



Beyond Oil, Bridging the Gulf

Unleashing Logistics and Supply Chain Potential in the Middle East Region

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ASCELA



Logistics sector in the Middle East is rapidly growing due to the region's strategic location and the push for economic diversification. Countries in the Middle East have been investing heavily in the sector, including the development of new infrastructure, such as ports, airports, rail networks, and logistic hubs. The ongoing development of new logistics hubs and free zones, such as NEOM and the Dubai South Logistics District, and the adoption of smart technologies and digital infrastructure are expected to transform the logistics ecosystem in the Middle East.

NEOM, for instance, is expected to be a hub for global logistics, leveraging its strategic location at the intersection of three continents, Africa, Asia, and Europe.

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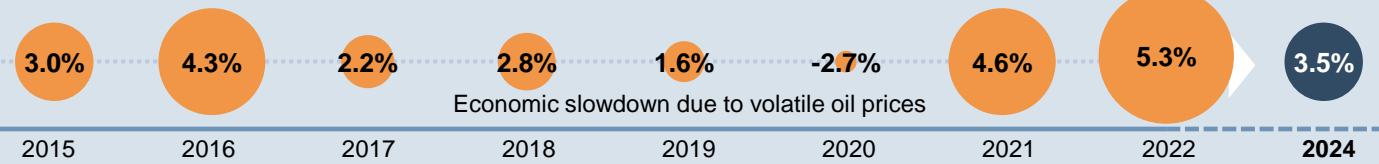
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Middle-Eastern logistics confront a torrent of developments

ME region has made sizable progress in recouping lost economic growth due to economic slowdown

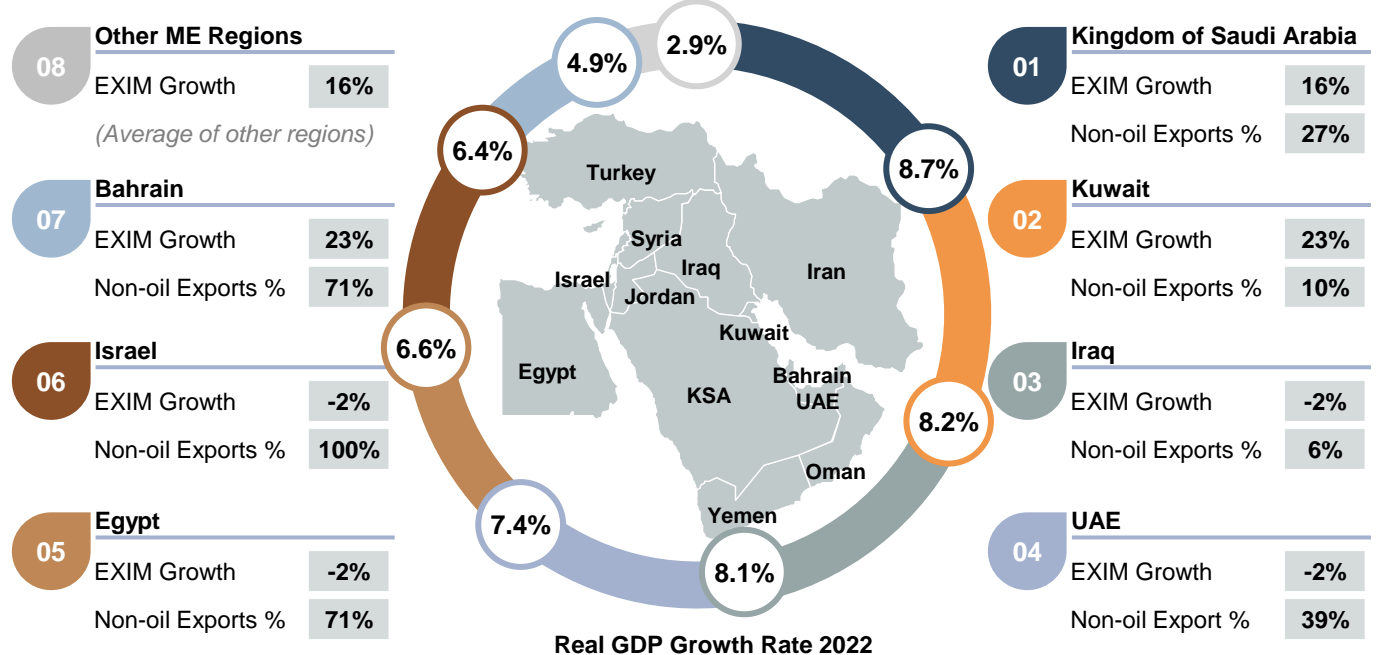
Real GDP Growth Rate of the ME Region (Source: IMF)



Increasing Economic Growth and Polarization towards Non-Oil based Economy has been the driving key

High oil prices and dynamic non-oil GDP growth offset the negative impact of rising global interest rates in 2022

EXIM y-o-y Growth Rate and share of Non-Oil Exports in 2022

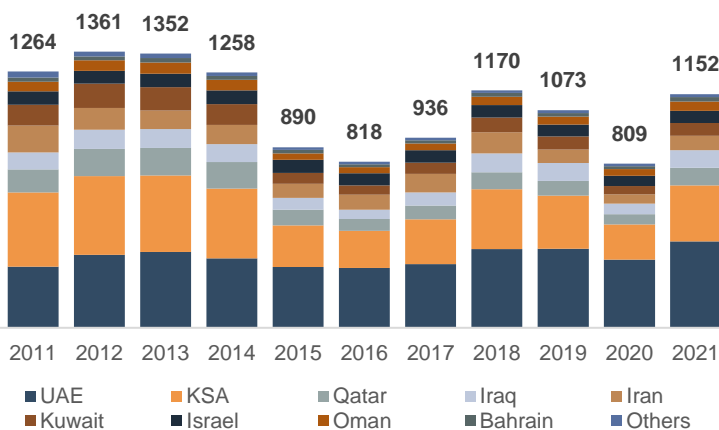


Real GDP Growth Rate 2022
Source: IMF; UNCTAD; OECD; ASCELA Analysis

Initiatives to increase revenue from Exports

Region-wise exports from ME region (in USD billion)

Source: World Trade Organization



UAE and KSA lead the export market in ME Region, with collectively more than 50% share over the previous decade.

