

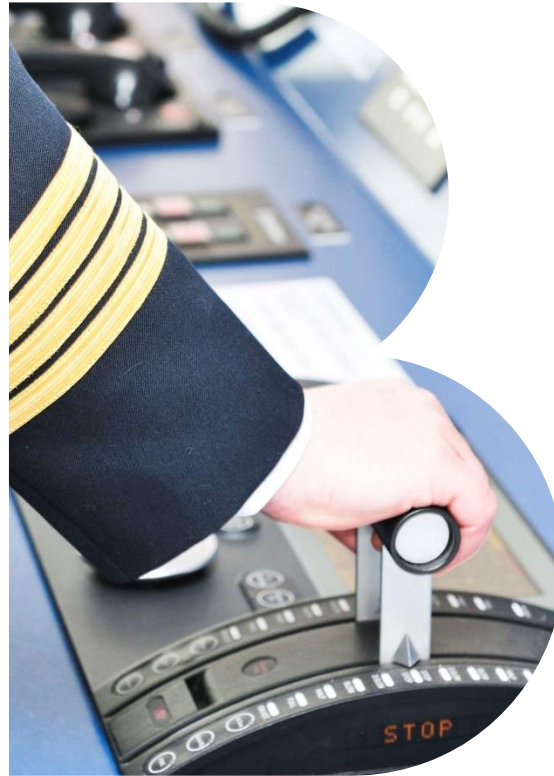
Accelerating Iran's maritime trade and economic growth



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- Ports as engines of economic growth
- Engines of growth opportunities in Iran

Introducing Roland Berger



Roland Berger is a leading global strategy firm with successful operations in all major international markets

Our global presence

51 offices in **34** countries,
with approx. **2,400** employees

Over **220** partners with specific
expertise organized in **14**
competence centers

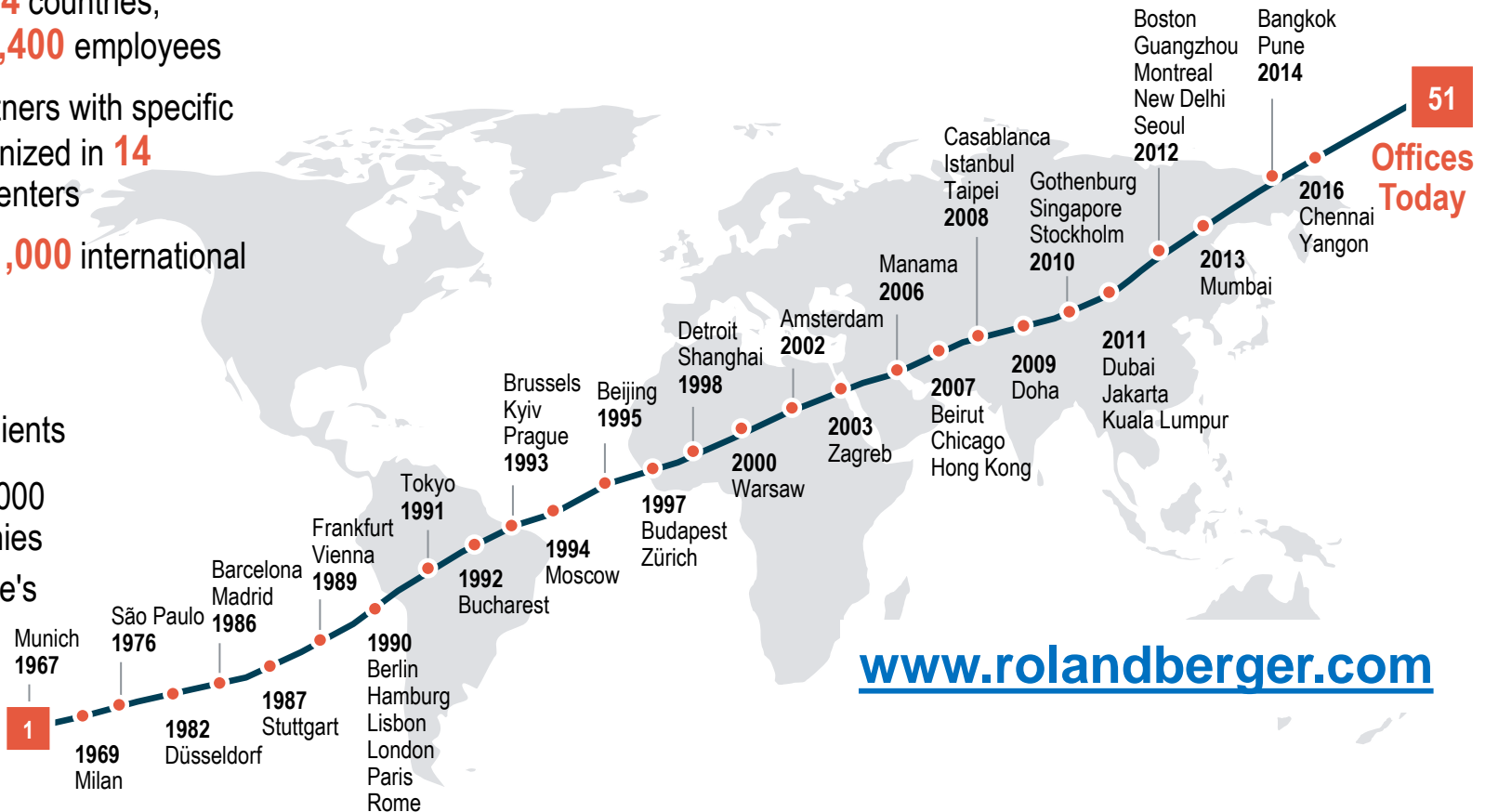
Serving over **1,000** international
clients

