WORLD GOVERNMENTS SUMMIT 2025

in collaboration with

pwc

How To Secure The Middle East's Global Trade And Logistics Advantage

To Inspire And Enable
The Next Generation Of Governments

The World Governments Summit is a global platform dedicated to shaping the future of governments worldwide. Each year, the Summit sets the agenda for the next generation of governments with a focus on how they can harness innovation and technology to solve universal challenges facing humanity.

The World Governments Summit is a knowledge exchange center at the intersection of government, futurism, technology, and innovation. It functions as a thought leadership platform and networking hub for policymakers, experts and pioneers in human development.

The Summit is a gateway to the future as it functions as the stage for analysis of future trends, concerns, and opportunities facing humanity. It is also an arena to showcase innovations, best practice, and smart solutions to inspire creativity to tackle these future challenges.


NMENTS SUMMIT
عالمية للحكومات
القمة العالمية للحكومات
WORLD GOVERNMENTS SUMMIT

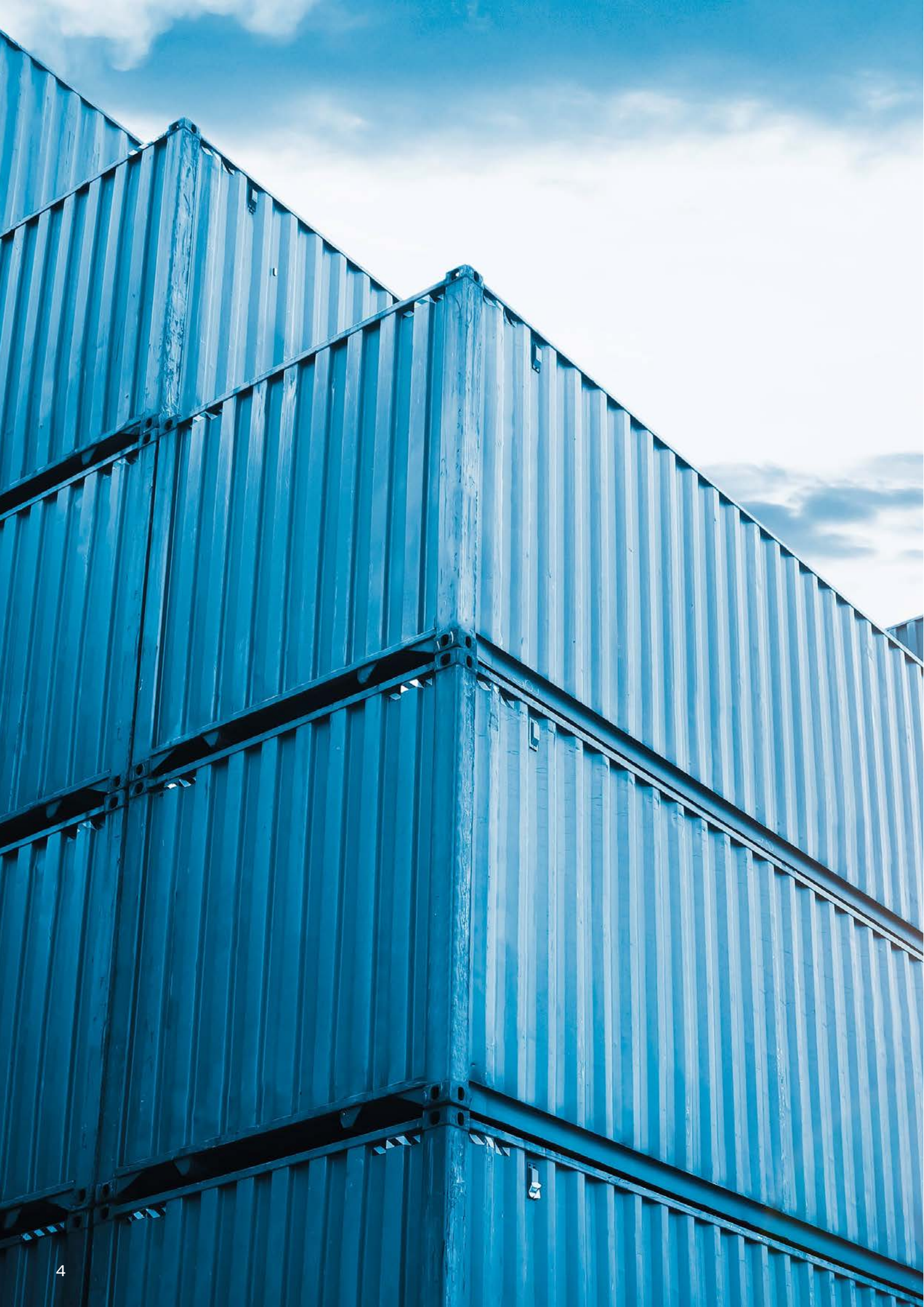
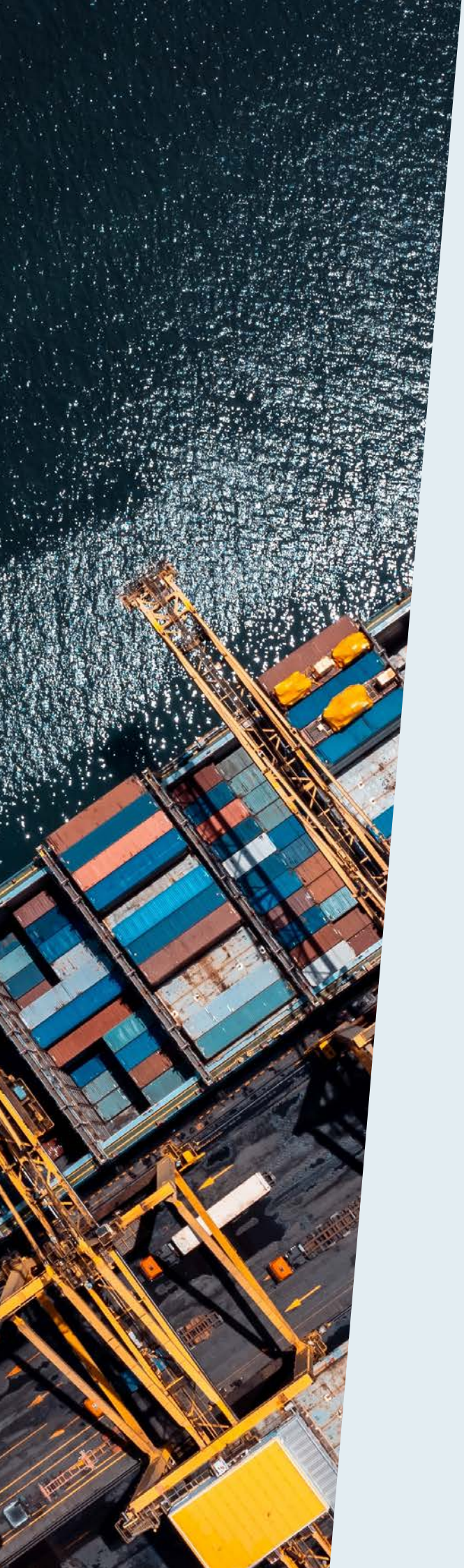


Table of Contents

Topics

Executive Summary



For centuries, the Middle East has acted as a global trading and logistics hub due to its location at the intersection of Europe, Asia, and Africa. Since the First World War, the discovery of vast onshore and offshore oil and gas reserves has reinforced the region's strategic importance. Today, the Middle East—covering, in this report, the six GCC countries plus Egypt—remains an indispensable conduit for global trade flows. For example, in 2023, around 12% of global trade volumes passed through the Red Sea, according to data compiled by the US Congressional Research Service (CRS).[1] The International Energy Agency (IEA) estimates that in 2023, around 30% of the world's traded oil and around 20% of all liquefied natural gas (LNG) was shipped via the Strait of Hormuz.[2]

The resilience of the Middle East's trading and logistics landscape, which also includes fast-growing land and air cargo traffic, is remarkable given the series of recent external shocks that have affected world trade in general and the region specifically. The COVID-19 pandemic and the Red Sea crisis have both placed severe strain on trade flows and supporting infrastructure across the Middle East, with shipping costs and insurance rates rising sharply between 2020 and 2024.[3] The Suez Canal obstruction in 2021 and the Ukraine conflict have added to this pressure.

Fortunately, these recent challenges have further spurred Middle Eastern governments and policymakers to upgrade and expand existing capabilities to secure the region's status as one of the world's leading trading and logistics centers. One recent example is the UAE's launch, in February 2025, of the Emirates Council for Logistics Integration.[4] The council aims to reinforce the country's pivotal position in global trade and increase the annual revenue from the UAE's logistics industry from $35 billion to $54.4 billion by 2032.

