gaspowered vehicle sales have risen as a result of rising ICE costs as the Egyptian government has focused on reducing its import bill while utilising its large natural gas reserves. The conversion of petrol- and diesel-powered vehicles has also gained traction in the country. The Central Bank of Egypt launched an initiative to aid owners of petrol- and diesel-powered vehicles to convert their vehicles to natural gas. Similar interventions for EVs in the country could lead to more rapid adoption of EVs, albeit from a low base.

#### **Airports**

The airports sub-sector is the smallest area of transport construction activity at present, with just two project under construction and two in the planning stages, according to our KPD. Improvements to the country's airports (expansions and upgrades) have been made to cater for tourists and business visitors in recent years. Despite concerns about security, the government views tourism as a long-term driver of economic growth in Egypt and continues to allocate investment to the sub-sector. As with other infrastructure sub-sectors, external financial support is proving to be critical to develop the airports sub-sector. The government is pushing ahead with the expansion of Sharm El-Sheikh International Airport, an important tourist transport hub for the Red Sea coast. This project will add extra capacity of 8mn passengers per annum at a cost of USD671.0mn and will be built by Spain-based Fairbanks Arguitectos, with financial support from the Islamic Development Bank and the African Development Bank. There are also plans under way for a new passenger terminal at Borg Al-Arab Airport in Alexandria, with Japan International Cooperation Agency (JICA) providing financial support to the project, and the construction of the Ras Sudr International Airport, South Sinai.

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#### **Egypt - Major Transport Infrastructure Projects**

Project Name	Project Group	Sector	Sub- Sector	Project Risk Metric	Value (USD mn)	Size	Unit	Status	Construction End
Alexandria - 6th of October City - Aswan High Speed Rail	na	Rail	High Speed	4	9,779	2,000	km	Under construction	na
Ain Sokhna (Suez) - Marsa Matrouh (Matrouh) High Speed Rail Project	Belt and Road Initiative (BRI)	Rail	High Speed	4	9,000	660	km	Under construction	na
Cairo Metro Line VI, Cairo	Belt and Road Initiative (BRI)	Rail	Metro	6.1	5,000	35	km	At planning stage	2024
Cairo Metro Line III Project, Cairo	na	Rail	Metro	3.6	4,386	48	km	Under construction	na
Hurghada (Cairo) - Luxor High Speed Rail	na	Rail	High Speed	6.3	4,300	300	km	At planning stage	na

Note: Top five projects by value. Project Risk Metric scores out of 10: lower score = lower risk. na = not available/applicable. Source: BMI Infrastructure Key Projects Data



#### **Energy & Utilities Infrastructure**

Key View: The government's divestment programme will most likely create scope for greater private sector participation in the country's power sector. The government has set out ambitious targets to expand the role of renewable energy in its power mix to 42% by 2035. Under its Integrated Sustainable Energy Strategy, it aims to phase out gas in support of increasing renewable electricity capacity, providing significant investment opportunities in the sector. Plans to build the country's green hydrogen production capacity will offer significant upside risk to our long-term electricity demand and renewables investment projections. The government also continues to prioritise investment in the water infrastructure sector, including the development of irrigation and treatment infrastructure.

#### **Latest Developments**

- The New and Renewable Energy Authority (NREA) and the Sovereign Fund of Egypt are preparing to launch the Phase II of the Zafarana wind farm for bidding in H2 2024. The tender process is part of Egypt's broader efforts to advance its renewable energy capabilities, including the agreements with Siemens and Jabal Al-Zeit stations, estimated at USD350.0mn. The project includes wind farms with a 545MW capacity and 700 turbines, developed through international collaborations.
- In April 2024, Amea Power has finalised installation of the first wind turbine in its Amunet wind farm, located in Egypt's Gulf of Suez. The USD709.0mn project, situated in Ras Ghareb 318km south of Cairo, will house a total of 70 wind turbines. Amea Power has collaborated with a consortium of Huadong PowerChina Engineering and PowerChina for the engineering, procurement and construction of the wind farm.
- In February 2024, Scatec signed a deal for the development of a 1GW solar project to supply clean energy for the operation of Egypt Aluminium's complex in the city of Nagaa Hammadi in Egypt. Under the terms of the agreement, the solar park will be built in two phases, each with a capacity of 500MW. Phase I is expected to be completed within 18 months from the date of signing and Phase II within 24 months.
- In January 2024, the governments of Egypt and Russia laid the foundation stone for the fourth and final unit at the 4.8GW Dabaa nuclear power plant in Egypt. Russia-based Rosatom is responsible for the construction of the USD30.0bn power plant, which will
- In January 2024, a consortium of ACWA Power and Hassan Allam Utilities signed a 25-year land usufruct agreement with the NREA for a 1.1GW wind project in Egypt. The USD1.5bn power plant will come up at the Gulf of Suez and Gebel El Zeit. Under the agreement, the consortium will work during the development phase to complete site studies and secure project finance.
- In January 2024, China Electric Power Equipment and Technology signed a memorandum of understanding (MoU) with NREA and Egyptian Electricity Holding to develop a 10GW solar energy project in Egypt. The proposed facility is expected to produce 29.7TWh of electricity per annum.

#### **Structural Trends**

#### **Investment In Power Infrastructure To Rise**

Our Power team is very bullish regarding Egypt's power generation sector development, noting that Egypt's power market is gearing up for a transformative era, with a strategic shift towards renewables and nuclear power, ensuring its status as an emerging renewable energy leader. They forecast overall generation capacity to rise by over 20GW over the 2024-2033, showing the extent of opportunities in the power plants and transmission grids infrastructure sector. With a power project pipeline in excess of 70GW currently featuring in our Key Projects Data (KPD), and a strong track record of recent project completion, we expect the power generation infrastructure segment will provide a strong boost to overall infrastructure sector growth in Egypt through to 2033.

They highlight that opportunities are spread across several sectors, with the largest upside from non-hydropower renewables. This



will be supported by the government's goal of achieving a 42.0% renewable energy share by 2035. Despite current power disruptions, this growth trajectory is bolstered by the country's substantial green hydrogen projects, enhancing its non-hydropower generation prospects. They highlight that private sector investments are set to lead growth in the market, as privatisation efforts and increased renewable participation expected to significantly boost overall capacity and generation. The sector's diversification is further strengthened by the construction of Egypt's first nuclear power plant and the development of power interconnectors, potentially positioning Egypt as a regional electricity exporter.

In order to support ongoing power sector growth and capitalise on its rising excess generation, we also expect Egypt to prioritise investment in new cross-border transmission interconnections, with the aim of becoming a regional electricity hub.

While there are proposals to expand Egypt's interconnections with the East African Power Pool and the Maghreb Electricity Committee, with both offering significant future export potential for Egypt, we expect the Egypt-Saudi and EuroAfrica interconnectors to take priority over the near-to-medium term. By expanding its electricity trading capacity, Egypt will be able to avoid mandatory power cuts. This will be essential in maintaining income stability and investor interest in its power sub-sector. We expect Egypt's overall electricity exports to rise steadily throughout our forecast period.

#### **Attractive Market For Solar Power**

Rapidly falling solar costs across the globe amid technological improvements, intensified competition for new projects and increasing access to financing have heightened the attractiveness of Egypt's solar market and offer grounds for cautious optimism that investment in solar infrastructure is set to accelerate.

Egypt's power market, and the solar market in particular, remains attractive. With rapidly growing urban and youth populations stoking robust structural demand, Egypt's government will need to invest aggressively in new power capacity over the next decade in order to forestall potential civil unrest. The country's natural advantages, including high solar irradiance and extended sunlight hours, coupled with growing private sector engagement, are key drivers of this growth. Supported by the Integrated Sustainable Energy Strategy, Egypt aims to achieve a 42% renewable power capacity by 2035, with non-hydropower renewables expected to grow by 82%.

In light of these considerations, there has been a strong uptick in investment pledges in Egypt's solar sub-sector. For instance, China Electric Power Equipment and Technology has signed a MoU with NREA and Egyptian Electricity Holding to develop a 10GW solar energy project in Egypt. The proposed facility is expected to produce 29.7TWh of electricity per year. Norwegian Scatec ASA also recently signed an agreement for a 1GW solar power and 200MW battery. Scatec ASA signed the agreement with the Egyptian Electricity Holding Company (EEHC) during the UN Climate Change Conference in Dubai (COP28).

#### Green Hydrogen Presents Significant Upside Risk To Long-Term Electricity Demand

Plans to build the country's green hydrogen production capacity will also hold significant upside potential for Egypt's domestic electricity consumption over the coming years. In 2021, Minister of Electricity and Renewable Energy Mohamed Shaker announced plans for the government to invest USD4.0bn in the construction of a green hydrogen production plant, which will use renewable electricity to power electrolysers. While the plans were not discussed in further detail, the government's commitment to establish a large-scale green hydrogen project highlights its long-term commitment to energy transition. Its vast solar and wind power potential, robust economic growth, close proximity to Europe - which is an emerging green hydrogen demand centre - and easy access to global trade routes make Egypt ideally suited to become a major market for global green hydrogen production.

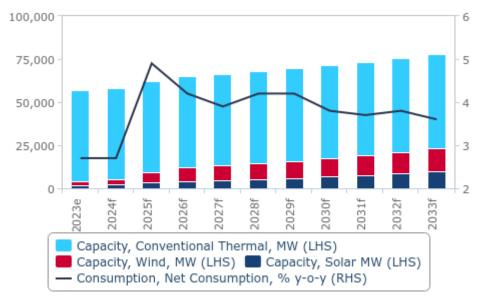
While we are not yet factoring this demand into our forecasts, given the early stage of the country's green hydrogen plans, there is robust upside risk to our power consumption and renewables growth forecasts over the medium-to-long term. A significant rise in



renewables-specific electricity demand would have a sizeable impact on solar and wind power investment in the country, presenting further upside risk to our long-term renewables capacity growth outlook.

#### Green Hydrogen Industry Poses Upside Risk To Long-Term Renewables Capacity Growth

Egypt - Electricity Consumption Growth & Capacity By Type (2023-2033)



e/f = BMI estimate/forecast, Source: National sources, BMI

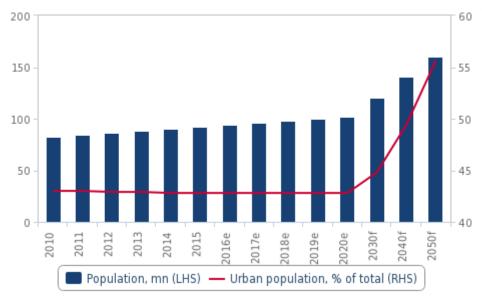
#### Sanitation And Treatment Key Areas For Egypt's Water Infrastructure

Investment in water infrastructure in Egypt will increase over the short-to-medium term, as persistent water stress and plans to support domestic agricultural production intensify water sanitation and reuse demand. As a predominantly arid country with only one major source of freshwater, the Nile River, Egypt is at high risk of water shortages. The Egyptian water sub-sector is relatively well developed concerning extraction and distribution. However, the wastewater and sanitation sub-sectors need more investment. We expect water consumption to increase steadily over the medium term, driven by a rising population and increased per capita consumption, as well as the corresponding need to expand agricultural production to feed the growing population. Investment in desalination projects and improving water infrastructure will need to be stepped up to mitigate the risk of shortages.

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#### Growing Urban Population Necessitates Water Infrastructure Investment





e/f = BMI estimate/forecast. Source: UN, BMI

We expect that public-private partnerships (PPPs) will play a larger role in Egypt's water infrastructure sub-sector. Egypt benefits from a strong PPP framework that supports water infrastructure projects. This robust PPP framework, coupled with the government's commitment to bolster domestic agricultural production, will support demand for water-related infrastructure.

An example of how demand for water infrastructure is translating into project opportunity is the El-Hamman wastewater treatment plant, which, according to reports, is set to be the world's largest. In 2021, the government awarded a design, supply, construction, operation and maintenance contract to a joint venture composed of OC, Hassan Allam Construction, Arab Contractors and Metito for an agricultural wastewater treatment plant. The project's value is estimated to be around USD739mn, with a capacity of 6mn cubic metres (cu m) of water per day, delivering treated water for irrigation to 2,100sq km of land on the west of the Nile Delta. The project reaffirms the confidence on the market's PPP framework due to its high value and comprehensive coverage across all the stages of the project's life cycle, from pre-construction to operation and maintenance. The participation of experienced and technically capable developers illustrates strong private sector interest in the market and strengthens the likelihood of other projects being developed in the future, the project is nearing completion as of 2024. We note the presence of multilateral funding agencies in Egypt's PPP landscape, with the involvement of the EBRD and the European Investment Bank in some of the projects.

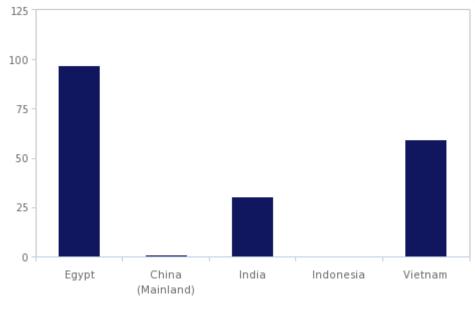
Other similar projects are in the planning phase and should ensure support of this sector's growth throughout the forecast period, such as the USD200mn Alexandria West Wastewater Treatment Plant Expansion project, with planned capacity of 80mn cu m of water, and the Helwan Wastewater Treatment Plant Expansion in Cairo, with expected capacity increase of 90mn cu m of water. Work is also underway on the Phase II of the 10th of Ramadan Water Purification Plant in Sharqia, a 219mn cu m water treatment plant under construction.

#### **Desalination To Enhance Water Security**

We expect the Egyptian government to intensify its focus on developing desalination infrastructure amid the risk that Nile River flow will be further constrained by upstream projects, such as the Grand Ethiopian Renaissance Dam. The Nile River is Egypt's traditional source of fresh water for agriculture, industry and household consumption. However, the river struggles to meet demand imposed by agriculture, industry and the growing population. Our Agribusiness team highlights that the government has already acted regarding the water shortage to reduce the production of water-intensive crops, such as rice. In terms of household consumption, demographic pressures dramatically increase demand for the use of Nile water. We expect the combined populations of Egypt, Sudan and Ethiopia to have increased by 25.7% from 2010 to 2020, accelerating to 52.7% by 2030 and more than doubling by 2050.