Clients

75% repeat clients

30% of top 1,000
global companies

40% of Europe's
leading
companies





www.rolandberger.com


We have deep experience and expertise in supporting ports and maritime sector development around the world

Selected Roland Berger clients in ports and shipping

Ports 	Shipping 
	

 We are proud to be a **top 5** player in the global strategy market

 We have **deep global port** planning and development experience

 We have a **Global Ports and Shipping Practice**

Our maritime practice, among others, supports Governments, port authorities and port and terminal operators across the world

Our port sector service offerings

1. Port policy & regulation



- > Malaysia
- > Pakistan
- > Tunisia
- > Ukraine
- > Hungary
- > Thailand
- > Indonesia
- > Myanmar
- > Morocco
- > Iran

2. Port planning & development



- > Malaysia
- > Indonesia
- > Pakistan
- > Bahrain
- > Netherlands
- > Maldives
- > China
- > Iran
- > Taiwan
- > Vietnam
- > Thailand
- > Saudi Arabia
- > Russia
- > Ukraine
- > Morocco

3. Port business



- > Malaysia
- > Indonesia
- > Pakistan
- > Maldives
- > China
- > Netherlands
- > Singapore
- > Japan
- > Cambodia
- > Vietnam
- > Thailand
- > South Korea
- > Germany
- > Belgium
- > Bangladesh

4. Port operations



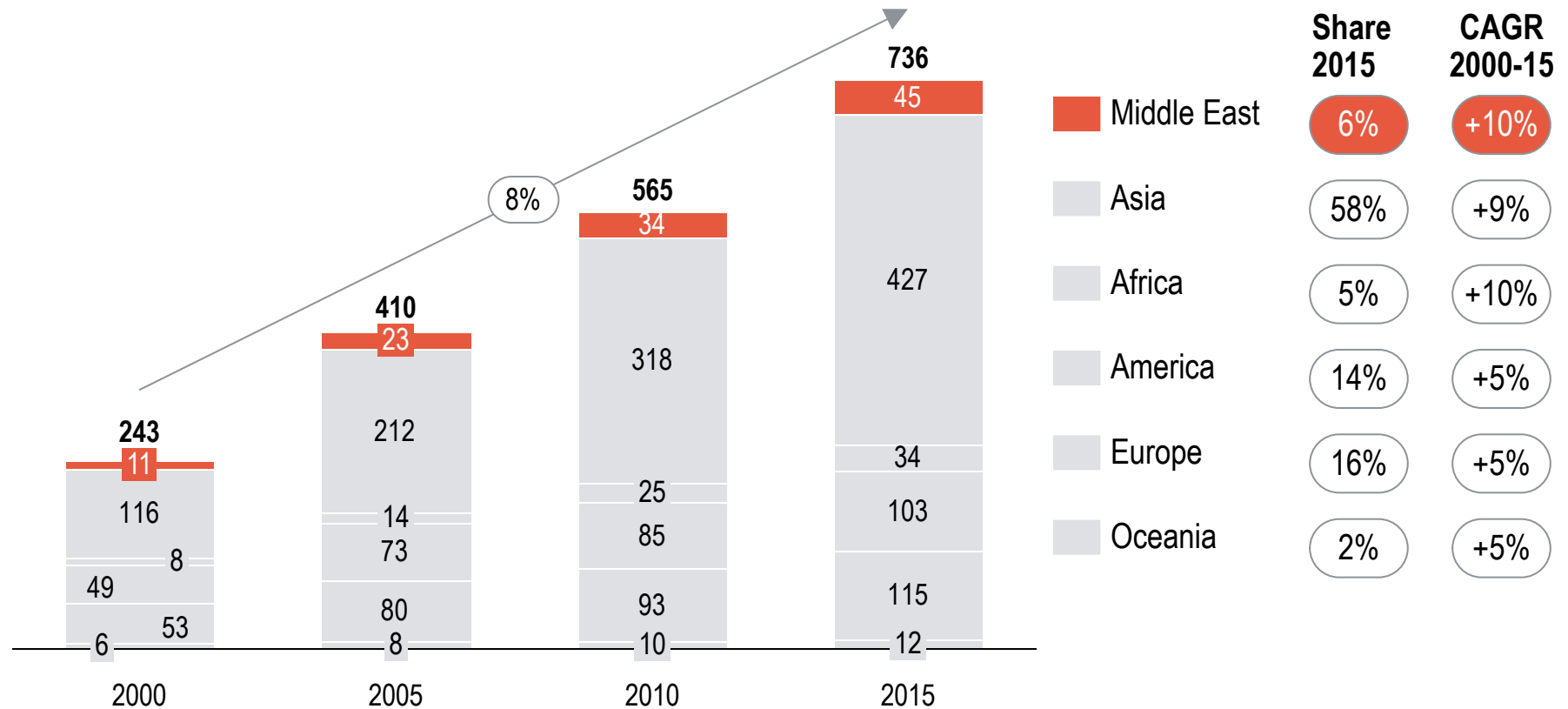
- > Malaysia
- > Indonesia
- > China
- > France
- > Russia
- > Ukraine
- > Estonia
- > Vietnam
- > Bangladesh