This report focuses on how Middle Eastern countries' national transformation programs can be leveraged to navigate structural and practical obstacles, such as:

- Limited cross-border collaboration in logistics between Middle Eastern countries
- Limited intermodal integration between maritime, aviation, rail and road logistics
- Shortage of skilled logistics personnel
- Limited alignment of Middle Eastern logistics companies with international sustainability regulations.

Two factors make transformation programs such as Saudi Arabia's Vision 2030,[5] We the UAE 2031,[6] and Qatar's National Vision 2030[7] well adapted to develop world-leading trading and logistics capabilities throughout the Middle East.

Firstly, all these programs correctly see investment in logistics as a critical enabler of national modernization and economic growth, while recognizing that greater regional collaboration is an important part of realizing the sector's full potential. With this goal in mind, Gulf Cooperation Council (GCC) countries hold regular joint dialogues covering a wide cross-border logistics agenda, such as strengthening regional land transport strategies and aligning transport regulations. Secondly, these national programs envisage significant and continuing public and private sector investment in infrastructure, much of which will incorporate new technologies that often leverage artificial intelligence (AI).

Nonetheless, a greater degree of collaborative thinking is still needed to turn a series of national initiatives into a coordinated regional effort to secure the Middle East's historic trading and logistics advantage for future generations. To be clear, there has been progress on specific cross-border projects recently, despite significant economic and geopolitical headwinds. The Gulf Railway Project, which aims to connect six member states via a 2,177-kilometer high-speed railway network, is a good illustration.[8] Yet, too often, logistics investments and programs are geographically limited, meaning they do not fully exploit economies of scale and risk overlapping with similar projects in other Middle Eastern countries.

This report deliberately adopts a broader, transnational approach, identifying several critical areas where coordinated action by Middle Eastern governments will deliver trading and logistics benefits for all participants. We make the following key recommendations:

- Increase cross-border coordination and collaboration on logistics projects to promote economic integration.
- Continue to use technology to accelerate development.
- Expand training for expatriate and local logistics workers to equip them with the skills to operate advanced logistics technologies.
- Ensure full compliance by Middle Eastern logistics and shipping companies with international sustainability regulations.

Section 1

Challenges Around the Middle East's Role as a Global Trading and Logistics Hub

Historically, the Middle East has served as a pivotal global trading hub due to its abundance of resources and strategic location as a bridge between Asia, Africa, and Europe. In the early 20th century, the discovery of oil added a new commercial and trading dimension, drawing in foreign investment and laying the foundations for the region's modernization.

In 2023, around 12% of total global trade volumes passed through the Red Sea, including 25% to 30% of the world's shipping container volumes, based on data compiled by the CRS (see Figure 1). Meanwhile, the IEA estimated that, in the first 10 months of 2023, 30% of the world's seaborne traded oil and 20% of all liquefied natural gas (LNG) was exported via the Strait of Hormuz, one of the world's most important commercial shipping lanes.


CAUTION
MAX WT.
PAYLOAD
CAUTION
MAX WT.
CAUTION

Figure 1: **Middle East share of global maritime trade, 2023**

12% of global trade passed through Red Sea

30% of global container traffic passed through Red Sea

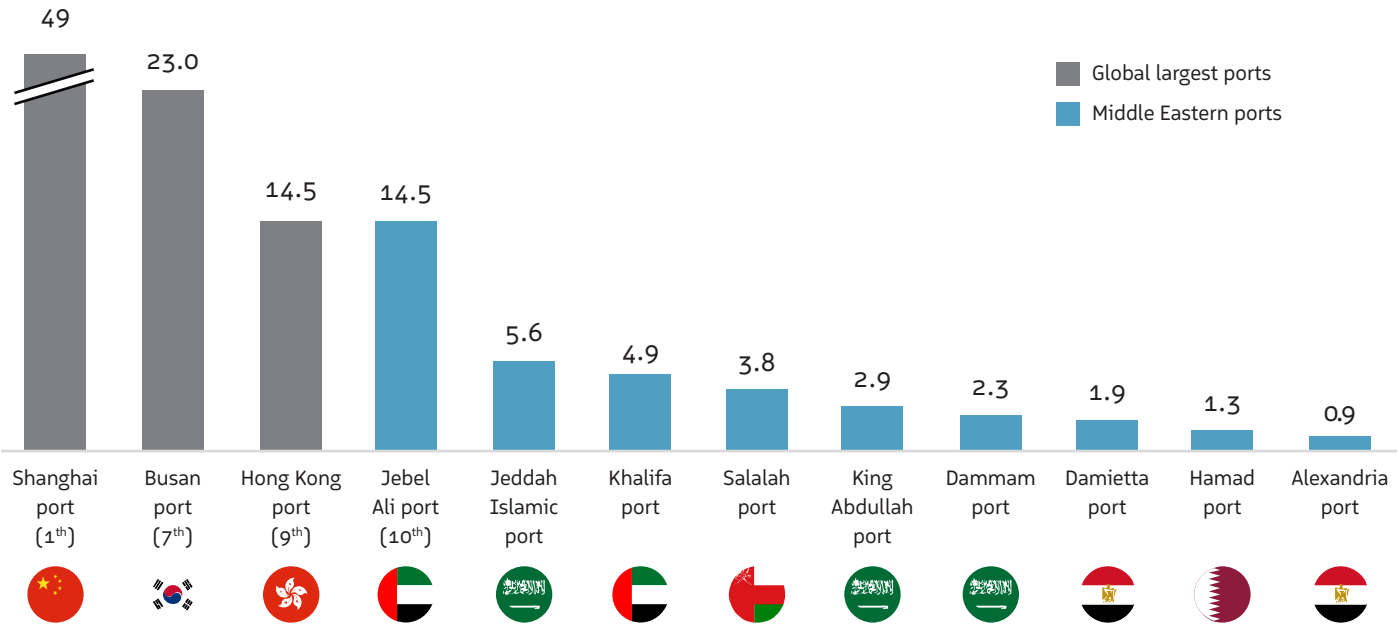
30% of the world's oil passed through Strait of Hormuz

20% of the world's global liquefied natural gas passed through Strait of Hormuz

Source: Congressional Research Service (CRS), International Energy Agency (IEA), 2023

Recent geopolitical tensions have temporarily affected maritime trade flows (see 'Major regional transport and logistics challenges' below). However, Middle Eastern seaports will always be pivotal to global trade due to their strategic location at the crossroads of major shipping routes connecting Asia, Europe, and Africa. In particular, Jebel Ali Port (UAE), Jeddah Islamic Port (Saudi Arabia), Khalifa Port (UAE), and Salalah Port (Oman) are among the world's busiest ports, serving as key hubs for cargo moving between Asia and Europe, as well as gateways for regional imports and exports (see Figure 2).

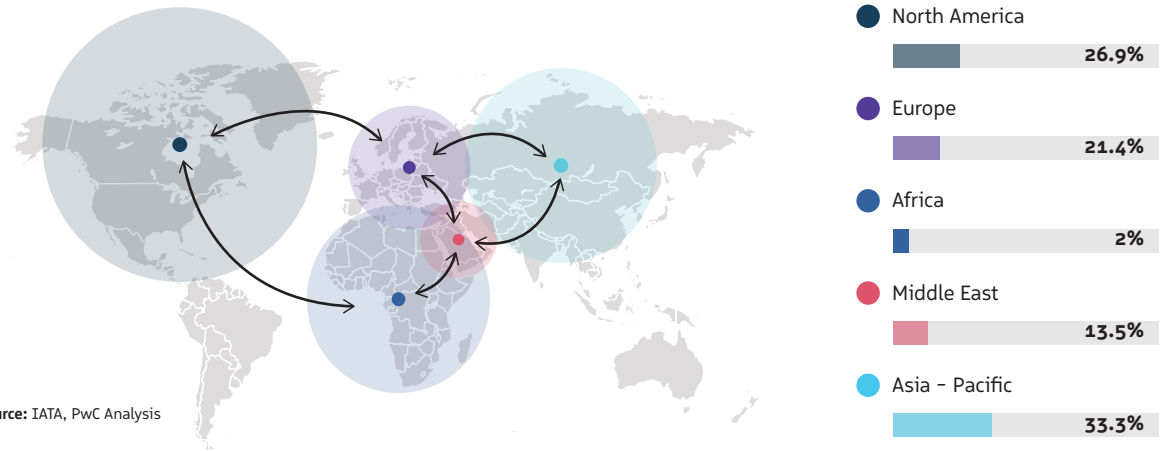
Figure 2: **Twenty-foot Equivalent Unit (TEUs) containers' throughput by Middle Eastern ports compared to global largest ports, millions, 2023**