#### Egypt Highly Dependent On Neighbouring Markets For Water

Selected Rice-Producing Markets – Water Dependency Ratio, %



Source: FAO, BMI

Egypt's government will prioritise and accelerate the development of desalination infrastructure as a means of hedging against the looming uncertainty surrounding its future water supply. For example, a partnership with Russian innovation development institution RUSNANO Group will support the government's plan to build at least 47 reverse osmosis plants by 2030, and construct 20 more by 2050. Our KPD shows the prioritisation of the desalination project sector, with currently about nine desalination projects featuring in our KPD, all of which are at planning stage, providing upside risks to this sector.



Egypt - Major Energy And Utilities Infrastructure Projects

Project Name	Sector	Sub-Sector	Project Risk Metric	Value (USD mn)	Size	Unit	Status	Construction End
New El-Dabaa Nuclear Power Plant, Matrouh	Power Plants & Grids	Nuclear	4.4	30,000	4800	MW	Under construction	2030
FourWinds Coal Fired Power Plant, Sharm El Sheikh, South Sinai	Power Plants & Grids	Coal	0	11,000	6,000	MW	Under construction	na
Masdar Wind Project, Suez Canal Economic Zone, Suez	Power Plants & Grids	Wind - Onshore	6.5	10,000	10,000	MW	At planning stage	na
Sohag Wind Farm Project, Sohag	Power Plants & Grids	Wind - Onshore	6.5	10,000	10,000	MW	At planning stage	2026
Sohag Wind Project, Sohag	Power Plants & Grids	Wind - Onshore	5.9	5,000	5,000	MW	At planning stage	na

Note: Top five projects by value. Project Risk Metric scores out of 10: lower score = lower risk. na = not available/applicable. Source: BMI Infrastructure Key Projects Data



#### Residential/Non-Residential Building

Key View: In the near term, we expect hawkish monetary policy and high inflation to weigh on private investment and residential and non-residential construction growth in Egypt. The Israel-Hamas war poses significant downside risks for investment in nonresidential construction, should the conflict escalate. In the medium-to-long term, government reforms and divestiture plans as well as an expected IMF programme will most likely support investor sentiment and investment in the buildings industry. As Egypt seeks to expand its manufacturing sector, we expect foreign direct investment in the industrial building sector to support overall growth.

#### **Latest Developments**

- In May 2024, Mazaya Developments launched of its fourth project in Egypt's New Administrative Capital, with an investment totaling EGP5.0bn (USD105.0mn). The new project is an integrated commercial, administrative and medical complex featuring a ground floor, nine upper floors and three basement levels.
- The Suez Canal Economic Zone (SCZone) of Egypt has inked an agreement in April 2024 with Mainland China based Wu'an Xin Feng for building of USD297mn hot-rolled coils (HRC) manufacturing facility in the Sokhna Industrial Zone. Spanning 750,000sq m, the project expects generating 1,200 job opportunities and targeting 70% of its output for international markets.
- Saint-Gobain has broken ground in March 2024 on a EUR175.0mn (USD189.6mn) glass production facility in Sokhna Industrial Zone in Egypt. The factory will cover 200,000sq m area. It will receive electricity from a 10MW solar photovoltaic power plant, according to a press statement by the Suez Canal Economic Zone.
- In March 2024, Hassan Allam Properties (HAP) acquired 1.1sq km of land from MIDAR for a mixed-use project in Mostakbal City. The project, valued at EGP35.0bn (USD732.3mn), will include residential options, including villas, apartments retail and office units. The mixed—use project furthers HAP's commitment to the area following the success of previous projects like Haptown and The Valleys.
- Al Ahly Sabbour Developments unveiled plans in March 2024 to start construction on two residential projects worth EGP130.0bn (USD2.74bn) in 2024 in Egypt. The Summer Beachfront residential project will span 3.4sg km and At-East will cover an area of 732,00sq m. The Summer project will have an estimated investment of over EGP100.0bn (USD2.0bn) and Phase I is due to be launched. At-East will have an estimated investment of EGP35.0bn (USD709.4mn), with Phase I consisting of detached villas, twin houses and townhouses.
- In February 2024, Upwyde Developments unveiled plans for a new EGP30.0bn (USD969.4mn) Jazebeya project, located in the sixth of October city, Egypt. The 161,874.4sq m project will comprise residential and commercial portions. Raef Fahmi Architects are the main consultants for the project. Phase I includes 835 units, with delivery expected to start by 2027.
- IL Cazar Developments unveiled plans in February 2024 to build a new residential-led mixed-use project, named The Crest, in New Cairo, Egypt. The mixed-use project, estimated to cost EGP60.0bn (USD1.9bn), will cover more than 639,403sq m area. The project comprises 3,000 residential units, serviced apartments, offices, a social club, restaurants, sports area and leisure facilities.

#### **Structural Trends**

In the near term, we expect hawkish monetary policy to weigh on private investment and residential and non-residential construction growth in Egypt. In the medium-to-long term, government reforms and divestiture plans as well as an expected IMF programme will likely support investor sentiment and investment in the buildings industry.

#### **Short-Term Context Remains Difficult For Housing Sector**

The current context of high inflationary pressures and tightening monetary policy will continue to weigh on the buildings sector over 2024 and 2025, and notably on the residential building sector, given these factors directly impact purchasing power and the affordability of housing.

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Our Country Risk team notably expects that after hiking the benchmark policy rates by 200 basis points, the Central Bank of Egypt (CBE) will increase the overnight deposit and lending rates by a further 300bps to 24.25% and 25.25% respectively by end-2024. Strong inflationary pressures and the need to support the currency will provide impetus for the CBE to tighten monetary policy. While we expect average inflation will fall from 33.9% in 2023 to 30.3% in 2024, the drop will be almost entirely driven by favourable base effects. Inflationary pressures will remain strong due to increases in administered prices designed to reduce the subsidy bill, particularly fuel and most importantly a weaker exchange rate. This provides a negative short-term context for the buildings sector.

The outlook should begin to stabilise and improve for the buildings segment from 2026 onwards, as the economy return to stronger footing and as inflation stabilises. Our Country Risk team notes the impact of subsidy cuts and austerity measures will begin to wear off over the medium term as the pace of fiscal consolidation moderates and policy focuses less on subsidy cuts. They expect inflationary pressures to stabilise, which will allow the CBE to loosen monetary policy and provide support for private consumption growth. This will be reinforced by healthy population growth and a large youth population with a greater proclivity to spend, providing a positive longer-term outlook for buildings demand.

#### **Robust Long-Term Housing Demand**

Past 2026, we believe the long-term fundamentals of Egypt's residential construction market remain favourable. The key underlying factors informing our long-term view are an economic diversification agenda allied to strong population fundamentals and an urbanisation rate growing at 2.0% a year. With a young and growing population of around 91mn, Egypt is the most populous market in the Middle East and North Africa region and offers a level of housing demand that is sustainable over the medium-to-long term.

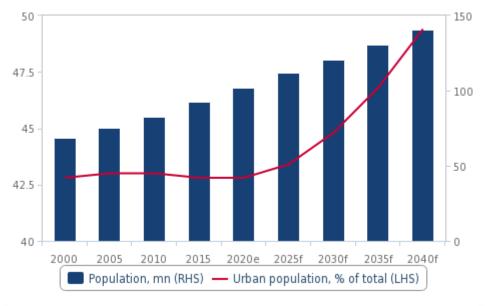
Factors such as the soaring rate of marriages in the country and rising levels of rural to urban migration add to this. Despite the potential, only 10% of Egypt's housing is supplied by professional property developers, with the rest built informally. While mid-to high-end property developments continue to spring up around the country, particularly around Cairo, developers have been largely unable to exploit pent-up demand from Egypt's poor.

Inability to match supply with demand has resulted in a housing shortage estimated at 500,000 units a year. A major factor behind the limited supply is the lack of low-income housing expertise among the country's largest housing developers as well as inadequate incentives to undertake low-income projects over more lucrative mid- to high-end developments. With an underdeveloped mortgage market (the share of mortgages to GDP is only about 0.5%), there is little to attract private developers to the affordable housing sector.

The government is taking steps to address the issue. Egypt's residential sector will continue to derive support from government policy that aims to deliver social housing as a means to address the country's persistent housing shortage. As a point of reference, the governorate of Cairo provided 7,380 housing units to slum-dwellers in the Mokattam district as part of the third phase in the Al Asmarat slum-dweller project. The project, estimated to cost about EGP14.0bn (USD769.1mn), aims to relocate citizens from slum areas to residential units. Then prime minister Sherif Ismail Mohammed unveiled plans for a USD1.6bn project to develop the Sinai, Portsaid, Ismailia and Suez governorates. The Sinai Development Authority, together with the Ministry of Housing, plans to build 5,000 houses. The water reserve network in El-Arish and electricity networks in Rafah and Sheikh Zuweid will also be replaced.

#### Housing Demand Driven By Demographic Growth

Egypt - Population & Urban Population



e/f = BMI estimate/forecast. Source: Local sources, BMI

The rise in investment in manufacturing industries and key infrastructure projects through the development of special economic zones is one emerging area of investment for the country. Infrastructure development continues to gain traction. Egypt has established an economic area in the SCZone with business-friendly regulations (such as more liberal and more efficient administration), tax incentives, the facilitation of registration and customs procedures, and better infrastructure.

The SCZone has four unique zones and six strategically located ports. The four zones are:

- Ain Sokhna: Set aside for heavy industry and renewable energy manufacturing (being near Egypt's windiest region).
- East Port Said: Allocated to light industry and logistics.
- Qantara West: A coastal area reserved for logistics.
- East Ismailia: Targeted at agri-business, textiles and ICT industries.

#### Main incentives include:

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- reduced income tax rates for businesses and individuals
- a one-stop shop for completing bureaucratic procedures
- special customs services
- proximity to ports

# Egypt Infrastructure Risk/Reward Index

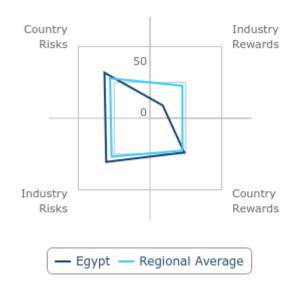
#### Egypt Infrastructure Risk/Reward Index

Please Note: BMI is enhancing its risk analysis with a new scoring system following its acquisition of GeoQuant, a market-leading provider of political risk data. From March 27 2024, risk scores are inverted: zero now represents the lowest risk and 100 represents the highest risk. This allows for clearer, industry-standard assessments. For further details, please refer to our updated methodology document.

Key View: Egypt currently ranks seventh regionally and 29th globally in our Infrastructure Risk/Reward Index. Egypt's score of 58.8 is well above the regional and global averages of 50.7 and 50.0 respectively. However, key challenges remain regarding the legal environment, the labour market and the country's ability to complete large announced projects, which will continue to weigh on its score. The Israel-Hamas war poses considerable downside risks for our construction industry growth outlook, as an escalation of the war would dampen investment in Egypt.

#### Risk/Reward Snapshot

Egypt & MENA Region - Infrastructure Risk/Reward Index



Note: Scores out of 100; lower score = more attractive market. Source: BMI Infrastructure Risk/Reward Index

#### **Global And Regional Ranks**

- Global rank (out of 104): 29th
- Regional rank (out of 15): 7th

#### **Key Features And Latest Updates**

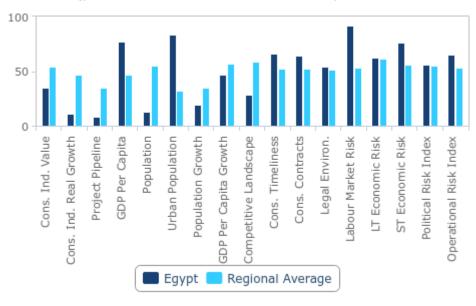
- With a young, growing and increasingly urban population, Egypt's construction sector will benefit from robust structural demand for investment across the infrastructure spectrum over our 10-year forecast period to 2033.
- We see significant scope for Egypt to continue its success in attracting international investment in infrastructure projects in the Suez Canal region, particularly from Mainland China-based companies.

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- use of Asmaa Gamal AbayaZeed Abdoon at Banque Misr (S.A.E). Downloaded: 14-Jul-2024 a FitchSolutions Company
- Persistent security risks, evidenced by bombings and sectarian attacks in recent years, will continue to weigh on Egypt's risk profile. Ongoing government efforts to rein in subsidies may result in popular backlash, stoking the possibility of social unrest and worsening the already volatile political risk outlook.
- Broader weakness of Egypt's institutions renders the country a substantially riskier environment in which to invest and operate infrastructure assets, relative to regional outperformers (ie, Qatar and the UAE). This weakness will continue to weigh on the strength of its legal framework, the clarity and enforceability of contracts and regulations, and the market's ability to combat pervasive corruption in its construction sector.

#### Risk/Reward Matrix Breakdown





#### Middle East And North Africa Infrastructure Risk/Reward Index: Robust Outperformance On Rewards

Please note: BMI is enhancing its risk analysis with a new scoring system following acquisition of GeoQuant, a market-leading provider of political risk data. From March 27 2024, risk scores are inverted: zero now represents the lowest risk and 100 the highest, for clearer, industry-standard assessments. For further details, please refer to our updated methodology document.

Key View: The Middle East and North Africa's average score of 49.0 in our Infrastructure Risk/Reward Index outperforms the global average of 50.0. This is driven by solid performance across Rewards on offer in the region, amid broad-based infrastructure investment efforts in the long term.

