



5 - 8 DECEMBER 2022
DUBAI WORLD TRADE CENTRE

The impact of mega projects on the regional supply chain

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5 December 2022



Impact of MEGA projects

Introduction

- Drivers for growth
- Project activity
- Cash flow
- Demand forecast
- Impact on major disciplines
- Impact on cement



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Drivers for Growth



Population growth

High domestic consumption, demand for social infrastructure

Diversification away from oil

Leverage potential in other sectors such as tourism, entertainment

Untapped resources

Mining, heritage

Eased foreign investment

Relaxed visa restrictions

Government initiatives

Privatisation, mega projects, manufacturing

Young generation leadership

Stability

Safety and security in a troubled region



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Project Activity

Summary



More than \$6.3 Trillion of active projects in MEA

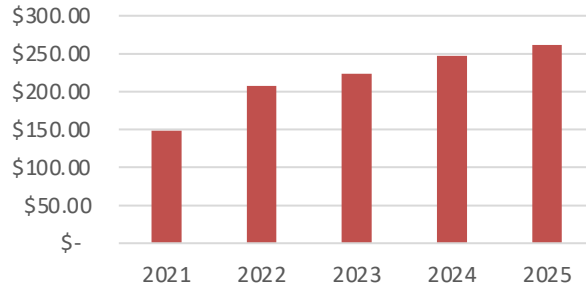
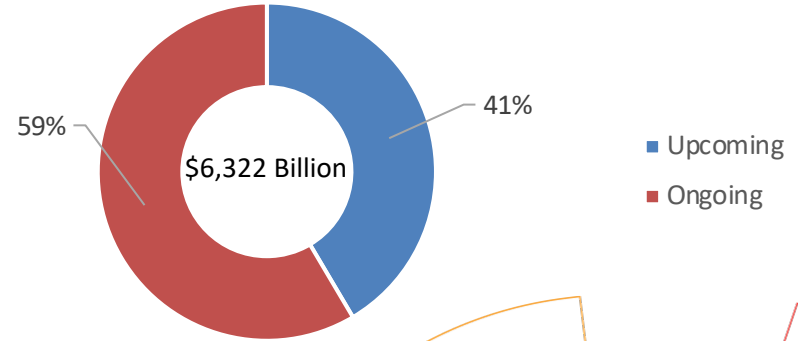
- 134% of MEA GDP

More than \$207 billion (\$0.207 Trillion) in spending during 2022

- 4.4% of GDP

Will increase to \$223 billion (8%) in 2023, and

Will increase to \$247 billion (10%) in 2024



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Project activity

By Stage



Bulk of the \$6.32 Trillion is already under construction

38% (\$2.4 Trillion) is early stages of design

3% (\$200 billion) is in the bidding phase

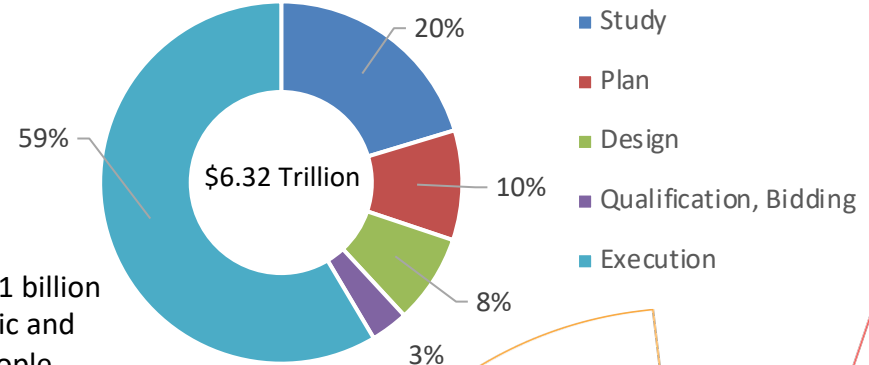
What is a MEGA project?

