



The oil & gas valve industry in Italy

BUSINESS STRUCTURE, PERFORMANCE AND RECENT TRENDS

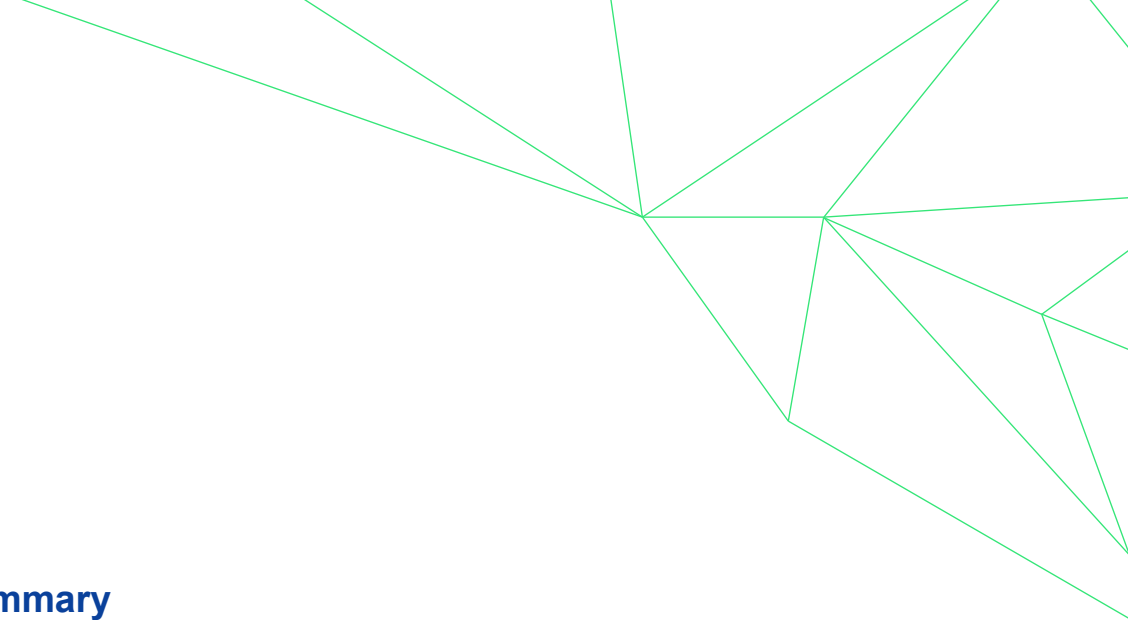
2023 Edition

Bergamo, July 2023



ORGANIZERS



- 
- **Executive Summary**
 - Business Structure & Italy's role in the European valve industry
 - International trade and Italy's export performance
 - A focus on O&G investment perspectives

The oil & gas valve industry in Italy | Executive Summary

As pointed out by the most recent available data, with more than 210 enterprises, 9.300 employees and 2,7 billion of euros of turnover, the Italian industry of Oil & Gas Valves retains its position among the top sectors of the Italian manufacturing

Two-thirds of the national production of valves is carried out in Lombardy, where Bergamo plays a pivotal role: the province alone accounts for more than 100 enterprises operating in valves production, which allow its industry to contribute as a “key player” (1,4 billion, almost 5 thousand employees, 4,2% of the regions’ total) to the achievements of one of the regions with the highest manufacturing vocation.

The journey towards recovery in energy-related sectors after the pandemic has proven to be lengthy and gradual, and the O&G Valves sector is no exception. In fact, by 2021, the Italian companies in this sector were still struggling to close the gap with pre-pandemic levels, with production value standing at 600 million euros (-18%) below the 2019 levels. The sector also faced challenges in terms of business demography, experiencing a reduction of 16% to 18% in the overall number of enterprises and employees. Nonetheless, things improved considerably in the past year.

Back on track from 2022: three years after the onset of COVID, Italian exports have made significant strides towards recovering to pre-pandemic levels. Remarkably, the Italian O&G Valves Industry has maintained its 2019 position as the world's third-largest exporter, trailing only China and Germany. Moreover, Italian companies overperformed or at least achieved comparable outcomes to their competitors in 54 markets, accounting for 39.6% of total O&G Valves exports. In spite of that, there should be pointed out that the outcome of Italian exports in regions such as the Far East and, primarily, MENA markets resulted far less positive.

The oil & gas valve industry in Italy | Executive Summary

Specifically, the country that contributed the most to hindering the performance of Italian companies abroad is Saudi Arabia. Export of Italian O&G Valves slumped more than 30% in 2022, compared to pre-pandemic levels. The relative weight of the Country, on the total of Italian exports, significantly decreased (by 2.5 p.p.) between 2019 and 2022, mostly to the advantage of China. China growing ties with Saudi Arabia (which received the largest share of Belt and Road Initiative, BRI, energy investments in 2022) are likely to have played a major role behind the booming flow of Chinese O&G Valves. A regulatory framework that rewards companies operating within the country could also have contributed to reduce the competitiveness of Italian O&G Valves in the Saudi market.

Reshoring/Friendshoring at play? The best results in terms of export growth have been achieved in geographically close markets, primarily in Western Europe, where Italy has outperformed its competitors in the top commercial destinations. Several factors (such as the impact of ballooning freight costs) could have positively affected the performance of Italian companies. Furthermore, it cannot be excluded that, in the wake of Ukraine conflict and growing tensions between China and Western World) Italian exports to Western Europe could have also found support in a greater reliance on "friendshoring" (a trade practice where supply chain networks are focused on countries regarded as political and economic allies) as a strategy to reduce the supply chain risk.

What to expect now? From the (bleak) recovery of 2021-'22... a year of exceptionally high energy prices hasn't proved enough to push a boom in investments, still below the pre-pandemic in 2022. Indeed, as confirmed by an analysis on the balance sheets of a pool of major O&G companies, while higher prices triggered an unprecedented increase in revenues and margins in 2021-'22, they failed to drive the capital spending (CAPEX) above the 2019 levels, as the windfall profits were mostly used to reward shareholders and share buybacks.

The oil & gas valve industry in Italy | Executive Summary



... to a more promising outlook for 2023... Capital spending by oil and gas companies will keep on growing in 2023, driven by a sustained favorable commodity price environment, strong cash flows and, more importantly, what appears like a shift toward security among the top priorities for governments and energy companies. Indeed, the consequences of Ukraine invasion and a ballooning inflation have partially redefined the priorities in the the “energy trilemma” (i.e. the balance between security, cleanliness and affordability of energy sources). Security will likely take a more central stage in the year ahead, supporting a renewed push for investments in O&G Up and Midstream investments.














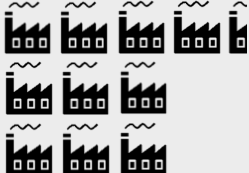

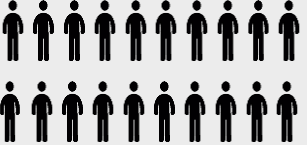


... which will favor the Italian O&G Valves exporters . According to International Energy Agency “World Energy Investment, 2023”, the O&G upstream investments will keep on recovery in 2023, with overall spending projected to Us\$ 508 blns, +7.1% compared to 2022. The strongest growth rates are projected in Europe and the Middle East, which together accounts for ~50% of Italian Oil&Gas Valves sales abroad. Provided that Italian exporters will be able to, at least, maintain their positioning in these regions, that could ensure a decisive support in closing the gap that has arisen with other global exporters in the last three years

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The Italian industry of tapes and valves

A core sector of Made in Italy IM&E industry (2021)

		Number of enterprises	Production value (€ blns)	Number of employees
		 213	 2,7	 9.300+
		 531	 4,6	 13.600+
		 282	 1,5	 4.900-
TOTAL	Tapes & Valves	 1027	 8,8	 27.997

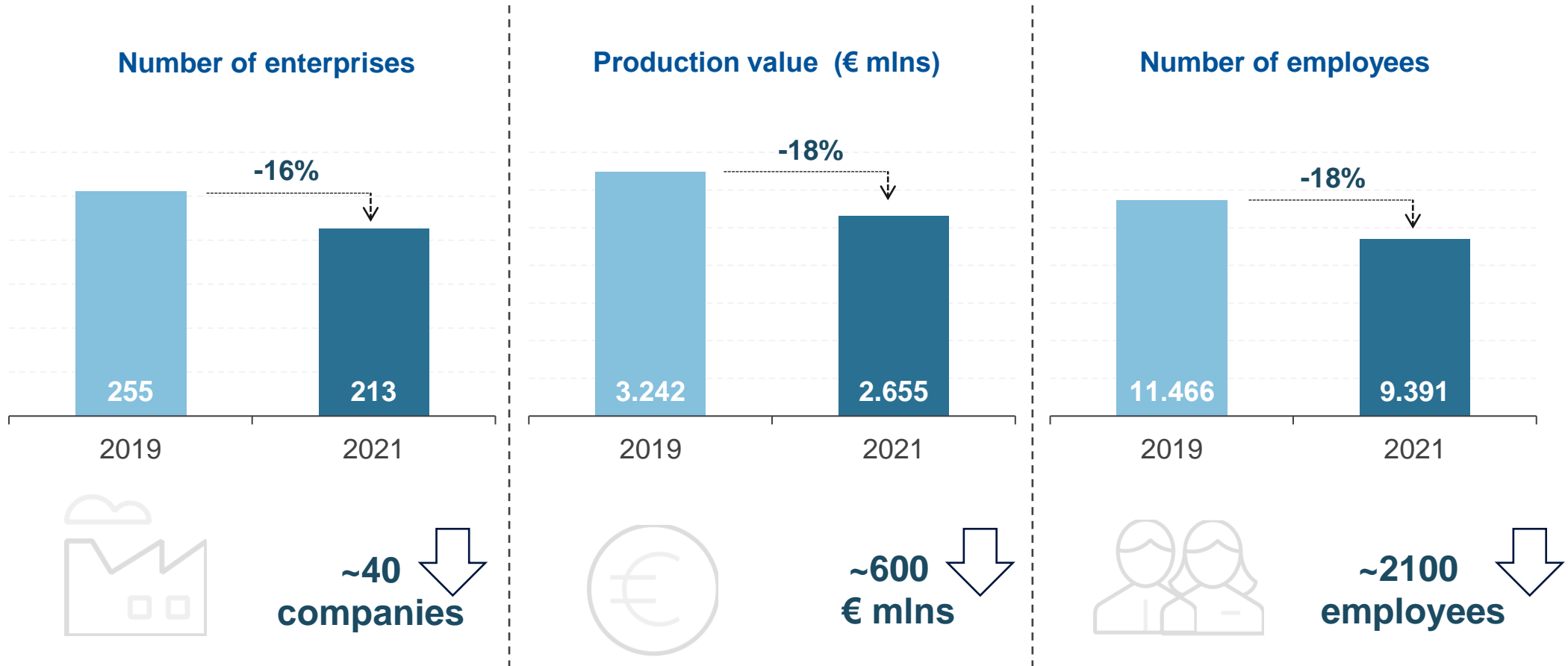
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* Hydraulic valves, valves for food & beverage industry, valves for pharmaceutical industry, etc.

Source: Prometeia's calculation on ISTAT data and Companies balance sheets

The Italian oil and gas valve industry after Covid

Structural changes: a 16-18 % loss in business demography and production value

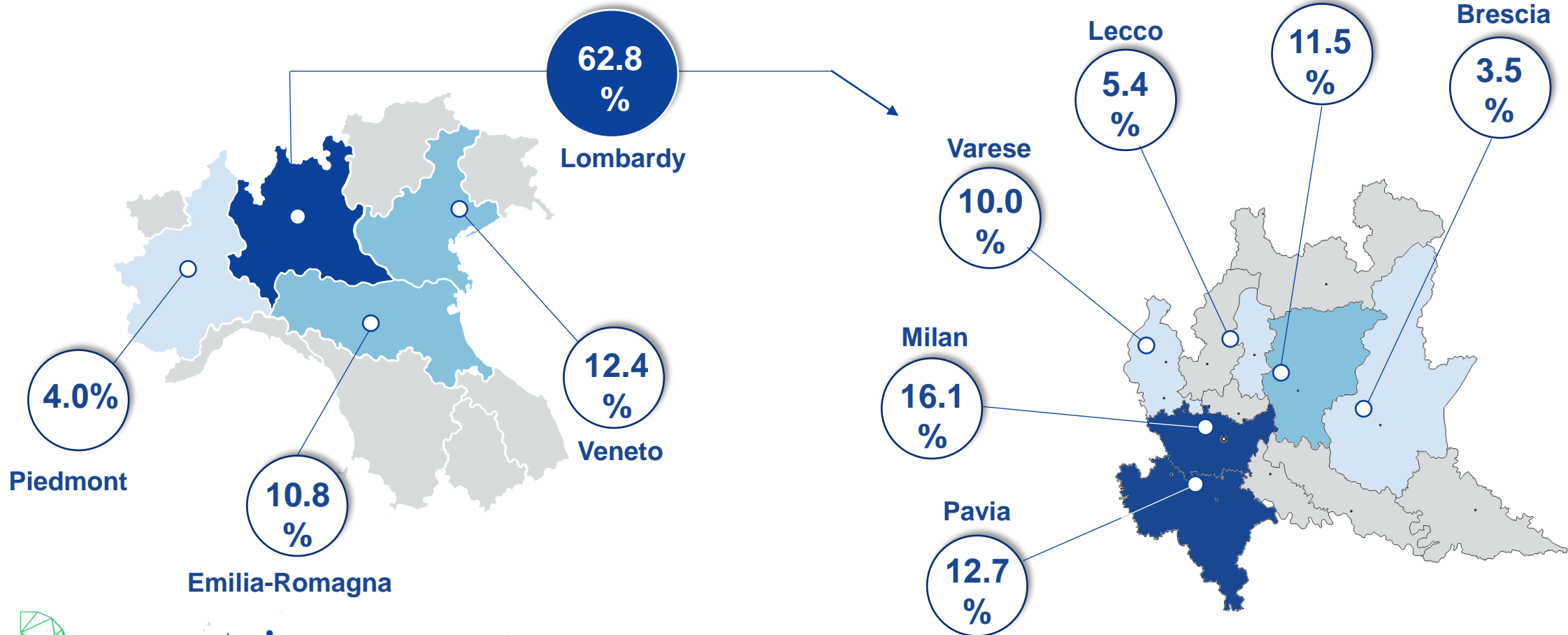


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The O&G valve industry in Italy

