CANADA 2025

Bolstering Economic Security and Resilience

Final Communiqué

Canadian Chamber of Commerce
Chambre de Commerce du Canada

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Foreword
by the B7 Chair

We are living through a period of extraordinary disruption in the international order, marked by growing geopolitical divisions, unilateral trade actions, and a wave of other disruptive forces. Amid this heightened uncertainty, the G7 has a vital responsibility to lead with a common purpose and a renewed commitment to cooperation and shared economic goals.

The current climate of unprecedented economic uncertainty threatens the prosperity and security of the G7 and also emboldens our geopolitical competitors that are increasingly seeking to exploit our vulnerabilities to reshape the international order. The scarcity and concentration of critical minerals exemplify these vulnerabilities — they are essential resources to G7 economies, yet their limited supply has made them targets for economic coercion by China.

Canada assumes the G7 presidency at a critical juncture. Faced with these and other challenges — including the rise of artificial intelligence, the energy transformation, and demographic stagnation — the G7 must move beyond the status quo and advance an agenda that is focused on economic security and resilience. This evolving landscape demands a renewed model of economic cooperation among G7 members and like-minded countries, one that prioritizes building resilient supply chains and bolstering the G7's competitive edge in critical and emerging technologies.

As the 2025 Chair of the Business 7 (B7), the Canadian Chamber of Commerce is committed to advancing a bold vision for the G7 that reflects the urgency and complexity of the current moment, and the opportunity for G7 leadership. The B7 Communiqué, which has been developed in close cooperation with our B7 counterparts, stands as a testament to that commitment.

Sincerely,

Candace Laing
President and CEO
Canadian Chamber of Commerce

Statements
by the B7 Presidents

Economic growth and social progress can only thrive in times of peace and global cooperation. Companies need a stable and predictable environment to prosper, create jobs, and face the green and digital challenges. That is our deepest conviction and the reason why the B7 works in a continuous effort of dialogue, experience sharing, coordination and collaboration. I hope that this same mindset will drive the G7 leaders' work this year, as there is urgency today in solving the multiple global crises that are destabilizing our economies.

Patrick Martin

Movement des entreprises de France (MEDEF)

Strong ties within the G7, bolstered by commercial engagement, are essential to our countries' economic growth and global leadership. The foundation of that relationship is two-way trade. In addition to strengthening those trade ties, we must work together to successfully harness emerging technologies, particularly AI, achieve energy security, promote balanced regulation, and preserve the rules-based international order. For all this and more, there is no more stalwart proponent than the B7. We stand ready to work with our partners to advance our common goals.

Suzanne Clark

President and CEO, United States Chamber of Commerce

With ongoing geopolitical tensions, business must continue to show leadership by defending democracy and promoting free and fair trade that delivers growth and prosperity for all. The B7, chaired this year by the Canadian Chamber, plays an important role in delivering this leadership, ensuring that the green and digital transitions benefit everyone in our societies, and that the values and principles of diversity, equity, and inclusion are central to the growth agenda.

Rain Newton-Smith

Chief Executive, Confederation of British Industry

The world is in the midst of a rebalancing of international trade and global tensions. In many cases, this leads to rising protectionism, in some, to irrational escalations. Nevertheless, the B7 is firmly committed to rules-based cooperation. In the end, the strength of law is our foundation. Rebalancing may take place, but the order must remain rules-based — for prosperity in the G7 and around the world.

Peter Leibinger

President, Bundesverband der Deutschen Industrie
(Federation of German Industries)

The escalating geopolitical tensions, Russia's aggression against Ukraine, alongside the growing influence of the Global South, are contributing to significant changes in the international order. Further, the recent proliferation of unilateral/retaliatory tariff measures is leading to disruption. We are at a critical juncture as to whether we can maintain the rules-based, free, and open international order. The G7's unity has never been more important.

Masakazu Tokura

Chairman, Keidanren (Japan Business Federation)

The G7 must champion the global market's predictability and trust by prioritizing cooperation over conflict, and progress over stagnation. Safeguarding strategic sectors, accelerating critical transitions, and ensuring long-term value creation across advanced economies and beyond require coordinated action. At the core of this shared endeavour should be industry competitiveness, supported by secure access to energy, open markets, reliable digital infrastructure, and resilient supply chains, creating an environment where businesses can invest, innovate, and scale.

Emanuele Orsini

President, Confindustria (General Confederation of Italian Industry)

Competitive companies make stronger and more vibrant economies. Political and economic stability together with legal certainty are pre-conditions for companies to invest, create jobs, and innovate. Unilateralism, protectionism, and undermining rules-based trade risk leading to uncertainty, less investments, and less economic growth. The G7 must remain committed to rules-based trade and look for ways to reduce trade and investment barriers to stimulate growth.

Fredrik Persson

President, BusinessEurope

Executive Summary
B7 2025

For 50 years, the G7 has provided consistent leadership in driving economic progress through cooperation. The G7's role in fostering strong institutions and trade has allowed businesses to grow, innovation to thrive, and standards of living to rise. However, trade realignments, disruptive technologies, and resource vulnerabilities are reshaping economies and undermining economic security. Further, extraordinary, broad-based trade restrictions have the potential to impede international cooperation and economic growth. In response to these challenges, cooperation among G7 members is as important as ever.

Building on recent B7 momentum, including Italy's presidency in 2024, the 2025 B7 Communiqué provides a strategic blueprint for G7 leaders to address today's most pressing economic challenges and build more secure economic linkages. This Communiqué centres on the theme of economic security and its intersection with trade, artificial intelligence (AI), and energy. We also spotlight the importance of critical minerals and materials, and their essential role in safeguarding economic and national security.

Here, we present a vision for how business and government can work together to achieve secure economic and strategic collaboration that strengthens the rules-based free and open international order. As leading voices from G7 businesses, we call for cooperation as the catalyst to advancing the prosperity of people and communities in the G7 and beyond. The G7 has a strong history of driving global action. Now is the moment to lead once more, with a renewed commitment to stability and sustainable growth for the next 50 years.

Bolstering Economic Security and Resilience

Spotlight: Ensure supply of critical minerals and materials

1 Champion predictable and efficient global trade	2 Realize the promise of responsible AI and digital	3 Invest in a secure and clean energy economy	4 Strengthen systemic security and resilience
Strategic trade coordination	AI adoption acceleration	Energy sustainability, affordability, and security	Global health security
Supply chain security	Digital regulatory interoperability	Carbon measurement and compliance efficiency	Infrastructure resilience
Trade enablement			Cyber security preparedness

Introduction

A Call for Coordinated G7 Leadership in an Era of Change and Uncertainty

G7 and the shifting global order

The G7 was born out of crisis. Established in the 1970s to counter economic upheaval, oil shocks, and the collapse of Bretton Woods, it became a pillar of global governance. While membership has evolved over the years as a result of geopolitical dynamics, its central goal has remained constant: Bringing together the world's most advanced economies to act as a catalyst for global cooperation and progress.

For five decades, the G7, alongside like-minded countries, has fostered an era of unprecedented stability and economic prosperity. From preventing financial disruption through the 1985 Plaza Accord, to integrating former Eastern Bloc economies into global markets in the 1990s, to restoring market confidence after the 2008 financial crisis, it has played a steady role in shaping the global economy. The system it helped to create based on rules and coordination facilitated economic integration, multilateral engagement, and cross-border trade and investment.

Today, this system is evolving as global power dynamics shift. While G7 members remain economic powerhouses, their collective share of global GDP has fallen from approximately 45% in 2000 to less than 30% today. This was driven not by G7 decline, but by the rapid ascent of emerging economies.[1] The shift from a unipolar post-Cold War system towards multipolarity has been accompanied by changing security dynamics, with

[1] Statista (2024; accessed 2025/02/28)

countries using both traditional military force and economic statecraft.

Amid this geopolitical and economic instability, new challenges and disruptions are highlighting the importance of economic security and resilience, defined here as the ability of governments and businesses to safeguard key industries, ensure reliable access to critical resources, and withstand economic shocks. Global trade is undergoing a substantial realignment as countries and businesses react to these shifting geopolitical realities. However, extraordinary, broad-based trade restrictions risk triggering a cycle of escalatory and retaliatory trade measures, impeding international cooperation and economic growth. Meanwhile, increasing economic coercion and disruptions are felt in supply chains, while AI and the energy transformation are poised to reshape industries. The systemic risks posed by global health emergencies, vulnerabilities in critical infrastructure, and rising cyber threats further exacerbate economic instability. The scarcity and concentration of critical minerals exemplify these challenges — they are fundamental inputs to G7 economies, yet their limited supply heightens exposure to undue influence.

G7 leadership to navigate these dynamics is as critical as ever given recent developments in other pluri-and multilateral institutions. The World Trade Organization (WTO) has struggled to reform its Dispute Settlement Body, which handles global trade disputes; fall-out from the COVID-19 pandemic has limited the influence of the World Health Organization (WHO); and the United Nations (UN) Security Council has failed to find common ground in responding to today's major conflicts. In a context where global coordination mechanisms are under growing strain, sustained G7 efforts are essential to preserving collective action. The G7 is well-placed to uphold and enhance global institutional capacity to deliver on foundational commitments — efforts that are core to the G7 mission of fostering shared prosperity and resilient economic growth.

Business call to action

Italy's presidency for B7 2024 highlighted a need to navigate transitions together, as nearly half of the world's population voted in elections. Incumbent parties across the political spectrum suffered losses, driven by a widespread desire for change, rejection of the status quo, and sentiments on declining affordability.[2] With faith in government called into question in some G7 countries, as indicated by the Edelman Trust Barometer work, it is incumbent on G7 leaders to act decisively to address the challenges facing their citizens.[3]

We as the B7 are uniquely positioned to offer pragmatic, forward-looking solutions to shared challenges that transcend differences in domestic agendas. As a unified voice for the G7 business community, we believe that future prosperity for citizens in the G7 and beyond depends on businesses that drive employment, innovation, and investment. To advance these goals, business leaders need a predictable and reliable environment in which to operate. As such, we remain steadfast in our support of global cooperation, including through existing multilateral institutions.

The B7 also reaffirms its unwavering commitment to the principles outlined in the 2024 B7 Communiqué, emphasizing sustainable development and inclusive growth across the African continent. South Africa's historic leadership as the first African nation to host both the G20 and B20 in late 2025 marks a significant milestone in global economic governance. This moment offers a valuable opportunity to deepen long-term partnerships that support prosperity and economic progress in Africa — particularly important given the continent's pivotal role in global development and representation of low-and-middle-income countries (LMICs). Throughout this Communiqué, we underscore the vital importance of multilateral collaboration in addressing shared challenges and achieving sustainable development goals both for the G7 and for our like-minded partners, as well as encourage the B20 and G20 to build on this positive momentum.

[2] BCG Center for Macroeconomics (2025)
[3] 2025 Edelman Trust Barometer Global Report (2025)

The 2025 B7 Communiqué provides a roadmap for strengthening the global economy through coordinated efforts between the G7 and like-minded countries on economic security, trade, AI, energy, and critical minerals. The G7 was designed to foster stability and growth, and today the need is as vital as ever.

Business leaders call for cooperation as the catalyst to advancing the prosperity of people and communities in the G7 and beyond. With a proven track record of driving global action, the G7 has an opportunity to reaffirm its commitment to sustained growth for the next 50 years.

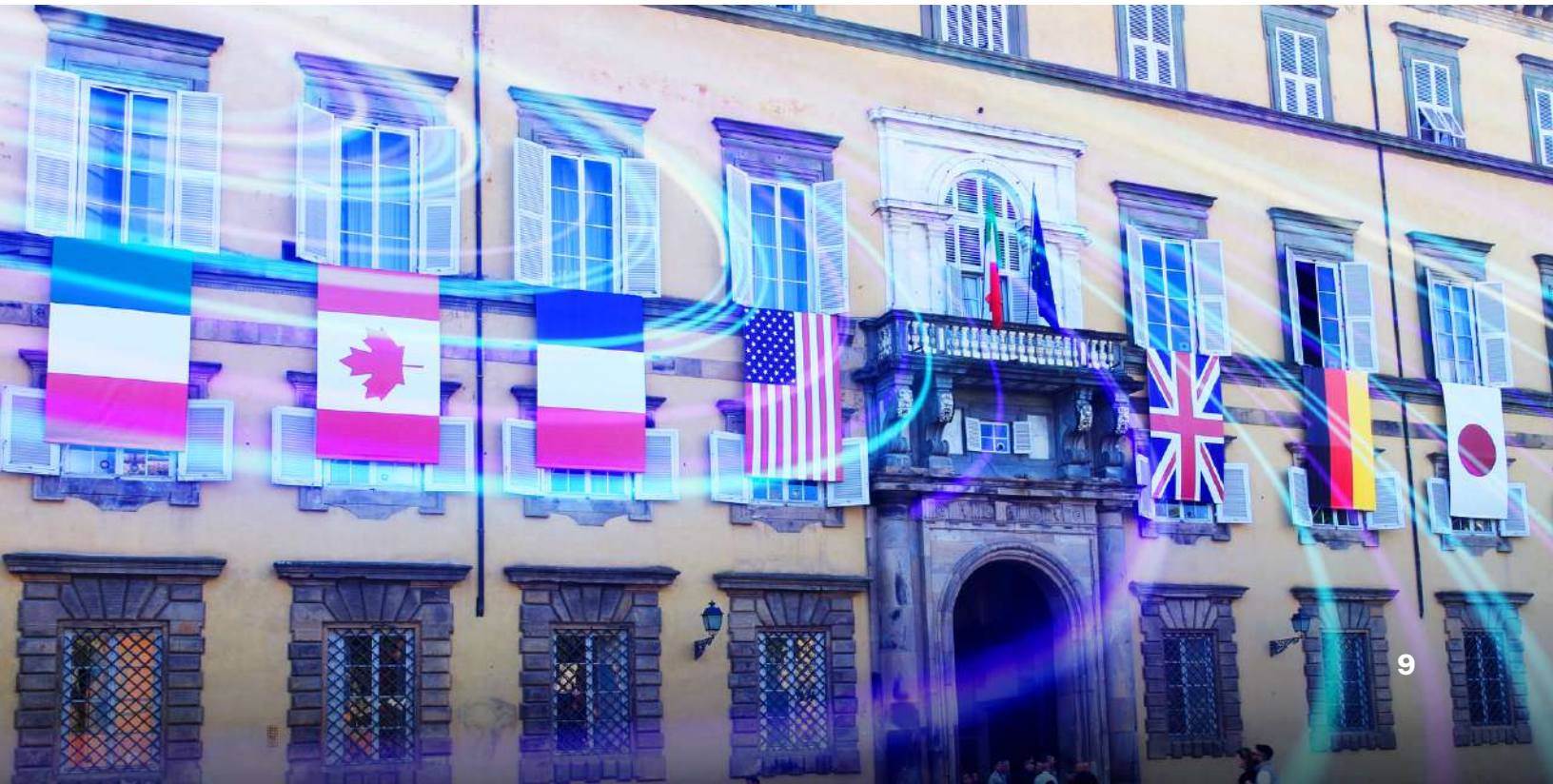
Structure of the Communiqué

This year's Communiqué focuses on bolstering economic security and resilience as a foundation for prosperity. Critical minerals are at the fore in today's geopolitical and economic landscape, as an issue relevant to the G7 as a whole and within domestic agendas. In this vein, the document opens with a spotlight on critical minerals and materials, given their unique cross-cutting importance to economic security. We then discuss three core forces reshaping the global economy: trade, AI and digital transformation, and the energy economy. Finally, we conclude with systemic enablers that strengthen economic security and resilience — global health security, infrastructure resilience, and cyber security preparedness.

In each section, we build on the 2024 Communiqué by outlining target outcomes to measure G7 progress against our recommendations. While some of these indicators are not yet tracked annually in a public forum, their inclusion highlights the need for improved data and accountability. To provide practical context, we include implementation examples that show how similar strategies have been successfully applied, demonstrating the feasibility and impact of our recommendations.