#### **Main Regional Features And Latest Updates**

- The Middle East and North Africa (MENA) region stands as the third-best performing region in our Risk/Reward Index (RRI), behind Asia-Pacific and North America and Western Europe.
- The region exhibits a significant range of scores among markets, from the lower-risk Gulf Cooperation Council (GCC) markets through to the higher-risk Yemen and Libya.
- Alongside the scale of long-term infrastructure investment efforts present across the region, several of the region's more developed markets also offer broadly low-risk operational environments, particularly the UAE.

#### Sizable Range Of Scores Present In Region

Middle East And North Africa - Infrastructure Risk/Reward Index



Note: Scores out of 100: lower score = more attractive market. Source: BMI Infrastructure Risk/Reward Index

With an average score of 49.0, MENA is behind only Asia-Pacific and North America and Western Europe respectively in our Infrastructure Risk/Reward Index. Within this, the region exhibits a Rewards score of 45.3. Weighted 60% in the final RRI score, the Rewards component encompasses Industry Rewards and Country Rewards; the former evaluates an industry's size and growth potential, while the latter quantifies a market's macroeconomic characteristics that directly impact the size of the market's business opportunities.

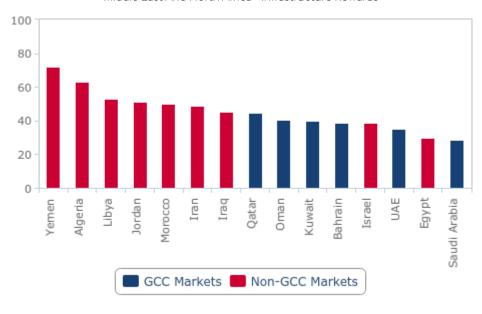
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GCC markets are the clear outperformers in the region, combining robust rewards with comparatively low risks. Our outlook for rewards on offer in these markets remains positive as high hydrocarbon prices will continue to support public investment. Higher revenue for the region's oil exporters amid elevated global energy prices will lead authorities to frontload higher capital spending, which will benefit infrastructure activity due to its importance for many markets' long-term strategic frameworks.

#### GCC Markets Exhibit Stronger Rewards

Middle East And North Africa - Infrastructure Rewards



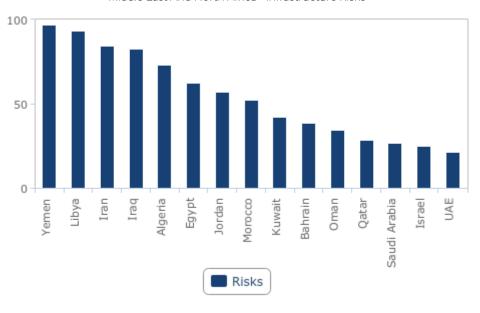
Note: Scores out of 100; lower score = more attractive market. Source: BMI Infrastructure Risk/Reward Index

MENA markets score an average of 54.6 in the Risks component of our RRI, slightly above the global average of 50.0. The Risks component of the RRI is weighted 40% in the final RRI score. It encompasses Industry Risks and Country Risks in a given market by considering factors including the openness of a market's competitive landscape, the risk of project delays, its broader legal environment, as well as political, economic and operational risk.

Contract enforcement remains a deterring factor when assessing the attractiveness of the MENA region. Markets such as Iraq, Egypt and Algeria underperform in this regard. Issues such as the perception of opaque tender processes with the awarding of government contracts, which are often giving preference to entities with longstanding relations with authorities, heighten the risks for foreign contractors trying to obtain contracts for publicly funded infrastructure projects.

#### Risks Elevated Across Numerous Markets In Region

Middle East And North Africa - Infrastructure Risks



Note: Scores out of 100; lower score = more attractive market. Source: BMI Infrastructure Risk/Reward Index

#### Middle East And North Africa - Infrastructure Risk/Reward Index

	Industry Rewards	Country Rewards	Rewards	Industry Risks	Country Risks	Risks	RRI	Regional Rank	Global Rank
Saudi Arabia	25.2	32.8	28.3	27.8	26.1	26.9	27.7	1	3
UAE	37.2	32.2	35.2	17.7	25.2	21.5	29.7	2	5
Israel	38.5	38.4	38.5	26.7	22.8	24.8	33.0	3	10
Qatar	47.2	41.4	44.9	22.6	34.0	28.3	38.3	4	23
Oman	34.0	50.7	40.7	33.1	36.4	34.8	38.3	5	24
Bahrain	32.7	47.4	38.6	30.0	46.8	38.4	38.5	6	25
Kuwait	41.4	37.5	39.8	45.7	39.3	42.5	40.9	7	32
Egypt	17.8	47.8	29.8	61.1	63.5	62.3	42.8	8	36
Morocco	51.1	48.5	50.1	47.6	57.6	52.6	51.1	9	57
Jordan	50.0	53.6	51.4	51.4	62.8	57.1	53.7	10	65
Iraq	43.7	47.6	45.2	81.5	83.5	82.5	60.1	11	81
Iran	50.5	46.4	48.9	90.7	78.4	84.5	63.1	12	88
Algeria	69.3	53.0	62.8	76.1	69.8	73.0	66.8	13	94
Libya	64.1	35.5	52.7	95.0	91.3	93.2	68.9	14	95
Yemen	75.7	66.8	72.2	96.9	97.7	97.3	82.2	15	104
Global Average	50.0	50.0	50.0	50.0	50.0	50.0	50.0	~	~
Regional Average	45.2	45.3	45.3	53.6	55.7	54.6	49.0	~	~

Note: Scores out of 100; lower score = more attractive market. Source: BMI Infrastructure Risk/Reward Index

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#### Middle East And North Africa - Infrastructure Industry Rewards

	Construction Industry Value	Construction Industry Real Growth	Project Pipeline, % of Industry Value	Industry Rewards
Saudi Arabia	16.5	32.0	27.2	25.2
UAE	27.2	74.8	9.7	37.2
Israel	29.1	35.9	50.5	38.5
Qatar	23.3	75.7	42.7	47.2
Oman	60.2	30.1	11.7	34.0
Bahrain	74.8	16.5	6.8	32.7
Kuwait	72.8	47.6	3.9	41.4
Egypt	35.0	10.7	7.8	17.8
Morocco	55.3	46.6	51.5	51.1
ordan	91.3	55.8	2.9	50.0
raq	58.3	57.3	15.5	43.7
ran	47.6	77.7	26.2	50.5
Algeria	36.9	78.6	92.2	69.3
Libya	89.3	4.9	98.1	64.1
Yemen	93.2	60.2	73.8	75.7
Global Average	50.0	50.0	50.0	50.0
Regional Average	54.0	47.0	34.7	45.2



#### Middle East And North Africa - Infrastructure Country Rewards

	GDP Per Capita	Population	Urban Population, % of Total	Population Growth	GDP Per Capita Growth	Country Rewards
Saudi Arabia	33.0	37.9	21.4	26.2	45.6	32.8
UAE	11.7	66.0	16.5	50.5	16.5	32.2
Israel	18.4	67.0	23.3	22.3	61.2	38.4
Qatar	4.9	92.2	2.9	51.5	55.3	41.4
Oman	37.9	84.5	12.6	24.3	94.2	50.7
Bahrain	29.1	98.1	11.7	45.6	52.4	47.4
Kuwait	22.3	86.4	1.0	46.6	31.1	37.5
Egypt	76.7	12.6	83.5	19.4	46.6	47.8
Morocco	69.9	35.9	58.3	43.7	35.0	48.5
Jordan	75.7	60.2	7.8	55.3	68.9	53.6
Iraq	63.1	29.1	48.5	10.7	86.4	47.6
Iran	58.3	14.6	37.9	56.3	65.0	46.4
Algeria	68.0	30.1	41.7	27.2	98.1	53.0
Libya	39.8	72.8	28.2	35.9	1.0	35.5
Yemen	100.0	39.8	86.4	11.7	96.1	66.8
Global Average	50.0	50.0	50.0	50.0	50.0	50.0
Regional Average	47.2	55.1	32.1	35.1	56.9	45.3



#### Middle East And North Africa - Infrastructure Industry Risks

	Infrastructure Competitive Landscape	Construction - Timeliness	Construction - Contracts	Legal Environment	Labour Market Risk	Industry Risks
Saudi Arabia	28.2	25.2	37.9	27.2	20.4	27.8
UAE	28.2	6.8	31.1	20.4	1.9	17.7
Israel	66.5	27.2	12.6	19.4	7.8	26.7
Qatar	4.4	26.2	48.5	23.3	10.7	22.6
Oman	66.5	36.9	1.0	28.2	33.0	33.1
Bahrain	49.0	17.5	8.7	36.9	37.9	30.0
Kuwait	66.5	59.2	18.4	42.7	41.7	45.7
Egypt	28.2	66.0	64.6	54.4	92.2	61.1
Morocco	28.2	44.7	44.7	46.6	73.8	47.6
Jordan	66.5	41.7	53.4	37.9	57.3	51.4
Iraq	66.5	73.8	98.1	77.7	91.3	81.5
Iran	97.1	87.4	95.1	91.3	82.5	90.7
Algeria	91.3	77.7	74.8	62.1	74.8	76.1
Libya	97.1	100.0	99.5	100.0	78.6	95.0
Yemen	97.1	97.1	91.3	99.0	100.0	96.9
Global Average	50.0	50.0	50.0	50.0	50.0	50.0
Regional Average	58.7	52.5	52.0	51.1	53.6	53.6



## Middle East And North Africa - Infrastructure Country Risks

	Long-Term Economic Risk Index	Short-Term Economic Risk Index	Political Risk Index	Operational Risk Index	Country Risks
Saudi Arabia	20.4	1.9	38.8	28.2	26.1
UAE	35.9	35.9	32.0	7.8	25.2
Israel	4.9	5.8	39.8	23.3	22.8
Qatar	47.6	53.4	27.2	24.3	34.0
Oman	53.4	35.0	33.0	32.0	36.4
Bahrain	65.0	73.8	45.6	25.2	46.8
Kuwait	45.6	25.2	36.9	45.6	39.3
Egypt	62.1	76.2	56.3	65.0	63.5
Morocco	68.9	67.0	51.5	53.4	57.6
Jordan	91.3	97.1	43.7	50.5	62.8
Iraq	81.6	58.3	90.3	90.3	83.5
Iran	80.6	71.4	83.5	75.7	78.4
Algeria	72.8	60.7	65.0	77.7	69.8
Libya	93.2	76.2	93.2	96.1	91.3
Yemen	98.1	98.1	95.1	100.0	97.7
Global Average	50.0	50.0	50.0	50.0	50.0
Regional Average	61.4	55.7	55.5	53.0	55.7

Note: Scores out of 100; lower score = more attractive market. Source: BMI Infrastructure Risk/Reward Index



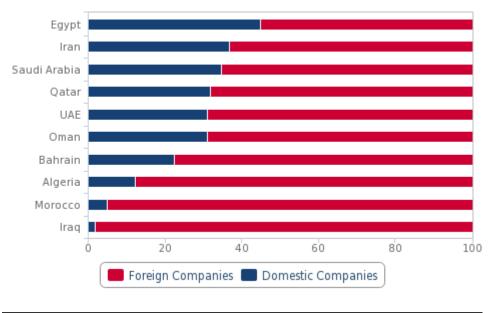
# Competitive Landscape

We expect Egypt's competitive landscape to remain diverse, with strong competition for contracts between domestic and foreign firms and the formation of joint ventures common. Leading local firms Orascom Construction Industries (OCI) and Arab Contractors have the strongest presence in construction roles, but this is not at the expense of international companies, with European and Asian contractors having considerable opportunities in the transport and power sectors. Infrastructure projects are funded through a relatively balanced mix of government spending, development finance and foreign investment. We expect the latter to increase in importance as the government moves forward with fiscal consolidation efforts and the use of public-private partnership (PPP) contracts grows.

Egypt will retain a diverse construction competitive landscape over the short term, with a strong mix of domestic and foreign firms competing for contracts. An analysis of our Key Projects Data (KPD), including all major infrastructure projects in the transport as well as energy and utilities sectors over USD30.0mn in value, shows that Egypt has the most even balance of local and foreign contractors in the Middle East and North Africa (MENA) region. This reflects the appeal of Egypt's construction sector for international firms, with considerable opportunities in the transport and energy and utilities sectors in one of the largest markets in the region. This shows the presence of well-established domestic construction companies and the country's developed local construction sector, in contrast with other markets in the Middle East.

## Egypt Has Strongest Balance Of Local And Foreign Firms

MENA - Share Of Construction Roles By Market, %

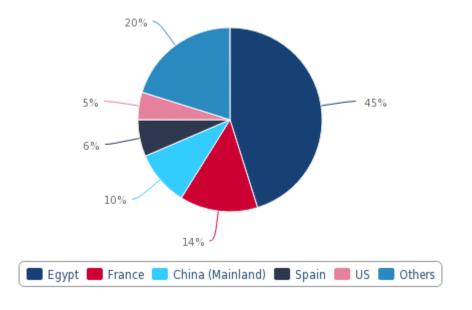


Source: BMI Key Projects Data

According to our KPD, Egypt-based firms take 45% of construction roles in the country, with an even spread across transport and energy and utilities projects, although local firms have a particularly strong presence in road and power plant developments. Within the domestic construction sector, OCI and Arab Contractors are the dominant firms, with nearly 60% of construction roles for Egyptbased contractors going to these two companies. Both companies were founded in the 1950s and have a strong track record in residential, commercial, industrial, transport and energy and utilities infrastructure. The two firms often work in partnership with each other and foreign contractors on major projects, including the Aswan Dam and the Cairo Metro.