Exports 50% ↑

A 50% Rise in **UAE** exports by the year 2030 is targeted under UAE's National Agenda for Non-oil Export Development.

4 SEZs

KSA launched four new SEZs in April 2023 - at Riyadh, Jazan, Ras al-Khair, and King Abdullah Economic City.

77 MTPA to 126 MTPA by 2027 ↑

Qatar is aggressively expanding its North Gas Field with six LNG-carrying trains that are expected to increase its LNG capacity from 77 MTPA to 126 MTPA by 2027.

109 million Sqm

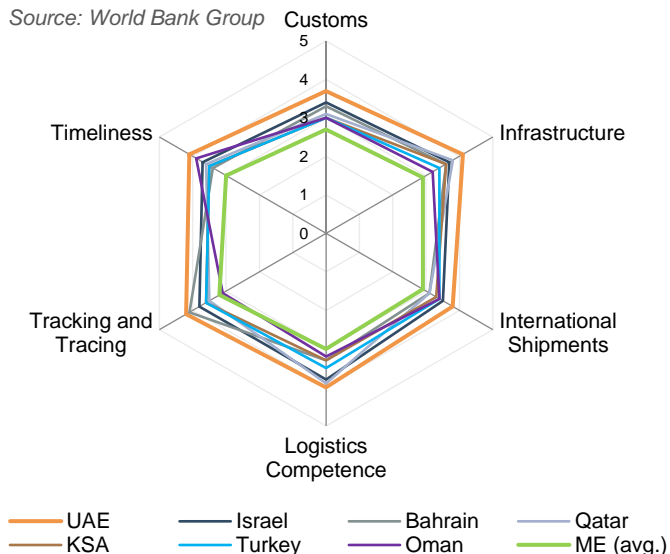
Tarbolou Industrial City being planned in **Egypt**, which is targeted to house industries, logistics services, Dry Port, and a Free Zone under Vision 2030.

ME Countries are at cusp of developing as Major Logistics Hubs

Increasing Port Performances, specially for containerized movements

ME Countries positioned among top 50 in Logistics Performance Index (LPI) 2023

Source: World Bank Group



Seven ME countries have been positioned among top 50 in World Bank's LPI 2023, with UAE being ranked 12th globally. However, the average LPI score of ME region is observed to be lower, due to high dwell time of Bulk Cargo at some of the non-major ports and airports.

ME Ports positioned among top 25 in Container Port Performance Index (CCPI) 2022

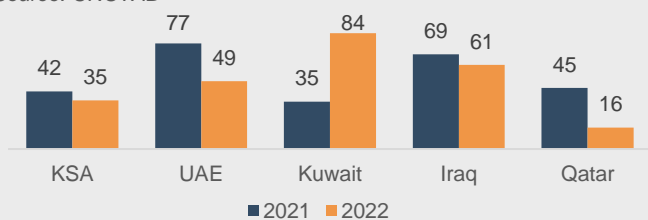
Source: World Bank



1 Rank in Container Port Performance Index

Average waiting time at berths in ME nations (in hours)

Source: UNCTAD



5 Among Top-10 Ranking Container Ports in CPPI are in the ME region.

7 ME ports are ranked in Top-25 in CPPI, increasing from 3 ports in the previous year.

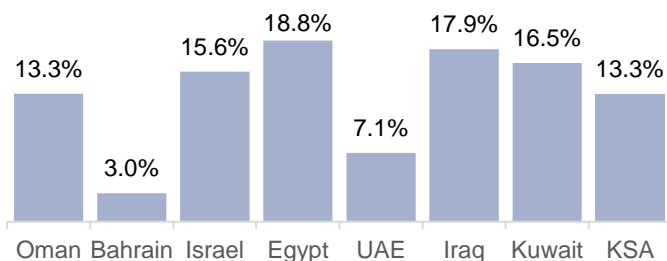
Growing concerns towards import-dependency and high logistics cost

High international food and fuel prices and exacerbating global financial conditions have resulted in high-valued imports during the years 2021 and 2022.

The share of logistics cost in the GDP of the countries also remained high over the years, being highest for Egypt and lowest for Bahrain among the ME countries.