Source: Lloyd's List, Middle East port websites, UNCTAD, 2023

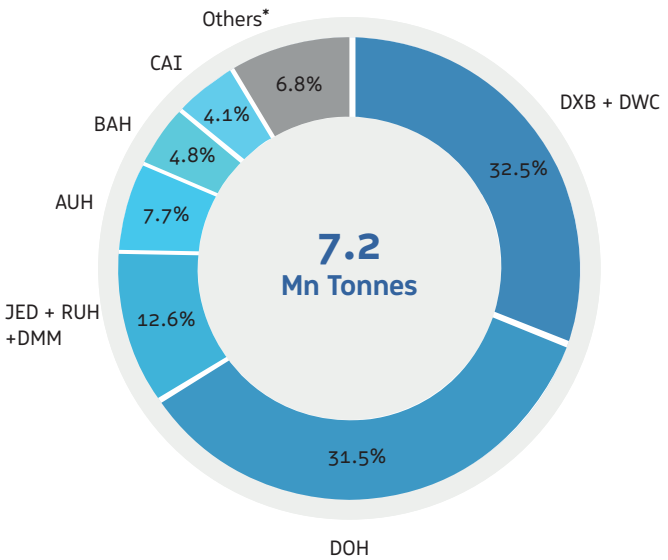
When it comes to air cargo, some 13.5% of the world's air cargo tonne-kilometers are carried by Middle Eastern airlines in 2023, according to an analysis by the International Air Transport Association (IATA).[9] This share is expected to grow faster than the global market in the next five years, driven by national initiatives to expand airline and airport capacities to meet rising regional demand. Examples include the planned launch of Riyadh Air in 2025, the construction of King Salman International Airport, the expansion of Dubai's Al Maktoum International Airport, the proposed greenfield terminal airport in Bahrain, and the development of the Muscat Airport Free Zone.

Figure 3: **Middle Eastern airlines' share of global air cargo capacity, 2023 (% of total cargo tonne kilometers)**



Source: IATA, PwC Analysis

Figure 4: **Split of air cargo by Middle Eastern airports, 2023 (million tonnes)**



Source: HIS Markit, ACI World, PwC Analysis

Within the region, Qatar's Hamad International Airport (DOH) and Dubai's DXB and DWC airports collectively accounted for almost two-thirds of the Middle East's total air cargo volume in 2023 (see Figure 4). Volumes are set to increase dramatically at other major Middle Eastern hubs, such as King Khalid International Airport, given the projected rise in cargo traffic across the region.

By its nature, land transport by rail and road is generally national or regional. In the Middle East, trains are currently used mostly to transport chemicals and mining products, but networks are limited, despite recent efforts to build more track and increase investment in passenger transport and container freight.

Road transport, therefore, remains the preferred land freight option, with trucks used to move goods between key entry points such as Dubai's ports and airports, Bahrain's airport, and Jeddah Port. Road networks, in particular highways, are generally well developed across the region, and there are good-quality road connections within major centers and between logistics facilities in some Middle Eastern countries—notably Saudi Arabia, the UAE, and Oman.

Yet overall, much of the Middle East's transport and logistics ecosystem requires further investment, especially in view of the region's forecast future needs.

Major regional transport and logistics challenges

Geopolitical disruptions

In the past two years, trade flows through and within the region have been hampered by a series of disruptions, the most serious being the risks posed by conflicts around the Bab El-Mandeb Strait at the southern end of the Red Sea. Global shipping lines have been forced to take longer routes around Africa, adding approximately 21 sailing days, which in turn has increased insurance costs and reduced maritime revenues in Saudi Arabia and Egypt. Certain logistics infrastructure projects have also faced delays.

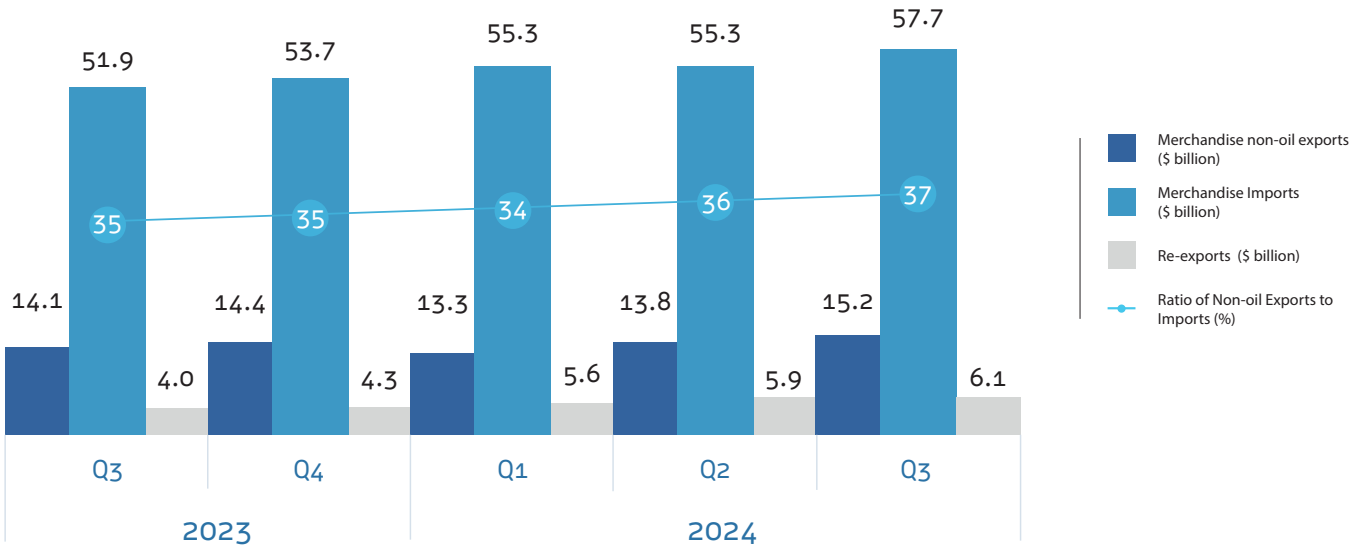
At the same time, the disruption has prompted transporters of high-value or time-sensitive goods, such as electronics and perishables, to shift from sea freight to air cargo, especially on Asia-Europe and Africa-Europe lanes. Partly due to this effect, air cargo volumes have surged at regional air transport hubs, such as Dubai and Doha, while air freight rates on major routes such as Dubai-Nairobi, Dubai-Johannesburg, Doha-Frankfurt, and Doha-London have increased on average by between 15% and 20% since 2023, according to leading industry incumbents.

High import dependence

Despite the drive by GCC member states to reduce their dependence on energy revenues, they still have high non-oil trade deficits that expose the region to global market volatility, supply-chain disruptions, and inflation, particularly in food and essential goods. For instance, in the five quarters to the end of September 2024, Saudi Arabia's non-oil imports were worth almost four times the value of its non-oil exports (see Figure 5).

Figure 5: **Saudi Arabia's non-oil trade, July 2023-Sept 2024 (% of imports and exports)**

Non-oil exports and imports (Q3 2023 - Q3 2024)