This Communiqué was informed by a legacy of successful G7 and B7 collaboration, and builds on the recommendations from recent cycles:

- B7 Responsiveness Report: Italy 2024
- B7 Communiqué: Italy 2024
- G7 Leaders' Statement: Italy 2024
- B7 Communiqué: Japan 2023
- G7 Leaders' Statement: Japan 2023
- B7 Communiqué: Germany 2022
- G7 Leaders' Statement: Germany 2022

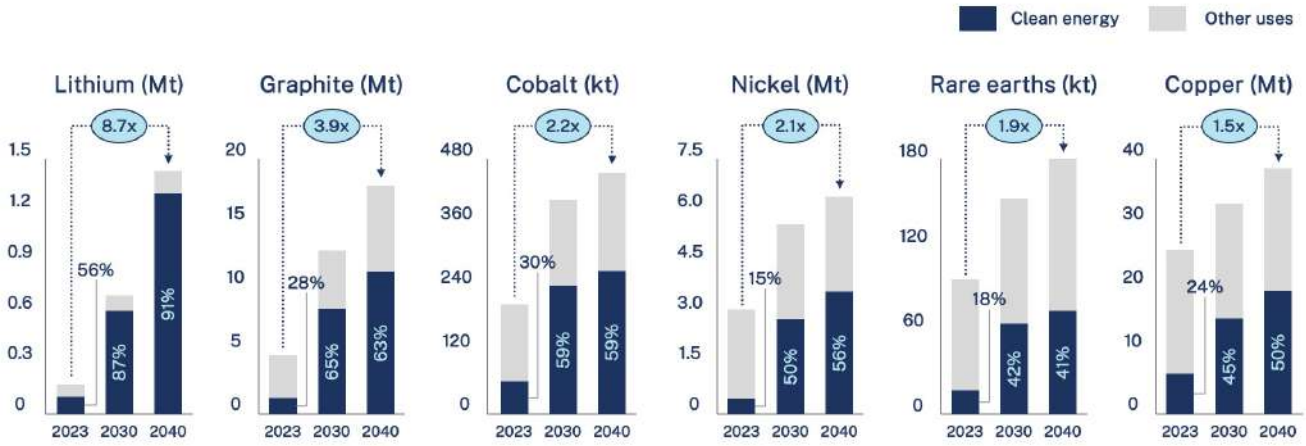


Spotlight

Ensure Supply of Critical Minerals and Materials

Context

Figure 1 | Projected demand for critical minerals to 2040



Source: IEA Global Critical Minerals Outlook (2024)

Critical minerals are vital to the economic and national security of the G7. They are irreplaceable inputs to a wide array of technologies and materials,[4,5] including semiconductors, chips, batteries, solar photovoltaic systems, electric vehicles, fertilizer, pharmaceuticals, ammunition, and radar. These materials underpin modern economies, enable clean energy transformations, and support the defence systems that safeguard national sovereignty.

Canada's 2025 G7 presidency comes at a pivotal moment in the global race for critical minerals and materials. Geopolitical competition among major powers is increasingly shaping the development, supply, and control of these vital inputs. China is actively consolidating its lead in critical minerals supply chains and increasingly leveraging export controls and interventions to tilt global market dynamics to its advantage. Additionally, recent unilateral trade actions by the United States — including the imposition of global tariffs — have further heightened uncertainty in global minerals markets and elevated critical minerals to the forefront of global discussions. Other major economies and the wider international community have accelerated efforts to secure reliable access to critical minerals and are reevaluating their strategic dependencies in this vital yet contested domain.

[4] UN University Merit (2024)
[5] U.S. Geological Survey (2024)

Faced with the current geopolitical and economic turbulence, the G7 has an unprecedented opportunity and responsibility to reaffirm its longstanding role as a pillar of international stability by exercising global leadership on critical minerals. Building on prior related G7 efforts, including the 2023 G7 Five-Point Plan for Critical Minerals Security, Canada's G7 presidency is well positioned to advance a bold strategic vision for the development and supply of critical minerals — grounded in close coordination among the G7 and like-minded countries. Access to critical minerals will have profound consequences for the economic competitiveness and national security of the G7, and for the G7's ability to uphold economic security.

To lead effectively on this front, Canada and its partners should confront a core challenge: The vulnerability to supply chain concentration that increases the risk of disruption, price volatility, and strategic dependence on a limited number of producers, namely China.[6,7] These structural weaknesses in supply chains are becoming more urgent as demand for critical minerals rises sharply, driven by their central role in enabling the energy and digital transitions. Together, these supply and demand pressures are intensifying the threat to G7 economic security and highlight the need for coordinated strategies to build resilient, diversified supply systems.

Given their indispensable role in advancing the energy and digital transformations, demand for critical minerals is projected to surge, with appetite for certain minerals growing by up to ~800% by 2040.[8] Even in stated policy scenarios, lithium requirements alone are expected to see significant increases, with ~90% of this demand attributable to clean energy technologies (Figure 1).[9] Given the rising importance of critical minerals in sectors underpinning economic competitiveness, prior B7s have called for greater supply security and development of resources. However, high investment costs have thwarted progress in diversifying G7 value chains and enabling supply chain security to date. The current geopolitical and security implications of a concentrated critical minerals supply chain necessitate urgent, unified action.

Beyond larger commodity markets like copper and nickel, there are also critical minerals and materials with smaller markets that are nonetheless vitally important. For example, in 2023, only ~220 tons of germanium were needed globally, compared to ~25.7 million tons of copper (Figure 2).[10] These concentrated and low-volume markets are particularly prone to geopolitical leverage, creating potential chokepoints that can paralyze entire supply chains despite the relatively small quantities involved. Ensuring stable and diversified access to these minerals is essential to safeguarding economic resilience and technological leadership.

Figure 2 | Demand for critical minerals, 2023

Source: BCG internal analysis (2024)

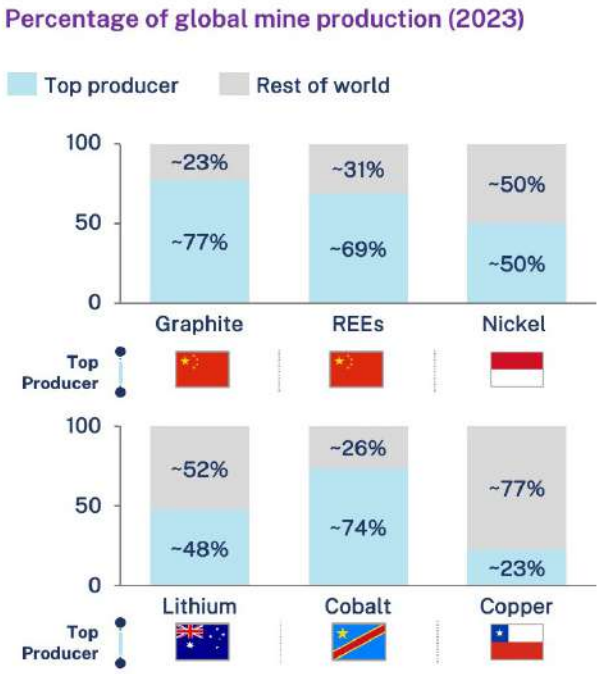
The relatively small size of some of these markets makes the economies of production challenging, opening the door to market volatility. Production facilities ought to operate on a scale large enough to be economically viable. This scale often has an outsized impact on global supply.[11] This has a downstream effect of driving prices down and deters further investment, ultimately concentrating supply in regions that can tolerate significantly lower returns or pursue non-market strategies. As a result, G7 countries face both vulnerability and limited market-based incentives to develop domestic supply. The G7 must account for the

[6] UN University Merit (2024)
[7] U.S. Geological Survey (2024)
[8] IEA Global Critical Minerals Outlook (2024)
[9] IEA Global Critical Minerals Outlook (2024)
[10] IEA Global Critical Minerals Outlook (2024), BCG internal analysis (2024)
[11] SAFE Center for Critical Minerals Strategy (2024), WSJ (2024)

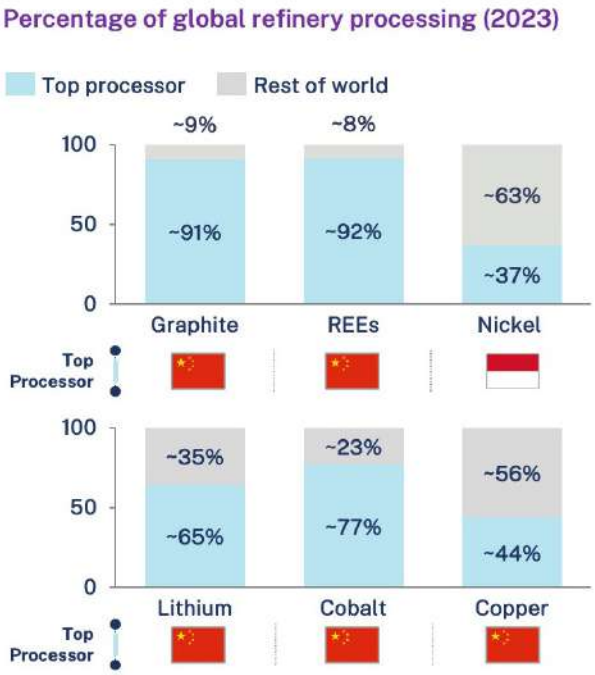
microeconomic realities facing miners that are driving disinvestment and weakening supply chain resilience. Without mechanisms to support production by the G7 and like-minded countries, G7 businesses lack a viable investment case and cannot compete with existing suppliers in the global market. Taking action to ensure commercial viability is essential to building diverse and secure supply chains.

Consequently, the ability to keep pace with the energy and digital transformations is gated by the concentration of critical minerals supply and processing, and the economic precarity facing many critical minerals producers. For example, ~90% of niobium and ~75% of cobalt mine production is concentrated in Brazil and the Democratic Republic of Congo, respectively (Figure 3).[12] While certain critical minerals are available globally, meeting demand hinges on countries with strong processing capabilities. For instance, China is expected to supply ~50% of the world's refined copper and an even higher share of aluminum by 2040.[13] For smaller volume critical minerals, the concentration risk is more severe. China supplies ~98% of gallium, an AI and defence input.[14] In 2024, China banned exports of gallium, along with germanium and antimony, two other defence inputs, to the U.S.[15] Without action to diversify supply chains and reduce dependency, businesses and governments risk supply chain disruptions that undermine national and economic security. Dominance by single countries in critical minerals supply chains exposes G7 members to supply shock risks, with potential disruptions threatening national security and economic stability via lack of availability and affordability. It is imperative for the G7 to develop mechanisms to both incentivize and protect investments in extraction and processing capacity to diversify critical minerals value chains.

Figure 3 | Mining and refining of key minerals



Source: USGS (2024)



Source: IEA Critical Minerals Data Explorer (2024)

[12] IEA Global Critical Minerals Outlook (2024)
[13] IEA Global Critical Minerals Outlook (2024)
[14] BCG internal analysis (2024)
[15] Reuters (2024)

Ensure Supply of Critical Minerals and Materials

Recommendations for G7 leaders

1 Establish market stability to unlock investment in critical minerals.

To ensure resilient and predictable supply of critical minerals, G7 countries should implement coordinated market mechanisms that enhance certainty, reduce volatility, and mitigate geopolitical risks.

Policy actions:

- **Implement demand-side incentives** to create investment certainty and address the unique barriers to development, extraction, and processing for each critical mineral (e.g., G7 and like-minded countries-backed offtake agreements/price floors).
- **Develop supply-side mechanisms**, such as strategic reserves and the mobilization of capital through funding programs or tax incentives, across G7 and like-minded countries, such as Australia, to mitigate market volatility and protect against geopolitical risks.

2 Expand and diversify critical minerals supply to reduce strategic vulnerabilities.

To strengthen supply chain security and support economic competitiveness, the G7 should drive responsible exploration, extraction, and diversification of critical minerals sources.

Policy actions:

- **Establish a Critical Minerals Security Secretariat** to enhance coordination among the G7 on concrete initiatives that advance critical minerals supply chain resilience, building off of Canada's chairing of the 2024 Conference on Critical Materials and Minerals.
- **Facilitate public-private critical minerals extraction and recycling partnerships** to reduce private sector investment uncertainty, enable viable exploration and extraction, and diversify supply sources.
- **Enable defence ministries to allocate budgetary resources** for the development and expansion of critical minerals mining and processing capabilities, including through co-investments with other ministries in critical minerals
- **De-risk extraction and recycling by providing government-backed incentives** (e.g., tax credits, loan guarantees) to lower financial barriers, encourage investment, and justify industry efforts to process small materials.
- **Develop public policies to prevent waste production and extend the lifespan** of products that contain critical raw materials.

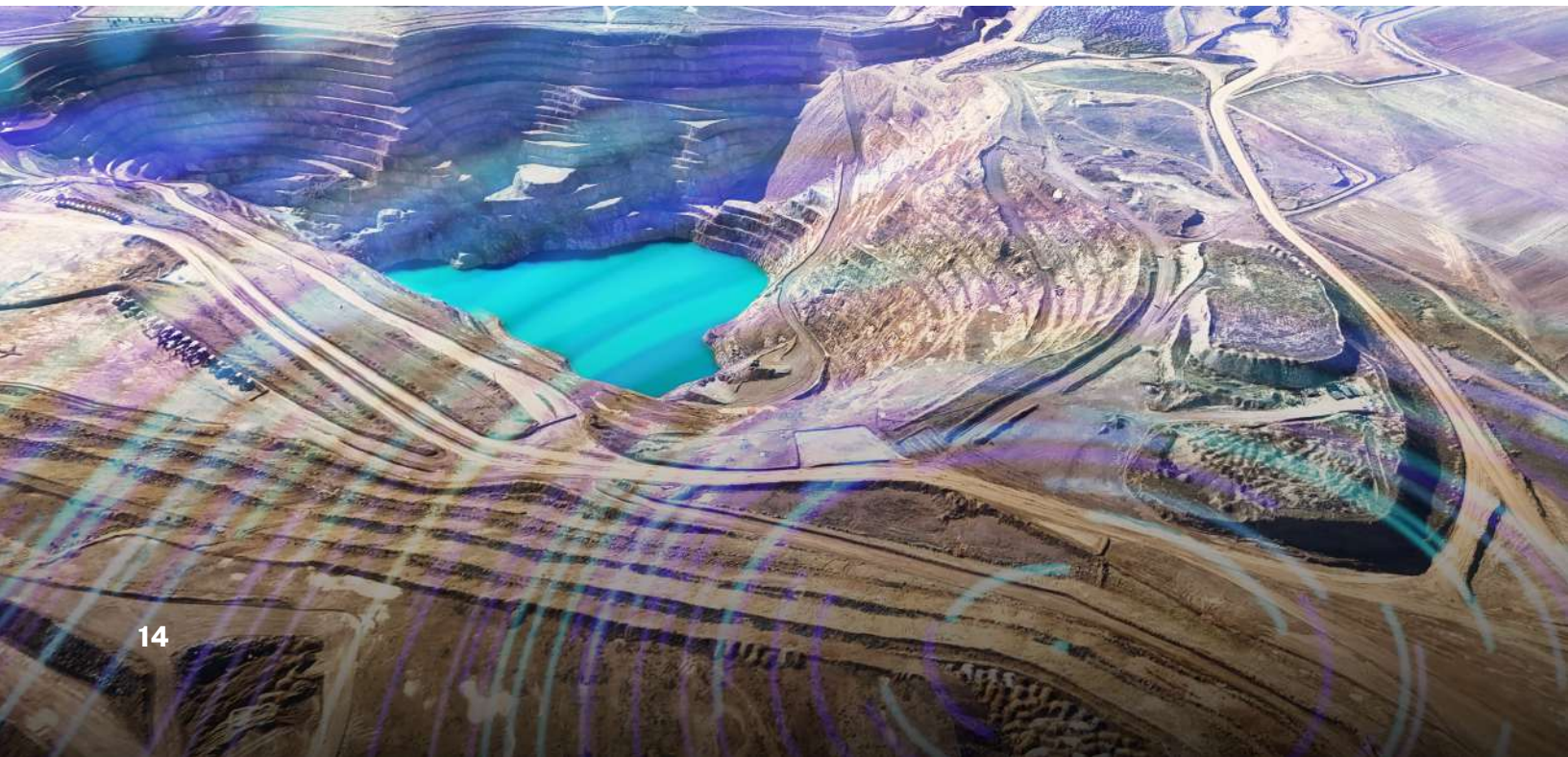
- **Invest both public and private funds in small mining companies, within G7 and like-minded countries**, that are equipped with exploration and development assets to provide the required resources to accelerate engineering and permitting.
- **Develop a responsible extraction framework that upholds Indigenous leadership and collaboration for impacted countries**, aligning with the COP15 Sustainable Critical Minerals Alliance and International Council on Mining and Metals' Mining Principles, to ensure meaningful community engagement and robust biodiversity protection.
- **Sustain existing mining capacity** by extending mine life (through a mix of incentives, permitting support and regulatory clarity), replacing aging infrastructure, and developing a talent pipeline.

3 Build competitive and secure processing and recycling capabilities for critical minerals.

To reduce dependence on concentrated refining hubs and to support industrial resilience, the G7 should develop domestic and like-minded countries' processing capacity and promote policies that encourage recycling and reuse including through more R&D investment.

Policy actions:

- **Design domestic funding mechanisms** to incentivize private sector investment in processing infrastructure projects and ensure durability of funding.
- **Promote public-private partnerships for R&D focused on substitution, usage reduction, and material technologies** that advance a circular economy and reduce dependence on critical minerals extraction.
- **Establish a network of centres of excellence** to support technology and knowledge transfer between the G7 and like-minded countries.



Target outcomes for coordinated G7 action

✔ Increased G7 share of global critical minerals extraction and processing

Implementation example: *U.S. Defense Production Act* (1950)[16]

In response to growing supply chain vulnerabilities and energy transformation needs, the U.S. has increasingly invoked the *Defense Production Act* (DPA) to secure domestic and allied access to critical minerals essential for the defence, energy, and technology sectors.

Action: The U.S. Invoked Title III of the DPA to support domestic and allied production and processing of strategic critical minerals (e.g., lithium, nickel, cobalt, graphite). Allocated funding and federal procurement tools to de-risk investment and expand capacity, including collaboration with Canada under the U.S.-Canada Critical Minerals Action Plan.

Outcome: In 2022, the U.S. authorized over $750 million in DPA funding to boost processing of battery-grade materials in North America and supported projects in the U.S. and Canada to expand capacity for key materials like lithium and nickel aiming to reduce reliance on foreign sources and strengthen allied supply chains.