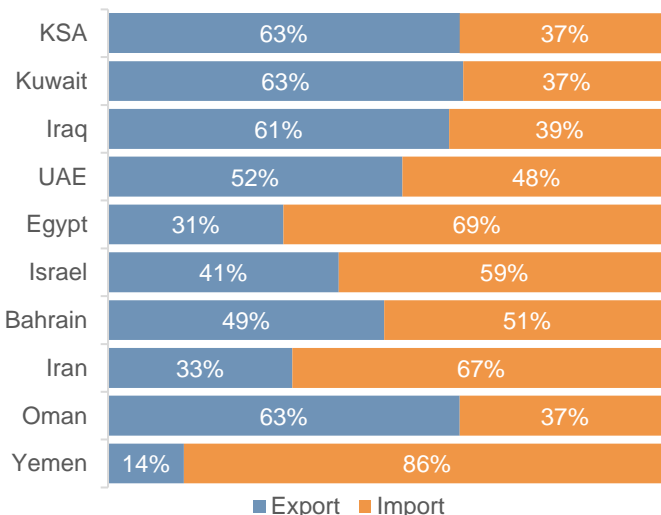
High share of logistics cost to GDP (in %)

Source: World Bank Report *Connecting to Compete-2018-Trade Logistics in the Global Economy*



High share of imports in 2021 (in value terms)

Source: OECD



Rail-based freight transportation targeted to reduce logistics cost

Key Rail-based developments for Regional Freight Movement

50 MTPA traffic targeted across 2,100km stretch

of GCC Rail upon completion in 2024. It would connect the countries of Bahrain, Kuwait, Oman, Qatar, KSA, and UAE. Freight Trains would likely run at a speed of 120 kmph. In September 2022, KSA completed its 200km of GCC rail.

Middle East Rail Projects	Length	Completion Year
Land Bridge	960 km	2024
Saudi NS Rail Corridor	2,400 km	2023
GCC Rail Project	2,100 km	2024
Etihad Rail Network	1,200 km	2024

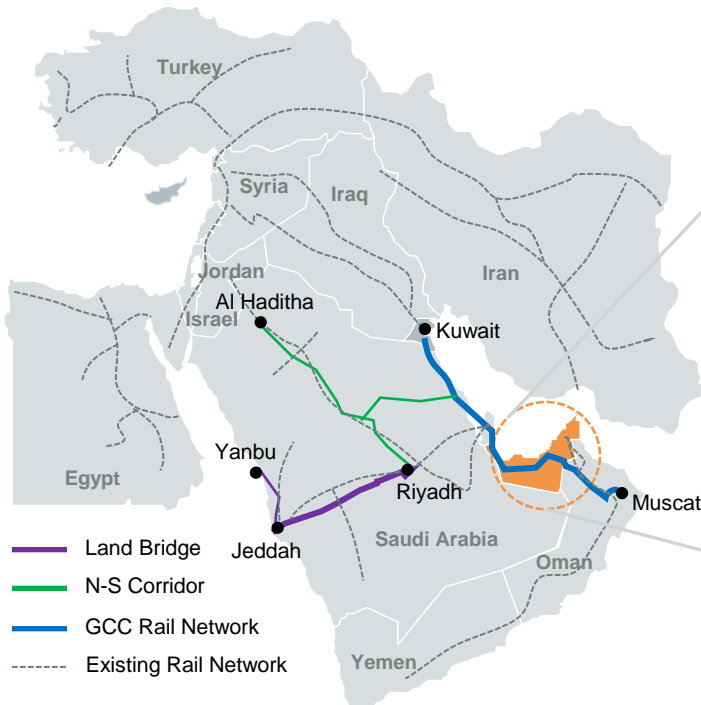
60 MTPA traffic targeted across 900km stretch

of Etihad Rail by end of 2023. Construction was completed in February 2023, connecting four major ports and seven logistics zones located at Ruwais, ICAD, Khalifa Port, Dubai Industrial City, Jebel Ali Port, Al Ghail, and Fujairah Port.

Phase	Etihad Rail Network	Length	Completion Year
1	Al Ruwais and Shah	264 km	Completed, 2016
2	Ghuweifat-Fujairah via Abu Dhabi-Fujairah	900 km	Completed, 2023
3	To Saqr Port	40 km	2024
4	To Sohar Port (Oman)	303 km	2025

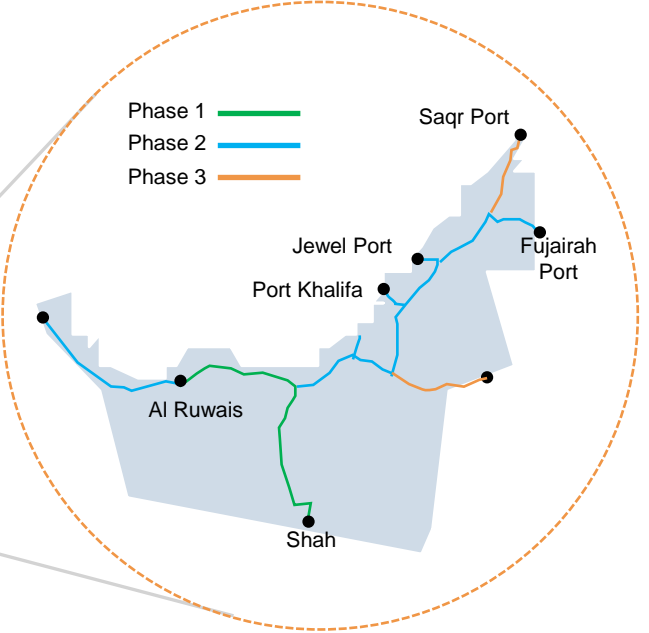
Under Construction Railway Freight Corridors