Regional maritime developments



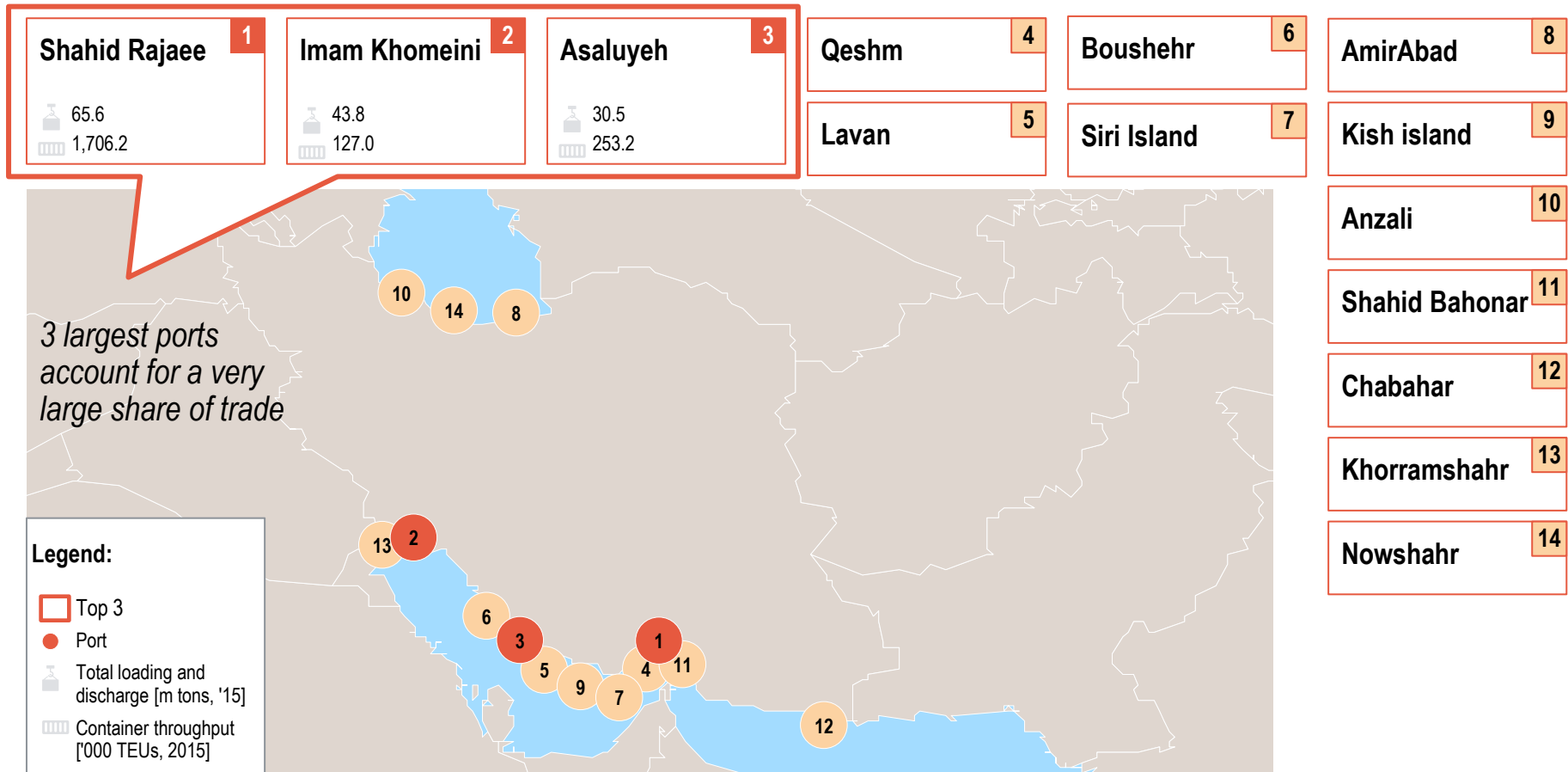
Trade in the Middle East has been and is growing at a rate that is above the world average

Global container trade [2000-2015, TEUm]



Iran has a strategic location, that can be leveraged by its ports vis-à-vis the Gulf region, Central Asia and beyond