[16] U.S. Government Info (accessed 2025)

Chapter 1

Champion Predictable and Efficient Global Trade

1.1 Strategic trade coordination

Context

The global trading system has long been a cornerstone of prosperity, playing a pivotal role in enhancing living standards.[17,18] For countries across all income levels, the benefits of trade have been substantial, contributing to innovation, job creation, diversified markets, foreign investment, lowered consumer prices, and improved resource allocation.[19] Low-and middle-income countries (LMICs) have also benefitted — the share of global exports nearly doubled (from 16% to 30%) between 1990–2017, and the global poverty rate plummeted from 36% to 9%, lifting 1 billion people out of poverty.[20]

The trade landscape is constantly evolving as businesses and countries look to capitalize on these benefits. However, in recent years, the political consensus around free trade and open markets has been challenged as countries look to advance domestic economic and national security interests, and as a result, have taken uniliteral trade actions that are inconsistent with long-established, shared rules.

China continues to strengthen its global economic presence supported in part by a range of government-led measures, such as industrial support programs, technology partnerships as a condition for market access, and broader state involvement in strategic sectors. These approaches provide Chinese firms with a competitive edge, allowing them to offer lower prices, scale rapidly, and gain market share in key industries. The steel industry is often cited as a sector where the impact of such measures is particularly evident, with estimates suggesting that China's steel subsidies are more than 5–10 times higher than other countries.[21,22] As these dynamics become more visible, governments and major trade blocs are increasingly reassessing their trade strategies to optimize for predictability and resilience in the face of evolving global market conditions.

As a result, this ongoing period of shifting trade dynamics has been characterized by a marked increase in protectionism and restricting interventions[23] globally (Figure 4).[24] While some of these interventions have been supported by the G7 as justifiable responses to incidents of international aggression, the overall trend underscores the increasingly complicated relationship between geopolitical dynamics and trade, and the accompanying uncertainty for citizens in the G7 and the organizations they run.

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17 WTO (2024)
18 World Bank (202
19 Bank of Canada (accessed 2025)
20 World Bank and WTO (2015)
21 OECD (2024)
22 OECD (2023)
23 Restricting interventions, as defined by the Global Trade Alert, are any implemented government policy that will likely or almost certainly worsen the treatment of one or more foreign commercial interests relative to domestic rivals.
24 Global Trade Alert (2024), BCG internal analysis (2025)

Figure 4 | Global trade covered by restricting trade measures, 2010–2024

($ trillion, imports in goods only)

Note: Trade figures reported in USD and exclude ~60 economies with inconsistent data quality or non-standard reporting; trade covered by restricting measures excludes those measures imposed on Russia
Source: Global Trade Alert; BCG internal analysis (2025)

Ensuring economic security has become a central concern for trade policymakers, as countries seek to safeguard critical supply chains, protect against economic coercion, and build resilience to external shocks. In this context, strengthening trade partnerships among trusted allies and enhancing cooperation on key technologies and resources — such as semiconductors, chips, and batteries — will be critical to mitigating vulnerabilities and ensuring long-term economic stability. The G7's relatively limited domestic critical minerals reserves and processing capacity underscores the importance of well-functioning trade with key partners. Export controls and other government-led interventions in this space, such as China's export restriction on gallium, have driven price volatility and investment uncertainty. Strategic coordination with trusted allies is crucial to ensuring stable access to these vital materials.

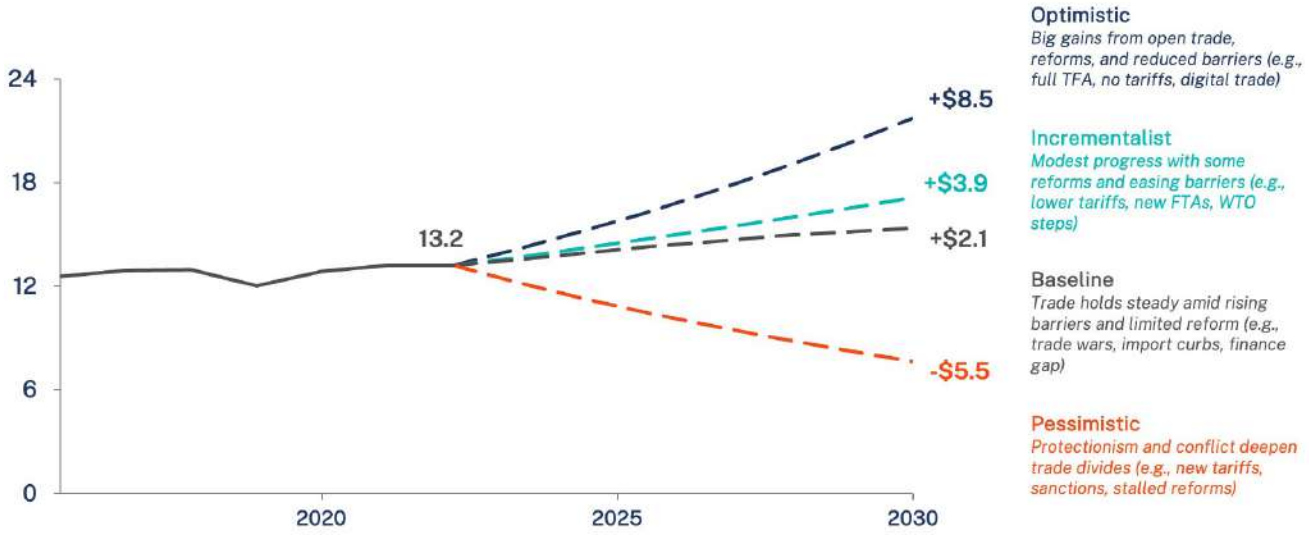
A long-standing pillar of predictability and efficiency in global trade has been the ability to resolve trade disputes, which fosters trust among trading partners, and ultimately provides the investment certainty needed for business growth and development. Importantly, trade dispute resolution mechanisms also provide a constructive alternative to escalation or retaliation. To this end, the WTO Dispute Settlement Body (DSB) was designed to provide meaningful recourse against WTO-illegal trade practices between countries and, within this system, the Appellate Body was constituted as a last resort for any disputes that could not reach resolution through the consultation phase or a DSB panel ruling. However, in the years since its inception, the WTO DSB has taken increasingly longer to adjudicate disputes, and since 2019, the Appellate Body has been non-functional, due to lack of consensus on the appointment of jurists. Faced with this situation, a subset of WTO members launched the Multi-Party Interim Appeal Arbitration Arrangement (MPIA), an alternative dispute settlement mechanism that now consists of over 50 WTO members. However, the MPIA is limited in its ability to resolve disputes given that certain key trading partners have opted not to join. This has created a legal void for disputes involving non-MPIA members, exacerbating tensions among countries and eroding business confidence in the multilateral trading system.

Trade modelling can help us understand how changes in trade openness (e.g., restrictive measures, tariffs), cross-border efficiency (e.g., free trade agreements, trade facilitation), and financial inclusion (e.g., access to trade finance) shape economic outcomes for the G7.[25]

Prioritizing a more predictable and efficient policy environment could yield economic gains among G7 members of ~$3.9–$8.5 trillion by 2030 (Figure 5).[26] Conversely, the economic impacts of unpredictability in trade are profound — a more closed trading system risks potential losses of ~$5.5 trillion across the G7.

Figure 5 | Impact of different trade scenarios

(G7 trade in goods, constant 2010 $ trillion)



Note: The numbers might not add up due to rounding; The model only includes Germany, France, and Italy from EU members; baseline model was adjusted for geopolitical factors before the U.S. election and does not include potential U.S. tariffs.
Source: BCG Global Trade Model (2024)

[25] BCG internal analysis (2025); Modelling does not include recent trade actions taken by U.S.
[26] BCG internal analysis (2025)

Strategic Trade Coordination

Recommendations for G7 leaders

1 Strengthen coordination among trusted trading partners.

To strengthen the G7's role as a stabilizing force in the global economy, G7 members and like-minded countries should reduce frictions among each other, deepen coordination on trade practices, and establish frameworks that set the pace for trusted, secure, and resilient economic ties.

Policy actions:

- **Commit to lifting current extraordinary trade restrictions among G7 members**, and to a moratorium on new broad-based tariffs to avoid triggering a cycle of escalatory and retaliatory trade measures, while also committing to upholding the principle of national treatment among the G7 and beyond.
- **Establish a common G7 framework to identify a shared view on critical materials in strategic industries**, and advance interoperability for associated standards and regulations to promote the trusted and seamless exchange of goods.
- **Create a trusted capital framework among G7 and like-minded countries to safeguard critical technologies and ensure secure cross-border capital flows** in support of shared economic and national security objectives.

2 Address and mitigate non-market practices.

To counter price volatility and investment uncertainty caused by state-backed interventions, the G7 should address market-distorting overcapacity while promoting transparent competition.

Policy actions:

- **Formulate G7-led sector-specific agreements to manage overcapacity** — particularly unprecedented surges in manufacturing exports — and avoid market distortions by strengthening initiatives such as the Global Forum on Steel Excess Capacity hosted by the OECD.
- **Develop a global code of conduct for state-owned enterprises (SOE)** that builds on the 2024 OECD SOE Guidelines[27] to ensure fair competition with private firms, while also levelling the playing field by reforming the Agreement on Subsidies and Countervailing Measures to better address both export and market-distorting industrial subsidies and other government support measures.

[27] OECD (2024)

3 Enhance certainty within the global trade system through shared rules.

To ensure a stable trading environment in which businesses can thrive, the G7 should foster transparency in dispute resolution, advance coordination on trade, and integrate trade rules that underpin efficiency.

Policy actions:

- **Reach consensus on reforming the WTO Dispute Settlement Body** to help address the recent proliferation of new trade barriers and discriminatory treatment, and if consensus cannot be reached, then all members of the G7 should join and advance the Multi-Party Interim Appeal Arbitration Arrangement (MPIA).
- **Advance plurilateral and multilateral agreements** — both through WTO initiatives such as Joint Statement Initiatives (JSIs) as well as through non-WTO frameworks — by increasing collaboration among G7 and like-minded countries to promote rulemaking on emerging issues.
- **Institutionalize the WTO Moratorium on Customs Duties on Electronic Transmissions** to safeguard predictability in digital trade and services and prevent the proliferation of digital trade barriers.

Target outcomes for coordinated G7 action

- ✔ **Increased percentage of liberalizing trade interventions**
- ✔ **Decreased percentage of restricting trade interventions**

Implementation example: International Chamber of Commerce's International Court of Arbitration (1923)[28]

To address the growing demand for neutral, enforceable, and globally respected arbitration in international commerce, the International Chamber of Commerce (ICC) established the International Court of Arbitration in 1923, creating a trusted forum for resolving commercial disputes across borders that continues to operate today. The Court offers a compelling model for how international trade disputes can be resolved efficiently and reliably.

Action: The ICC created an independent arbitration body composed of members from over 100 countries, tasked with overseeing arbitration proceedings under the ICC Rules of Arbitration. The Court administers cases by confirming arbitrators, supervising procedures, and scrutinizing awards to ensure fairness, enforceability, and adherence to international standards, making it one of the world's leading institutions for commercial dispute resolution.

Outcome: The ICC strengthens global commercial confidence by offering predictable, neutral arbitration services, resolving disputes in key sectors such as construction, energy, and finance, and continuing to serve businesses of all sizes, with over 27,000 cases administered since inception — including 831 cases filed in 2024 across 136 jurisdictions, with 152 cases administered under the expedited process — underscoring its continued relevance and effectiveness in global dispute resolution.

[28] ICC International Court of Arbitration (accessed 2025)

1.2 Supply chain security

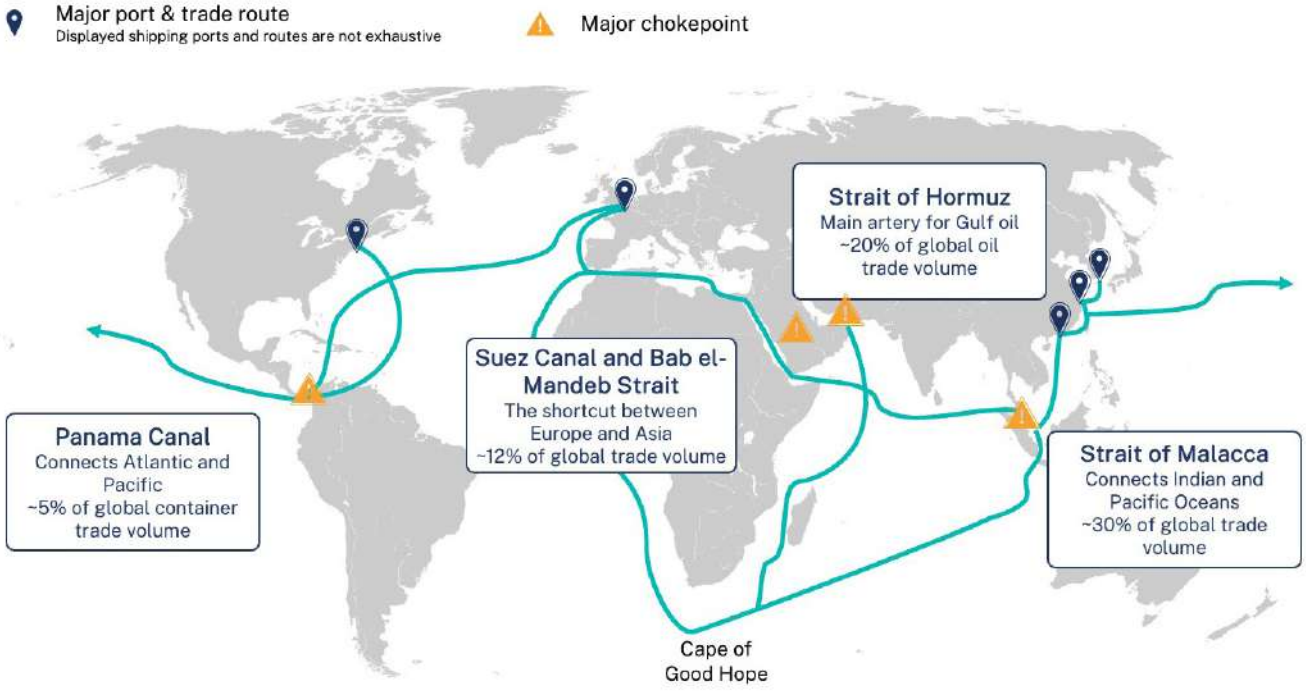
Context

Global economic security and stability hinges on the seamless operation of supply chains. The OECD estimates that only 30% of annual international trade comes from the movement of finished goods, while the other 70% is derived from intermediate steps of the supply chain.[29,30] These crucial networks face an increasing variety of threats ranging from geopolitical tensions and disruptions in trade flows to extreme weather events, health emergencies, and illicit trade. The COVID-19 pandemic exposed vulnerabilities in supply chains worldwide, triggering shortages, delays, and increased costs for various types of goods. Then, just as the effects of the pandemic had begun to subside, Russia's full-scale invasion of Ukraine upended supply chains for critical commodities like wheat, fertilizer, and natural gas, heightening risks to global food security and energy security. Building resilience is essential to mitigating these risks, ensuring continuity, adaptability, and sustainability in an increasingly unpredictable world.

Chokepoints in international trade exemplify the threats facing global supply chains. Over 50% of global maritime trade flows through four critical junctures, each of which is vulnerable to disruption (Figure 6)[31]. For example, attacks by Houthi rebels in the Red Sea in 2023–2024 disrupted transit through the Suez Canal, forcing costly and time-consuming rerouting around the Cape of Good Hope (Figure 7).[32] Such chokepoints highlight the systemic risk that supply chain insecurity poses to global economic prosperity.