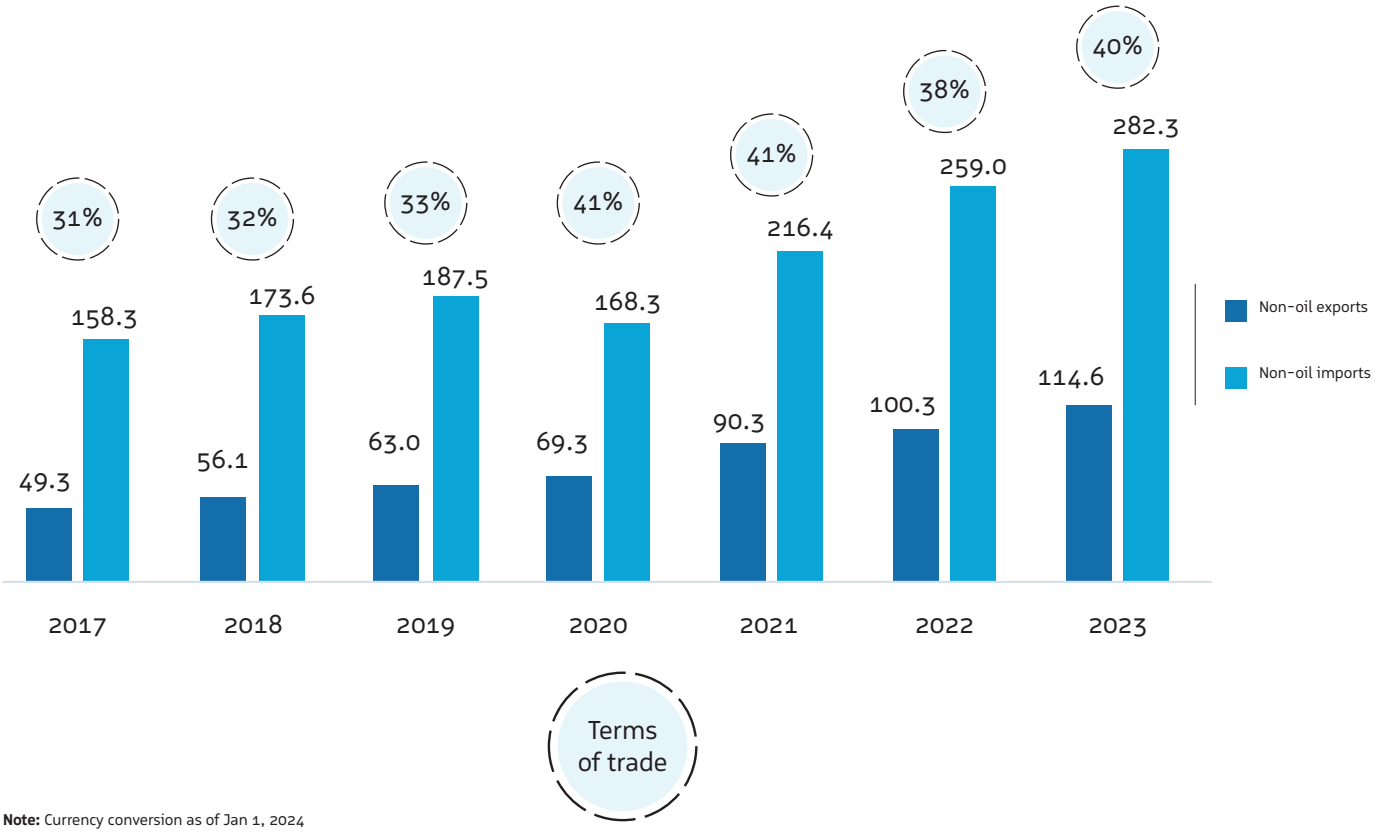


Currency conversion SAR to USD- as of December 31, 2024

Source: Saudi Arabia, General Authority for Statistics

Similarly, the UAE's non-oil imports still amounted to more than double the value of its equivalent exports in 2023 (see Figure 6).

Figure 6: **The UAE's non-oil trade, 2017-2023 (USD billion) and terms of trade (%)**



Note: Currency conversion as of Jan 1, 2024

Source: UAE, Federal Competitiveness and Statistics Centre

This non-oil trade imbalance has a direct impact on logistics operations and costs across the Middle East, creating significant empty cargo "backhaul" volumes where there are no domestically produced goods for export to fill inbound ships, airplanes, and trucks. The effect is further exacerbated by global trade flows from Asia to Europe and North America being much larger than those in the opposite direction.

Limited cross-regional collaboration

Regional collaboration to establish seamless, cross-border trade has been discussed by Middle Eastern governments for decades, with the EU's Trans-European Transport Network (TEN-T) often cited as a possible model.[10] Nonetheless, steps to turn the concept into reality have been hampered by a range of factors, including prioritization of national projects and budgetary pressures.

However, progress is being made, with the GCC Customs Union providing a good illustration of how smart investment and digitalization can support cross-border trade. Established in 2003, the union was intended to operate according to a single customs regime and common external tariff, eliminating barriers to the transport of goods between member states. The new Integrated GCC Customs Tariff (see section 3.2 below), agreed in December 2024, is a further step in the right direction.[11]

Limited integration between sea, road, rail, and air transport

The region's heavy reliance on road transport for freight movement stems from limited rail connectivity to shipping ports and airports. This is compounded by the lack of major transport terminals and hubs that connect sea, road, rail, and air networks in a coordinated way that reflects commercial traffic flows. The Gulf Railway Project was launched to address this challenge, by expanding and integrating the region's rail network to enhance logistics efficiency.

In recent years, China has offered the outstanding global illustration of how joined-up transport and logistics projects that deploy advanced technologies can act as formidable drivers of economic growth. For example, in 2021, China launched a to carry electronics and other consumer goods from the inland city of Yiwu, in the coastal province of Zhejiang, to the port of Ningbo, 200 kilometers away, a journey which previously took six to eight hours by truck. From Ningbo, goods are shipped directly across the Pacific to the US. This coordinated rail-sea service is the first of its kind in China, with the country's rail and maritime authorities working in partnership with the private-sector logistics by as much as 50%.[12]

Skilled labor shortages in the logistics sector

The lack of skilled labor increasingly hampers not only the capacities but also the modernization of the region's transport and logistics sector. In the aviation industry, for example, Boeing estimated in July 2024 that the Middle East will require 68,000 new pilots between 2024 and 2042 to keep pace with rising demand and fleet capacity.[13] Another example is the regional carrier Riyadh Air, which said in 2023 that it would need to train 700 pilots by 2025.[14] Meanwhile, international airlines such as Emirates, Etihad Airways, and Qatar Airways depend heavily on expatriate pilots, with Emirates recently running recruitment roadshows in 18 countries.

Similarly, the Middle East's road freight sector has a significant shortage of better-qualified drivers. According to the International Road Transport Union (IRU), there are currently more than 3 million truck driver vacancies worldwide, with shortages projected to double by 2028.[15] In the Middle East, the problem is especially severe, due to the region's rapid economic growth and major giga projects in Saudi Arabia that rely on trucks to transport most construction materials and other goods.

Lastly, Middle Eastern countries need more skilled workers to operate modern warehouses, sorting centers, and control towers, as new automotive technologies start to play an increasingly important role in the region's logistics sector.

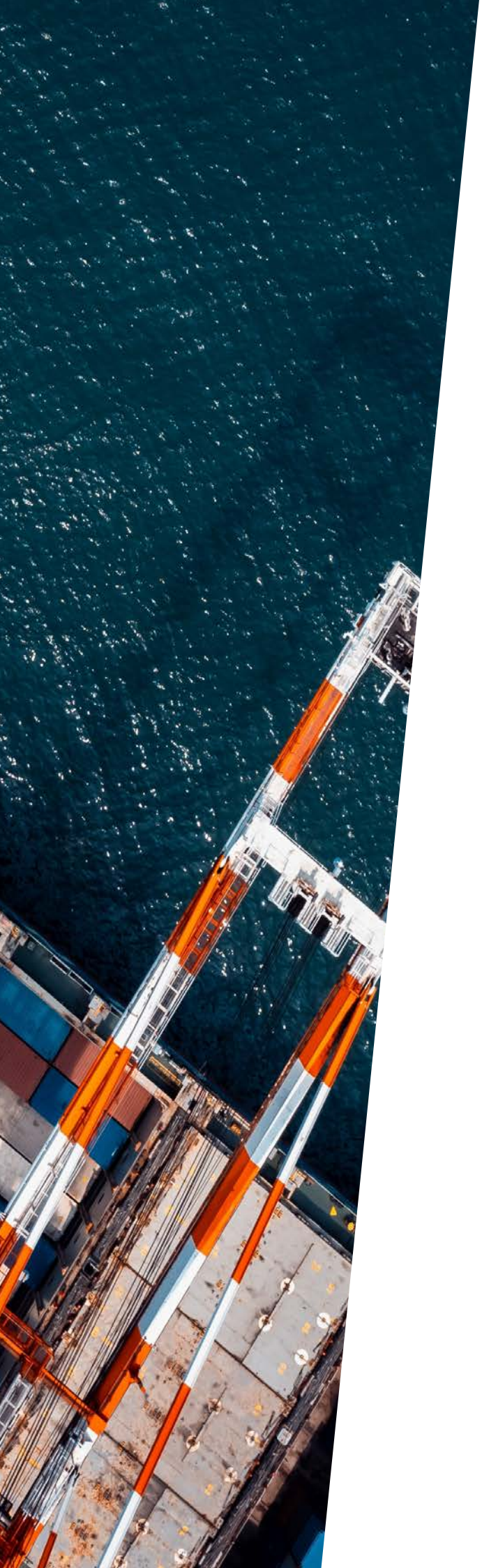
Compliance with international sustainability standards and regulations

The increasing worldwide trend toward sustainability represents both a major opportunity and a significant current challenge for the region's logistics sector. A good example is the EU's Carbon Border Adjustment Mechanism (CBAM), which is scheduled to take effect from 2026.[16] The CBAM requires exporters to meet strict emissions standards and provide transparent reporting —both areas where many Middle Eastern countries fall behind other economies due to limited "green" logistics infrastructure and insufficient adoption of clean technologies.