65.5% of the Italian production is concentrated in Lombardy

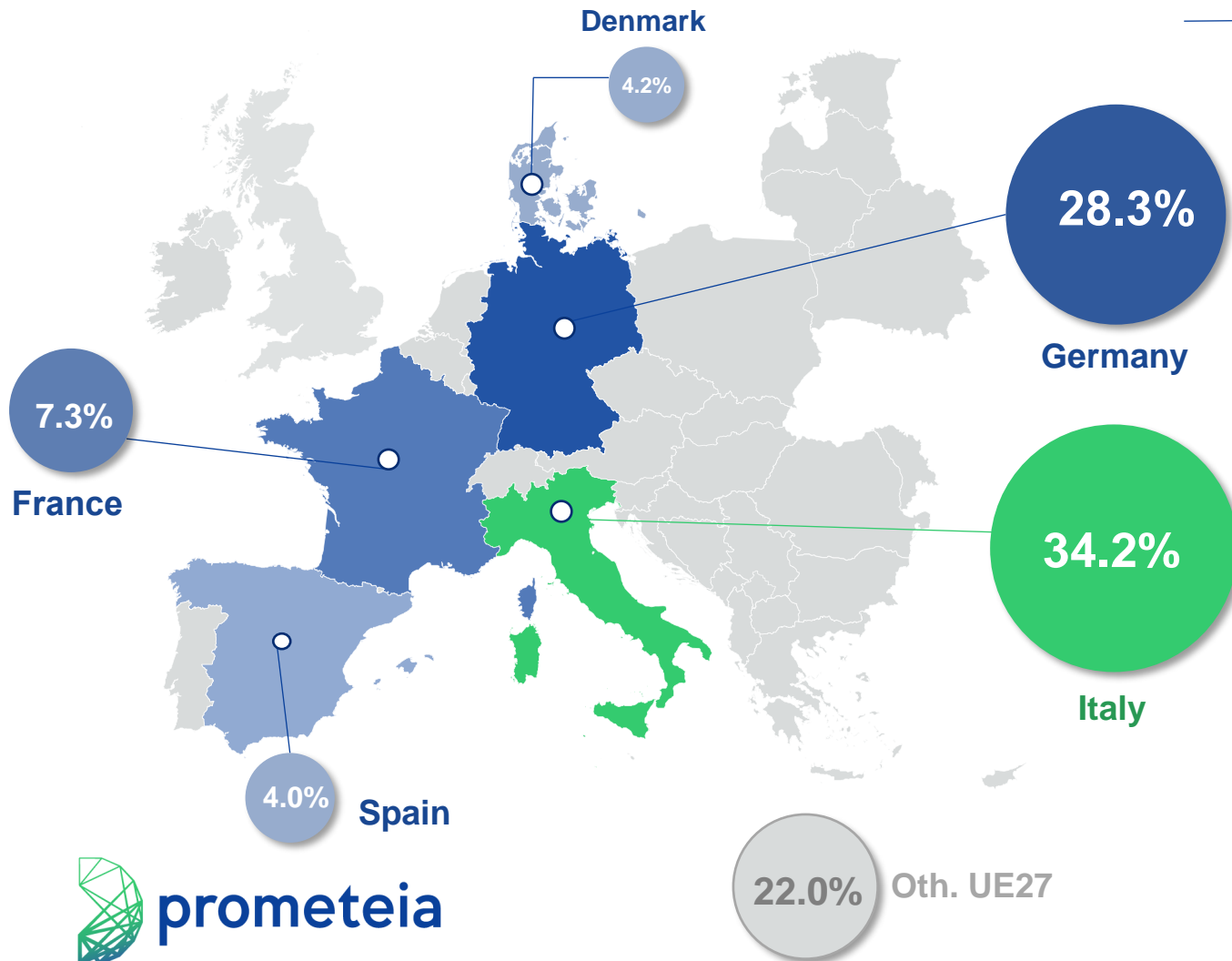
The map of territorial specialization: % share of the Italian production value (2021)



The O&G valve industry in Europe

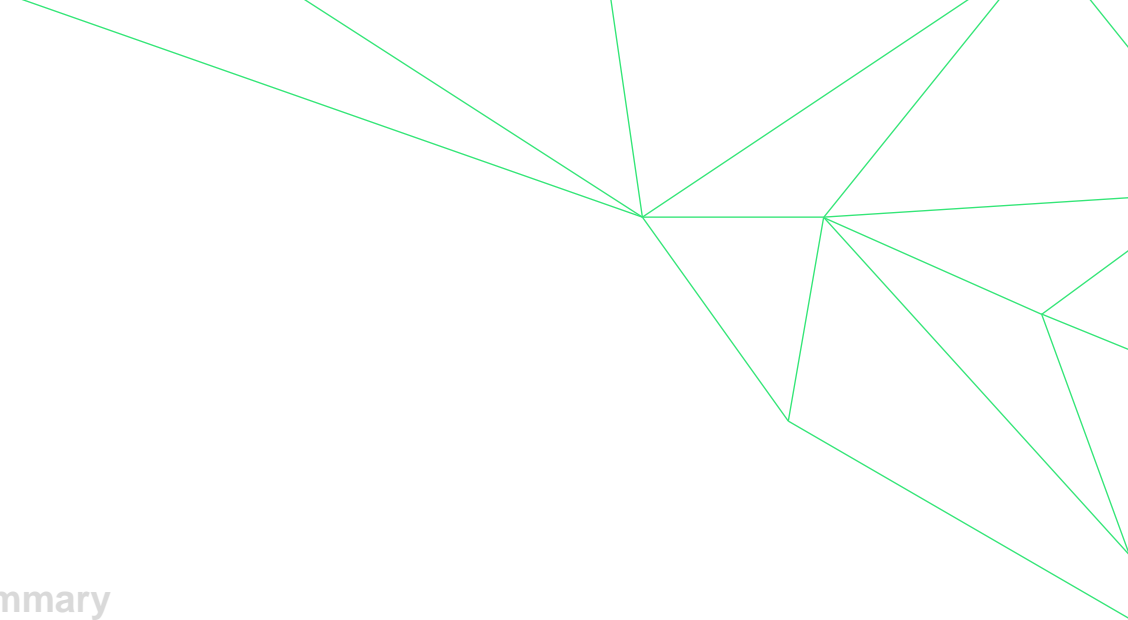
Italy is the European leading manufacturer of O&G valves (over 34% of EU Tot. Production)

The main European production countries sold production value*
% share on total, €, average 2019, 2020, 2021



total UE27
9€ blns

* Production value generated at national production plants

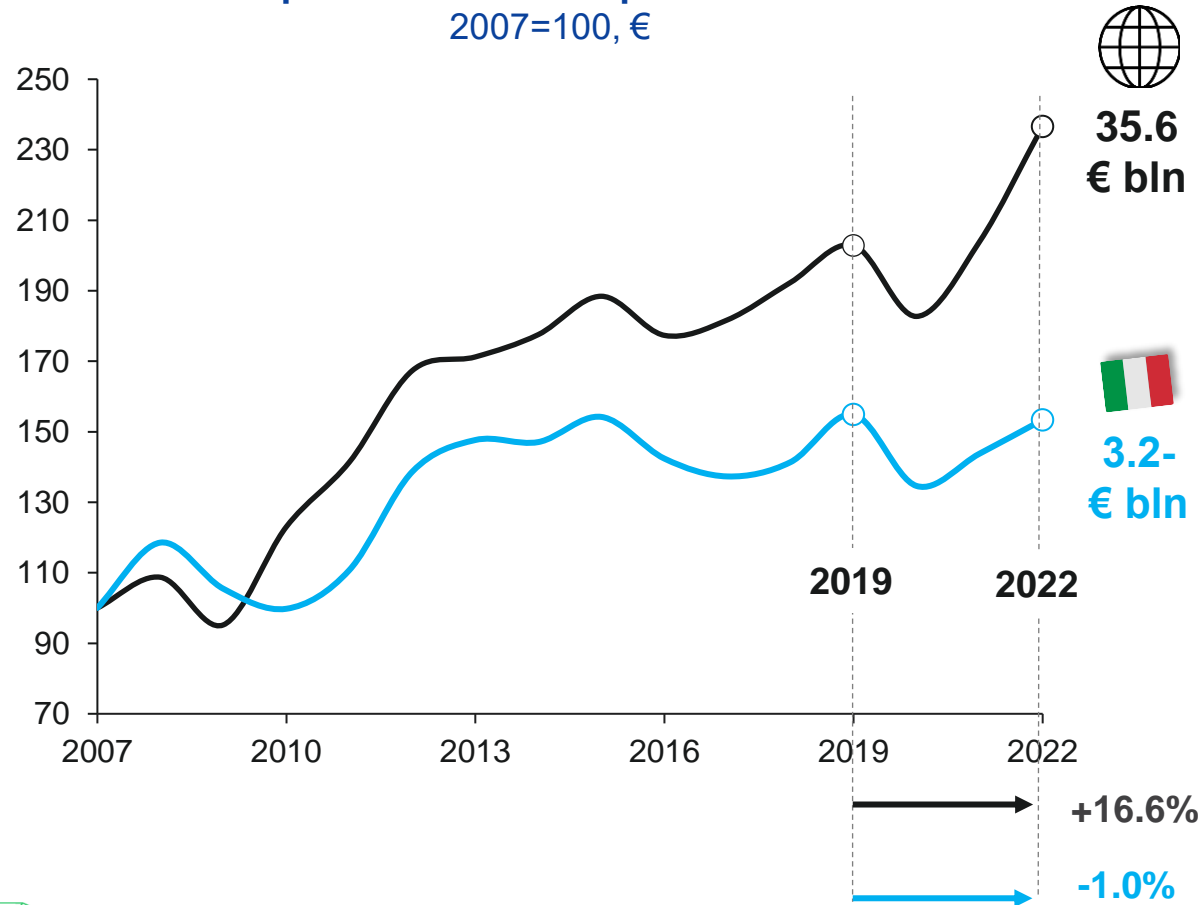
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Italy in O&G valves global trade | the recovery goes on

Italy's valves export maintained a positive momentum in 2022 and filled the gap with pre-pandemic...
 ... albeit leaving on the ground approx. 1.6 point of export market share

World imports and Italian exports of O&G valves

2007=100, €



Italy's share of World O&G valves market

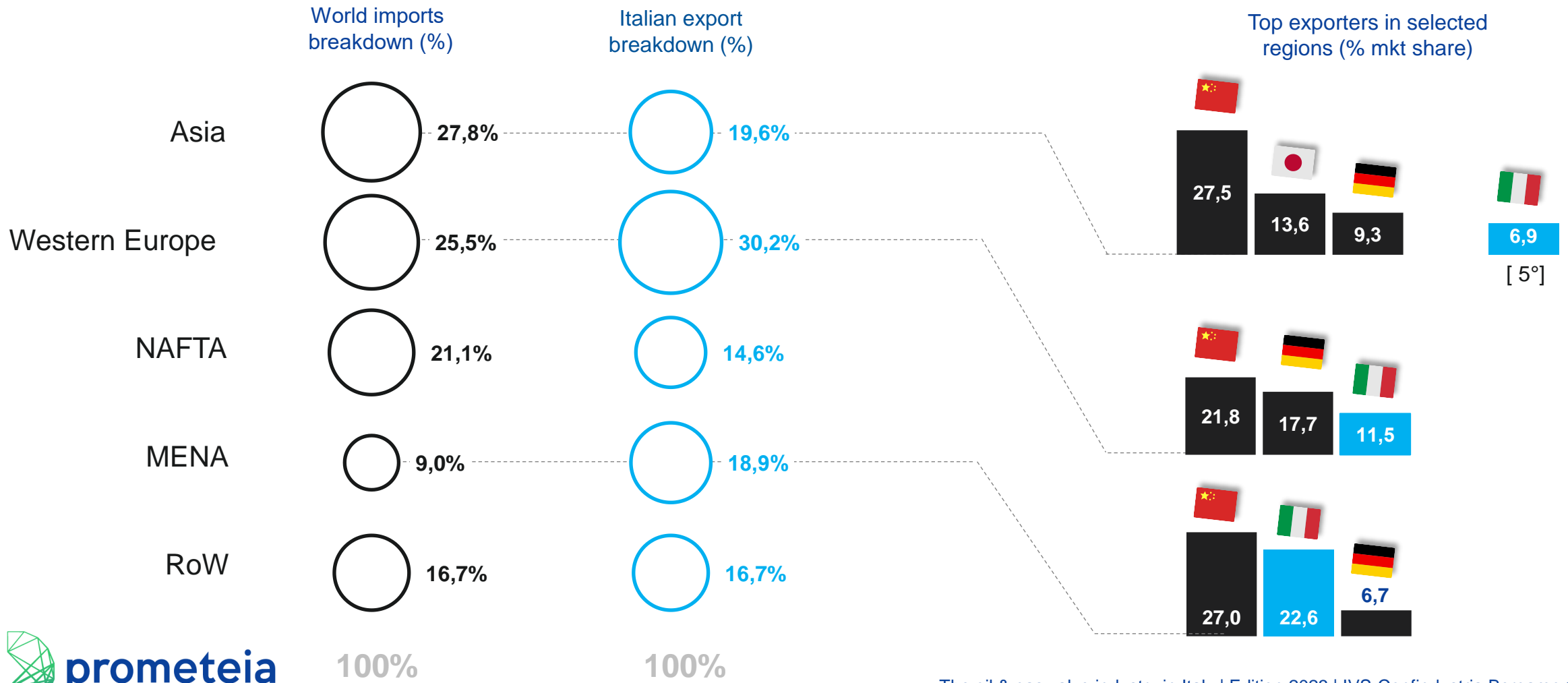
ITA export as % of World imports, €



Italy in O&G valves global trade | structure and positioning

A leading role (behind China) in MENA region, third in rank in the core Western Europe market

Geographic Framework of sales (in €, 2019-2022 average)



