Capital Markets Strategy

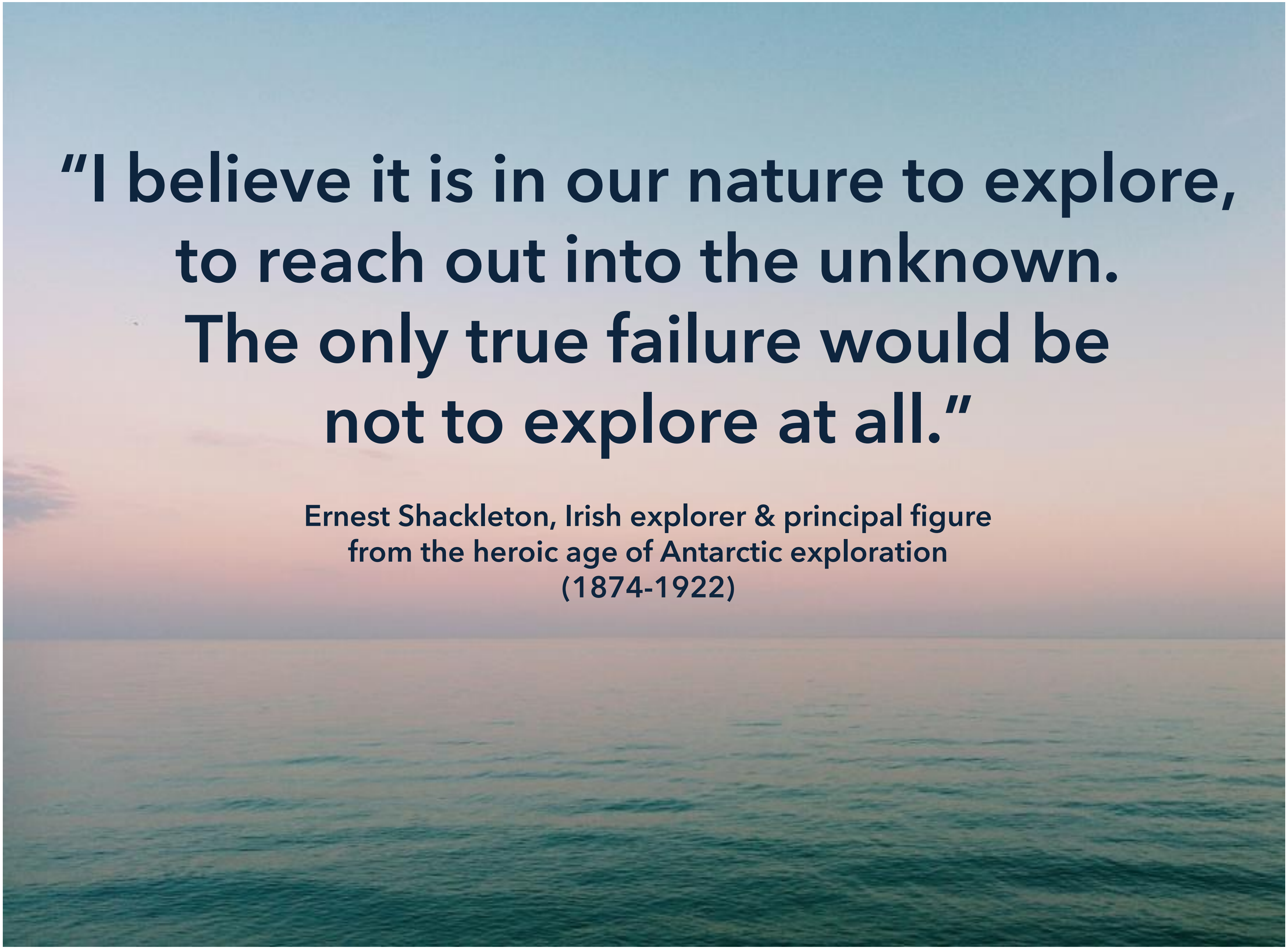
Essential inCights for the C-Suite

MUFG

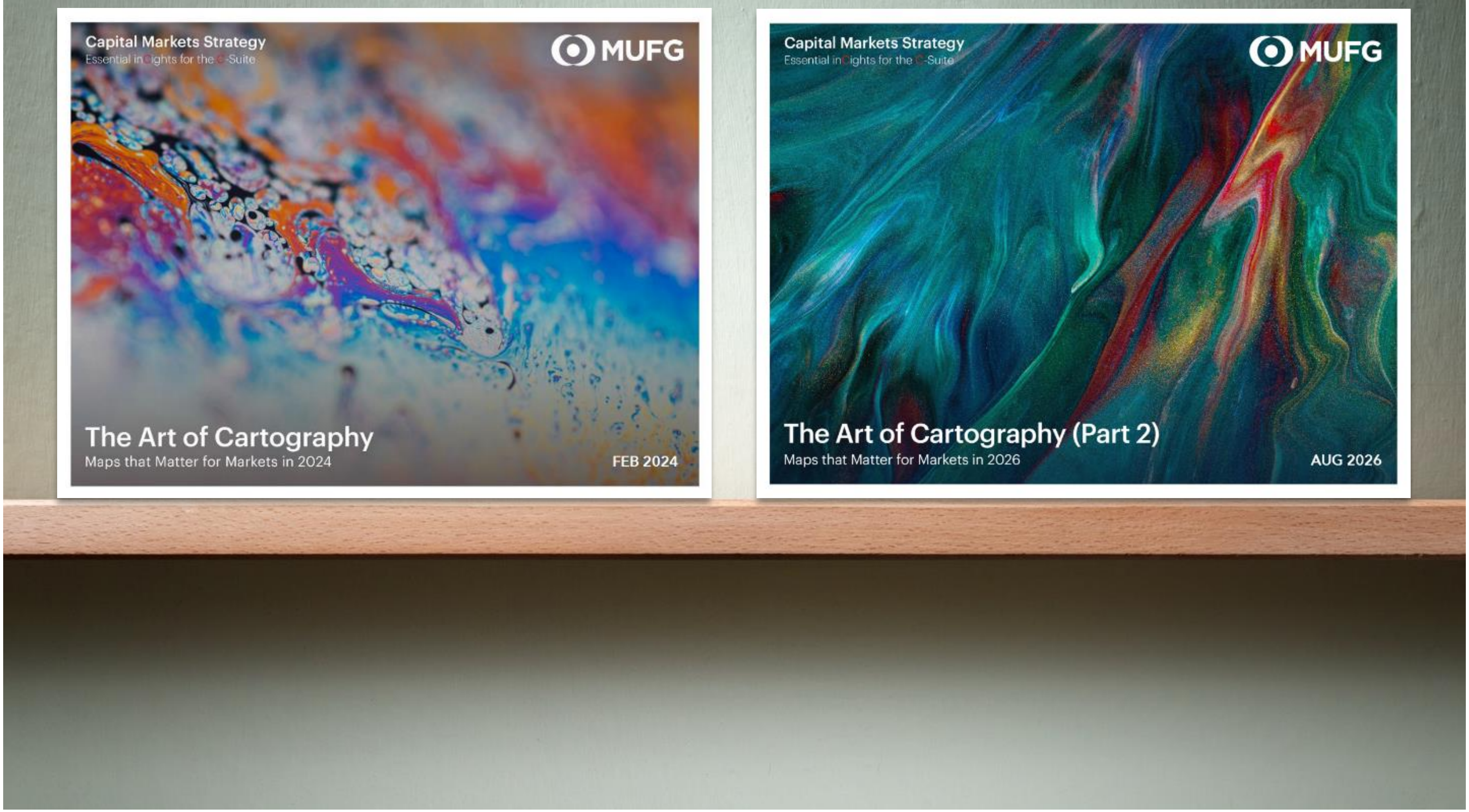
The Art of Cartography (Part 2)

Maps that Matter for Markets in 2026

AUG 2026


"I believe it is in our nature to explore,
to reach out into the unknown.
The only true failure would be
not to explore at all."
Ernest Shackleton, Irish explorer & principal figure
from the heroic age of Antarctic exploration
(1874-1922)

The Art of Cartography



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AUTHORS

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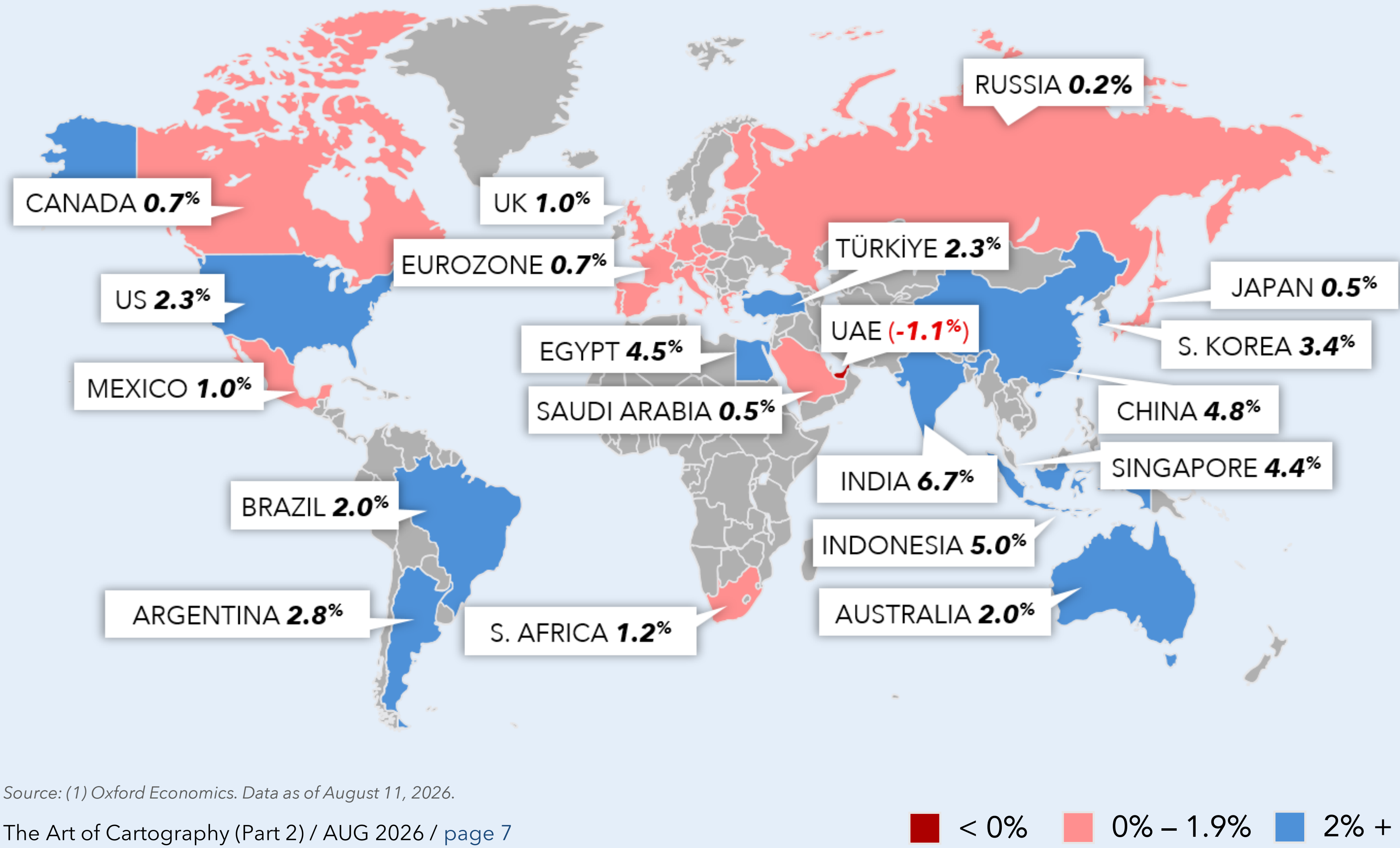
The Global & US Economy

Resilient Though Subdued Global Growth in 2026

2026 GDP growth, y/y

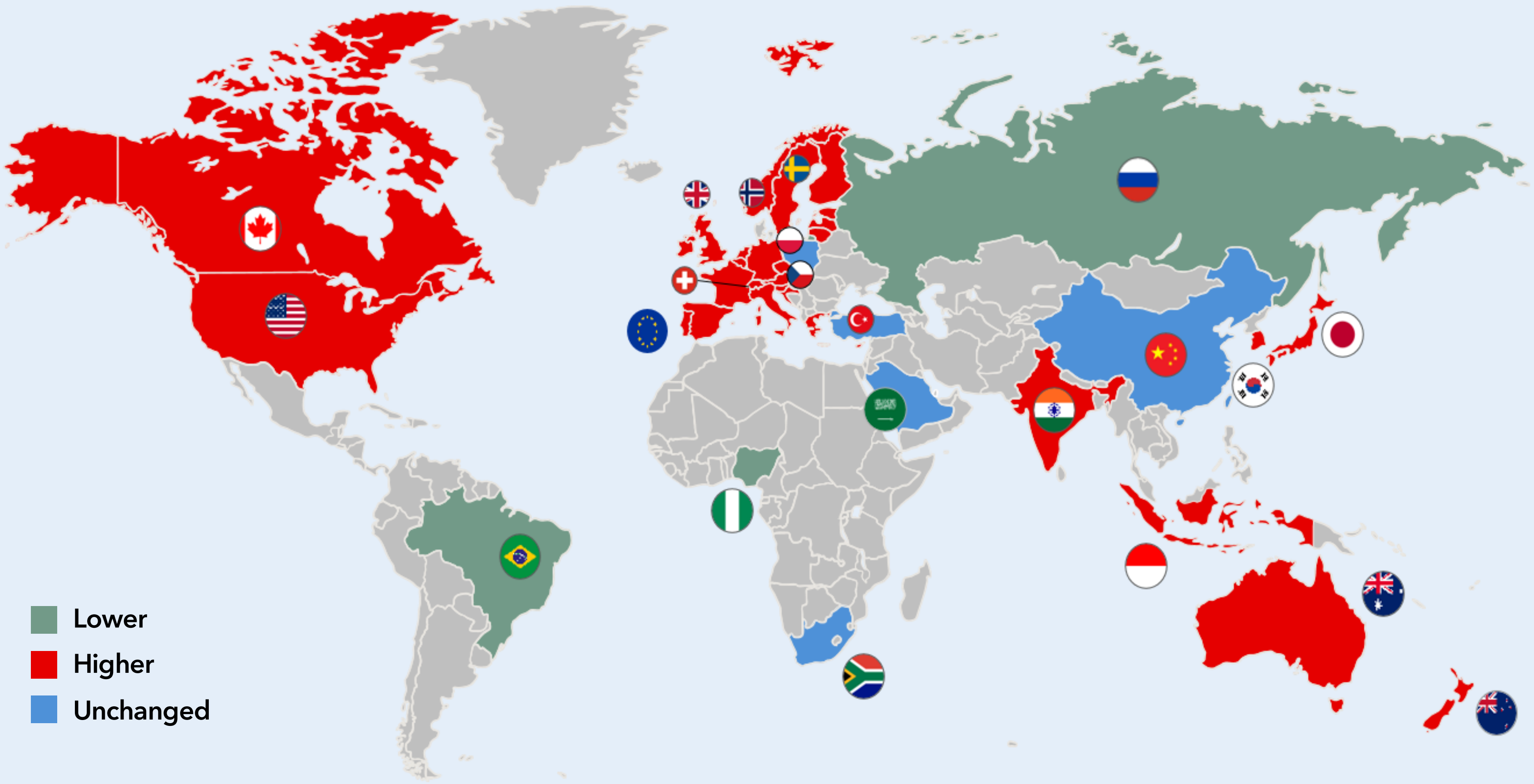


Source: (1) Oxford Economics. Data as of August 11, 2026.

Asynchronous Defensive Pivot Toward Policy Tightening

Just six months ago, more than 70 central banks had been actively engaged in synchronized global policy easing, with only Australia and Japan expected to modestly increase rates in 2026.

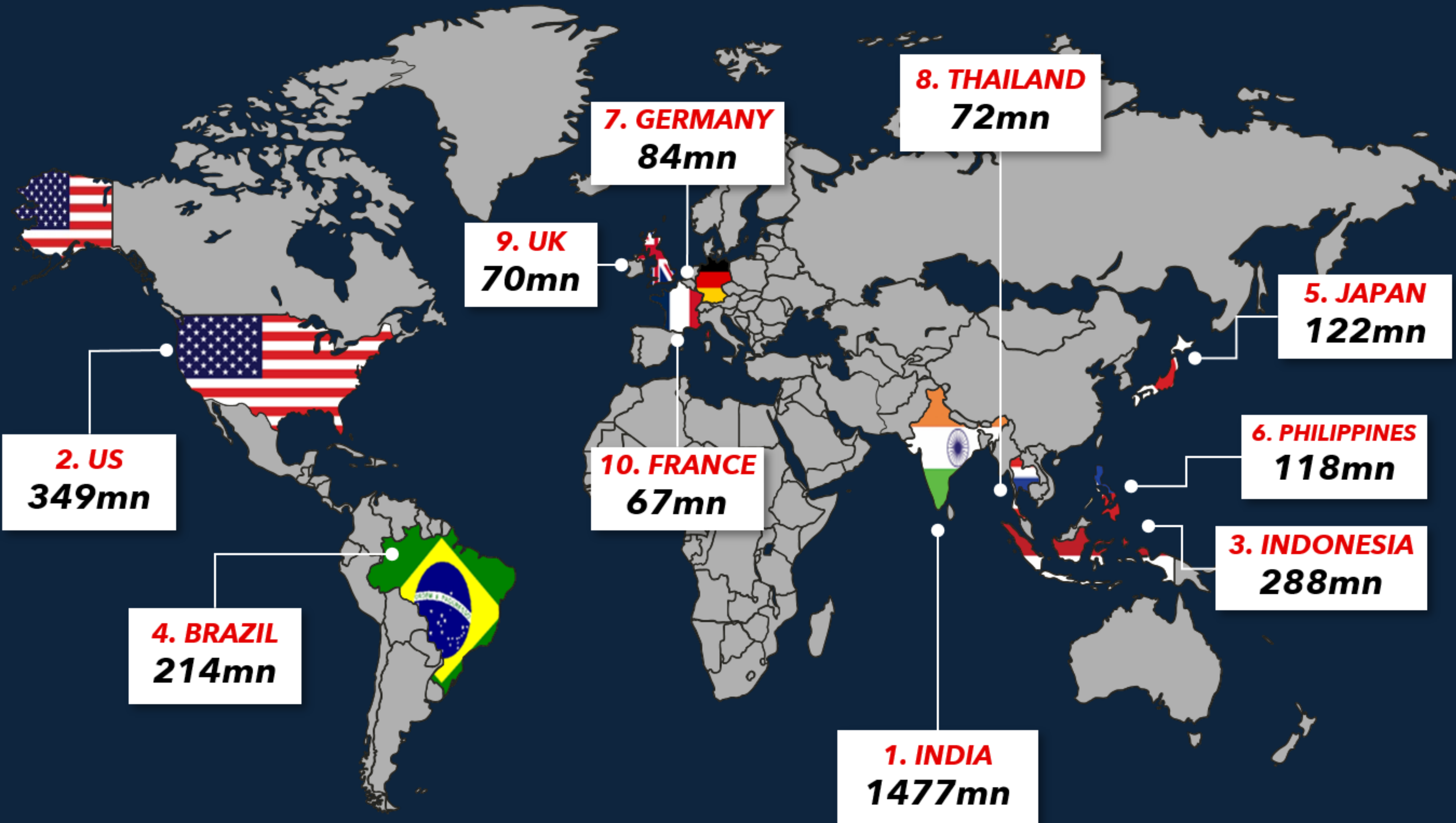
Expectations for YE 2026 central bank policy rates



Source: (1) Bloomberg. Data is based on economic forecasts, market-implied rates, and global central banks. Data as of July 2026.

Top 10 Largest Democracies

Top 10 largest democracies, by population (2026)

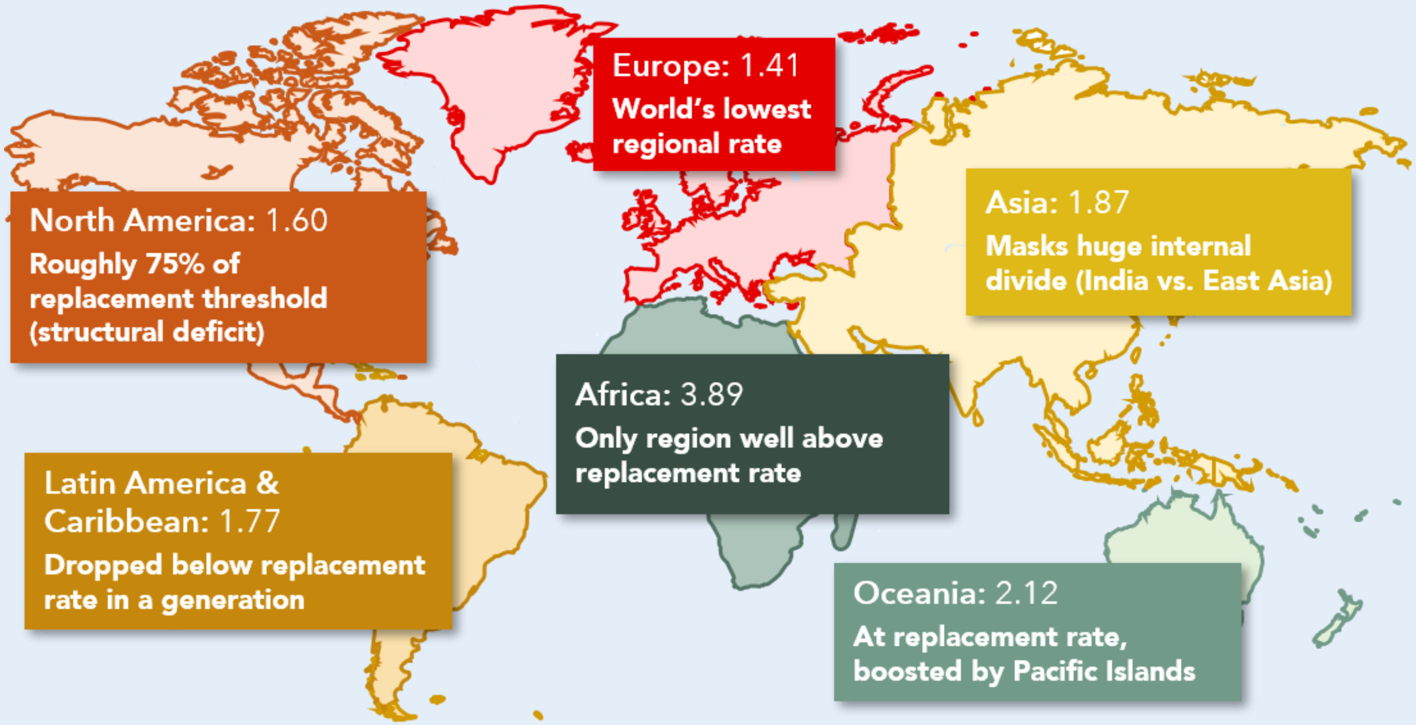


Source: Economist Intelligence Unit. UN Population Division. Population is 2026 estimates. Countries listed as democracies on EIU 2025 Democracy Index.

Regional Review of Global Fertility Rates

More than 2/3 of the global population now live in countries where fertility has fallen below the 2.1 replacement rate, thereby concentrating global population growth in a shrinking set of high-fertility countries. Regional variance is stark, with Africa the only major continent meaningfully above replacement. Among advanced economies, the Americas sit above Europe, which has the lowest TFR among continents. The picture within Asia is bimodal, with several countries in ultra-low TFR territory (i.e., SK, Singapore), while many countries in Central and South Asia (i.e., India) sit near or above replacement.

Total fertility rate (TFR), by region



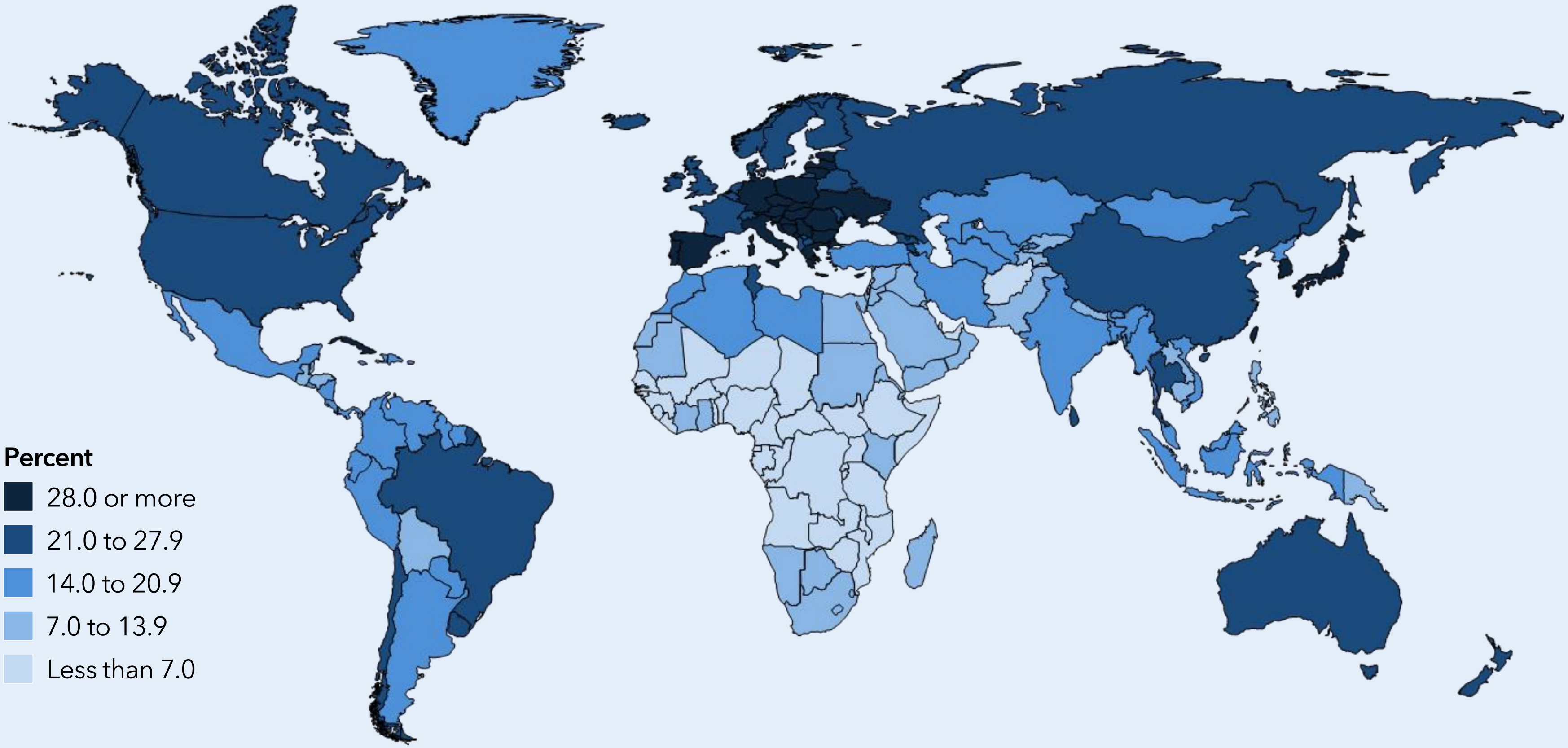
Source: (1) United Nations, "World Population Prospects". Data is 2026 estimate.

Near natural replacement rate — ***Severely below*** natural replacement rate

Productivity as Critical Offset to Aging Demographics

The global population above age 65 is expected to double from 800 million people today (10% of total) to approximately 1.6 billion people in 2050 (16% of total). The number of people over age 80 is expected to triple over the same period to nearly 500 million. The IMF forecasts that aging demographics will curtail advanced economy growth rates by 0.5-1% points annually over the coming decades.

Percentage of the population aged 65+ in 2050

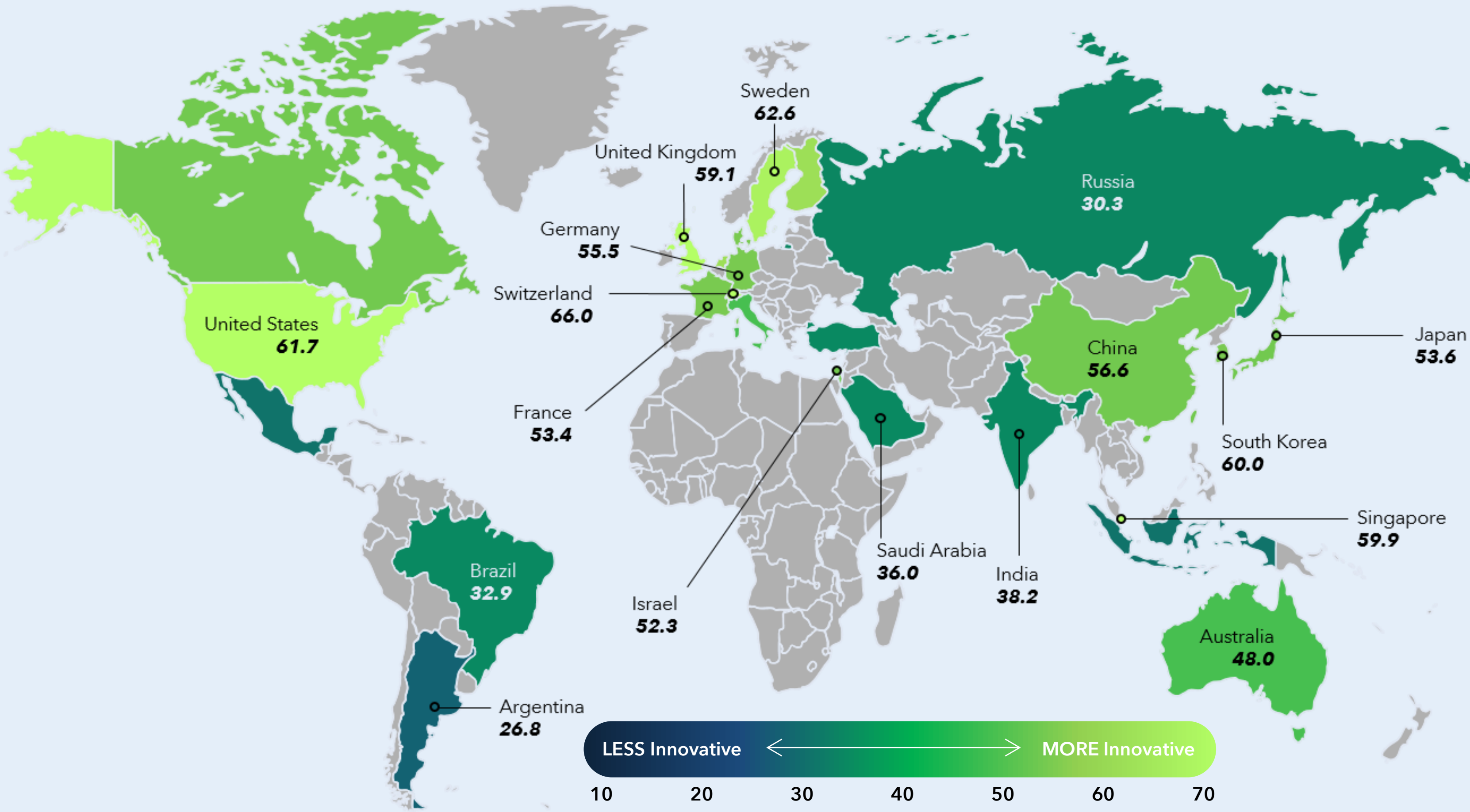


Source: (1) US Census Bureau. US Department of Commerce Economics & Statistics Administration.