Similarly, the World Shipping Council's Green Balance Mechanism (GBM), which comes into force in 2027, will impose a steadily increasing fee on fossil fuels used by international cargo fleets and allocate the funds to the production and subsidy of "green" fuels to achieve the maritime industry's net-zero target for carbon emissions by 2050.[17] The GBM is designed to encourage a sector-wide net-zero drive by building on efforts already underway at some shipping lines to reduce their carbon footprint. Examples in this regard include France's CMA CGM Group, which aims to have 120 vessels capable of using alternative "green" fuels by 2028, and Geneva-based MSC Mediterranean Shipping Company, which is renewing its fleet with 100 dual-fuel ships.[18] Middle Eastern shipping companies now need to invest in research and development of non-fossil fuels so they are ready when the GBM takes effect.

Section 2

How National Transformation Programs Can Contribute More Effectively to the Middle East's Transport and Logistics Needs



The central role of transport and logistics in national transformation agendas

During the past decade, a widening range of ambitious national transformation programs have acted as critical drivers of the Middle East's economic growth and modernization. The overarching goal is to create advanced, highly educated, and digitalized societies for the benefit of all the region's citizens. At the heart of programs, such as Saudi Arabia's Vision 2030, Qatar's National Vision 2030, and Kuwait's Vision 2035,[19] is a commitment to reduce dependence on oil and gas revenues. In the region, building a robust logistics network is a key enabler of this economic diversification, facilitating trade expansion, industrial growth, and regional connectivity. This will position the region as a global trade and logistics hub beyond hydrocarbons.

To this end, an array of targeted initiatives within the various national transformation programs aim to exploit the sector's crucial potential role as a growth engine. For example, Saudi Arabia's National Transport and Logistics Strategy (NTLS), launched in 2021 and revised recently in 2025, envisages an investment of more than $265 billion by 2030 to establish the kingdom as a leading international logistics center.[20] The NTLS is complemented by the National Industrial Development and Logistics Program (NIDLP), which supports the growth of the industrial, mining, energy, and logistics sectors to diversify the economy and create quality jobs.[21]

Other relevant initiatives include:

- **Egypt – Seven Integrated Logistics Corridors:** In November 2024, the Ministry of Transport announced a plan to build corridors across Egypt to connect major industrial and agricultural areas with maritime ports and leading cities.[22]

- **Dubai Commercial Transport Strategy 2030:** Aims to double the sector's direct annual contribution to the economy by $4.5 billion, increase infrastructure technology adoption by 75%, and reduce the carbon emissions by 30%.[23]

- **Qatar Freight Master Plan:** Key projects include expanding Hamad Port and Hamad International Airport and upgrading land borders at Abu Samra to facilitate smooth, secure trade flows.[24]

- **Oman's National Logistics Strategy 2040:** Aims to position the country as a global logistics hub by 2040 and make the sector the second-largest contributor to GDP after hydrocarbons.[25]

- **Bahrain Logistics Services Sector Strategy 2022–26:** Aims to position Bahrain as a leading regional logistics hub by expanding port capacities, improving air cargo facilities, and integrating advanced digital technologies to boost supply-chain efficiency.[26]

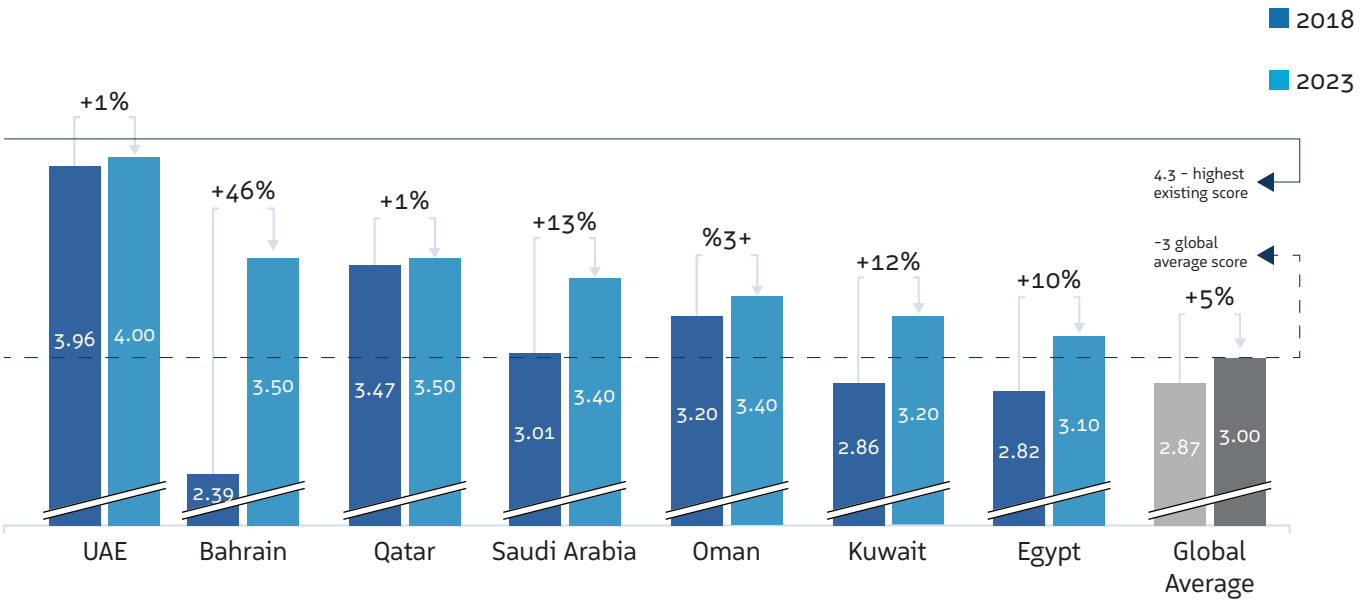
- **Kuwait – Sustainable Logistics Services:** Under Kuwait Vision 2035, the country aims to become a global logistics hub over the next decade via a series of sustainable transport initiatives underpinned by advanced technologies that will upgrade ports, airports and road networks, and streamline customs processes.[27]

Multiple national transport and logistics initiatives do not deliver the maximum regional impact

Middle Eastern leaders and policymakers increasingly recognize that a top-down, state-directed approach will not achieve long-term, sustainable growth in a sector with so many highly market-sensitive areas, from perishable goods transport to maritime insurance. In Saudi Arabia, for example, the NIDLP runs funding competitions for private sector logistics projects, while in 2023, the Dubai Roads and Transport Authority approved the Dubai Portfolio for Public-Private Partnership (PPP) (2024-2026), which covers 10 designated transport projects. In Qatar, the Qatar Chamber of Commerce and Industry called in January 2024 for private sector freight, logistics, and customs clearance companies to join the newly formed Qatar Association for Freight Forwarding and Logistics (QAFL), which will work closely with the government in drafting modernization policies.

Overall, it is already possible to measure the progress made by Middle Eastern countries in overhauling and modernizing their logistics sectors as part of national transformation agendas. Between 2018 and 2023, all GCC countries and Egypt improved their scores in the World Bank's annual Logistics Performance Index (see Figure 7).[28] The index draws on multiple data sources, including a survey of international logistics operators, and granular, high-frequency information on maritime shipping, container tracking, and postal and air freight traffic. This improvement, which saw all these countries exceed the global average score of 3.0 in 2023, is especially creditable, given the sector-wide disruption caused by the COVID-19 pandemic, Russia-Ukraine conflict, Red Sea crisis, and other external shocks.

Figure 7: **World Bank Logistics Performance Index (LPI), Middle East, 2018-23**



Source: World Bank

While national logistics improvements are evident, realizing their full potential depends on greater regional coordination. For example, a foreign infrastructure investor may observe that multiple GCC countries and Egypt aim to become global logistics hubs and question how each can differentiate itself in a competitive landscape. Similarly, a local road transport firm moving perishable goods across borders may encounter varying customs processes and haulage standards, which, while aligned with national transformation goals, are not yet fully harmonized regionally.