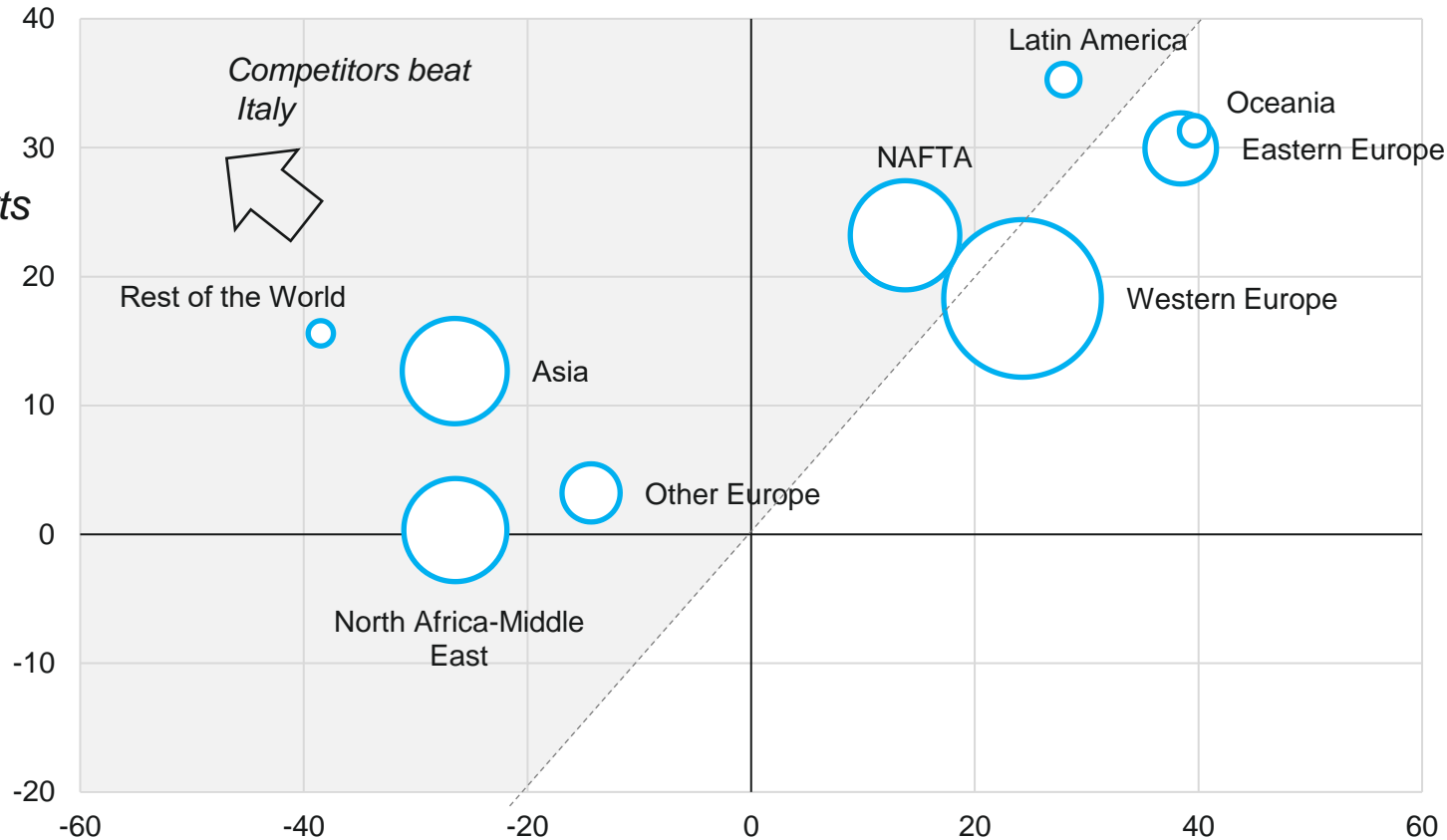
Competitive O&G valves landscape | a mixed performance for Italy

Italy increased its share of European Mkts (both Eastern & Western)...

... but lost ground in MENA & Asia Markets

World imports and Italian exports of O&G valves in the last 3 years

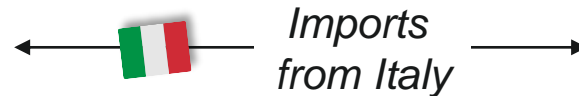
Imports from Italy and overall imports, 2022 / 2019 % chg. (€)



Each bubble size is proportional to the weight of the region in overall ITA export

= 250 € Mlns

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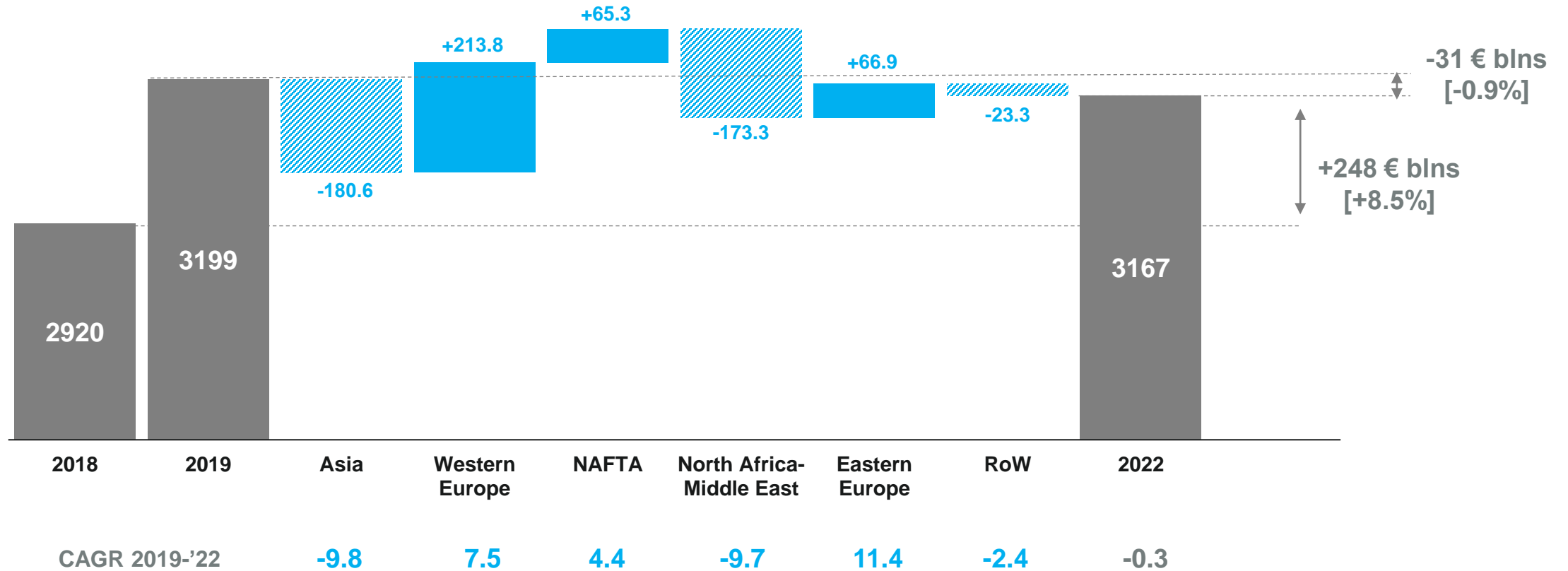


Markets contribution | NAFTA & Europe underpinned the recovery

Overall sales almost close the gap with pre-pandemic in 2022 (-0.9%)... +8.5% from 2018 levels



Italian export of O&G valves
Regional contribution to Italian export growth, Δ 2022 - 2019 in € blns.



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Italy maintained competitiveness in global O&G Valves markets

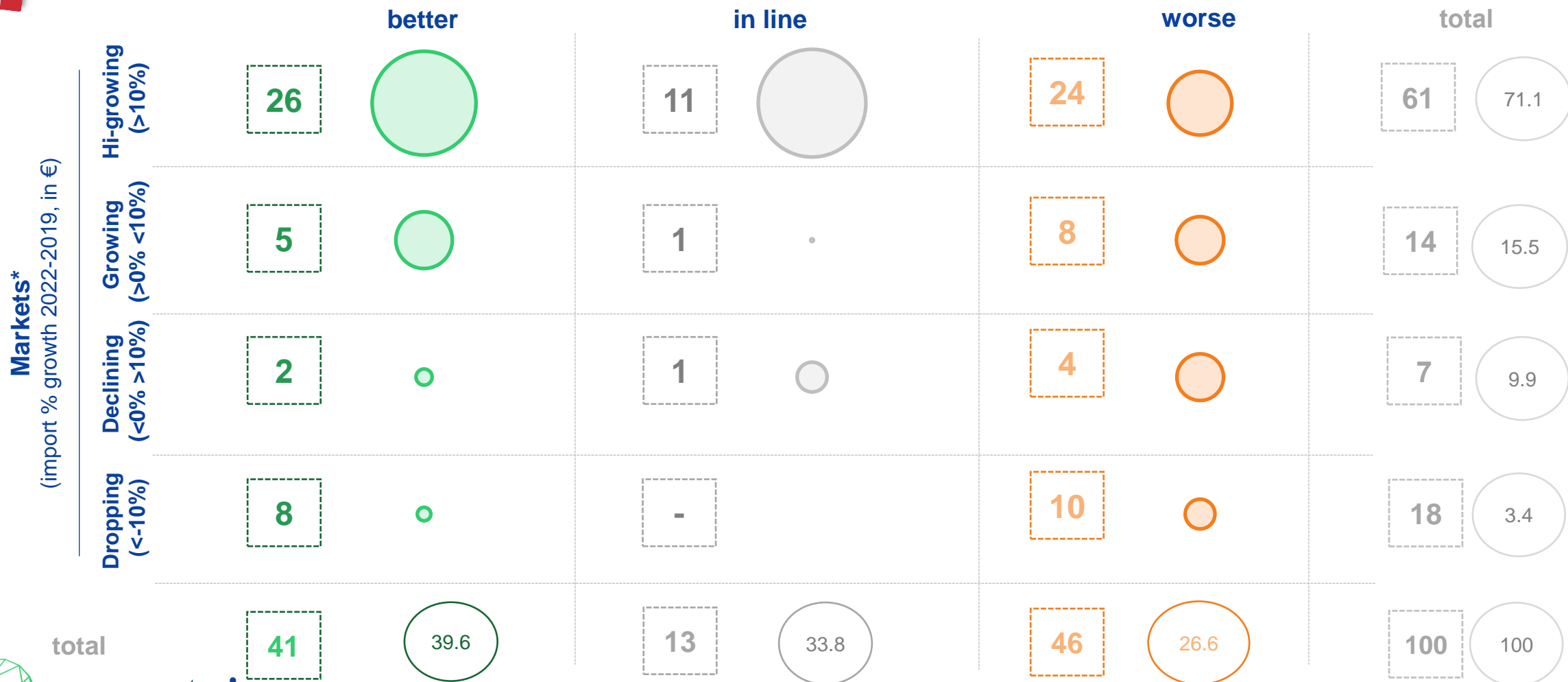
... as export increased at least in line with overall market in 54 over 100 top destinations



Export
ITA
(%)

of
countries

Italian O&G Valves export*
2022/2019 growth, in €



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top 100 countries

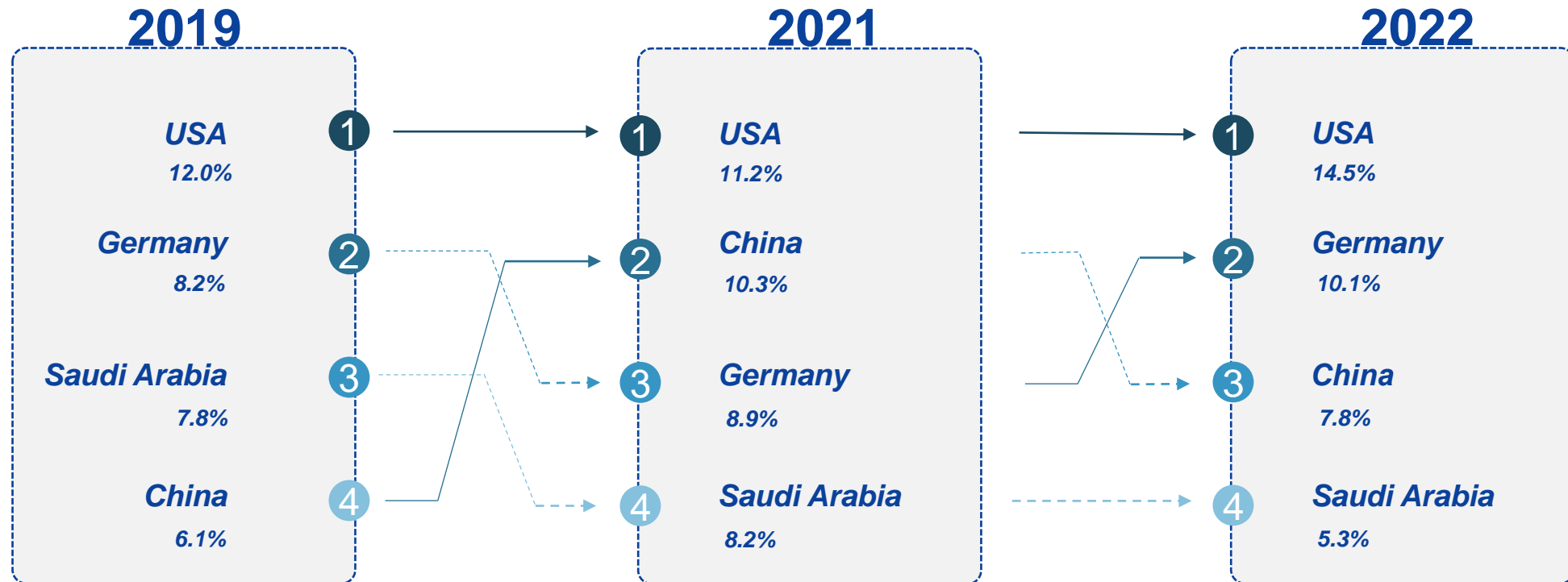


Italian O&G valves export: a fast-changing & concentrating landscape

USA reaffirmed its position in 2022, Germany overcame China and placed second in the rank ...

... Saudi Arabia lost ~3 p.p of share among the top recipients of ITA O&G Valves

Italian O&G Valves export by destination
in €, ranking and mkt share



Top 4 markets accounted for **37.7%** of Italian export value in 2022...