World's Most Innovative Economies

The United States ranked #3 globally, behind Switzerland and Sweden, in the 2025 Global Innovation Index (GII) as part of a comprehensive study by the World Intellectual Property Organization (WIPO).

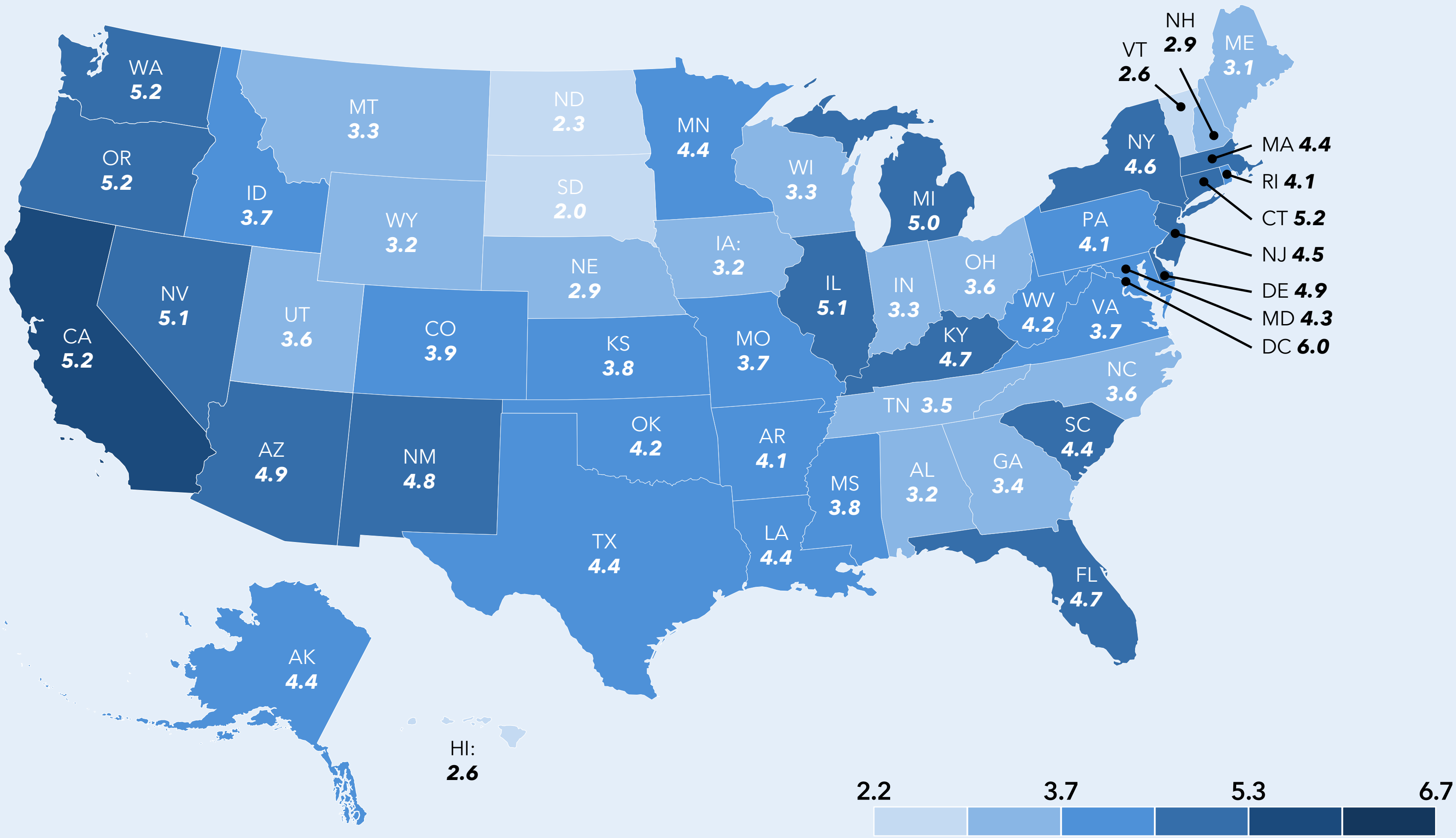
2025 Global Innovation Index



Source: (1) World Intellectual Property Organization (WIPO), "Global Innovation Index 2025".

Unemployment Rates by US State (%)

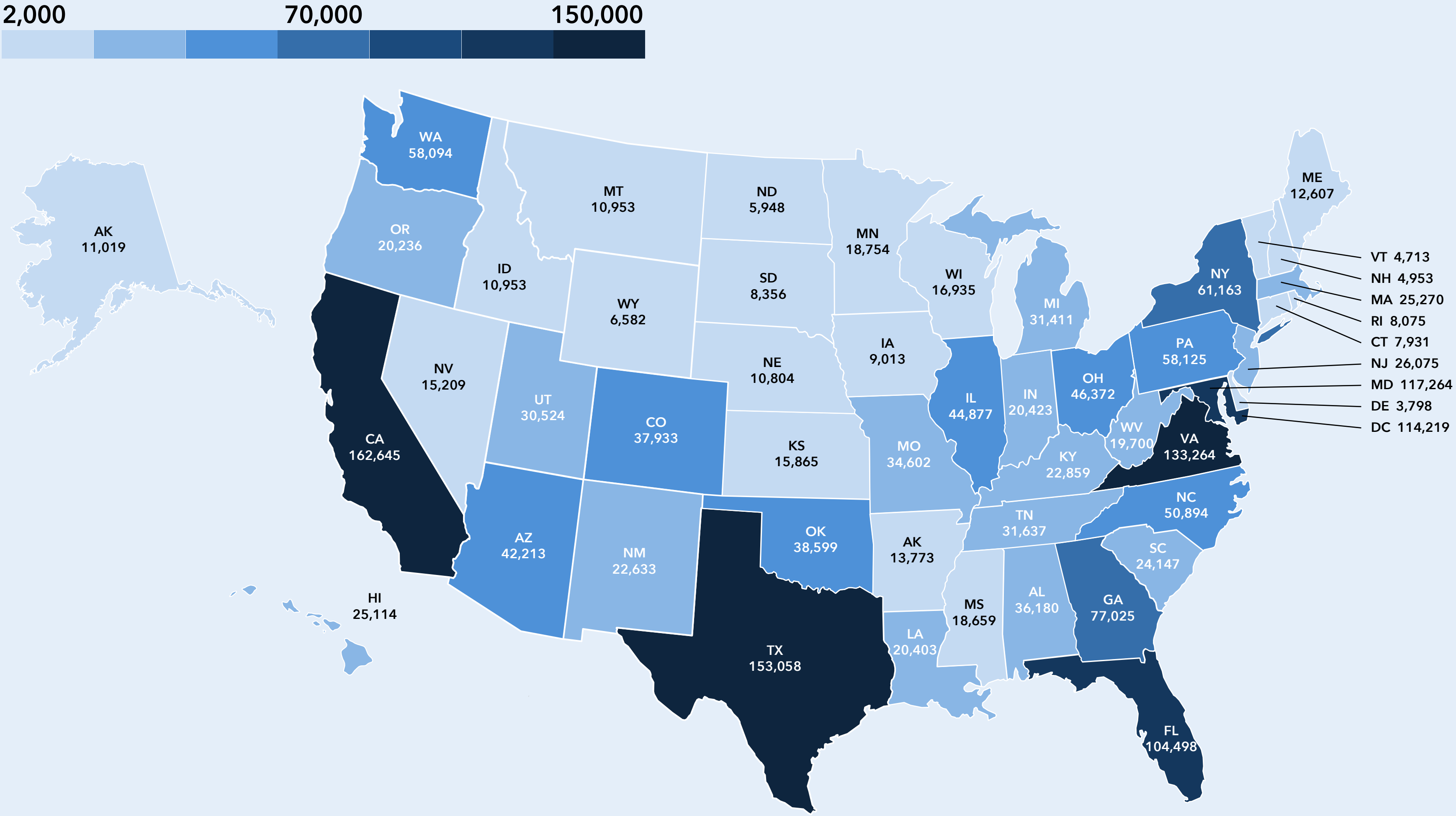
U.S. unemployment rate (Jul 2026) = 4.1%



Source: Bureau of Labor Statistics and FRBSF staff calculations. Data as of June 2026.

Federal Employment by US State

Number of federal employees

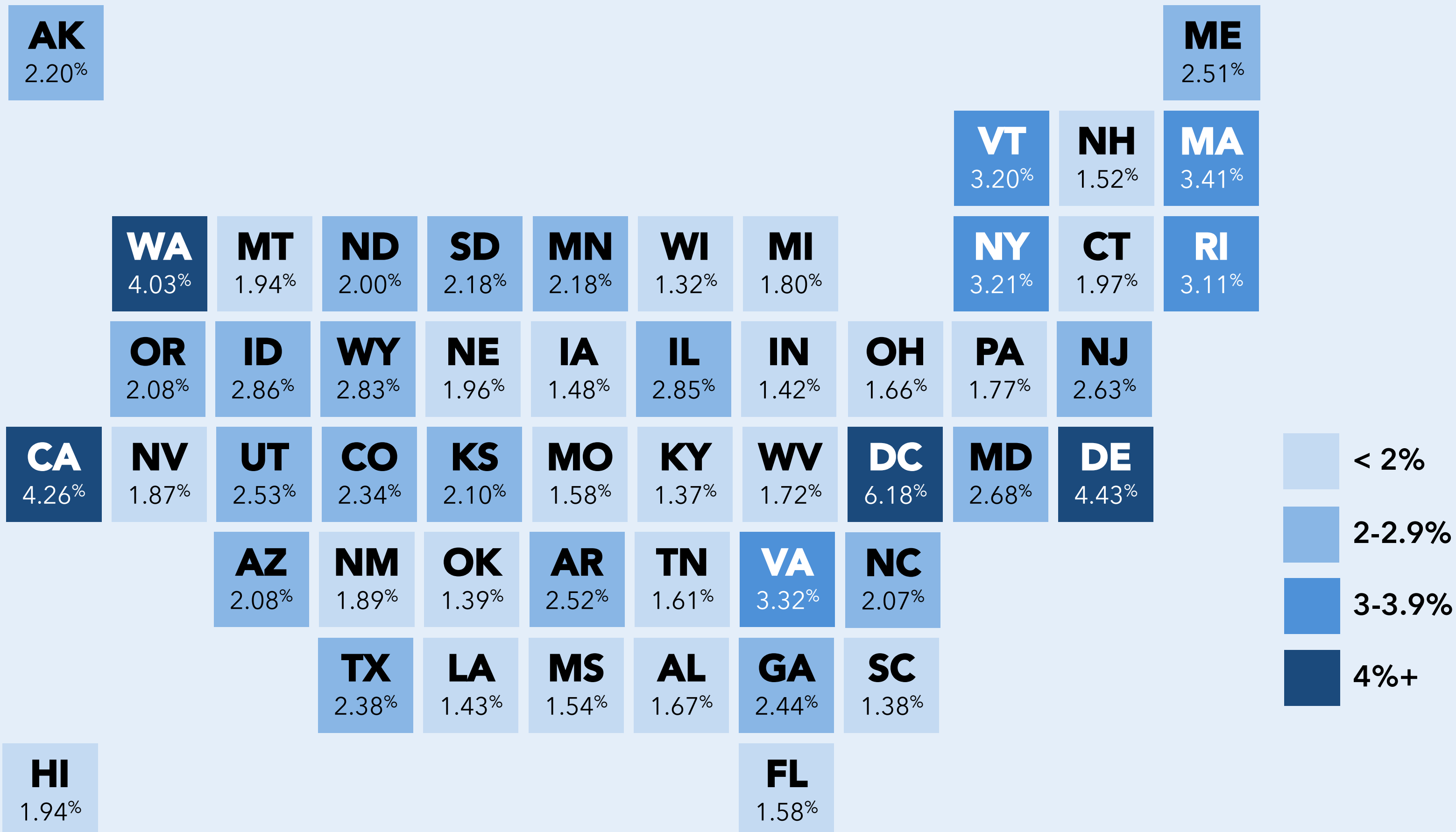


Source: OPM EHRI Status. Data as of June 2026.

AI Labor Demand by US State

The three large states of California, Texas, and New York lead aggregate US job postings by states, though Washington D.C., Washington state, and Delaware lead as percentage of total jobs.

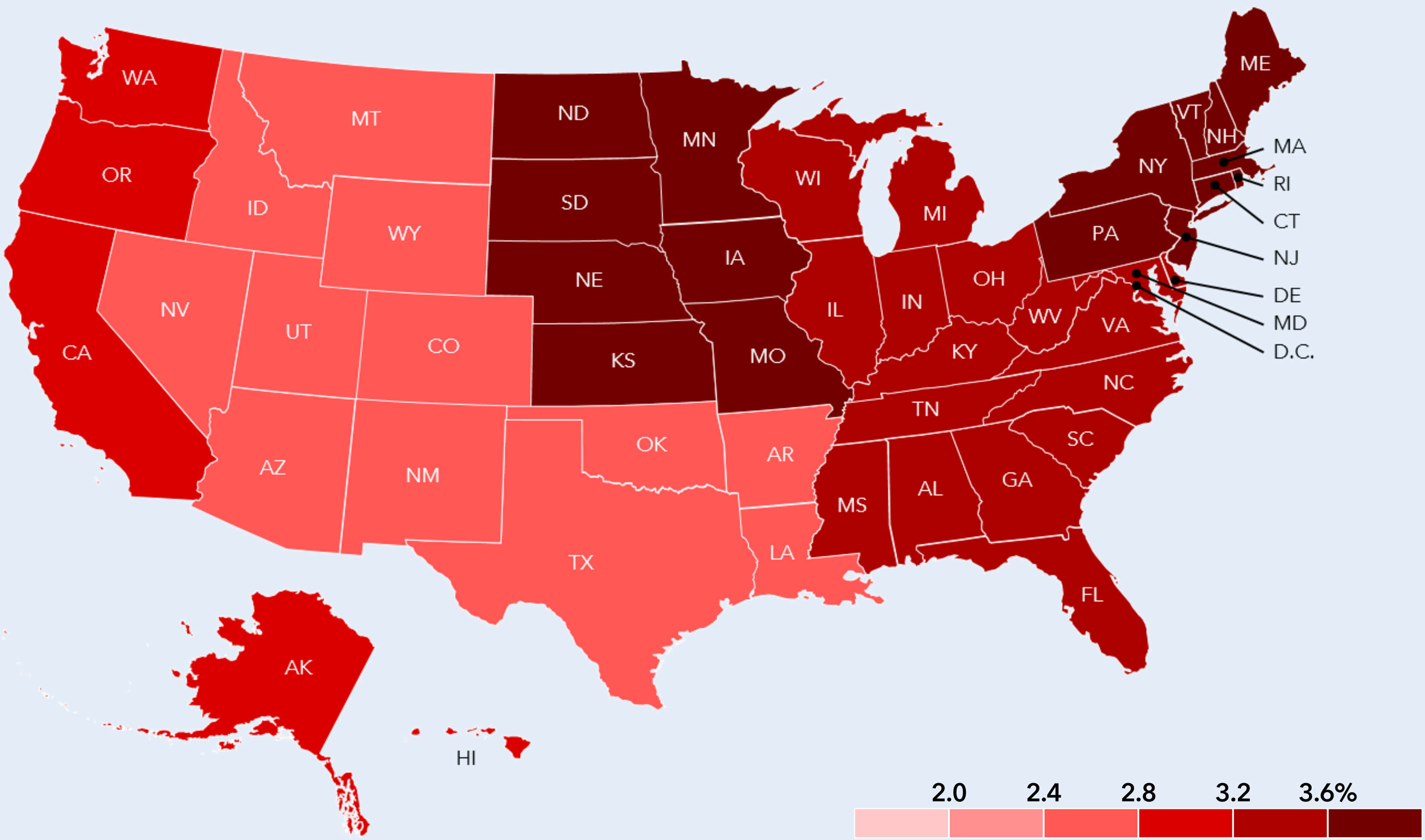
Percentage of US states' job postings in AI (2025)



Source: (1) AI Index Steering Committee, Stanford University Institute for Human-Centered AI, "The AI Index 2026 Annual Report" (April 2026). Lightcast (2025).

Inflation by US State

July headline CPI y/y, by US census divisions

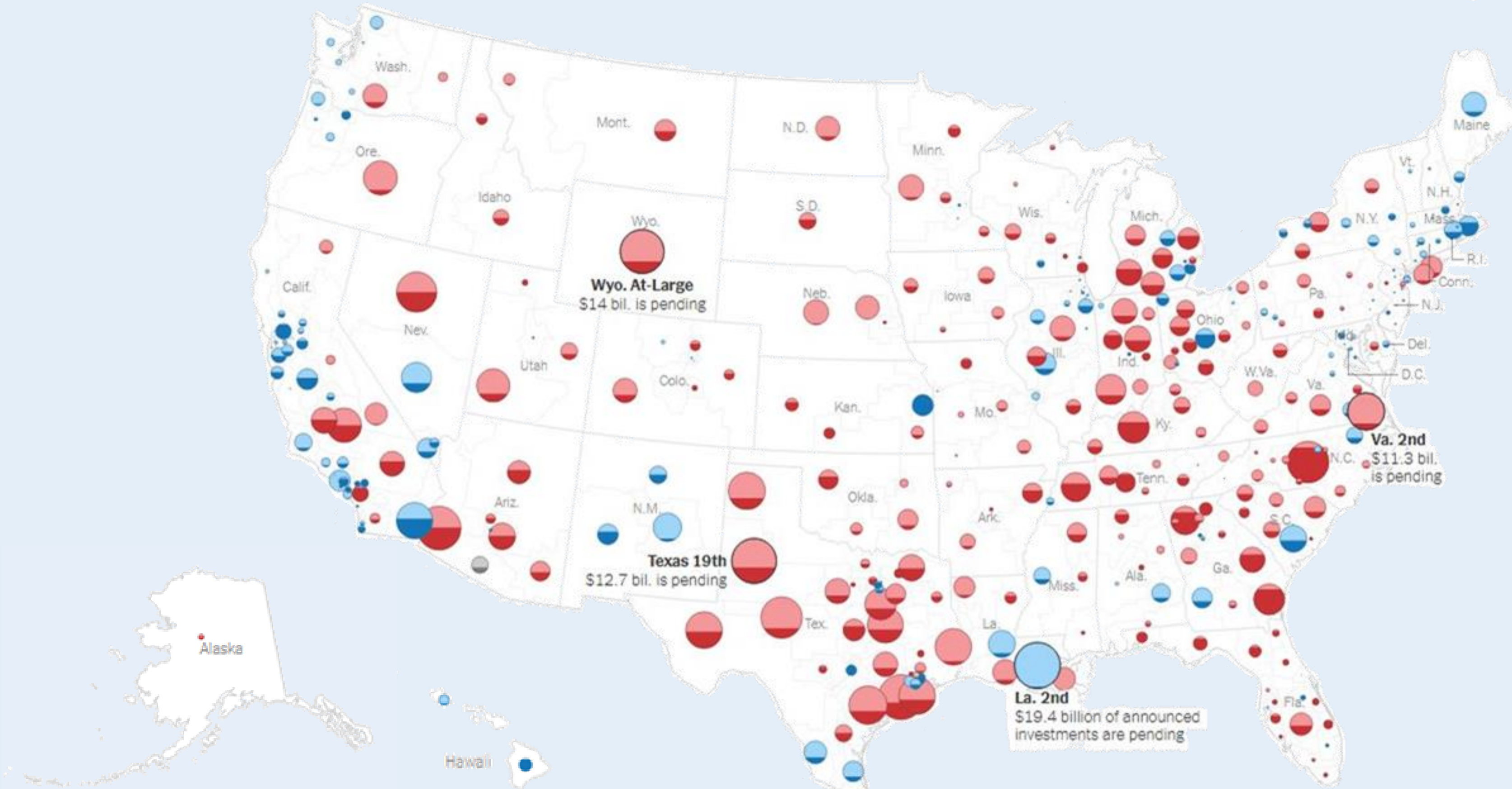


Source: Bureau of Labor Statistics. Note: July 2026 data y/y.

75% of US IRA Investments in Red States

Approximately 75% of the roughly $800 billion in announced IRA clean energy investments across the United States are located in red Republican House districts.

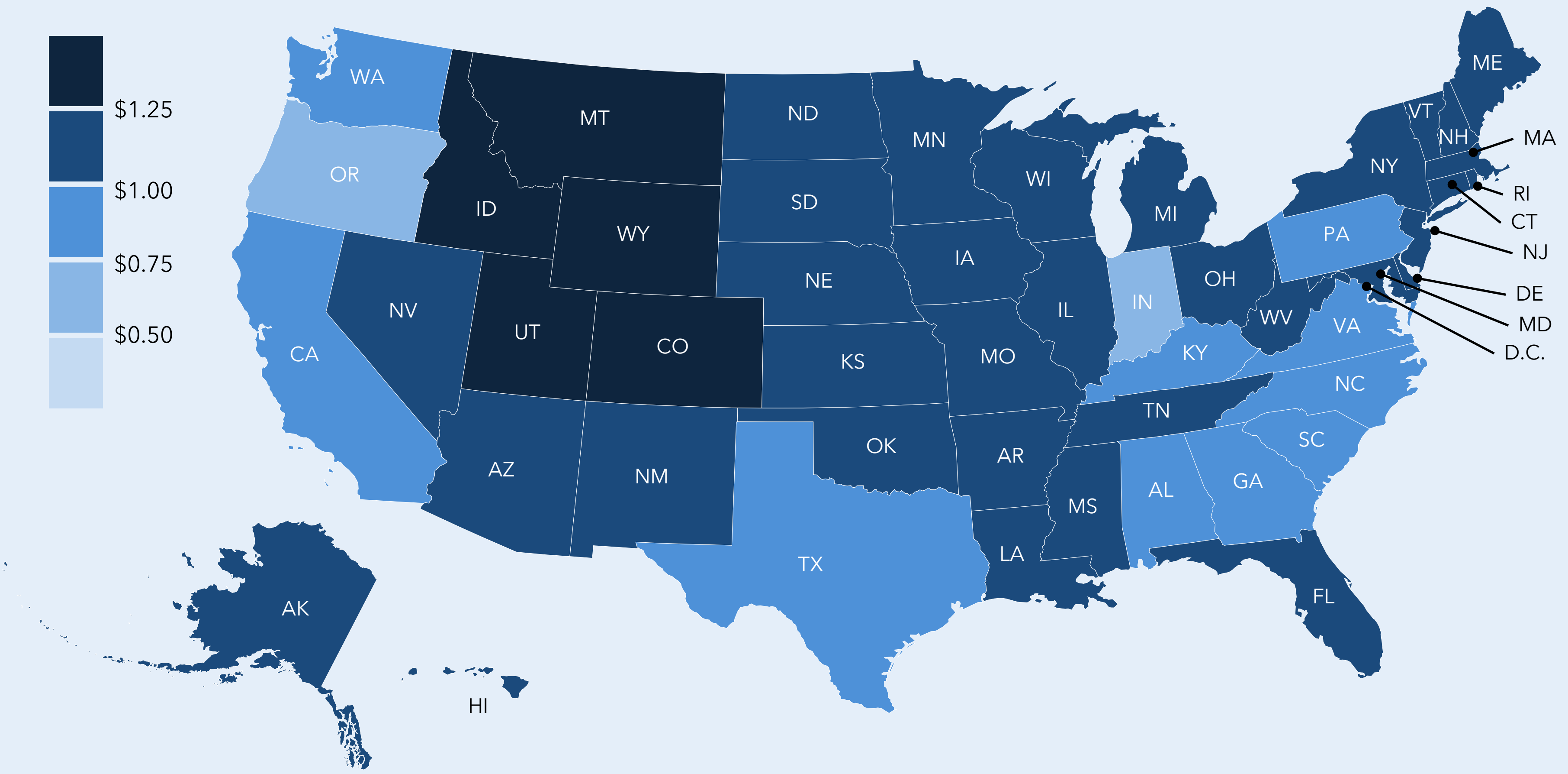
House districts where companies have announced low carbon energy investments



Source: (1) NYTimes, "A Clean Energy Boom Was Just Starting. Now, a Republican Bill Aims to End It." (May 13, 2025). Data is from the third quarter of 2022 through the first quarter of 2025. Excludes roughly $11bn where the congressional district is unclear. Clean Investment Monitor.

Gasoline Prices Since US-Iran War

Change in average price per gallon of gas since Feb 28, 2026



Source: AAA Gas Prices. WSJ, "The U.S. Gas Price Hit $4 a Gallon. See How Fast It's Rising." For regular unleaded from Feb 27 – Aug 11, 2026.

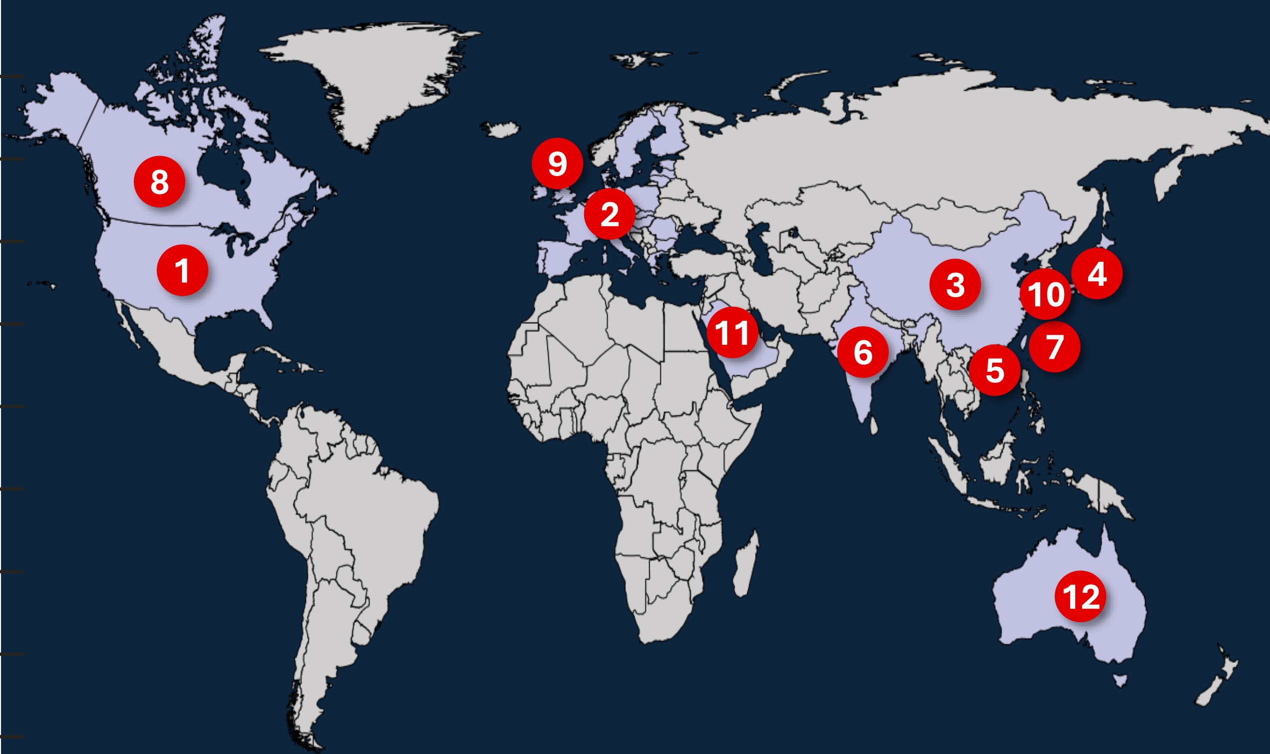
2

Capital Markets & Commodities

World's Largest Equity Markets

Global equity market cap, USD tn

1	US	$82.7
2	EU	$17.3
3	China	$15.0
4	Japan	$8.9
5	Hong Kong	$7.2
6	India	$5.2
7	Taiwan	$4.9
8	Canada	$4.7
9	UK	$4.1
10	S. Korea	$3.9
11	Saudi Arabia	$2.6
12	Australia	$2.1



Source: (1) Bloomberg. Data as of August 11, 2026.

World's Largest Gov't Bond Markets

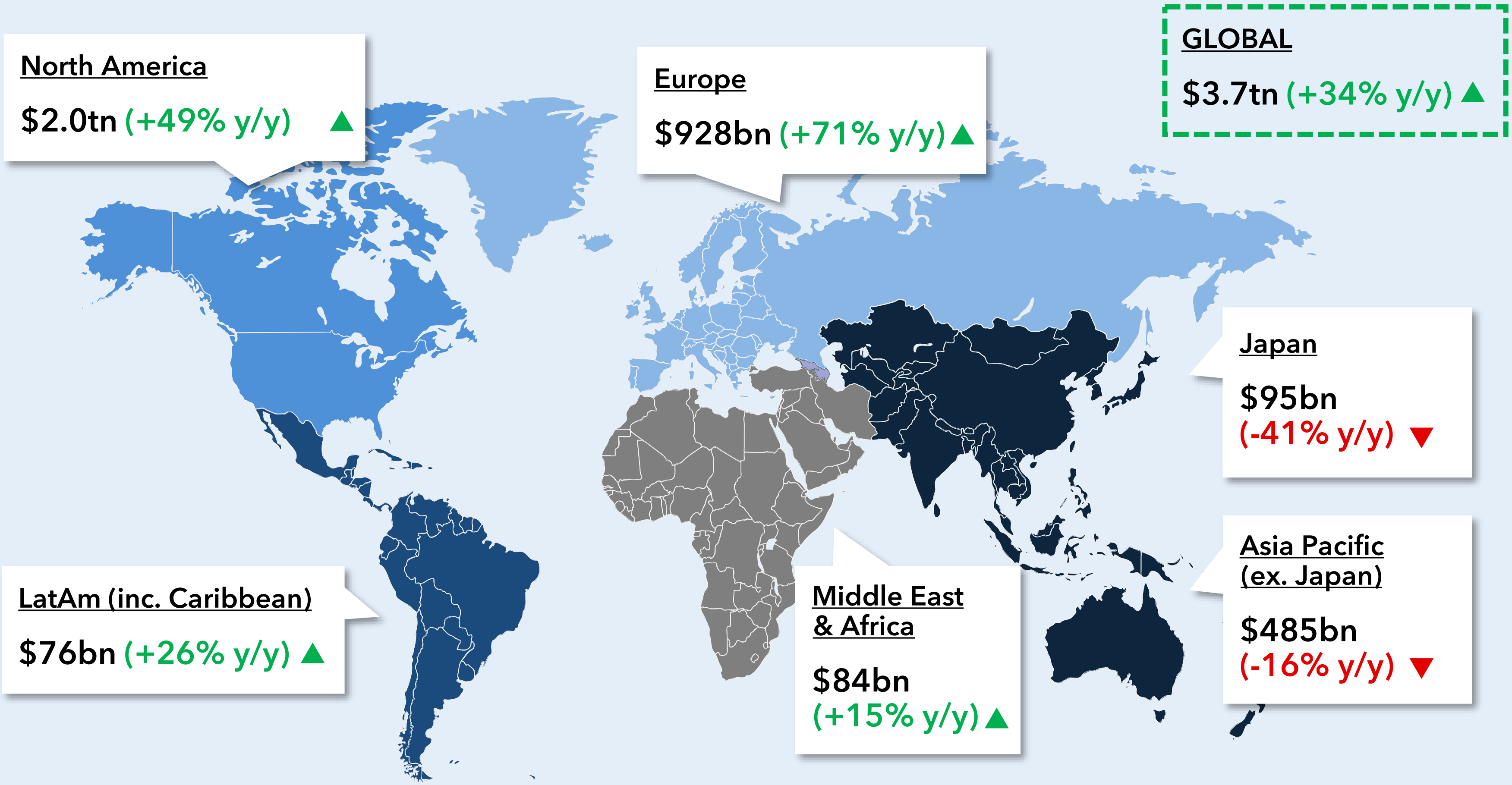
Global government bond markets by amount outstanding, USD tn

1	US	***$34.9tn***
2	China	***$19.0tn***
3	Japan	***$11.8tn***
4	UK	***$3.9tn***
5	France	***$3.8tn***
6	Italy	***$3.1tn***
7	Germany	***$2.9tn***
8	India	***$2.9tn***
9	Canada	***$2.7tn***
10	Brazil	***$2.1tn***

Source: (1) Bloomberg. Data as of August 11, 2026.