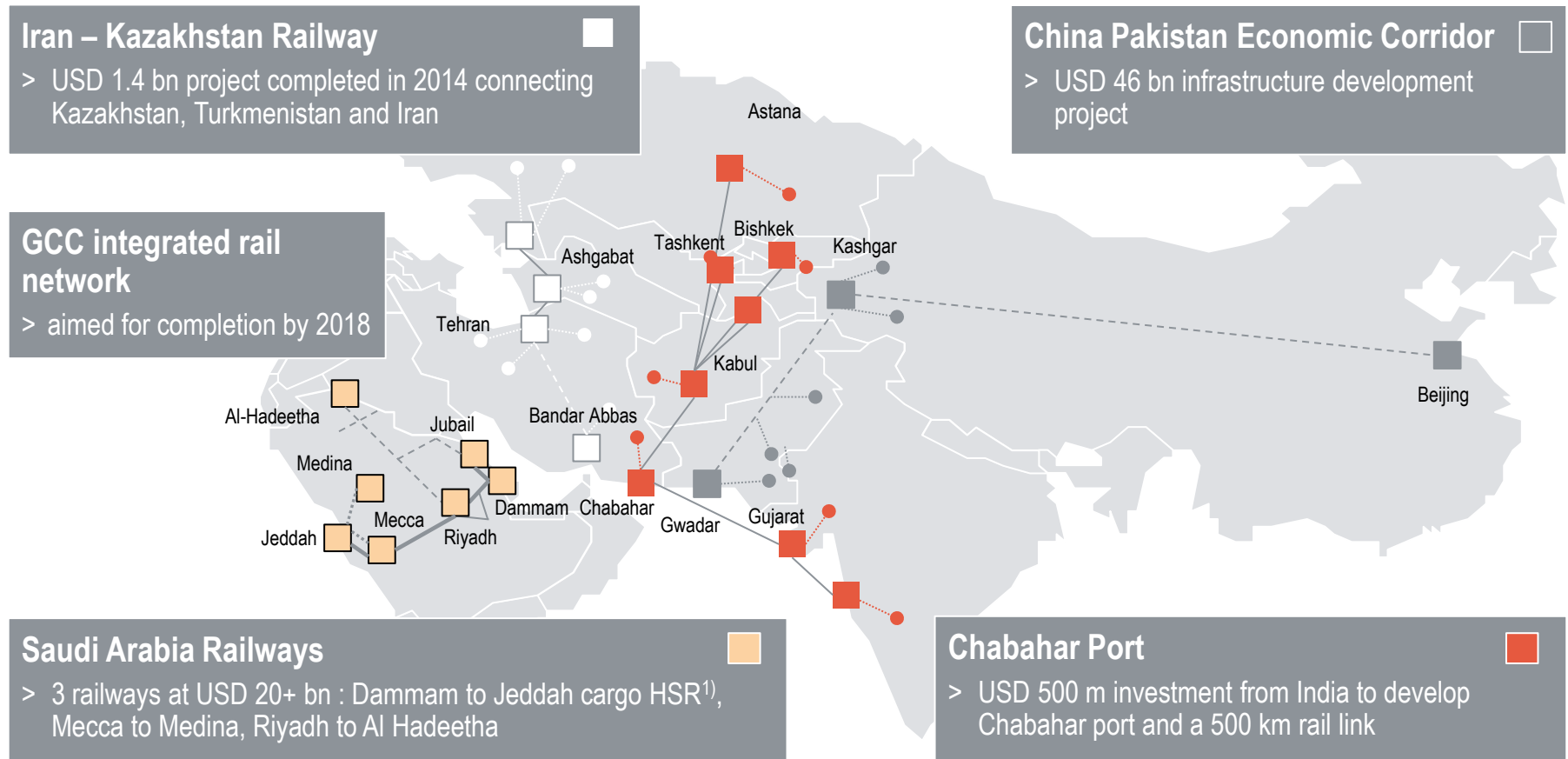
Overview of key ports¹⁾ in Iran



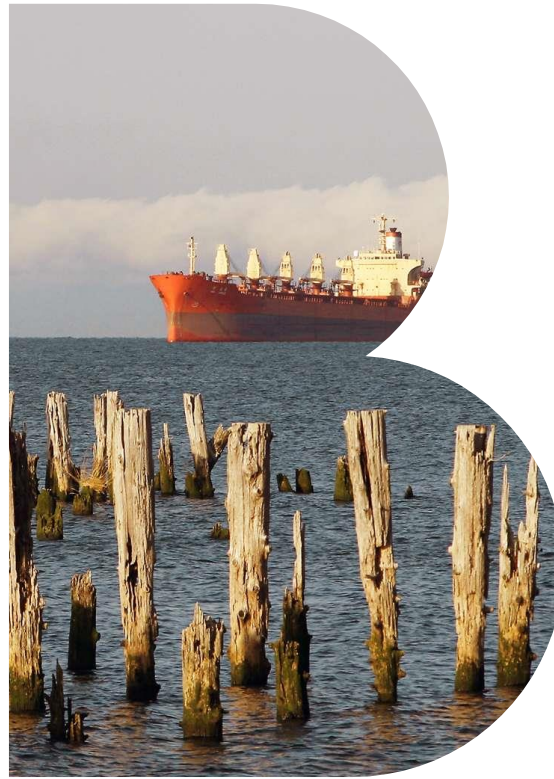
1) Many other smaller ports are not included in this map

Rapid expansion of transport infra in corridors around the Gulf region means "hinterland-expansion" opportunities for some ports

New regional transport infra initiatives



Ports as engines of growth



An integrated approach to port development strategy formulation is required in order to maximize its economic impact