Ensuring diversified and resilient supply chains — both domestically and internationally — helps mitigate risk by reducing dependency on any single source. However, many supply chains critical to G7 economies remain heavily concentrated in a few markets or suppliers. For example, ~90% of the most advanced semiconductors are manufactured in Taiwan[33], ~64% of active pharmaceutical ingredient production is concentrated in India and

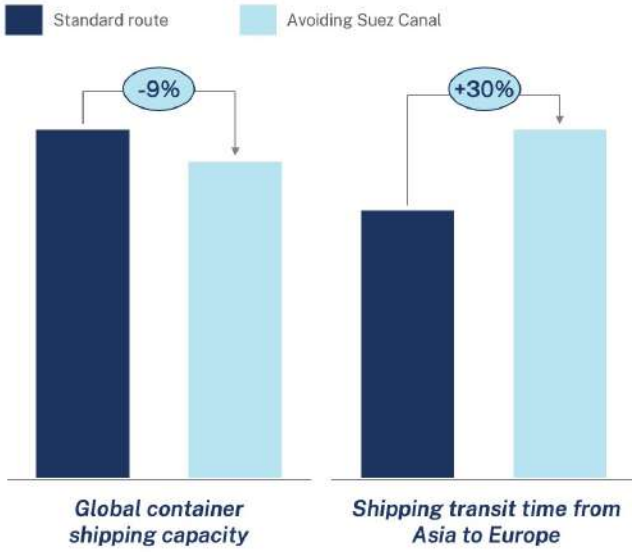
Figure 6 | Chokepoints of global maritime trade



Source: IMF Portwatch, Politico, BCG analysis (2024)

[29] OECD (2025)
[30] OECD (2019)
[31] BCG (2024)
[32] UNCTAD (2024)
[33] BCG (2021)

Figure 7 | Trade disruption following Houthi attacks in the Red Sea



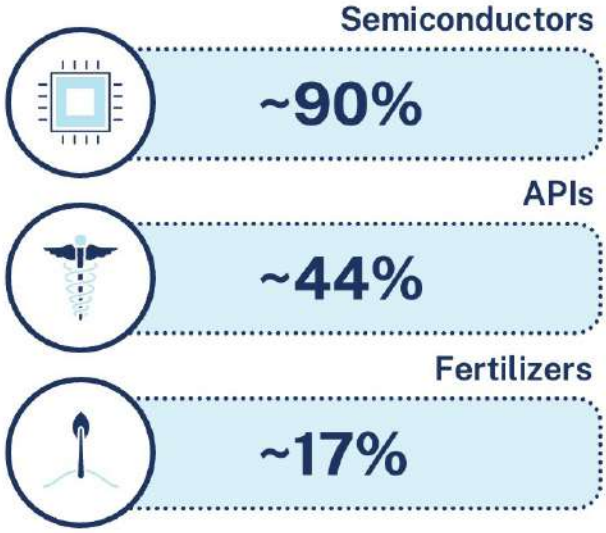
Source: UNCTAD (2024)

mainland China[34], and ~17% of global fertilizer exports come from Russia (Figure 8)[35]. Likewise, the dominance of a few countries in critical minerals mining and processing, particularly China, exposes G7 countries to supply chain vulnerabilities, geopolitical risks, and trade disruptions. Without diversification, industries reliant on these minerals — such as AI, energy, and defence — face instability, threatening both economic and national security.

Failing to address supply chain vulnerabilities could have devastating economic consequences. Persistent disruptions in critical industries, such as semiconductors, fertilizers, and pharmaceuticals, could lead to prolonged shortages, significantly increased costs, and the loss of global market leadership for G7 members. The ripple effects would extend beyond businesses, affecting consumers, national security, and overall economic resilience.

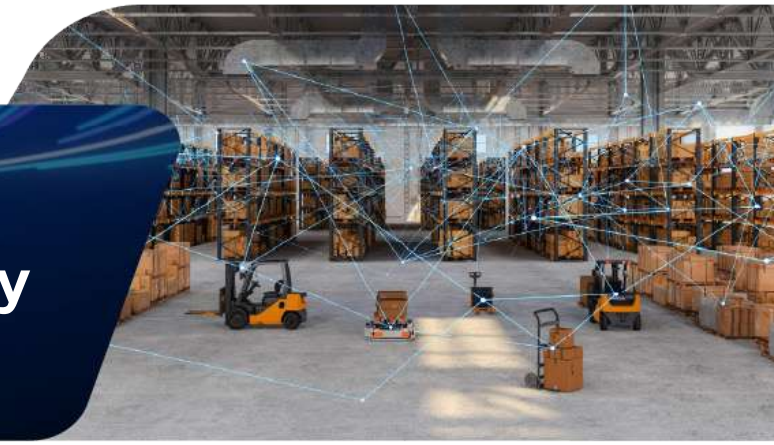
Despite these vulnerabilities, a 2022 survey of over 150 companies worldwide found that only 10% of businesses have the capacity to effectively navigate supply chain disruptions.[36] These firms were able to foresee crises and recover effectively, rather than react to crises as they occurred. In times of crisis, firms that had adopted best practices outperformed their competitors by 30 percentage points in total shareholder return, underscoring the concrete benefits of investing in supply chain resilience and diversification.[37] Governments have a critical role to play in accelerating these efforts by providing targeted support — such as funding, regulatory guidance, and infrastructure development — to help businesses as they make the changes required to build robust and efficient supply chains.

Figure 8 | Concentration of critical inputs from single sources



Source: BCG analysis (2021), Statista (2024; accessed 2025/01/28), ITC (2023; accessed 2025/01/28)

[34] Statista (2024; accessed 2025/01/28)
[35] ITC (2023; accessed 2025/01/28)
[36] BCG (2022)
[37] BCG internal analysis



Supply Chain Security

Recommendations for G7 leaders

1 Strengthen G7 coordination to safeguard strategic supply chains.

To mitigate economic and geopolitical risks, the G7 should establish a coordinated approach to securing supply chains for strategically critical goods, ensuring resilience against disruptions from geopolitical tensions, trade chokepoints, and economic coercion.

Policy actions:

- **Develop a G7 mechanism for coordinating responses to mitigate supply chain shocks and economic coercion** by working with the private sector to map strategically critical supply chains, identify supply chains at high risk of disruption, and develop coordinated response frameworks.
- **Coordinate export controls among G7 and like-minded countries** in a precise, proportionate, and predictable manner by building off the 2023 G7 Enforcement Coordination Mechanism to enhance efficacy while reducing compliance costs.
- **Incentivize production of strategically critical goods in G7 and like-minded countries** through coordinated sector specific agreements, public-private partnerships, and increased access to financing for Micro, Small and Medium-sized Enterprises (MSMEs).

2 Support industry-led efforts to de-risk companies' global supply chains.

To increase businesses' resilience and overall economic security, the G7 should support businesses in de-risking their supply networks and reducing reliance on high-risk inputs.

Policy actions:

- **Support businesses' efforts to de-risk their supply chains** by developing digital tools to facilitate targeted tracing and to predict supply chain disruption, and by deploying supportive measures to companies that provide goods and services vital to economic security.
- **Support the establishment and protection of designated manufacturing and logistics areas** through collaboration between the public and private sectors to de-risk supply chains by ensuring operational continuity, enhancing resilience to disruptions, and enabling strategic control over critical production and distribution nodes.
- **Reduce dependence on high-risk inputs** by promoting the circular economy among trusted

trading partners and supporting technology agnostic innovation to find alternative solutions, decreasing overall demand.

- **Diversify global supply chains by supporting industrial development in strategically aligned LMICs**, while maintaining high standards and benefitting local communities, building off the Resilient and Inclusive Supply-Chain Enhancement (RISE) initiative, and the G7 Sustainable Supply Chains Initiative (SSCI).

Target outcomes for coordinated G7 action

- ✔ **Increased percentage of supply chains in G7 countries**
- ✔ **Increased percentage of G7 businesses implementing supply chain best practices**

Implementation example: Freight Logistics Optimization Works (FLOW; 2022)[38]

The U.S. Department of Transportation (USDOT) launched FLOW as a public-private partnership to enhance supply chain efficiency and resilience through improved data sharing and collaboration.

Action: The USDOT created a real-time logistics database where participating companies agree to share anonymized data in exchange for access to industry wide data.

Outcome: The USDOT partnered with 80+ companies to improve supply chain resilience through improved demand and throughput forecasting.

[38] Department of Transportation (2024; accessed 2025/01/28)

1.3 Trade enablement

Context

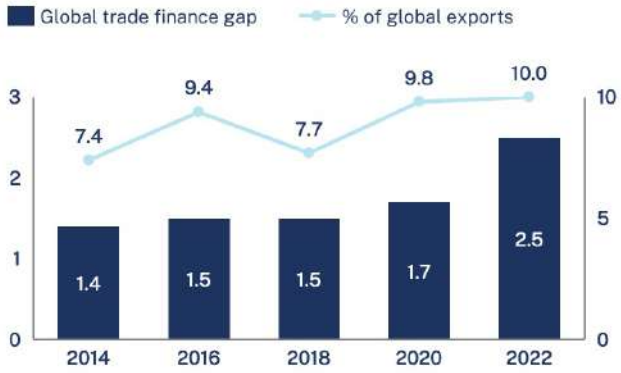
Trade enablement — the processes, technologies, and policies that streamline trade and improve access to trade-related resources — is essential in supporting businesses of all sizes to benefit from the global trading system. However, this system is increasingly strained by outdated infrastructure, fragmented regulatory frameworks, and lagging digital integration[39,40] — challenges that have been further exposed by recent geopolitical tensions and supply chain disruptions.

Digital trade facilitation measures — such as automated customs procedures and paperless documentation — offer significant potential to improve trade efficiency across the G7.[41] However, fewer than 1% of trade documents globally were fully digitized as recently as 2022.[42] Further, businesses continue to face overlapping or conflicting regulatory requirements across jurisdictions, with a typical transaction requiring the exchange of 36 documents and 240 copies in hard copy,[43] raising compliance costs and discouraging cross-border activity. If unaddressed, inefficiencies in trade processes will continue to hinder economic growth, stifle innovation, and prevent businesses — particularly resource-constrained MSMEs — from accessing international markets.

While improving trade efficiency is critical, it should be matched by expanded access to the financial tools that enable participation. The global trade finance gap — the shortfall between the demand for trade finance (e.g., loans, guarantees, letters of credit) and the actual supply provided by financial institutions — is a persistent obstacle, and is now estimated at over $2.5 trillion (Figure 9).[44]

MSMEs, particularly in LMICs, are often disproportionately affected given that they face

Figure 9 | Global trade finance gap
($ trillion)



Source: ADB (2023)

higher barriers to accessing the capital and instruments needed to engage in cross-border trade, ranging from collateral requirements to documentation burdens and regulatory hurdles.[45] In particular, MSMEs in both the G7 and beyond struggle to obtain trade financing from financial institutions due to factors such as a lack of demonstrable financial transaction data, insufficient collateral, and limited credit history, all of which contribute to a higher perceived risk by lenders.[46] Yet supporting their ability to benefit from the global trading system is an economic necessity: MSMEs are key engines of job creation, innovation, and export diversification, accounting for 50% of GDP worldwide.[47]

Without concerted efforts taken by governments, the financing gap will continue to limit the ability of businesses — particularly MSMEs — to engage meaningfully in global trade. The G7 and multilateral institutions can play a catalytic role in unlocking this economic potential by ensuring the regulatory environment itself is not a barrier and even enables innovative and adaptive approaches. This includes digital infrastructure and regulation that keeps pace with modern, secure trade

[39] UK International Chamber of Commerce (accessed 2025)
[40] OECD (accessed 2025)
[41] UK International Chamber of Commerce (accessed 2025)
[42] ICC and WTO (2022)
[43] ICC and WTO (2022)
[44] ADB (2023)
[45] ADB (2023)
[46] ADB (2023)
[47] UN (2024)

tools, such as electronic trade documents and blockchain-based systems, which could help MSMEs overcome information asymmetries, high compliance costs, and operational inefficiencies that often exclude them from formal financing channels. Further, governments should ensure that the implementation of international financial regulations — such as capital adequacy rules — are calibrated to reflect the actual risk of trade finance instruments, so as not to unintentionally constrain the availability of credit.

By focusing on both digital modernization and improved access to trade finance, the G7 has an opportunity to reinforce the foundations of a more efficient global trading system both domestically and within LMICs. Investing in digital infrastructure, advancing regulatory cooperation, and expanding access to trade finance — particularly for MSMEs — can help ensure that trade enablement measures translate into measurable economic gains.

Trade Enablement

Recommendations for G7 leaders

1 Enhance trade efficiency measures.

To capture the economic growth enabled by a more efficient and innovative global trading system, G7 countries should invest in digital infrastructure, promote mutual recognition of trade regulations and standards, modernize digital customs processes, and establish clear global e-commerce rules.

Policy actions:

- **Support investments in digital infrastructure**, including digital single windows, smart border systems, and interoperable e-certification platforms, to boost trade in goods and services.
- **Advocate for interoperability**[48] **of trade regulations and standards among G7 countries** to minimize compliance burdens for businesses.
- **Support the implementation of globally interoperable digital trade standards through the ICC's Digital Standards Initiative** to streamline border processes, reduce delays, and increase efficiency, aligning with commitments in the G7 Digital Trade Principles and the WTO Trade Facilitation Agreement.
- **Establish robust e-commerce rules** under the WTO Joint Statement Initiative on E-commerce by incorporating its agreement, which includes the permanent prohibition of the imposition of customs duties on electronic transmissions, into the WTO legal framework early, addressing remaining issues like cross-border data flows, data localization, and source code disclosure.

2 Improve access to trade finance.

To support and further grow seamless global commerce, the G7 should expand access and reduce barriers to trade finance, particularly for underrepresented businesses.

Policy actions:

- **Expand access to trade and export finance aimed at supporting underrepresented groups** (e.g., MSMEs, women-and youth-led businesses), enabling their full participation in international trade by leveraging national export-import banks and development finance institutions to design and scale targeted financial instruments and guarantees.

[48] Interoperability refers to the ability of regulatory systems to work together through coordination and mutual recognition — without requiring uniformity — enabling jurisdictions to align rules and practices in ways that respect domestic contexts while achieving shared policy goals.

- **Review and modernize regulations to enable the use of digital original trade documents and blockchain-enabled payment tools**, while supporting implementation in LMICs and among MSMEs through technical assistance, capacity-building, and digital infrastructure development.
- **Assess and mitigate the impact of Basel 3.1 implementation on trade finance** by applying appropriate risk-weighting for low-risk trade finance instruments and support the Basel Committee on Banking Supervision's efforts to monitor and adjust standards based on real world effects.

Target outcomes for coordinated G7 action

- ✔ **Increased number of trade regulations and standards that are interoperable across G7 countries**
- ✔ **Decreased global trade finance gap**

Implementation example: Singapore Trade Data Exchange (SGTraDex; 2022)[49]

In response to increasing global trade complexities, Singapore's SGTraDex was launched to streamline digital trade by enabling secure, real-time data exchanges between stakeholders in logistics, shipping, and finance.

Action: Singapore developed a trusted, industry-wide digital infrastructure platform for seamless trade data exchanges; established a secure, permissioned data-sharing model to enhance interoperability and compliance; and facilitated public-private partnerships to drive adoption and improve trade resilience.

Outcome: Singapore enhanced supply chain resilience through real-time visibility and secure data-sharing, while aligning with international trade frameworks (WTO, World Customs Organization, UN Commission on International Trade Law) for global scalability; projected that initial participants will unlock more than $100 million of value in the form of cost savings, optimal use of assets, faster access to financing, and other value-creating benefits over the first five years.

[49] Singapore Trade Data Exchange (2022)

Chapter 2

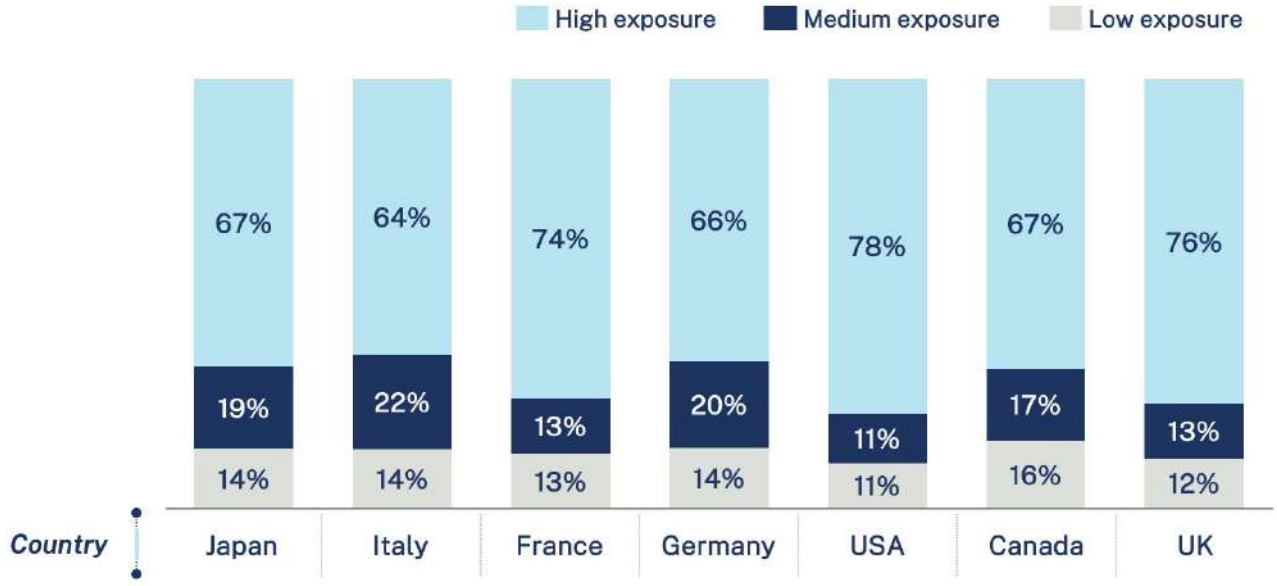
Realize the Promise of Responsible AI and Digital

2.1 AI adoption acceleration

Context

AI is driving a major technological shift, transforming industries through improved efficiency and decision-making. The acceleration of AI adoption presents a transformative opportunity for G7 countries. While estimates vary widely, all agree that AI has the potential to meaningfully increase global GDP, with some estimates indicating as much as ~$7 trillion worldwide by 2030.[50,51] AI is no longer limited to specialists. User-friendly tools now enable millions of workers to use AI in their daily work, while tech professionals customize models and apply advanced methods like Retrieval Augmented Generation to develop new use cases and drive innovation. At the same time, AI also has the potential to influence how customers interact with business and their products. With a large share of G7 countries' GDP generated by industries sensitive to AI-driven changes, the G7 is poised to benefit from substantial increases in productivity, an important contribution given demographic

Figure 10 | Economic exposure to AI[52]
(% GDP)



Source: BCG analysis (2024)

[50] WEF (2017), Goldman Sachs (2023), MIT (2024)
[51] Goldman Sachs (2023)
[52] AI exposure is calculated using BCG's AI Maturity Matrix, which assesses sector-level AI impact potential and maps it to each country's GDP composition

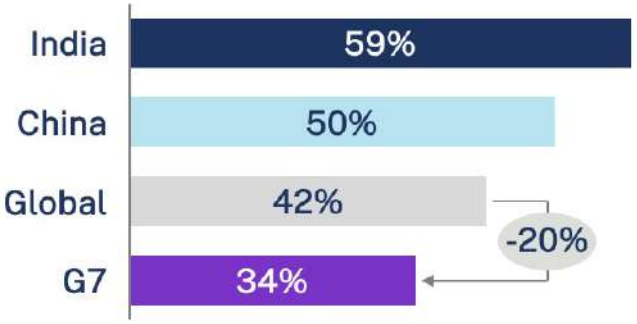
challenges facing many G7 countries, including aging populations, shrinking workforces, and population decline. However, this exposure also means that successful adoption of AI is critical for remaining competitive on the world stage (Figure 10).[53] The potential upside is significant, but achieving it requires widespread adoption of value-driving AI applications.