Record 2026 Global M&A Activity

M&A volumes in 2026 YTD vs. 2025 YTD and y/y increase (based on target region)



Source: (1) Dealogic. Cortex. Data through August 12, 2026, accessed on August 12, 2026. Region is by target.

World's Largest Oil Reserves

Crude oil reserves, billion barrels

Source: OPEC, "Annual Statistical Bulletin 2026". Data as of 2025. Includes only countries with 100,000,000 barrels of crude oil reserves or more.

Top 10 Largest Oil Reserves

Top 10 largest oil reserves, billions of barrels (2025)

1	***Venezuela***	304
2	***Saudi Arabia***	267
3	***Iran***	209
4	***Canada***	163
5	***Iraq***	140
6	***UAE***	120
7	***Kuwait***	102
8	***Russia***	80
9	***Libya***	48
10	***US***	42

Source: OPEC, "Annual Statistical Bulletin 2026". Data as of 2025. Includes crude oil, condensates, natural gas liquids, and oil sands. Data shows proven oil reserves.

World's Largest Oil Producers

World's largest oil producers, million barrels per day

1	US	**13.7**
2	Russia	**9.8**
3	Saudi Arabia	**7.4**
4	Canada	**5.0**
5	China	**4.4**
6	Brazil	**4.3**
7	Iran	**2.5**
8	Iraq	**2.3**
9	UAE	**2.1**
10	Kuwait	**1.6**

Source: (1) Bloomberg. Department of Energy. Data as of August 11, 2026.

Top 10 Largest Natural Gas Reserves

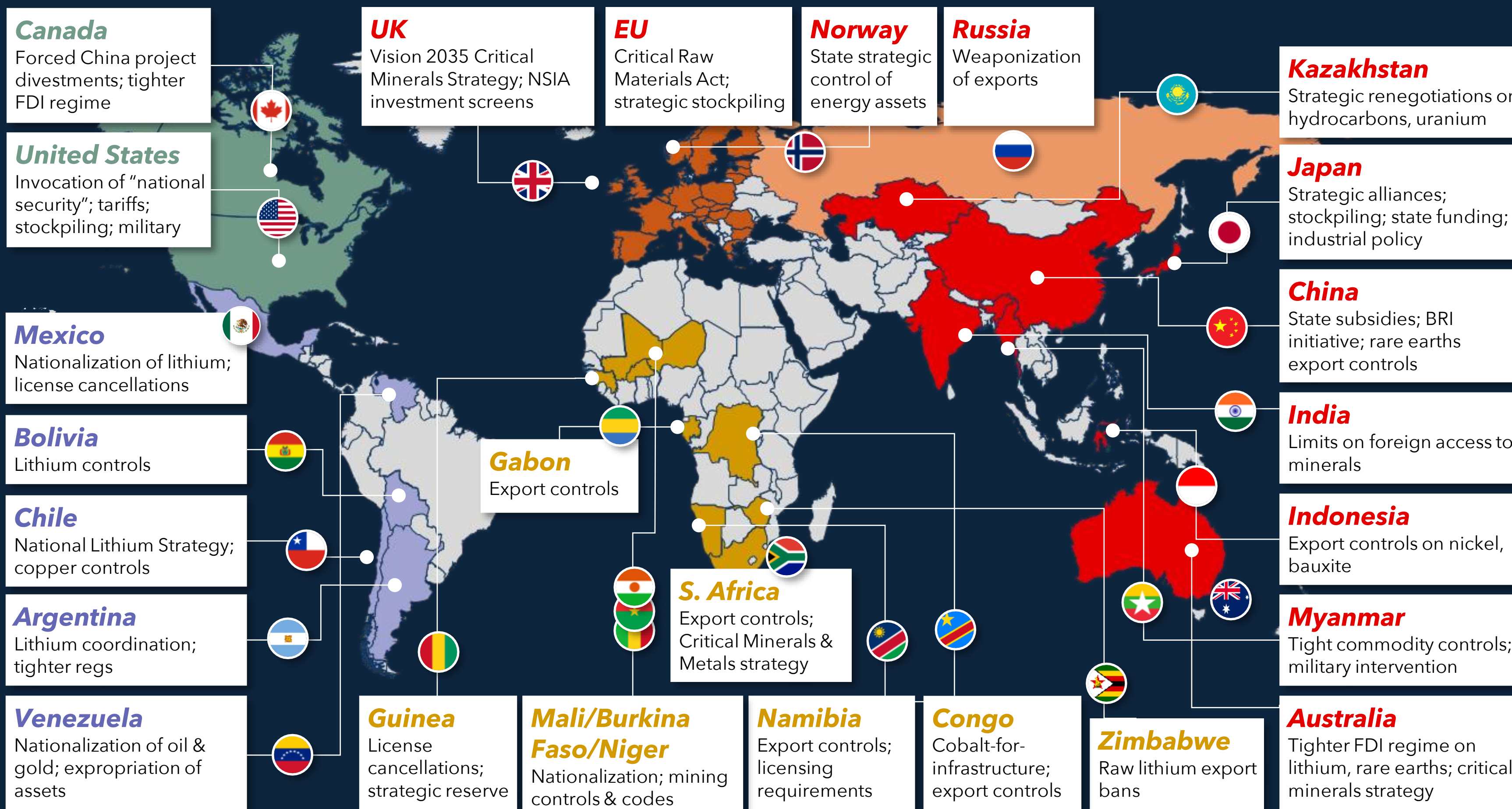
Top 10 largest natural gas reserves, trillion cubic meters (2025)

1	**Russia**	42.0
2	**Iran**	34.0
3	**Qatar**	23.8
4	**Turkmenistan**	13.9
5	**US**	13.9
6	**Saudi Arabia**	9.8
7	**UAE**	8.4
8	**China**	7.6
9	**Nigeria**	6.1
10	**Canada**	5.6

Source: OPEC, "Annual Statistical Bulletin 2026". Data as of 2025. Data shows proven natural gas reserves.

New Era of Resource Nationalism

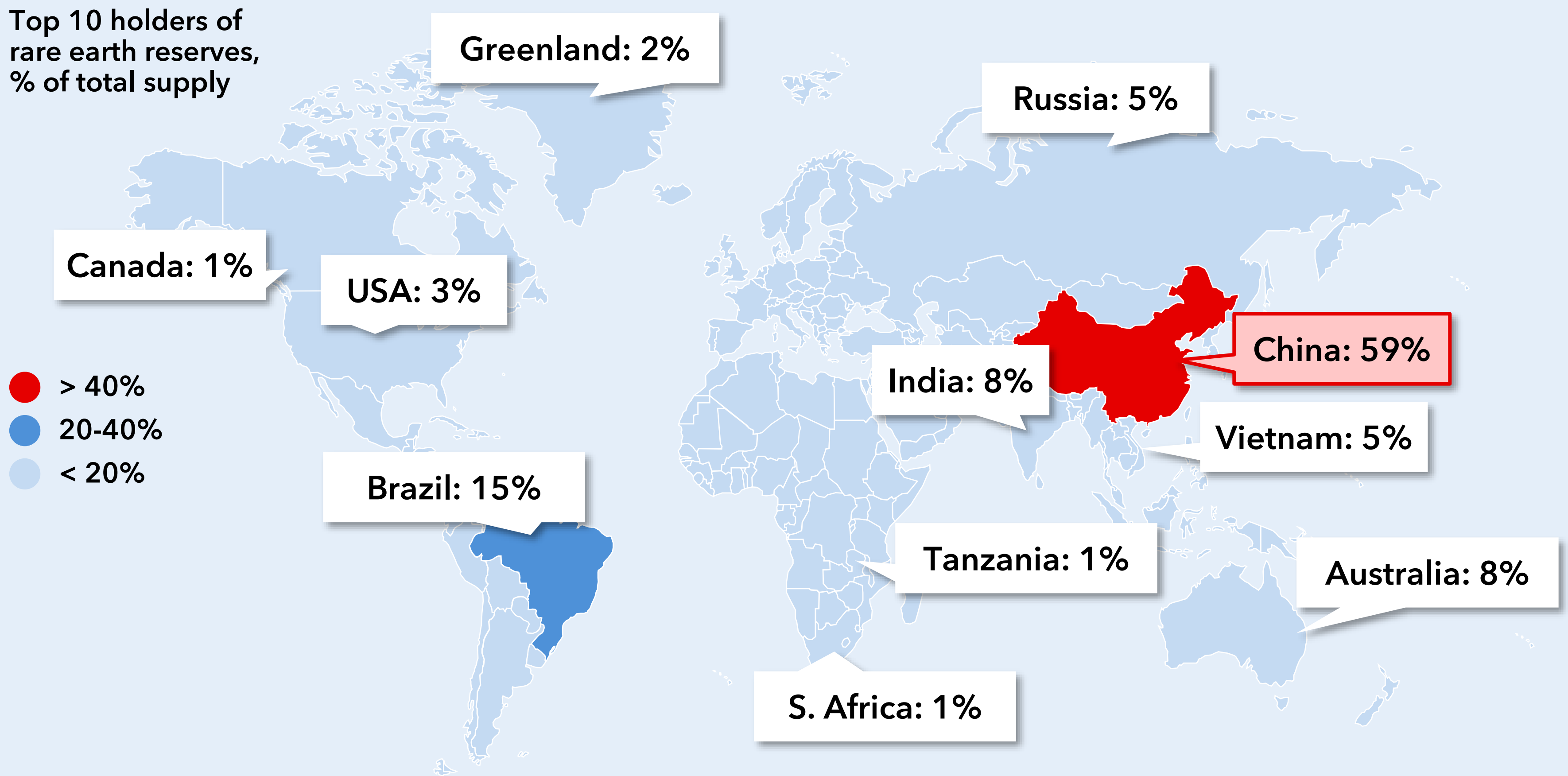
Countries are layering a broad range of traditional resource nationalism tools with newer geoeconomic and industrial policy instruments that target entire supply chains and the most strategically significant minerals for high-end manufacturing (EVs, defense, semis, AI).



Source: US Geological Survey. Mineral Commodity Summaries 2025.

China's Leadership on Rare Earth Reserves

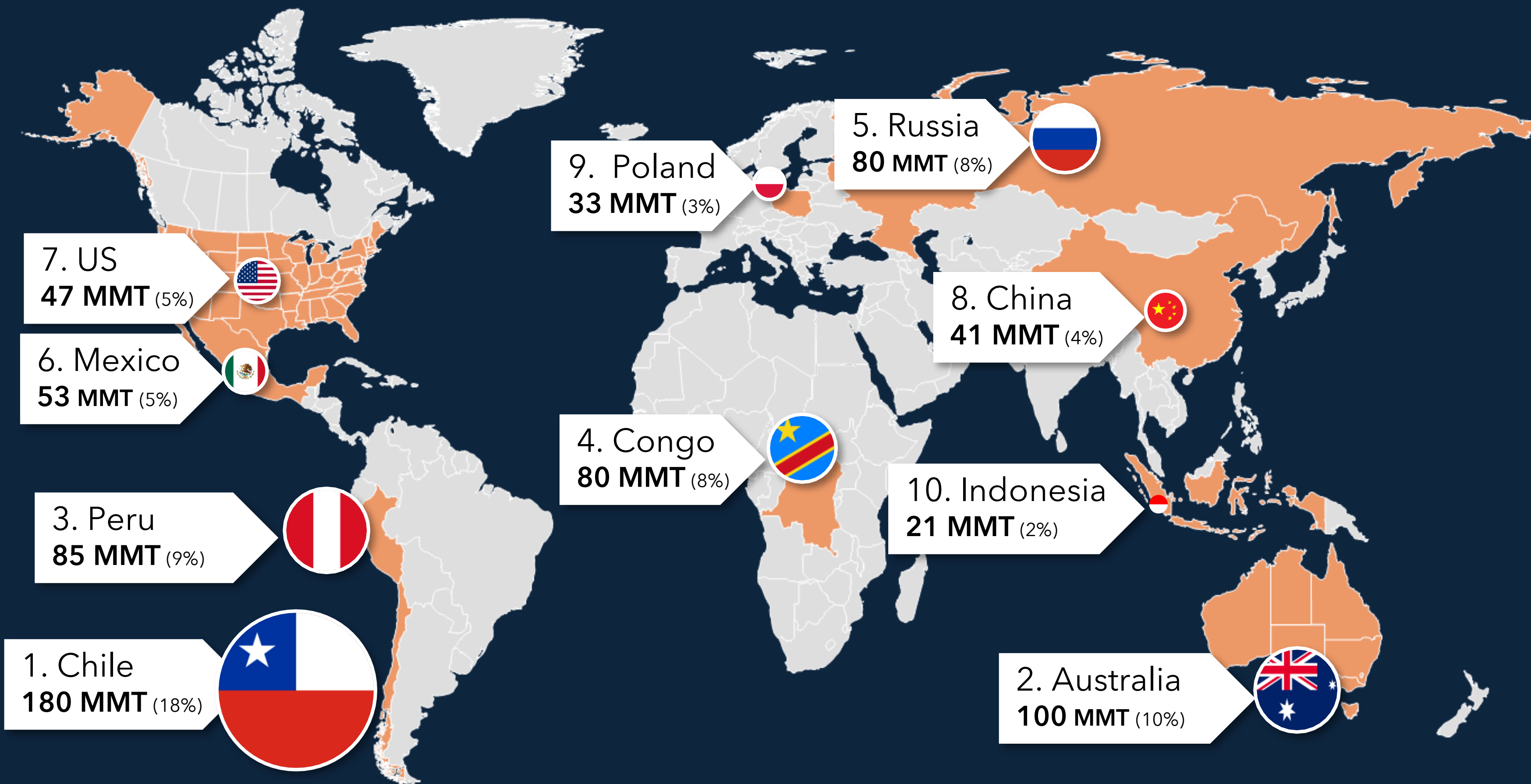
China holds a commanding lead in rare earth reserves, though many of the most important critical minerals for technology and AI exist in significant scale outside of China. China's true dominance on strategic minerals lies further up the value chain in production and refining.



Source: (1) US Geological Survey. Data as of 2026.

Top 10 Sources of Global Copper Reserves

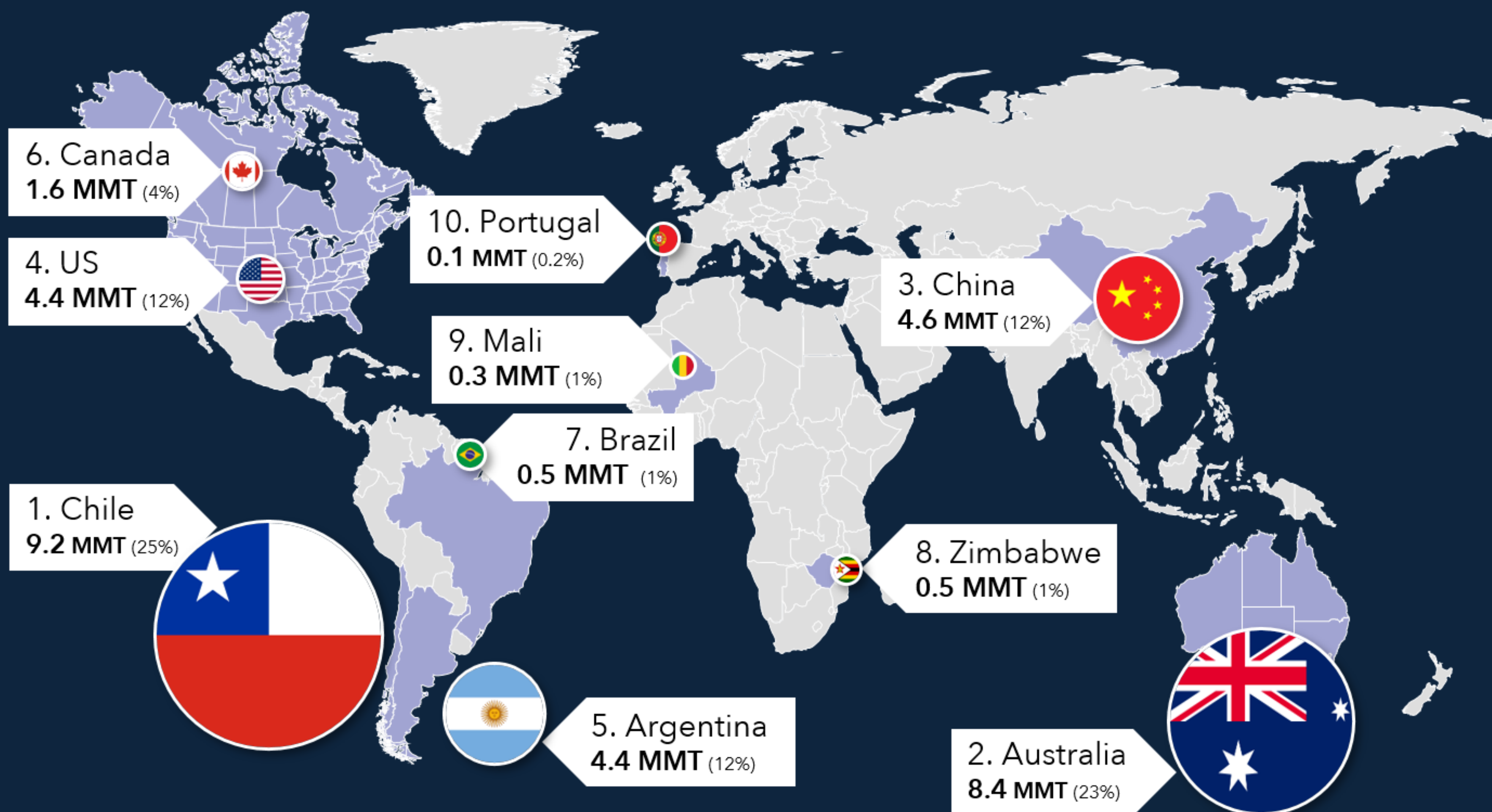
Global copper reserves, million tons (2025)



Source: US Geological Survey. Mineral Commodity Summaries 2026.

Top 10 Sources of Global Lithium Reserves

Global lithium reserves, million tons (2025)



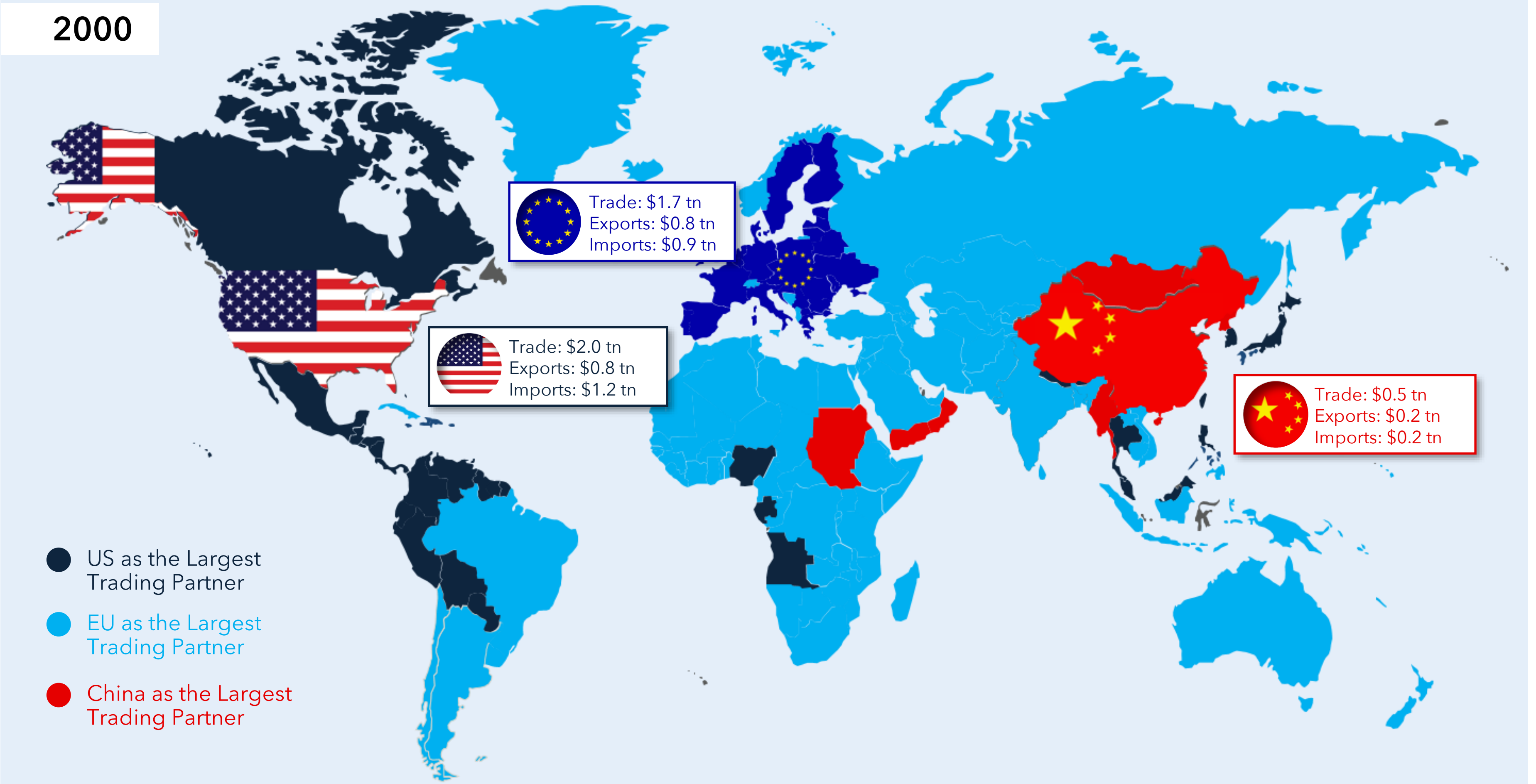
Source: US Geological Survey. Mineral Commodity Summaries 2026.

3

Global Trade Policy

Late 20th Century: Europe Leads Global Trade Flows

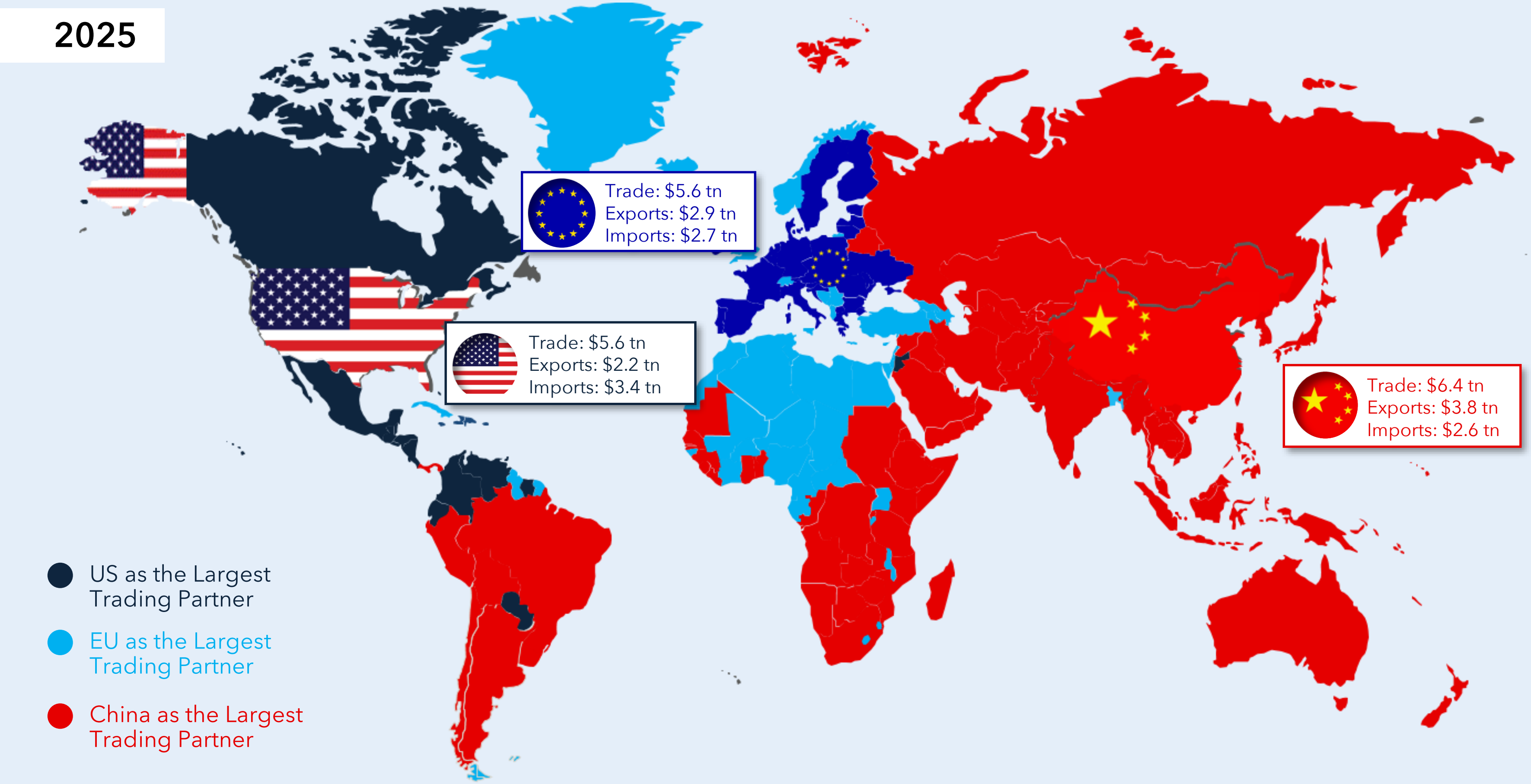
Just 25 years ago, Europe's manufacturing and export heavy economy was the largest trading partner to the majority of countries globally.



Source: (1) US Census Bureau. Eurostat. China Customs.

2000-2025:
China Emerges as Global Trade Leader

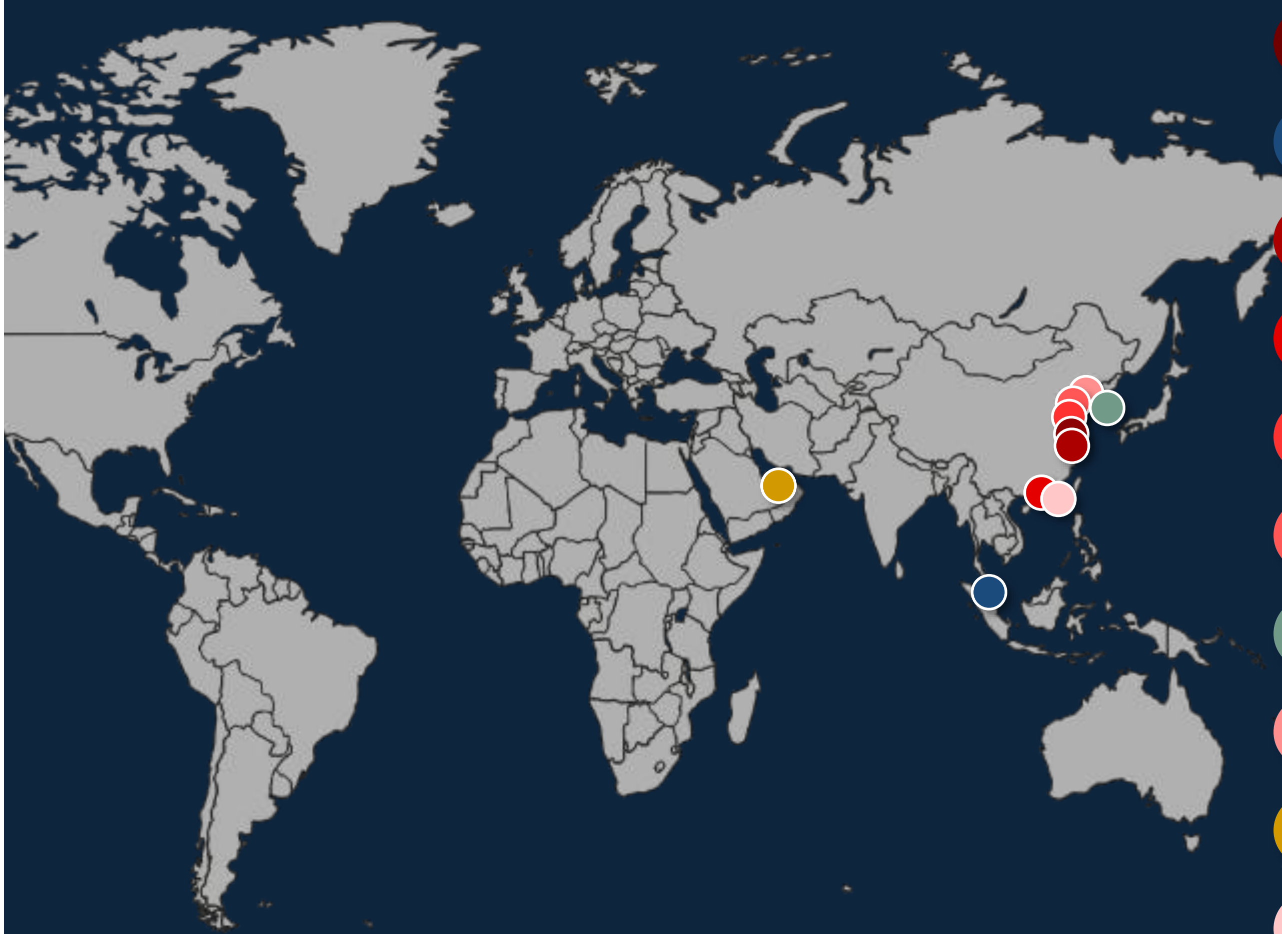
Since China joined the WTO in 2001, they have risen to become the world's largest trading country, the world's largest exporter and the 3rd largest importer. China has also supplanted Europe to become the largest trade counterparty to the majority of countries globally.



Source: (1) US Census Bureau. Eurostat. China Customs. Data is trade in goods for 2025.

