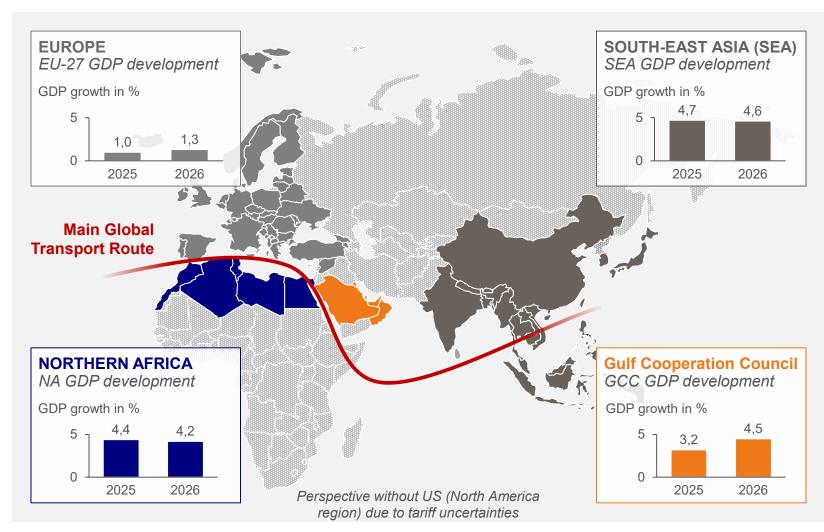


EFESO
MANAGEMENT CONSULTANTS

DIGITAL TRANSFORMATION & MANUFACTURING

INSIGHT

On a larger scale, North Africa and the Gulf Cooperation Council (Middle East) are currently showing rising GDP expectations



Main characteristics & advantages of the regions:

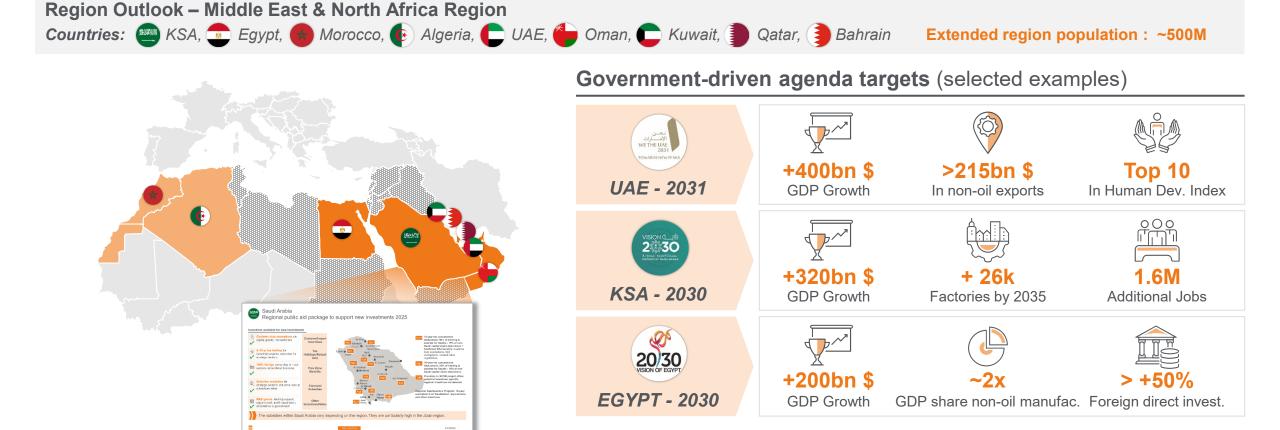
- The Gulf Cooperation Council (GCC) region and Northern Africa show strong GDP development potential
- GCC as a pivotal point for logistics streams in the region
- Northern Africa & GCC with a total population of ~290M people (compared to ~450M in the EU-27)
- Population is relatively young and growing; forecasted to stay younger than the global average in 2050
- Massive subsidies by local governments create a businessfriendly environment

Raising attractiveness for foreign companies (as export and production market)

Sources: EU 27 - European Central Bank, NA - UNECA & African Development Bank, GCC - World Bank, SEA - Asian Development Bank



Due to government-driven agendas, the Middle East is striving for high economic growth rates