#### France- And Mainland China-Based Firms Lead International Contractors

Egypt - Share Of Construction Roles By Company Origin, %



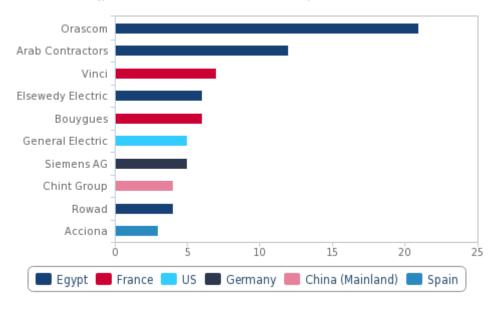
Source: BMI Key Projects Data

A wide range of foreign companies are present in the Egyptian construction market, with firms from 19 different markets represented, largely from Europe and Asia. France-based firms lead the way, taking 14% of total construction roles (according to our KPD) followed by Mainland China-based firms with 10% and Spain-based (6%) and US-based (5%) companies. France-based firms are predominantly involved in rail projects, with 16 roles, largely in the various projects associated with expanding and extending the Cairo Metro. These roles are generally taken by major contractors, such as VINCI and Bouygues, which have a strong track record in rail projects and experience operating in high-risk African markets. There are a number of other foreign firms involved in the transport sector, but these are spread over a diverse range of nationalities and few firms currently take multiple construction roles. Other major international contractors present in the transport construction sector include China Railway Construction Corporation, Netherlands-based Royal Boskalis Westminster and UK-based Colas Rail.

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#### Orascom And Arab Contractors The Largest Players

Egypt - Top 10 Construction Contractors By Number Of Roles



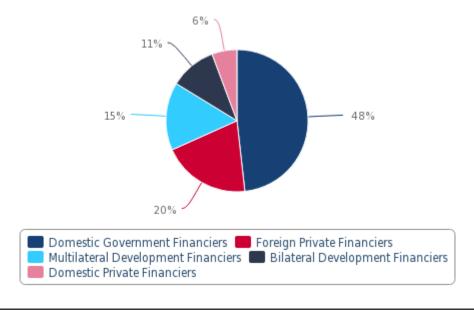
Source: BMI Key Projects Data

The competitive landscape is more diverse in the energy and utilities sector, with companies from a number of markets taking multiple construction roles. China-, Spain- and US-based firms are more active in power plant projects. US-based power firm General Electric has a particularly significant presence in Egypt's power sector as a contractor and equipment provider. The company has been involved in a number of gas-fired power plants, such as the North Giza Power Plant and the New West Damietta Simple Cycle Power Plant. Germany-based Siemens and its subsidiary Siemens Gamesa Renewable Energy are also involved in thermal and wind power projects in Egypt respectively. The role of China-based companies, such as Chint Group, is growing in solar projects and largescale thermal plants, such as the USD10.0bn Hamrawein coal-fired power plant.

We see scope for greater involvement of foreign power companies and equipment providers in Egypt as the government presses ahead with renewable power plans, with many projects set to be delivered through PPP contracts. According to our KPD, there are 10 renewable power projects under construction or in the planning stages in Egypt that are set to be delivered as PPPs, including a mix of solar, and offshore and onshore wind. The government's plans to expand its renewable energy capacity to help meet rapidly growing electricity demand will provide opportunities for international construction and energy firms as well as equipment providers. PPP projects that are supported by development financiers and that share risks between the government, multilateral institutions and companies will prove attractive. We have already seen positive momentum on the Ras Ghareb Wind Farm, the first phase of which is being developed by Siemens Gamesa and supported by a mixture of development financiers, such as the International Bank for Reconstruction and Development and private banks, including France-based Société Générale.

## Share Of Foreign Investment And Development Finance To Grow

Egypt - Share Of Project Finance & Sponsorship Roles, %



Source: BMI Key Projects Data

We expect mixed financing arrangements to remain prominent in infrastructure funding in Egypt. Financing roles are largely divided between the government and its various departments, foreign private banks and development financiers, with domestic private sources playing a more limited role. Government spending is the primary source of infrastructure funding, but the country remains reliant on the funding provided by development financiers, which comprise the most active non-governmental financiers in the Egyptian infrastructure market. The Kuwait Fund for Arab Economic Development is the largest foreign financier, with 16 finance or sponsorship roles largely in the power plant and water sub-sectors. The European Bank for Reconstruction and Development has 13 roles, and the Islamic Development Bank and the African Development Bank are also heavily involved in infrastructure financing. Private European banks, including Deutsche Bank, HSBC and BNP Paribas, are also present, often supporting projects being carried out by international contractors. We expect this to continue, with a growing prominence of foreign investors as the government seeks to pare back spending in order to tackle the large fiscal deficit.



# **Company Profile**

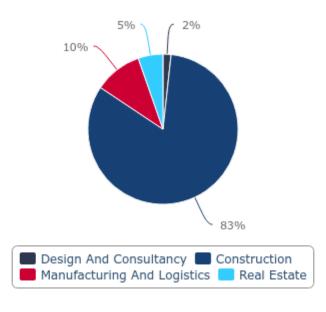
## Egypt Infrastructure Profile: China Railway Construction Corporation

#### Overview

China Railway Construction Corporation (CRCC) is a Mainland Chinese state-owned company primarily active in civil engineering and residential construction. With an annual revenue of just under CNY1.1tn (USD151.1bn) in 2022, it is the third-largest construction company by revenue globally. CRCC has its origins as the railway corps of China's People's Liberation Army. However, the organisation was moved under the Ministry of Railway in 1984 and then under then incorporated as an independent stateowned enterprise (SOE) under the oversight of the State Asset Control Commission (SACC) in 1989. In 2003, CRCC acquired China Civil Engineering Construction (CCEC), another SOE in the construction sector. Over the last two decades, CRCC has expanded at a rapid pace, primarily driven by revenue generated from contracting roles in China's booming high-speed rail (HSR) and highway construction market. It has also grown its international contracting business.

## Construction Largest Segment

CRCC - Revenue By Segment, CNYbn (2022)



Note: CAS results, Source: CRCC

CRCC maintains a vertically integrated structure focused around its main contracting business. Besides the construction of civil engineering and real estate projects, the company is active in the planning, design and consultation of infrastructure, the real estate sector, the manufacturing of construction materials and machinery as well as services related to infrastructure financing. In addition, CRCC is increasingly active in infrastructure investment and operations. In 2022, CRCC's main revenue stream (83% of its total revenue) originated in from its contracting operations, with the two largest segments in this field being railway and road construction. Taken together, infrastructure projects accounted for 66% of CRCC's contracting revenue in 2022. The company's footprint in the residential and non-residential building sector is less pronounced, accounting for just under 30% of revenue within CRCC's contracting activities. CRCC's manufacturing segment, which accounts for 10% of total company revenue in 2022, is active in the production of construction machinery, such as railway track maintenance machinery, underground construction equipment, rail and bridge construction equipment and others, as well as the manufacturing of construction materials, such as concrete or prefabricated steel structures. CRCC's real estate segment, which accounted for 5% of its revenue, is centred around the sale and

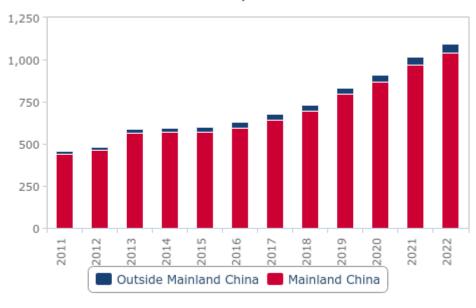
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leasing of residential and commercial properties developed by CRCC, primarily in China's coastal large urban agglomerations. Similarly, its financial services arm primarily conducts services related to the financing and insurance of infrastructure projects developed by CRCC.

#### Mainland China Main Source Of Revenue

CRCC - Revenue By Market, CNYbn

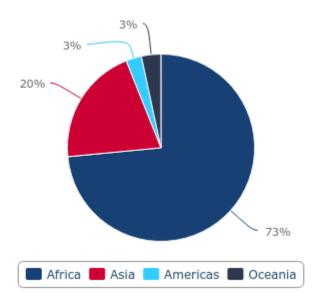


Note: CAS results. Source: CRCC

The majority of CRCC's revenue (95% in 2022) originates from China, where it plays a major role in the country's ongoing rapid expansion of its rail and highway network. CRCC was the main contractor for just under half of China's high-speed rail network, which alone accounts for more than half of the world's high-speed rail infrastructure by total length. The company also built over 40% of the country's intercity expressway network. However, CRCC also conducts substantial international contracting operations, mainly through its subsidiary CCEC. Particularly, the company is very active in Africa, which accounted for 73% of its international revenue in 2022. Here, it served as the main contractor for a number of high-profile rail and road projects, such as the Tanzania and Nigeria standard gauge railway projects.

## Africa Largest Market Outside Mainland China

CRCC - International Revenue By Region, % of total



Note: CAS results. Source: CRCC

### **Strategy**

CRCC's corporate strategy is shaped both by its company-specific comparative advantages as well as the economic environment of its core market, Mainland China, and the interests of its majority shareholder, the Chinese government. It reflects widespread concerns around the saturation of China's infrastructure market in the long term and the ambition of Chinese policymakers to pursue higher-value added production and technological self-sufficiency.

#### Global Revenue Growth In Line With Home Market

CRCC - Revenue Outsite Mainland China, CNY bn and % of total



Note: CAS reporting. Source: CRCC



CRCC seeks to further expand the geographical scope of its business operations to secure long-term growth potentials outside the slowing Chinese rail infrastructure market, seeking to build on its large and relatively secure domestic revenue stream to finance its riskier activities in emerging markets globally. It also benefits from financing support from Chinese policy banks within the Belt and Road Initiative (BRI). CRCC's overseas expansion will primarily focus on emerging markets with friendly relations with China.

Even though the company's international engagements are extensive in absolute terms, it remains relatively less exposed to international markets than some of its Chinese peers, relative to its overall revenue. Furthermore, although its global revenue has grown substantially over 2011-2022, the share of its total revenue originating from projects outside China has remained relatively stable over 2011-2022, growing from 3.9% in 2011 to 5.1% in 2022.

Pursuing vertical integration and technological self-sufficiency, CRCC seeks to prioritise investments in innovative segments along the construction value chain. It emphasises increased R&D expenditure within its manufacturing segment coupled with investments in manufacturing facilities in China. However, CRCC's current research spending, as of the latest available data from end-2022, remains at 2.3% of revenue, roughly in line with industry standards. Furthermore, although CRCC's construction operations expanded substantially in absolute terms over the last decade, they remain relatively small as a share of the company's overall revenue.

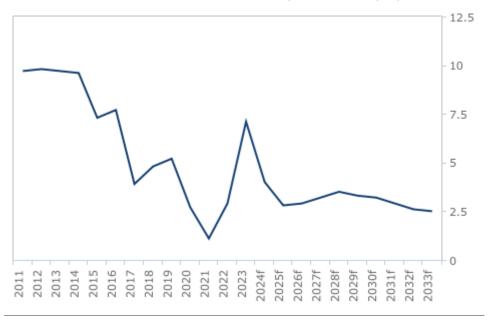
CRCC is seeking to expand its investments in private and public-private partnership infrastructure projects and infrastructure operations. This can be seen as a response to increasing concerns about the fiscal sustainability of a sovereign-debt-based infrastructure development model in many of its primary markets in Mainland China and Africa.

#### **Outlook**

Throughout our forecast period to 2032, we expect CRCC to be able to continue to grow its operations, driven by its strong position in China's rail and highway market. From 2023 to 2032, we expect China's rail and road sectors to expand at an average pace of 4.7% and 4.8% y-o-y respectively, well above the expected global average of 3.1% and 2.6%. Particularly given China's extremely large rail and roads infrastructure sectors, with the market standing as the largest in both sectors globally, this will provide ample project opportunities for firms well established in China. In competing for these projects, CRCC will be able to benefit from its large scale and entry barriers for foreign firms, allowing it to continue to maintain a considerable share of the Chinese rail and road construction market.

#### Long Term Slowdown In China's Construction Market

China (Mainland) - Construction Industry Real Growth, % y-o-y



f = BMI forecast. Source: National Bureau of Statistics, BMI

Several headwinds are set to weigh on CRCC's operations over the coming years, leading us to expect a slowdown relative to its rapid expansion over the 2000-2019 period. Particularly, these include the relative slowdown in China's construction industry and diminishing funding for large-scale, high-risk infrastructure projects abroad.

As of November 2023, China's rail infrastructure project pipeline remains extensive and the government has announced a USD137bn stimulus package to strengthen economic growth, much of which is set to benefit the rail sector. However, both analysts and China's policymakers have expressed increasing concerns about the long-term sustainability of China's investment-driven economic model. Particularly given China's increasingly mature rail and road network, concerns around diminishing returns on investments coupled with elevated debt levels are set to lead to a slowdown in rail and road infrastructure growth in the long term, with expected growth rates for these sectors declining from 9.2% and 7.9% in 2023 to 3% and 4% by 2033 respectively. Furthermore, we note that China's residential construction market is set to underperform throughout our forecast period, reaching an average growth rate of 1.5% y-o-y from 2023 to 2033. Chinese authorities have also become less willing to engage in infrastructure finance abroad, particularly affecting large and high-risk projects. Given CRCC's extensive involvement in rail projects in many high-risk markets, this will weigh on its international contracting business. This view is based on the large investment costs, long-time horizons and operational difficulties of many rail projects, which amplify existing fiscal and political risks in some of CRCC's traditional export markets.