Top 10 Largest Global Shipping Ports

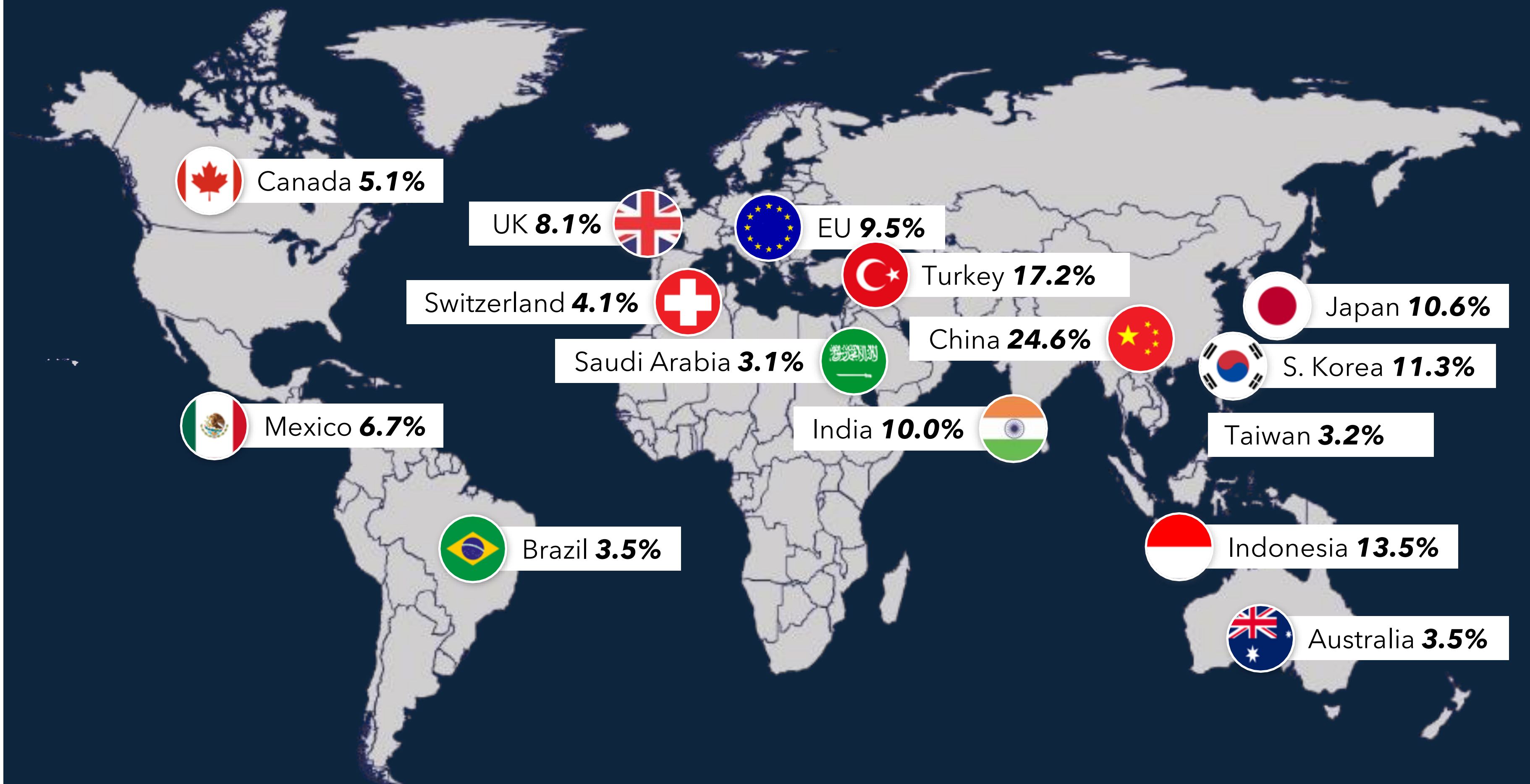
Top 10 largest container shipping ports, million TEU (2023)



1. ***Shanghai, China***
   Volume: 49.16mn
2. ***Singapore***
   Volume: 39.01mn
3. ***Ningbo-Zhoushan, China***
   Volume: 35.3mn
4. ***Shenzhen, China***
   Volume: 29.88mn
5. ***Qingdao, China***
   Volume: 28.77mn
6. ***Guangzhou Harbor, China***
   Volume: 25.41mn
7. ***Busan, South Korea***
   Volume: 23.04mn
8. ***Tianjin, China***
   Volume: 22.19mn
9. ***Dubai, UAE***
   Volume: 14.47mn
10. ***Hong Kong, China***
    Volume: 14.4mn

Source: World Shipping Council.

Effective US Tariff Rates on World's Largest Economies



Source: Oxford Economics, Tariff Monitor – Why recent headlines haven't changed our outlook" (July 24, 2026). Census Bureau.

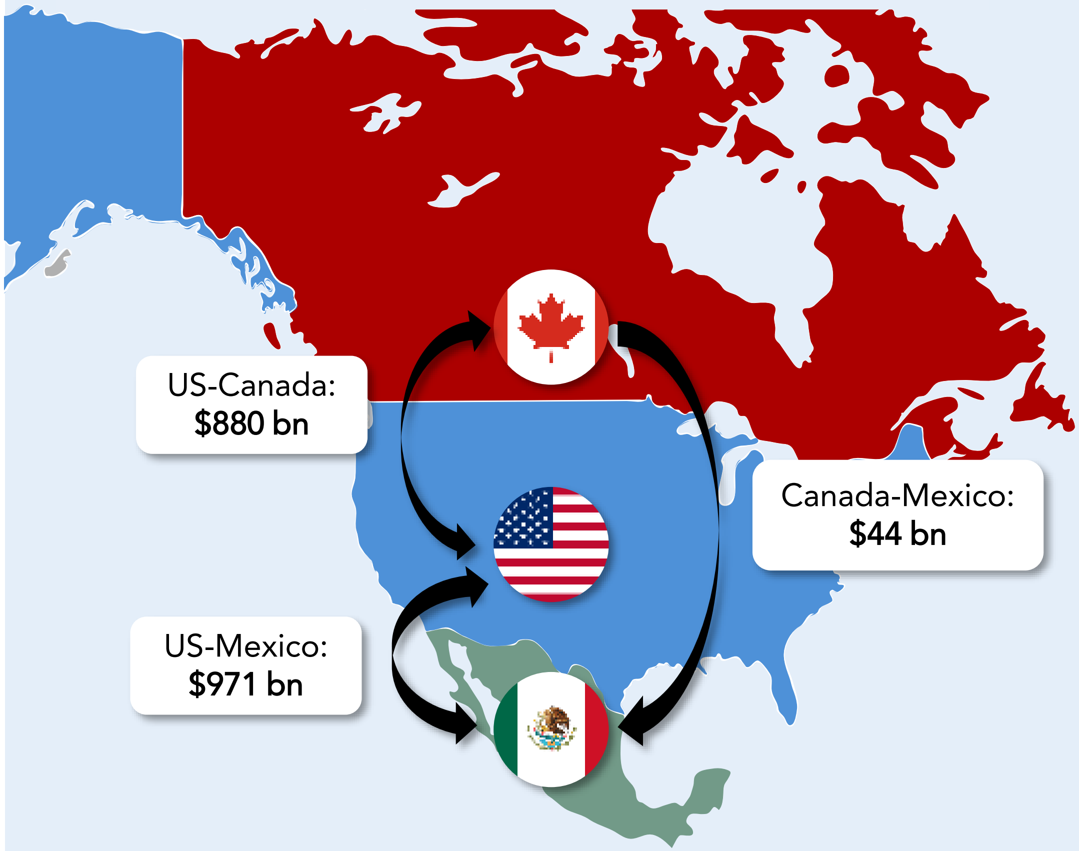
The Largest Free Trade Bloc in History

The Regional Comprehensive Economic Partnership (RCEP) has 15 member countries and is the largest free trade block in history by economic output and population. The RCEP represents approximately 30% of world GDP, covers 2.2 billion people (~30% of the global population) and accounts for 28% of global merchandise trade.

Trilateral North American Trade Agreement

The United States-Mexico-Canada Agreement (USMCA) is a trilateral free trade pact covering a massive market of more than 520 million people, nearly 30% of global GDP and close to $2 trillion in annual intra-regional trade.

Trade in goods and services (2025)



Notable issues:

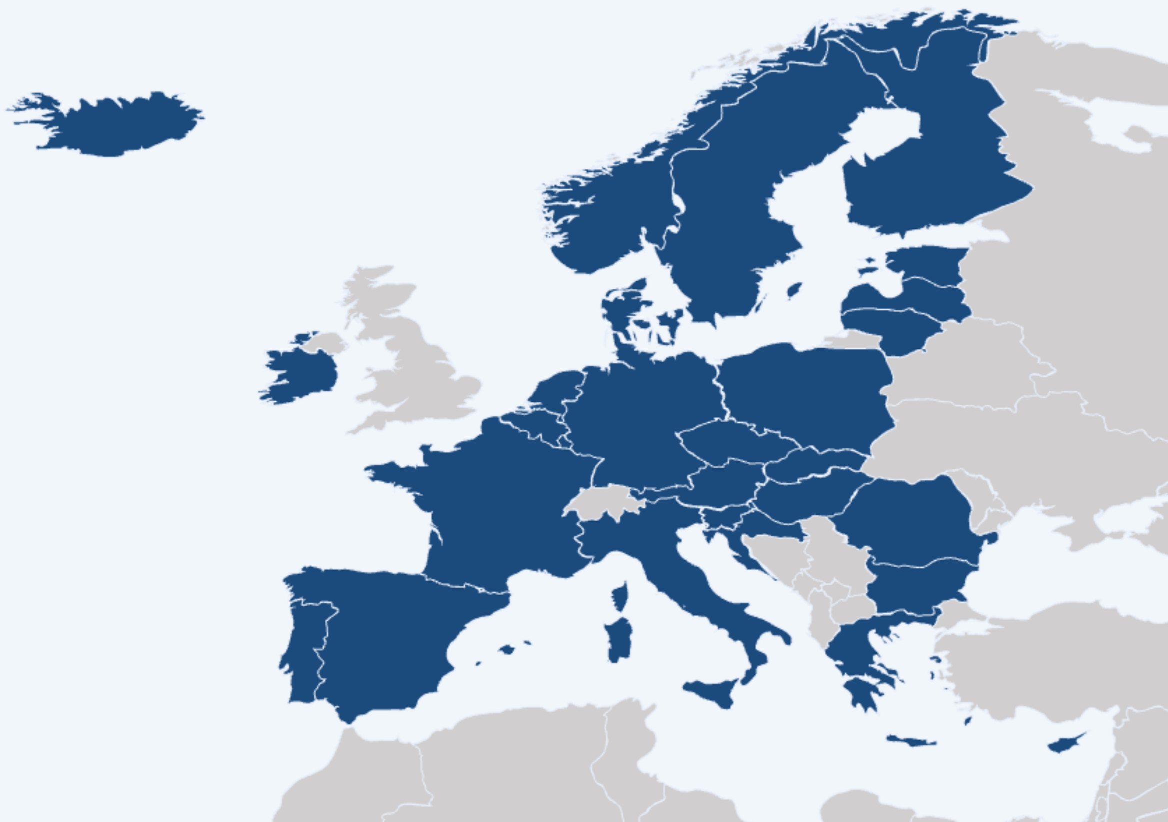
- Auto rules of origin
- Labor enforcement
- Market access (agriculture)
- China backdoor nearshoring
- Dispute resolution compliance
- Digital trade & taxes; AI
- Energy policy friction
- Critical minerals, steel & aluminum
- Non-trade issues (i.e., border, fentanyl)

Source: U.S. Bureau of Economic Analysis. UN Comtrade. Statistics Canada. Canada-Mexico trade is goods only. Data is latest through 2025.

The European Single Market

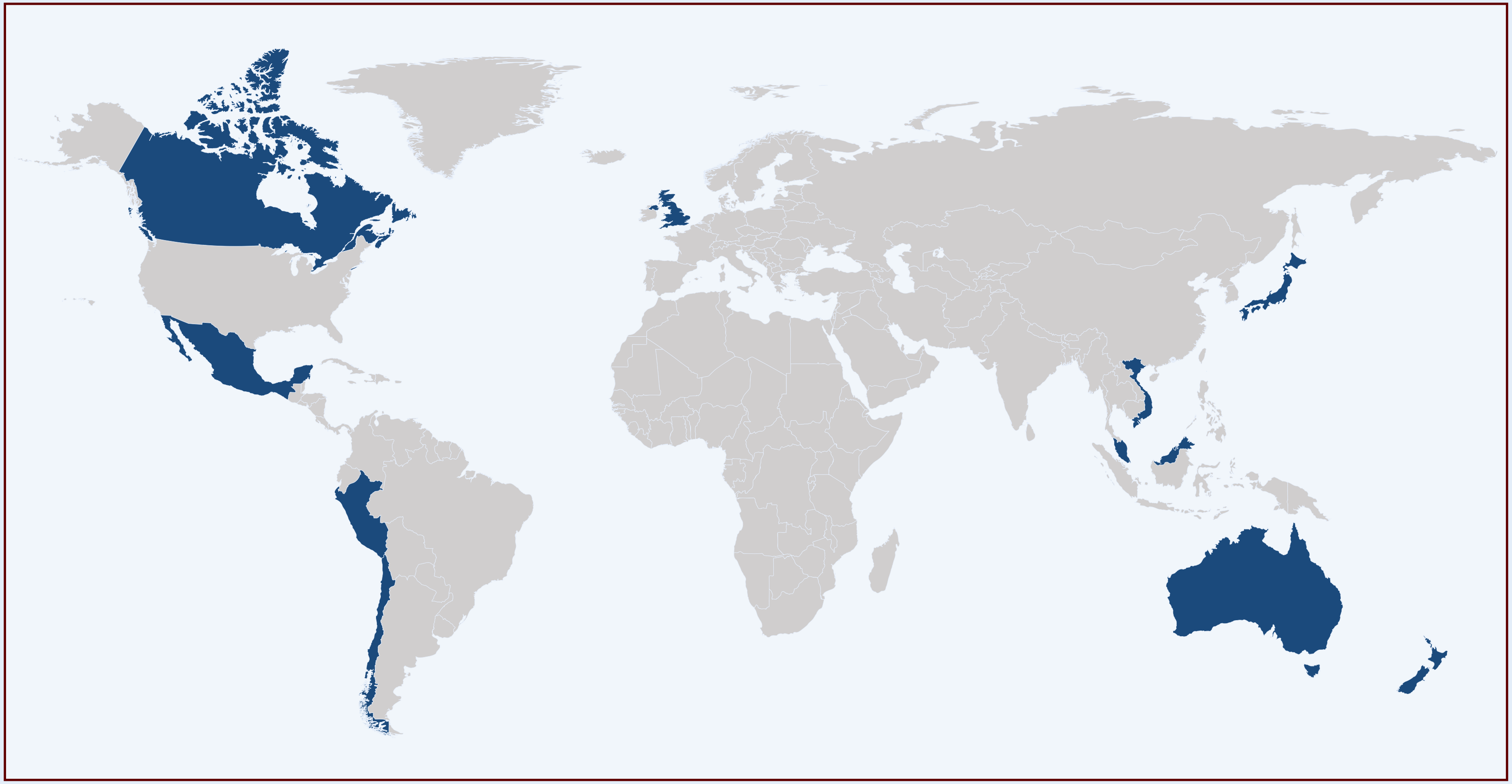
The European Single Market was formally launched in January 1993 and is one of the world's largest integrated economies. It covers 30 European nations, home to over 450 million consumers with a combined GDP of $23 trillion. The single market accounts for about 15% of global trade

- **30 European nations**
- **$23 trillion combined GDP**
- **450 million consumers**
- **Accounts for 15% of global trade**



The $15 Trillion CPTPP

The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) evolved from the original TPP after the US withdrew in 2017. The agreement includes 12 member states and spans four continents representing $15 trillion in combined GDP. The CPTPP accounts for roughly 15% of global merchandise and services trade, with member states conducting hundreds of billions in intra-bloc trade annually.



AfCFTA: The Largest Free Trade Area by Signatories

54 of the 55 African Union member states have signed **the African Continental Free Trade Area (AfCFTA),** making it the world's largest free trade area by number of signatories. The AfCFTA represents a combined GDP of $3.4 trillion and roughly 1.4 billion people. Trading started in January 2021 and is still in its early stages with intra-African trade of $273 billion, only about 18% of Africa's total trade.

ASEAN's $4 Trillion Trade Base

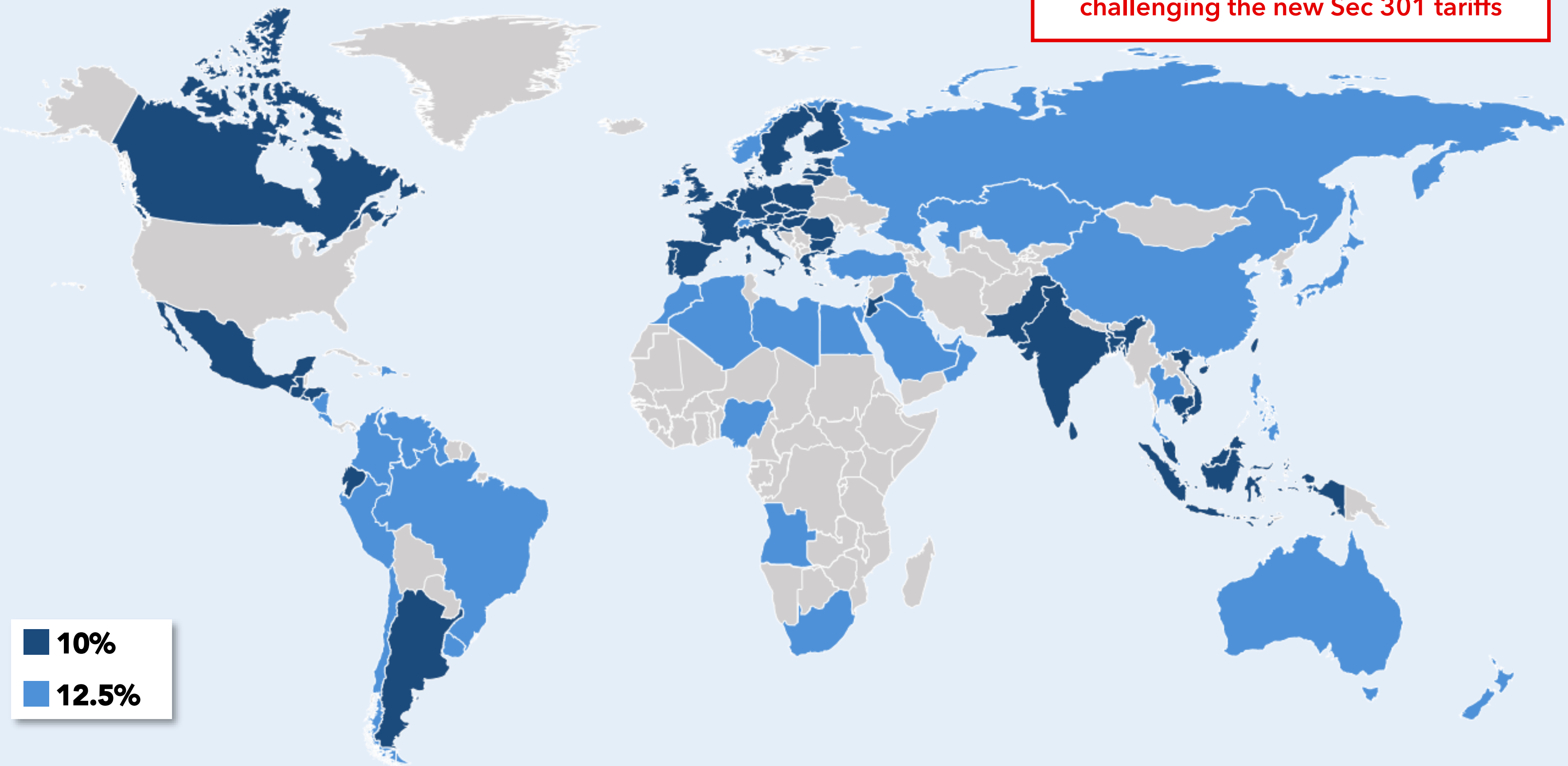
The Association of Southeast Asian Nations (ASEAN) was founded in August 1967 and now includes 10 member states. The population accounts for roughly 680 million (8.5% of world population) with a combined GDP of $4 trillion. Annual trade in goods and services is nearly $4 trillion, but Intra-ASEAN trade accounts for only ~22% of total trade.

US Section 301: Forced Labor Tariffs

The Trump Administration concluded its Section 301 forced labor investigation, resulting in a tiered-tariff system of 10% and 12.5% that went into effect on July 24, 2026. These measures replace the temporary 150-day Section 122 tariffs that were enacted earlier this year and stand on a more durable, legally defensible trade framework.

On Aug 3, 2026, 25 states filed a lawsuit with the US Court of International Trade challenging the new Sec 301 tariffs

Section 301 forced labor tariffs

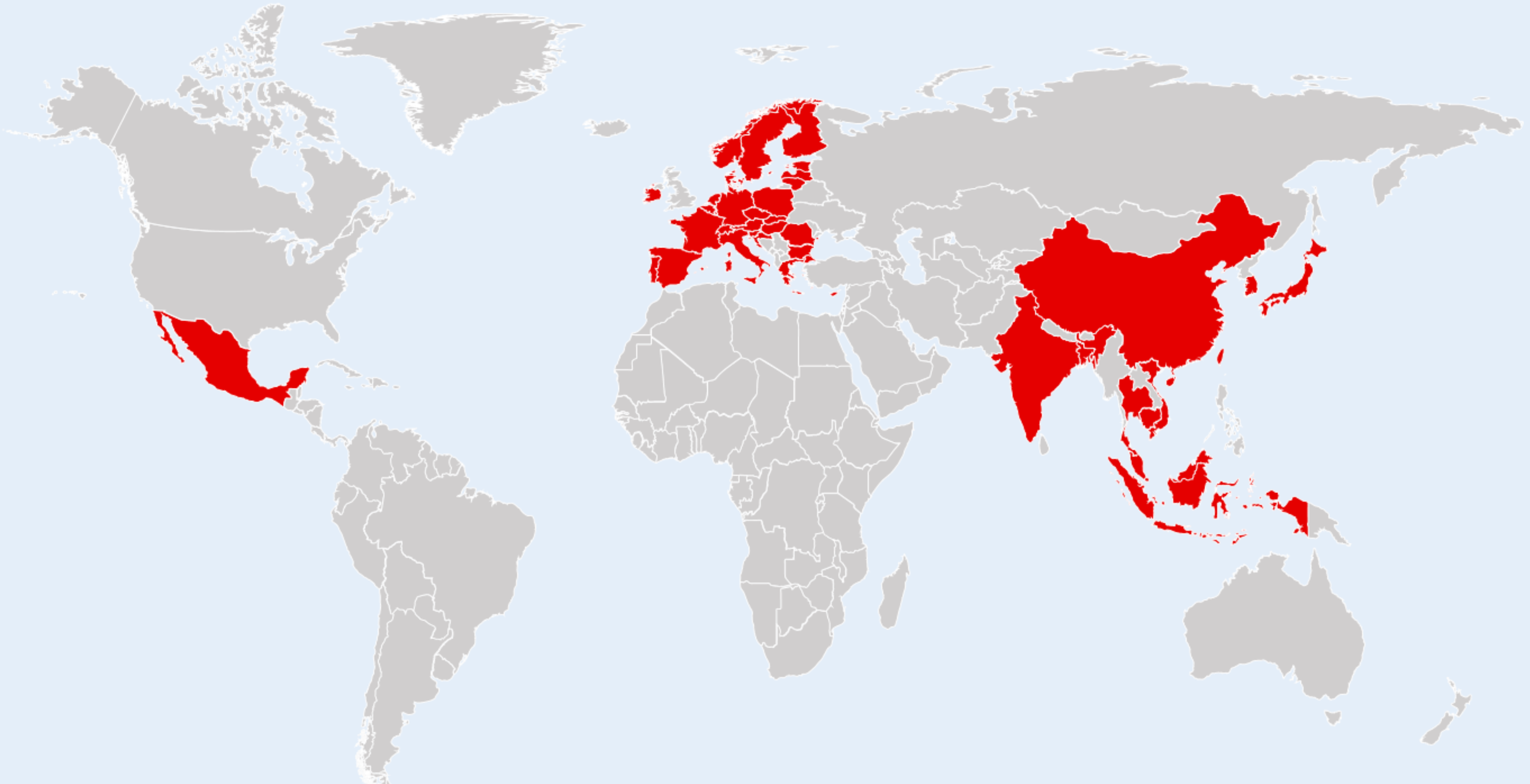


Source: (1) USTR. Data as of July 2026.

US Section 301: Excess Manufacturing Capacity

The Trump Administration's primary trade focus is now on its ongoing Section 301 probe into structural excess capacity and production in manufacturing sectors. This investigation targets 16 major economies that account for ~75% of the US's imports.

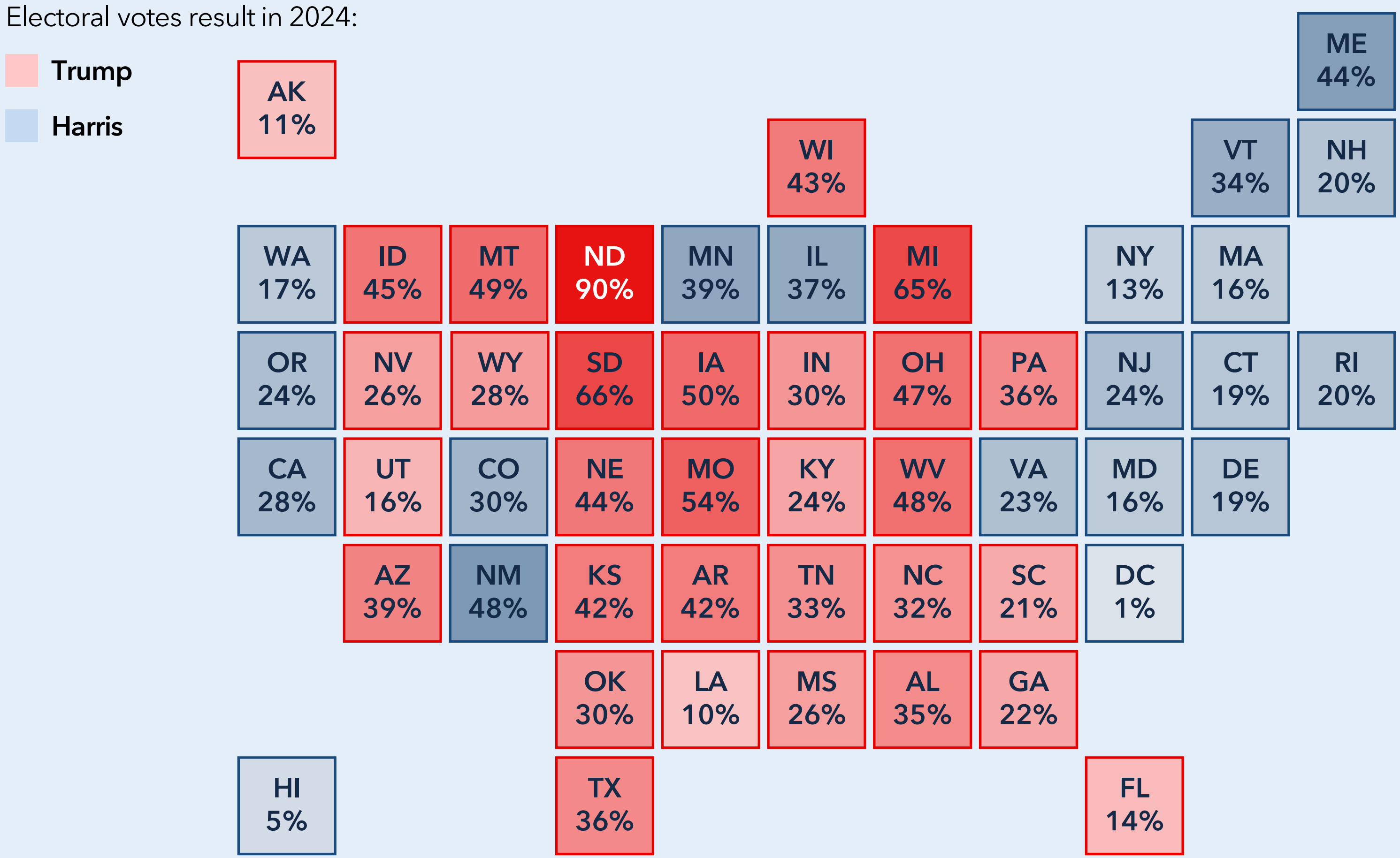
Economies targeted with Section 301 excess manufacturing capacity investigation



Source: (1) USTR. Data as of July 2026.

US Red States at Highest Risk for Export Losses in Event of USMCA Unwind

US state exports to Canada & Mexico (2025), % of total state exports

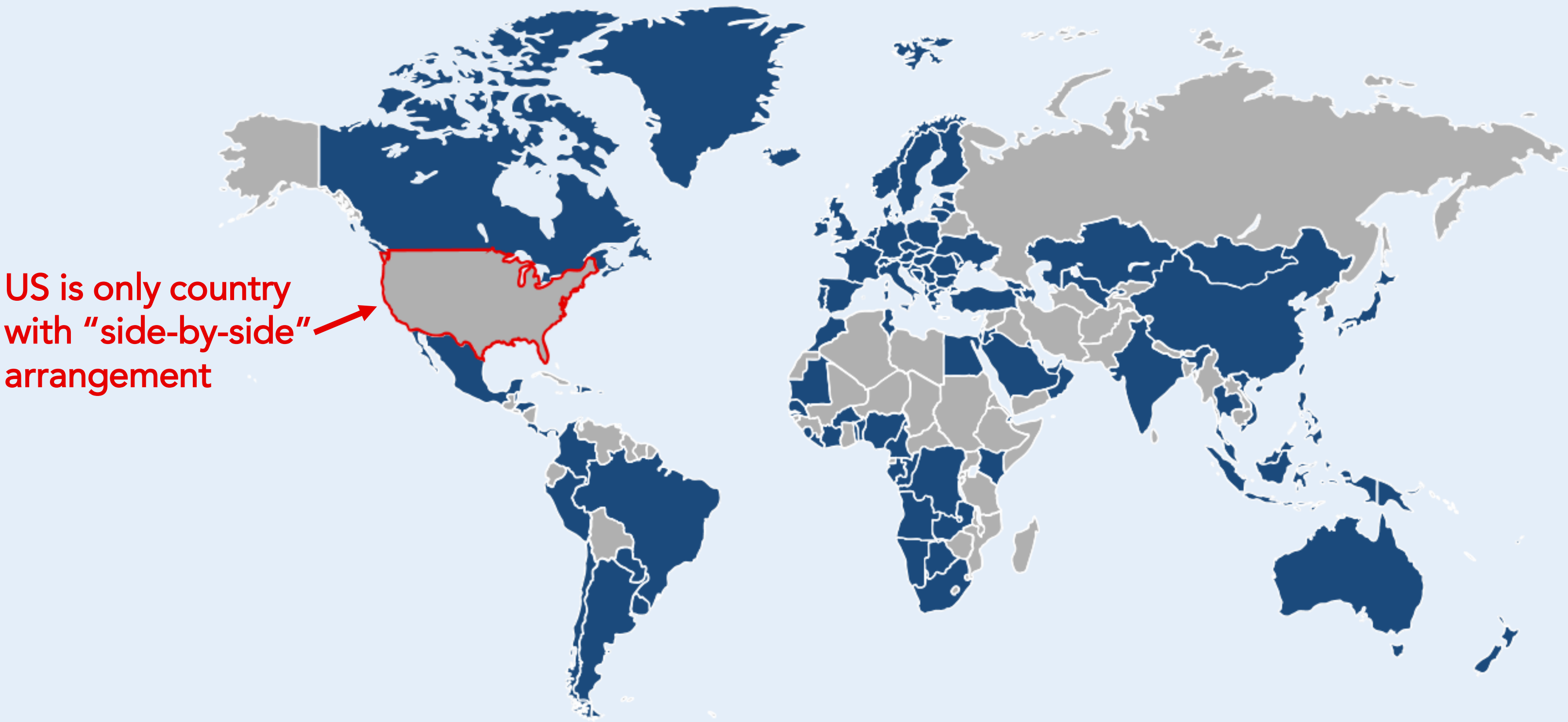


Source: (1) PIIE, "Trump-voting states are at highest risk for export losses if the USMCA ends". Census state export data based on the origin of movement. Exports to Mexico / Canada as a share of total state exports may be overstated due to multiple border crossings during production.