G7 countries have played a pioneering role in developing advanced AI models, developing thought leadership on responsible AI, and rank highly in AI readiness — a measure of an economy's capacity to implement and integrate AI technologies effectively (Figure 12).[54] This leadership provides a strong foundation for G7 countries to capitalize on the economic and technological advantages AI offers.

While G7 countries have led in the development of generative AI, enterprise-level adoption risks falling behind global peers. Recent estimates suggest that G7 countries are lagging in AI enterprise deployment, with usage largely concentrated in large businesses (Figure 11).[55] Meanwhile, other countries are accelerating both innovation and adoption. Recent models such as China's DeepSeek highlight the intensifying competition for global leadership in AI development.

While there are a variety of factors contributing to slower AI adoption, including organizational change management challenges, integration

Figure 11 | AI adoption
(% of enterprises deploying AI tools)



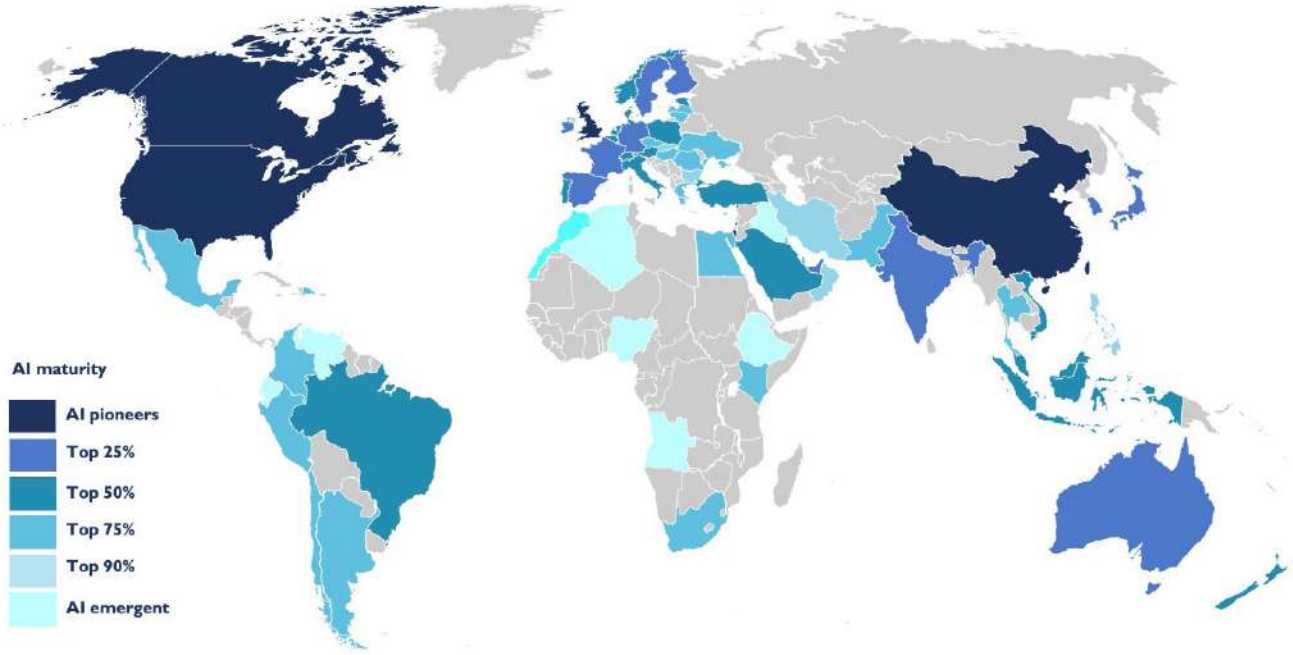
Source: IBM (2023)

complexity, and security concerns, this section highlights three particularly critical barriers: talent and skilling, infrastructure constraints, and regulatory uncertainty. These areas are not exhaustive, but they represent domains where G7 countries are both currently constrained and especially well-positioned to take strategic, coordinated action.

Talent shortages and skills gaps remain a foundational barrier. One study conducted across 12 countries, including the G7, suggested 82% of employers reported uncertainty about how to implement AI training programs, while nearly 80% of employees indicated they were unsure about the AI training programs available to them.[56] Broader adoption of AI depends on a workforce equipped with the right expertise to implement

[53] BCG Center for Public Economics (2024)
[54] BCG Center for Public Economics (2024)
[55] IBM Global AI Adoption Index 2023 (2023); China and India included given leadership in enterprise AI adoption; Global adoption rate includes China, India, and the G7
[56] AWS Accelerating AI Skills (2023)

Figure 12 | AI maturity index



Source: BCG analysis (2024)

and manage increasingly complex technologies. Without targeted and scalable training initiatives, the G7 risks being outpaced by countries investing more aggressively in digital skill development. India's Future Skills Prime program offers one such example, helping to accelerate adoption through national skilling efforts aimed at building AI capabilities across the workforce.[57]

Infrastructure is also becoming a major constraint on AI deployment and innovation. As models grow more compute-intensive and digitalization accelerates, global demand for compute capacity is surging. Between 2024–2030, data centre investments are projected to hit $1.8 trillion, driving a ~55% increase in computing energy demand between 2025–2028.[58] This will place heavy stress on energy infrastructure. In the U.S., a shortfall of up to 80 gigawatts is expected by 2030, with ~40% of current data centres potentially facing operational limits by 2027.[59] Cloud providers are investing in next-gen infrastructure, including nuclear Small Modular Reactors (SMRs), but sustainable scaling will also require secure supplies of critical minerals like gallium, rare earth elements, and silicon, vital for high-performance computing.

Regulatory uncertainty further complicates the adoption landscape. Many firms, especially in Europe, cite compliance costs as a major obstacle. According to recent surveys, 44% of European businesses view regulation as their primary barrier to AI adoption, with compliance costs accounting for as much as €40 out of every €100 spent on IT.[60] Clear, balanced regulation that mitigates risks while enabling innovation will be essential. Establishing aligned technical standards and fostering cross-sector collaboration can help support safe, responsible deployment. Absent proactive leadership from the G7, there is a real risk that global AI norms and frameworks will be shaped elsewhere.

[57] India Future Skills Prime (accessed 2025)
[58] BCG (2025)
[59] BCG (2024), Gartner (2024)
[60] AWS | Strand Partners (2025)

AI Adoption Acceleration

Recommendations for G7 leaders

1 Lead and facilitate widespread AI adoption.

To maximize AI's economic potential and maintain G7 leadership in global innovation, the G7 should accelerate broad and effective adoption of responsible AI throughout the economy.

Policy actions:

- **Increase usage of AI within the public sector** in line with the G7 Toolkit for Artificial Intelligence in the Public Sector to improve delivery and efficiency of public services, promote innovation, and build private sector confidence in the use-cases of AI across industries.
- **Accelerate private sector AI adoption** by providing targeted financial incentives, establishing sector-specific AI centres of excellence to support MSMEs, promoting access to cloud infrastructure, and fostering collaboration between technology providers, industry stakeholders, and academia.
- **Strike a balance between regulation and innovation** by developing more pro-innovation policy frameworks to ensure that technological advancements can thrive, while ensuring the responsible development and use of AI.
- **Commit to measuring cross-G7 rates of AI adoption** across industries and functions to support development of targeted and impactful policies, potentially building off model surveys developed by the OECD.

2 Secure AI supply chains and critical infrastructure to support sustainable AI growth.

To prevent bottlenecks that could hinder AI adoption, the G7 should ensure a stable supply of critical inputs like energy and compute capacity.

Policy actions:

- **Develop a G7 Toolkit on AI and Energy** that offers guidance on how governments can ensure adequate supply and incentivize investment in innovative new technologies and infrastructure, such as SMRs.
- **Secure continuous availability of critical inputs and infrastructure for AI** (e.g., energy, access to cloud computing resources) through public-private partnerships to de-risk investments and streamline cross-border resource sharing.

- **Develop publicly accessible compute infrastructure and high-quality public datasets** to lower barriers for startups, researchers, and MSMEs, enabling AI research development, testing, and adoption.

3 Build a skilled workforce for the AI economy.

To enable widespread and responsible AI adoption, the G7 should expand AI-related education, workforce upskilling, and talent pipeline development.

Policy actions:

- **Partner with industry, academia and polytechnics to encourage broad-based AI and digital education** by developing certificates and skills programs in addition to graduate and post-graduate programs in AI.
- **Support industry to upskill/reskill workers** by providing targeted funding and resources for organizations that support workers to develop AI-relevant digital skills across sectors.

Target outcomes for coordinated G7 action

- ✔ **Increased percentage of G7 businesses using AI-enabled tools**
- ✔ **Increased percentage of employees at G7 businesses that have received training in AI**

Implementation example: Singapore National AI Strategy[61]

Singapore was one of the first countries to launch a national AI strategy, with the goals of leading in AI development, driving overall economic growth, and improving citizens' lives.

Action: Singapore integrated AI into public services, provided dedicated support for MSMEs, established AI-focused training and visa programs, and committed more than $500 million to R&D through their Digital Enterprise Blueprint and Go Digital programs.

Outcome: Singapore is ranked consistently as a global AI leader, with strong adoption, an innovation ecosystem including over 1,100 AI startups, and more than 200,000 upskilled individuals contributing to a greater than 50% edge on G7 countries in terms of AI adoption.

[61] Singapore National AI Strategy (2019); Singapore National AI Strategy (2023)

2.2 Digital regulatory interoperability

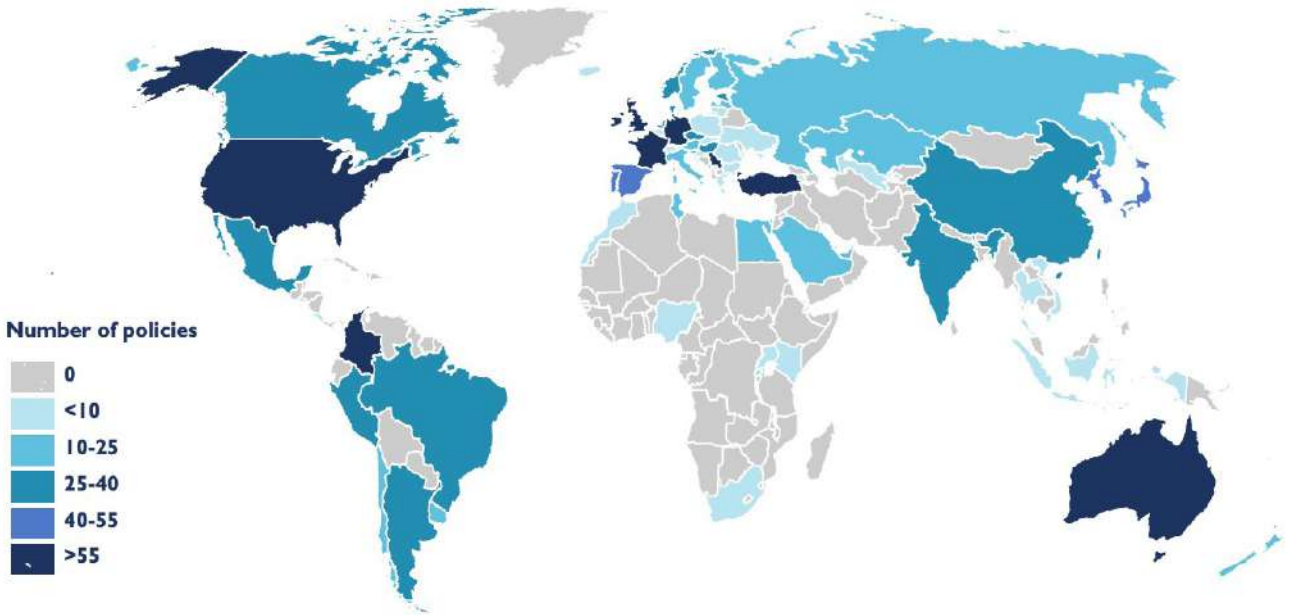
Context

The G7 has been at the forefront of digital regulation, introducing influential frameworks that emphasize the balance between innovation and trust. Two landmark initiatives underscore this leadership: the concept of Data Free Flow with Trust (DFFT) and the Hiroshima AI Process. Introduced by Japan, DFFT recognizes the vital role of cross-border data sharing in fostering digital trade and unlocking the economic benefits of seamless data flow.[62] Meanwhile, the Hiroshima AI Process, launched at the 2023 G7 summit, and building off existing OECD AI principles, aims to promote safe, secure, and trustworthy AI practices globally. These efforts exemplify the G7's commitment to responsibly shaping the digital landscape and minimizing regulatory fragmentation.

While digital regulations are essential to mitigate risks such as market concentration, they can also impose significant burdens on businesses, with wide-ranging economic consequences. Data localization measures, for instance, can increase costs for businesses, and are thought to have broader impacts on innovation, cyber security, and even economic growth.[63] Policymakers should look to strengthen competitiveness through designing proportionate regulation, safeguarding consumer interests and promoting good business practices without stifling economic growth.

New regulatory frameworks are being considered and implemented as governments worldwide accelerate the development of AI policies, which will have a defining impact on the pace and direction of global AI innovation. The OECD's AI Policy Repository now tracks over 1,000 AI-related policy initiatives globally (Figure 13).[64]

Figure 13 | Number of AI policies



Source: OECD (2021; accessed 2025/01/28)

[62] OECD (2019), WEF (2023), WEF (2023)
[63] WEF (2020), WEF (2023)
[64] OECD (2021; accessed 2025/01/28)

While governance is important to ensuring trust and security in AI systems, regulators risk stifling innovation and limiting AI's transformative potential. For example, the EU's *AI Act* (2021) was projected to lead to compliance costs ranging from €3–30 billion (depending on measurement methodologies) between 2021–2025.[65,66] Interoperable governance would streamline compliance, reduce administrative burdens, and encourage cross-border collaboration in AI and digital technology development. Regulations need not be identical to achieve these benefits if they are developed using aligned international technical standards, principles and taxonomies that facilitate interoperability, permit mutual recognition, and simplify compliance. The EU *AI Act*, for example, adopts prescriptive measures to streamline rules and lower cross-border costs, whereas the Hiroshima process, a high-level regulatory alternative to the EU *AI Act*, and formed in response to generative AI specifically, emphasizes voluntary standards, international collaboration, and flexibility that fosters innovation, supporting cooperative, industry-friendly frameworks that empower businesses to adapt in a rapidly evolving AI landscape. Moreover, leading AI developers have widely adopted AI safety frameworks that can evolve with the technology — demonstrating the private sector's ability to advance responsible innovation that enhances consumer trust through transparency.

Failure to achieve regulatory interoperability risks fragmenting global markets and creating barriers to innovation and trade. Businesses, particularly MSMEs, would face mounting compliance costs and reduced competitiveness. Moreover, conflicting regulations could deter investments in critical technologies, slowing economic growth and diminishing the transformative potential of AI and digital tools. By seeking regulatory interoperability whenever possible, the G7 and like-minded countries can not only mitigate the risks of AI but also reinforce their collective market strength, establish common approaches, and lay the groundwork for secure trade and long-term digital cooperation in the face of global competition.

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[65] European Commission (2021), ITIF Center for Data Innovation (2021)
[66] Clarifying the costs for the EU's *AI Act* -CEPS (2021)

Digital Regulatory Interoperability

Recommendations for G7 leaders

1 Advance interoperability of AI and digital regulation to foster innovation and trust.

To balance innovation with security, the G7 should promote unity through interoperable AI and digital regulations that facilitate responsible adoption while reducing compliance burdens.

Policy actions:

- **Collaborate with industry to advance shared AI standards and classifications among G7 and like-minded countries,** including through greater clarity for the voluntary implementation of the Hiroshima AI Process and frameworks such as ISO 42001, while supporting responsible leadership by larger firms, enabling smaller companies to innovate, and advancing adaptable, future-ready frameworks.
- **Establish sector-specific, regulator-led G7 taskforces** in priority sectors to review where regulatory innovation, such as sandboxes, could help enable AI adoption.