## **Group Income Statement**

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Revenue	569,962	575,260	582,522	629,327	680,981	730,123	830,452	910,325	1,020,000	1,096,300
Operating Income	16,055	19,148	20,635	20,803	23,449	29,458	31,681	35,203	38,692	45,646
Net income	10,345	11,735	12,645	14,000	16,057	17,935	20,197	22,393	24,691	26,642
Operating Margin,%	2.82%	3.33%	3.54%	3.31%	3.44%	4.03%	3.81%	3.87%	3.79%	4.16%
Net Margin, %	1.81%	2.04%	2.17%	2.22%	2.36%	2.46%	2.43%	2.46%	2.42%	2.43%
Order Backlog, CNYbn	1,743,771	1,762,978	1,808,528	1,977,768	2,396,630	2,708,700	3,273,637	4,318,927	4,854,898	4,871,297

## **Group Balance Sheet**

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Inventories	201,637	227,930	245,591	265,781	266,604	159,891	194,892	232,359	279,554	299,819
Total Current Assets	471,061	521,307	575,248	611,300	652,898	650,277	755,814	860,768	908,400	1,010,100
Total Non-Current Assets	81,957	102,259	120,848	148,045	168,989	267,393	325,425	382,025	444,570	513,861
Total Assets	553,019	623,566	696,096	759,345	821,887	917,671	1,081,200	1,242,800	1,353,000	1,523,900
<b>Total Current Liabilities</b>	390,906	430,203	483,879	490,999	543,655	591,707	688,979	769,625	832,081	934,638
Total Non-Current Liabilities	78,288	88,180	83,398	119,630	99,584	118,629	130,239	159,529	174,396	203,356
Total Equity	83,825	105,183	128,819	148,716	178,649	207,335	262,022	313,639	346,493	385,920
Total Liabilities And Equity	553,019	623,566	696,096	759,345	821,887	917,671	1,081,200	1,242,800	1,353,000	1,523,900

Note: CAS results. Values in CNYmn. Source: CRCC

## **Group Cash Flow Statement**

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Cash flow from operating activities	-15,664	-3,488	40,760	29,037	16,465	-4,871	28,845	28,364	-21,182	42,548
Cash flow from investment activities	-20,060	-17,341	-24,482	-26,624	-36,893	-49,419	-51,192	-51,852	-62,491	-56,958
Cash flow from financing activities	36,014	25,487	7,314	6,340	32,920	54,406	32,382	51,538	25,900	48,793
Cash flow for the period	290	4,658	23,592	8,754	12,492	116	10,035	28,051	-57,772	34,383
Free cash flow	-33,310	-25,326	13,616	-779	-13,766	-37,210	-3,420	-3,024	-54,057	12,287

Note: CAS results. Values in CNYmn. Source: CRCC



## **Group Key Financials By Segment**

	2018	2019	2020	2021	2022
Revenue					
Construction	622,822	713,558	795,121	871,216	939,366
Real Estate Development	36,914	41,297	40,929	50,662	62,254
Manufacturing	14,597	16,379	15,546	20,365	21,747
Survey, Design & Consultancy	16295.241	17946.952	18453.059	19372.949	20181.756

Note: CAS results. Values in CNYmn. Source: CRCC



## Egypt Infrastructure Profile: European Bank For Reconstruction And Development

#### **Overview**

The European Bank for Reconstruction and Development (EBRD) is a multilateral development bank, headquartered in the UK. Founded in 1991, the EBRD provides equity and debt financing for a range of economic activities including agriculture, commerce and infrastructure development.

The bank features 72 governments as shareholders, alongside the EU and the European Investment Bank, with each shareholder obligated to make a capital contribution to the EBRD's capital base upon becoming a shareholder. Having comprised 39 shareholders during its founding year, the EBRD has continued to attract new governments globally; Iraq and Algeria are the most recent shareholders to join the EBRD in November 2023 and October 2021 respectively. We highlight the distinction between EBRD shareholders and EBRD country of operation status, though numerous jurisdictions are both a shareholder and a country of operations.

The EBRD segments its activities into Banking, Treasury, and Shareholder Special Fund. Banking conducts its investment-related activities, Treasury conducts the raising of debt finance and financial risk management, while Shareholder Special Fund conducts technical and non-technical assistance to clients and other project stakeholders.

**EBRD** Shareholde Banking Treasury Special Fund Eastern Central Greece And Southern And South-Eastern Turkiye Other OECD Central Asia Europe And Europe And Russia Eastern Med Caucasus

EBRD - Company Structure And Key Regions

Source: European Bank for Reconstruction and Development, BMI

The EBRD's means of financing involve direct equity investments, pooled investment vehicles such as private equity funds and debt financing. Its debt financing, for example, typically ranges between EUR5mn and EUR250mn for individual projects, with an average of EUR25mn. This generally targets projects that would otherwise struggle to attract sufficient private investment. Often, the EBRD also acts as a project sponsor.

The EBRD works to mobilise external financing as well; from private investors, governments, and other multilateral institutions. It also engages with project stakeholders, namely public authorities, to develop regulatory frameworks, instil best practices in project development and assist with any specific risks.

On its income statement, the EBRD details interest income, fee income, donor-related income and other investment income:

- Interest Income: Interest income on banking loans, interest income on fixed income securities and interest income on derivative securities.
- Fee Income: Fees earned on services provided by the EBRD, such as loan commitment fees and other performance fees.
- Donor-Related Income: Income derived from fees paid by donors for the EBRD's fund administration services. Net of donorrelated expenses, this figure typically equates to zero.

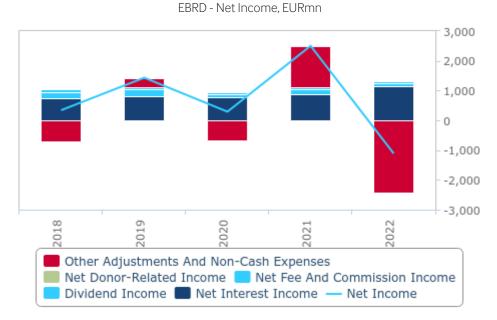
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Other Investment Income: Dividend income on the EBRD's strategic equity investments, unrealised fair value gains on equity investments and loans and other adjustments for assets held at amortised cost.

The bank reported a net loss in the year to 31 December 2022 of -EUR1,117mn. This followed a net profit of EUR2,502mn during 2021, with this reversal attributed to the impact of Russia's invasion of Ukraine; impairment losses on loans in Ukraine, Russia and Belarus, and fair value losses on equity investments in Russia.

## Net Loss In 2022 An Indirect Consequence Of Russia's Invasion Of Ukraine



Note: IFRS results. Other adjustments and non-cash expenses include fair value adjustments, gains from assets held at amortised cost, foreign exchange adjustments, impairment provisions, administrative expenses, depreciation and amortisation. Source: European Bank for Reconstruction and Development

Geographically, the EBRD operates predominantly in Europe and its neighbouring markets. Its activities are segmented into nine overarching regions:



#### **EBRD** - Key Regions And Markets

Central Asia	Central Europe And The Baltics	Eastern Europe And The Caucasus	Greece And Cyprus	Russia	Southern And Eastern Mediterranean	South- Eastern Europe	Turkiye	Other OECD
Kazakhstan	Croatia	Armenia	Cyprus	Russia	Egypt	Albania	Turkiye	
Kyrgyzstan	Czech Republic	Azerbaijan	Greece		Jordan	Bosnia and Herzegovina		
Mongolia	Estonia	Belarus			Lebanon	Bulgaria		
Tajikistan	Hungary	Georgia			Morocco	Kosovo		
Turkmenistan	Latvia	Moldova			Tunisia	Montenegro		
Uzbekistan	Lithuania	Ukraine				North Macedonia		
	Poland					Romania		
	Slovakia					Serbia		
	Slovenia							

Source: European Bank for Reconstruction and Development

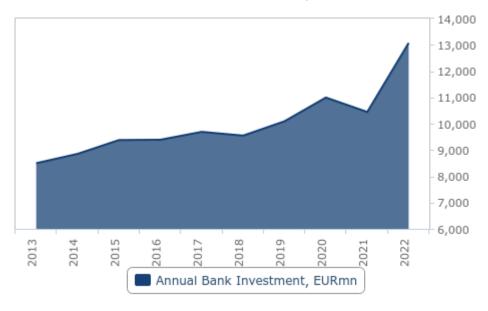
The most notable recent expansion of the EBRD's geographic mandate came in 2011, when the bank inaugurated its Southern And Eastern Mediterranean segment and began investment activities in Egypt, Jordan, Morocco and Tunisia. Regarding EBRD's longerterm expansion, May 2023 saw the formal approval of the EBRD to expand its operations in Sub-Saharan Africa (SSA) and Iraq. From 2025 to 2030, the bank will be able to invest in up to six SSA markets; the EBRD cites Benin, Côte d'Ivoire, Ghana, Kenya, Nigeria and Senegal as appropriate markets for potential investments, should they wish to apply.

Conversely, EBRD suspended any new investments in Russia from 2014, before suspending Russia's access to EBRD resources in April 2022 following Russia's invasion of Ukraine. At the time of writing, Russia remains a shareholder of the EBRD.

Annual bank investment is the primary metric with which to track the EBRD's direct operational activities. It reflects the volume of financial commitments made by the EBRD during a given year, plus any trade finance provided. 2022 saw the EBRD's annual bank investment reach EUR13bn, up markedly from EUR10.4bn in 2021. The EBRD achieved a near-uninterrupted increase in its annual bank investment over the 10 years to 2022, and decreased year-on-year only in 2018 and 2021.

#### EBRD's Annual Investment Commitments Exceeded EUR13bn As Of 2022

EBRD - Annual Bank Investment, EURmn

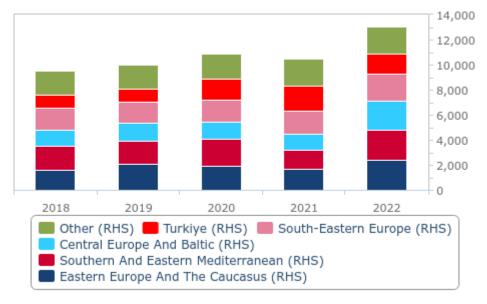


Source: European Bank for Reconstruction and Development

Between 2018 and 2022, the respective Eastern Europe And The Caucasus and Southern And Eastern Mediterranean regions saw the largest amount of annual bank investment by the EBRD. Investment within Eastern Europe And The Caucasus has been particularly situated in Ukraine and Georgia, whereas Egypt has seen sizable annual investment flows within Southern And Eastern Mediterranean. Outside of the two aforementioned regions, Turkiye, Poland and Greece have also accounted for material portions of the EBRD's annual bank investment over the period.

## Mediterranean, Central And Eastern Europe Have Accounted For Much Of EBRD's Investment

EBRD - Annual Bank Investment By Region, EURmn



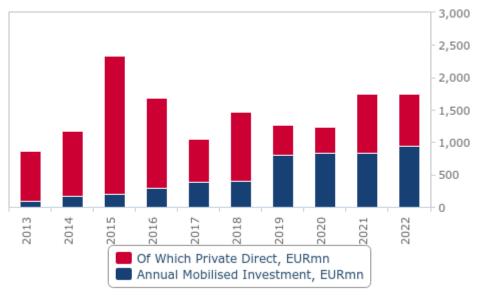
Source: European Bank for Reconstruction and Development



Reflective of the importance of the EBRD's efforts to crowd-in external financing, the bank also reports its annual mobilised investment; the volume of financial commitments made by other entities due to the EBRD's direct involvement with a client. Within these figures, the EBRD also states the amount of commitments from private entities on a commercial basis. In 2022, the EBRD reported EUR1.7bn of annual mobilised investment, of which EUR0.8bn was derived from private direct financing. The relative contribution of private direct financing to the EBRD's annual mobilised investment has fluctuated over the past decade, from a high of 92% during 2015 to a low of 33% during 2020.

## Rising Private Capital Contributions Reflective Of EBRD's Effective Mobilisation Efforts





Source: European Bank for Reconstruction and Development

#### **Strategy**

By targeting investments that would otherwise struggle to attract sufficient private capital, the EBRD's activities play a catalysing role in the broader development of less mature infrastructure markets. Despite operating in predominantly emerging markets, the bank maintains a high level of diversification across sectors, such as infrastructure, minimising its concentration risk.

The EBRD's activities tend to provide broader positive spillover effects beyond the completion of its direct activities; whether through helping to establish a minimum level of infrastructure for other entities to utilise, or through the bank's policy engagement to establish stable regulatory frameworks for infrastructure.

The ultimate aim of the bank's activities is to enable a given market to 'graduate' from being a country of operations, effectively reaching a point of sufficient economic development to cease being a recipient of the Bank's funds. At the time of writing, the Czech Republic is the sole market to have 'graduated' from the EBRD, resulting in EBRD investment ceasing in 2007, though the market received financial assistance from the bank during the Covid-19 pandemic.

The bank's overarching strategy is bound especially by its political mandate; to assist in markets committed to and applying the principles of multi-party democracy and pluralism. Much of its day-to-day strategy, however, is directed by its Strategic and Capital Framework; the EBRD's key objectives and priorities over a 5-year period, with its current iteration covering 2021-2025. This sets the overarching objectives and constraints for the EBRD's financing activities, such as its risk parameters, lending target and the nature

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of the infrastructure investments it seeks to make. For example, the Strategic and Capital Framework for 2021-2025 stipulates that the bank can lend up to EUR13bn annually, up from EUR10bn during the previous 5-year period. Additionally, it stipulates the private sector as its target recipient, with the EBRD aiming for the private sector to account for 75% of its financing activities over the period.

As such, the EBRD's operations tend to skew towards higher-risk markets with less-developed capital markets, elevated operational risks, and ultimately greater infrastructure deficits. Our Infrastructure Risk/Reward Index (RRI), which quantifies and ranks the relative attractiveness of a given infrastructure market, shows that the EBRD predominantly operates in markets which underperform in our RRI. Versus a global average RRI score of 50.0, the EBRD operates in markets which, overall, average an RRI score of 47.4.

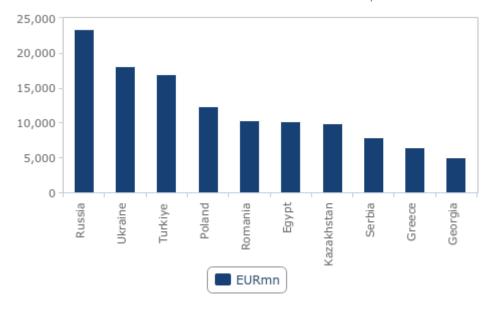
Russia, Ukraine and Turkiye have, historically, received the greatest absolute amount of investment from the bank. In Russia, this is despite the EBRD's aforementioned suspension of investment from 2014 and is particularly the result of the bank's investment activities in Russia following the collapse of the Soviet Union. As such, the EBRD was key in developing Russia's banking sector, the expansion of social infrastructure, and the construction of transport infrastructure during the period of mass privatisation throughout the 1990s.