Global Tax Agreements

While the US never joined the 2021 global 15% minimum tax deal, the OECD and US struck **a "side-by-side" arrangement** in January 2026. The same 147 countries that signed onto the **OECD Pillar 2 agreement** agreed not to enforce the tax against US companies, since the US's own tax system is treated as roughly equivalent. However, local minimum taxes where US companies operate still apply. As of now, the US is the only country with this special carveout.

Countries committed to the OECD Pillar 2 Global Minimum Tax Agreement & Side-by-Side framework



Source: (1) OECD. "Members of the OECD/G20 Inclusive Framework on BEPS that have approved the July 2023 Outcome Statement om the Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalization of the Economy as of May 28, 2024. Including Canada who signed in September 2024.

Nearly 50 Countries Have Adopted DSTs

Nearly 50 countries globally have either enacted or are actively pursuing **Digital Service Taxes (DSTs)**. In June 2026, President Trump threatened 100% tariffs on any country implementing a DST, escalating a dispute that has flared intermittently since 2019.

Legislation enacted:

1. Argentina
2. Austria
3. Cameroon
4. Canada
5. Colombia
6. Costa Rica
7. Denmark
8. Ecuador
9. Ethiopia
10. France
11. Greece
12. Hungary
13. India
14. Israel
15. Italy
16. Kenya
17. Malaysia
18. Mexico
19. Nepal
20. Nigeria
21. Pakistan
22. Paraguay
23. Poland
24. Portugal
25. Rwanda
26. Sierra Leone
27. Slovakia
28. Spain
29. Taiwan
30. Tanzania
31. Tunisia
32. Turkey
33. Ukraine
34. UK
35. Uganda
36. Uruguay
37. Vietnam
38. Zimbabwe

Draft Legislation / Public Consultation

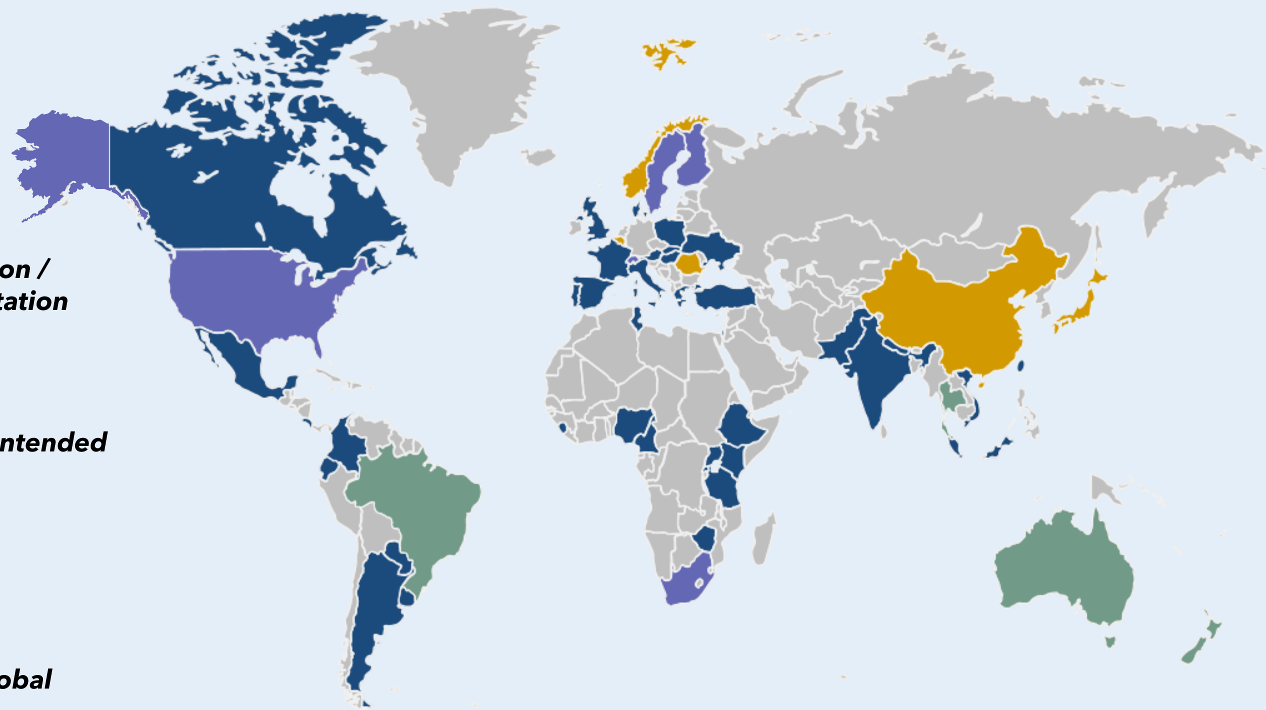
39. Australia
40. Brazil
41. Thailand

Announced / Intended to Implement

42. Belgium
43. China
44. Japan
45. Norway
46. Romania

Waiting for global solution

47. Finland
48. Singapore
49. South Africa
50. Sweden
51. Switzerland
52. US



38 Legislation Enacted

3 Draft Legislation / Public Consultation

5 Announced/Intention to Implement

6 Waiting for global solution

Source: KPMG, "Taxation of the Digitized Economy – Developments Summary" Data as of July 31, 2026.

4

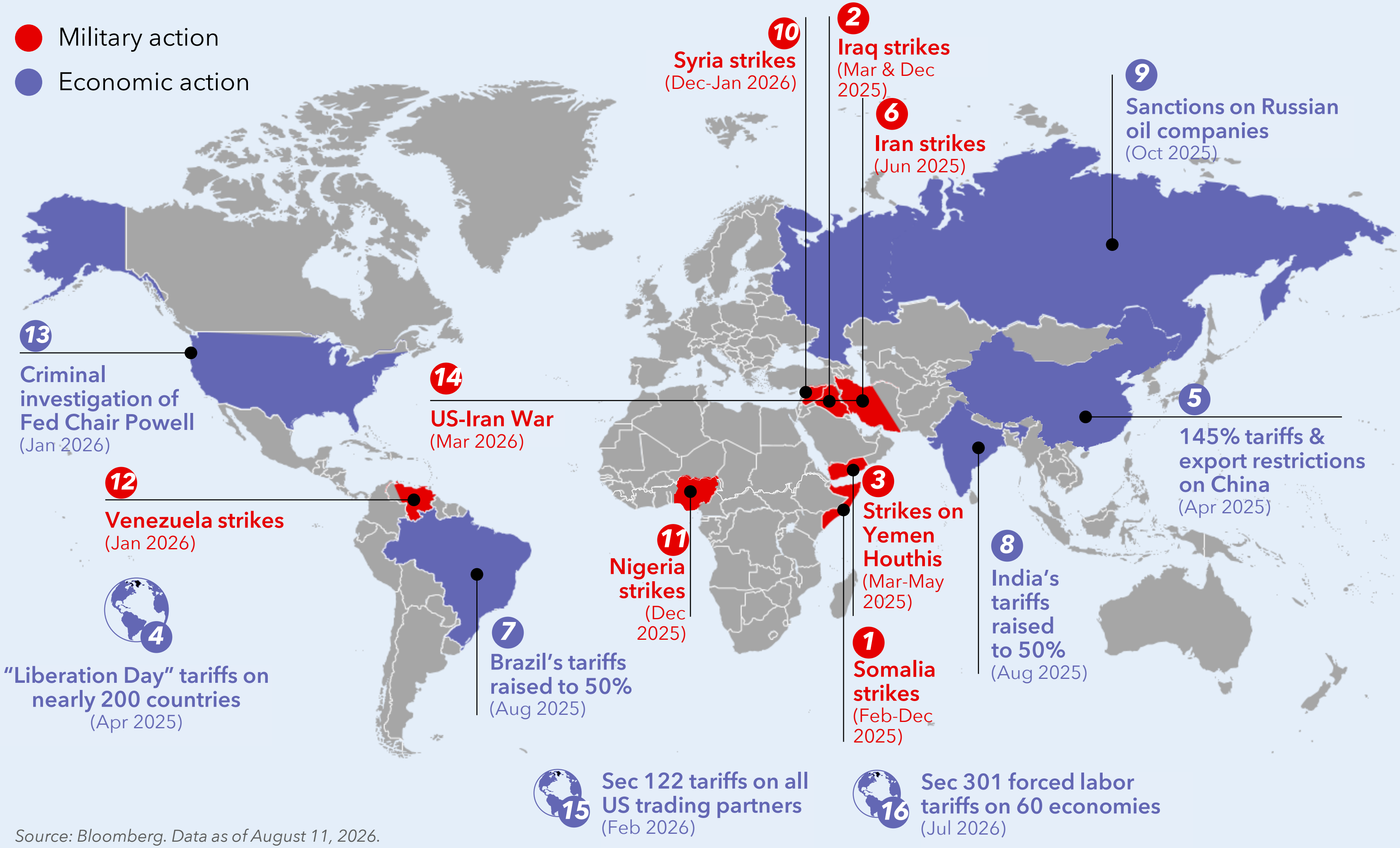
Geopolitical Risk

From World Order to Regional Disorder

Selected areas of potential regional conflict in 2026

President Trump's More Assertive Foreign Policy

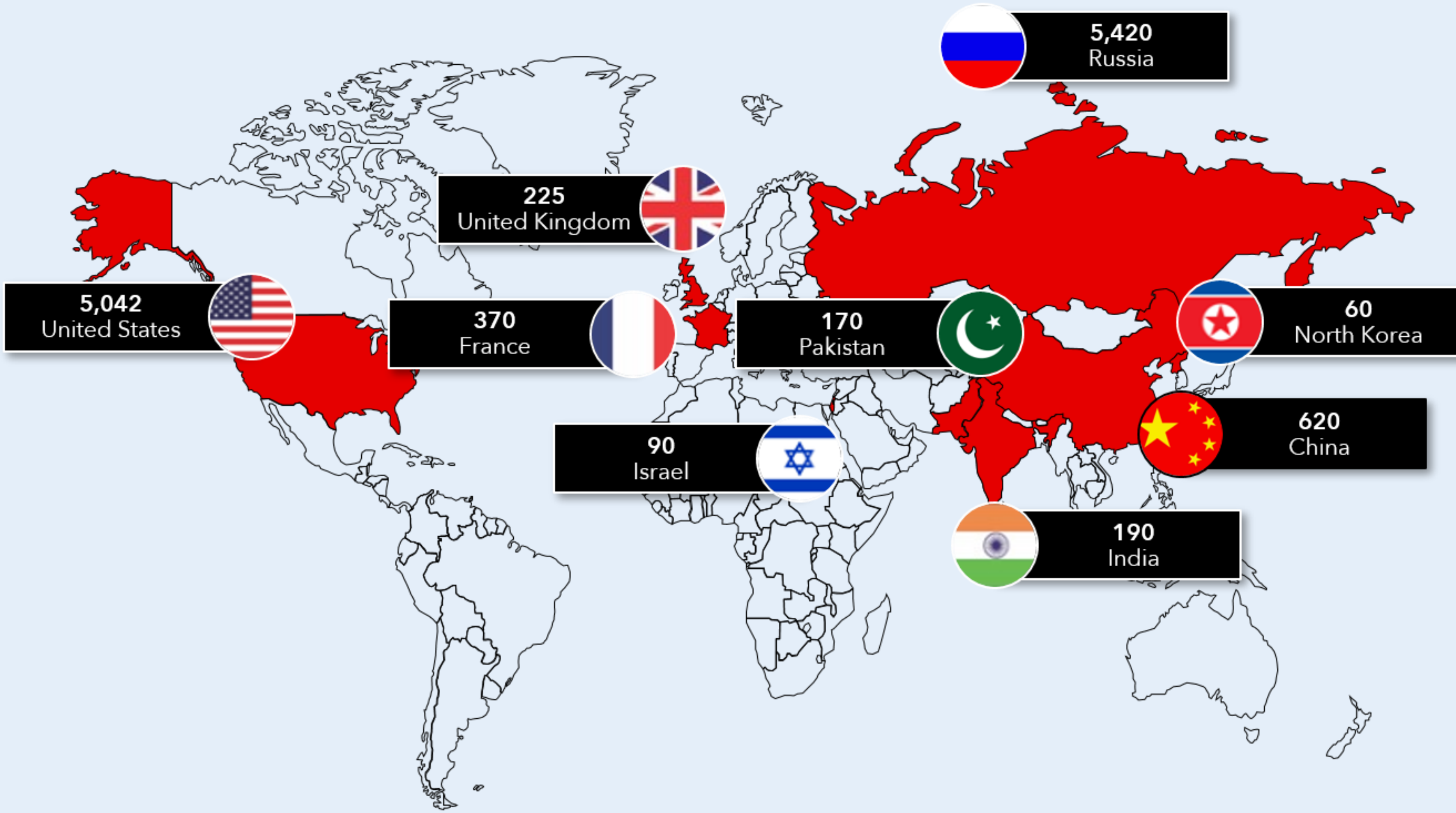
Selected US military and economic policy actions (2025-26)



Source: Bloomberg. Data as of August 11, 2026.

The World's Nuclear Arsenal

Global nuclear warhead inventory, by country



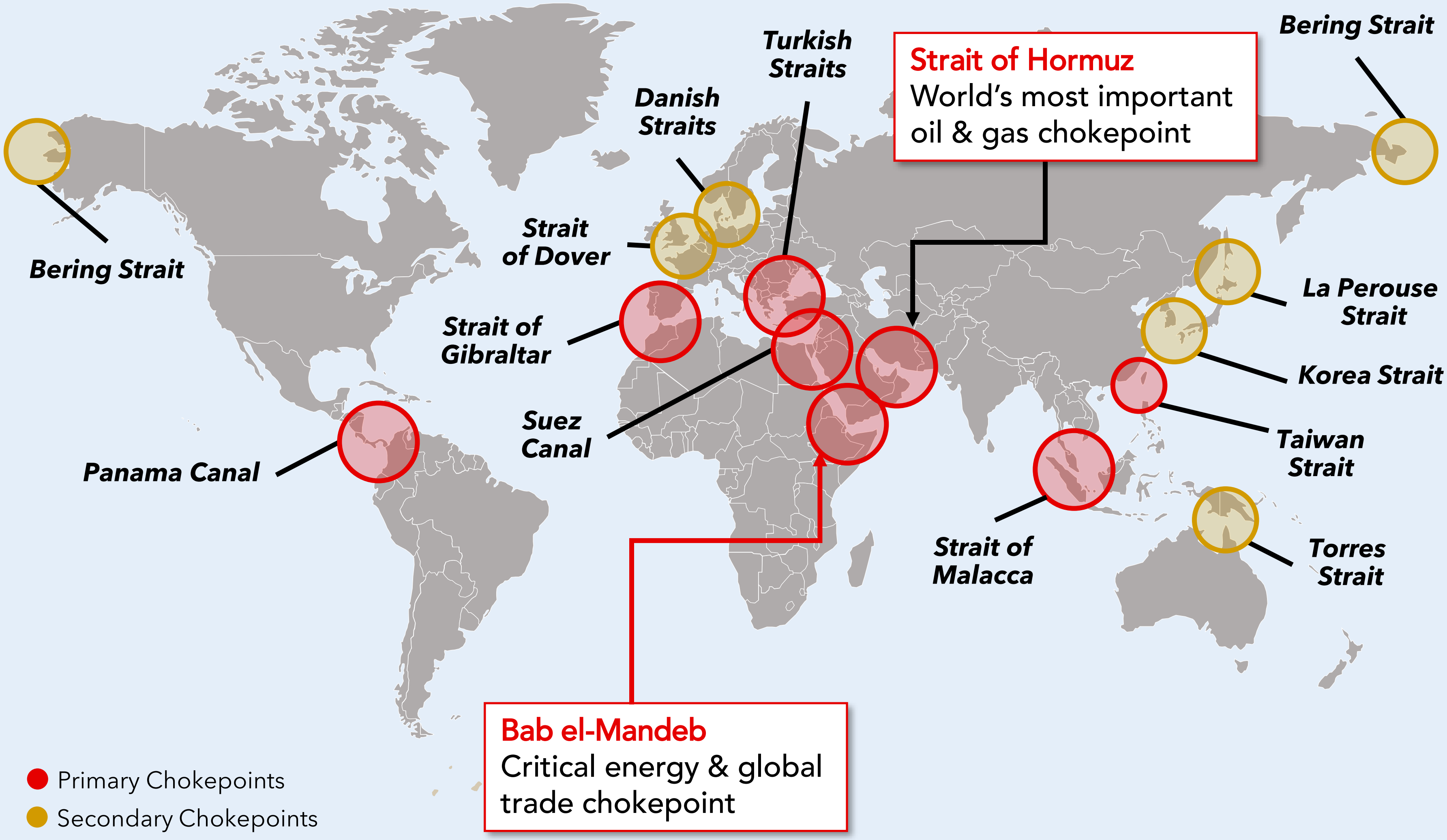
Source: Arms Control Association. Estimated June 2026 warhead inventories. US Department of State, and the SIPRI.

Nuclear Non-Proliferation Treaty

The Nuclear Non-proliferation Treaty (NPT) was established in 1970 to prevent the spread of nuclear weapons and promote cooperation in the peaceful use of nuclear energy. There are five major countries that are notable non-signatories to the NPT: India, Pakistan, Israel, South Sudan and North Korea. While Iran remains a formal member of the NPT, the relationship has become highly strained since the war started in early 2026.

Source: (1) United Nations Office for Disarmament Affairs.

Important Global Geostrategic Chokepoints

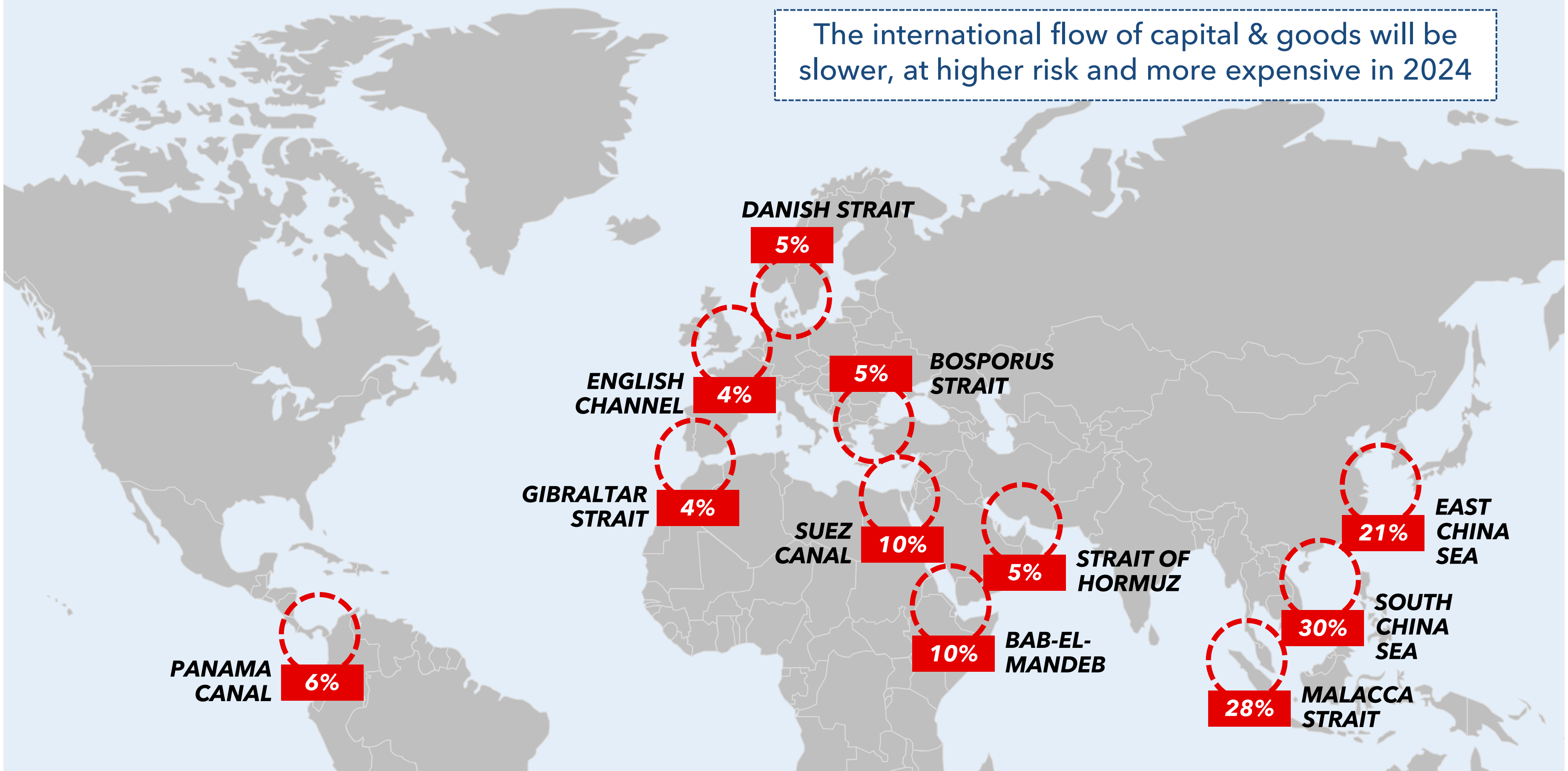


Share of Global Trade By Geostrategic Chokepoint

Military conflict in the 21st Century is quickly shifting to maritime theaters, and critically vulnerable geo-strategic chokepoints. Notably, over 90% of global trade (95% for the US) and 60% of global oil, is transported by sea. Over 6 billion of the world's population also lives within 200 miles of the sea.

Share of global trade by 2019 value

The international flow of capital & goods will be slower, at higher risk and more expensive in 2024

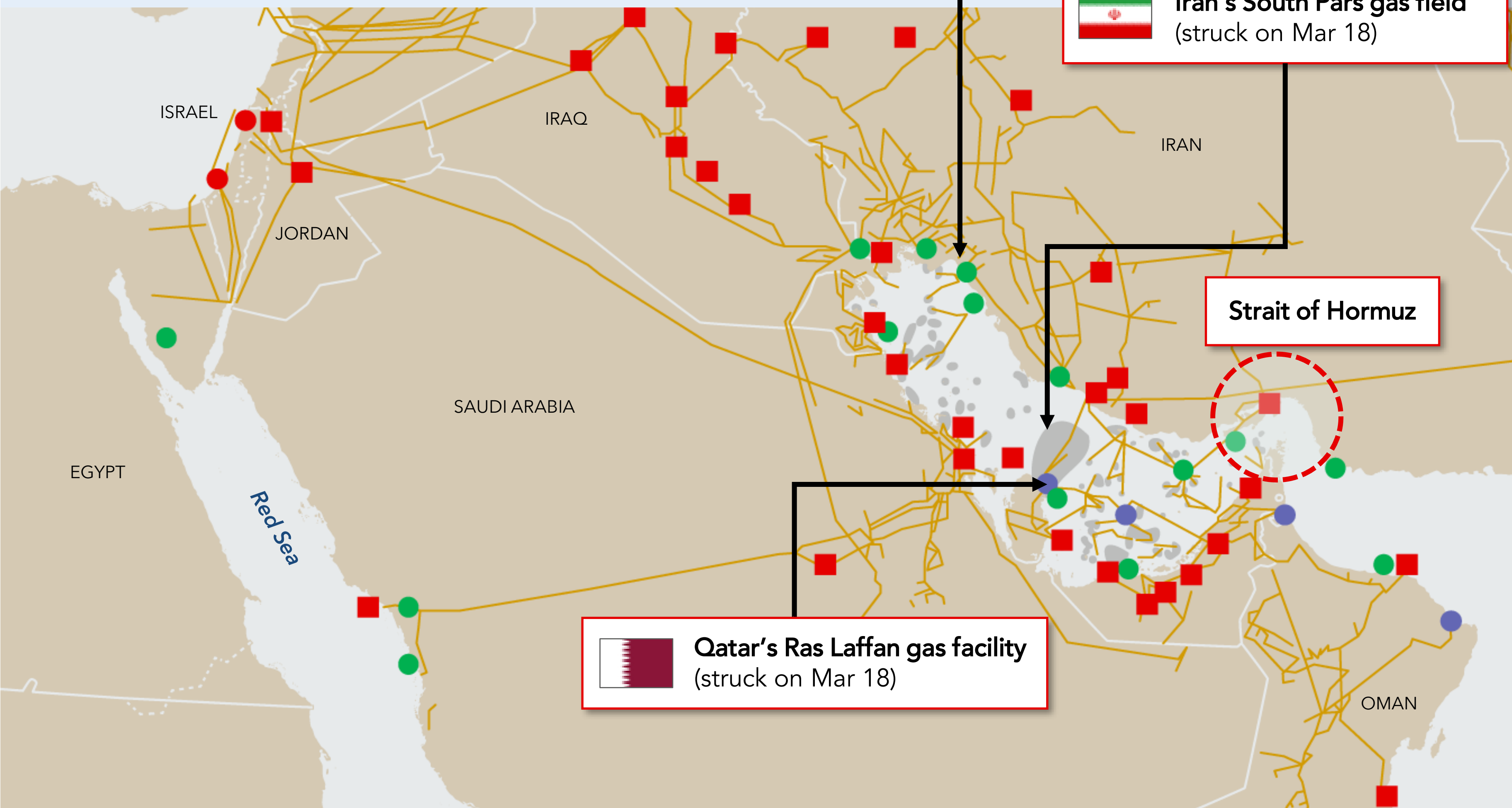


Source: Lincoln Pratson of Duke University. GPS locations from OpenStreetMap. Statista. Percentages don't sum to 100 as a ship may pass through multiple chokepoints.

Middle East Regional Energy Infrastructure

■ Oil refinery, gas processing plant
● Oil terminal
● Oil, gas field
● Oil, gas pipeline
● LNG export terminal

Oil refineries and terminals in the Middle East

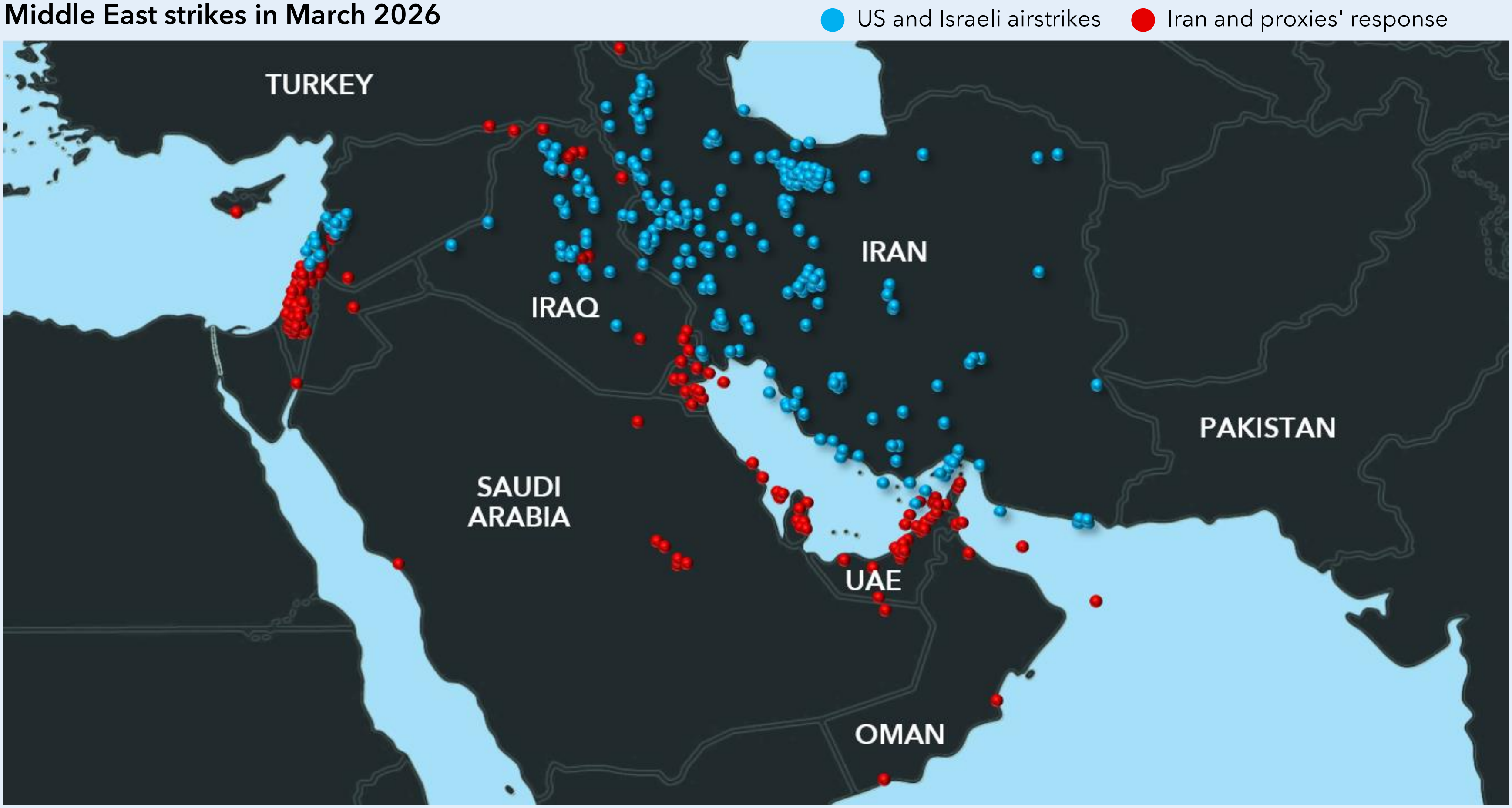


Source: US Central Intelligence Agency. US Department of Energy.

Middle East Air Strikes in March 2026

Measured by the number and intensity of aerial strikes, the March 2026 Middle East war is quite a bit smaller than the 1991 and 2003 Gulf wars. However, in historical terms, the **distinguishing feature of this crisis can be measured in the size of the oil disruption, Hormuz closure and the Iranian counterstrikes** on energy and military infrastructure across 11 regional countries.