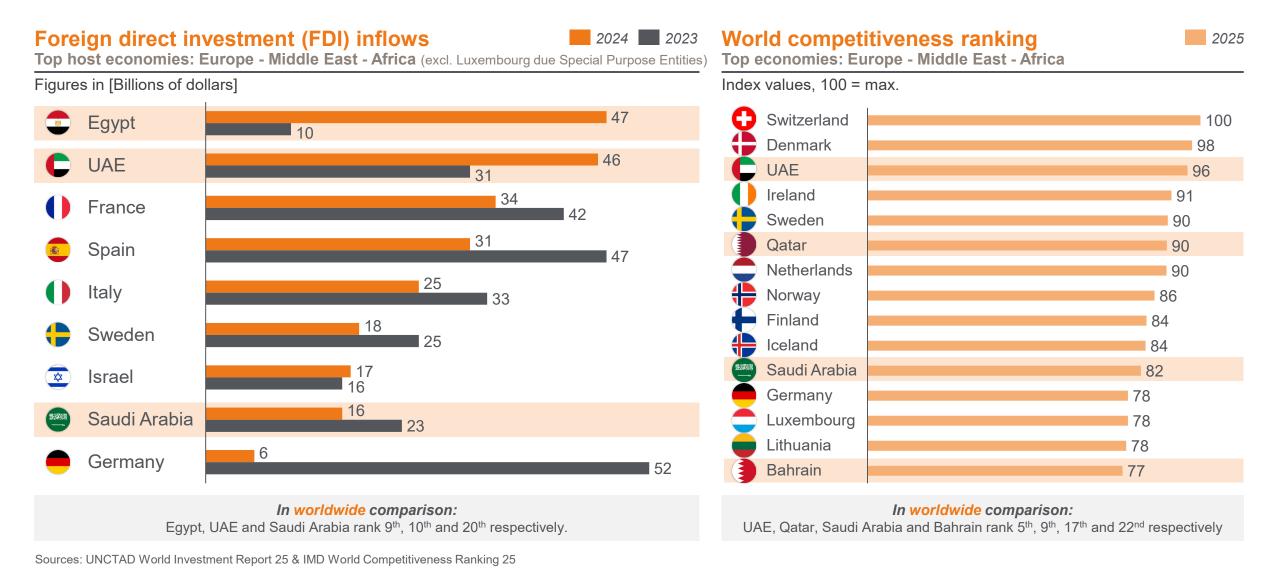


Further information on other countries or detailed incentives per region available

Sources: Government information of country-specific agendas

Excluded due to instability reasons

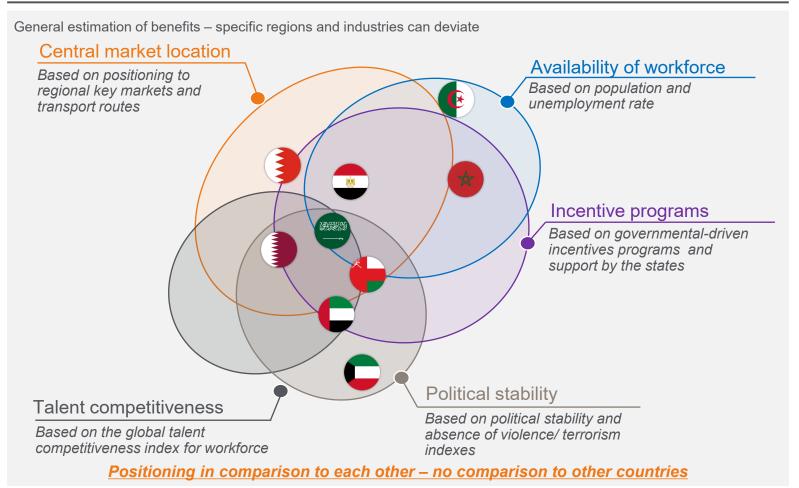
The region is already showing its strength in foreign direct investments and competitiveness rankings



250923_Middle East on the rise_v2 LBI

Saudi Arabia and the United Arab Emirates are advocating for a digital transformation to boost production companies, while Egypt provides a large workforce

Benefits for European companies by country



General information

- Egypt's key strength is the strategic location bridging Africa, the Middle East, and Europe, with a high population and workforce available; one main weakness is political instability.
- Saudi Arabia and the United Arab Emirates offer strong incentive programs and growing talent competitiveness driven by governmental programs (e.g., Vision 2030). Their main weakness is limited workforce availability.
- Kuwait and Oman share strengths in political stability. Oman offers more proactive incentive programs, while Kuwait lags in this area. Both face significant challenges in talent competitiveness and workforce availability.
- Qatar excels in incentive programs and infrastructure, while Bahrain leads in regulatory openness and ease of doing business. Both face limitations in workforce size and high-skilled talent availability and offer political stability.
- Algeria and Morocco offer an extensive workforce, lacking in the other dimensions. Morocco is starting to attract more and more foreign investors for production sites.