Developing ports as real economic "engines of growth"

1. National ECONOMIC DEVELOPMENT strategy

2. National TRANSPORT systems strategy

3. National PORT DEVELOPMENT strategy

4. Individual PORT DEVELOPMENT strategies and master plans

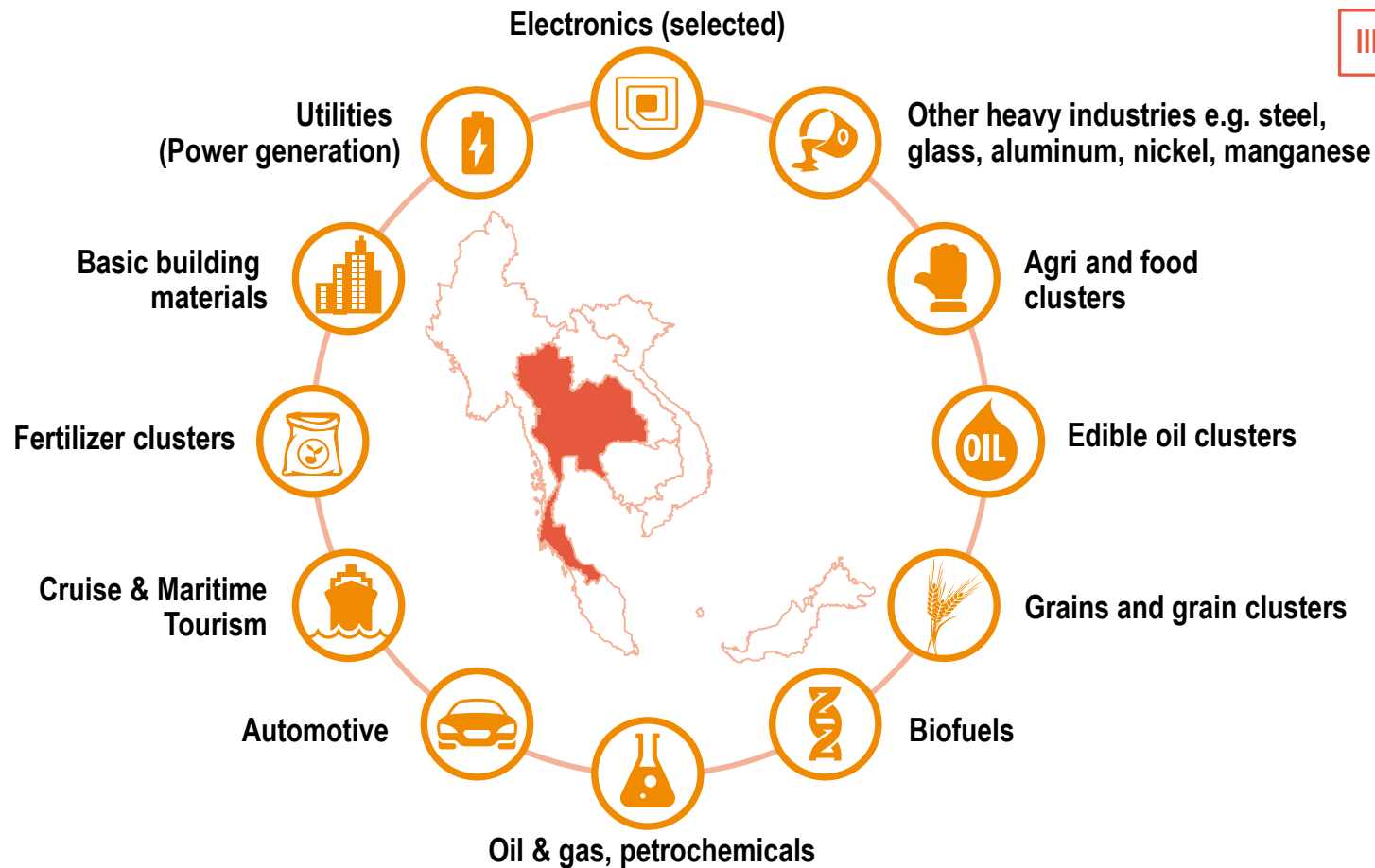
Key challenges

- > Which is the best **port management model**, taking local and regional factors into account?
- > How to **attract investors and industries** that sustain port business?
- > What is the best way to **finance** port (re-) development?
- > How to manage and **integrate** ports, inland infrastructure, industry, transport systems, logistics?
- > What are the best **development** locations?
- > How to do **port master planning**?
- > How to ensure and improve **port performance**?