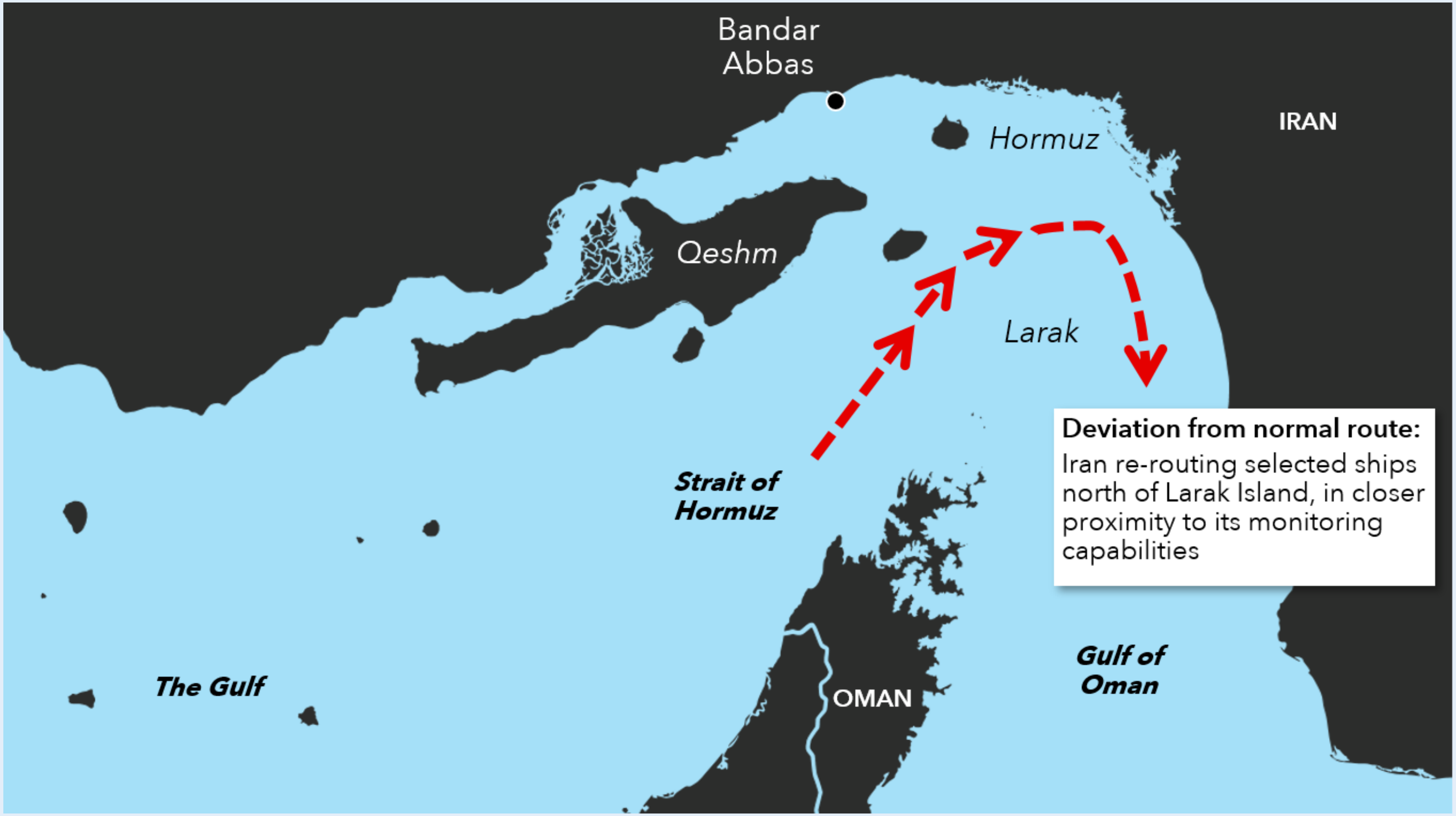
Middle East strikes in March 2026



Source: Institute for the Study of War and AEI's Critical Threats Project as of March 31 morning Middle East time, Bloomberg News reporting.

The Larak Detour & Tehran as Toll Collector

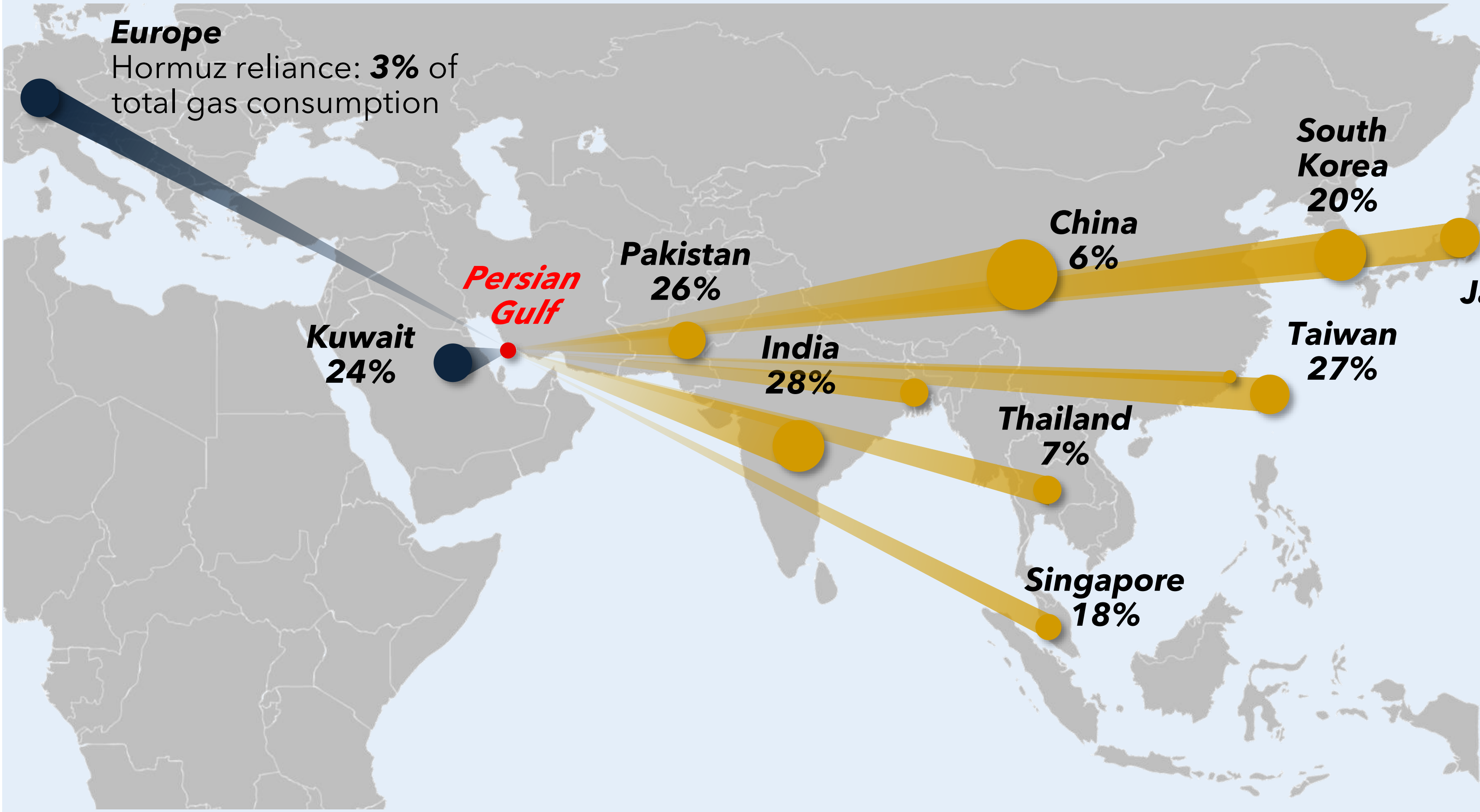
Iran has implemented authority over Hormuz by shutting down over 95% of traffic, while redirecting a very low number of ships north of Larak Island, closer to Iranian territorial waters.



Source: Marine Regions, International Maritime Organization, Lloyd's List.

Asia More Exposed to Nat Gas Shut-In

Reliance on Strait of Hormuz for LNG imports as a share of total gas consumption

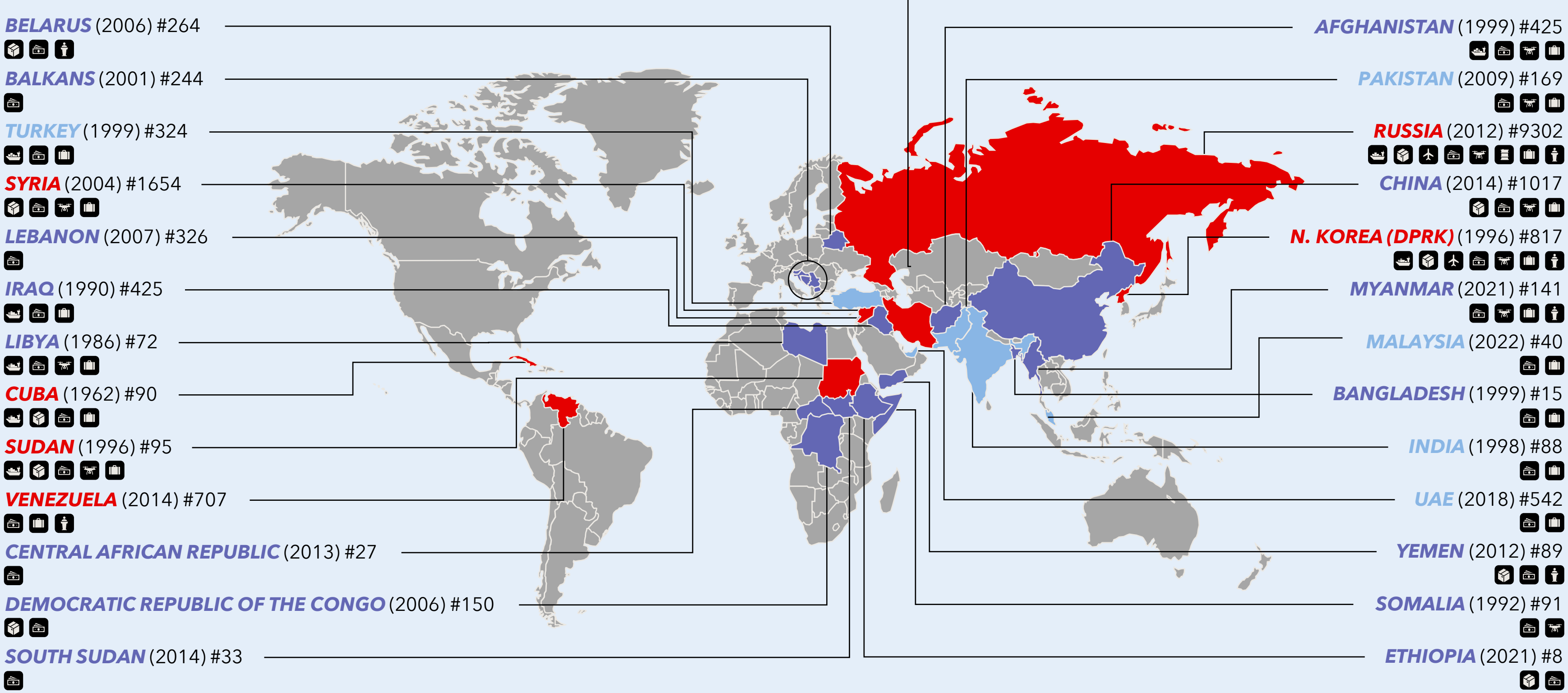


Source: GIGNL. Energy Institute. Bloomberg.
Note: Reliance is calculated as total Hormuz imports divided by total gas consumption.

Weaponization of the US Dollar

As of 2025, the US has sanctions on approximately 80,000 persons globally, or about 2/3 of global designations

US sanctions across the world (1807-2025)



SANCTIONS:

- Trade
- Commodities
- Transportation
- Financial
- Arms
- Energy
- Travel
- Head of State

SANCTIONS TYPE:

- Primary
- Secondary
- Issue Specific
- # Number of Sanctions

Source: Gateway House.

NATO’s Eastward Expansion

Since the early 1990’s, NATO has expanded its membership from 16 to 32 nations, and has acknowledged 3 new aspirational members: Ukraine, Georgia and Bosnia & Herzegovina.

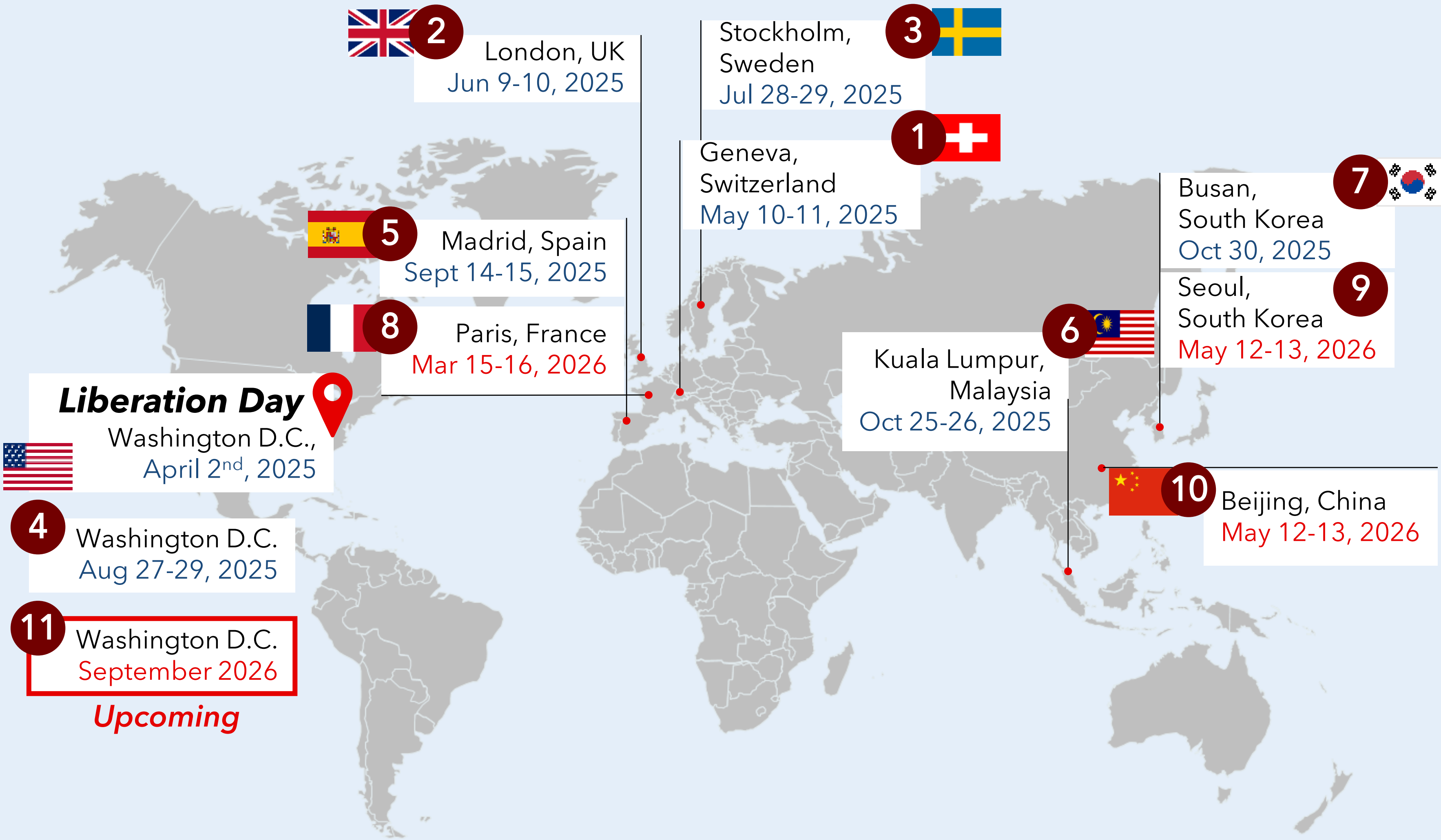
Source: NATO. Note: Map excludes NATO members, the US & Canada

5

US-China Policy

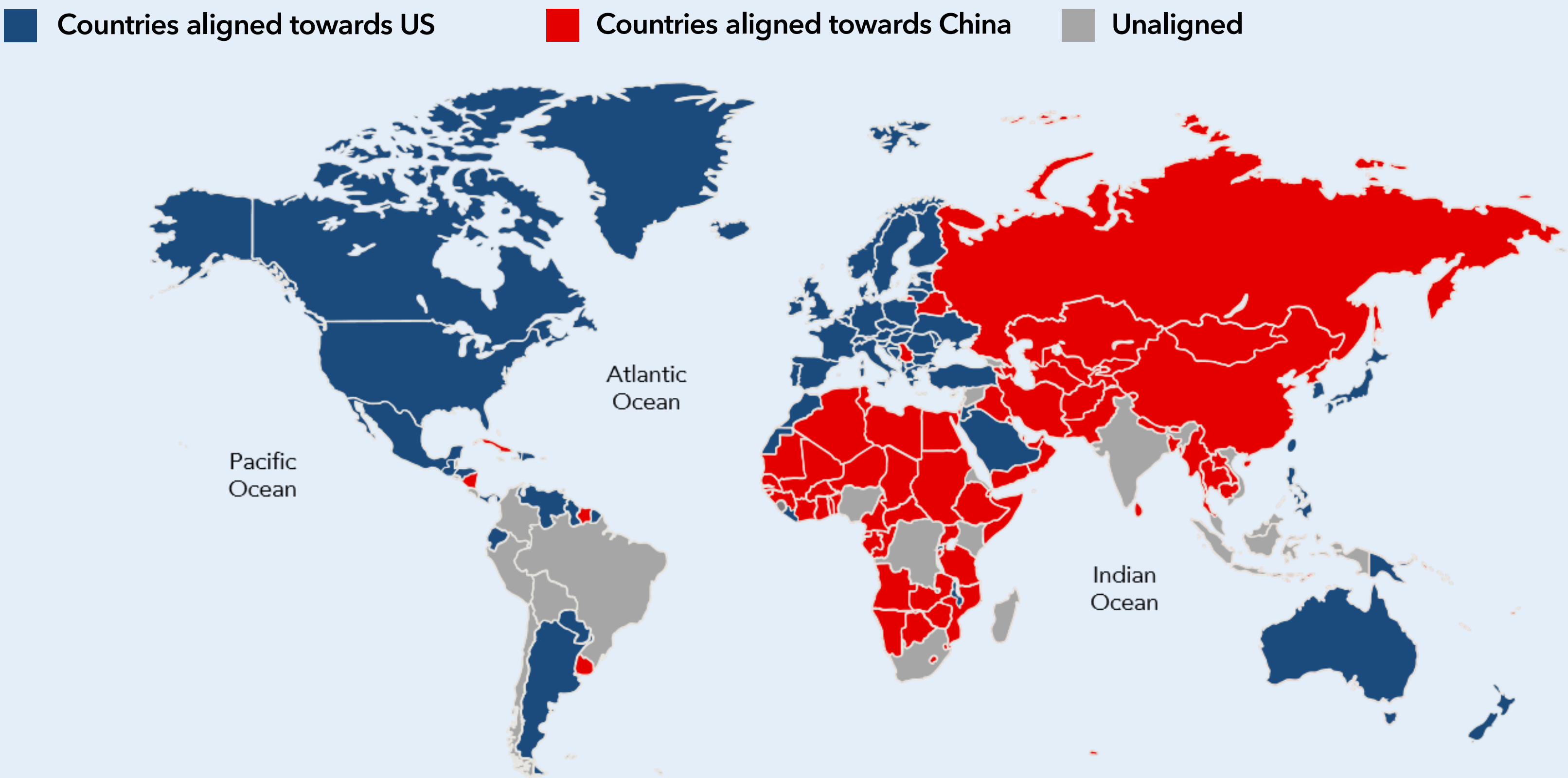
The Evolution of US-China Dialogue in 2025-26

In-person US-China meetings in 2025-26



Global Bifurcation Between the US & China

Following several seismic shifts in the geopolitical map from a **bipolar** power structure (pre-1989 Berlin Wall), to **unipolar** (post 1989), and increasingly **multi-polar** (post-2008 GFC), a new and more **profound bifurcation of global power is well underway between the US and China.** On its current path, the global landscape will become increasingly divided between the world's two largest superpowers, with significant **implications for technology standards, supply chains, trade and capital flows and military alliances.**

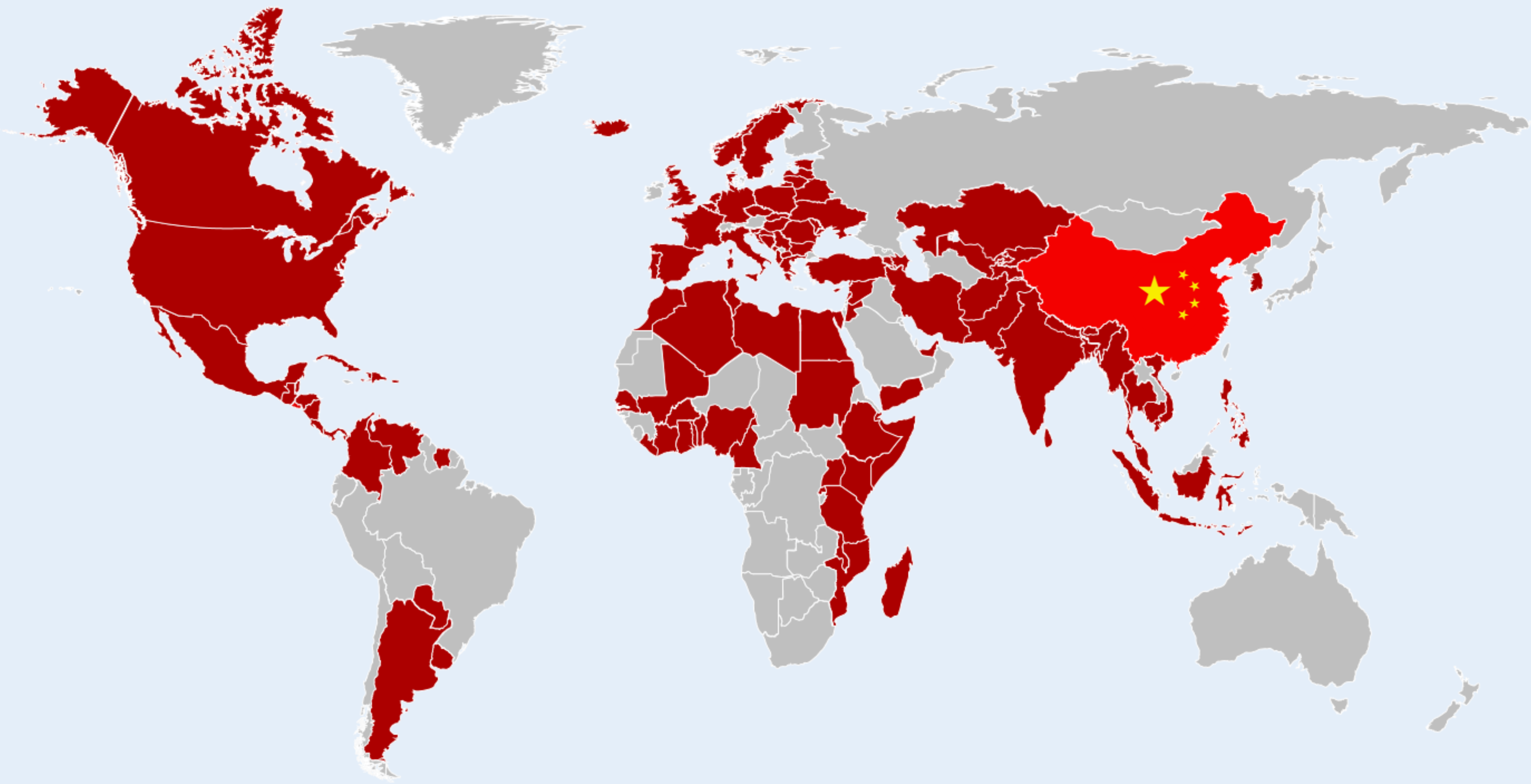


Source: Capital Economics. Global Fracturing Dashboard. As of January 2026. India moved to unaligned following recent developments with US & India policy. Blue includes aligned and leans US. Red includes aligned and leans China.

China's Externally Dependent Surpluses

Aided by a managed currency and accusations of unfair trade practices, China maintains trade surpluses with over 150 countries, up from approximately 100 in 1992.

Countries that China has a trade surplus with (2025)

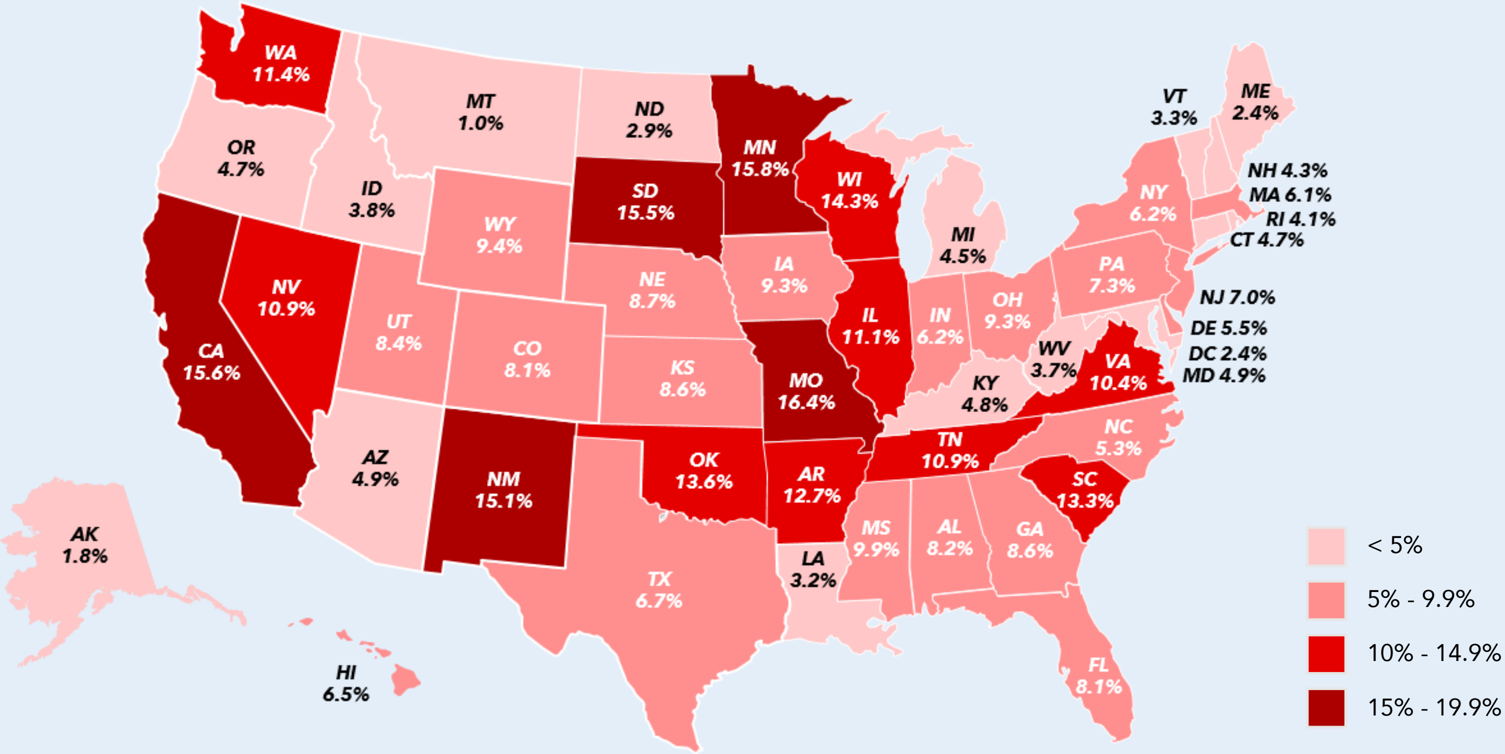


Source: (1) World Integrate Trade Solution. Full year data as of 2025.

Revoking China's PNTR Status Would Be Difficult

Over the last few decades, the US Congress has introduced, but not passed, several bills to revoke China's Permanent Normal Trade Relations (PNTR) status. Though very difficult to do, revoking China's PNTR status would: (1) sharply increase tariffs on all US imports from China; (2) create significant, and much needed, "revenue" for Trump tax and spending priorities; and (3) permanently alter and damage the US-China trade landscape. Though risk for this transformative policy change remains high, it would be a heavy lift for the very narrow majorities in the US Congress (especially agriculture states) and would receive enormous blowback from the US business community.

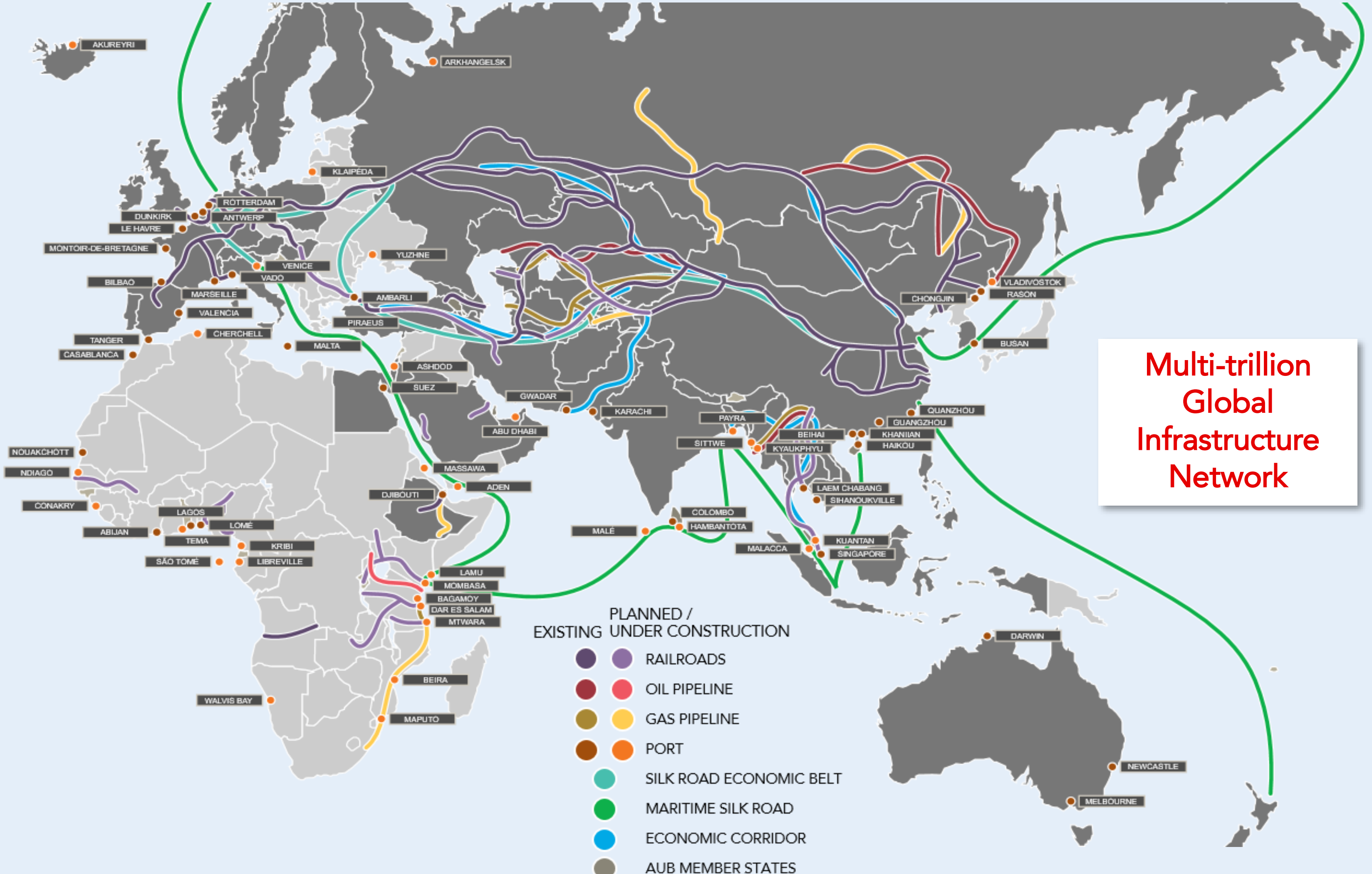
US imports from China as % of total state imports, by state (2025)



Source: (1) US Census Bureau. Data shows imports from China percent of total state imports. Data is 2025.