To maximize efficiency and attract investment, the next step in the region's logistics transformation lies in cross-border collaboration, ensuring seamless trade flows while maintaining each country's distinctive strengths.

A. AVIATION

Saudi Arabia: King Salman International Airport, Riyadh

- Incorporation of current terminals at King Khalid International Airport
- Annual passenger handling capacity of 120 million by 2030
- Annual cargo handling capacity of 3.5 million tonnes by 2050.

Bahrain: Greenfield Terminal Airport

- Forecast investment of $1.1 billion
- Annual passenger handling capacity of 40 million to 50 million by 2035
- Offshore site requiring dredging and additional works to connect to the mainland.

Oman: Muscat Airport Free Zone

- Annual air cargo capacity of 350,000 tonnes in the project's first phase
- Direct air access to more than 90 international destinations
- 100% foreign ownership rights and zero import and export duties.

B. MARITIME

Egypt: Burj Al-Arab Dry Port, Alexandria

- 133-acre dry port connected by rail and road to nearby marine ports
- Public-Private Partnership (PPP) with $25 million in total forecast investment
- 2.5 million tonnes per year of dry bulk goods and general goods handling capacity.

UAE: Maqta Gateway Project, Abu Dhabi Ports Group

- Comprehensive digital logistics platform for more than 70 UAE stakeholders
- Streamlines customs processes and reduces trade documentation
- Processes more than 150 million transactions annually.

Kuwait: Mubarak Al-Kabeer Port Project

- Joint venture with China under Beijing's Belt and Road Initiative
- Total forecast investment of around $614 million
- 60 berths with annual capacity for 1.8 million twenty-foot equivalent units (TEUs).

C. RAILWAYS

Saudi Arabia: Landbridge Project

- 1,300-kilometer railway network from Jeddah via Riyadh to Dammam and Jubail
- Total annual cargo capacity of 8 million tonnes of freight and 350,000 containers
- Total forecast investment of around $7 billion.

UAE: Railway Programme

- Will connect all emirates and major cities via high-speed rail lines
- Total forecast investment of AED 50 billion ($13.61 billion)
- Advanced technologies to integrate port and customs services with the network.

Egypt: High-Speed Railway Extension

- Around 2,000 kilometers of high-speed rail connecting Alexandria, Cairo, Luxor, and Aswan
- Total forecast investment of around $7.8 billion
- Forecast annual capacity of up to 30 million passengers.

D. ROADS

UAE: Abu Dhabi Mid-Island Parkway

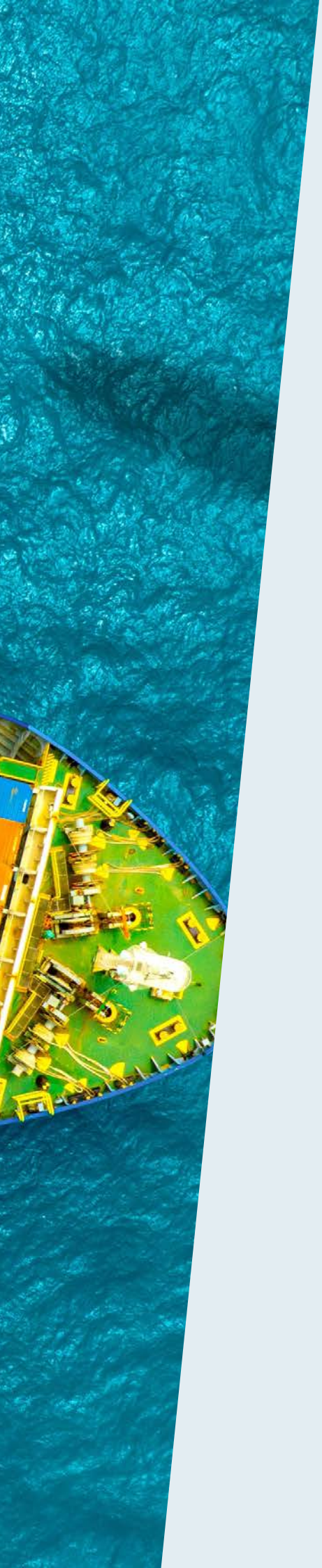
- 25-kilometer network to ease traffic congestion across Abu Dhabi's mid-island area
- Multiple lanes for commercial vehicles and dedicated public transport lanes
- Sustainable design features, including green spaces and energy-efficient lighting.

Bahrain-Qatar Causeway Project

- 40-kilometer causeway with forecast total investment of $5 billion to $7 billion
- Designed to carry road and potentially rail traffic
- Projected reduction of travel time between the two countries from more than four hours to 30 minutes.

Section 3

Cross-Border Collaboration Between Middle Eastern Countries Is Essential to Transform the Region's Transport and Logistics



Toward more integrated regional cooperation

There are many areas where governments and private-sector transport and logistics companies and investors are already cooperating on cross-border projects. A prominent example, already noted, is the GCC Railway Project. Another, even more ambitious international venture, is the proposed India-Middle East-Europe Corridor (IMEC), which aims to connect India, the Middle East, and Europe through an integrated network of railways, ports, energy pipelines, and digital infrastructure.[29] Key participating countries include India, Saudi Arabia, the UAE, Jordan, Israel, and several European states, with support from the United States. The corridor is intended to lower transit costs and drastically reduce transit times for goods between India and Europe.

While these ambitious projects showcase the region's commitment to growth, they also highlight the challenges of large-scale planning. For example, regional coordination in logistics remains limited, as seen in the trucking example in Section 2.2 above, where differences in customs processes and haulage standards create inefficiencies. Meanwhile, the India-Middle East-Europe Economic Corridor (IMEC), announced in 2023, is still in its early stages, with progress slowed by ongoing regional geopolitical instability. Moving forward, a more integrated approach to logistics and infrastructure planning will be key to unlocking the region's full potential.

The external viewpoint of a foreign infrastructure investor provides a useful reality check in this regard. Such an investor, seeking answers to why so many cross-border projects are delayed and frequently experience cost overruns, would agree that external shocks such as COVID-19 and global inflation have played their part. But a full audit might also focus on political differences, differing regulatory frameworks, and infrastructure disparities as factors that hamper seamless collaboration.

One key to better cross-border collaboration is to work at ground level on a host of unfinished practical tasks that must be completed to ensure the Middle East's future as a regional logistics hub for international commerce. Completing smaller projects that may only take a year or two to execute is also vital to inject renewed momentum into efforts by the GCC and national governments to develop a world-class transport and logistics network that spans the Middle East.

For example, a truck driver delivering fresh produce across borders illustrates how small, targeted improvements can enhance efficiency. While road freight in the Middle East benefits from low fuel costs due to government subsidies, border delays remain a significant challenge. These delays are not just caused by customs paperwork or differing national haulage standards—they are also due to the limited number of border crossings, which struggle to handle increasing commercial and passenger traffic.

Expanding border crossings is a practical, achievable solution that could be implemented within years, rather than decades. With greater cross-border cooperation, doubling the number of major GCC border crossings by 2030 is a realistic goal that would improve logistics efficiency and reduce transport costs.

New technologies are a critical connector for high-impact cross-border projects

As long as physical infrastructure is still somewhat amiss, advanced digital technologies can only achieve so much. The first challenge with those missing border posts, for example, is simply to build or extend them and streamline associated processes. Across the Middle East, it is the same story, whether the challenge is the need for more railways to connect dry and maritime ports, a shortage of fulfilment centers, or the absence of intermodal hubs to allow for seamless cargo flows.

From one angle, such problems are the by-product of success. In the past decade, national transformation programs have implemented ambitious mega-projects and other developments at such speed that the region has sometimes been playing catch-up to meet ever-rising demand for trucks, freight trains, and cargo planes serviced by modern warehouses and ports. The region's opportunity, set out in these transformation agendas, is that it can develop world-class transport and logistics infrastructure, literally from scratch, which harnesses the latest technologies, from highly automated warehouses operated by robots to electric, high-speed trains with a far lower carbon footprint.