According to the Oxford Handbook of Megaproject Management, "Megaprojects are large-scale, complex ventures that typically cost \$1 billion or more, take many years to develop and build, involve multiple public and private stakeholders, are transformational, and impact millions of people

"Megaprojects are temporary endeavours characterized by large investment commitment, vast complexity, and long-lasting impact on the economy, the environment, and society".

By this definition, 32% (\$2 Trillion) is MEGA projects

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Project activity

By Region



Middle East accounts for \$3.8 Trillion of Active Projects

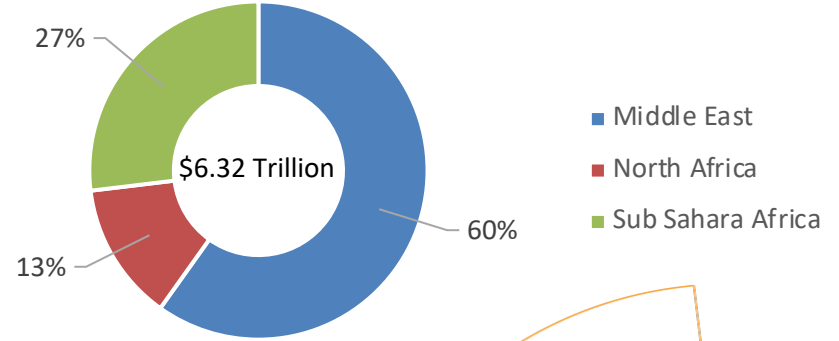
- \$1.8 Trillion (45%) are MEGA projects

North Africa has \$0.8 Trillion in active projects

- \$462 billion (18%) are MEGA projects

Sub-Saharan Africa has \$1.7 Trillion in active projects

- \$268 billion (16%) are MEGA projects



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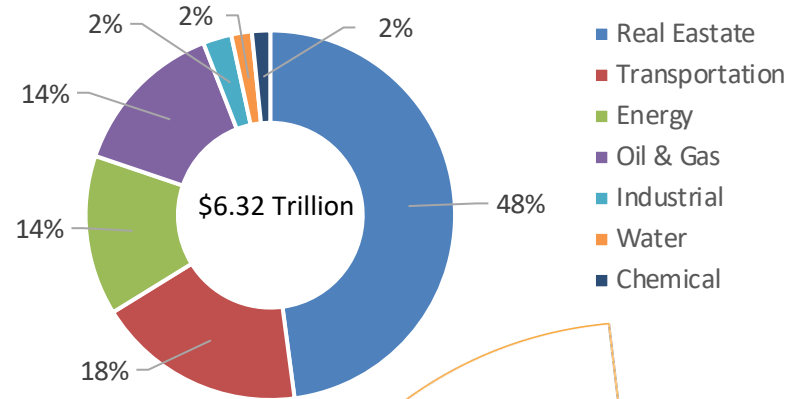
Project activity

By Asset Class

Real estate projects make up almost half of all active projects in the Middle East Africa region.

MEGA projects tend to be in the real estate and hydrocarbon sectors.

MEGA projects in the real estate sector typically include infrastructure such as transport and utilities