In Ukraine, the EBRD's activities have included offering assistance with Ukraine's decommissioning and management of the Chernobyl nuclear power plant site, including overseeing the construction of the New Safe Confinement structure. More recently, following Russia's invasion, the EBRD has provided financial aid and liquidity support across Ukraine's infrastructure sector, while expressing the EBRD's intention to play a central role in financing Ukraine's post-war reconstruction.

Thirdly, in Turkiye, the EBRD has been particularly impactful in developing Turkiye's public-private partnership framework for healthcare and other social infrastructure. Since entering the market in 2009, the EBRD has co-financed notable projects including the Bosphorus Tunnel in Istanbul, the Efeler geothermal power plant and expansion works on the Izmir Metro.

## Historically, Russia Has Received Highest Amount Of EBRD Funding

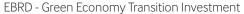
EBRD - Cumulative Annual Bank Investment To End-2022, Top 10 Markets

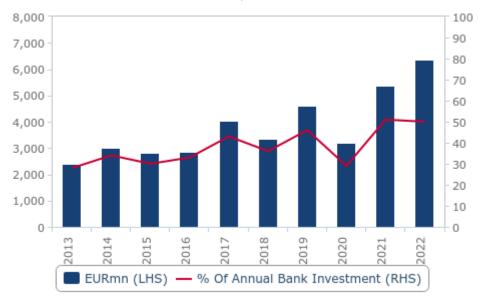


Source: European Bank for Reconstruction and Development

A key component of the EBRD's current Strategic and Capital Framework is the bank's effort to facilitate the low-carbon energy transition. It is seeking to raise the proportion of its sustainability-related investments, referred to as its Green Economy Transition (GET) activities, to 50% of its annual bank investment by 2025. The bank already met this target in both 2021 and 2022, in which GET activities accounted for 51% and 50% of the EBRD's annual bank investment respectively. In absolute terms, this saw the EBRD make sustainability-related investments worth a total of EUR5.4bn and EUR6.4bn each year. For infrastructure, these investments range from greenfield renewable energy assets, enhancements to transmission and distribution infrastructure and projects to improve the energy efficiency of buildings.

## Around 50% Of EBRD's Annual Investment For Sustainability-Related Activities





Source: European Bank for Reconstruction and Development

#### **Outlook**

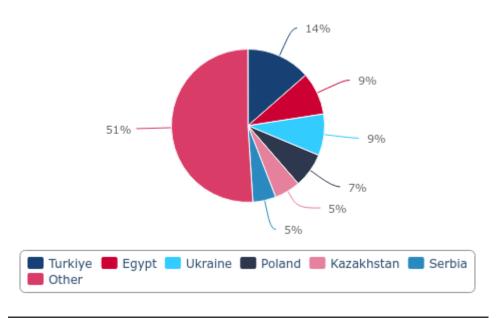
Amid persistent infrastructure deficits across emerging markets, and a need to build-out infrastructure conducive to the low-carbon energy transition, the EBRD's provision of infrastructure financing globally will likely remain substantial. Even among markets in Central and Eastern Europe with relatively developed transport, water and social infrastructure, much of the region's industries remain relatively carbon-intensive. The investment needs for markets to develop lowemission infrastructure, and thus the opportunity for the EBRD to realise capital investment, will be significant in the long term.

Additionally, the EBRD's notable presence in several candidate EU member states, including Moldova, Bosnia-Herzegovina and Ukraine, will be a contributing factor to their respective candidacies and promote regional cohesion among infrastructure networks.

Within the EBRD's active portfolio, covering the bank's infrastructure and non-infrastructure-related activities, Turkiye, Egypt and Ukraine account for the highest respective shares with, EUR7.2bn, EUR4.8bn and EUR4.7bn of its active portfolio across all sectors situated across the three markets.

Turkiye, Egypt, Ukraine Notable Markets Among EBRD's Active Portfolio

EBRD - Share Of Active Portfolio, 2022

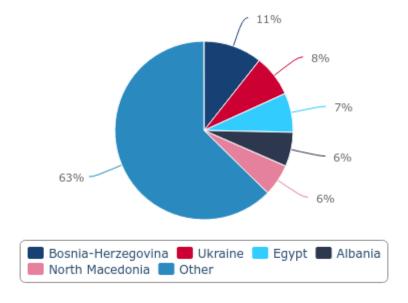


Source: European Bank for Reconstruction and Development

Specifically for infrastructure, we note that our BMI Infrastructure Key Projects Data, which track large-scale projects worth USD30mn or higher, show that the EBRD's project pipeline of infrastructure projects remains particularly situated in Central and Eastern European markets such as Bosnia, Ukraine, Albania and North Macedonia.

### Central And Eastern Europe Markets To See Continued EBRD Investment

EBRD - No. Of Infrastructure Projects By Market, %



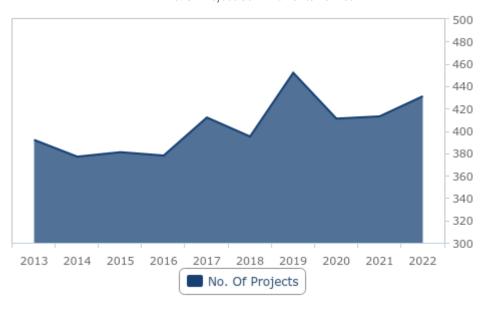
Source: BMI Infrastructure Key Projects Data



As with its annual bank investment, the EBRD has achieved a steady rise in its number of project commitments over the past decade. In 2022, the bank made 431 project commitments, up from 413 made during 2021. 2019 saw the EBRD achieve its highest number of project commitments in a given year, making 452 commitments. Given that the subsequent fall in the EBRD's project commitments was largely the result of the Covid-19 pandemic and its subsequent economic disruption, we expect the EBRD's volume of project commitments to exceed its 2019 high in the medium term.

#### Steady Rise In EBRD Project Commitments

EBRD - No. Of Project Commitments Per Year



Source: European Bank for Reconstruction and Development

Being the largest institutional investor in Ukraine, the EBRD will naturally play a central role in the financing of Ukraine's envisaged reconstruction efforts. In December 2023, amid a resolution to increase the EBRD's paid-in capital by EUR4bn, the bank also stated its intention to raise its annual lending to Ukraine to EUR3bn amid its envisaged reconstruction. Mobilising enough funding to rebuild Ukraine will require multiple funding vehicles, and would entail a dependence on allied governments and international organisations such as the EBRD ahead of any meaningful private investment.

#### Income Statement

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Net Interest Income	845	863	899	774	754	751	820	764	883	1,139
Net Fee And Commission Income	25	14	28	77	74	93	82	80	71	64
Net Donor-Related Income	0	0	0	0	0	0	0	0	8	4
Dividend Income	105	109	82	97	185	204	215	112	146	98
Other Adjustments And Non-Cash Expenses	37	-1,554	-207	44	-241	-708	315	-666	1,394	-2,422
Net Income	1,012	-568	802	992	772	340	1,432	290	2,502	-1,117

Note: IFRS results. Values in EURmn. Other adjustments and non-cash expenses include fair value adjustments, gains from assets held at amortised cost, foreign exchange gains/losses, impairment provisions, administrative expenses, depreciation and amortisation. Source: European Bank for Reconstruction and Development



## **Key Financials**

	2012	2014	2015	2016	2017	2010	2010	2020	2021	2022
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
No. Of Projects	392	377	381	378	412	395	452	411	413	431
Total Project Value	20,527	20,796	30,303	25,470	38,439	32,570	34,884	27,224	39,781	38,028
Annual Bank Investment	8,498	8,853	9,378	9,390	9,690	9,547	10,092	10,995	10,446	13,071
Annual Mobilised Investment	862	1,177	2,336	1,693	1,054	1,467	1,262	1,240	1,750	1,746
Private Direct Mobilised Investment	769	1,014	2,138	1,401	669	1,059	460	411	908	803
Green Economy Transition Investment	2,393	3,028	2,807	2,866	4,052	3,344	4,618	3,192	5,366	6,360
Private Direct Mobilised Investment, % Of Annual Mobilised Investment	89%	86%	92%	83%	63%	72%	36%	33%	52%	46%
Green Economy Transition Investment, % Of Annual Bank Investment	28%	34%	30%	33%	43%	36%	46%	29%	51%	50%

Note: Values in EURmn unless otherwise stated. Source: European Bank for Reconstruction and Development

### **Shareholders**

	Date Joined	No. Of Shares	Paid-In Capital, EURbn	Callable Capital, EURbn	Total Capital, EURbn
Albania	December 1991	3,001	6.3	23.8	30.0
Algeria	October 2021	203	0.4	1.7	2.0
Armenia	December 1992	1,499	3.1	11.9	15.0
Australia	March 1991	30,014	62.6	237.5	300.1
Austria	March 1991	68,432	142.7	541.6	684.3
Azerbaijan	September 1992	3,001	6.3	23.8	30.0
Belarus	June 1992	6,002	12.5	47.5	60.0
Belgium	April 1991	68,432	142.7	541.6	684.3
Bosnia-Herzegovina	June 1996	5,071	10.6	40.1	50.7
Bulgaria	March 1991	23,711	49.5	187.7	237.1
Canada	March 1991	102,049	212.9	807.6	1,020.5
Mainland China	January 2016	2,900	5.3	23.8	29.0
Croatia	April 1993	10,942	22.8	86.6	109.4
Cyprus	March 1991	3,001	6.3	23.8	30.0
Czech Republic	January 1993	25,611	53.4	202.7	256.1
Denmark	March 1991	36,017	75.1	285.1	360.2
Egypt	March 1991	3,087	8.1	22.8	30.9
Estonia	February 1992	3,001	6.3	23.8	30.0
European Investment Bank	March 1991	90,044	187.8	712.6	900.4
European Union	March 1991	90,044	187.8	712.6	900.4
Finland	March 1991	37,518	78.3	296.9	375.2

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	Date Joined	No. Of Shares	Paid-In Capital, EURbn	Callable Capital, EURbn	Total Capital, EURbn
France	March 1991	255,651	533.2	2,023.3	2,556.5
Georgia	September 1992	3,001	6.3	23.8	30.0
Germany	March 1991	255,651	533.2	2,023.3	2,556.5
Greece	March 1991	19,508	40.7	154.4	195.1
Hungary	March 1991	23,711	49.5	187.7	237.1
Iceland	May 1991	3,001	6.3	23.8	30.0
India	July 2018	986	1.8	8.1	9.9
Iraq	November 2023	203	0.4	1.7	2.0
Ireland	March 1991	9,004	18.8	71.3	90.0
Israel	March 1991	19,508	40.7	154.4	195.1
Italy	March 1991	255,651	533.2	2,023.3	2,556.5
Japan	April 1991	255,651	533.2	2,023.3	2,556.5
Jordan	December 2011	986	1.8	8.1	9.9
Kazakhstan	July 1992	6,902	14.4	54.6	69.0
South Korea	March 1991	30,014	62.6	237.5	300.1
Kosovo	December 2012	580	1.1	4.8	5.8
Kyrgyzstan	June 1992	2,101	6.3	14.8	21.0
Latvia	March 1992	3,001	6.3	23.8	30.0
Lebanon	July 2017	986	1.8	8.1	9.9
Libya	July 2019	986	1.8	8.1	9.9
Liechtenstein	March 1991	599	1.3	4.7	6.0
Lithuania	March 1992	3,001	6.3	23.8	30.0
Luxembourg	March 1991	6,002	12.5	47.5	60.0
Malta	March 1991	210	0.6	1.5	2.1
Mexico	March 1991	4,501	10.5	34.5	45.0
Moldova	May 1992	3,001	6.3	23.8	30.0
Mongolia	October 2000	299	0.6	2.4	3.0
Montenegro	June 2006	599	1.3	4.7	6.0
Morocco	March 1991	2,464	5.3	19.4	24.6
Netherlands	March 1991	74,435	155.3	589.1	744.4
New Zealand	August 1991	1,050	3.5	7.0	10.5
North Macedonia	April 1993	1,762	4.3	13.3	17.6
Norway	March 1991	37,518	78.3	296.9	375.2
Poland	March 1991	38,418	80.1	304.1	384.2
Portugal	April 1991	12,605	26.3	99.8	126.1
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30.1

114.0

14,407

March 1991

Romania

144.1



	Date Joined	No. Of Shares	Paid-In Capital, EURbn	Callable Capital, EURbn	Total Capital, EURbn
Russia	April 1992	120,058	250.4	950.2	1,200.6
San Marino	June 2019	203	0.4	1.7	2.0
Serbia	January 2001	14,031	29.3	111.1	140.3
Slovakia	January 1993	12,807	26.7	101.4	128.1
Slovenia	December 1992	6,295	13.1	49.8	63.0
Spain	March 1991	102,049	212.9	807.6	1,020.5
Sweden	March 1991	68,432	142.7	541.6	684.3
Switzerland	March 1991	68,432	142.7	541.6	684.3
Tajikistan	October 1992	2,101	6.3	14.8	21.0
Tunisia	December 2011	986	1.8	8.1	9.9
Turkiye	March 1991	34,515	72.0	273.2	345.2
Turkmenistan	June 1992	210	0.6	1.5	2.1
Ukraine	August 1992	24,011	50.1	190.0	240.1
UAE	September 2021	203	0.4	1.7	2.0
UK	March 1991	255,651	533.2	2,023.3	2,556.5
US	March 1991	300,148	626.0	2,375.4	3,001.5
Uzbekistan	April 1992	4,412	13.2	31.0	44.1

Note: Capital figures may not sum due to rounding. Source: European Bank for Reconstruction and Development



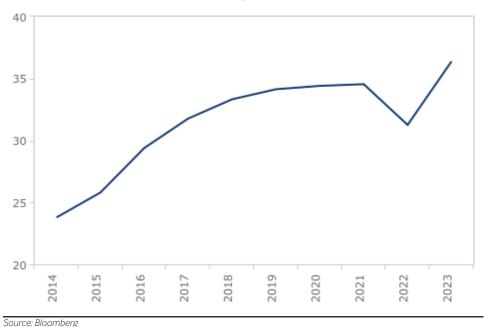
## Egypt Infrastructure Profile: China Communications Construction Company

#### **Overview**

China Communications Construction Company (CCCC) is a state-owned construction company based in Mainland China. It is primarily active in urban redevelopment, road, metro and light railway construction, as well as dredging, port construction and other maritime engineering fields. With a total revenue of CNY7.6bn in 2023, it is the world's fourth-largest construction company by revenue. Established in 2005 through a merger of China Harbor Engineering Company (CHEC) and China Road and Bridge Corporation (CRBC), CCCC has seen substantial growth over the last two decades, driven primarily by the Mainland China's fastgrowing construction industry. However, CCCC has also emerged as a major international contractor, particularly in the context of the Belt and Road Initiative (BRI).