Source: ASCELA's Analysis

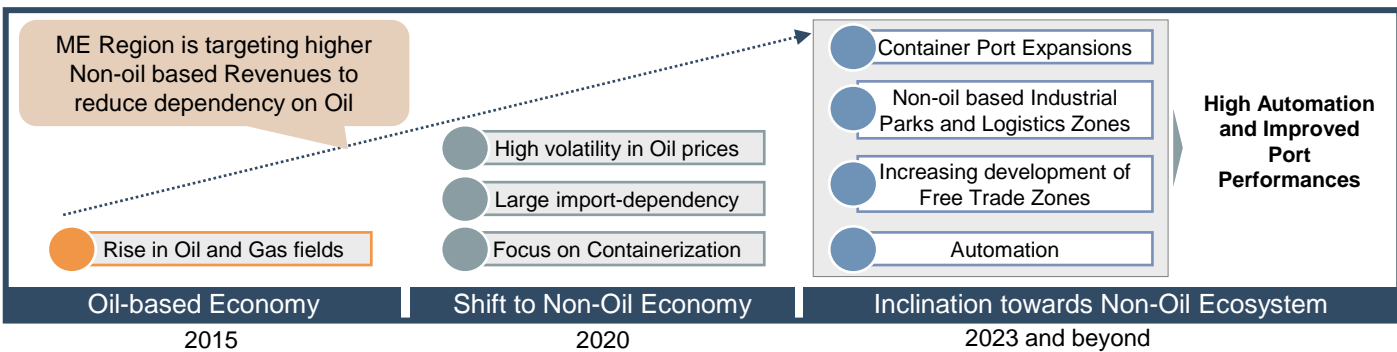


Etihad Railway Network- UAE

Source: ASCELA's Analysis



Increasing Polarization towards Non-Oil Economy



Polarization of economic activities to Non-Oil based Economy

Developments in Kingdom of Saudi Arabia

3.1% Real GDP Growth Forecast for 2024

Source: IMF

4.0%

Non-oil GDP growth forecast by 2024

SAR 1.2 Trillion

Non-oil GDP contribution by 2025

70%

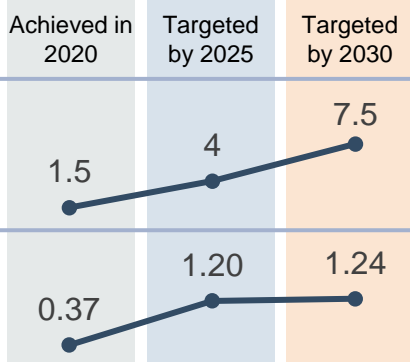
Port utilization targets by 2025

40 MTEU

Container traffic target by 2030

Developments proposed under Vision 2030

Targets- Vision 2030
Source: PIF



Other major targets under Vision 2030

60%

Private sector contribution target in KSA, increasing from 45% in 2016.

330

SAR Billion non-oil exports targeted from KSA, increasing from SAR 185 billion in 2016.

30%

Share of renewable energy in KSA's current energy mix.

NEOM: A USD 500 Billion Giga Project under Vision 2030

NEOM-OXAGON is targeted to be the world's first 4.3 miles-wide floating city and largest fully automated port and integrated logistics hub, to be developed by 2030.

Key Features:

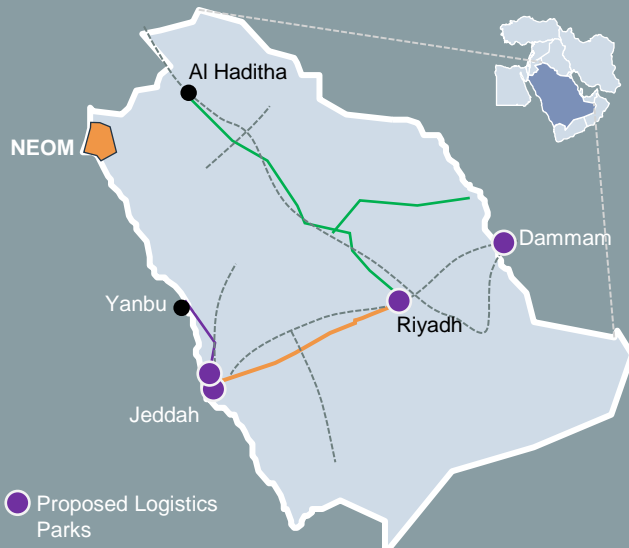
- 9 MTEU capacity Port in proximity to Suez Canal
- Integration with high-speed road and rail freight networks
- Integration with automated Supply chain through driverless last-mile delivery and smart fulfillment centers
- Targeted 'truly' circular economy using 100% clean energy

Opportunities in NEOM-OXAGON

- Transportation opportunities using renewable sources
- Support infrastructure and value-addition opportunities for Seaports, Airports, and Railways.

Key regions under development- Saudi Arabia

Source: ASCELA's Analysis



Other Key Logistics Developments and Opportunities

Logistics Park and Re-export Zone, Damman

- › USD 27 Million investment
- › 100,000 sqm logistics park
- › Capacity: 0.2 MTEU
- › Developer: MAWANI
- › Likely Timeline: 2024

Integrated Logistics Park, Jeddah

- › USD 346 Million investment
- › 225,000 sqm logistics park
- › Capacity: 0.2 MTEU
- › Developer: Maersk & MAWANI
- › Likely Timeline: 2024

Agility Logistics Park, Jeddah- Al Mahjar

- › USD 163 Million investment
- › 576,760 sqm Logistics Park
- › Target Sectors: Retail, Energy, Technology, Auto, e-Commerce
- › Likely Timeline: 2025

Procurement and Logistics Hub

- › Target Sectors: Industrial, energy, chemical, petrochemical
- › Developer: ARAMCo & DHL
- › Likely Timeline: 2025

King Salman International Airport, Riyadh

- › 6 parallel runways for passenger and freight operations
- › Capacity: 3.5 MTPA
- › Developer: PIF
- › Likely Timeline: 2030