2 Facilitate secure and seamless cross-border data flows.

To unlock the economic benefits of digital trade and AI-driven economies, the G7 should strengthen mechanisms that enable trusted, seamless data flows while ensuring privacy and security.

Policy actions:

- **Implement DFFT agreements among G7 members** through the Institutional Arrangement for Partnership (IAP) while working to ensure that ongoing trade negotiations include provisions for the secure free flow of data.
- **Partner with industry to promote digital trust** by building upon initiatives like the G7 Compendium of Digital Government Services to share best practices for facilitating trust-based cross-border data flows.
- **Reduce barriers for MSMEs by establishing industry-specific digital compliance hubs** to share best practices and increase understanding of regulations surrounding data storage, localization, transmission, and privacy.

Target outcomes for coordinated G7 action

- [x] **Increased percentage of digital cross-border transactions within G7 countries covered by a DFFT agreement**

Implementation example: *Interoperable Europe Act*[67]

The *Interoperable Europe Act* aims to enhance interoperability and cooperation among public sector entities across the EU, facilitating seamless digital public services for citizens and businesses.

Action: The EU mandated interoperability assessments for new public services, promoted best practice sharing, and established a body to coordinate cross-border interoperability.

Outcome: The EU expected to save up to €5 billion annually, ensure secure and efficient cross-border data transfers, drive innovation via regulatory sandboxes, and support the goal of 100% online public services by 2030.

[67] European Commission (2025; Accessed 2025/02/10); European Commission (2024); European Commission (2024); European Commission (2022)

Chapter 3

Invest in a Secure and Clean Energy Economy

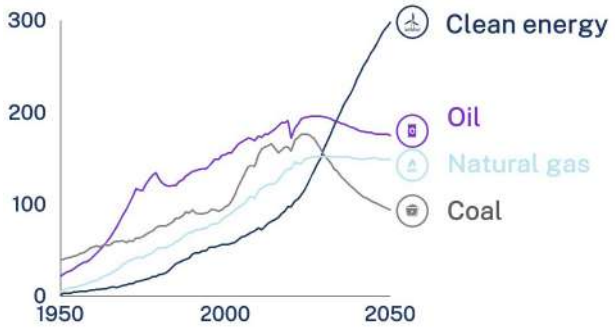
3.1 Energy sustainability, affordability, and security

Context

Governments today are grappling with an unprecedented energy challenge that demands urgent and strategic action to address the energy trilemma — the difficulty of ensuring energy security, sustainability, and affordability. As global energy demand is projected to rise by nearly 50% by 2050,[68] driven by standard of living increases, industrial expansion, and population increases, G7 nations must strengthen their capacity to support collective energy security and overhaul their energy systems to meet this demand. This transformational expansion of energy systems is unfolding amid supply chain vulnerabilities exacerbated by geopolitical tensions, including the war in Ukraine and instability in the Middle East. These disruptions have underscored the risks of concentrated energy supply chains, elevating energy policies as a critical issue of economic resilience and national security. To navigate this challenge, G7 countries should pursue a coordinated approach that reconciles shared global objectives with distinct national priorities.

A core pillar of this transformation is the commitment to meeting environmental objectives guided by international climate agreements that continue to shape policy. Ongoing multilateral efforts under the UN Framework Convention on Climate Change have galvanized global efforts to curb emissions and accelerate the shift towards lower-carbon energy sources[69]. Recent agreements, such as the *Paris Agreement* at COP21, the *Glasgow Climate Pact* at COP26 and the *UAE Consensus* at COP28, have reinforced these ambitions, calling for accelerating efforts towards the phasedown of unabated coal and a tripling of renewable energy capacity.[70] Additionally, the launch of the Oil & Gas Decarbonization Charter at COP28 aimed to accelerate action to reduce emissions in the oil and gas sector. Yet despite these commitments, the world remains far off-track, with clean energy — which includes renewables, modern bioenergy, nuclear, abated fossil fuels, low-emissions hydrogen and hydrogen-based fuels — projected to meet only 40% of global energy demand by 2050 (Figure 14).[71] This is well below the nearly 90% required to achieve net-zero emissions by 2050.[72] The scale of investment needed to bridge this gap is substantial, necessitating a significant expansion of clean and lower-carbon energy infrastructure, innovation, and financing.

Figure 14 | Global energy mix in stated policy scenarios *(exajoules)*



Source: IEA (2024)

[68] IEA World Energy Outlook (2024)
[69] UNFCCC (2024)
[70] UNFCCC (2024)
[71] IEA World Energy Outlook (2024)
[72] IEA World Energy Outlook (2024)

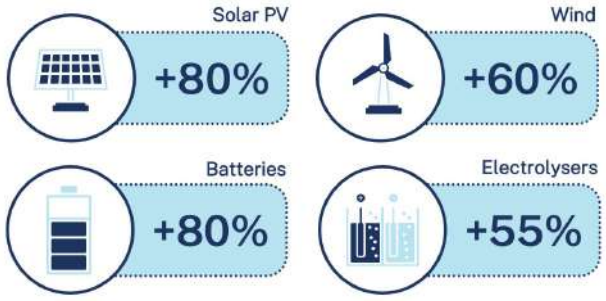
Securing financing to meet the increase in global energy demand while also reducing emissions presents another major challenge. The debate centres on two primary funding pathways: government-backed public investment or consumer-driven cost absorption.[73] Public investment provides long-term economic benefits by creating durable infrastructure but fiscal constraints and political resistance to tax hikes limit its feasibility.[74] Conversely, shifting costs to consumers risks disproportionately burdening low-income households and energy-intensive industries, potentially stifling economic growth and competitiveness.[75] The scale of required investment is significant: Meeting solar and wind deployment targets alone could require between $41–57 trillion by 2050,[76] with an additional $18 trillion needed for energy and industrial infrastructure by 2030.[77] A financing strategy that adopts a technology-neutral approach and is scalable is crucial to mobilizing the necessary capital without destabilizing economies or widening social inequities. Achieving this will require coordinated G7 leadership that can support a secure energy transformation.

At the same time, energy security remains central to the energy trilemma, highlighting the need to diversify supply chains while ensuring affordable and reliable access to energy. The consequences of over-reliance on limited suppliers have become starkly evident. In the wake of the Russian invasion of Ukraine, Russian gas exports to the EU dropped from 47% to 13% of total supply, demonstrating the geopolitical risks of energy dependence.[78] Meanwhile, China dominates more than 80% of global manufacturing capacity, 60% of the worldwide critical minerals production, and 85% of processing capacity for key clean energy components, such as batteries and solar photovoltaic panels (Figure 15), underscoring potential supply chain fragilities.[79,80] Addressing these vulnerabilities requires a multi-pronged approach, including securing critical minerals supply chains and leveraging additional energy sources like oil and liquefied natural gas (LNG) as a complementary solution to fully scaled renewables, with LNG demand predicted to increase well into the next decade and beyond. With certain G7 countries, such as Canada, possessing abundant domestic reserves, the opportunity exists to scale up LNG production to reduce reliance on external suppliers while bridging the shift to fully scaled renewables.[81]

Strengthening domestic energy technology innovation is essential for reducing reliance on external supply chains and advancing sustainability objectives. Strategic investments in natural gas production and LNG export, alongside clean energy capacity, play a key role in addressing the energy trilemma by simultaneously promoting security, affordability, and sustainability. Expanding wind, nuclear power, solar, hydropower, hydrogen and its derivatives like ammonia — while accelerating research into emerging renewable technologies like hydrogen and SMRs — can enhance security by mitigating reliance on external supply chains. Strengthening domestic energy innovation is essential, particularly given that G7 countries are currently falling behind China in clean technology development and deployment.[82]

In addition to security benefits, continued development of natural gas and LNG markets is necessary to stabilize volatile global energy markets, expand energy access in emerging economies, and complement the expansion of renewable energy (e.g., nuclear power) while offering a reliable and cleaner alternative to coal-fired power generation and industrial use. Taken together, a coordinated strategy will be necessary to support long-term energy security.

Figure 15 | China's share of clean energy manufacturing supply chains *(2023)*



Source: IEA (2024)

[73] BCG (2025)
[74] BCG (2025)
[75] BCG (2025)
[76] BCG (2023)
[77] BCG Centre for Energy Impact (2023)
[78] Reuters (2025)
[79] GMF (2023)
[80] IEA World Energy Outlook (2024)
[81] Institute for Energy Economics and Financial Analysis (2024)
[82] BCG (2024)

Energy Sustainability, Affordability, and Security

Recommendations for G7 leaders

1 Scale investments in energy supply and infrastructure to ensure stability and resilience across G7 countries.

To secure reliable and affordable energy systems, the G7 should increase investments in energy production, infrastructure, and diversification of supply sources, while recognizing various pathways towards net-zero.

Policy actions:

- **Increase investment in energy supply, infrastructure, and technologies**, including upgrades required to integrate clean energy sources, while leveraging public procurement agreements to drive resilience, security, and private sector confidence.
- **Ensure predictability of conventional energy investments, including as it relates to oil and LNG, to maintain affordable and reliable energy supply during the energy transformation.** This entails bolstering investment certainty and protection, and securing supply resilience, while recognizing that G7 members have different energy mixes and requirements.
- **Streamline permitting for all energy infrastructure licenses** — including renewables, nuclear, Carbon Capture and Storage/Carbon Capture, Utilization and Storage, conventional energy, pipelines, and transmission networks — to accelerate deployment, enhance resilience, and reduce reliance on chokepoints, while upholding environmental and community safeguards.

2 Strengthen energy security through market-based and financial mechanisms.

To enhance supply resilience and affordability, the G7 should establish financing tools that de-risk investments and expand clean energy production.

Policy actions:

- **Recognize the importance of financing for the energy transformation and explore establishing a framework among G7 countries on technologically neutral finance** to incentivize investments that enhance security, strengthen supply diversification, and expand clean and reliable energy production across G7 and like-minded countries.
- **Enhance energy security through demand-side measures**, including efficiency incentives, demand response programs, and market-based tools that balance supply needs with cost stability.

3 Accelerate innovation to close the clean energy supply-demand gap.

To maintain global competitiveness and meet net-zero goals, the G7 should drive investment and R&D in advanced energy technologies.

Policy actions:

- **Scale investment in existing renewable and low-carbon energy resources** — including wind, solar, and energy storage solutions, and sustainable aviation fuel — to enhance grid stability, drive cost reductions, and accelerate deployment at scale.
- **Invest in Carbon Capture, Utilization, and Storage (CCUS) technologies such as post**-combustion, pre-combustion, and direct air capture, to expand CO2 capture opportunities (e.g., Canada's Pathways Alliance), recognizing that deployment speed and investment will vary by country priorities and industrial context.
- **Accelerate R&D and implementation of hydrogen and its derivatives like ammonia** to achieve decarbonization of thermal power generation and heat demand.
- **Catalyze breakthrough energy innovations (e.g., advanced geothermal, next-generation nuclear reactors, including SMRs, fast reactors, high temperature gas-cooled reactors, and fusion reactors)** by developing targeted financing mechanisms, risk-sharing frameworks, and strategic public-private partnerships to bridge the gap between research and commercial viability.

Target outcomes for coordinated G7 action

✔ Improve the G7's global position in the World Energy Council's trilemma index

Implementation example: REPowerEU[83]

REPowerEU is a €300 billion investment plan launched by the European Commission in response to the Russian invasion of Ukraine, aiming to boost clean energy, diversify supplies, and save energy across the EU.

Action: The European Commission established an EU Energy Platform for aggregated gas demand, accelerated low-carbon energy targets, and introduced robust storage measures to safeguard energy supply.

Outcome: REPowerEU reduced reliance on Russian gas from 45% to 15% between 2021–2023, more than doubled solar output since 2019, and reached 95% strategic gas reserve capacity in 2022, collectively enhancing EU energy security.

[83] European Commission (2024)

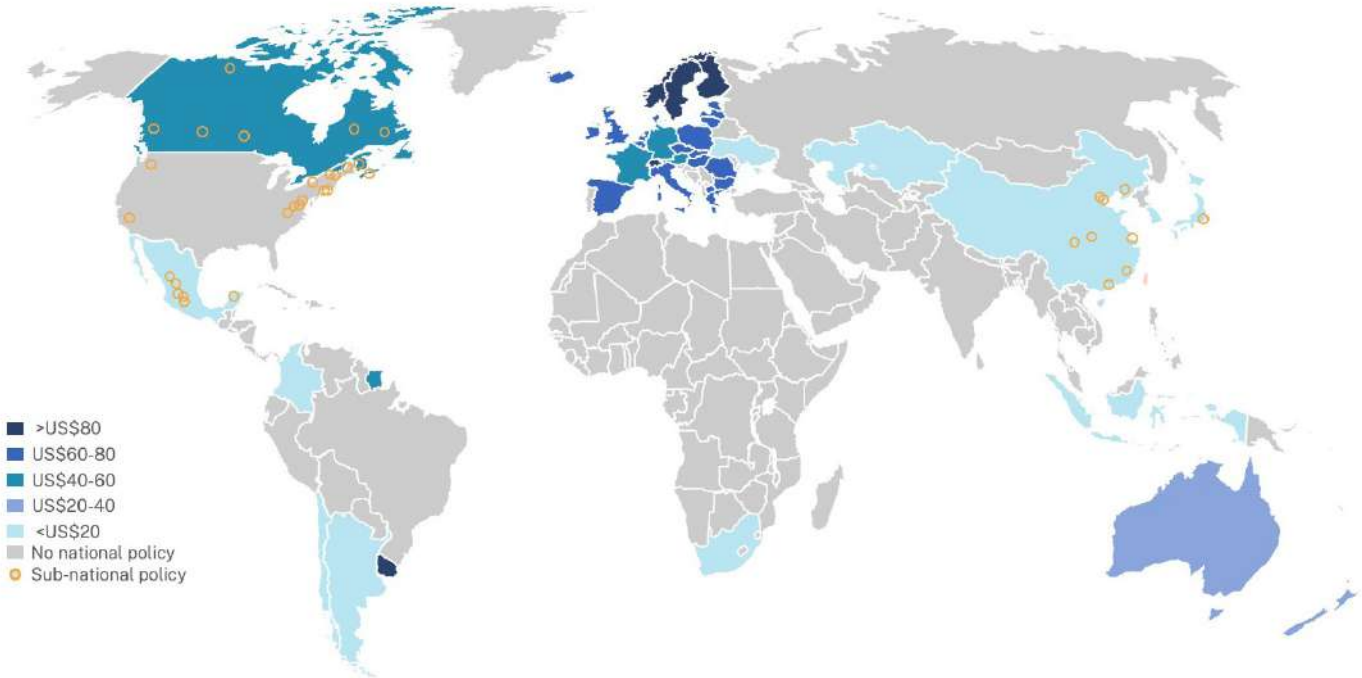
3.2 Carbon measurement and compliance efficiency

Context

Today, global compliance carbon pricing policies and accounting methodologies are highly fragmented, creating significant regulatory costs, operational inefficiencies, and competitive challenges for businesses (Figure 16)[84]. The existence of over 100 distinct carbon pricing mechanisms worldwide, with prices ranging from ~$1.91–61.30/tCO2e across the G7 alone, underscores the complexity of the current system.[85] This fragmentation extends to underlying accounting methods. There are different approaches for company-level accounting (used for corporate emission reporting), installation-level accounting (for facility-specific compliance schemes), and product-level accounting (critical for trade-related mechanisms).

Moreover, compliance carbon markets — which include systems like emissions trading schemes and regulatory tools such as Border Carbon Adjustments (BCAs) — differ fundamentally from voluntary carbon markets. Similarly, the concepts of carbon credits (often used in voluntary markets) and carbon allowances (used in compliance markets) are distinct, further complicating the landscape. However, recognizing and integrating offsetting mechanisms — such as the Joint Crediting Mechanism (JCM) — as valid compliance tools can reduce administrative burdens and support market flexibility. In addition, some taxes and levies on energy use, regulations that discourage carbon emissions, and subsidies for

Figure 16 | Global carbon prices *(2024)*



Source: World Bank Group (2024)

[84] World Bank Group (2024)
[85] World Bank Group (2024)

Figure 17 | Carbon leakage effect of a $1/ton CO2e carbon pricing increase on steel and cement

Source: OECD (2024)

low or zero-carbon technologies or behaviors result in implicit carbon prices. Most jurisdictions deploy a range of both implicit and explicit price instruments, with the policy mix depending on their specific circumstances, such as the level of economic development or the availability of and access to natural resources and clean technologies.

This fragmentation in carbon-mitigating measures and methodologies forces businesses to navigate multiple reporting frameworks, comply with differing corporate-, installation-, and product-level carbon accounting requirements, duplicate compliance efforts, and engage with different verification systems, increasing administrative burdens and costs. This fragmentation also risks undermining progress towards Sustainable UN Development Goals (SDGs) by making it more difficult for countries and businesses to implement effective emissions reductions. Businesses operating in regions with higher carbon prices and energy costs are at a competitive disadvantage in export markets with low or no carbon pricing. It can also distort investment decisions, thereby exacerbating disparities across markets.