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Cash Flow

Basis for Analysis

- Apply sector-specific cash flow on a project level

For Example, “The Line” development as part of NEOM

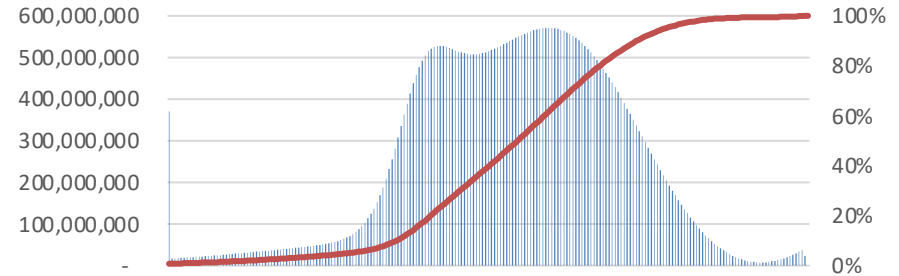


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The Line

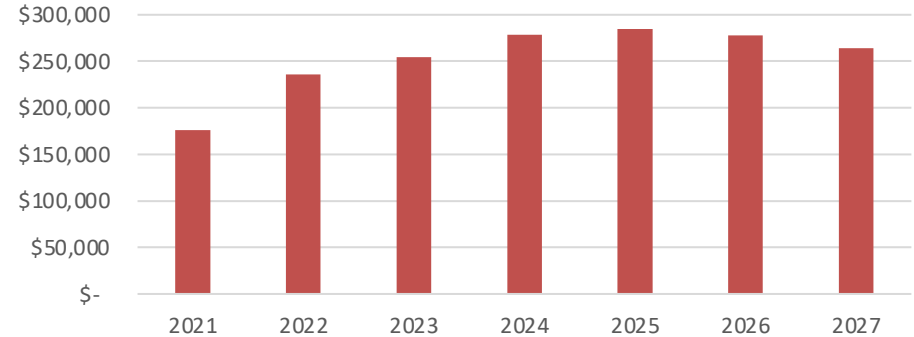


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Cash Flow

Regional Spending

The graph shows the expected cash flow for active projects. There is a significant increase in spending, which will peak at \$285 billion in 2025. This is based on currently available information. Project realisation rates, delays, cancellations and new announcements will impact the actual cash flow.