Sources: Workforce availability – World Bank data on unemployment rates & population | Political stability – World Bank data on political stability index | Talent competitiveness – INSEAD Talent Competitiveness Index | Location & incentives – Governmental information & EFESO knowledge base

250923 Middle East on the rise v2 LBI

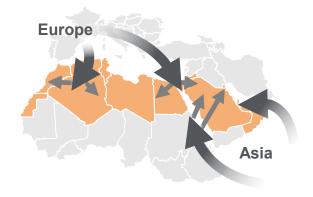
The selection of the right footprint integration approach is critical for market entry and needs to be aligned with the specific business requirements and characteristics

Non-exhaustive

Operations footprint integration options for MENA or GCC Market

Delivery & distribution

Fulfilling demand via existing plants and integration of market via delivery only



local spoke(s)

Key production steps centrally, final assembly at the local spokes

Central hub &



- + Economies of scale + Economies of scale (partially)
 - + Med. CapEx, potential incentives
 - + Small local brand presence

Exposure to tariffs / restrictions

+ Low CapEx demand

High transport lead times & costs

+ Limited complexity and fast access

- No labor cost efficiency (vs. Europe)
- Partially import duties & tariffs possible
- High supply chain complexity and long lead times (incl. distribution)

Contract / license production

Partners producing brand products and fulfilling local market demands



- + Low CapEx demand with flexibility
- + Fast localization paired with fulfillment of local sourcing requirements
- Higher quality / intellectual property risks (reliance on partners)
- Reduced margin through profit sharing

Local production / joint venture

Local presence with own production (potential JV with local player)



- + Full market access
- + Low import duties, max. incentives
- + Optimized brand positioning
- High CapEx, planning & set-up time
- Long-term commitment and local market risk exposure



With our ONE-STOP-SHOP capabilities, we can help you to define the entry strategy or support you with setting up state-of-the-art future factories



Guiding question as task definition

How should I connect a new market to my operations footprint setup?

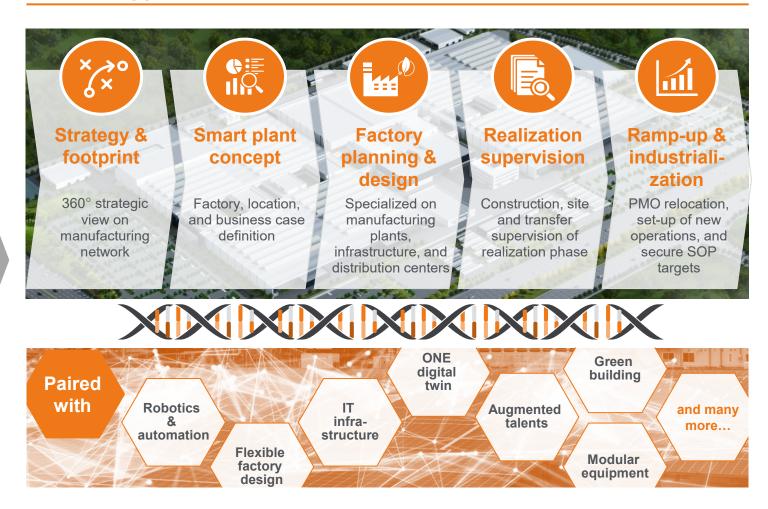
Should I establish a local site, and how can I find the most attractive locations?

What is the **right dimensioning for a plant**, and how can the digital backbone of the site be designed?

How is the **construction secured** and managed in terms of time, budget, and quality?

Which digital use cases and technologies should I integrate or plan in my factory lifecycle?