Beyond direct compliance cost implications, fragmented carbon-mitigating measures risk undermining the effectiveness of emission reduction efforts through "carbon leakage" (Figure 17).[86] Carbon leakage occurs when emission-intensive production shifts to regions with lower carbon pricing that then ship those products back to the original market. This both diminishes the environmental benefits of domestic climate policies and disadvantages domestic emission-intensive industries. For example, according to an analysis by the OECD, a $1/tCO2e increase in carbon pricing on steel and cement can achieve a ~1% reduction in domestic CO2e emissions.[87] However, ~13% of this reduction is offset by emissions shifting to jurisdictions with less stringent regulations, reducing the overall impact of the carbon pricing in the original market.[88]

Recent proposals by several G7 members, such as the implementation of BCAs (with the EU's mechanism in force from January 2026 and others following), aim to address these challenges. However, the introduction of BCAs also brings new compliance challenges, particularly as different jurisdictions may adopt varying methodologies for determining embedded emissions in products. If these issues are not properly addressed, businesses will continue to face higher administrative costs and uncertainty in compliance requirements across jurisdictions. Without clear, coordinated approaches that reduce the burden on businesses, governments risk slowing progress toward net-zero — and in so doing, may undermine economic stability and the livelihoods of citizens across the G7.

[86] OECD (2024)
[87] OECD (2024)
[88] OECD (2024)

Carbon Measurement and Compliance Efficiency

Recommendations for G7 leaders

1 Reduce business compliance costs through coordinated carbon accounting measures.

To enhance business competitiveness and reduce compliance costs, the G7 should work to build a shared understanding of carbon pricing measures across countries. It should also consider spillover effects of BCAs and response measures which have the ability to mitigate carbon leakage but can also negatively impact trade flows. Coordinated carbon accounting measures could encompass both explicit pricing and implicit mechanisms — such as regulations, energy taxes, and levies — recognizing the diverse pathways to carbon emissions mitigation. Additionally, countries vary in how they prioritize SDGs, particularly those focused on energy security, based on their unique national contexts.

Policy actions:

- **Promote international coordination of corporate carbon accounting and reporting standards**, such as ISO 14064 and the Greenhouse Gas Protocol, to reduce compliance costs and accelerate the shift to a lower-carbon economy; encourage related discussions in forums including the WTO Committee on Trade and Environment (WTO-CTE) and the OECD's Inclusive Forum on Carbon Mitigation Approaches (IFCMA) to foster mutual understanding on fair and transparent accounting methods.
- **Support the development of globally recognized product-level carbon accounting methodologies** (e.g., ISO 14067 and the Greenhouse Gas Protocol) to improve consistency and reduce compliance burdens through discussions, including in the WTO-CTE and IFCMA, alongside smoothing imbalances in carbon prices.
- **Consider the inclusion of international offset mechanisms**, like the JCM, within compliance carbon markets to enhance flexibility, facilitate global emissions reductions, and reduce overall compliance costs.

Target outcomes for coordinated G7 action

✔ **Lower carbon-related compliance costs for businesses**

Implementation example: Japan's JCM[89]

Japan developed the Joint Crediting Mechanism (JCM), through which it supports greenhouse gas reduction projects in partner countries and receives credits for resulting emission reductions.

Action: Japan funded emissions-reduction projects abroad, harmonized monitoring and reporting standards to accurately track emissions, and operationalized Article 6.2 of the *Paris Agreement* for internationally transferred mitigation outcomes.

Outcome: As of February 2025, Japan established the JCM with 29 partner countries, and conducted more than 260 projects, 47 of which have resulted in the issuance of credits, thereby strengthening global climate collaboration.

[89] JCM (2024)

Chapter 4

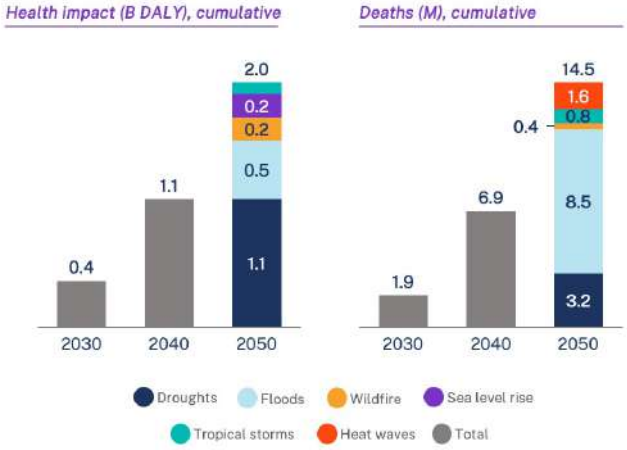
Strengthen Systemic Security and Resilience

4.1 Global health security

Context

Global health security encompasses proactive and reactive measures to prevent, detect, and respond to cross-border health threats, relying on continuous innovation to drive solutioning specific to the geographic context. A well-functioning and agile global health system is foundational to these efforts; however, the current architecture is at a critical inflection point given unprecedented funding challenges coupled with significant and sudden loss of expertise and capacity. Without urgent reforms and sustained investment, these challenges risk undermining the progress made in pandemic preparedness, disease prevention and eradication, and health equity, and could even result in backsliding.[90,91] At the same time, emerging issues that threaten both health and economic security, particularly antimicrobial resistance, weather-related health risks, and the rising burden of communicable and non-communicable diseases, which together pose a dual burden in LMICs, further underscore the criticality of continued, coordinated investments in health systems and innovation. This moment of transition presents an opportunity for policymakers, informed by the experiences of the private sector and civil society, to be intentional and forward-looking as they seek to chart a future in global health.

Figure 18 | Impact of weather-related events on health

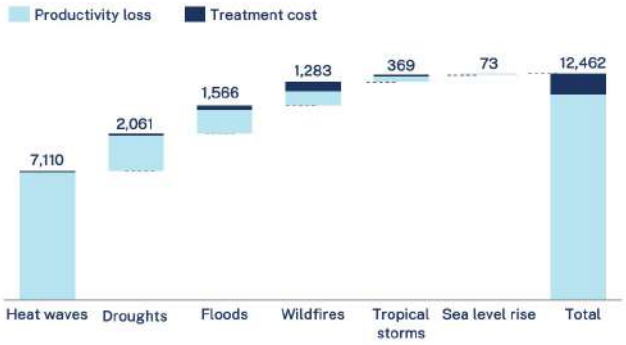


Source: OECD (2024)

The need for a system that is capable of complex response is particularly acute given the increasing frequency and scale of emerging health threats, driven by factors such as aging and growing populations, urbanization, environmental degradation, globalization, demographic changes and weather-related events.[92,93,94] The COVID-19 pandemic revealed widespread unpreparedness across the global health system, including with respect to the resilience of medical supply chains. The resulting economic fallout was severe, with the GDP of G7 members declining by 4.2% in 2020, equivalent to approximately $1.6 trillion (in 2015 constant prices) in lost economic

[90] The New England Journal of Medicine (2020)
[91] Johns Hopkins Bloomberg School of Public Health (2025)
[92] BMJ Global Health (2023)
[93] Nature (2022)
[94] Nature (2021)

Figure 19 | Cost of adverse health outcomes from weather-related events by 2050
($ billion, cumulative)



Source: WEF (2024)

output.[95] Beyond pandemics, extreme weather events are projected to substantially increase premature mortality and years of healthy life lost,[96] resulting in 14.5 million preventable deaths by 2050 (Figure 18).[97] In addition to the devastating human loss, the economic ramifications of such crises, including trillions of dollars in productivity losses, represent an increasingly pressing threat to global economic stability (Figure 19).[98] Chronic conditions add yet another layer to this challenge — noncommunicable diseases (NCDs) could cost the global economy more than $30 trillion from 2011–2030, representing 48% of global GDP in 2010.[99]

And while life expectancy in G7 countries is on the rise again,[100] tracking this metric alone tells an incomplete story. As the share of those over 65 is soon to outnumber those aged 0–19,[101] there is increasing concern that the additional years lived are not guaranteed to be healthy,[102] and this dynamic is likely to drive complex healthcare demands, straining medical systems and resources.

To help address these growing challenges, fostering health innovation should remain a core priority, especially to drive advancements in prevention, screening, diagnostics, and treatment — which could include digital health, precision and personalized medicine, and vaccination programs. Investing in innovation provides strong, demonstrable returns — every $1 of public funding for basic research generates ~$8 in industry investment within eight years.[103] In particular, the life sciences sector plays a key role in advancing health innovation, contributing to the development of safe and effective treatments alongside academic and public research efforts. Led by the private sector and underpinned by years of public research, the swift development of COVID-19 vaccines illustrates the power of a pro-innovation environment — a framework that could be key to addressing growing challenges like antimicrobial resistance, which has the potential to cut global GDP by 1.1–3.8% by 2050.[104] To ensure these breakthroughs are accessible to all and bridge the innovation gap in LMICs, there should be a focus placed on sustainable funding mechanisms, strengthened health system capacity — encompassing workforce development and readiness — and collaborative partnerships, which could include voluntary licensing mechanisms, where relevant.

The need for a more cohesive and future-ready global health system extends beyond public health — it is an economic and security imperative. In today's interconnected world, global health challenges disrupt global supply chains as well as trade and economic stability, underscoring the need for coordinated, multilateral action, investment in health system readiness, emergency preparedness, and a focus on innovation. Gaps exposed during the pandemic highlight the need for a fit-for-purpose global health system in responding to increasingly complex health challenges.[105]

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[95] BCG internal analysis (2024)
[96] One DALY represents the loss of the equivalent of one year of full health. DALYs for a disease or health condition are the sum of the years of life lost to due to premature mortality and the years lived with a disability due to prevalent cases of the disease or health condition in a population, WHO
[97] WEF (2024)
[98] WEF (2024)
[99] WEF and the Harvard School of Public Health (2011)
[100] Statista (2025)
[101] Statista (2025)
[102] BMC Public Health (2024)
[103] Global Health Technologies Coalition (2024)
[104] World Bank Group (2017)
[105] The Independent Panel for Pandemic Preparedness and Response (2021)

Global Health Security

Recommendations for G7 leaders

1 Drive efforts to stabilize and reshape global health architecture.

To ensure a strategic approach to current shifts in the global health architecture, which includes driving structural changes and facilitating collective action on global health issues, the G7 should dedicate concerted efforts to supporting system reform and resilience, while also supporting ongoing global coordination, including at the WHO.

Policy actions:

- **Convene a dedicated G7-led working group on global health** to critically assess and propose bold reforms for a more resilient, equitable, and sustainable global health architecture, while fostering enhanced coordination and resource mobilization among relevant actors including the WHO, regional health bodies, G7 and like-minded governments, global health initiatives (e.g., Gavi, Global Fund to Fight AIDS, Tuberculosis, and Malaria), donors, non-governmental organizations, the private sector, and others.
- **Strengthen global health financing by providing sustained and predictable investment** to support implementation of critical long-term health reforms and ensure access to essential health services, particularly in resource-limited regions.
- **Integrate resilience into existing health systems to manage surges in healthcare demand** linked to extreme weather, particularly to protect vulnerable populations in both G7 and LMICs (e.g., targeted investments in digital health, technical exchanges on surveillance and early warning systems, etc.).

2 Bolster capacity to prevent and respond to emerging health threats.

To mitigate the growing risks of pandemics and weather-related health emergencies, and to tackle the growing burden of NCDs, the G7 should continue to elevate the need for investments in prevention, including diagnostic systems, immunization, and disease surveillance, while also enhancing data-sharing and rapid response coordination.

Policy actions:

- **Strengthen global health surveillance and early warning systems**, to improve cross-border data sharing and response time by providing sustainable and predictable funding and leveraging digital health technologies, including the responsible integration of AI.
- **Establish a G7-coordinated health emergency response framework**, which could include public (e.g., Gavi) and private sector expertise (e.g., research and development,

manufacturing and supply chain management, etc.), to standardize rapid, multilateral action during pandemics and health crises, and expand the International Pandemic Preparedness Secretariat 100 Days Mission with increased funding and governance.
- **Enhance the resilience of global medical supply chains** by committing to the uninterrupted and equitable flow of critical medical supplies between partners, particularly during health crises, fostering diverse sourcing strategies, leveraging partnerships with private and public stakeholders, coordinating on contingency stocks of critical supplies.

3 Advance global health innovation to keep pace with emerging health threats.

To drive long-term global health security and economic growth, the G7 should foster a pro-innovation environment to catalyze next generation R&D as well as advancements in biotechnology and bioeconomy, particularly to support efforts to tackle existing and novel health threats, such as antimicrobial resistance, weather-related health risks, and NCDs.

Policy actions:

- **Foster a pro-innovation health environment among G7 and like-minded countries** by adopting an incentive-led approach that includes robust, stable and predictable intellectual property (IP) rights; a focus on research and development, including open innovation models; and public-private partnerships and other local partnerships, which could include voluntary technology transfers and voluntary licensing on mutually agreed terms.
- **Encourage information and best practice exchange within G7 governments on key health innovation topics and strategies** to identify where there are strategic gaps in collective capabilities and to share best practices, including on digital health (e.g., AI, interoperability of health data), precision medicine and genomics, biomanufacturing and vaccines, and the development and use of Digital Public Infrastructure to support scalable and secure health solutions.
- **Support health innovation in LMICs** by creating an ecosystem to back innovation and incentives for voluntary technology transfer on mutually agreed terms and industry-led technical assistance and capacity-building programs; promoting sustainable financing models; and sharing best practices, including with the support of the private sector.

Target outcomes for coordinated G7 action

- ✔ **Increase in health system readiness indicators (e.g., diagnostic capacity, digital infrastructure adoption, specialized workforce availability, etc.) in both G7 countries and LMICs**
- ✔ **Increased percentage of global disease surveillance systems leveraging modern digital tools**

Implementation example: IPPS 100 Days Mission (2021)[106]

In response to COVID-19, the International Pandemic Preparedness Secretariat (IPPS) proposed recommendations to allow deployment of diagnostics and therapeutics within 100 days of discovering a future pandemic threat.

Action: The IPPS developed 25 policy recommendations to improve pandemic preparedness through increased R&D /diversified manufacturing of diagnostics, therapeutics, and vaccines (DTVs); strengthened global health governance/regulation; and increased global disease surveillance.

Outcome: The IPPS improved collaboration, increased funding, and ensured rapid resource allocation for global disease surveillance by having the G7, G20, and WHO align on pre-approved pandemic response funds. It also increased funding by ~$1.8 billion from 2022–2024 for platforms to develop DTVs against future diseases.

[106] IPPS (2025)

4.2 Infrastructure resilience

Context

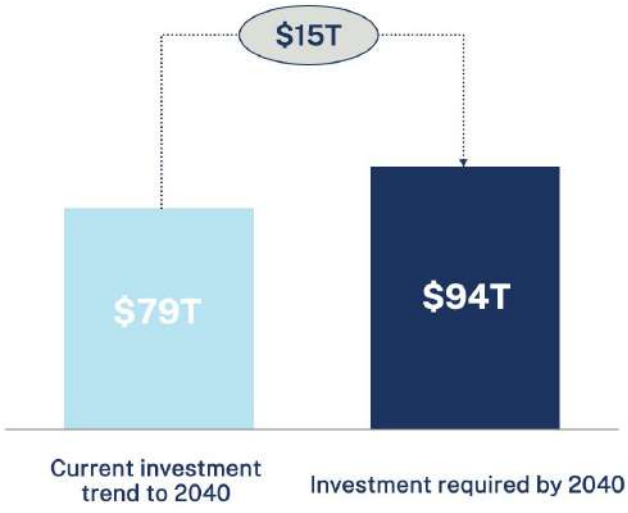
Physical infrastructure — including energy, transportation, telecommunications and digital networks — plays an essential role in generating prosperity for people and the communities in which they live and work. In particular, well-functioning infrastructure enables the efficient movement of goods and facilitates market access, ultimately driving economic growth and international connectivity. However, there are a variety of factors that are collectively straining and compromising global physical infrastructure. These include underinvestment,[107] aging systems and deferred maintenance,[108] infrastructure that is not fit-for-purpose,[109] weather-related events[110] and natural disasters (e.g. earthquakes),[111] cyber vulnerabilities,[112] and a lack of strategic redundancy to mitigate against the risk of infrastructure failure.[113]

Given the vital role infrastructure plays as a cornerstone of global social and economic activity, the costs associated with this exposure are substantial. Examples of breakdown of or damage to critical infrastructure illustrate that the effects can even go beyond the initial impact, resulting in cascading failure that jeopardizes economic stability across multiple sectors or entire supply chains.[114] To this end, investment in infrastructure contributes to economic security by ensuring systems can keep pace with economic growth and demographic change, while also strengthening national resilience through disaster prevention and mitigation. These efforts require modernized approaches to both upgrading existing infrastructure as well as building new infrastructure. This includes integrating risk assessments and adaptive strategies at every stage of a project's lifecycle — from planning and permitting to construction, operation, and maintenance. Enhancing global infrastructure also requires governments to prioritize development strategically, provide investment certainty, and create a regulatory environment that is agile and responsive.