In this regard, there are plenty of national transport and logistics projects, typically featuring Public-Private Partnerships (PPPs). For example, Saudi Arabia's Logistics Deputyship, established in 2022, has a mandate to develop comprehensive logistics strategies and specialized high-tech logistics zones with private sector partners. The Kingdom's Master Plan for Logistics Centers, launched in 2023, envisages the development of 59 logistics zones by 2030, located near major ports, industrial areas, and cities, to streamline internal cargo movements and goods for export.[30]

Similar national logistics initiatives around the region include:

- **Bahrain—Global Sea-to-Air Logistics Hub:** Launched in 2021, the hub integrates maritime and aviation logistics and can handle up to 10 million tonnes per year. The hub features a newly built seaport with advanced, high-tech container systems and an adjacent air cargo terminal with 40 dedicated aircraft.[31]

- **Oman— Logistics Center 2023-2025 Program:** The initiative has forecast investment of $1.8 billion to modernize the country's logistics and supply-chain infrastructure. Key goals include the development of advanced warehousing facilities, distribution centers, and multimodal transport hubs to increase annual cargo handling capacity to 15 million tonnes.[32]

The challenge for Middle Eastern governments in transforming their logistics sectors lies in balancing ambitious national goals with practical implementation. The real test is in delivering tangible improvements—from electrified cross-border railways and cleaner truck fleets to digitalized warehouses and other essential infrastructure. Focusing on both large-scale vision and on-the-ground execution will be key to building modern, efficient, and sustainable transport and logistics systems across the region.

Encouragingly, in recent years, Middle Eastern governments have increasingly got the "think small" message about transport and logistics against a background where a series of external macro shocks has focused minds on factors within their control. As members of the WTO Trade Facilitation Agreement (TFA), GCC countries have been implementing a wide set of commitments to streamline processes, such as pre-arrival goods clearance and greater transparency on fees and customs regulations. The next step is to take advantage of these procedural reforms to roll out new infrastructure that reflects a "think small" approach while leveraging advanced technologies.

For example, there is no reason in principle why all the customs and identity checks at existing border posts cannot be executed with a single digital smart card, with much of the processing performed online before the trucker starts his journey. This illustration is particularly relevant because GCC countries are making significant progress toward customs integration that leverages advanced technologies to streamline and unify procedures. In December 2024, the GCC Customs Union Authority issued a new Integrated GCC Customs Tariff, creating a single 12-digit system for all member states and increasing the total number of tariff codes from 7,800 to more than 13,400 goods and products.

Training logistics and transport-sector workers to use new technologies is an urgent priority – but not as difficult as it sounds

It is easy to imagine that high-tech logistics is the exclusive domain of highly qualified specialists. Here is another example in which thinking small about the everyday challenges involved in cargo transport is instructive. Consider what it takes to have a fully digitalized customs and border control post for heavy and light goods commercial traffic. The trucker and the border-post official do not need advanced digital skills to operate the system; they just need to know how to swipe a card, enter a pin code, and read the result on a computer screen.

Similarly, an employee at a newly built warehouse at a Middle Eastern maritime port must understand how to use automated technologies to ensure that cargo moves in and out of the building at the right time to the correct destination. But they do not need to understand how technology works; any more than a banker needs to understand the technology behind financial data analytics. In the same way, the driver of a freight train on a new transnational high-speed railway line will require training to adapt to advanced signaling technologies.

These technologies, when properly implemented with appropriate training programs, typically make the job easier. Furthermore, the train driver or warehouse employee does not need a degree in computer science to acquire the necessary tech skills. It is far less challenging, for instance, to rely on real-time supply-chain data to organize an efficient construction site than to depend on paperwork that cannot tell the site manager exactly where the next truck delivery of building materials is currently located on its journey.

Why successful cross-border transport and logistics ventures must be sustainable

The Middle East's infrastructure developers are building the next generation's future transport systems at a time when the need to mitigate global warming is pressing. On a practical level, sustainability is also essential for financial reasons. These days, it is extremely likely that investors will insist that a project meets the highest, internationally recognized ESG investing criteria before committing capital.

The "easy" part to this sustainability challenge is that, by definition, advanced logistics technologies and forms of transport do less harm to the environment than traditional counterparts. For example, in January 2025, EMX (the parcel delivery subsidiary of 7X, previously Emirates Post Group), launched its first fleet of e-bikes and committed to replacing 98% of all its delivery vehicles with electric alternatives by 2030.[33] At Qatar's Hamad Port Free Zone, smart technology includes solutions to utilize solar energy and recycle waste, while at Dubai's Jebel Ali Port, DP World and the Swedish supply-chain technology company Einride plan to deploy the Middle East's largest fleet of driverless electric cargo vehicles.

Across the region, similar initiatives are increasingly common, achieving an instant "green" impact and demonstrate the importance of end-to-end efforts for sustainable logistics that incorporate environmentally friendly, resilient, and efficient supply chains for the future. Middle Eastern governments that prioritize this approach to achieve cost-effective, sustainable transport and logistics systems, from sourcing to final delivery, will gain a long-term competitive advantage over countries whose infrastructure and working practices are still rooted in the pre-digital era.

Section 4

Conclusion: Securing the Middle East's Future as an International Commercial Hub

Strong regional collaboration among countries in the logistics sector can have a profound impact on economic growth, supply-chain resilience, and efficiency. Middle Eastern governments can draw inspiration from other cross-border logistics and transport projects currently underway in other regions.

A noteworthy case is the EU's Trans-European Transport Network (TEN-T), a €515 billion multi-year program aimed at integrating roads, railways, airports, water infrastructure, and urban nodes across member states, using advanced, sustainable technologies and alternative fuels. According to the European Commission, this comprehensive program could raise the EU's GDP by 2.4% and create 840,000 new jobs, while helping to reduce the region's CO_2 emissions.[34]

In the Middle East, similar regional logistics collaboration would help leverage the various geographical advantages of individual countries, enhance supply-chain resilience, optimize resource utilization, and improve operational efficiency. Furthermore, a platform has already been built over the past decade in the form of national transformation programs that have attracted huge levels of investment in infrastructure and information and communication technologies (ICT).

The challenge now is for governments, private sector developers, and investors to move beyond purely national transformation objectives to achieve benefits that extend across the region. At the same time, they should leverage each country's unique strengths to secure the Middle East's status as one of the world's great commercial hubs for the next generation.

Critically, existing cross-national collaboration programs should move forward by focusing on small, feasible steps that deliver outcomes rapidly. In this spirit, we conclude with several proposals that are not intended to be comprehensive or definitive. They are examples of the kind of practical, ground-level projects with the potential to build cross-border confidence between partners and act in turn as staging posts toward broader collaboration.

	Priorities	International case studies
Create a regional digital logistics platform to support standardized digital road consignment notes (CMRs) and real-time cross-border tracking	• Drastically reduce CMR processing times. • Increase real-time data visibility between carrier and shipper.	• The EU's e-CMR system enables digital waybills, reducing paperwork and streamlining freight movement. • BRICS countries are creating a Digital Logistics Platform to improve trade interactions and logistics infrastructure among member nations.
Build inland distribution hubs serving multiple Middle Eastern countries	• Decentralize logistics. • Reduce dependency on coastal infrastructure.	• Germany: The Rhine River port of Duisburg is the world's largest inland trade hub, handling approximately 4.3 million twenty-foot equivalent units (TEUs) of container cargo in 2021. • China: The inland cities of Chongqing and Chengdu have developed major trade hubs to reduce their dependence on the ports of Shanghai and Guangzhou.
Develop specialized, uniform cross-border logistics training programs	• Equip the region's logistics workforce with skills in relevant advanced technologies.	• Singapore's Logistics Academy trains professionals in AI-driven supply-chain management and digital freight forwarding • The European Logistics Association (ELA) has developed standardized ELA Qualification Standards (ELAQF) to define expected competencies for logistics professionals at different levels.

Contacts

Dominik Baumeister
Partner and Transport and Logistics Global and Middle East Lead
PwC Middle East
dominik.b.baumeister@pwc.com

Chitransha Mathur
Director, Transport and Logistics
PwC Middle East
chitransha.x.mathur@pwc.com

Contributors:
Anushree Kejriwal
Pratik Kanthe

PwC Middle East

At PwC, our purpose is to build trust and solve the most important challenges facing government, businesses and communities. We are on a mission, bringing our community of solvers together to deliver human-led, tech-powered solutions from strategy through to execution, developing talent and scaling exponential opportunities that deliver sustained outcomes for our clients for future generations. We're a network of firms in 149 countries with nearly 370,000 people who are committed to delivering quality in assurance, advisory and tax services.

Find out more and tell us what matters to you by visiting us at www.pwc.com.
Established in the Middle East for over 40 years, PwC Middle East has 30 offices across 12 countries in the region with around 12,000 people. (www.pwc.com/me).

PwC refers to the PwC network and/or one or more of its member firms, each of which is a separate legal entity. Please see www.pwc.com/structure for further details.