To stimulate maritime trade and economic development, at least 5 strategies can be adopted for ports to become engines for growth

Port development strategies	Description	Rotterdam	Tanger	Singapore
Industrial engine of growth	Develop & attract "heavy" industries that are directly port-dependent (steel mills, refineries, smelters etc.)	✓	✓	✗
Value addition of exports/imports	Free zone at port; value addition of exports/imports, eg. re-packaging, final assembly etc.	✓	✓	✗
Major logistics hub	Provision of full logistics services (storage, packaging, 3PL, 4PL) to optimize global supply chains	✓	✗	✓
Transshipment trade development	Global hub for transfer of goods en route between origin & destination	✓	✓	✓
Pro-active expansion of regional hinterland	Gateway for export & imports for region rather than home country = transit trade development	✓	✓	✓

Ports that adopt the "engine of growth" concept, typically design specific strategies for developing port-dependent industrial clusters



Illustrative

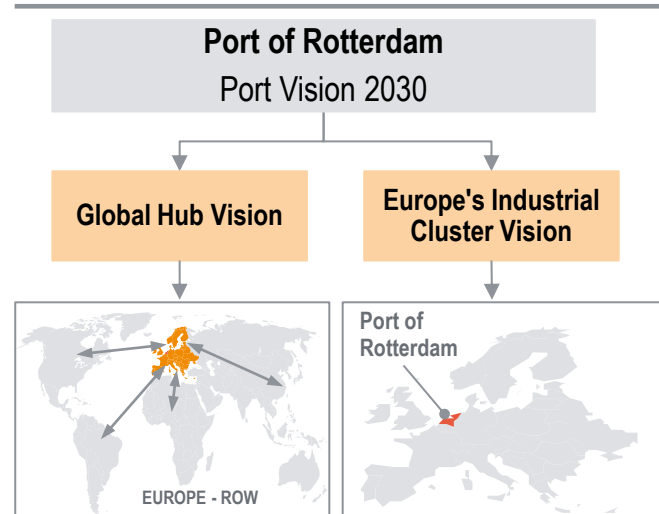
Typical port-dependent industries, requiring close proximity to port / berth facilities

Port of Rotterdam's vision and development is geared towards fostering economic prosperity to the country AND the region

Overview of Port Rotterdam

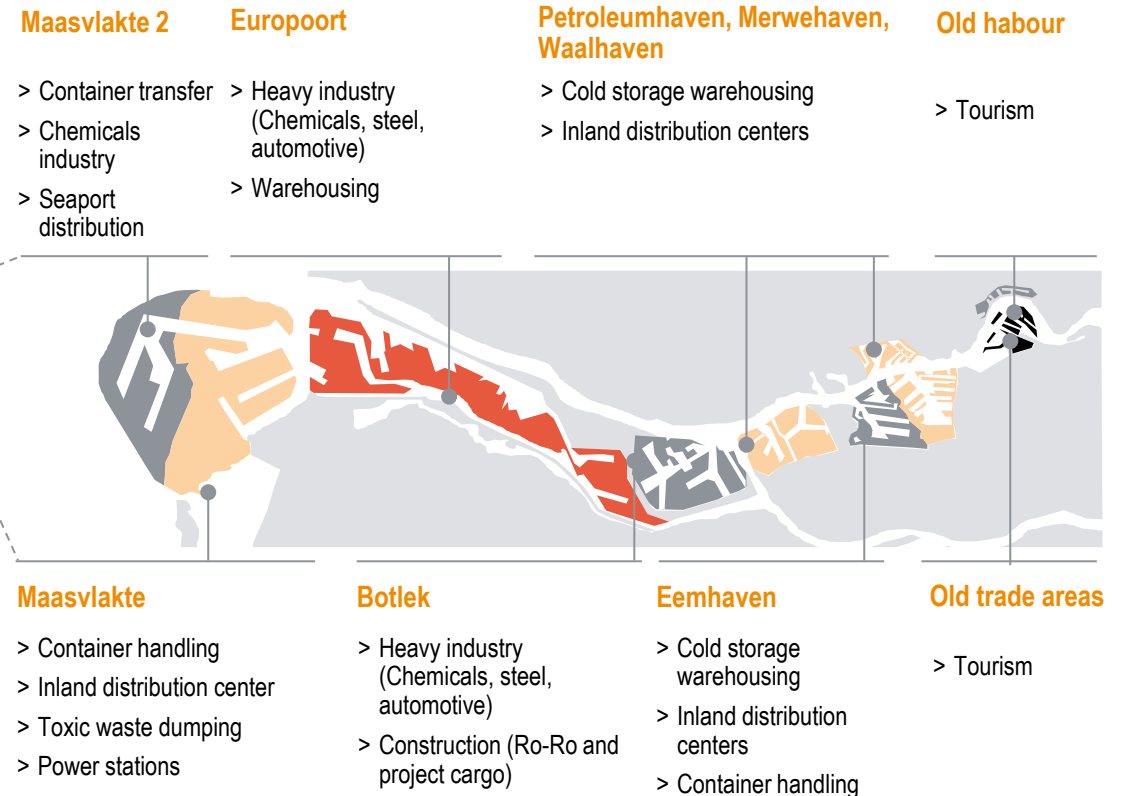


Port Vision 2030



- > The Port Vision is underlined by 2 strategic visions
- > Implemented through the layout of the Port
- > 5.3 bn Eur VA of industrial cluster since launch in 2011

Port of Rotterdam layout



The Port of Rotterdam has a wide set of actions and tasks clearly mapped out in order to achieve its ambition by 2030