Despite repeat calls to action emphasizing the urgency and severity of the challenge, infrastructure investment has failed to keep pace with global demand.[115] Consequently, there is a substantial funding gap that poses risks to global economic stability and resilience — a gap that will constrain the ability to meet the demands of evolving economic needs, growing populations, and changing weather patterns. Projections indicate that infrastructure requirements will continue to surpass investment, resulting in a cumulative shortfall of ~$15 trillion by 2040 (Figure 20).[116] This reflects the systemic underinvestment in critical infrastructure projects that are essential to global economic functionality. In LMICs alone, ~$56 billion in annual infrastructure adaptation investment is required until 2030, yet capital flows peaked at only ~$24 billion.[117]

A lack of resilience in the system is particularly apparent when it comes to the increasing damage and disruption caused by extreme weather events, with storms and floods driving substantial economic impact. Annual losses from extreme weather events have surged dramatically since 1970, reaching a peak of $1.6 trillion in cumulative damage between 2010–2019 (Figure 21).[118] Weather-

Figure 20 | Projected cumulative infrastructure investment gap from 2016–2040 *($ trillion)*



Source: Global Infrastructure Outlook (2017)

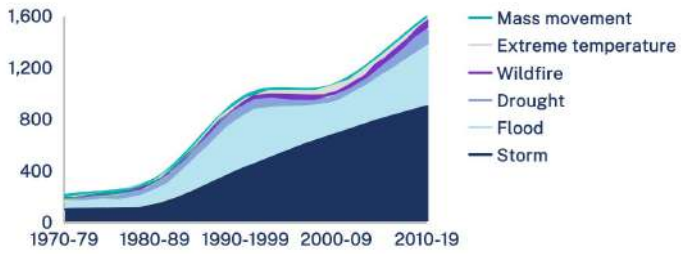
[107] Global Infrastructure Outlook (2017)
[108] WEF (2019)
[109] BCG (2025)
[110] BCG (2023)
[111] WEF (2024)
[112] WEF (2019)
[113] Institution of Civil Engineers (2025)
[114] Royal Academy of Engineering (accessed 2025)
[115] BCG (2023)
[116] Global Infrastructure Outlook (2017)
[117] BCG (2023)
[118] OECD (2024)

related port disruptions alone threaten ~$81 billion in trade annually, putting an additional ~$122 billion of downstream economic activity at risk.[119] Land transport networks are particularly vulnerable to disruption, with ~30% of global rail and roads exposed to heavy flooding and cyclone events.[120]

With global losses from infrastructure damage averaging more than $300 billion annually,[121] it is evident that despite action toward greater resilience, there is still more to be done. Without acceleration of adaptation and resilience financing, it is projected that up to ~23% of global GDP by 2100 and ~15% of companies' earnings before interest, taxes, depreciation, and amortization by 2040 will be at risk.[122] The scale of the cost of inaction, coupled with infrastructure's susceptibility to disruption, illustrates the urgency to prioritize investment in resilience. At the same time, the case for investing in infrastructure to support economic growth and prosperity is clear: For every dollar invested in infrastructure by the public sector, an additional $1.50 in economic activity is generated.[123]

The widespread impacts are particularly acute for LMICs, which bear a disproportionate share of the economic burden.[124] Given the critical role of these regions in global trade and business ecosystems (e.g., manufacturing, raw materials), the effects of their infrastructure vulnerabilities extend far beyond their borders, amplifying the urgency for G7 coordinated action. Investment in resilient infrastructure within these countries also presents an opportunity for transformative returns — for every $1 invested, $4 of return are generated.[125] Despite recent commitments for investment, the Partnership for Global Infrastructure Investment (PGII), which was established by the G7 at the 2022 Elmau Summit,[126] is currently off track to meet its goal of $600 billion by 2027.[127] Comparatively, countries such as China are investing heavily in infrastructure development in LMICs, with over $1 trillion deployed since 2013 through the Belt and Road Initiative.[128] To bridge this investment gap and mitigate the risks posed by infrastructure vulnerabilities, prioritizing targeted funding for resilience is essential. Strategic investment in LMICs offers a dual benefit: Addressing critical infrastructure needs while fostering economic stability and growth on a global scale.

Figure 21 | Economic losses from weather-related events *($ billion)*



Source: OECD (2024)

The scale of the problem both domestically and globally underscores the imperative for the G7 to act collectively, reinforcing infrastructure resilience as an economic priority. This means not only safeguarding infrastructure against disruption but also ensuring it evolves in line with demographic shifts, technological advances, and expanding economic activity. With the right investments, infrastructure systems can be powerful enablers of economic growth and social progress.

[119] Nature Climate Change (2023)
[120] BCG (2023)
[121] CDRI (2023)
[122] BCG (2023)
[123] WB PPIAF (2020)
[124] BCG (2023)
[125] BCG (2023)
[126] UofT (2024)
[127] Confindustria (2024)
[128] WEF (2023)

Infrastructure Resilience

Recommendations for G7 leaders

1 Strengthen G7 investment and cooperation towards resilient infrastructure development.

To address the growing global infrastructure investment gap, mitigate risks from weather-related disruptions, and enhance economic stability, the G7 should accelerate investments in resilient infrastructure, identify and mitigate critical vulnerabilities, and streamline permitting processes to expedite essential upgrades.

Policy actions:

- **Increase investment and share best practices for upgrading priority physical infrastructure** (e.g., energy, transportation, telecommunications and digital, water and sanitation, etc.) to facilitate increased economic activity, including by sharing multi-year project pipeline horizons to provide enhanced planning certainty for the private sector.
- **Identify priority critical infrastructure to safeguard and de-risk** by mapping vulnerable single points of failure and cascading failure that could benefit from enhanced public oversight or redundancy (i.e., backup systems or duplicate components in critical infrastructure to ensure continued operation of supply chain hubs, power grids, water treatment facilities, etc.).
- **Simplify permitting for projects and encourage inclusion of resilience measures** to reduce delays in upgrades to critical infrastructure (e.g., ports, energy networks, and transportation infrastructure) and ensure risk assessment and adaptive strategies are integrated at every stage of a project's lifecycle.
- **Accelerate G7 efforts to support infrastructure development in LMICs**, particularly for priority infrastructure such as transmission and transportation networks, by mobilizing investment and technical expertise, and by resourcing project implementation efforts for the PGII.

2 Enhance infrastructure resilience standards.

To reduce uncertainty and incentivize long-term investment in resilient infrastructure, the G7 should standardize weather-related risk integration in finance, strengthen global investment principles, and certify resilient projects to de-risk infrastructure development.

Policy actions:

- **Align on a G7-certified framework for integrating weather-related risk considerations into lending and insurance practices** — implemented in a manner that safeguards the efficient flow of capital and avoids introducing undue administrative burdens — to incentivize the prioritization of resilience in private infrastructure investment, potentially through a G7 working group coordinated by G7 central banks.
- **Elaborate on the G20 Principles for Quality Infrastructure Investment with guidelines on the integration of weather-related risk assessments** to advance resilient design in infrastructure projects.
- **Adopt a G7 certification of resilient infrastructure projects, building on the Blue Dot Network**[129], to reduce uncertainty and risk in infrastructure investment.

Target outcomes for coordinated G7 action

- ✔ **Decreased cumulative global infrastructure investment gap for 15-year outlook**
- ✔ **Increased percentage of $600 billion committed to PGII invested in infrastructure development**

Implementation example: PGII – Lobito Corridor (2023)[129,130,131,132]

The G7 and other partners have collectively invested ~$6 billion to refurbish the Lobito Corridor, the land transport network connecting the Democratic Republic of the Congo, Zambia, and the Port of Lobito in Angola.

Action: Governments (EU, U.S., Angola, Democratic Republic of the Congo, Zambia), private sector (AFC), and development banks (AfDB) collaborated to deploy ~$6 billion of capital via public-private partnerships, grants, and concessional financing and provided grants for Environmental and Social Impact Assessments to ensure rail refurbishment and development aligns with international best practice.

Outcome: PGII strengthened rail infrastructure via ~1,300 km of rail refurbishment and ~800 km of new rail; increased the region's integration to global value chains by, for example, reducing transportation time to the U.S. from 45 days to 45 hours; and reduced environmental damage from trucking of critical minerals.

[129] European Commission (2023)
[130] AFC (2024)
[131] Atlantic Council (2024)
[132] DFC (2024)

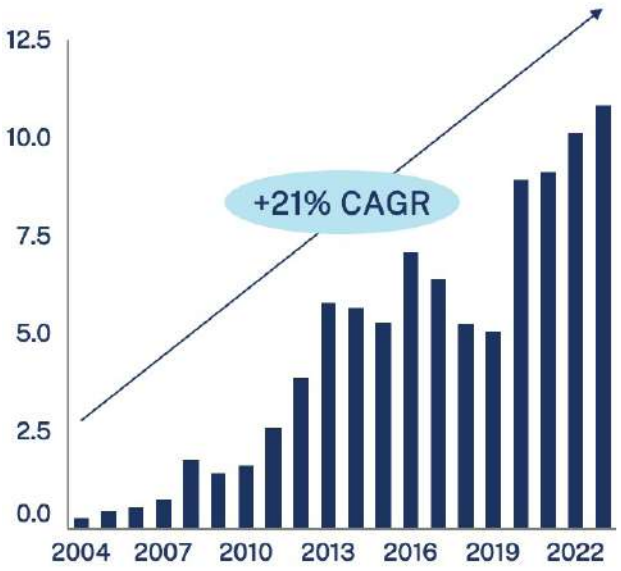
4.3 Cyber security preparedness

Context

In an increasingly digital world, cyberspace has become a new theatre of geopolitical and economic conflict where both state and non-state actors carry out increasingly sophisticated and malicious operations. The global nature of cyberspace means that cyber crime can occur instantaneously across borders, thus demanding innovative strategies and coordinated efforts to combat these threats effectively. Unlike traditional domains of conflict, cyberspace is deeply woven into everyday life, underpinning critical infrastructure such as energy grids, transportation systems, supply chains, healthcare, and financial networks. This integration amplifies the stakes of cyber attacks, as disruptions can have cascading effects on economic security, national security, businesses, and the daily lives of citizens.

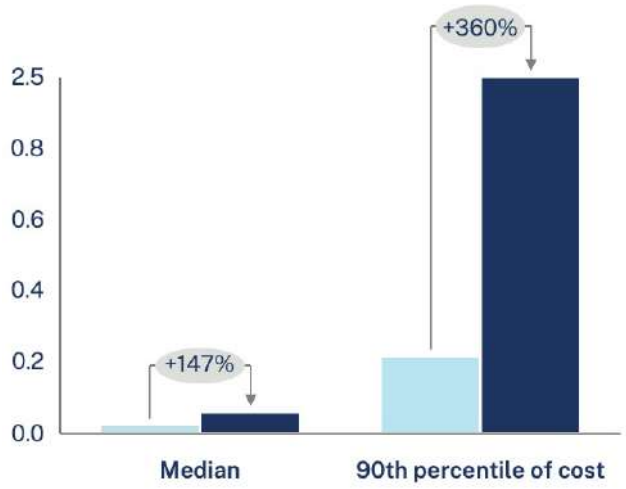
Cyber security preparedness is a pressing concern for governments and businesses alike as cyber attacks have grown in frequency, severity, and sophistication. By 2025, the global cost of cyber crime is projected to reach ~$2 trillion, reflecting both immediate losses and the downstream costs of disruption and recovery.[133] The frequency of incidents have seen a compound annual growth rate (CAGR) exceeding 20% since 2004, with an average of more than 8,000 incidents per year recorded between 2019–2023 (Figure 22).[134] The economic impact of cyber events has also escalated, with the most severe individual incidents in 2021 resulting in losses of ~$2.5 billion per event (Figure 23).[135]

Figure 22 | Frequency of cyber incidents *(k)*



Source: International Monetary Fund (2024)

Figure 23 | Maximum losses from cyber incidents *($ billion)*



Source: International Monetary Fund (2024)

Beyond the economic toll, cyber attacks pose a significant threat to national security. These attacks originate from a variety of sources, including individuals, organized crime, state, and non-state actors, all exploiting vulnerabilities in increasingly digitized societies.[136] The risks extend beyond financial losses and reputational damage to include espionage, disinformation campaigns, IP theft, and the potential disruption of critical infrastructure that could destabilize entire economies and undermine trust in private and public institutions.[137]

Private companies play an essential role in safeguarding digital infrastructure used by society, putting them at the frontlines of cyber attacks. From ransomware targeting software used in hospitals that delays emergency care, to cyber

[133] BCG (2024)
[134] International Monetary Fund (2024)
[135] International Monetary Fund (2024)
[136] Microsoft Digital Defense Report (2024), WEF (2024)
[137] Canadian Centre for Cyber Security (2024)

intrusions into food distribution systems that cause supply shortages, to breaches in banking infrastructure that disrupt the economy — the potential for societal upset is significant given how deeply the digital systems of the public and private sectors are intertwined. Strong cooperation between businesses and governments, including government support for businesses' efforts to combat cyber crime, is therefore critical.

Despite these dynamics, a global survey of Chief Information Security Officers found that less than one third of companies worldwide had adopted the highest standard of cyber security practices, leaving significant vulnerabilities.[138] While businesses worldwide are investing heavily — projected to spend over $200 billion on information security alone in 2025 — they face significant barriers to improving their cyber defence.[139] For instance, some estimates suggest that 40–70% of cyber security teams' time is spent on regulatory compliance.[140,141] Moreover, there is an acute talent gap, with fewer than four qualified professionals for every five cyber security jobs.[142] These issues highlight the fact that businesses, particularly MSMEs, need support to optimize for prevention, detection, and mitigation, which could include government reassessing burdensome regulatory obligations, as well as cyber security best practice sharing to enhance overall cyber literacy.

The challenge is compounded by ongoing technological advancements, such as AI and quantum computing, which continually raise the stakes in the cyber security arena.[143] Even companies that maintain robust security measures today will have to invest in innovation, training, and resilience to counter emerging threats enabled by rapidly advancing technology.

Addressing these challenges requires urgent, coordinated action from G7 members. The stakes of inaction are high: unmitigated cyber crime can destabilize critical industries, expose sensitive government data and corporate IP, and put citizens' safety and privacy at risk. From identity theft to disruptions in essential services like healthcare and finance, cyber attacks have direct, real-world consequences for everyday life. Beyond financial harm, the erosion of public trust in digital systems and institutions could stifle innovation and weaken the global economy.

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[138] BCG (2024)
[139] Gartner (2024)
[140] BCG (2019)
[141] Senate Committee on Homeland Security & Governmental Affairs (2024)
[142] BCG (2024)
[143] BCG (2024)

Cyber Security Preparedness

Recommendations for G7 leaders

1 Strengthen cyber resilience to safeguard economic and national security.

To counter the rising frequency and financial impact of cyber attacks, the G7 should enhance cyber security readiness by promoting interoperability of regulations, protecting critical infrastructure, expanding access to cyber training, and fostering innovation in defence against emerging threats like AI-enabled cyber crime and quantum computing risks.

Policy actions:

- **Enhance interoperability of existing and future cyber security regulations across G7 and like-minded countries**, including development of mutual recognition frameworks for compliance, aligned standards for secure software development, and streamlined incident reporting mechanisms.
- **Identify priority critical infrastructure to safeguard and de-risk** by mapping which are most vulnerable to cyber attacks and could therefore benefit from added protection.
- **Advance research to combat next generation cyber threats** from AI and quantum computing by encouraging collaboration between government, industry, academia, and polytechnics and support efforts to apply research, including through commercialization.
- **Support organizations, particularly MSMEs and not-for-profits, to address cyber security vulnerabilities** with best practice sharing, streamlined compliance requirements, access to training and talent development, and promotion of cyber insurance investment schemes.

2 Enhance international collaboration to prevent and prosecute cyber crime.

To combat cross-border cyber threats, the G7 should strengthen multilateral cooperation on cyber defence, intelligence sharing, and law enforcement coordination.

Policy actions:

- **Develop a common standard for cyber resilient digital infrastructure** to safeguard both physical assets, such as undersea cables, and intangibles like health data.
- **Increase collaboration between intelligence agencies, law enforcement bodies, and businesses** (e.g., internet providers, financial institutions) by building off existing

mechanisms, such as the G7 Roma-Lyon Group and International Counter Ransomware Initiative to facilitate threat detection through information sharing and voluntary reporting.

- **Increase cooperation among international law enforcement bodies in line with the UN Convention against Cybercrime** to promote robust investigations in countries where perpetrators operate and improve tools and processes to detect and confiscate illegal financial flows.
- **Leverage the G7 Rapid Response Mechanism** to coordinate action against international cyber attacks and align diplomatic action against actors committing or facilitating cyber crime.
- **Expand the circle of digital trust** between the G7 and like-minded countries to ensure a secure digital foundation for critical infrastructure, key industries, economic security, and government systems, underpinned by shared standards on data security and ethics.

Target outcomes for coordinated G7 action

✔ Decreased frequency of cyber incidents impacting G7 businesses

Implementation example: PGII – Ukrainian cyber defence (2022)[144,145,146]

In response to Russian cyber aggression during the invasion of Ukraine, governments and private companies provided substantial assistance to bolster Ukraine's cyber defence capabilities.

Action: Governments mobilized cyber response teams and intelligence agencies to strengthen Ukraine's defences, while companies like Microsoft, Google, and AWS offered free cyber services.

Outcome: Despite repeated Russian attacks, Ukraine maintained government and military operations through increased resilience and improved collaboration with international partners.

[144] U.S. Department of State (2022)
[145] European Commission (2022)
[146] Carnegie Endowment (2022)

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