

# Global Conflicts and Geopolitical Dynamics (2025–2075): A Strategic Outlook

#### Introduction

The world of 2025 is marked by a complex tapestry of conflicts and rivalries that span military, economic, technological, and ideological domains. From conventional wars and insurgencies to battles waged in cyberspace and the information sphere, global tensions are at a multi-faceted peak. Major powers like the United States, China, and Russia jockey for influence amid a resurgence of *great power competition*, while emerging actors and regional blocs assert their interests in a increasingly **multipolar world** 1 2. Looming over these rivalries are transnational challenges—climate change, resource scarcity, mass migration, and disruptive technologies—that strain state capacities and may transform the international system. This report provides an analytical yet imaginative exploration of these dynamics as of 2025, and projects plausible evolutions over the next 50 years. It will examine current conflicts (from traditional wars to cyber and hybrid warfare), the shifting power balance between global blocs, the role of economic and environmental pressures, the impact of technological breakthroughs on warfare and governance, and informed predictions on future alliances, borders, and political systems. The goal is to paint a detailed portrait of the geopolitical landscape through 2075—grounded in real-world trends but extended through creative foresight—laying a rich foundation for scenarios such as a future RPG setting.

# **Current Global Tensions and Conflicts (2025)**

#### **Traditional Military Conflicts and Flashpoints**

Traditional armed conflicts continue to scar many regions in 2025. A prominent example is the Russo-Ukrainian War, which erupted into a full-scale invasion in 2022 and persists with intense fighting, massive casualties, and global economic repercussions 3 4. Ukraine's unexpected resilience, bolstered by Western aid, has turned what Russia anticipated as a quick victory into a protracted war of attrition that exemplifies the complexities of modern warfare 3 5. In the Middle East, long-standing flashpoints have flared dangerously: the Israel-Palestine conflict saw a major war in 2023 and remains volatile, involving regional players like Iran and non-state actors. Civil wars and insurgencies persist in parts of Africa (for instance, the aftermath of Ethiopia's Tigray conflict and ongoing strife in the Sahel), the Middle East (civil war in Syria, instability in Yemen), and Asia (Myanmar's internal war since the 2021 coup, Afghanistan under Taliban rule facing insurgency). These conflicts vary widely in nature – from state-on-state warfare to ethnic strife and extremist insurgencies - but collectively they contribute to a world map dotted with war zones 6 . Major wars (those causing 10,000+ battle deaths per year) are ongoing or recently active in several countries, while many other nations suffer lower-intensity conflicts (100 to 1,000+ deaths) 6 . Global map of ongoing armed conflicts (2025). Red areas indicate major wars (≥10,000 deaths/year), orange areas indicate wars (1,000–9,999 deaths/year), yellow for minor conflicts, and purple for skirmishes (under 100 deaths/year). As shown, active conflicts span multiple continents, with heavy concentrations in parts of Africa, the Middle East, and Asia.

Several **regional flashpoints** carry the risk of escalating into wider wars. In East Asia, **Taiwan's status** remains a potential trigger: China's military posturing and vow of "reunification" have raised tensions with the U.S. and allies, given Taiwan's de facto autonomy and strategic importance. In the **South China Sea**, China's territorial claims and island militarization put it at odds with Southeast Asian nations and the U.S., risking a naval incident that could spiral. Border disputes like India–China clashes in the Himalayas and India–Pakistan skirmishes over Kashmir also persist. Meanwhile, the Korean Peninsula remains technically at war (since 1953's armistice), with periodic missile tests by North Korea reminding the world of potential conflagration. Each of these hotspots requires careful diplomacy to prevent localized conflicts from igniting major-power confrontations.