Port of Rotterdam implementation agenda



Port of Rotterdam's Port Vision 2030

Global Hub Vision

Increase throughput capacity and extend the hub function



Improve the interconnection with multi modal inland hubs



Increase the efficiency of the logistics chains



Better information exchange



Minimize the ecological footprint of logistics chains



Attract high end activities to the region



Europe's Industrial Cluster Vision

Increase production capacity and renewal of production assets



Connect the industries of Antwerp, Moerdijk, Flushing, Terneuzen and Rotterdam



Cluster the industry in Rotterdam



Develop bio-based chemical industry



Develop facilities for capture, storage, distribution and trade of CO₂



Generate energy with more renewable resources



Engines of growth opportunities in Iran

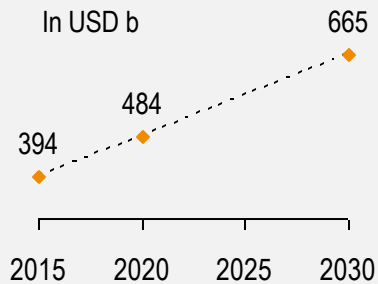


Lifting of sanctions, expanding connectivity, growing consumption and production provide the conditions to accelerate industrial development

Growing port throughput demand

1. Export

Strong production drives exports & import of raw materials



Iran's GDP is expected to **grow by 23% by 2020** and **69% by 2030**

3. Transshipment

Global trade increases transshipment

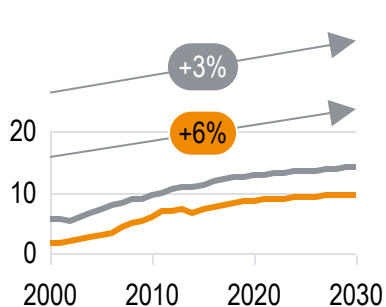
Global seaborne trade surpassed 10 billion MT for the first time in 2016



Shahid Rajaee Port is strategically located and has the potential to capture a higher transshipment share

2. Import

Income & spending is a strong driver for imports



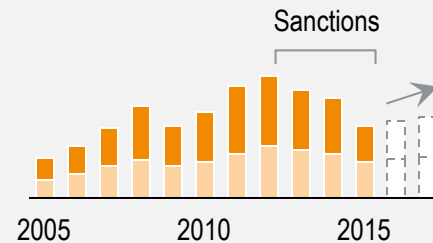
— World
— Iran, Islamic Rep.

Iran's **GNI per capita will grow 6% p.a., doubling global 3%**

4. Transit

Iran is strategically located for transit from CIS countries

Exports '05-'15 +5.8% growth Imports '05-'15 +6.6% growth



In the **post-sanction period, transit from CIS is expected to recover**

Expected growth in import and export provide the basis for adoption of some/more/all of the 5 potential development strategies

Sample growth drivers

Export – main industries



Crude oil

- > With nuclear-related sanctions lifted, Iran's oil production and exports increase by \$10bn in 2017
- > Due to past sanctions, Iran is exempt from OPEC's production cuts, and allowed to ramp up production



Plastics & rubbers

- > Plastics & rubbers earmarked to become strategic industries
- > Iran is expected to be largest producer in the region at 3% of world production

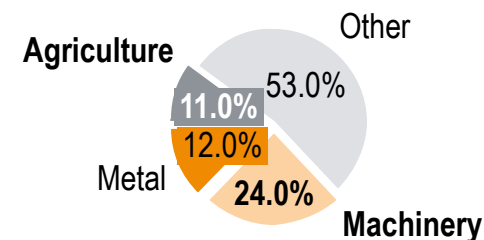


Chemicals

- > Chemical industry is expected to experience a slow/flat growth with CAGR 1.7%
- > Mainly caused by strong Govt. monitor/control