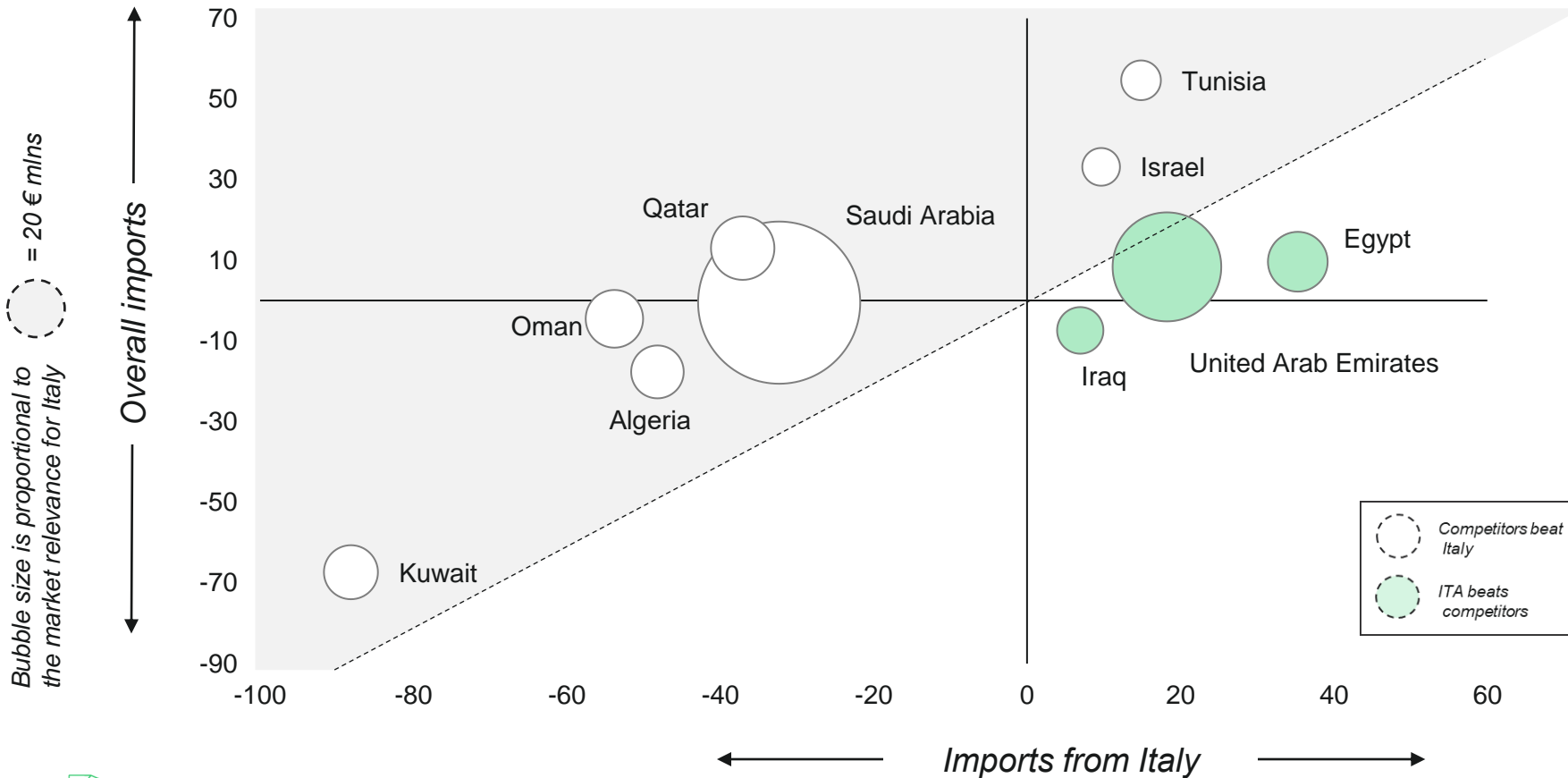
... 3.5 p.c. point more than in 2019 (**34.1%**)



In depth | Middle East and Northern Africa (MENA) (1/3)

Underperformance in the (challenging) Saudi market explain a large part ...
 ... of the competitiveness loss of Italian O&G companies

MENA imports and Italian exports of O&G valves : 2022 / 2019
 % chg. and market size for Italy (avg. 2019-2022), top-10 markets



In a nutshell

- ITA share in MENA mkts **20.7%**
- ITA export to MENA as % of total **19.0%**
- MENA import as % of World imports **9.0%**
- MENA import growth (2022/2019) **0.3%**
- Italy export to MENA growth (2022/2019) **-26.4%**
- ITA share gain / loss in MENA **-6.1 p.p.**

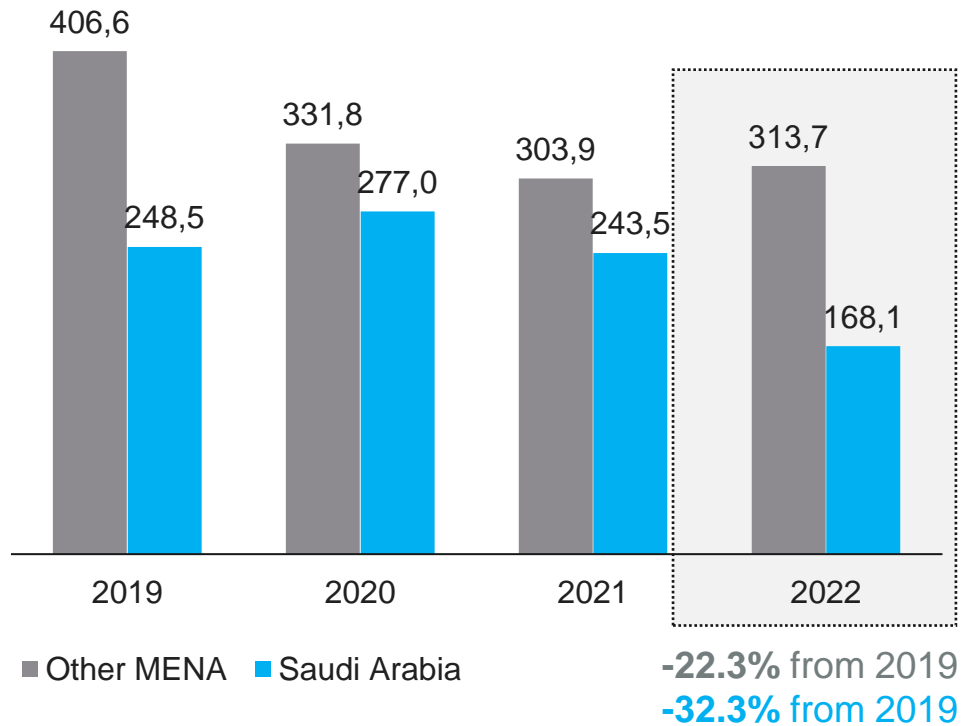
In depth | What happened to Saudi Arabia?

The impact of OPEC+ oil production cuts doesn't entirely explain...

... the magnitude of the loss of ITA share (to the advantage of CHN)

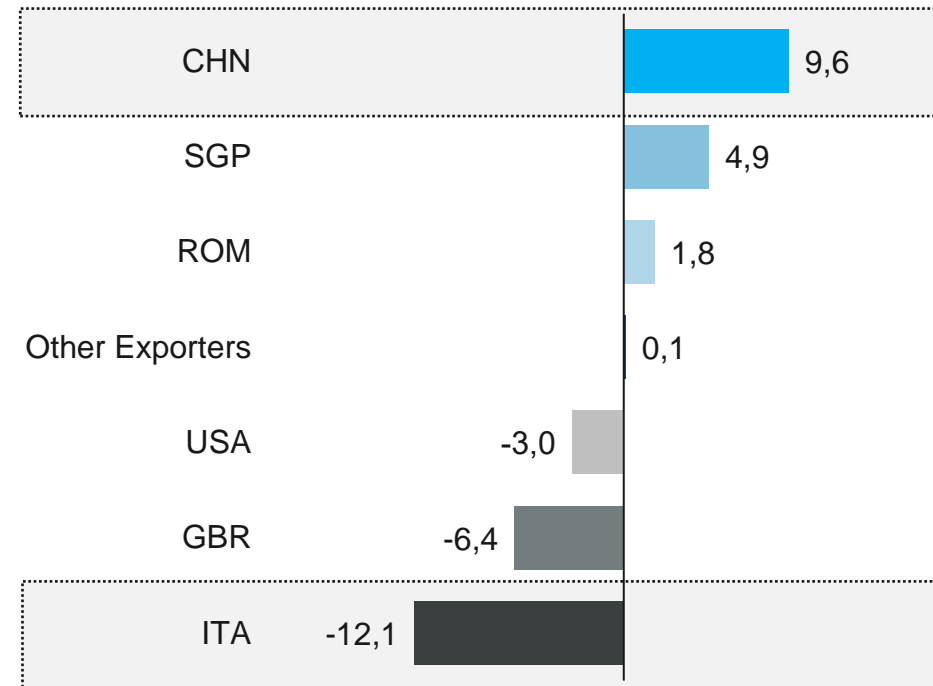
Italian O&G Valves export in MENA region

in € mlns



Saudi Imports of O&G Valves, contribution to growth

in € mlns, 2022 vs 2019



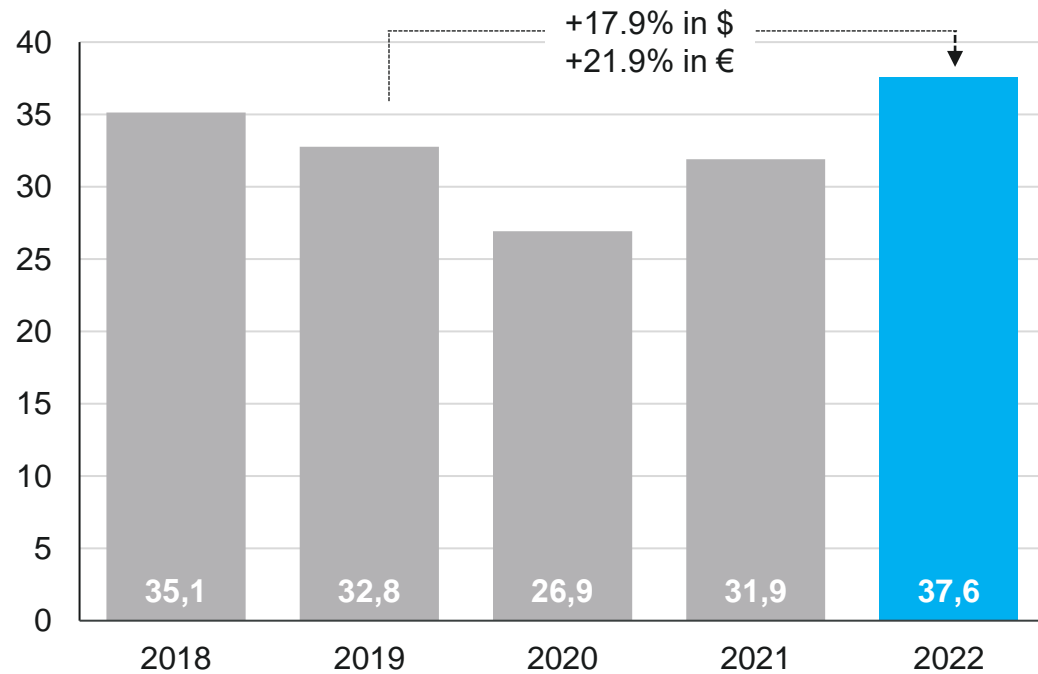
Overall Saudi Imports of O&G Valves in 2022: **-5.1%**



In depth | What happened to Saudi Arabia?

China growing ties with Saudi Arabia (which received the largest share of BRI energy investments in 2022) ..
 ... likely played a major role behind the booming flow of Chinese O&G Valves

Saudi Aramco, 2022 CAPEX
in \$ blns



Prometeia Calculation on balance sheet data, Saudi Aramco FY Financial Results 2022 document



2023 guidance
 55+ \$ blns
 +17.9% in \$
 +32.3% in €

- Oil and gas construction engagement amounted to \$ 6.8 billion (51% of Chinese energy construction abroad) and \$ 4.8 billion in investments (60% of Chinese energy investments abroad).
- Gas-related investments reached their 2° highest level in the history of the BRI at \$ 4.8 billion i.e. to 60% of China's energy investments, driven by a **\$ 4.6 billion investment in Aramco Gas Pipelines Company in Saudi Arabia. Saudi Arabia was the country that received the most energy engagement in 2022 (\$ 5.4 billion)**, followed by Argentina.
- China's engagement in oil-related projects in the BRI represent ~17% of total Chinese energy engagement in the BRI, amounting to about \$ 3.6 billion in 2022

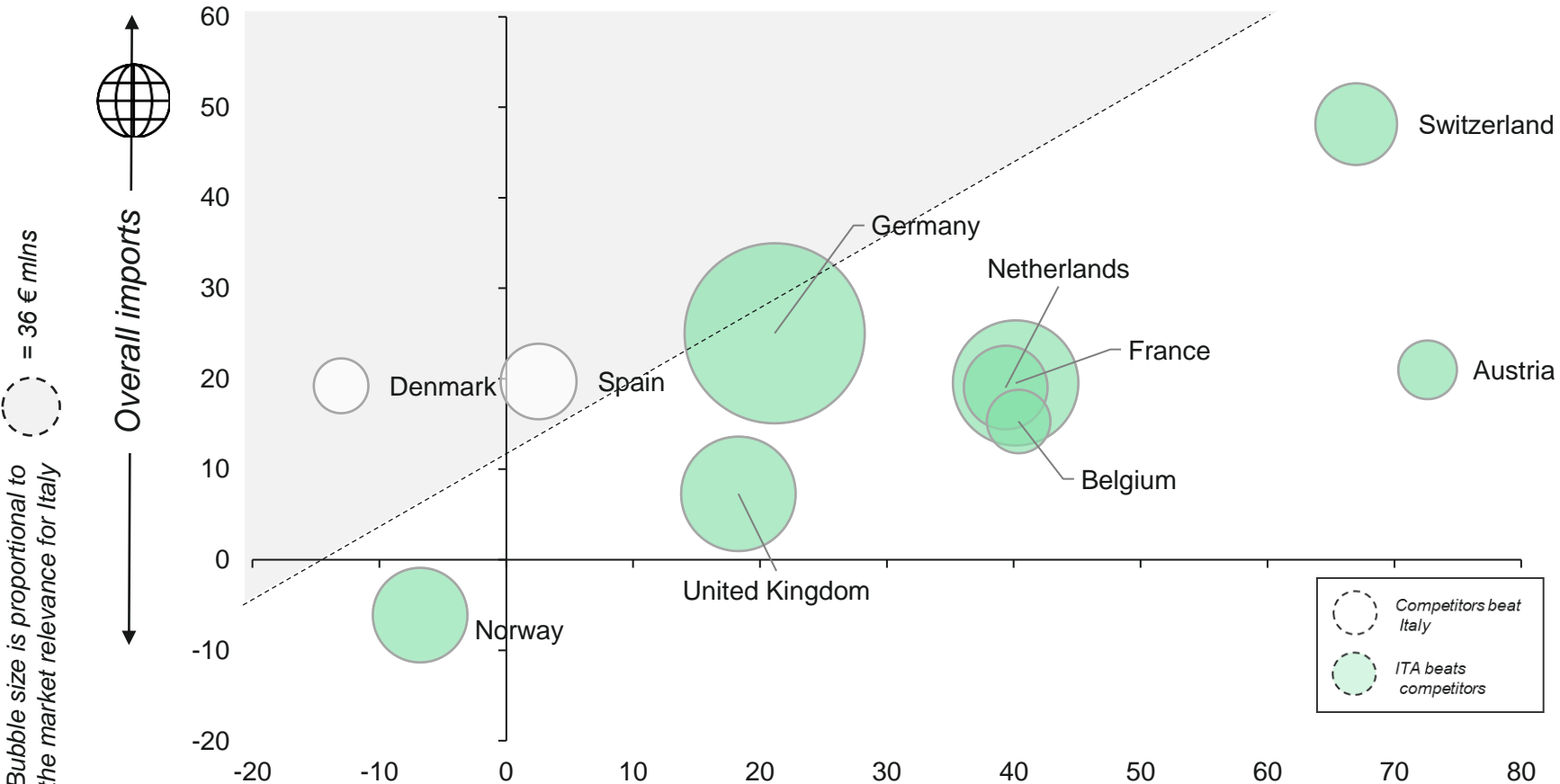
from Green Finance & Development Center,
 «China Belt and Road Initiative (BRI) Investment Report 2022