## Long-Term Growth In Operating Income

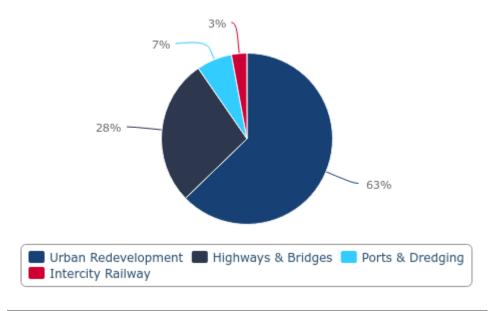
CCCC - Operating Income, CNYbn



In 2023, just over half of CCCC's new contract value came from urban redevelopment projects in Mainland China. Primarily, such projects include the planning and construction of comprehensive infrastructure for new neighbourhoods and industrial parks. For instance, CCCC is the main contractor for Xiongan Science and Technology City, located in Mainland China's most high-profile new city projects. This reflects CCCC's strength in both the metro rail and roads and bridges sectors, which account for the majority of CCCC's ongoing infrastructure projects by value. Besides this, CCCC is highly active in the port and dredging business, particularly though its subsidiary CHEC. For instance, the company was the main contractor for the Pinglu Canal, one of Mainland China's largest water infrastructure projects.

## Urban Redevelopment Dominates New Contracts In Mainland China

CCCC - New Contract Value (Mainland China)

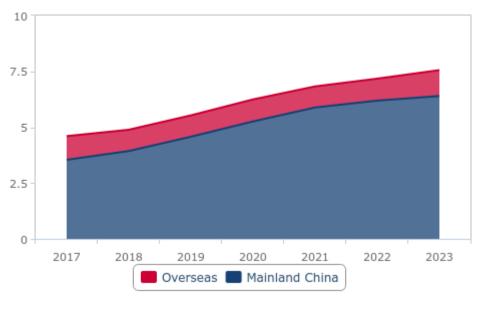


Source: China Communications Construction Company

In 2023, projects outside of Mainland China accounted for 18% of CCCC's total revenue, outperforming other large Mainland Chinese construction companies. However, over the last decade, CCCC's international activities have underperformed its domestic revenue growth. In part, this development was driven by a decrease in international development finance availability, with BRI funding having declined substantially from its 2016 peak. This was especially notable in Sub-Saharan Africa, which has historically been a major market for the company. As of 2023, CCCC retains strong exposure to projects in Africa and Asia, which represented 34% and 32% of its newly signed international contracts in 2023. In contrast to domestic projects, mainline rail projects account for a significant share of CCCC's international contracting work. Prominent examples of this include LAPSET corridor railway in Kenya and Ethiopia and Malaysia's New East Coast Rail Link. Similarly, new port projects play a relatively more important role internationally than in Mainland China, reflecting the market's mature port sector.

#### Mainland China Main Growth Driver

CCCC - Revenue By Region, CNYbn



Source: Bloomberg

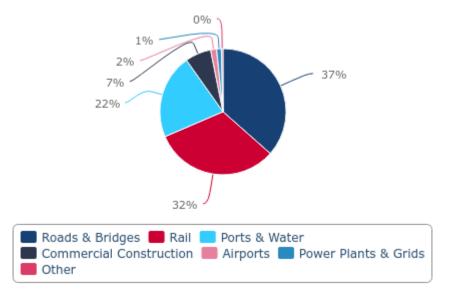
### **Strategy**

CCCC's strategy is shaped by unique challenges in its domestic market. These include the ongoing challenges for real estate activities and weakening local government fiscal space, both weighing on demand for new urban infrastructure projects. At the same time, heightened economic risks in many international markets pose downside risks to the company's global operations. In line with Chinese government policy, this has led CCCC to pursue new revenue streams besides direct government payments. Thus, it is set to increase its participation in public-private partnership (PPP) projects, increasingly taking on infrastructure operational roles. In particular, we highlight the toll roads as an important growth segment for the company.



### Roads And Bridges The Largest Segment

CCCC - Ongoing Infrastructure Projects Value, % of total



Source: BMI Infrastructure Key Projects Data

At the same time, the company is seeking to expand its role in emerging value chains. Most notably, it seeks to benefit from Mainland China's fast-expanding renewable energy sector and plans to leverage its competences in maritime engineering to increase CCCC's presence in the offshore wind-power sector. It also involves a focus on the deployment of solar power in the Ghobi desert, a long-standing Chinese policy goal.

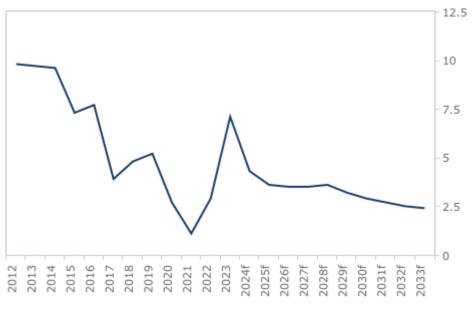
Besides renewable energy, CCCC emphasizes its investments in smart-infrastructure and the potential synergies between infrastructure digitalization and its growing concession business. CCCC's research and development spending, currently at 3.4% of revenue, outperforms the construction industry average. Notable research projects in this field include smart highway and integrated toll collection solutions, as well as smart port and logistics systems.

#### **Outlook**

Although we note that a secular downturn in Mainland China's construction sector will weigh on CCCC's growth throughout our forecast period, we see upside risks from the market's booming renewable and manufacturing sectors. Throughout our forecast period, we expect Mainland China's construction sector growth to gradually decline from 4.3% in 2024 to 2.4% in 2033. This slowdown will be driven by acute weakness in the residential construction industry as well as a long-term slowdown in transport infrastructure. In contrast, we are more bullish on Mainland China's industrial construction and energy infrastructure sector, which is set to benefit from strong investment inflows and favorable government policies.

## Long Term Slowdown Ahead

Mainland China - Construction Industry Real Growth, % y-o-y

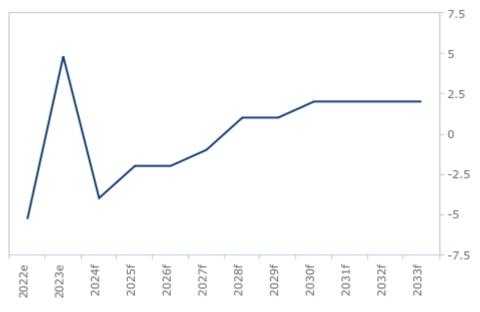


f = BMI forecast. Source: National Bureau of Statistics, BMI

Given CCCC's pronounced indirect exposure to residential construction through its focus on urban renewal projects, we expect the company to be more strongly affected by the recent downturn in the sector than some of its peer in Mainland China's infrastructure sector. We expect Mainland China's residential construction sector to decline at an average pace of 2.4% over 2024 to 2027, before returning to tepid growth averaging 1.5% y-o-y for the rest of our forecast period.

#### Residential Building Industry To Decline Over Medium Term

Mainland China - Residential Building Industry Real Growth, % y-o-y



f = BMI forecast, Source: National Bureau Of Statistics of China, BMI

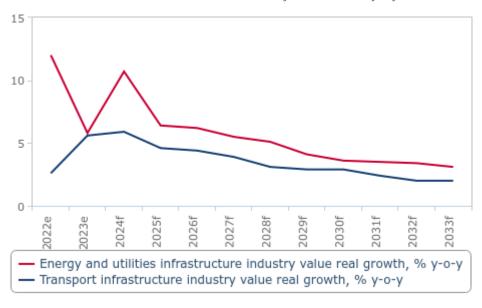
Over the short term, elevated levels of transport infrastructure investments in Mainland China will benefit the company. Following

Mainland China's recent economic downturn, the market strongly increased transport infrastructure investments, particularly in the rail sector. This will support project activity over the medium term. However, in the long term, we expect a secular slowdown in transport infrastructure investments, driven by fiscal sustainability and return on investment concerns. Such concerns are also likely to affect CCCC's ambition to establish itself in the concessions business, given the downward trend in returns from local governments financing vehicles over 2016-2023.

In contrast, we expect energy and utilities sector growth to remain relatively more robust over the long term, driven primarily by renewable power investments. Given CCCC's small footprint in the sector, the company's ability to expand into appropriate niches in the energy supply chain will be critical to its growth trajectory.

### **Energy To Outperform Transport Infrastructure**

Mainland China - Infrastructure Industry Real Growth, % y-o-y

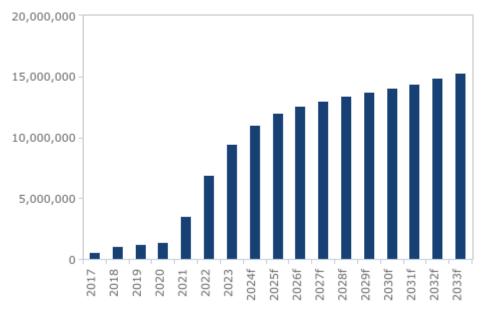


f = BMI forecast. Source: National Bureau Of Statistics of China, BMI

Strong investment inflows in the market's manufacturing sector will provide some upside pressure, especially given the company's strong presence in industrial park construction, driven by a surge in financing for advanced industrial sectors such as electric vehicles, batteries, aircraft and shipbuilding. We expect China's non-residential construction sector to expand at an average pace of 4% throughout our forecast period.

#### EVs Lead Industrial Investments

Mainland China - EV Sales

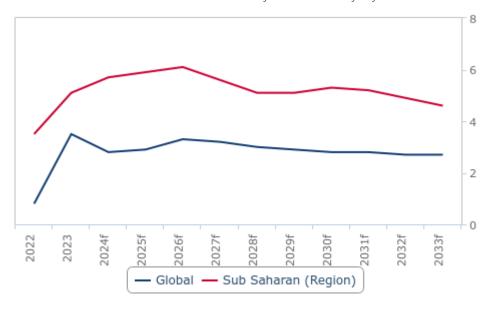


f = BMI forecast. Source: National Bureau Of Statistics of China, BMI

Chinese authorities have repeatedly emphasized the significance of water utility infrastructure as a long-term investment priority, including water management, irrigation, canal, and similar projects. Although the sector remains relatively small both in the context of China's overall construction industry and CCCC's project portfolio, we expect the company to be able to benefit from this growing market, owing to its well-established position in China's water utilities sector.

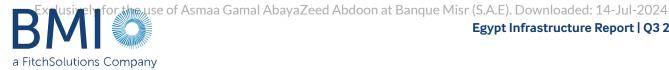
#### SSA To Outperform Global Construction Industry Growth

Global - Construction Industry Real Growth, % y-o-y



f = BMI forecast, Source: National Sources, BMI

Outside of Mainland China, the company's strong exposure to the Sub-Saharan African market offers strong growth potential while



posing elevated risks for CCCC. Throughout our forecast period, we expect Sub-Saharan Africa (SSA) to record the strongest construction industry growth of all regions globally, driven by pronounced population growth, relatively high GDP per capita growth, and strong demand for infrastructure projects. This is set to benefit the company, due to its well-established presence in the region. However, SSA is also subject to heightened risks, including government debt burdens, reliance on foreign financing for infrastructure projects and political instability in some markets.

### **Group Income Statement**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Revenue	366,042	403,616	406,331	460,067	488,666	553,114	624,495	682,785	721,888	758,676
Operating Income	23,785	25,798	29,391	31,768	33,321	34,132	34,405	34,542	31,252	36,383
Net Income	13,985	15,828	17,210	20,943	19,819	19,999	16,475	18,349	19,263	23,812
Operating Margin, %	6.5%	6.4%	7.2%	6.9%	6.8%	6.2%	5.5%	5.1%	4.3%	4.8%
Net Margin, %	3.8%	3.9%	4.2%	4.6%	4.1%	3.6%	2.6%	2.7%	2.7%	3.1%

Note: CAS results. Values in CNYmn unless otherwise stated. Source: CCCC

#### **Group Balance Sheet**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Inventories	46,149	51,904	45,554	40,536	46,861	62,613	72,877	73,067	78,263	88,021
Total Current Assets	354,929	392,738	437,146	449,545	481,502	529,369	584,497	567,572	619,565	686,140
Total Non-Current Assets	275,251	338,575	363,936	400,343	478,974	594,045	719,672	823,537	897,148	998,122
Total Assets	630,180	731,313	801,082	849,888	960,476	1,123,414	1,304,169	1,391,109	1,516,713	1,684,263
<b>Total Current Liabilities</b>	339,296	373,080	423,954	446,711	479,869	528,339	582,708	599,383	664,380	762,181
Total Noncurrent Liabilities	159,272	189,227	190,558	197,583	240,925	298,665	363,657	400,331	424,841	462,957
Total Equity	131,612	169,006	186,570	205,594	239,682	296,410	357,804	391,395	427,492	459,125
Total Liabilities And Equity	630,180	731,313	801,082	849,888	960,476	1,123,414	1,304,169	1,391,109	1,516,713	1,684,263

Note: CAS results. Values in CNYmn. Source: CCCC



### **Group Cash Flow Statement**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Cash Flows From Operating Activities	4,408	31,913	29,719	42,741	9,098	5,383	-31,074	-12,626	1,139	12,074
Cash Flows From Investing Activities	-45,505	-45,473	-38,705	-45,619	-50,312	-66,027	-60,762	-52,816	-46,927	-55,885
Cash Flows From Financing Activities	31,801	36,424	22,102	24,309	38,631	51,488	93,687	42,204	52,632	50,332
Cash Flow For The Period	-9,296	22,864	13,116	21,431	-2,583	-9,156	1,851	-23,238	6,843	6,521
Free Cash Flow	-16,559	5,401	9,772	17,397	-17,255	-20,653	-62,254	-44,481	-56,255	-49,504

Note: CAS results. Values in CNYmn. Source: CCCC



## Infrastructure Methodology

#### **Connected Thinking**

BMI employs a unique methodology known as 'Connected Thinking'. This means that our analysis captures the inter-relatedness of the global economy, and takes into account all of the relevant political, macroeconomic, financial market and industry factors that underpin a forecast and view. We then integrate them so as to explain how they interact and affect each other. Our Connected Thinking approach provides our customers with unique and valuable insight on all relevant macroeconomic, political and industry risk factors that will impact their operations and revenue-generating potential in the industry/industries within which they operate.