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Cash Flow

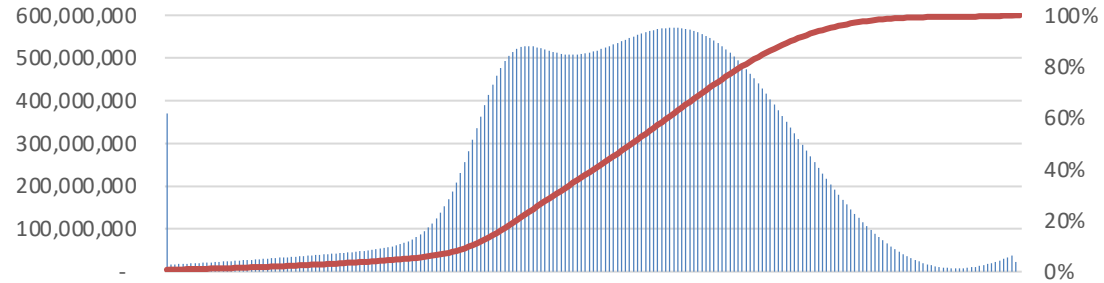
Basis for Analysis

- Apply sector-specific cash flow on a project level

For Example, “The Line” development as part of NEOM



The Line



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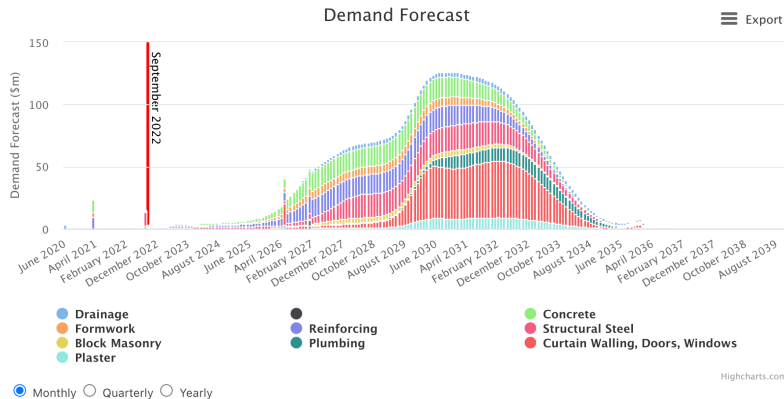
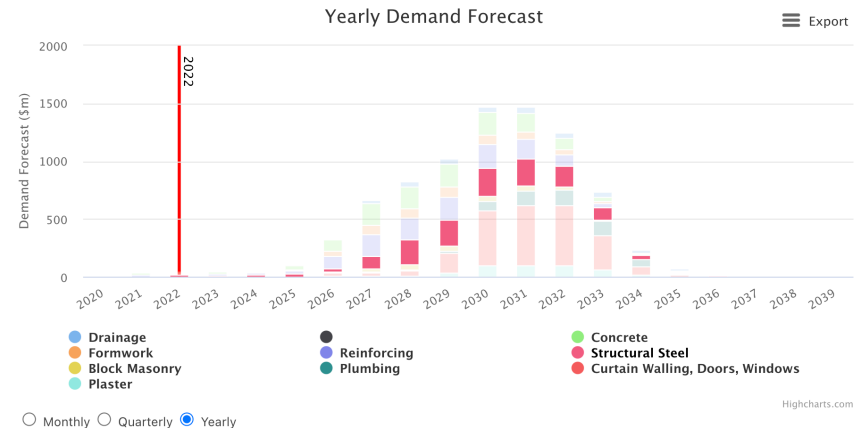
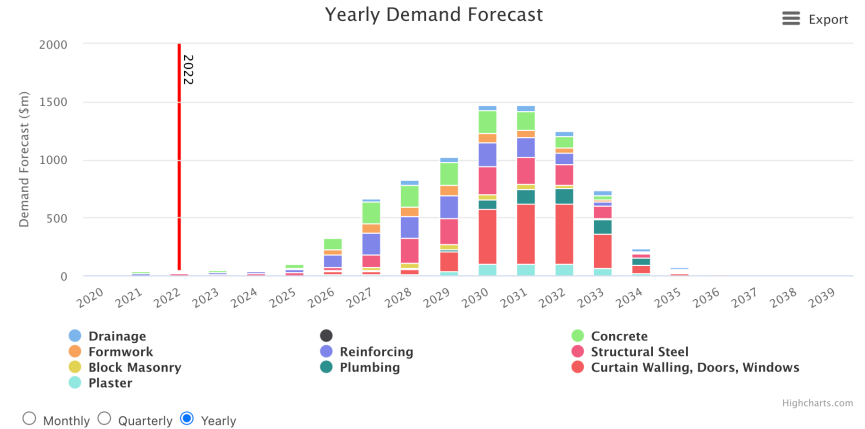
Demand Forecast

Example of the Line

ABiQ has developed a detailed cost breakdown for each project type. Applied with the cash flow for each project, the demand for materials, equipment, labour and fuel can be calculated.

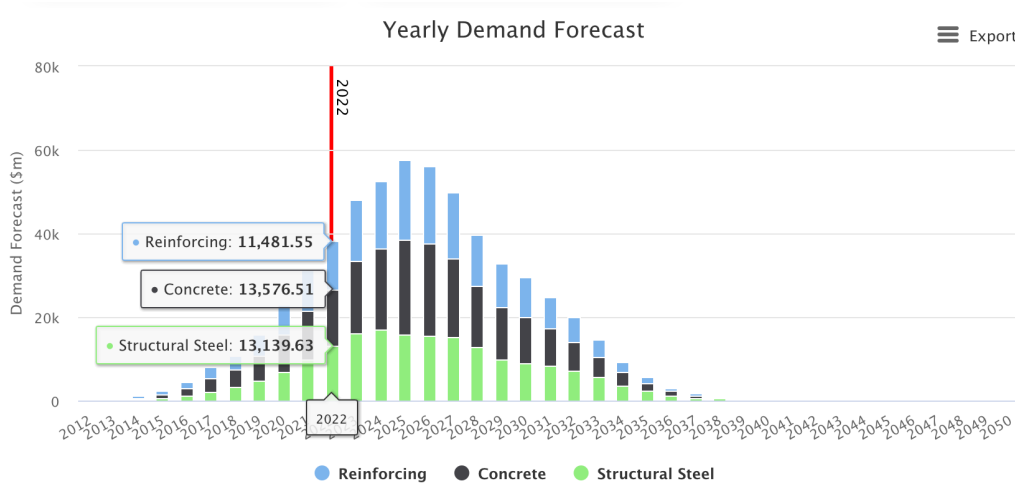
The chart on the right shows the demand forecast for major material items on "The Line"

The chart below shows the demand for structural steel required over the project life.