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In depth | Western Europe (2/3)

Italy: overperformance in almost every market of the region

Western Europe imports and Italian exports of O&G valves : 2022 / 2019
% chg. and market size for Italy (avg. 2019-2022), top-10 markets



2022 vs 2019

In a nutshell



ITA share in WEU mkts
11.5%



ITA export to WEU as % of total
30.2%



WEU import as % of World imports
25.5%



WEU import growth (2022/2019)
+18.3%



Italy export to WEU growth (2022/2019)
+24.3%



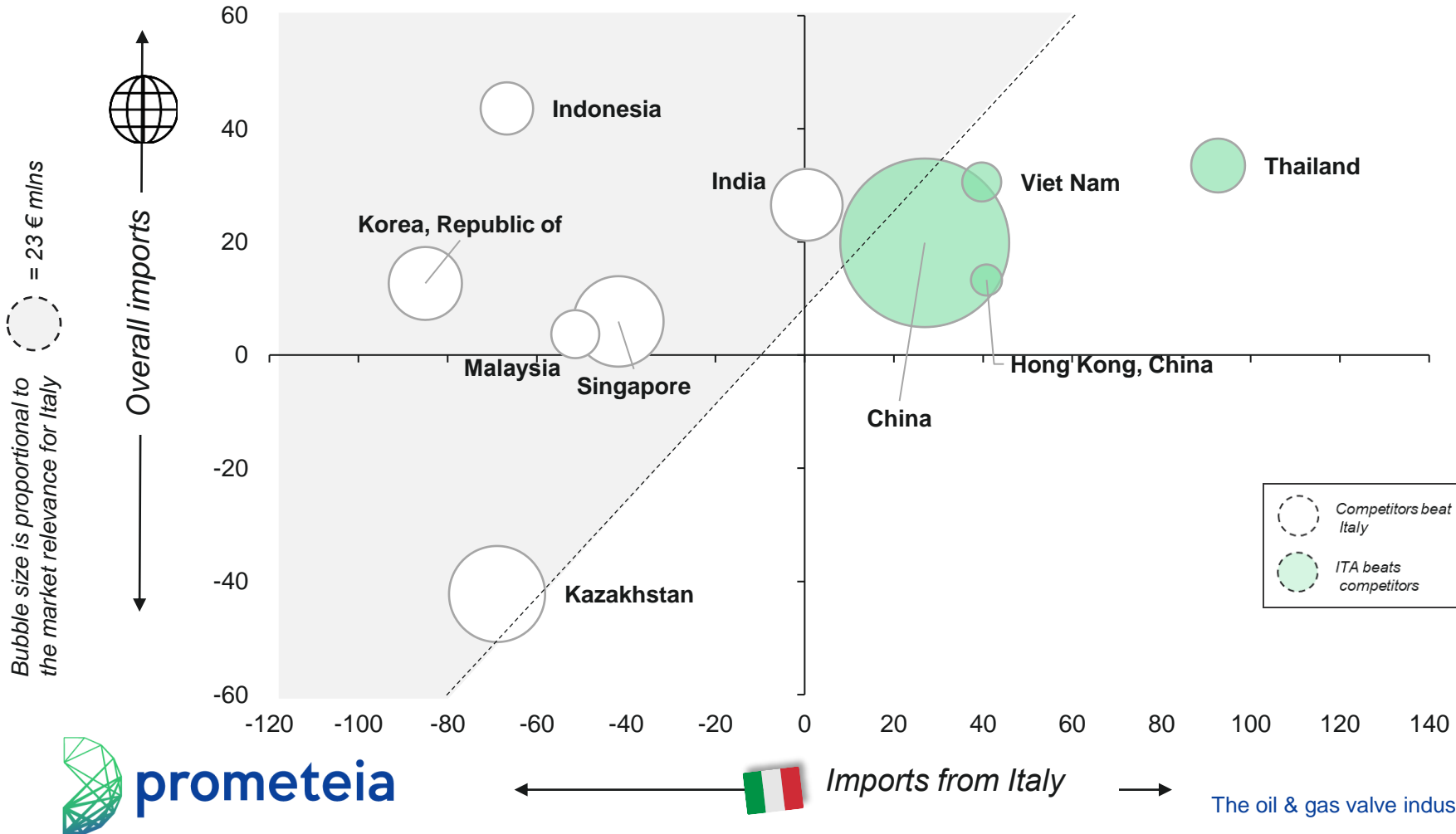
ITA share gain / loss in WEU
+0.6 p.p.



In depth | Far East (3/3)

The positive performance in the Chinese market hasn't prove enough
... to offset the loss in other relevant Asian destinations

Far East imports and Italian exports of O&G valves: 2022 / 2019
% chg. and market size for Italy (avg. 2019-2022), top-10 markets



In a nutshell

- ITA share in FAR EAST mkts **6.9%**
- ITA export to FAR EAST as % of total **19.6%**
- FAR EAST import as % of World imports **27.8%**
- FAR EAST import growth (2022/2019) **+12.7%**
- Italy export to FAR EAST growth (2022/2019) **-26.5%**
- ITA share gain / loss in FAR EAST **-2.8 p.p.**

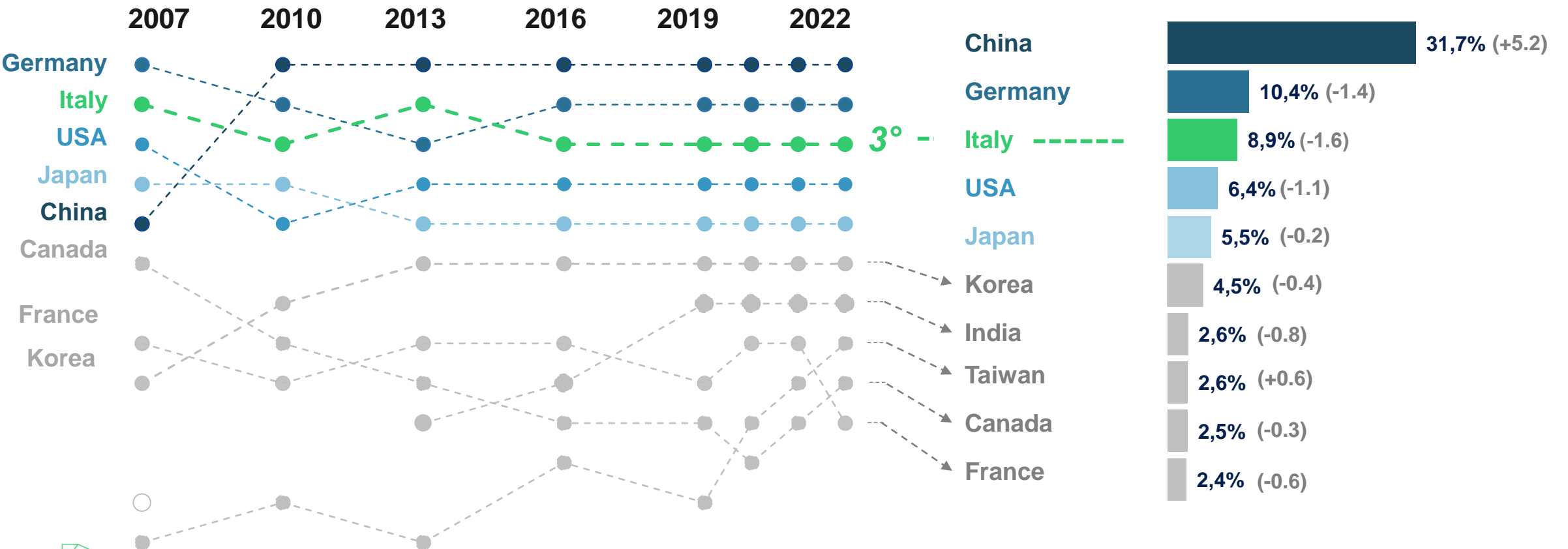
World top exporters of O&G valves

Italy still holds the third place in global exporters ranking, behind China and Germany

World top-10 exporters of O&G valves (€)

Place in ranking, 2007-2022

World market share, 2022
2019-'22 Δ share between brackets



Italy and its competitors in the aftermath of pandemic

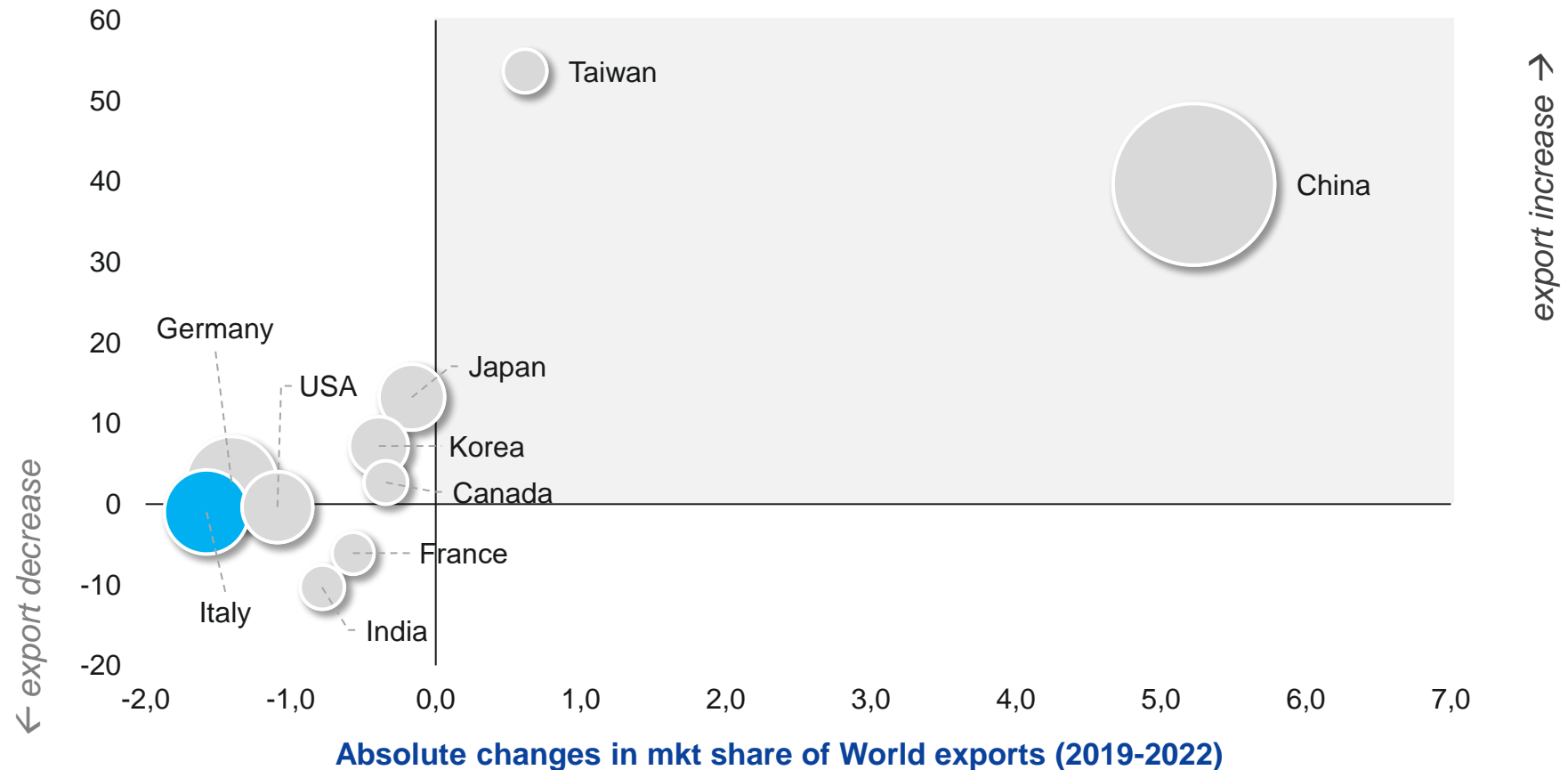
China & Taiwan alone in the “bright quadrant” the other top exporters (Italy among them) ...

... failed to increase their mkt share

Export growth and world market shares by world leading exporters

2019-2022, in €

← market share loss market share gain →

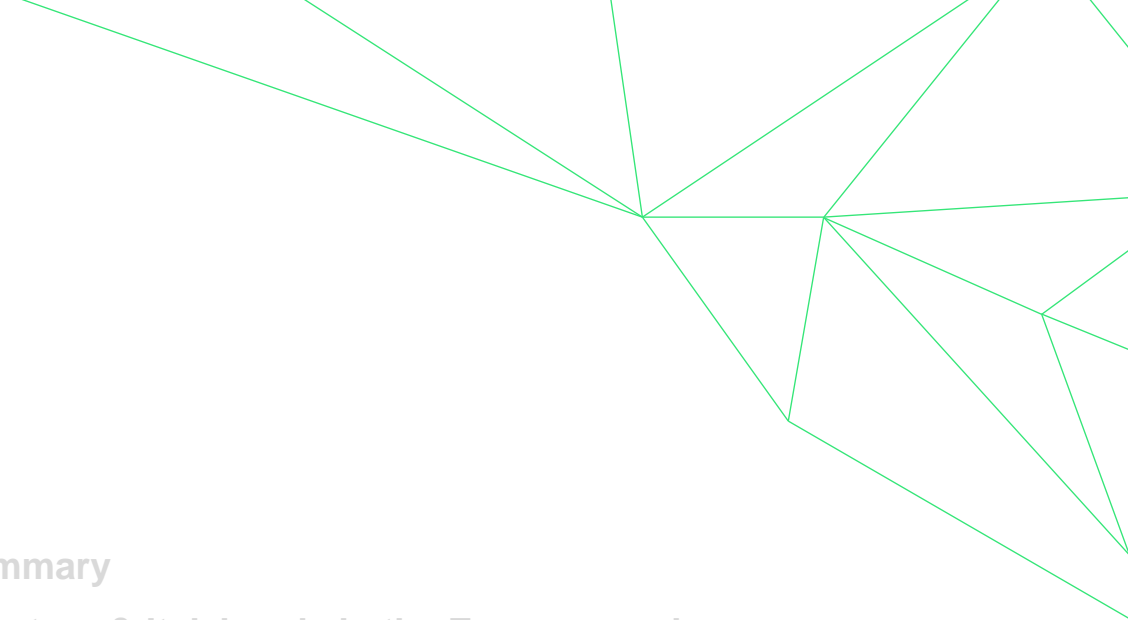


Export value %
change
2019-2022

← export decrease

export increase →

Absolute changes in mkt share of World exports (2019-2022)