“Socialism With Chinese Characteristics”

China’s Belt & Road initiative



Multi-trillion Global Infrastructure Network

Source: MERICS. Mapping the Belt & Road Initiative.

Sino-Russian Pivot to Global South

The BRICS economic group expanded in January 2024 with 6 additional members in "Phase 1" of a multi-year expansion process. The expanded 11-member group, with an enlarged presence across the Global South, accounts for 30% of global GDP (41% on a PPP basis), and 45% of the world's population. The expanded bloc, which will meet again in New Delhi, India in September 2026, seeks to offer an alternative to the post WW2, Western-dominated, global financial and economic architecture.

USA
$32.4tn GDP
343mn Pop.

EU
$23.0tn GDP
451mn Pop.

GERMANY
$5.5tn GDP
84mn Pop.

JAPAN
$4.4tn GDP
123mn Pop.

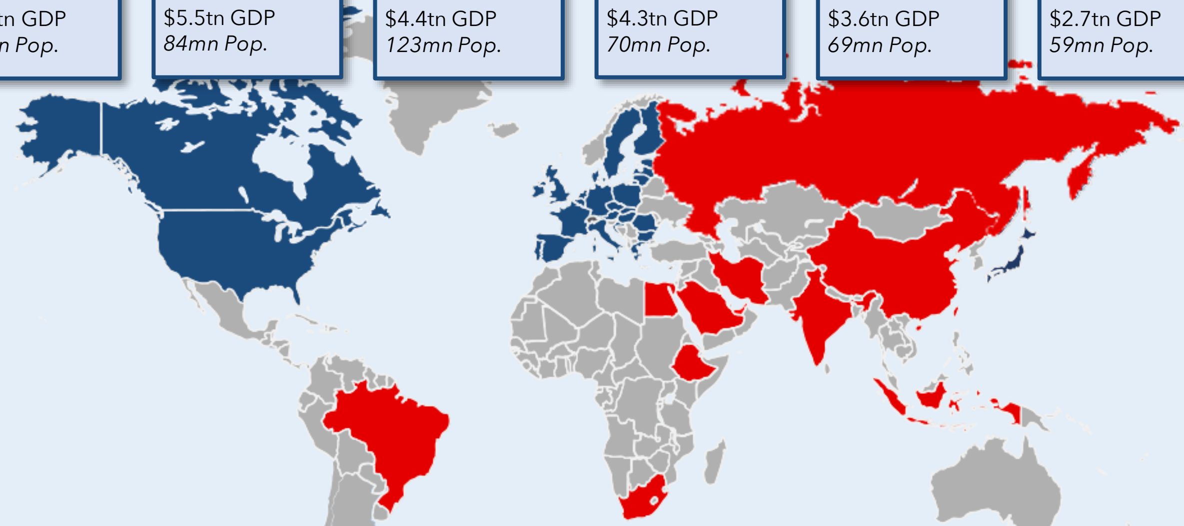
UK
$4.3tn GDP
70mn Pop.

FRANCE
$3.6tn GDP
69mn Pop.

ITALY
$2.7tn GDP
59mn Pop.

CANADA
$2.5tn GDP
42mn Pop.

G7
BRICS



CHINA
$20.9tn GDP
1.4bn Pop.

INDIA
$4.2tn GDP
1.5bn Pop.

BRAZIL
$2.6tn GDP
214mn Pop.

RUSSIA
$2.7tn GDP
143mn Pop.

SOUTH AFRICA
$480bn GDP
64mn Pop.

Prior BRIC Members

INDONESIA
$1.5tn GDP
287mn Pop.

SAUDI ARABIA
$1.4tn GDP
37mn Pop.

UAE
$622bn GDP
12mn Pop.

EGYPT
$430bn GDP
110mn Pop.

IRAN
$300bn GDP
92mn Pop.

ETHIOPIA
$126bn GDP
112mn Pop.

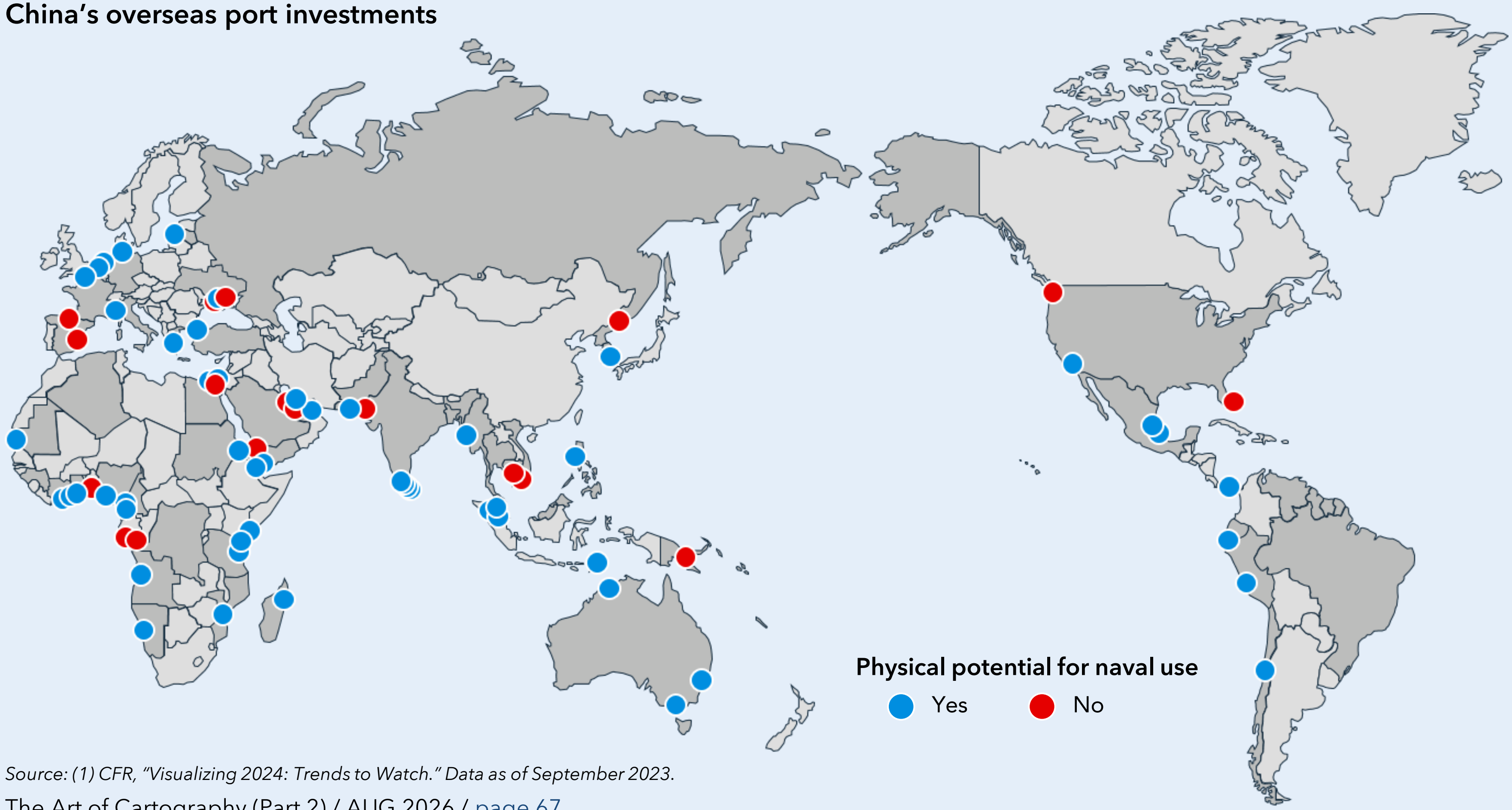
BRICS as of Jan 1, 2024

**By convention, although the EU is a member of the G7, only GDP of Germany, France and Italy is included in aggregate G7 GDP statistics.*
Source: (1) IMF. World Economic Outlook Database. 2023 estimates. GDP in USD based on GDP in national currency converted to USD using market exchange rates.

China’s Expanding Global Naval & Port Infrastructure

As measured by number of ships, China became the world’s largest navy in 2020, though is not yet on par with the United States as a global naval power. According to the CFR, China currently has more than 90 port projects underway, part of its strategic plan to dominate global port infrastructure and support its position as the world’s largest trading economy. More than half of these development projects have physical potential for naval use (and more than a dozen are China majority-owned).

China’s overseas port investments



Source: (1) CFR, “Visualizing 2024: Trends to Watch.” Data as of September 2023.

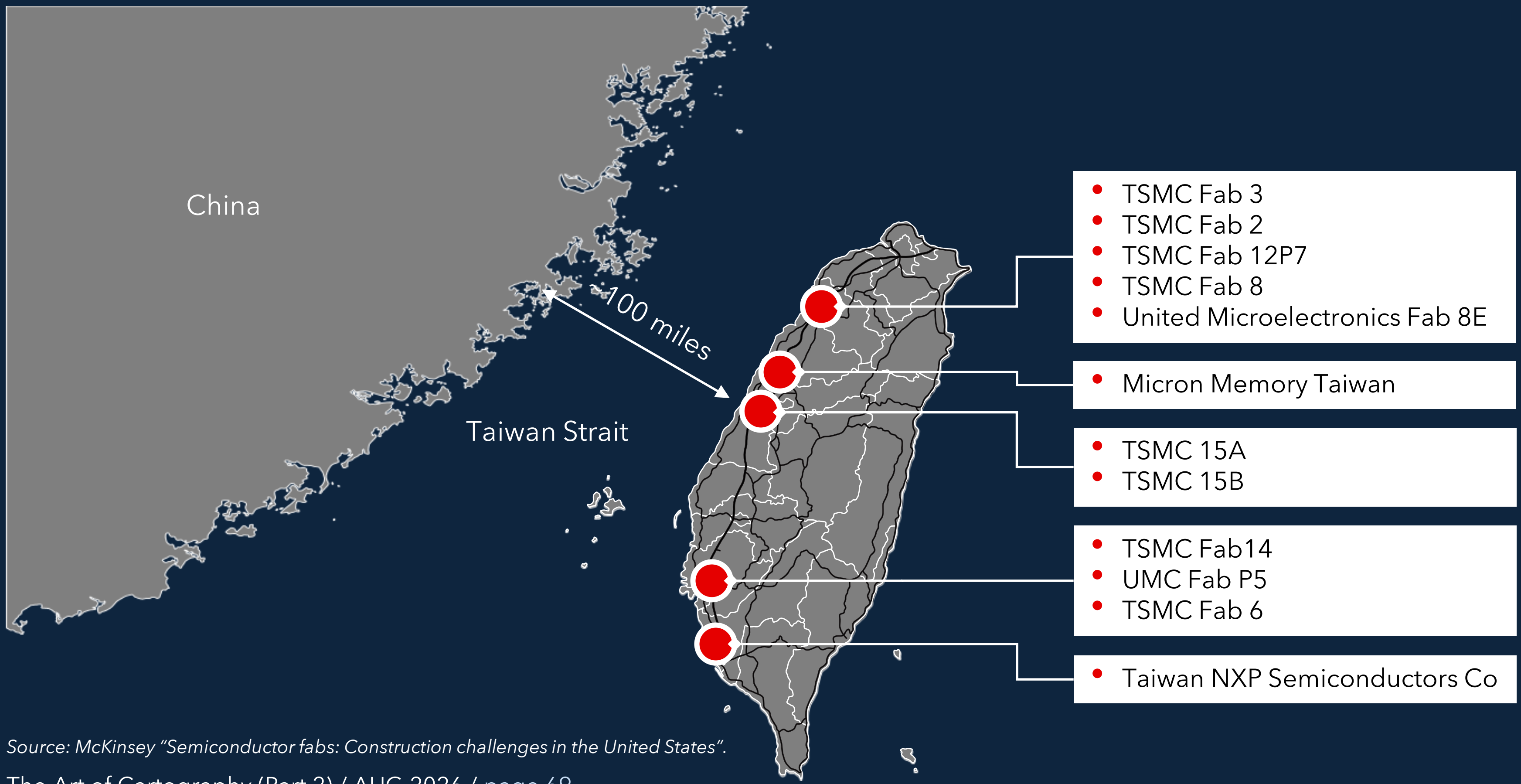
The World's Most Contested Sea

World's Most Contested Sea

- 80% of China's oil imports
- Massive oil & gas reserves
- 1/3 of global trade
- Center of global supply chains
- World's largest arms race
- World's 2 largest navies (US & China)
- Taiwan risk

Taiwan's Silicon Shield

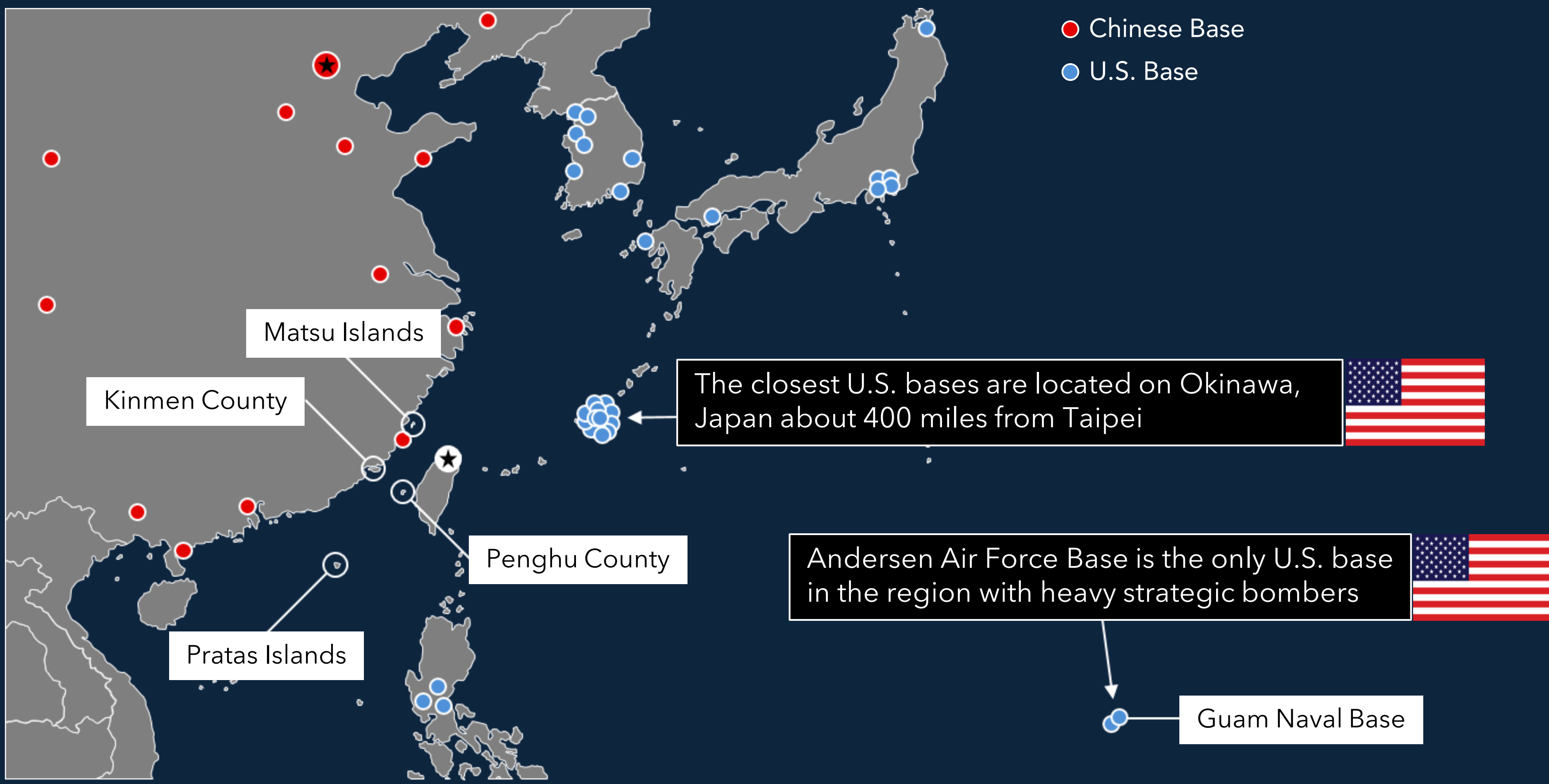
Taiwan is responsible for over 20% of global semiconductor manufacturing, over 60% of advanced semiconductor production (<10 nanometer) and over 90% of the world's most sophisticated chips (< 3 nanometer). With Taiwan's fabs located on the western coast of Taiwan less than 100 miles from the mainland, global chip supply is highly exposed to China-Taiwan tensions. Historically, Beijing has never sanctioned Taiwan's semiconductors or high tech exports.



Source: McKinsey "Semiconductor fabs: Construction challenges in the United States".

US-China Taiwan Military Tensions

At its narrowest point, the Taiwan strait is just 100 miles. However, Taiwan also has numerous outlying islands which could be early targets if China were to launch an invasion. Whether or not an invasion is launched, military activity in and around the Taiwan Strait remains high as both the US and China have numerous military bases in the region.



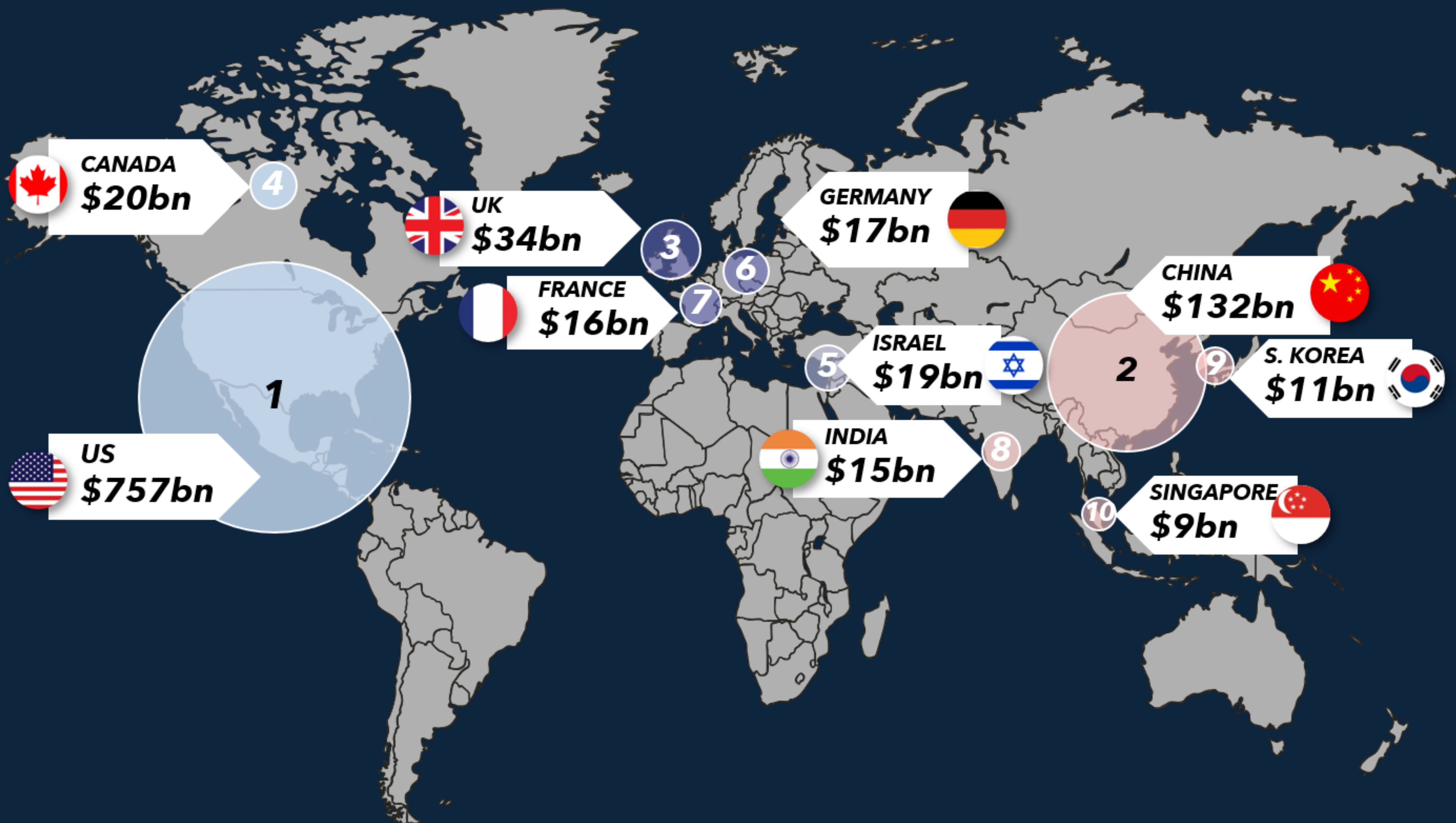
Source: The Chinese Invasion Threat, Natural Earth, International Institute for Strategic Studies, US Department of Defense, GlobalSecurity.org.

6

The AI Industrial Revolution

AI Investment Over the Prior Decade

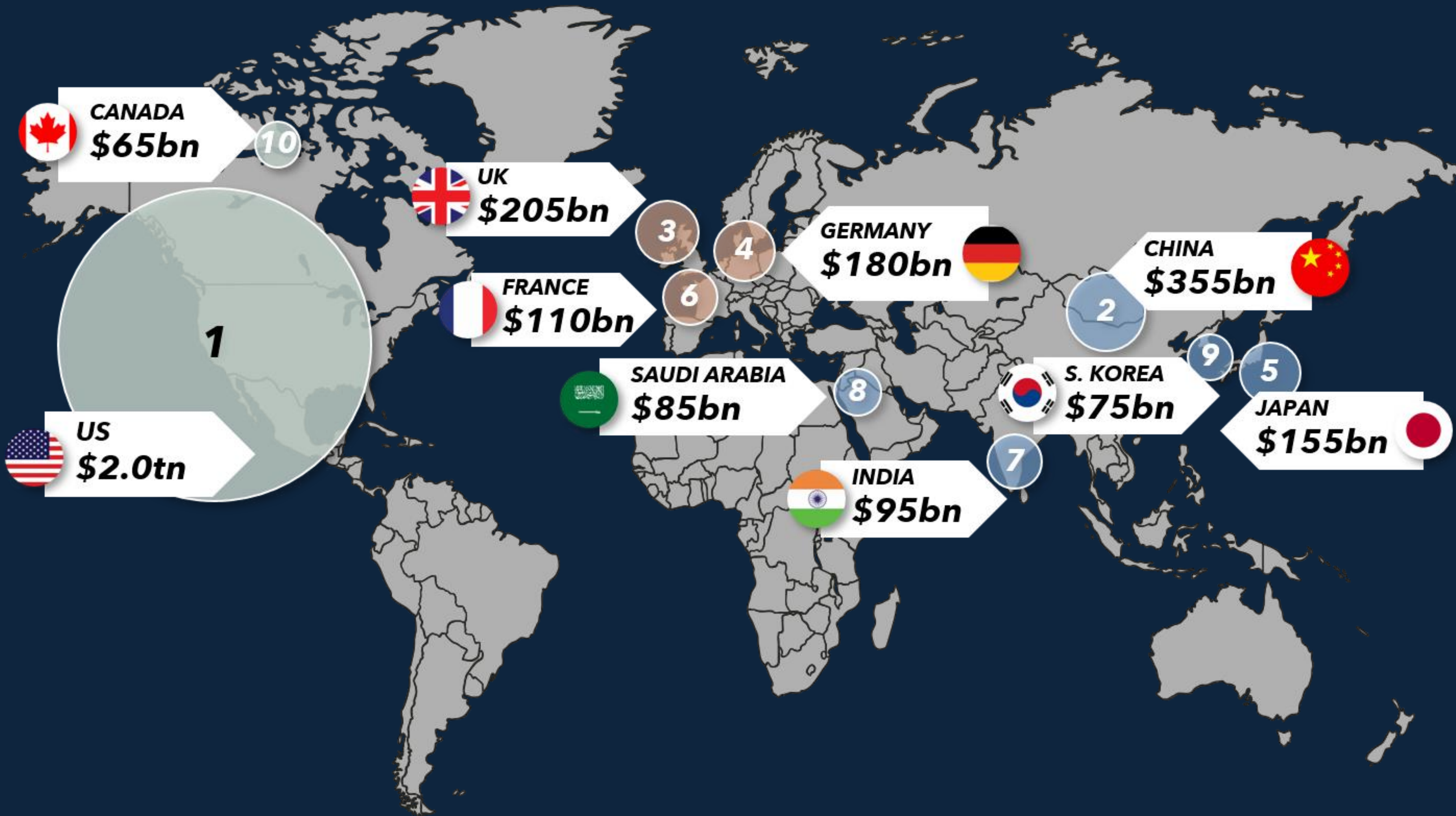
Top 10 countries with largest total private AI investment (2013-2025)



Source: AI Index Steering Committee, Stanford University Institute for Human-Centered AI, "The AI Index 2026 Annual Report" (April 2026).

Expected AI Spend in 2026

Top 10 countries by projected AI investment (2026)



Source: (1) IDC. Gartner. Futurum Group. Wall Street tech sector research. Includes infrastructure, software & services. US Dollars.

Europe’s Data Center Footprint

While Western Europe’s core markets continue to dominate operational load, a structural shift in capacity is underway across the continent. Years of dense development in traditional FLAP-D cities have created severe power queue bottlenecks and tightening land supply. Driven by cheaper renewables and better site availability, markets in the Nordics and Southern Europe are transforming from secondary sites into primary destinations for high-density compute.

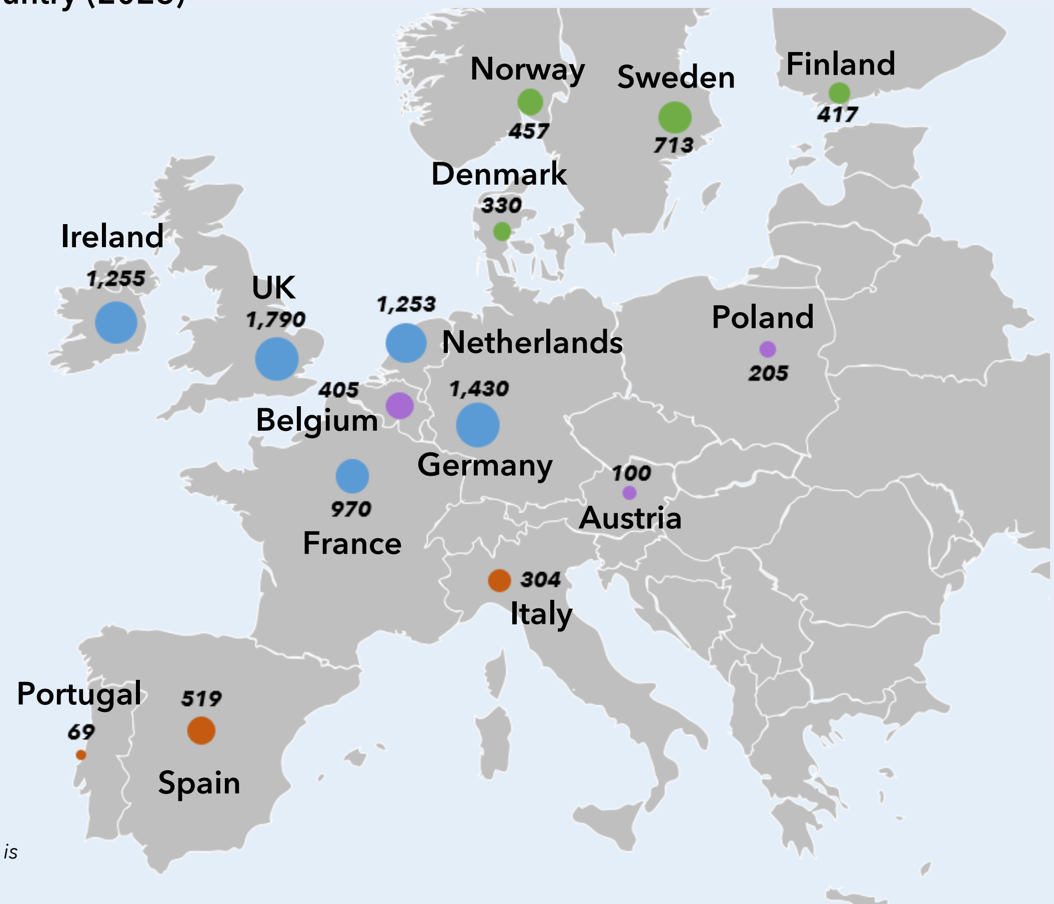
European data center capacity, by country (2026)

Capacity size (MW)

300 1000 3000

Regions

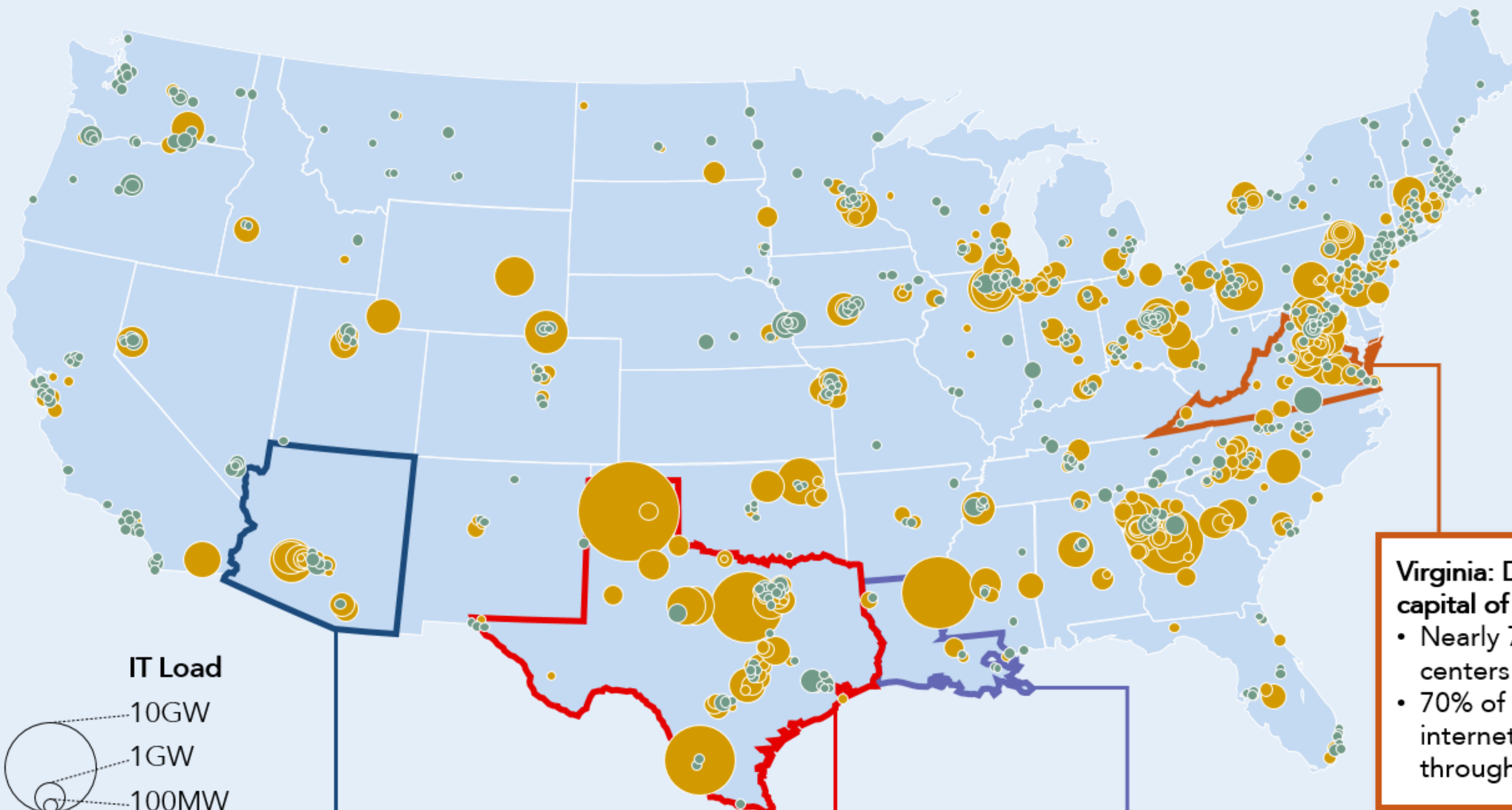
- FLAP-D hubs
- Nordics
- Southern Europe
- Secondary markets



Source: (1) BloombergNEF, Data Center Historical Capacity. DC Byte. Data as of 2026. Data center capacity is live capacity only. Includes colocation and self-build.