Demand Forecast

Main disciplines



The demand for key materials such as Reinforcing steel, Structural steel and concrete, peaks in 2025 at \$58 billion.

A 50% increase from 2022.

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Demand Forecast

A case for cement



Values	Central Africa	East Africa	GCC	Middle East	North Africa	Southern Africa	West Africa	Grand Total
2018 Cement Manufacturing Capacity (Tonnes)	11,743,000	30,506,000	99,946,000	19,200,000	111,485,000	15,931,000	21,333,000	310,144,000
2022 Cement Demand (Tonnes)	18,064,359	57,891,538	124,308,205	24,114,615	98,838,974	28,778,974	93,336,923	445,333,590

In 2018, MEA had a 310 million tonne per annum cement production capacity.

Demand for cement in 2022 is already exceeding MEA production capacity at 450 million tonnes

Current demand already outstrip local supply!

This excludes imports from neighbouring countries, such as Turkey & Pakistan

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Impact on resources

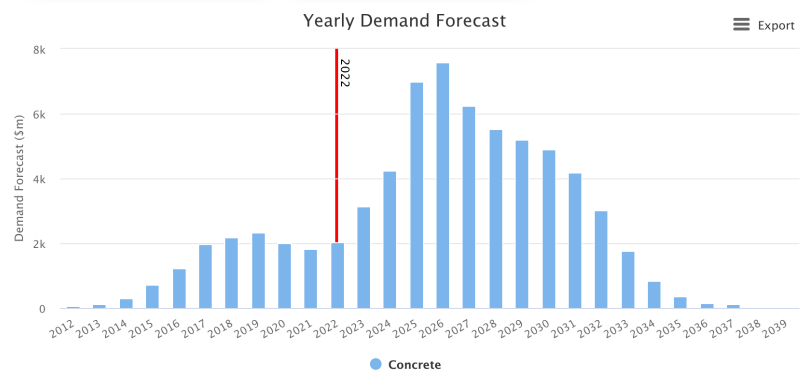
Saudi supply & demand for Cement

Saudi Arabia is leading the region with MEGA projects.

49% of the \$2.3 Trillion of active projects are Mega Projects.

In 2018, cement manufacturing capacity stood at 56 million tonnes per annum.

From 2018 to 2026, demand will grow by 330%



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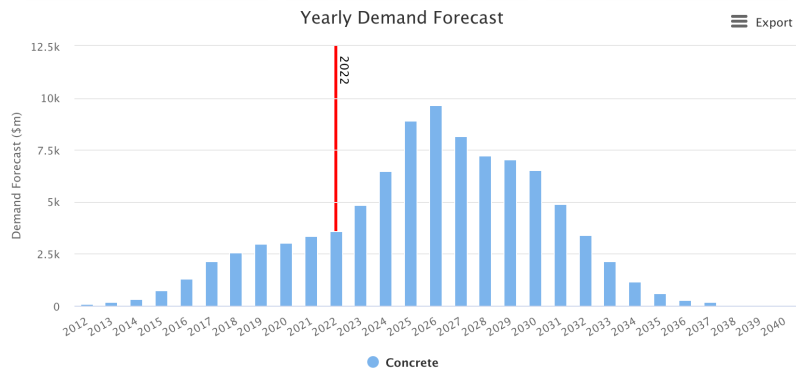
Impact on resources

GCC supply & demand for Cement

The GCC by comparison has \$3.5 Trillion of active projects of which 39% is considered MEGA projects

In 2018, cement manufacturing capacity stood at 100 million tonnes per annum.