#### **Cyber Warfare, Disinformation and Hybrid Tactics**

Open warfare is increasingly accompanied – or even replaced – by conflict in the **cyber and information domains**. In 2025, **cyber warfare** has evolved into a constant, low-visibility battle among states and non-state actors, involving espionage, sabotage of critical infrastructure, and financial or electoral interference. State-sponsored hackers from Russia, China, Iran, North Korea, and Western nations regularly probe and penetrate adversary networks, sometimes causing disruptive attacks. For example, Iranian and Israeli cyber units have traded blows, targeting each other's financial systems and infrastructure <sup>7</sup> <sup>8</sup>. Cyber operations often blur with "hacktivism" and criminal activity, making attribution difficult and providing deniability to perpetrators.

Perhaps even more insidious is the realm of **information warfare** – the deliberate spread of false or misleading information (disinformation) to influence societies. Adversaries deploy online propaganda and troll farms to sway public opinion and exacerbate divisions in target countries. This strategy, used notably by Russia to interfere in Western elections and sow discord, has only grown more sophisticated. By the mid-2020s, *deepfake* technology and AI-generated media allow the creation of fake personas and fabricated videos that are difficult to distinguish from reality 9 10 . Foreign actors exploit social media algorithms to amplify extremist narratives, conspiracy theories, and doubts about democratic processes. The United States and EU have recognized these *"foreign information manipulation"* campaigns as a serious cyberenabled threat, as they degrade public trust and fracture societies if left unchecked 9 10 .

Modern conflicts increasingly combine these methods in what is termed **hybrid warfare** – a blend of military force, cyber attacks, economic pressure, and information operations. Russia's approach in Ukraine since 2014 exemplified hybrid tactics (using cyberattacks on grids, propaganda on Russian-language media, and deniable proxy forces alongside troops). In 2025, other examples abound: a brief Israel–Iran conflict saw cyber strikes on civilian infrastructure, the hacking of security cameras for intelligence, and waves of fake text messages aimed at inciting panic on the home front <sup>7</sup> <sup>11</sup>. Such hybrid operations allow nations to pursue strategic goals below the threshold of overt war, exploiting the gray zone of ambiguity. Democracies are learning that **resilience against disinformation** – through robust cyber defenses, media literacy, and public-private cooperation – is now a core pillar of national security in this era of invisible incursions <sup>9</sup> <sup>10</sup>. We can expect cyber and information warfare to remain **pervasive features of global tension** in the coming decades, as technology further empowers these tactics.

# **Great Power Rivalries and Shifting Power Blocs**

#### **U.S.-China Strategic Competition**

The relationship between the United States and China has become the central axis of global geopolitics, often likened to a new **Cold War** albeit with profound economic interdependence. As of 2025, China is the world's second-largest economy (having surpassed the U.S. in purchasing power parity) and is rapidly expanding its military and technological capabilities. The U.S., while still the preeminent global military power and innovation hub, faces a peer competitor in China for the first time since the Soviet Union's fall. The rivalry spans multiple domains:

- **Military**: China's military modernization aims to challenge U.S. influence in the Indo-Pacific. Beijing now fields a blue-water navy with advanced warships and the world's largest navy by number of vessels. Repeated close encounters between Chinese and U.S. ships or aircraft in the South China Sea and Taiwan Strait underscore the risk of conflict through miscalculation. The U.S. has responded by strengthening regional alliances (e.g. the QUAD with India, Japan, Australia and AUKUS security pact) to contain China's reach. Taiwan remains a potential flashpoint any Chinese attempt to seize the island by force could trigger a U.S. military response, an scenario with catastrophic global consequences.
- Economic and Technological: Washington and Beijing are locked in an economic competition that includes trade wars, tariff exchanges, and a race for dominance in critical technologies. The U.S. has imposed export controls to hobble China's access to cutting-edge semiconductors and AI chips, while China invests heavily in indigenous innovation to reduce reliance on Western tech 12 13. This decoupling has created parallel tech ecosystems (e.g. Huawei 5G networks banned in the West, Chinese alternatives to GPS and internet platforms). Both nations seek supply-chain security for strategic goods, leading to a partial unwinding of globalization as they "friend-shore" production to trusted countries. By mid-century, this techno-economic rivalry could determine who leads in fields like artificial intelligence, quantum computing, and biotech, which in turn confer military and economic advantages.
- Ideological and Political: The U.S. promotes a vision of a free, democratic international order, whereas China offers an alternative model of authoritarian capitalism, emphasizing state sovereignty and non-interference. Through initiatives like the Belt and Road (a global infrastructure and investment program) and leadership in multilateral banks, China has gained influence across Asia, Africa, and Latin America. American policymakers see this as a challenge to the post-WWII liberal order. Many countries, however, seek to avoid choosing sides, instead extracting benefits from both powers a trend likely to grow as the world becomes more multipolar.