Integrated Logistics Bonded Zone (ILBZ), Riyadh

- › Adjacent to King Khalid International Airport
- › 50-year tax benefit
- › 3 Million sqm SEZ
- › Launched in October 2022

Developments in United Arab Emirates

3.9% Real GDP Growth Forecast for 2024

Source: IMF

4.0%

Non-oil GDP growth forecast by 2024

15%

Share of logistics to GDP by 2030

90%

Port utilization targets by 2030

1.7 Billion sqft.

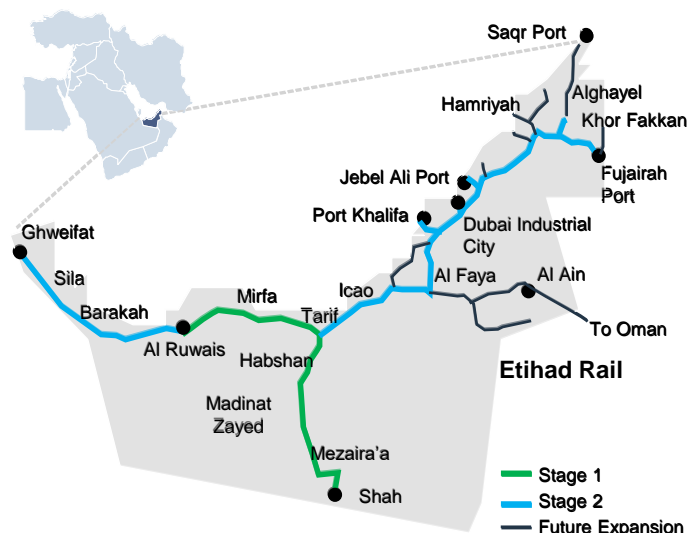
Dedicated industrial land by 2040

Developments proposed under Etihad Rail Network

Phase	Network	Existing utilization
1	Al Ruwais and Shah	Movement of Granulated Sulphur from ADNOC facilities in Western region to the port of Ruwais for export
2	Ghuweifat-Fujairah via Abu Dhabi-Fujairah	Movement of containers, Petrochemicals, F&B, Construction Materials, Consumer Goods to various ports

Key regions under development- UAE

Source: ASCELA's Analysis



Opportunities under Phase 3

- 1 Direct rail link between the Gulf of Oman and the Gulf of Arabia would add intermodal container movement.
- 2 Key target commodities: Oil and gas products, minerals, and agricultural product

Opportunities under UAE-Oman Etihad Rail

Improved rail link between Sohar and Jebel Ali Ports, which are important trade hubs for the region, would facilitate movement of oil and gas products, minerals, agricultural products, and manufactured goods.

Opportunities at Dubai Industrial City

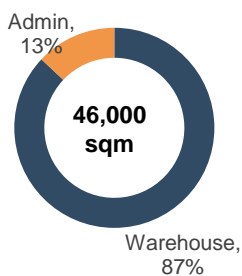
Etihad Rail and Dubai Industrial City are developing an advanced freight terminal at Dubai Industrial City with a capacity of 5 MTPA. This would further likely increase economic developments around Dubai Industrial City.

Other Key Logistics Developments and Opportunities

Logistics Park and Re-export Zone, Damman

JAFZA's South Logistics Park, spread over 46,000sqm, is targeted to be completed by October 2024.

Key Features:



BOXBAY Integration at Jebel Ali Port

DP World and SMS Group installed the BOXBAY system by June 2022 at the Jebel Ali Port Terminal 4, which is one of the busiest container ports in the world.

Key Features:

- Around 70% reduction in terminal footprint
- Eliminated 350,000 unproductive moves per year, with high performance of 19.3 container moves per hour at each waterside transfer table to the straddle carrier and 31.8 moves per hour at each landside truck crane
- Improved the overall truck servicing time by 20%
- 190,000 container movements carried out in June 2022 under realistic operating conditions

Virtual Trade Corridor with India and Kuwait

- > Focus on pre-arrival information for cargo movement to facilitate pre-clearance Target: reduce delays and benefit exporters on both sides

Drydock facility expansion, Khalifa Port

- > Targeted at increasing the handling capacity at Khalifa Port to 15 MTEU and general cargo handling capacity to 25 MTPA by 2030

Cold Storage Expansion. Abu Dhabi International Airport (ADIA)

- > Etihad Cargo and Abu Dhabi Airports are doubling the cold storage facility at ADIA for pharmaceutical handling and storage