Demand growth from 2018 to 2026 will be 376%



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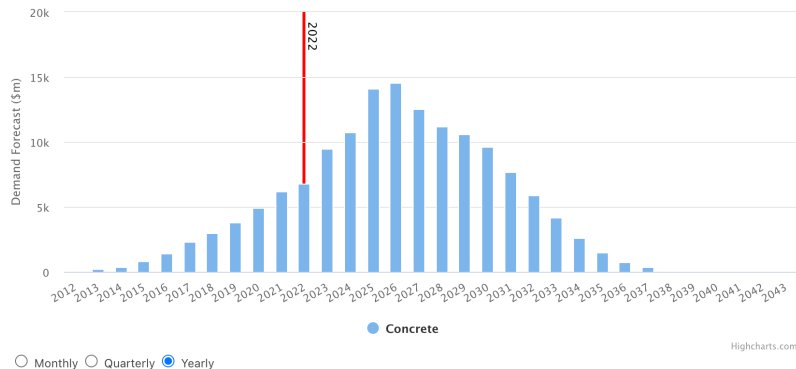
Impact on resources

MENA supply & demand for Cement

The MENA region has \$5.1 Trillion of active projects of which 36% is considered MEGA projects

In 2018, cement manufacturing capacity stood at 230 million tonnes per annum.

Demand growth from 2018 to 2026 will be 494%



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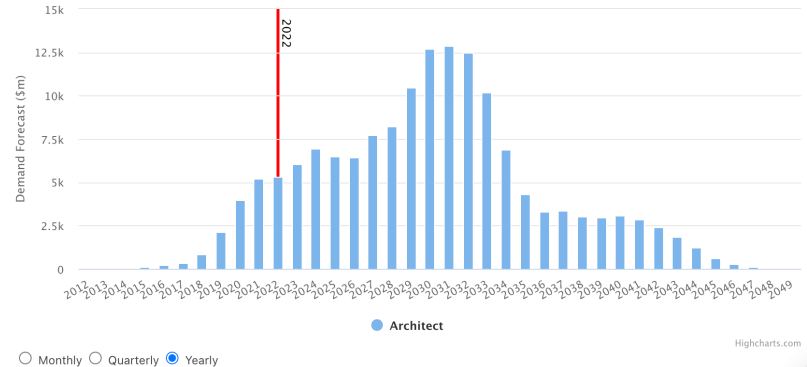
Impact on resources

MEA supply & demand for Cement

The MEA region has \$6.4 Trillion of active projects of which 34% is considered MEGA projects

In 2018, cement manufacturing capacity stood at 310 million tonnes per annum.

Demand growth from 2018 to 2026 will be 780%



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Summary

Recap

- Demand for core construction resources will be under immense pressure over the next decade.
- Essential commodities such as cement, steel, skilled labour, etc., will be in high demand.
- This could lead to acute shortages, which will drive up the cost.
- Pressure to complete developments will pose significant challenges to developing sustainable projects.
- Create opportunities for innovation
 - 3D printing
 - New building materials
 - New innovative construction methods

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About ABiQ

ABiQ tracks the activity of upcoming and ongoing projects in energy, utilities, hydrocarbon, transport and social infrastructure sectors in the 70 countries of the Middle East and Africa from concept to operation. ABiQ provides timely updates and thorough information about projects, including values, timelines, products and the organisations and people associated with them, in compliance with international standards for classification and recognised research code of conduct.

In a holistic approach to information intelligence for business development, ABiQ augments projects information with market insights on the countries and details of the organisations and people associated with projects. ABiQ tracks organisations worldwide with significant roles in MEA built environment projects, including developers, financiers, consultants, main contractors and operators. The structured knowledge enables advanced views and analytics for strategists and executives.

For more information visit www.abiq.io

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3,100

active projects

6 trillion

US\$ worth of active projects

10,000

Project updates per year

51,800

contact people

3 million

data points

19,000

organisations

13,000

organisations associated to projects

16,200

organisations relations

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