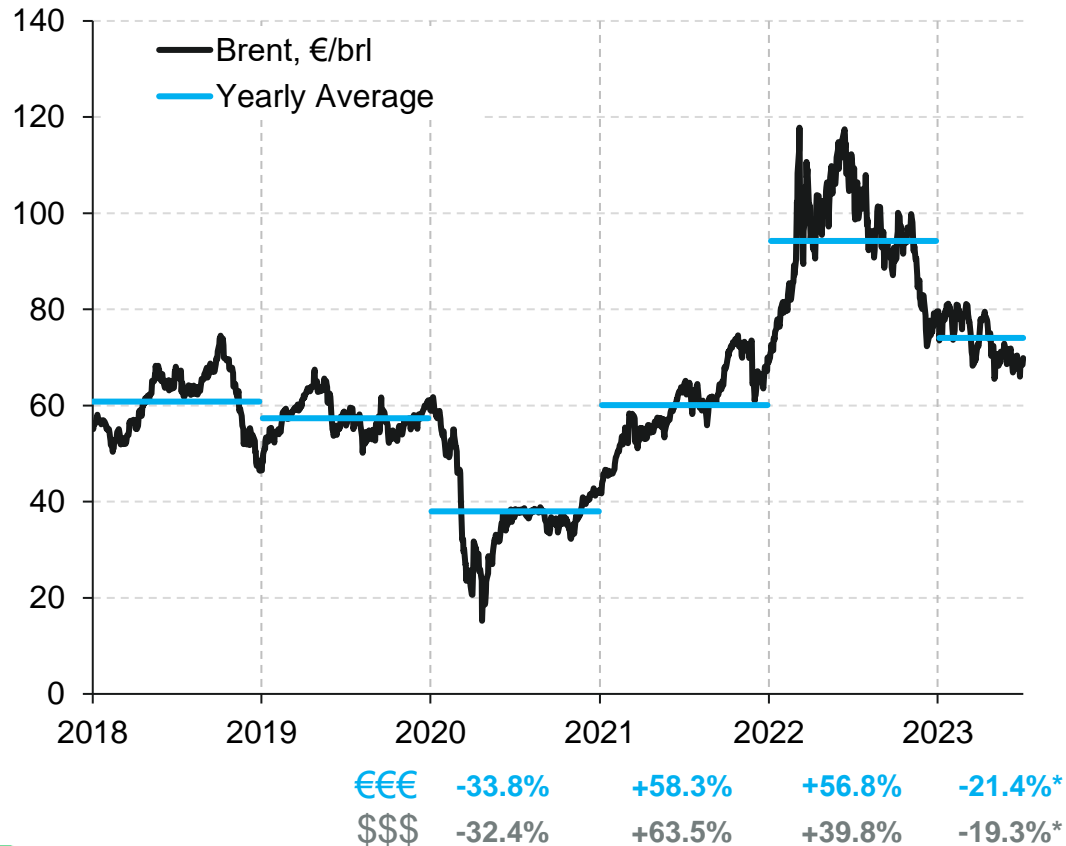
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2022: a year of exceptionally high energy prices ...

Ukraine conflict added another layer of tension to an already complex and volatile situation

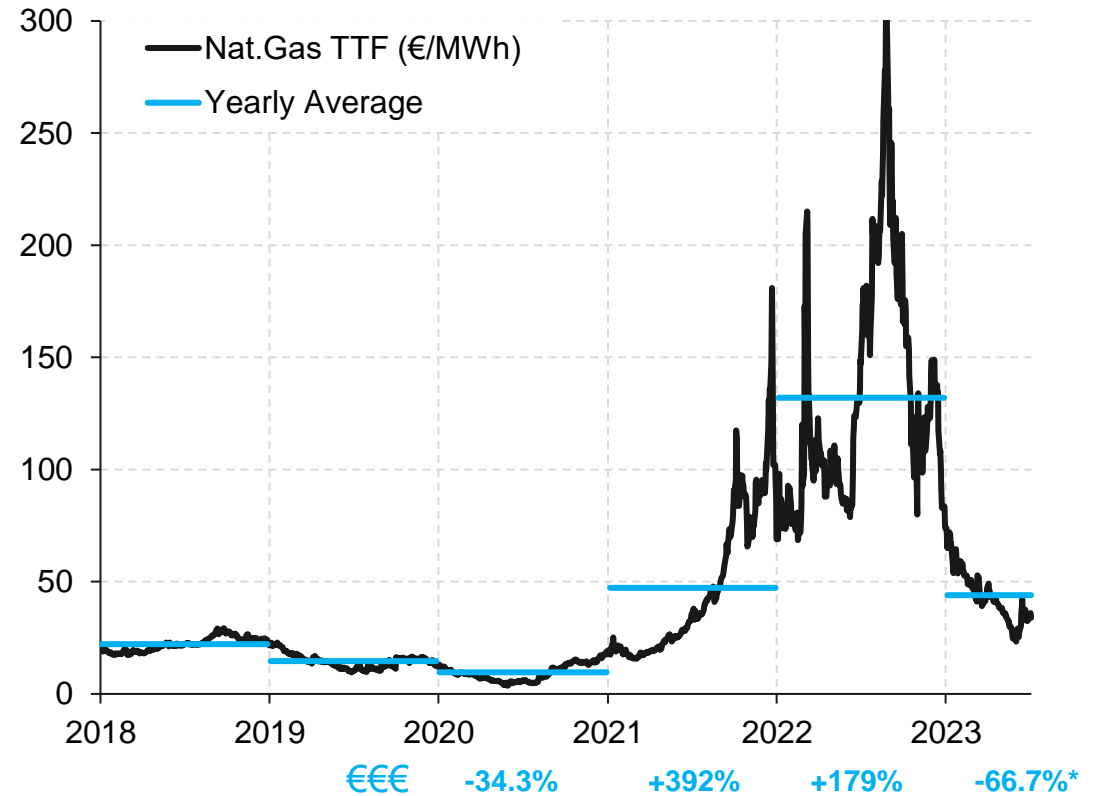
Crude Oil Price

Brent, 1° futures position, €/bbl, daily quotes



Natural Gas Price (Europe)

Dutch Title Transfer Facility (TTF), €/MWh, daily quotes



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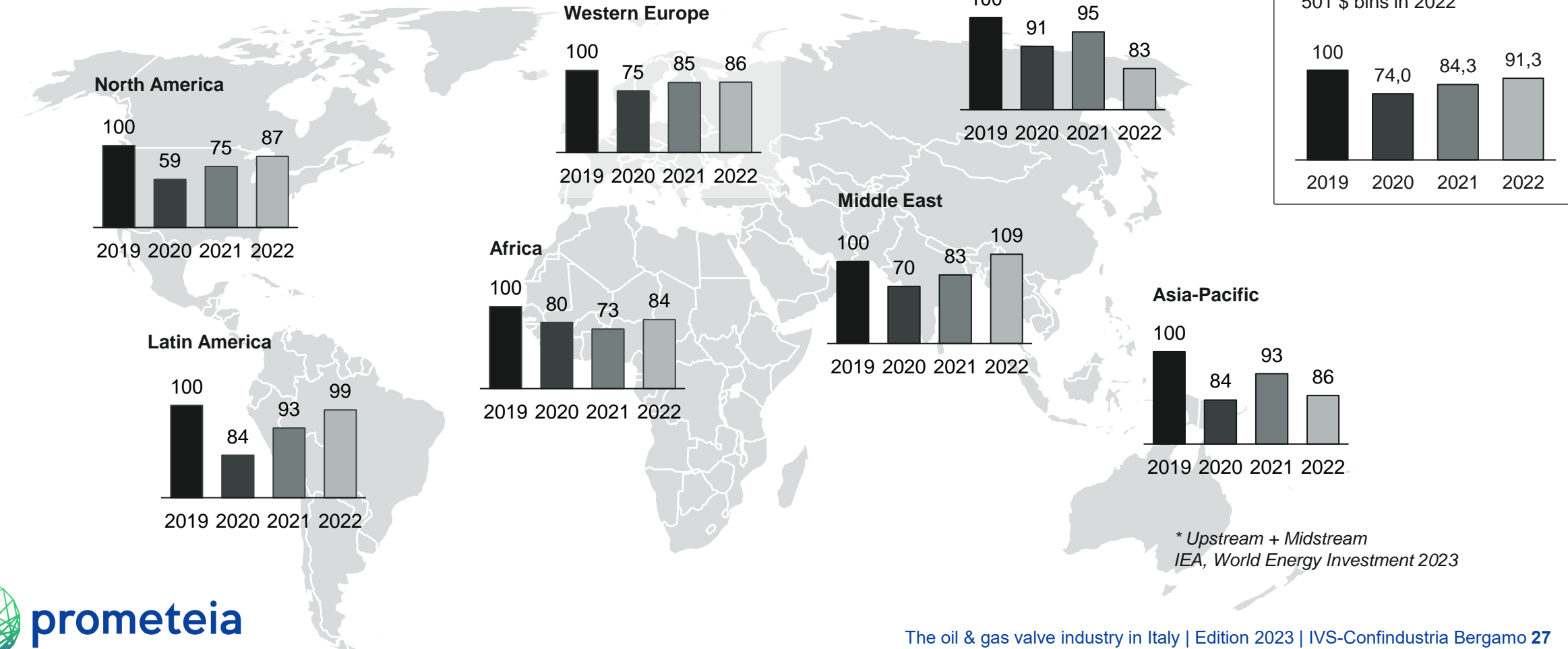
Prometeia calculation on Eikon Data

* jan-jun average

... hasn't proved enough to push a boom in investments: both for oil...

Middle East the only bright spot in an otherwise bleak scenario for oil industry

World Oil* investment map
2019=100, in \$ blns at current prices

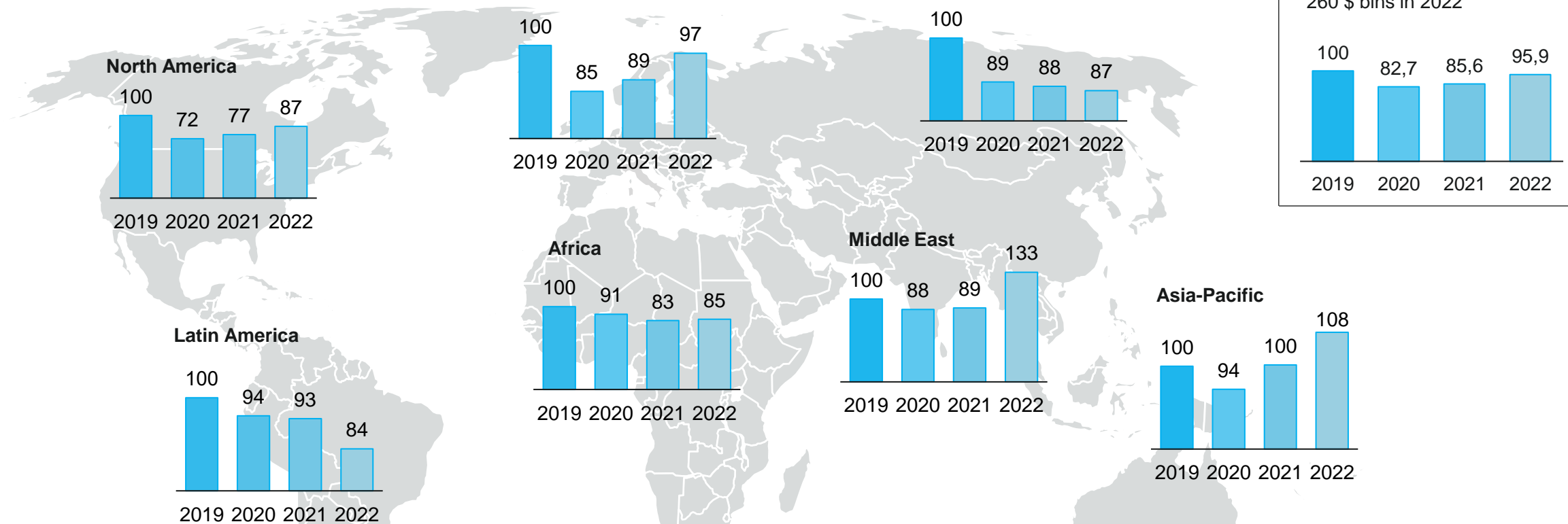


... and natural gas supply

2022 natural gas investments rose above the pre-pandemic levels in ME, APAC

World Gas* investment map

2019=100, in \$ blns at current prices



* Upstream + Midstream
IEA, World Energy Investment 2023



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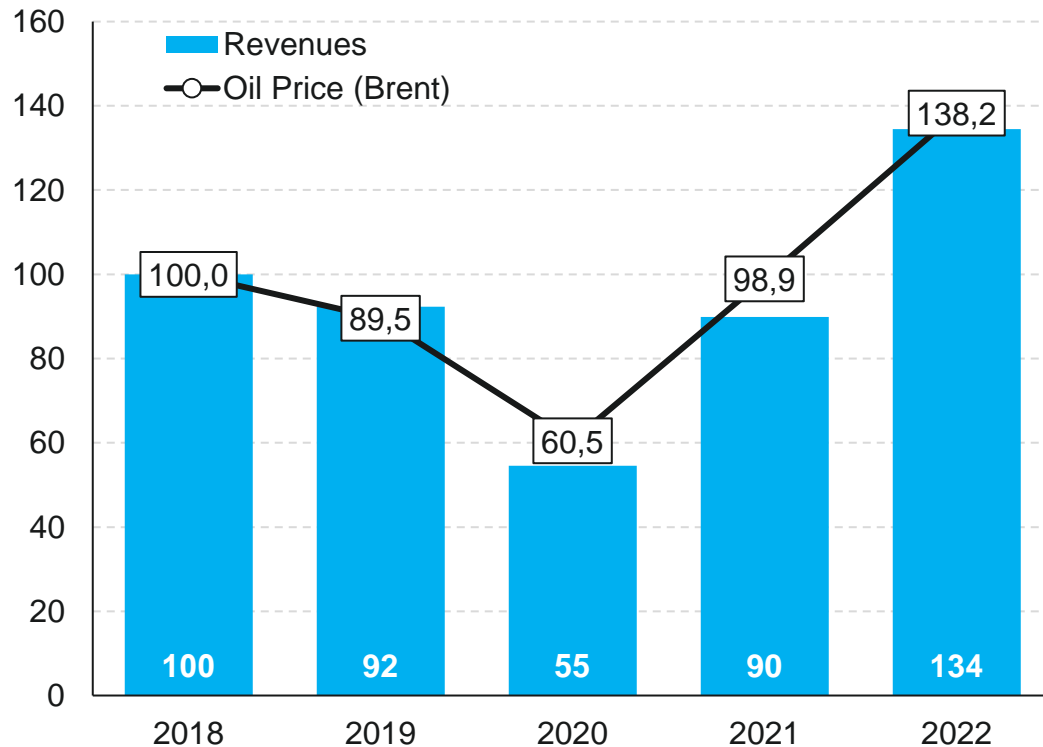
Indeed, while higher prices triggered an unprecedented increase in revenues ...