Developments in Oman

5.2% Real GDP Growth Forecast for 2024

Source: IMF

5.0%

GDP growth target under Vision 2040

1.5%

Mining sector share in GDP by 2040

23 MTPA

Rail freight volumes by 2040

1 Million sqkm.

Dedicated agri land expansion by 2040

Developments proposed under Oman Mineral Rail Project

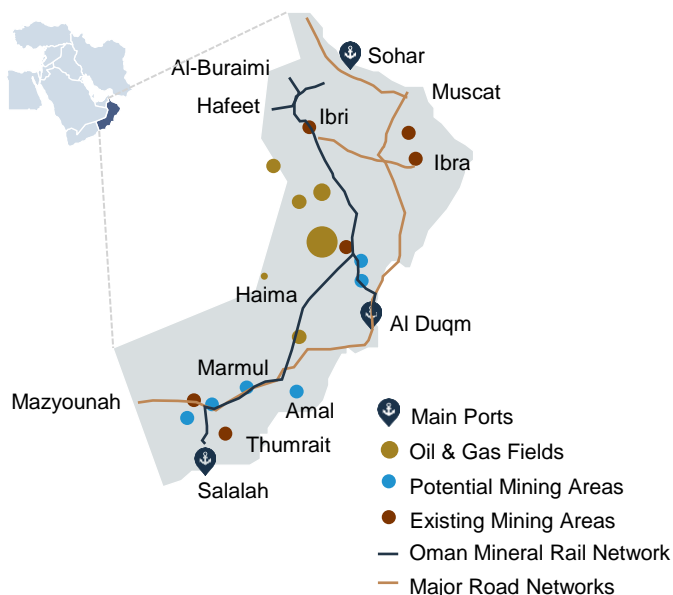
Oman Mineral Rail Project is a 1,000 km long rail network aimed at providing an efficient and cost-effective means of transporting ~30 MTPA of minerals from the mines to the ports and is targeted to be completed by 2030.

Key Developments:

Phase	Length	Key developments
Phase-I	230 km	<ul style="list-style-type: none"> › Rail network between Duqm Port and mining areas in the interiors › Construction of a mineral terminal at Duqm Port
Phase-II	410 km	<ul style="list-style-type: none"> › Rail network between Sohar Port and mining areas in the interiors › Construction of a mineral terminal at Sohar Port
Phase-III	360 km	<ul style="list-style-type: none"> › Rail network between Salalah Port and mining areas › Construction of a mineral terminal at Salalah Port

Key regions under development- Oman

Source: ASCELA's Analysis



Other Key Logistics Developments and Opportunities

Salalah Port Phase-III Expansion

Salalah Port's Phase 3 expansion project was launched in 2017 and is expected to be completed in 2024.

Key Developments:

Developments	Details
New Container Terminal	3.5 MTEU largest container terminal in Oman
New liquid bulk terminal	Capacity of 20 million barrels per year
Expansion of General Cargo Terminal	Cumulative capacity of 20 MTPA, up from its previous capacity of 6.5 MTPA

OOMCO Marine Bunker Terminal, SEZAD

OOMCO Marine officially launched its new Bunker Fuel Terminal in Duqm Special Economic Zone (SEZAD) in 2022.

Key Features:

Terminal has a storage capacity of over 30,000 cubic meters
It is capable of supplying up to 1,000 tonnes of marine fuel per day
Equipped with Marine Diesel Oil (MDO) and Marine Gas Oil (MGO) marine fuels
Support infrastructure: blending and mixing facilities, and pumping equipment

Privatization Planned under Budget 2023

1 The Government is planning on developing Oman's first PPP-based 67km road, dedicated to heavy vehicles and trucks operating between Thamrait and Salalah City in Dhofar Agreement.

2 Budget also plans for PPP-based development and operation of a Dedicated Fisheries Seaport and food-centric industrial complex at Liwa in North Al Batinah.

3 Government is willing to engage private sector for the development and operation of National Ports Community System in Oman to optimize, manage, and automate ports and logistics services.

4 Government is also planning operational expansions in Free Zones at Muscat and Salalah Airports.

Developments in Egypt

5.0% Real GDP Growth Forecast for 2024

Source: IMF

12%
GDP growth target under Vision 2030

1,500 MTPA
Port Capacity by 2030 (now 900 MTPA)

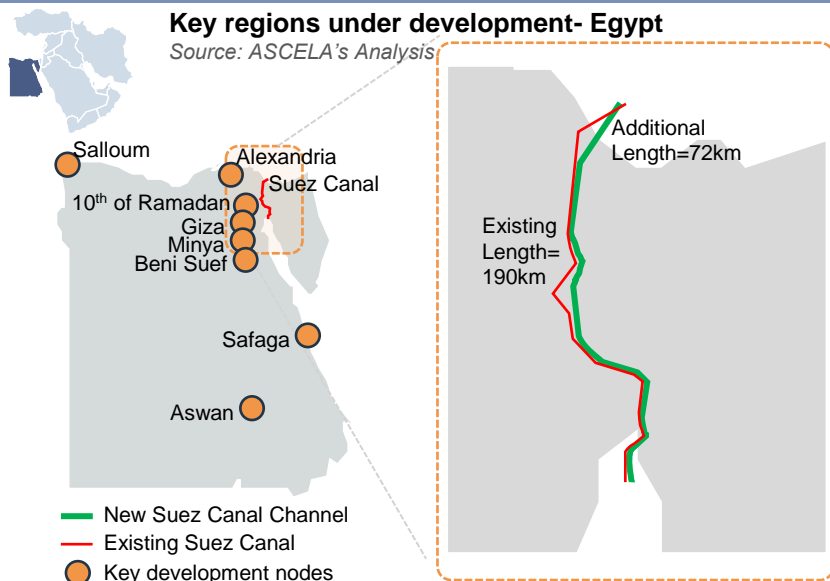
10%
Manufacturing growth rate by 2030

3X share
of logistics sector in GDP by 2030

Expansion of Suez Canal to increase the revenue by 259% by July 2023

Key regions under development- Egypt

Source: ASCELA's Analysis



Suez Canal Authority is developing a wider 2-way canal, parallel to the existing one, to maximize benefit from the present Canal and its by-passes and minimize the waiting time for transiting ships.