Operating & Planned US Data Center Sites

Operating (< 5,000 locations) Planned (< 3,000 locations)



Virginia: Data center capital of the world
- Nearly 700 data centers
- 70% of the world's internet traffic flows through VA daily

Arizona: Western hub for hyperscalers
- Preferred hub for Microsoft, Google & Meta
- Low natural disaster risk & business friendly tax laws

Texas: New Hotbed for AI data centers
- #2 in total facilities
- $100bn Stargate project & $25bn Vantage Frontier campus

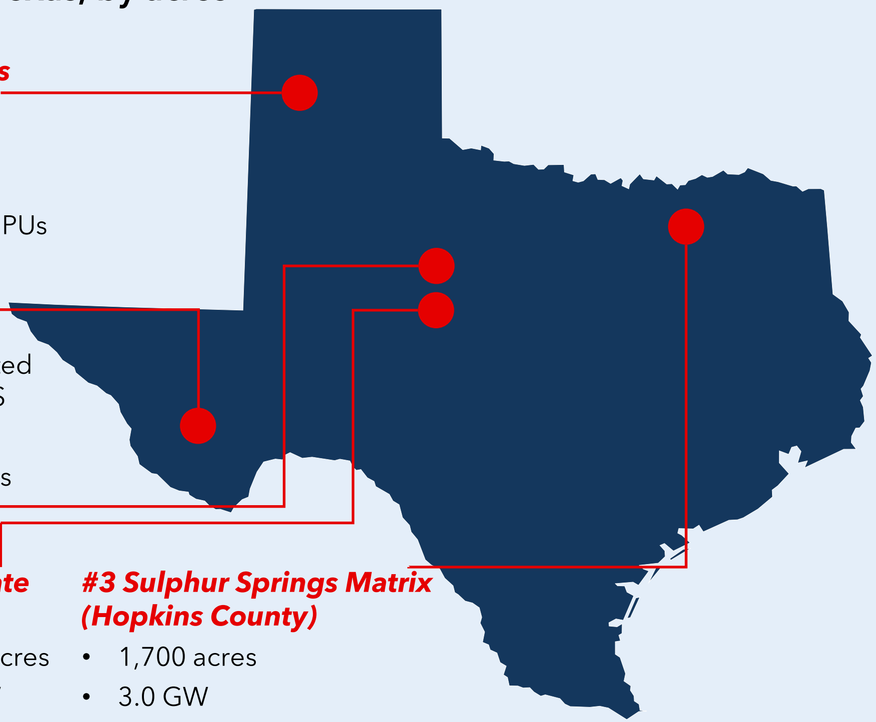
Louisiana: Large construction pipeline
- Home to Meta's $10bn Hyperion data center
- > 5.5 GW in pipeline
- Tax incentives, less bureaucratic hurdles

Source: DC Byte. CMRA. FT, "The Power Crunch Threatening AI's Ambitions."

Texas: New Hotbed for AI Data Centers

Texas is projected to overtake Northern Virginia as the nation's leading data center market by 2028, driven by a massive shift toward "Gigascale" campuses that generate their own power. Power independence, along with speed to market, massive land scale and financial incentives are all helping Texas "win the race" for new data center capacity. As of February 2026, Texas has over 400 data centers compared to Virginia's nearly 700.

Largest data centers in Texas, by acres



#2 Advanced Energy Campus (Amarillo)

- 5,800 acres
- 11 GW of capacity
- Phased for multiple cluster GPUs

#1 GW Ranch (Pecos County)

- 8,000+ acres, largest permitted data center campus in the US
- 7.65 GW
- Designed for 1 million+ GPUs

#4 Vantage Frontier (Shackelford)

- 1,200 acres
- 1.4 GW
- High density Blackwell pods

#5 Stargate (Abilene)

- 1,100 acres
- 1.2 GW
- 150k+ NVIDIA GB200s

#3 Sulphur Springs Matrix (Hopkins County)

- 1,700 acres
- 3.0 GW
- ~450k GPUs

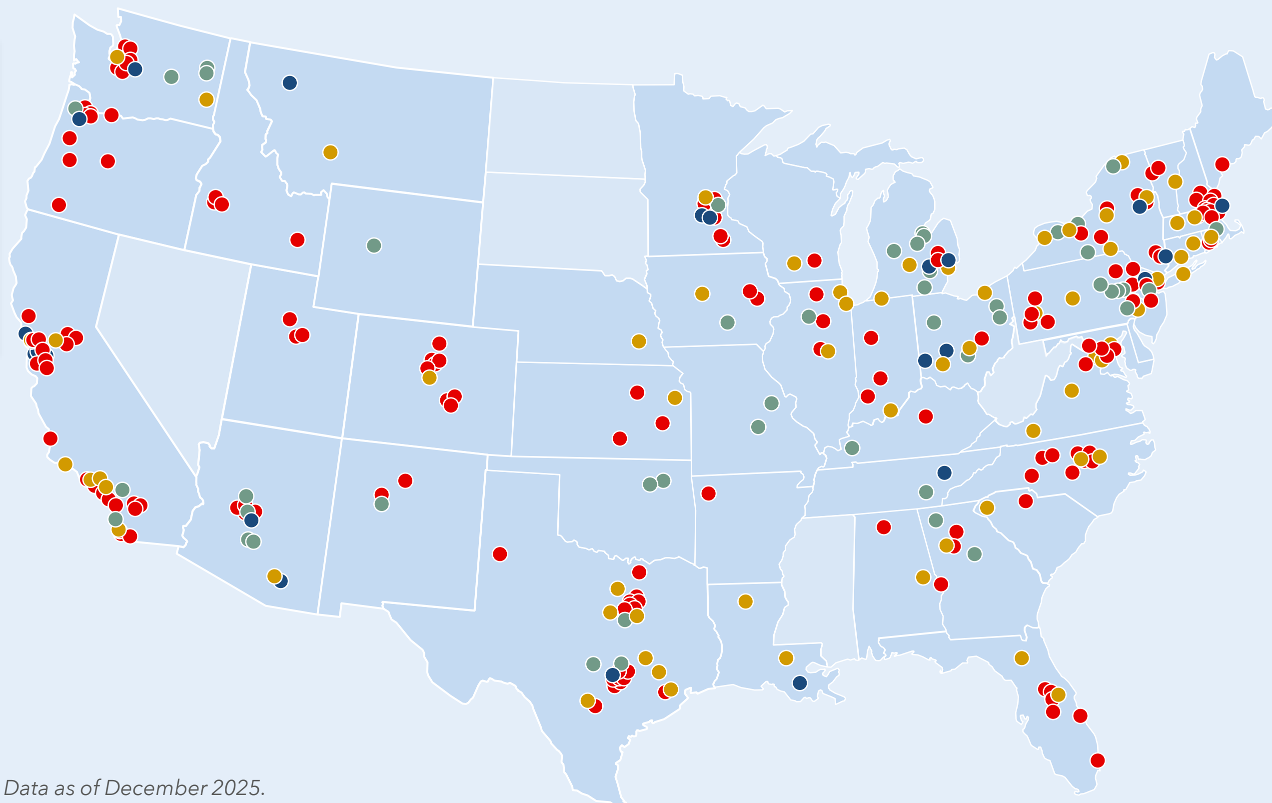
- Total number of data centers: ***> 400***
- Total number of planned data centers: ***>100***
- Active construction: ***35 facilities***
- Current power capacity: ***8.5 GW (grid)***
- Current power capacity: ***57.9 GW (off-grid)***
- Planned power capacity additional: ***~38.1 GW***
- Commercial construction spend: ***$90bn / year***

Rapid Expansion in US Semiconductor Manufacturing Since 2022

According to the Semiconductor Industry Association (SIA), **more than 80 new semiconductor-ecosystem projects across 25 US states with aggregate private investment close to $500 billion** have been announced since passage of the CHIPS Act in August 2022. The scale of private investment includes materials, equipment and **manufacturing fabs (leading-edge logic, DRAM, analog, mixed-signal, specialized MEMS/sensors).**

Since Aug 2022 CHIPS Act:

- > 80 investment projects
- > Nearly $500 bn private investment
- > 25 US states



- Semiconductors
- Equipment
- Materials
- University R&D Partner

Source: Semiconductor Industry Association. Data as of December 2025.

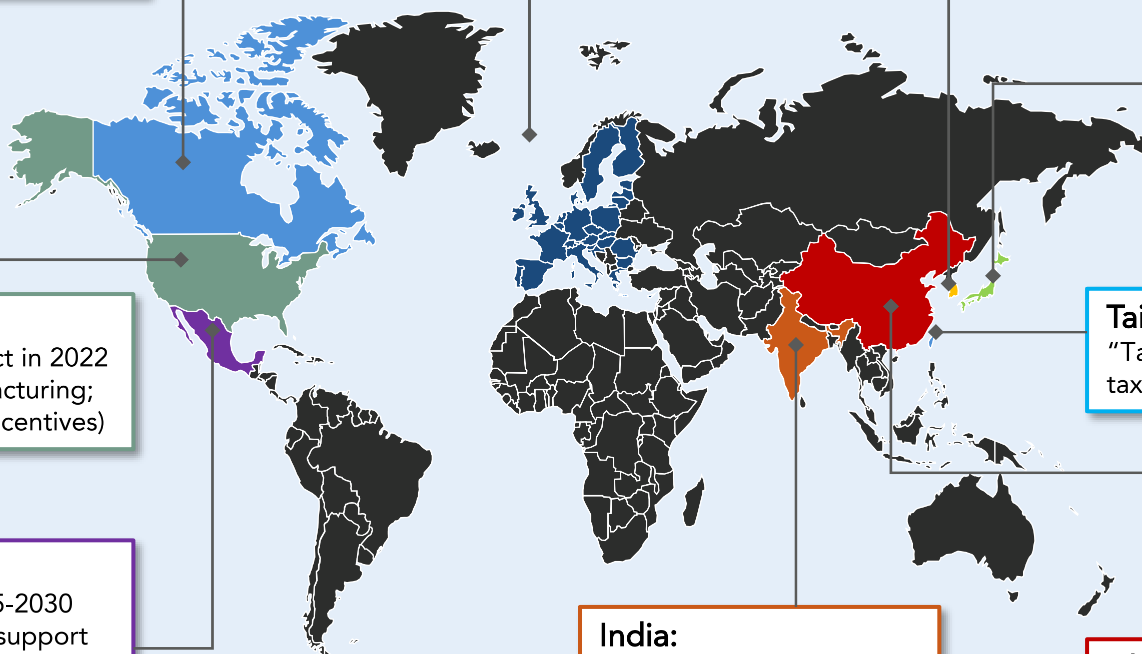
Global Government Chip Incentives

Canada:
$1.2 bn tech investment fund to boost domestic semiconductor manufacturing, including $400 mn allocated for fabrication and packaging facilities

European Union:
2026 EU Chips Act 2.0, targeting €120 bn ($140 bn) in combined public & private investments by 2035

South Korea:
₩11 tn ($8 bn) 2026 Chip Fund; ₩20 tn ($14.5 bn) KIC sovereign investment fund; ₩881 tn ($576 bn) target in total combined public & private investments

Japan:
¥4 tn ($30 bn) allocated by METI in grants & subsidies for semiconductor manufacturing and R&D



United States:
$280bn CHIPS Act in 2022 (R&D and manufacturing; subsidies & tax incentives)

Taiwan:
"Taiwan Chips Act" 25% R&D tax incentives passed in 2026

Mexico:
Plan México 2025-2030 tax incentives to support semiconductor investment (R&D, training, fixed-asset investments)

India:
ISM 2.0, including ~$15 bn of grants / equity investment for chip design

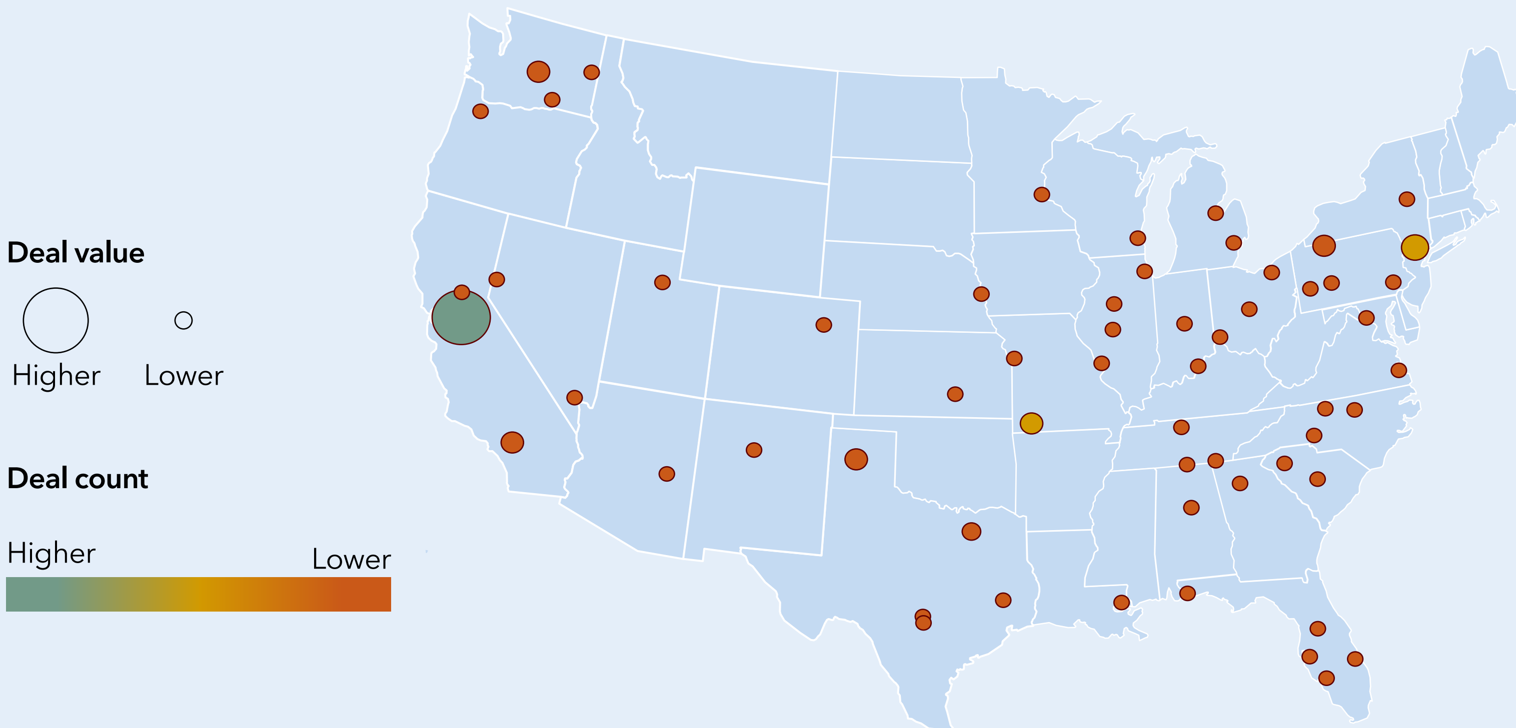
China:
$50bn Big Fund III; $70 bn + additional subsidies (proposed)

Source: Semiconductor Industry Association (SIA). Bloomberg. Reuters. OECD. European Commission. India Semiconductor Mission. Ministry of Economy, Trade and Industry (METI). Canada's Semiconductor Council.

AI Funding Highly Concentrated in SF Superstar Hub, More Dispersion in # of Startups Nationally

AI startup activity in the US is still highly concentrated in a few superstar hubs, though a gradual trend toward broader regional dispersion has begun. Nonetheless, a BCG review notes that over 70% of all AI-related North American venture funding goes to companies in the San Francisco Bay Area. Looking at number of startups instead of aggregate funding, the US AI startup landscape has become more national.

First time financing AI VC deal activity by market

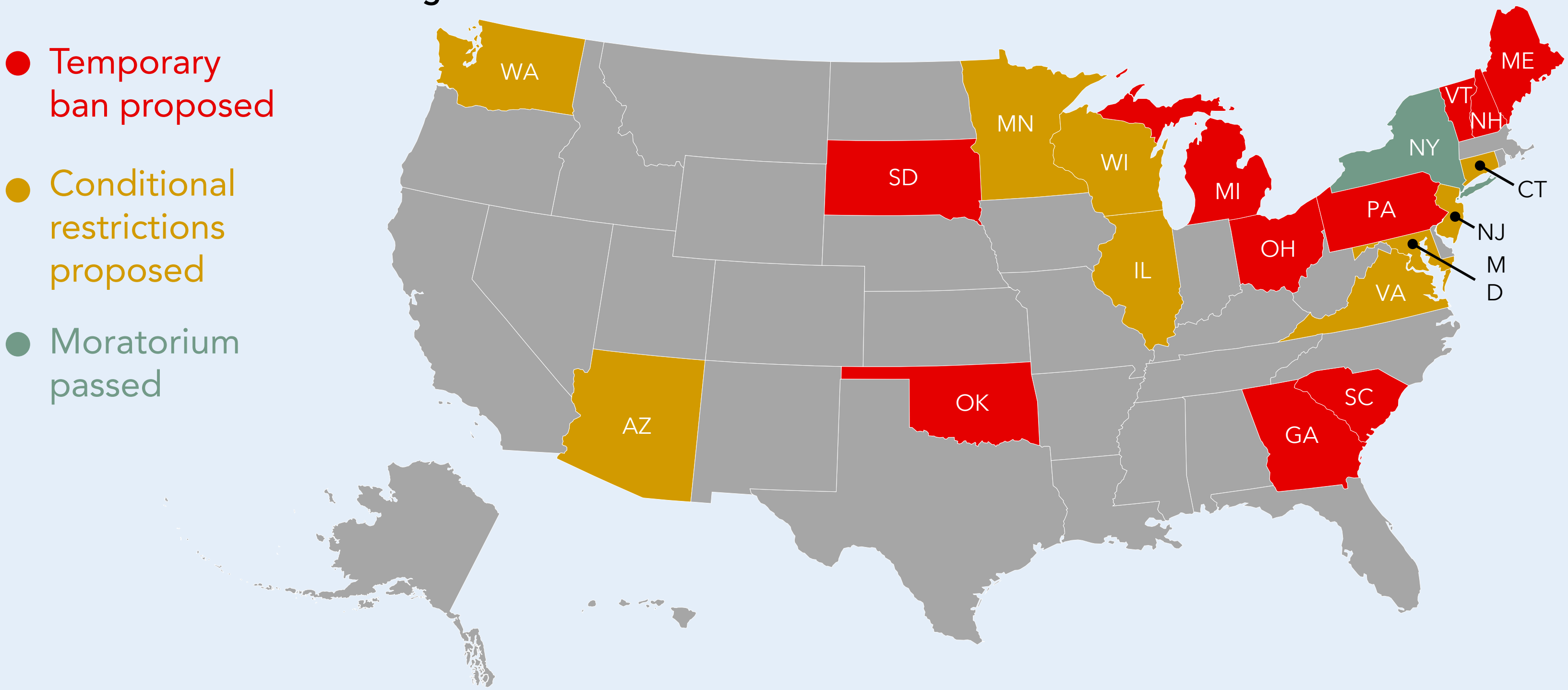


Source: (1) Pitchbook, "2026 US Venture Capital Outlook." Data as of October 31, 2025.

US States Considering Data Center Bans

20 US states have introduced bills to restrict data center construction and associated energy use, with New York becoming the first state to successfully pass a temporary moratorium. While statewide bills face resistance, dozens of municipalities across over 30 states have successfully enacted **local moratoriums** on data center construction. **Communities are pushing back** against rising electricity costs, high water consumption and the job vs. cost mismatch (few permanent jobs, generous tax breaks). Stricter restrictions on data center construction could lead to increased investment uncertainty, geographic concentration risk, offshoring of AI infrastructure and geopolitical implications in the AI arms race.

Status of US states considering statewide data center bans



Source: (1-2) Visual Capitalist. National Conference of State Legislatures. DataCenterBans. Aterio. Stateline. Data as of July 14, 2026.

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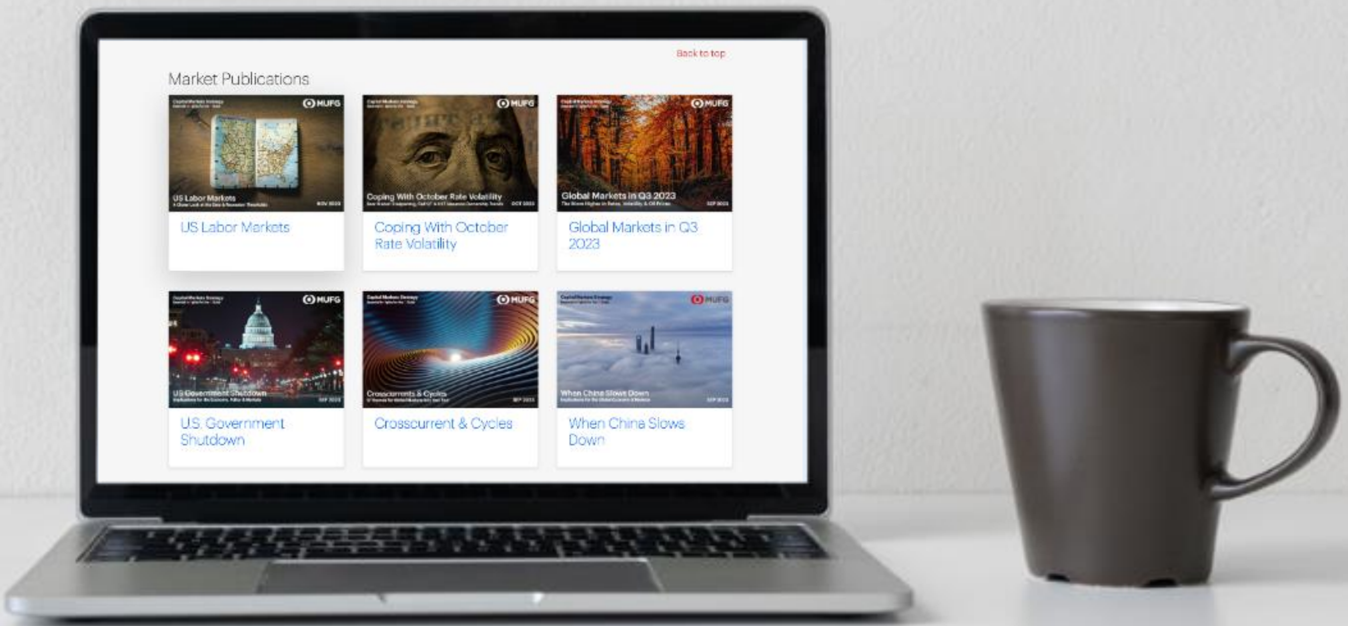

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Tom Joyce

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Role

Tom Joyce is a Managing Director and Capital Markets Strategist within MUFG's global capital markets and investment banking business. Based in New York, Tom heads a team that creates customized analytical content for multi-national S&P 500 companies. His team provides in depth analysis on the impact of economic, political, public policy and regulatory dynamics on the US credit, foreign exchange, rates and commodities markets.

Experience

Tom has over 30 years of Investment Banking experience in New York, London, Hong Kong, and San Francisco. Tom created and built the Capital Markets Strategy role, advising corporate C-Suite executives (Boards, CEOs, CFOs, and Treasurers) on the pervasive macro forces driving markets. Tom also presents at dozens of corporate events each year including Board meetings, CEO ExCo sessions, CFO and Treasury off-sites, corporate leadership events and conferences.

Education

Tom's educational background includes a year of study at Oxford University from 1991 - 1992, a Bachelor of Arts in Political Science from Holy Cross College in 1993, and a MBA from Kellogg Business School, Northwestern University in 2000.

Personal

Tom resides in New Canaan, CT with his wife and four sons, where he previously served on the Board of Trustees of the New Canaan Library. Tom also serves on the President's Council of Holy Cross College.

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Role

Stephanie Kendal is a Director in MUFG's Capital Markets Strategy group within the global capital markets and investment banking business. The team provides market based content for corporate clients to assist in strategic decision making. Focus areas include the impact of economic, political, public policy and regulatory dynamics on the US credit, foreign exchange, rates and commodities markets.

Experience

Stephanie has spent nearly nine years as a Capital Markets Strategist. She is an active member of the University of Michigan recruiting team and is focused on the diversity recruiting effort at MUFG. Stephanie is also a part of MUFG's DEI, Culture & Philanthropy (DCP) Council.

Education

Stephanie graduated with honors from the University of Michigan's Ross School of Business with a BBA .

Personal

Stephanie is involved in NYC's iMentor program, mentoring high school students with their journey to college graduation. She also volunteers at Experience Camps, a free summer camp program for grieving children, as the associate program director.

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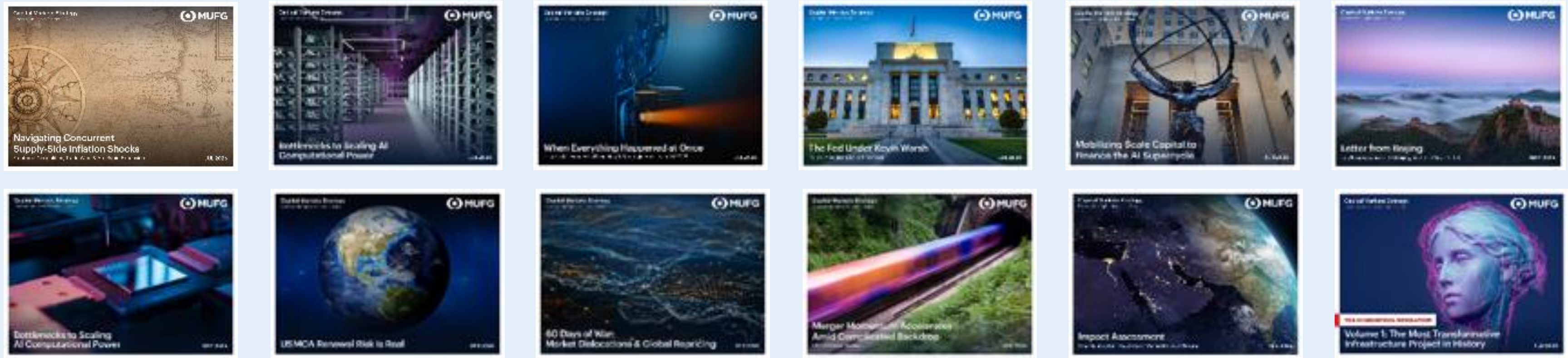
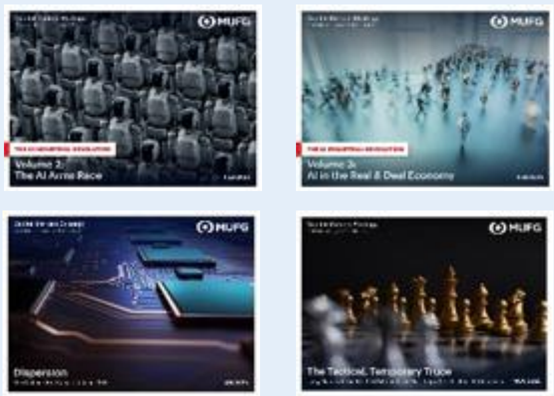
Experience

Angela previously interned at MUFG working in Capital Markets within the Equity Capital Markets and Leveraged Finance divisions. She is also an active member of the Carnegie Mellon University recruiting team.

Education

Angela graduated with honors from Carnegie Mellon University's Tepper School of Business with a BS in Business Administration with an additional major in Statistics and a minor in Media Design. She was a member of Alpha Kappa Psi business fraternity and the Undergraduate Entrepreneurship Association.





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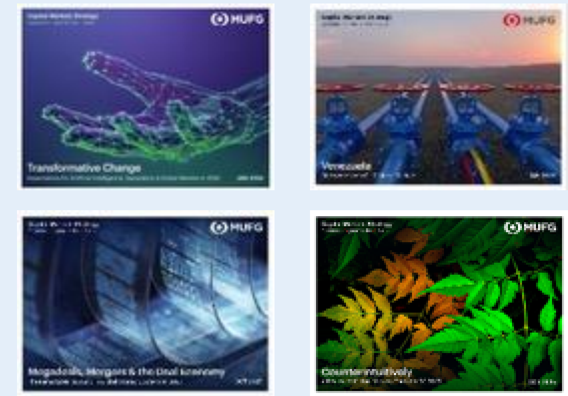

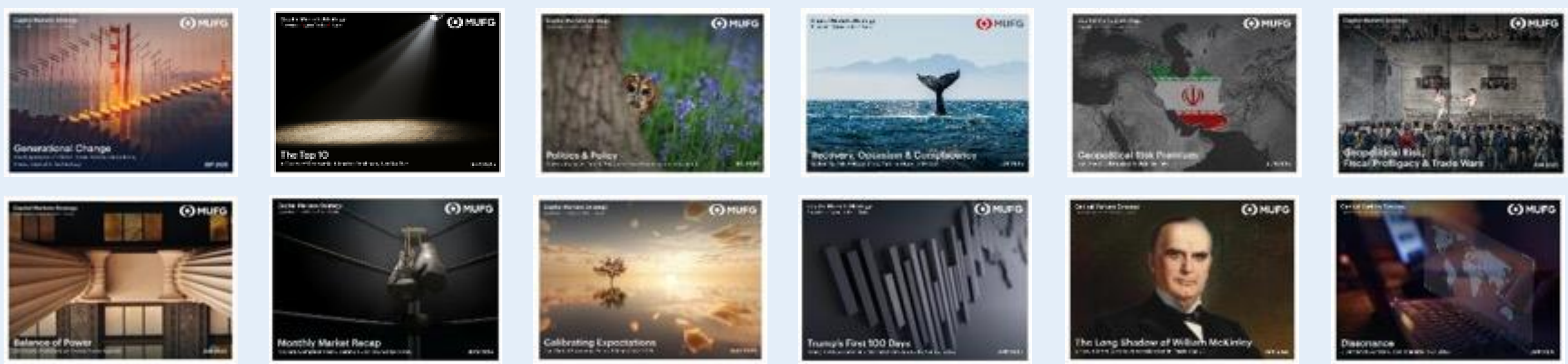

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