Endnotes

1 Congressional Research Service (CRS). Red Sea Shipping Disruptions: Estimating Economic Effects, May 8, 2024, https://crsreports.congress.gov/product/pdf/IF/IF12657

2 IEA, Strait of Hormuz – Factsheet (undated),https://iea.blob.core.windows.net/assets/203eb8eb-2147-4c99-af07-2d3804b8db3f/StraitofHormuzFactsheet.pdf

3 U.S. International Trade Commission, Executive Briefings on Trade, April 2021, https://www.usitc.gov/publications/332/executive_briefings/ebot_greg_larocca_freight_costs_weighing_covid_pdf.pdf World Bank blogs, "Navigating troubled waters: The Red Sea shipping crisis and its global repercussions", May 16, 2024, https://blogs.worldbank.org/en/developmenttalk/navigating-troubled-waters--the-red-sea-shipping-crisis-and-its-

4 The National (UAE), "UAE sets Dh200bn transport logistics goal to drive global trade", Feb 3, 2025, https://www.thenationalnews.com/news/uae/2025/02/03/uae-unveils-dh200-billion-transport-logistics-strategy-to-drive-global-trade/

5 Government of Saudi Arabia, https://www.vision2030.gov.sa/en

6 Government of the UAE, https://wetheuae.ae/en

7 Government of Qatar, https://www.gco.gov.qa/en/state-of-qatar/qatar-national-vision-2030/our-story/

8 Gulf Cooperation Council Media Center, Nov 7, 2024, https://gcc-sg.org/en/MediaCenter/News/Pages/news2024-11-7-5.aspx

9 IATA, Air Cargo Market Analysis, September 2024,https://www.iata.org/en/iata-repository/publications/economic-reports/air-cargo-market-analysis-september-2024/ European Commission, Trans-European Transport Network (TEN-T), https://transport.ec.europa.eu/transport-themes/infrastructure-and-investment/trans-european-transport-network-ten-t_en

10 European Commission, Trans-European Transport Network (TEN-T), https://transport.ec.europa.eu/transport-themes/infrastructure-and-investment/trans-european-transport-network-ten-t_en

11 PwC, "2024 updates to the Unified Customs Tariff of the GCC States", Jan 28, 2024, https://www.pwc.com/m1/en/services/tax/me-tax-legal-news/2024/uae-2024-updates-to-the-unified-customs-tariff-of-the-gcc-states.html

12 The Loadstar (Taiwan), "Zim launches 'unique' sea-rail service to get Yiwu exports to US quicker", July 15, 2021, https://theloadstar.com/zim-launches-unique-sea-rail-service-to-get-yiwu-exports-to-us-quicker

13 Boeing, "Boeing Projects Global Need for Nearly 2.4 Million New Commercial Pilots, Technicians, Cabin Crew", July 22, 2024, https://investors.boeing.com/investors/news/press-release-details/2024/Boeing-Projects-Global-Need-for-Nearly-2.4-Million-New-Commercial-Pilots-Technicians-Cabin-Crew/default.aspx

14 Arabian Gulf Business Insight (AGBI), "Pay and perks set to soar for in-demand pilots," July 12, 2023, https://www.agbi.com/aviation/2023/07/middle-east-pilots-demand-recruitment/

15 IRU, "Global truck driver shortage to double by 2028, says new IRU report", Nov 20, 2023, https://www.iru.org/news-resources/newsroom/global-truck-driver-shortage-double-2028-says-new-iru-report?utm_source=chatgpt.com

16 European Commission, Carbon Border Adjustment Mechanism, Jan 17, 2025, https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism_en

17 World Shipping Council, "Delivering net zero by 2050 with the Green Balance Mechanism", (undated), https://www.worldshipping.org/green-balance-mechanism

18 World Shipping Council, "Delivering net zero by 2050 with the Green Balance Mechanism", (undated), https://www.worldshipping.org/green-balance-mechanism

19 Kuwait Ministry of Foreign Affairs, https://www.mofa.gov.kw/en/pages/kuwait-vision-2035
20 Zawya (Saudi Arabia), "Saudi Arabia spends $53.33bln out of the planned $266bln to implement National Transport Strategy: minister", Oct 14, 2024, https://www.zawya.com/en/business/transport-and-logistics/saudi-arabia-spends-5333bln-out-of-the-planned-266bln-to-implement-national-transport-strategy-minister-erxodgrk
21 Government of Saudi Arabia, https://www.vision2030.gov.sa/en/explore/programs/national-industrial-development-and-logistics-program
22 Egypt, State Information Service, "Egypt develops 7 integrated logistic corridors to enhance national transport network", Nov 25, 2024, https://sis.gov.eg/Story/202213/Egypt-develops-7-integrated-logistic-corridors-to-enhance-national-transport-network?lang=en-us#:~:text=The%20integrated%20logistic%20corridors%20are,Qena%2DAbu%20Tartur%20Logistic%20Corridor.
23 Dubai Commercial Transport Strategy 2030, (undated), https://u.ae/en/about-the-uae/strategies-initiatives-and-awards/strategies-plans-and-visions/transport-and-infrastructure/dubai-commercial-transport-strategy-2030#:~:text=Commercial%20Transport%20Strategy%202030%20was%20launched%20as%20a,support%20the%20sector%E2%80%99s%20growth%20and%20boost%20its%20competitiveness.
24 Qatar, Ministry of Transport, "Ministry Finalizes Qatar Freight Master Plan", Feb 18, 2024, https://www.mot.gov.qa/en/news/ministry-finalizes-qatar-freight-master-plan
25 Oman, Ministry of Transport, Communications and Information Technology, "Strategy of Oman Logistics Center 2040", (undated), https://www.mtcit.gov.om/itaportal/Pages/Page.aspx?NID=873111&PID=1342488#:~:text=Strategy%20of%20Oman%20Logistics%20Center%202040,handle%20and%20distribute%20goods%20effectively.
26 Bahrain News Agency, "Bahrain's Logistics Services Sector Strategy details revealed", Nov 18,2021, https://www.bna.bh/en/BahrainsLogisticsServicesSectorStrategydetailsrevealed.aspx?cms=q8FmFJgiscL2fwIzON1%2BDhV6Jo6pQljCbS1xdrh7%2Buk%3D
27 Oxford Business Group, "Kuwait Upgrades Transport Infrastructure to Meet Development Goals," 2022, https://oxfordbusinessgroup.com/reports/kuwait/2022-report/transport-logistics/network-of-the-future-rehabilitating-upgrading-and-expanding-existing-services-and-infrastructure-to-meet-new-kuwait-2035-goals/?utm_source=chatgpt.com
28 World Bank, Logistics Performance Index (LPI), 2023, https://lpi.worldbank.org/about
29 Government of India, Ministry of External Affairs, "Partnership for Global Infrastructure and Investment (PGII) & India-Middle East-Europe Economic Corridor (IMEC)," Sept 9, 2023, https://www.mea.gov.in/press-releases.htm?dtl/37091/Partnership_for_Global_Infrastructure_and_Investment_PGII_IndiaMiddle_EastEurope_Economic_Corridor_IMEC
30 U.S. International Trade Administration, "Saudi Arabia Logistics Launch of the Master Plan for Logistics Centers", Dec 9, 2023, https://www.trade.gov/market-intelligence/saudi-arabia-logistics-launch-master-plan-logistics-centers#:~:text=As%20part%20of%20the%20master,the%20rest%20of%20the%20country.
31 Bahrain News Agency, "Bahrain launches fastest Global Sea-to-Air logistics Hub in region", Sept 29, 2021, https://www.bna.bh/en/BahrainlaunchesfastestGlobalSeatoAirlogisticsHubinregion.aspx?cms=q8FmFJgiscL2fwIzON1%2BDml3IVHe08e9ro3spxfh4mg%3D

32 Government of Oman, Ministry of Transport, Communications and Information Technology, “Harib bin Thuwaini Patronizes the celebration of the first Logistics Day”, April 30, 2024, https://www.mtcit.gov.om/ITAPortal/MediaCenter/NewsDetail.aspx?NID=111276#:~:text=His%20Excellency%20explained%20that%20for,value%20of%20investments%20and%20economic

33 Logistics Middle East, “EMX to replace 98% of vehicles with electric alternatives by 2030”, Jan 7, 2025, https://www.logisticsmiddleeast.com/logistics/emx-to-replace-98-of-vehicles-with-electric-alternatives-by-2030

34 European Commission, “Questions and Answers: The revision of the TEN-T Regulation,” Dec 14, 2021, https://ec.europa.eu/commission/presscorner/detail/en/qanda_21_6725

WORLD GOVERNMENTS SUMMIT

JOIN THE CONVERSATION

@WorldGovSummit

www.worldgovernmentssummit.org