Our approach as an answer



PMO = Project Management Office; SOP = Start of Production



To do this together, we provide access to our world-class toolbox, combining end-to-end delivery, from strategy to ramp-up, with leading Future Factory expertise

EFESO's 'one-stop-shop' capabilities and service offerings* for FACTORY REALIZATION

STRATEGY & FOOTPRINT

- \$\phi\$ 360° strategic view
- Factory role / site view
- Supply chain view
- Network design
- Business case

PLANT CONCEPT

- factory concept
- Location search & site selec.
- Incentives & subsidies
- Building design & permits
- € CAPEX / OPEX

FACTORY DESIGN

- Production
- Material flow & warehouse
- Digitalization & automation
- Work concept & offices
- Green building & infrastruc.

V. REALIZATION SUPERVISION

- Project preparation & design phase
- Execution preparation
- Site supervision & realization monitoring
- Management of general contractor(s)
- Permanent check & control

INDUSTRIALIZATION & RAMP-UP

- ♣ Organization blueprint
- Executive research
- 📆 Training & qualification
- Relocation & ramp-up mgmt.
- OEE stabilization to target value

Project Management and Project Management Office

FUTURE FACTORY TO SERVICE OF THE PROPERTY OF

Our vision and guiding principles for the FUTURE FACTORY































*We support our customers holistically or in every phase in which our customer currently finds himself

OEE = Overall Equipment Effectiveness

Why EFESO? Trusted by industry leaders, ready to accelerate your growth in the Middle East & Northern Africa



1ST OPERATIONS PURE-PLAYER

- EFESO is the world's leading international 'pure play' consulting firm
- We specialize in Industrial Operations and Performance Improvement
- Multiple awards confirm our outstanding position



INDUSTRY 4.0 THOUGHT LEADER

- EFESO is a global I4.0 thought leader
- Starting in 2013, we deliver fresh-eyed views based on our leading INDUSTRIE 4.0 AWARD
- The award is the most important benchmark for digitalization and automation across industries



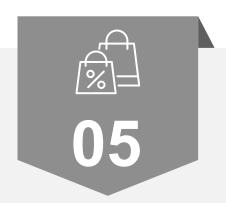
INNOVATOR IN FUTURE FACTORY

- EFESO offers a unique one-stop-shop capability, bringing together leading insights and implementation capability – from idea to start of production
- The "Factory of the Future" is connected, adaptable, efficient, and scalable



LEADING-EDGE CONTROL TOWER

- EFESO's "Solvace" is the best-in-class platform for large Smart Factory transformation programs and provides an advanced OpEx 4.0 Control Tower solution
- It digitizes factory programs, connects people at all levels, and integrates functions both locally and globally



BEST-IN CLASS UPSKILLING

- Implementation of academy structures and physical learning factories
- Customized qualification programs with high practical orientation
- Innovative learning solutions with Al videos, e-learning, AR/VR, and Metaverse technology

EFESO is the world's leading and award winning international 'pure play' consulting firm, specializing in Industrial Operations and Performance Improvement

- A fast-growing pure player, operating globally
- Serving Process Industries, Discrete Manufacturing, Infrastructure-based Services and Private Equity
- Helping transform, boost and/or build operations
- Offering Operations, Supply Chain, Idea-2-Value support, fully integrating Process, Human, DigiTech and Sustainability dynamics
- Working side-by-side with clients to accelerate their progression towards completely future-proofed operations



+1,100

Consultants with hands-on experience in the industry

+1,000

Projects in >75 countries annually

45

Nationalities in >30 offices worldwide

+10

Average savings multiple of consulting fees

Our group-wide awards

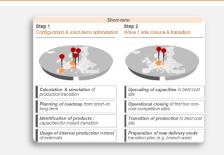


... and there are many more.

We supported various clients and industries along their factory planning journey with our technical and market expertise

Selected project examples – from strategy to start of production

Footprint roadmap



Assessment of current footprint set-up and planning of strategic roadmap for Europe area for a global industrial goods provider

Define and review potential scenarios and high-level action plan

Bus. case evaluation for key scenario and step-

MENA market entry



Definition of growth strategy for MENA region and site selection incl. footprint archetypes and strategic guidelines

Identify and define ideal strategy to enter MENA region market

Country shortlist and started site selection

Plant network design



Re-design of plant network incl. organizational restructuring for an international glass-ceramic producer

Match strategic goals with operational targets incl. markets & clients

Selected to-be scenario. tailored organization and = new operations set-up

Factory design ME



Design of concept for a plant with integration of logistics, operations, and building for electrical products in Middle East

Design and refine plant layout with focus on production volume

Refined factory design with

up to +15% production volume



Objective

Project

examples

by-step roadmap

incl. site masterplan