Looking ahead, **predictions for 2050** often place China at or near the top of global rankings. Some analysts long assumed China's GDP would surpass the U.S. around 2030, but recent economic slowdowns in China (aging population, debt, etc.) have cast some doubt 14. Nonetheless, by 2050 China is still expected to be a leading superpower economically and militarily. Former UK PM Tony Blair projected a "complex multipolar world" by mid-century with **China, the U.S., and India** as the three superpowers dominating global affairs 15. The U.S.-China relationship could evolve into a tense co-management of global issues if outright conflict is avoided. A *realistic scenario* might be one of "**competitive coexistence**": both powers remain rivals but find limited areas to cooperate (like climate change or pandemic response) because global

stability demands it. However, if mutual suspicions harden, the world could see a bifurcation into rival blocs, a fragmented internet, and even an arms race extending into space and AI – reminiscent of the Cold War, but with 21st-century characteristics.

#### Russia vs. the West

Russia in 2025 is a revanchist power in conflict with the Western bloc, yet its long-term trajectory is uncertain. The **Ukraine war** has severely strained Russia's military and economy due to stiff Ukrainian resistance and Western sanctions <sup>3</sup> <sup>16</sup>. In the near term, Russia remains a formidable military force (especially its nuclear arsenal) and will continue using hard power to assert itself in its near abroad (Eastern Europe, Caucasus, Central Asia). It also employs hybrid tactics – from cyber attacks on NATO countries to mercenary deployments in places like Africa – to expand influence and undermine Western unity <sup>17</sup> <sup>18</sup>. The confrontation between Russia and NATO has reinvigorated the alliance: NATO is expanding (with Finland and Sweden joining) and has refocused on territorial defense, even as it avoids direct intervention in Ukraine to prevent a great-power war.

However, looking several decades ahead, Russia faces **steep challenges**. Its population is aging and shrinking, and its economy is overly dependent on oil, gas, and minerals – sectors that could decline globally as the world shifts to renewable energy. If current trends hold, Russia's global standing by 2050 may diminish relative to faster-growing countries. A key determinant will be whether Russia's political system adapts post-Putin. A continuation of authoritarian nationalism could keep Russia isolated and aligned primarily with China (a junior partner supplying raw materials and military distraction for Beijing). Conversely, a future leadership could seek rapprochement with Europe, especially if China's dominance becomes uncomfortable for Moscow. We might plausibly see Russia's territorial integrity questioned by midcentury as well – for instance, regions like the North Caucasus could restive, or an independent-minded Siberia if Moscow's grip falters under economic decline. **Territorial fragmentation is not a given**, but a severely weakened Russia might mirror past empires in contracting. On the other hand, with its nuclear deterrent intact, Russia will remain a key player in any global order or disorder. The West's challenge will be managing a **declining but nuclear-armed Russia**: integrating it into a stable balance (if it moderates) or containing it (if it stays aggressive) to avoid catastrophic escalation.