... and profits, for upstream and midstream International Oil Companies (IOC's)*

EBITDA / Revenues ratio of our sample rose to an impressive 27.9% in 2022

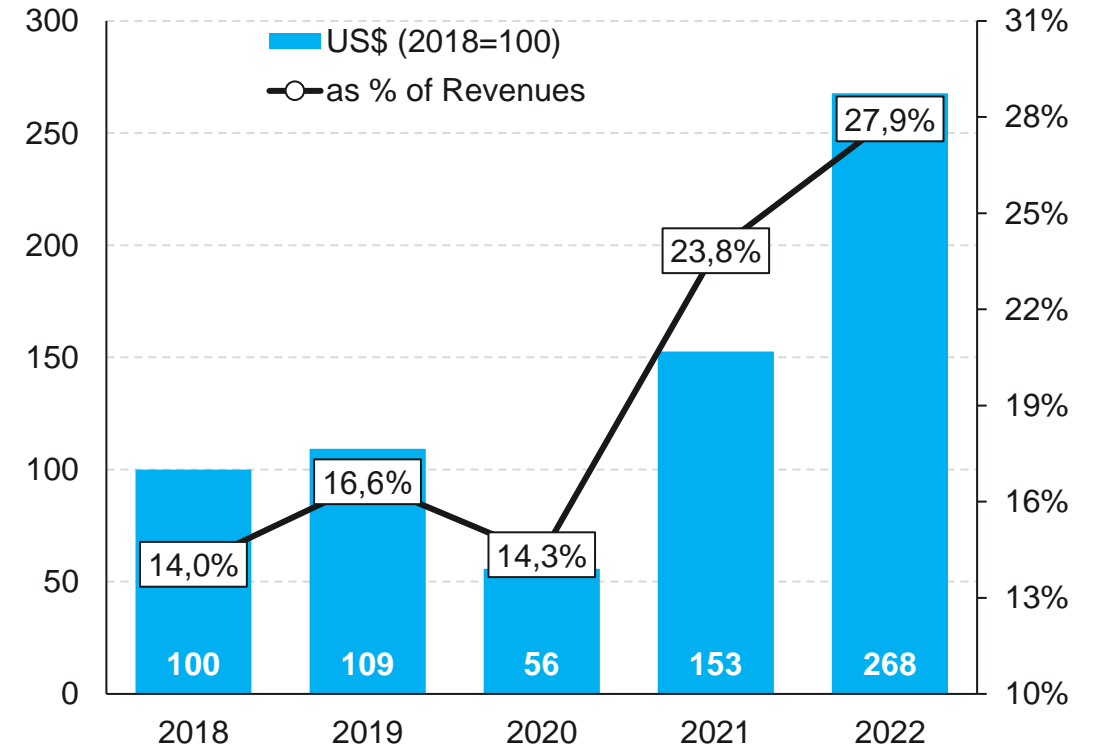
Selected Western O&G companies* revenues + oil price

2018=100, in \$



Selected Western O&G companies* EBITDA

in \$ (2018=100) and % of Revenues



* Hess, Pioneer, ExxonMobil, Marathon, Occidental, Chevron, Chesapeake, ConocoPhillips, EOG, Woodside, Suncor, ENI, Galp, OMV, Total, BP, Shell, Aker BP, Equinor. **Prometeia** Calculation on balance sheet data.



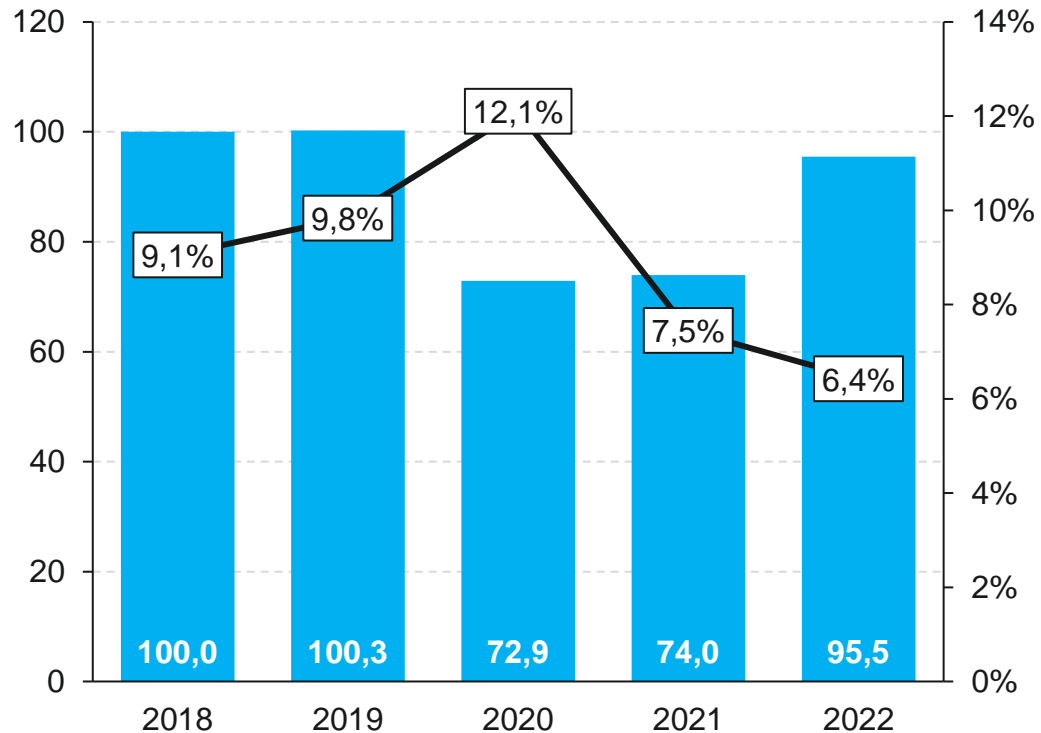
... they (until now) failed to drive the capital spending above the 2019 levels

... as O&G IOCs mostly used their windfall profits to reward shareholders and share buybacks...

... CAPEX (albeit recovering) remained below the pre-pandemic

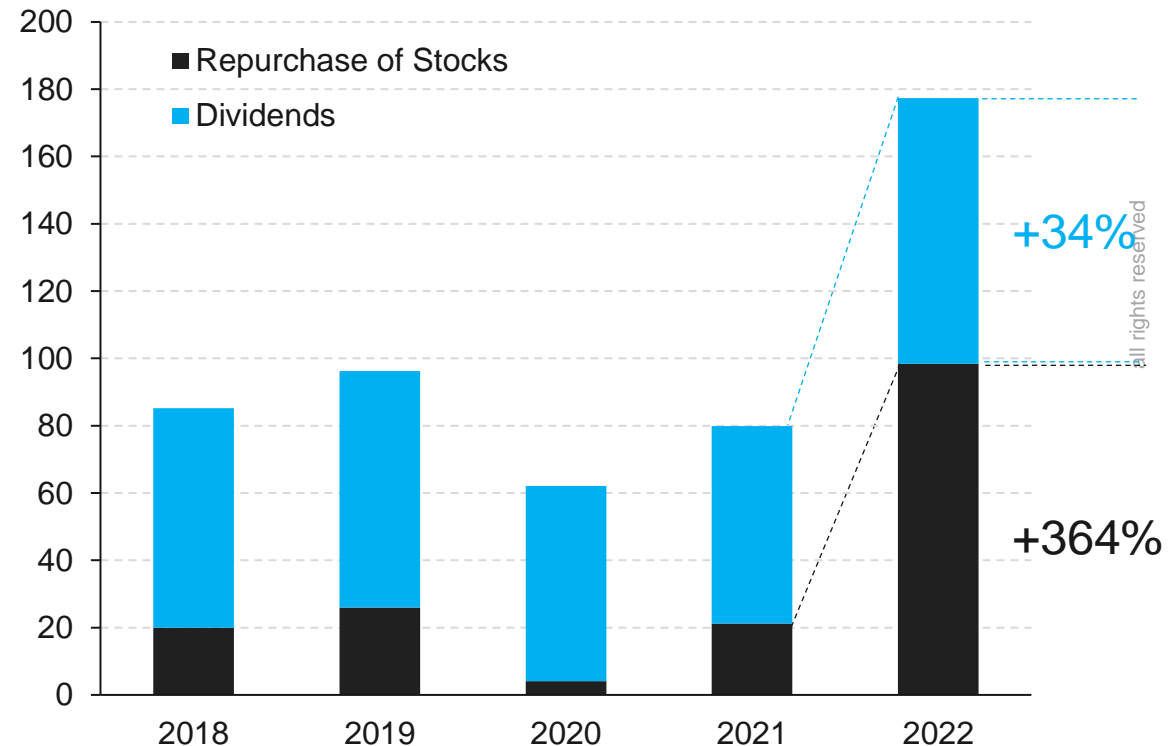
Selected O&G companies* CAPEX

2018=100, in \$



Selected O&G companies* Financing Activity: Buybacks + Dividends

in \$ blns



* Hess, Pioneer, ExxonMobil, Marathon, Occidental, Chevron, Chesapeake, ConocoPhillips, EOG, Woodside, Suncor, ENI, Galp, OMV, Total, BP, Shell, Aker BP, Equinor. **Prometeia** Calculation on balance sheet data.

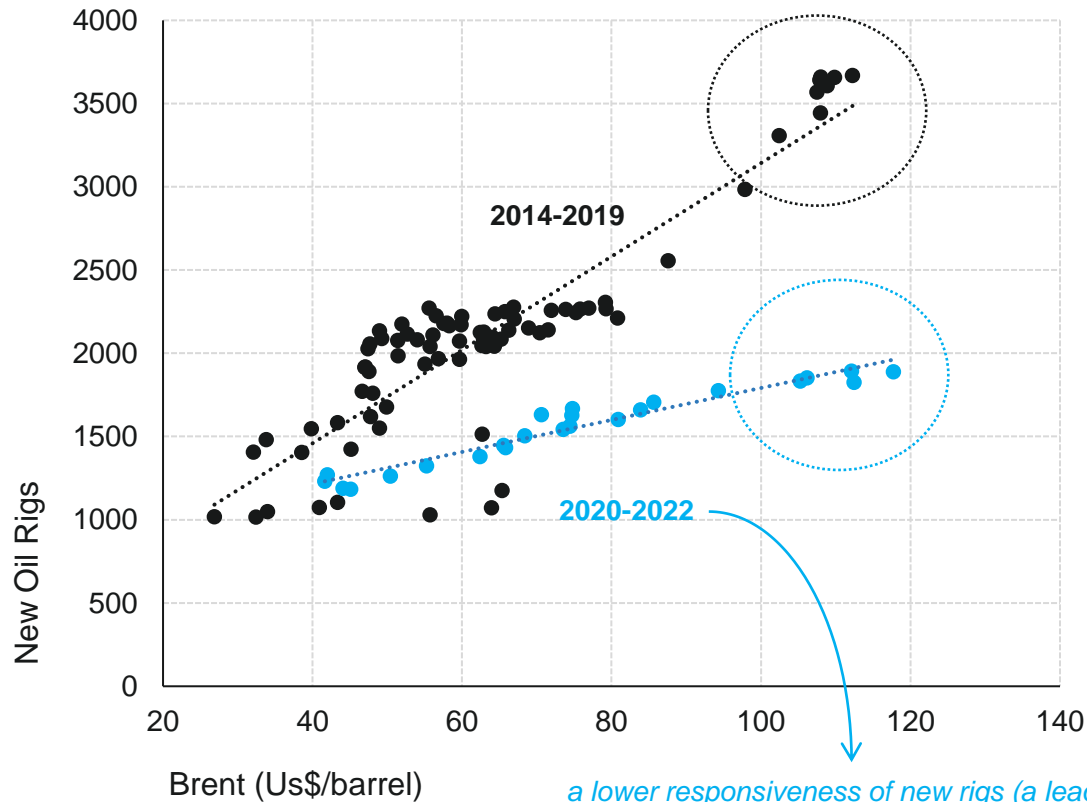


Not surprisingly, upstream investment proved less responsive to price...

... than in the past. In 2014-2019, a 100 \$/barrels price associated with at least 3000+ new oil rigs...

... over doubling those observed in 2022

Global Oil Rig Count and Crude Oil Price
Correlation



Prometeia calculation on Baker Hughes, Eikon
Data

a lower responsiveness of new rigs (a leading indicator of demand for products used in drilling, completing, producing and processing hydrocarbons.) to oil prices suggests that, compared to the past, O&G industry require a higher oil price to incentivize investments in oil-related projects

What hindered the recovery in O&G investment?

- I. **Uncertainty** about global oil demand, supply dynamics, and geopolitical factors contributed to the price fluctuations, making it difficult for companies to plan and invest with confidence
- II. **Capital discipline**: The industry faced pressure to prioritize shareholder returns and profitability, leading to cost-cutting measures and a focus on capital efficiency. Companies were more selective in their investments, prioritizing projects with higher returns and lower breakeven costs.
- III. **ESG Standards** Concerns about climate change, environmental regulations, and growing investor pressure to address sustainability issues led to a cautious approach in O&G investments.
- IV. More recently, **higher interest rates** impacted on the attractiveness of investments, particularly for capital-intensive projects with long payback periods, such as offshore drilling or large-scale infrastructure developments.