We use a transparent forecasting model as a base for our industry forecasts, but rely heavily on our analysts' expert judgement to ensure our forecasts capture all of the insights we derive using our unique Connected Thinking approach. We believe analyst expertise and judgement are the best ways to provide the most accurate, up-to-date and comprehensive insight to our customers.

#### Infrastructure Methodology

Our data and forecasts capture the entire spectrum of construction activities, including all areas of civil engineering and building construction, as defined under the ISIC Rev.4.

Our data and forecasts for Infrastructure are broken down into: transport (road, rail, ports and airports) and energy & utilities (power plants & transmission grids, water, oil & gas pipelines). Our building data and forecasts are broken down into residential and nonresidential construction.

#### **Construction Industry**

#### **Construction Industry Value**

Our construction data is derived from national accounts from each market's national statistics office (or equivalent) or from international organisations which compile national account data, most notably the UN. Specifically, it measures the gross value added (GVA) of the construction industry over the reported 12-month period in nominal values. GVA (also known as GDP by industry) measures the contribution to overall GDP. The components of value added consist of compensation of employees, taxes on production and imports less subsidies, and gross operating surplus. We source our construction industry value data in nominal local currency terms.

This data is used because it is reported by virtually all markets and can therefore be used for comparative purposes.

#### **Construction Industry Value Real Growth**

Our construction industry value forecasts are based on a regression model, using a market's own historical time series and key macroeconomic variables, such as gross fixed capital formation, from BMI Country Risk.

In addition, we will also apply analyst expert judgement to refine and finalise our construction industry value real growth forecast, based on exogenous and endogenous variables or events, not captured by our regression model. Real growth is defined as industry value nominal growth adjusted for industry-specific inflation (construction deflator).

Bearing in mind that other factors need to be taken into consideration, both quantitative and qualitative, our analysts also factor in



industry-specific issues in deriving our forecasts:

- Political risk potential change in leadership, policy continuity
- Regulatory outlook pricing structures of specific markets, bureaucracy, red tape
- Currency outlook currency volatility, cost of imports
- Funding availability fiscal health of the government, openness to private/foreign investment
- BMI Infrastructure Key Projects Data indication of a market's infrastructure project pipeline by sector
- High Frequency Data construction permits, starts, confidence etc
- Company developments reflective of market dynamics and competitive landscap

#### Construction Industry, % Of GDP/Construction Value (USD)

These are derived indicators, calculated using our Country Risk team's GDP and exchange rate forecasts.

#### **Construction Output**

These figures refer to the gross output of the construction industry. Gross output measures the total sales or receipts of the industry, including sales to final users in the economy as well as sales to other industries. Gross output consists of construction industry value and intermediate consumption.

As in the case of construction industry value data, our construction output data is derived from national accounts from each market's national statistics office (or equivalent) or from international organisations which compile national account data, most notably the UN.

Forecasts are the result of a regression model, using a market's own historical time series as well as our construction industry value

#### **Construction Intermediate Consumption**

These figures refer to the intermediate consumption of the construction industry. Intermediate consumption measures the goods and services employed in the production process of other goods and services and not for final consumption. Intermediate consumption is equivalent to the difference between gross output and GVA.

Our Construction Intermediate Consumption figures are a function of construction output minus construction industry value.

#### **Cement Data**

We forecast Portland cement production, consumption and net exports, in millions of tonnes.

Our historical national production data is sourced from the United States Geological Survey (USGS), while trade data is sourced from TradeMap by the International Trade Centre. By calculating production and net exports, we are able to determine historical consumption levels.

These consumption levels are then forecast over our 10-year forecast period using our construction growth forecasts, reflecting the changing demand picture for cement from the industry.



#### **Construction Sector Employment**

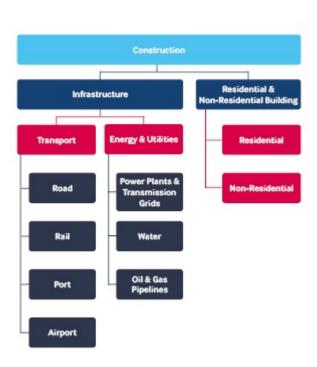
#### **Total Construction Employment**

This data is sourced from either the national statistics office or the International Labor Organization. It includes all those employed within the sector.

Our total construction employment forecasts are based on a regression model, using a market's own historical time series and key macroeconomic variables from our Country Risk service.

#### Infrastructure Data Sub-Sectors

#### Infrastructure Data Sub-Sectors



Source: BMI

For select markets, in addition to our construction industry value figures, we also provide industry value (gross value added) figures for subsectors of the construction industry.

We use a combination of historic data as reported by central banks, national statistics agencies and other official data sources, and leverage our analysts' knowledge of market and subsector dynamics and project information included in our proprietary BMI Infrastructure Key Projects Data, a comprehensive catalogue of the major power, transport, utilities, residential and non-residential projects in each market.

Given a variation in construction sub-sector classifications under various national accounts systems currently in use, we segment official construction sub-sector data into consistent and proprietary categories to compare industry value across sub-sectors. First,



our construction industry data is broken down into infrastructure construction on one hand and residential and non-residential building construction on the other. Infrastructure construction is then broken down where possible into transport infrastructure and energy and utilities infrastructure, which are then further broken down where possible into the categories illustrated in the figure above. Residential and non-residential building construction in turn is broken down where possible into residential building and non-residential building.

Our infrastructure sub-sectors industry value forecasts are based on a regression model, using a market's own historical time series and key macroeconomic variables, such as fixed capital formation, from our Country Risk service.

In addition, we also apply analyst expert judgement to refine and finalise industry value real growth forecasts, based on exogenous and endogenous variables or events, not captured by our regression model.

The residential and non-residential industry values are a function of construction minus infrastructure industry value. We further rely on national sources and our BMI Infrastructure Key Projects Data to further estimate the separation between the two areas of building when historic data is not available.

#### Infrastructure Risk/Reward Index

Our Infrastructure Risk/Reward Index (RRI) quantifies and ranks a market's attractiveness within the context of the Infrastructure industry, based on the balance between the Risks and Rewards of entering and operating in different markets.

We combine industry-specific characteristics with broader economic, political and operational market characteristics. We weight these inputs in terms of their importance to investor decision-making in a given industry. The result is a nuanced and accurate reflection of the realities facing investors in terms of first the balance between opportunities and risk and second between industryspecific and broader market traits. This enables users of the index to assess a market's attractiveness in a regional and global context.

The index uses a combination of our proprietary forecasts and analyst assessment of the regulatory climate. As regulations evolve and forecasts change, so the index scores change providing a highly dynamic and forward-looking result.

The Infrastructure Risk/Reward Index universe comprises 104 markets.

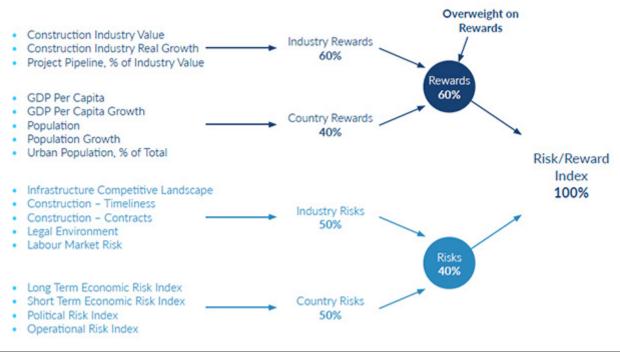
#### **Benefits Of Using Our Infrastructure RRI**

- Global Rankings: One global table, ranking all the markets in our universe for Infrastructure from most attractive (closest to zero) to most risk (closest to 100).
- Accessibility: Easily accessible, top-down view of the global, regional or sub-regional Risk/Reward profile.
- Comparability: Identical methodology across 104 markets for Infrastructure allows users to build lists of markets they wish to compare, beyond the confines of a global or regional grouping.
- Scoring: Scores out of 100 with a wide distribution, provide nuanced investment comparisons. The higher the score, the less favourable the market profile.
- Quantifiable: Quantifies the Rewards and Risks of doing business in the infrastructure industry in different markets around the world and helps identify specific flashpoints in the overall business environment.
- Comprehensive: Comprehensive set of indicators, assessing industry-specific risks and rewards alongside political, economic and operating risks.
- Entry Point: A starting point to assess the outlook for the infrastructure industry, from which users can dive into more granular forecasts and analysis to gain a deeper understanding of the market.
- Balanced: Multi-indicator structure prevents outliers and extremes from distorting final scores and rankings.

Methodology: The index is a combination of proprietary BMI forecasts, analyst insights and globally acceptable benchmark

## Weightings Of Categories And Indicators

Infrastructure Risk/Reward Index



Source: BMI

The RRI matrix divides into two distinct categories:

Rewards: Evaluation of an industry's size and growth potential (Industry Rewards), and macro characteristics that directly impact the size of business opportunities in a specific industry (Country Rewards).

Risks: Evaluation of micro, industry-specific characteristics, crucial for an industry to develop to its potential (Industry Risks) and a quantifiable assessment of the political, economic and operational profile (Country Risks).

#### **Assessing Our Weightings**

Our matrix is deliberately overweight on **Rewards** (60% of the final RRI score for a market) and within that, the **Industry Rewards** segment (60% of final Rewards score). This is to reflect the fact that when it comes to long-term investment potential, industry size and growth potential carry the most weight in indicating opportunities, with other structural factors (demographic, labour statistics and infrastructure availability) weighing in, but to a slightly lesser extent. In addition, our focus and expertise in emerging and frontier markets has dictated this bias towards industry size and growth to ensure we are able to identify opportunities in markets where regulatory frameworks are not as developed and industry sizes not as big as in developed markets, but where we know there is a strong desire to invest.



## Infrastructure RRI Indicators - Explanation And Sources

	Source	Rationale				
Rewards						
Industry Rewards						
Construction Industry Value	BMI Forecast	Size of the construction industry indicates potential for opportunities and scale of operations. USDbn, Five Year Average Forecast.				
Construction Industry Value	BMI Forecast	Growth of the construction industry indicates potential for growth in opportunities. Real Growth, % Change y-o-y, Five Year Average Forecast.				
Project Pipeline, % of Industry Value	BMI Key Projects Data/BMI Forecast	Size of the project pipeline in the pre- and under-construction phase relative to the construction industry size, indicates the potential for project opportunities, progression of projects through the pipeline and growth of pipeline.				
Country Rewards						
GDP Per Capita BMI Forecast		The wealth of the population indicates demand for infrastructure. L Five Year Average Forecast				
GDP Per Capita Growth	BMI Forecast	As a population gets richer, we would expect to see greater demand for infrastructure, especially transport. Local Currency, % Change y-o-y, Five Year Average Forecast. Except: Zimbabwe & Venezuela where USD is used.				
Population	BMI Forecast	Larger population creates greater demand for infrastructure. Five Year Average Forecast				
Population Growth	BMI Forecast	Growth of population necessitates increased infrastructure stock. % Change y-o-y, Five Year Forecast.				
Urban Population % Of Total	BMI Forecast	High and growing concentration of population in urban areas indicates greater pressure on infrastructure assets. Five Year Average Forecast.				
Risks						
Industry Risks						
Infrastructure Competitive Landscape	BMI Subjective Indicator	Assesses the openness of the competitive landscape. Considers the sophistication and saturation of the existing market, the ability to compete fairly in tenders and barriers to international companies entering the market.				
Construction – Timeliness	BMI Project Risk Index	Measures the risk of delays to project development. Based on ability secure permits and the potential for protracted bureaucracy to delay increase the cost of operations.				
Construction – Contracts	BMI Project Risk Index	Measures the risk of contracting issues. Assesses both the efficiency of contract resolution and the sophistication of local regulations.				
Legal Environment	BMI Operational Risk Index	Measures risk stemming from lack of transparency and legal protection.  Assesses the strength of rule of law, transparency and investor protection.				
Labour Market Risk	BMI Operational Risk Index	Measures the risk to project development based on the labour market. Assesses the size, education levels and cost of employment.				
Country Risks						
Long-Term Economic Risk Index BMI Country Risk Index		Takes into account the structural characteristics of economic growth, the labour market, price stability, exchange rate stability and the sustainability of the balance of payments, as well as fiscal and external debt outlooks for the coming decade.				

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## Egypt Infrastructure Report | Q3 2024

	Source	Rationale				
Short-Term Economic Risk Index	BMI Country Risk Index	Seeks to define current vulnerabilities and assess real GDP growth, inflation, unemployment, exchange rate fluctuation, balance of payments dynamics, as well as fiscal and external debt credentials over the coming two years.				
Political Risk Index	BMI Country Risk Index	The Political Risk Index is a score made up of the mean average across three distinct pillars: Governance Risk, Society Risk and Security Risk.  These are aggregated into an overall assessment of Political Risk.				
Operational Risk Index	BMI Operational Risk Index	Focuses on existing conditions relating to four main risk areas: Labo Market, Trade & Investment, Logistics, and Crime & Security.				

Source: BMI

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