Key Features:

Shortening the Suez Canal transit time from 18 hours to 11 hours

Minimize the waiting time to 3 hours instead of 8-11 hours

Increase daily average of transiting vessels to 97 ships, up from 49 ships at present

Additional 35km dredging to achieve a depth of 24m along the new canal to accommodate vessels with up to 24m draft

Other Key Logistics Developments and Opportunities

Proposed Dry Ports in Egypt

Egypt is planning to establish 6 dry ports at Alexandria, the 10th of Ramadan City, Giza, Minya, New Beni Suef City, and Aswan. This is followed by the successful financial close of the country's first PPP dry port project in the 6th of October City.

Integrated Logistics Zone at Salloum Land Port

GALDP, with Egyptian Companies, is planning on developing 700 acres Integrated Logistics Zone near the existing 21-acre Land Port with existing 11 warehouses and 24 cold storages. This would likely increase EXIM traffic at the Port of Jarjoub.

Developments proposed by AD Ports Group

AD Ports Group, in March 2023, signed a CA to develop a multi-purpose port in Safaga and expanded access to multipurpose terminals, cruise routes, and logistics capabilities in Safaga, Ain Sokhna, Port Said, Hurghada, Sharm El Sheikh, Al Arish.

Developments in Qatar

3.6% Real GDP Growth Forecast for 2025

Source: IMF

Qatar National Vision 2030 aims at strengthening the capacity of the country's ports and airports to handle increasing levels of trade and commerce. The aim is also to reduce the cost of transportation to increase the competitiveness of Qatari products.

Expansion of Suez Canal to increase the revenue by 259% by July 2023

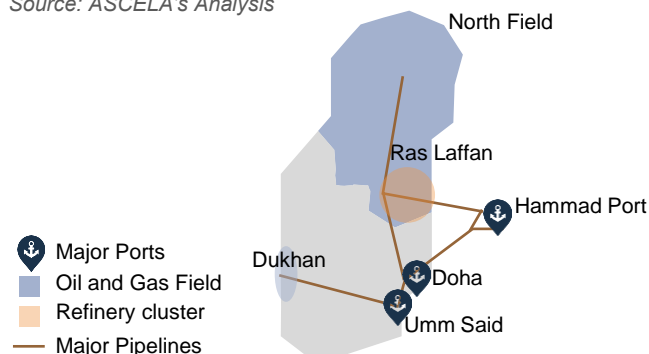
North Field Expansion Project (NFE) involves the development of new LNG production facilities in the Ras Laffan Industrial City in Qatar.

Key Features:

Project	Key developments
LNG Production	<ul style="list-style-type: none"> Expected to increase LNG production capacity from around 77 MTPA to 110 MTPA by 2026 Make Qatar largest global LNG producer
LNG Trains	<ul style="list-style-type: none"> 6 new LNG trains to be run 1st train to be operational by 2025

Key regions under development- Qatar

Source: ASCELA's Analysis

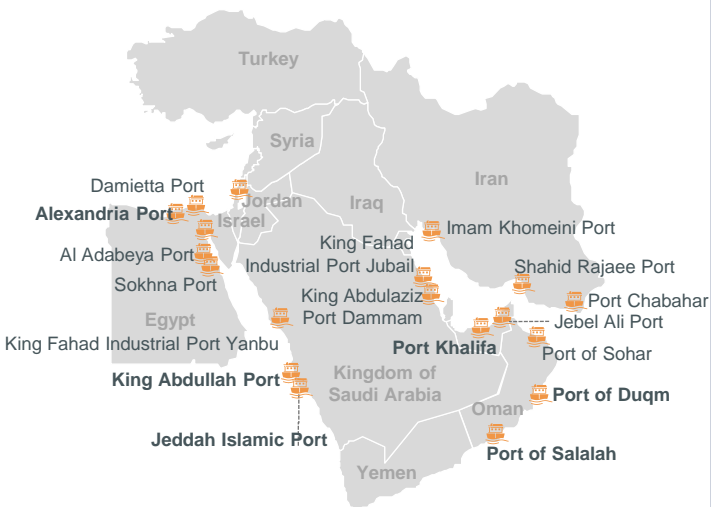


Technology and re-invention-oriented investments loom large in many countries

Major Port Expansion Plans around the Middle East

Major Sea Ports in ME Countries

Source: ASCELA's Analysis



Khalifa Port in UAE is planned to be expanded, targeting an annual throughput of 15 MTEU container traffic and 25 MTPA of general cargo traffic by 2030.

Jeddah Islamic Port in KSA is being expanded with the construction of Southern Container Terminal RSGT2 which would likely add 5.2 MTEU capacity by 2024.

Salalah Port in Oman is constructing Salalah Container Terminal 3 (SCT3) which would likely add 3.5 MTEU capacity by 2024.

Alexandria Port in Egypt undergoing development of a new Container Terminal, targeted at handling 5 MTEU container traffic by 2030.

King Abdullah Port in KSA is undergoing berth expansion, targeted to handle 7.5 MTEU by 2030.

Duqm Port in Oman is constructing new container terminal with 3.5 MTEU capacity by end of 2023, following the completion of a new dry bulk terminal, liquid bulk terminal, and a RO-RO terminal.

Opportunities in Port Sectors

Improved rail link between Sohar and Jebel Ali Ports, which are important trade hubs for the region, would facilitate movement of oil and gas products, minerals, agricultural products, and manufactured goods.

Other logistics based developments in ME Region

01 Dubai World Central and Logistics City , UAE

DWC is undergoing construction of new 60,000 sqm cargo terminal that will be able to handle world's largest cargo aircraft. It is also set to benefit from the development of the Dubai Logistics City, which is a 21 sqkm logistics hub.