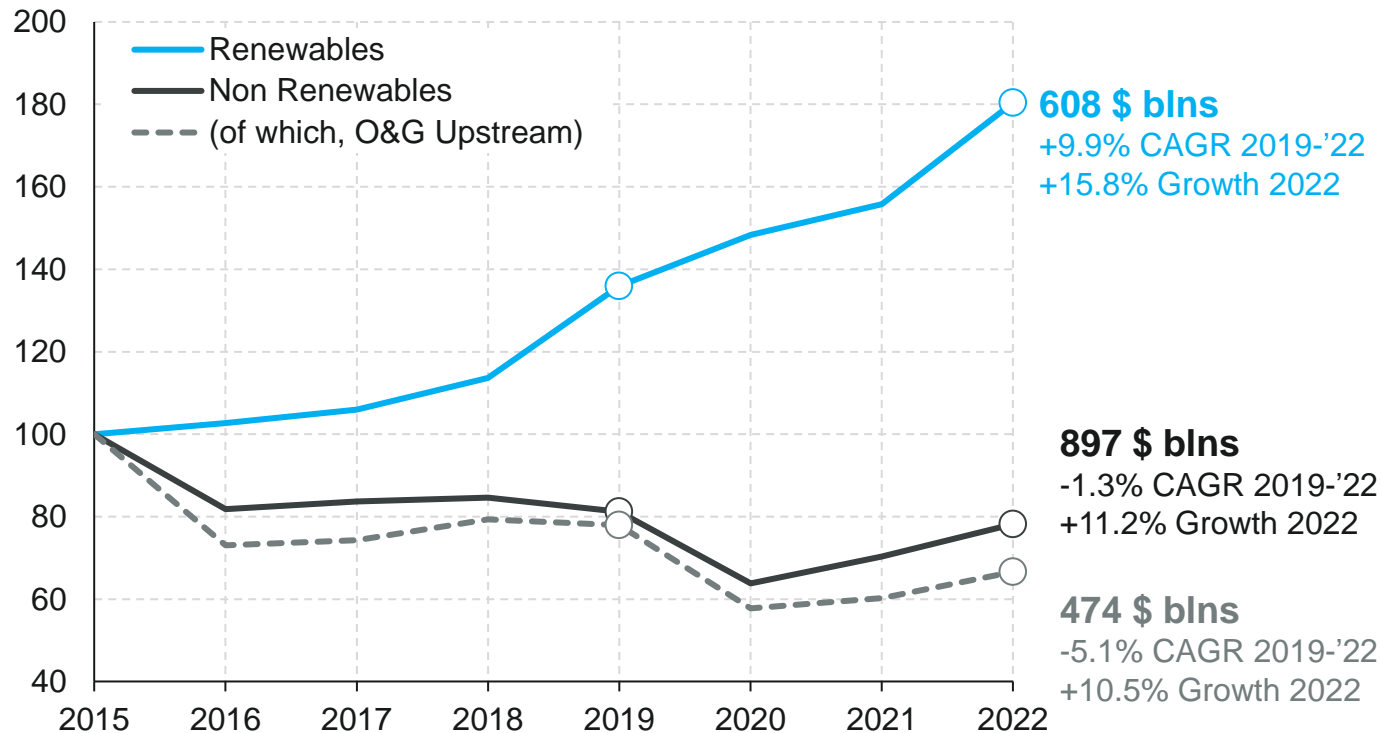
... while renewables continued to attract the bulk of new investments in 2022

The recovery from the pandemic and the response to the global energy crisis ...

... further boosted the global investments for clean energy

World energy investments, 2015-2022

2015=100, in \$ blns at current prices



Prometeia calculations based on IEA, World Energy Investment 2023

Factors behind the booming investments in renewables

- I) **Favorable economic and political environment** (policies and incentives to support the development and deployment of renewable energy sources)
- II) **Growing attention to ESG standards** (incorporation of ESG factors into the decision-making process)
- III) **Widespread popular support**: increased demand for clean and sustainable energy sources led by concerns about climate change and air pollution.
- IV) **Changing Dynamics in the Oil and Gas Industry**, as many companies have set renewable energy targets, invested in renewable projects, or acquired renewable energy companies

These factors combined have led to a **significant increase in renewable energy investments** in recent years, allowing renewables to dominate the energy investment landscape. This trend is likely to continue as the world transitions towards a more sustainable and low-carbon energy system.

Energy Security vs Energy Transition vs Discipline: towards a shift in energy trilemma?

Global O&G investment recently picked up...

— ... as the focus shifted to energy security and majors dialed down their plans to reduce their production

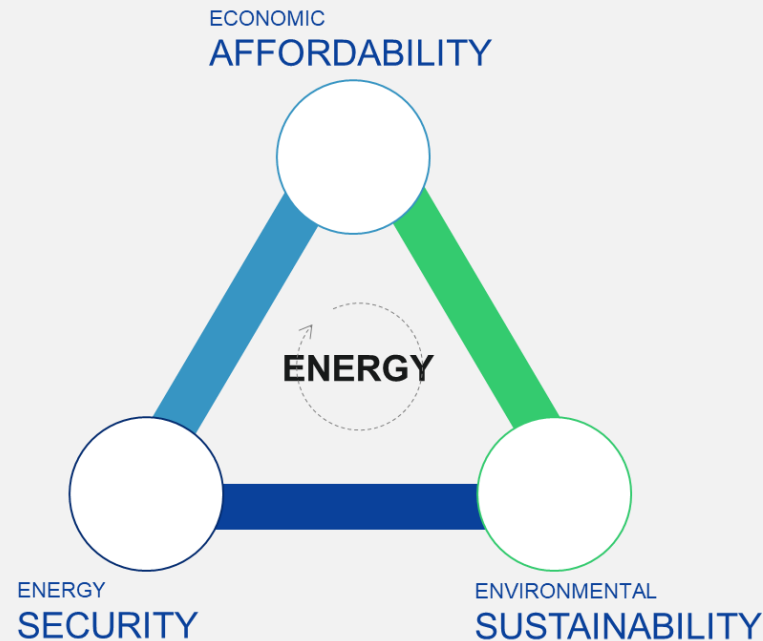
The energy trilemma

The Energy trilemma summarize the **three interconnected** (and often competing) **dimensions that policymakers need to consider when making decisions about energy systems.**

Security: ensuring a reliable and uninterrupted supply of energy to meet the needs of individuals, businesses, and industries.

Sustainability: enabling the transition towards cleaner and more sustainable energy sources + reduce greenhouse gas emissions

Affordability: ensuring the accessibility and affordability of energy for individuals, businesses, and industries.



Energy | Refining | Gas | Governance

Exclusive: UK to announce dozens of new North Sea oil and gas licences

Reuters

September 8, 2022 10:00 AM GMT+2 · Updated 10 months ago



Energy | Governance | Grid & Infrastructure | Exploration & Production | Fuel Oil

Norway awards 47 oil and gas exploration permits

Reuters

January 10, 2023 2:28 PM GMT+1 · Updated 6 months ago

Energy | Environment | Exploration & Production | Climate Change | Fuel Oil

Biden administration approves massive Willow oil project in Alaska

By Nichola Groom and Valerie Volcovici

March 13, 2023 11:58 PM GMT+1 · Updated 4 months ago



Sustainable Business

Climate-focused investors irked by BP's pivot back to oil

By Ron Bousso, Simon Jessop and Shadia Nasralla

February 10, 2023 6:39 PM GMT+1 · Updated 5 months ago



Energy | Sustainable Markets | Exploration & Production | Refining | Gas

Exclusive: Shell pivots back to oil to win over investors

By Ron Bousso

June 9, 2023 7:06 PM GMT+2 · Updated a month ago

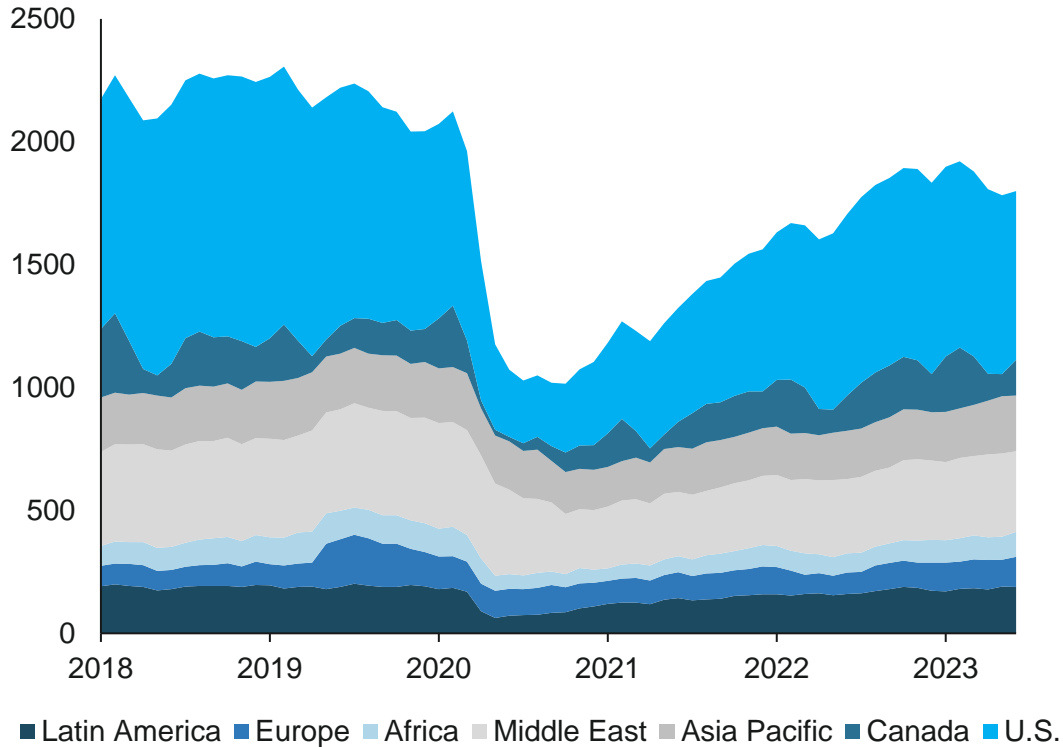


Recent developments in O&G E&P activity

Overall drilling activity +5.5% y-o-y in June, still 17.3% below the 2019 average

Global Oil Rig Count

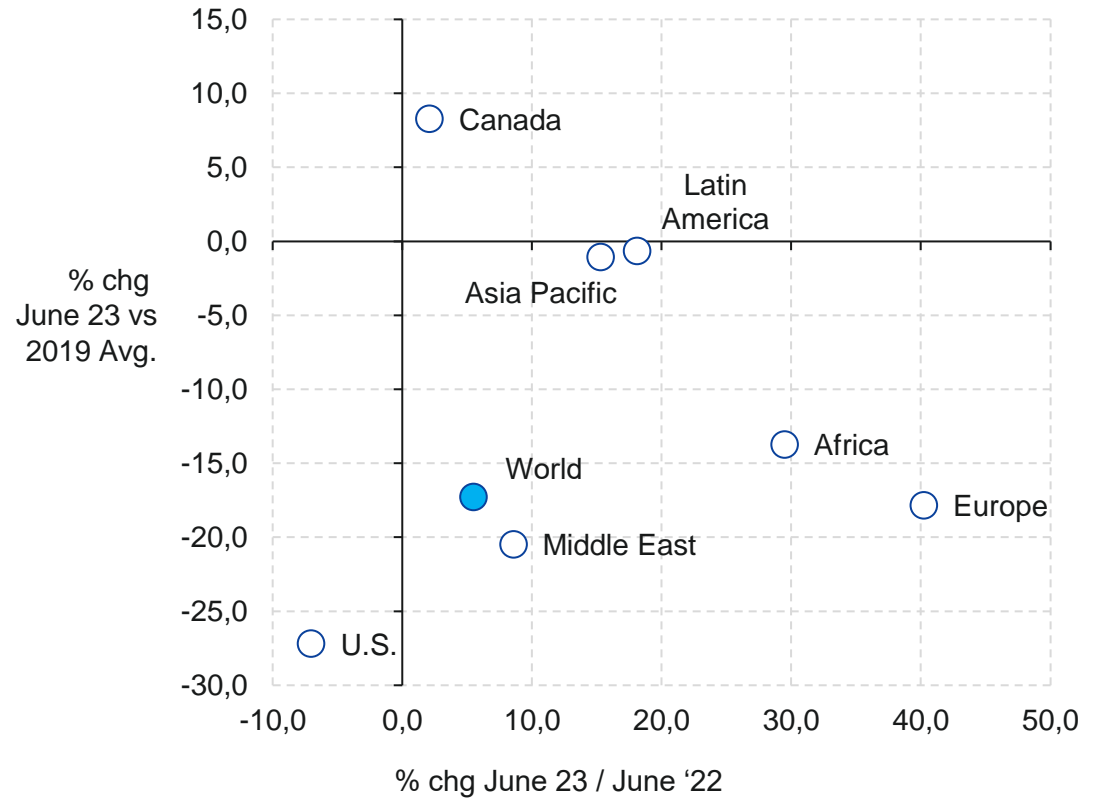
of active drills, monthly data until June, 2023



Prometeia calculation on Baker Hughes Data

Global Oil Rig Count

of active drills, monthly data until June, 2023



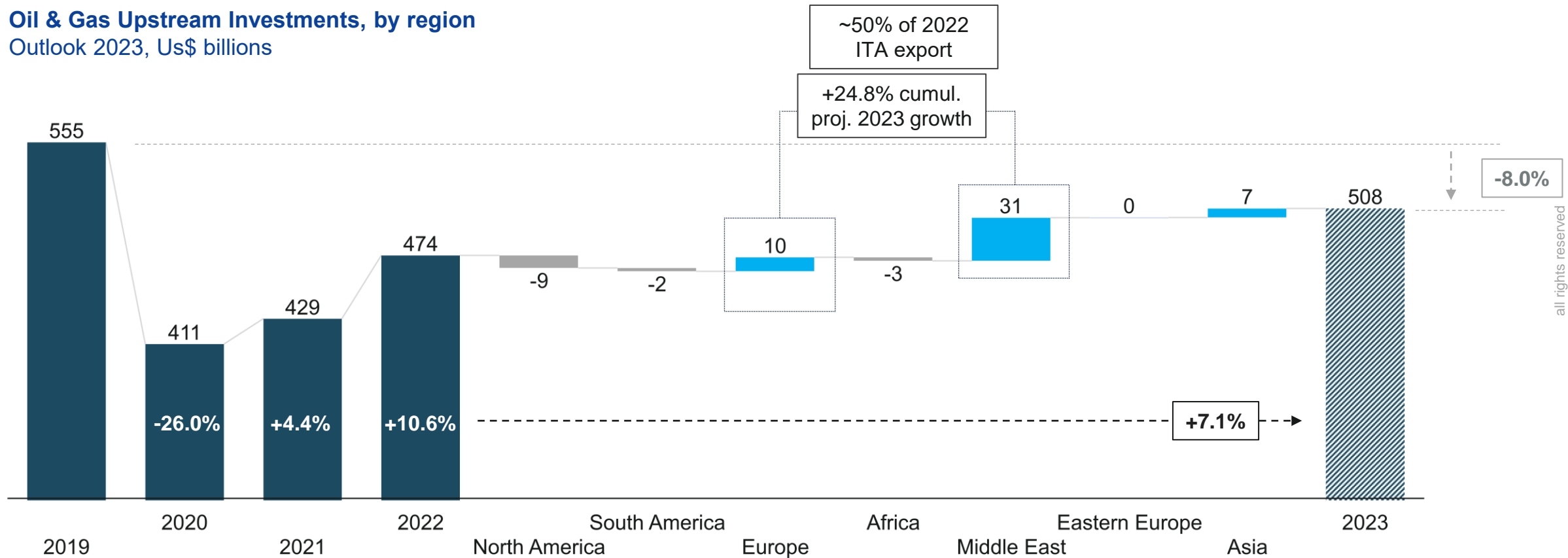
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2023 Upstream Outlook: still increasing (at slow pace). Italy well positioned

Middle East and Europe (accounting for ~50% of ITA sales abroad) to attract the bulk of new investments in 2023...
 ... with overall spending projected to Us\$ 508 blns, +7.1% compared to 2022 (still 8% below 2019)

Oil & Gas Upstream Investments, by region
 Outlook 2023, Us\$ billions



IEA, World Energy Investment 2023

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