Import – main industries

Main import sectors



Machinery

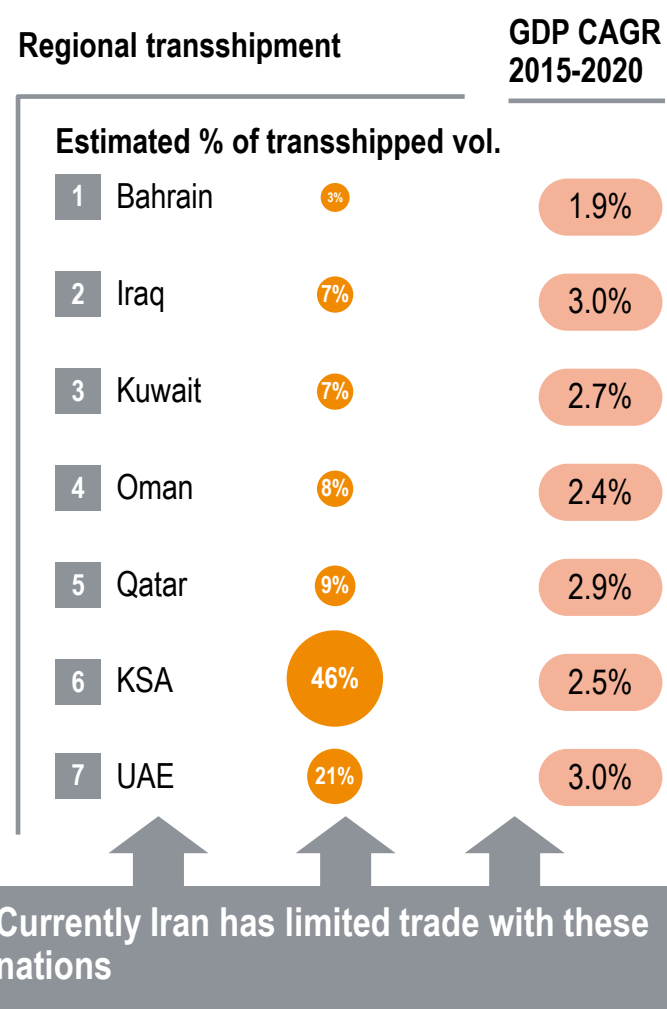
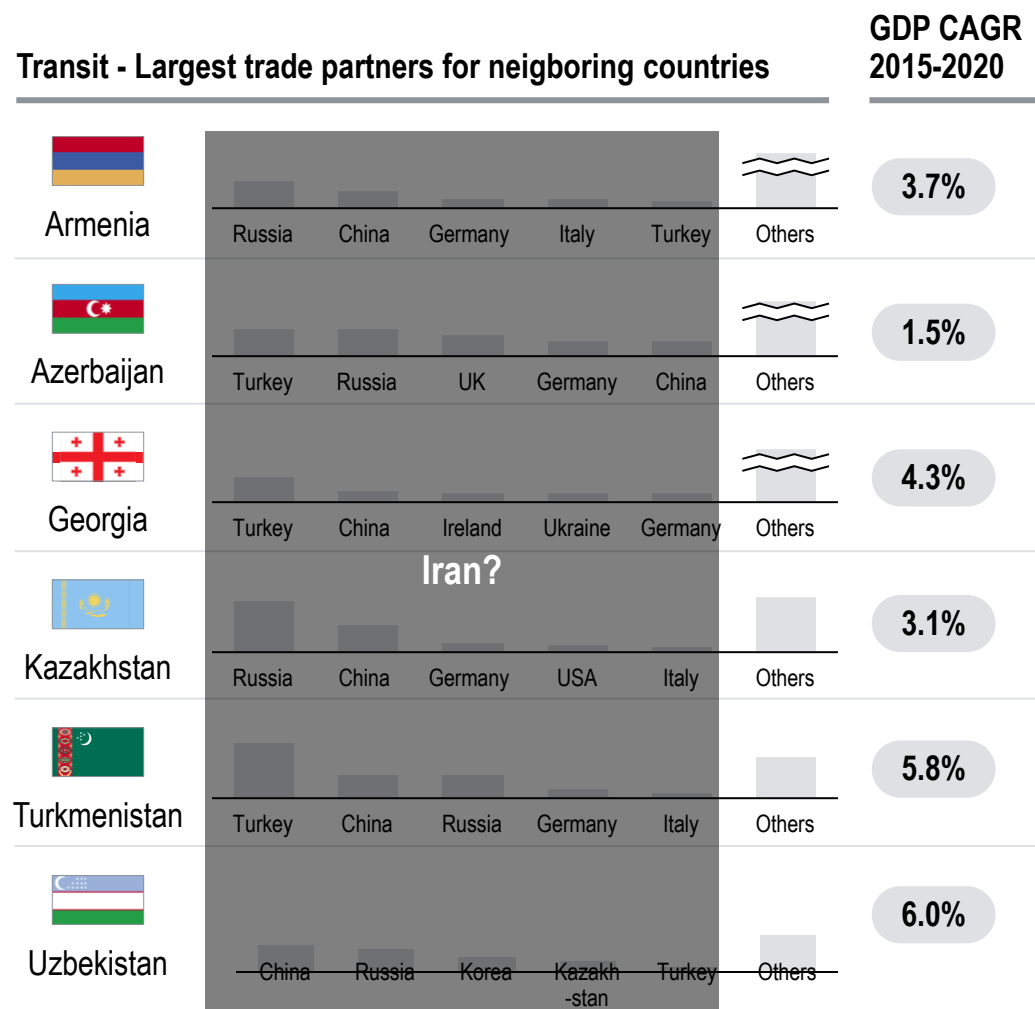
- > Due to underdeveloped technology adoption, Iran tends to import machinery products
- > Machinery is expected to increase as the economy changes from labor intensive to knowledge-based



Agriculture

- > Iran suffers a strong water shortage, which limits Iran's capability to increase wheat production
- > Population increase with CAGR 1.3%, thus demand and import of agricultural products will remain strong

There is now a clear opportunity for Iran to expand its port business in both the transit trade and the transshipment trade



Shahid Rajaei has all the ingredients for becoming an "engine of growth" - Rotterdam-style



In summary, lessons can be learnt from leading ports that continue to grow and expand as result of smart development planning

Key lessons from leading ports

- 1 Leverage **strategic geographical positioning** and develop **strong hinterland connectivity** in order to become regional gateways
- 2 Integrate **industrial cluster approach** to attract industrial and economic development linked to berthing areas within the port
- 3 Create a **best-in-class transshipment hub** via operational excellence, & strengthening of logistics and industrial ecosystem
- 4 Create a **world-class logistics hub** via fully integrated multi-modal logistics platforms coupled with technological innovation
- 5 Develop strong **environmental and community engagement** to ensure deep support for port development across the community



Please feel free to contact us for further information



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