02 New Cargo Terminal, Abu Dhabi IA, UAE

Abu Dhabi International Airport is witnessing development of a new cargo terminal which would increase the airport's cargo capacity to 1.5 MTPA

03 Cargo Express Village, Bahrain

Bahrain is developing a Cargo Express Village with a total area of 25,000sqm and a capacity of 0.4 MTPA by end of 2023. Being built at Bahrain International Airport, it is targeted to include warehouse, cold-storage, a dangerous goods storage area, and a perishables handling area.

04 Saab's Maritime Control VTMIS , UAE

Saab's Maritime Control VTMIS is proposed to be installed at Khalifa Port, Zayed Port and Free Port, Musaffah Port, and Al Dhafra region ports as part of a project to provide monitoring and control of vessel movements.

Technology-based investments are increasingly aimed in ME Region.

Major Technology-based Developments:

Project	Key developments
PCS, MAWANI	MAWANI is developing Port Community System to build a smart platform universe in KSA
PMIS, Oman	Oman Government is developing Port Management Information System at Salalah, Sohar, and Duqm Ports
Bahrain Logistics Zone	Bahrain is implementing Bahrain Logistics Zone Smart Port System to streamline operations and increase efficiency at the Khalifa Bin Salman Port and Bahrain International Airport, Bahrain Investment Wharf, and Hidd Industrial Area
SSTC, Kuwait	Kuwait is developing Smart and Secure Tradelane Corridor (SSTC) to digitize and automate the supply chain process.
NSWFT, Egypt	Egypt is implementing National Single Window for Foreign Trade (NSWFT) to streamline and simplify import and export procedures.

Healthy industrial, manufacturing, and logistics sectors are critical for the Middle Eastern region's economic future as they will help move away from reliance on oil and gas exports and toward a more diverse economy.

Middle Eastern ports have invested in expanding capacity to meet cargo flows on the Far East–Europe trade route, as well as smaller routes, in the years after the global financial crisis. Large ports, in particular, have built infrastructure that is significant in terms of both scale and technology. Several port groups have grown into well-respected organizations in the region and beyond, capable of competing with the best in the world.

1 Development of Free Trade Zones

The recent development of numerous Free Zones and Industrial clusters demonstrates that the region is on track to becoming a leading industrial economy, maximizing the use of its modern infrastructure and distribution channels, which include three of the world's most far-reaching airlines – Emirates, Etihad, and Qatar Airways.

2 Surge in E-Commerce Activities

E-commerce activities especially post Covid have increased drastically. This will evolve the whole supply chain movement of goods and services and demand for new warehousing and storage facilities along with digitization of the operational model.

3 Advancement towards Automated Logistics Services

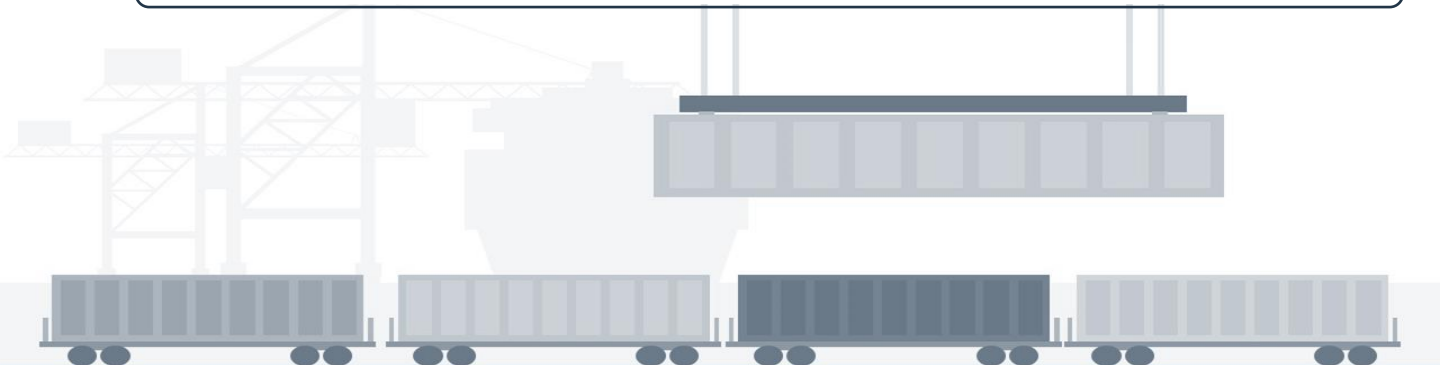
Companies are now integrating with autonomous vehicles and drone deliveries for efficient and speedy last-mile deliveries. There is a high need to move towards the adoption of technologies where warehouses can be automated with the help of robots and automotive systems.

4 Need for Smart Technological Interventions for Ease of Logistics

Middle East has been focusing on opportunities for smart logistics technologies, including Dubai's World Logistics Passport, and BOXBAY technology at Jebel Ali Port. All maritime authorities are also highly adopting Port Management Systems, driven by AI, IoT, and Blockchain interfacing. Automated Cargo Deliveries like Dronamics are also in discussion.

5 Is building more ports the right solution ?

Overcapacity, large transshipment exposure, and low port productivity may likely cause the region's port to stall or even reverse its development trend. Business developers need to focus on improving hinterland links over capacity augmentation. Port operators should likely promote productivity and digitization improvements in order to grab more revenue from existing and future clients.





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About ASCELA

ASCELA is a professional service company providing advisory services to organizations to help them enhance efficiency through analysis of market potential, competitive landscape, operational, financial, economic, technical, and strategic challenges. The firm was established in 2018 with a vision to provide independent strategic insights into Infrastructure and build environments.

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