#### The European Union and Other Allied Powers

The European Union (and associated Western allies like the UK, Canada, Japan, Australia) represent another major bloc in global politics. Europe in 2025 is confronted by war on its doorstep (Ukraine) and has shown rare unity in responding with sanctions on Russia and moves toward strategic independence. The EU's strength lies in its economic size, regulatory power, and values-based diplomacy; however, it often struggles with internal cohesion and military reliance on the U.S. By 2075, Europe's trajectory could go in multiple directions. One possibility is **greater unity and integration** – for example, if the EU evolves into a more federal entity with a common defense force, it could act as a unified superpower on par with China or the U.S. (especially economically). Alternatively, persistent internal divisions (over issues like migration, economics, rise of nationalist movements) could weaken the EU's global role.

Demographically, Europe will be a smaller share of humanity by 2050 (the EU27 might be <10% of world GDP by 2050, down from ~15% in 2021 <sup>19</sup> <sup>20</sup> ). This relative decline is somewhat inevitable due to slow population growth. To remain influential, Europe may double-down on forming **alliances and multilateral coalitions**, leveraging soft power and diplomacy. NATO will likely continue to be a cornerstone of European

security through the 2020s–2030s, but by 2050 one can imagine Europe taking more autonomous control of its defense (often termed "strategic autonomy"). The UK, after Brexit, will either closely align as a transatlantic bridge or risk isolation. Other Western-aligned powers like **Japan and Australia** are deepening security ties (e.g., Japan increasing defense spending, Australia partnering in AUKUS for nuclear submarine tech) to address the China challenge, suggesting a tighter *democratic security network* spanning Europe to the Indo-Pacific. Over 50 years, these alliances may shift – possibly drawing in India or others as partners – or fray if threat perceptions diverge. But the fundamental values linking democracies could sustain a loose "free world" coalition even as global power equalizes.

#### India, Emerging Powers, and the Global South

Beyond the U.S.-China-Russia triad, a host of other countries are gaining prominence. **India** stands out: by 2023 it became the world's most populous nation (~1.4+ billion) and its economy is among the top five. With growth averaging 6%+, India is projected to be the **world's second-largest economy by 2050 (behind China but ahead of the U.S.)** in PPP terms 21 20. India aspires to great-power status, modernizing its military and expanding its influence in South Asia and the Indian Ocean. However, it faces internal challenges (infrastructure, social inequality) and foreign policy balancing acts – it maintains strategic autonomy, cooperating with the West on some issues (countering China) while preserving ties with Russia and rejecting alignment in great power conflicts. By mid-century, if India continues on its current trajectory, it will likely be a **third pole** of global power. Tony Blair's prediction of "America, China, and probably India" as the superpowers of 2050 reflects this expectation 1 15. How India uses its growing clout – either as a champion of the developing world, a mediator between East and West, or a self-interested continental power – will significantly shape the international order.

Other **emerging regional powers** also demand attention. In East Asia, **Japan** remains economically powerful and is boosting its military role, though an aging population limits its rise. **Indonesia**, with its huge population and resource wealth, could become the world's 4th largest economy by 2050 <sup>20</sup> and a leader of the ASEAN bloc. **Brazil** may remain the powerhouse of Latin America and a significant player in food and energy markets. In the Middle East, **Turkey** and **Iran** have large populations and historical influence, positioning them as regional hegemons (Turkey within NATO but pursuing independent goals; Iran as a revolutionary power projecting influence in Iraq, Syria, Lebanon, and Yemen). **Saudi Arabia** and the Gulf states, flush with oil wealth, are diversifying and could evolve into financial/tech hubs that wield economic influence beyond their size.

Meanwhile, the concept of the "Global South" – referring broadly to developing nations in Asia, Africa, Latin America – has gained prominence as these countries seek a greater voice. Collectively, the Global South (excluding China) is projected to surpass the GDP of the U.S. and China combined around 2040 <sup>22</sup>, and by 2050 it will account for roughly 70% of world population <sup>23</sup>. This indicates a historic shift in economic gravity away from the North Atlantic. Organizations like **BRICS** (Brazil, Russia, India, China, South Africa – now expanding to include others like Saudi Arabia and Indonesia) and the **Shanghai Cooperation Organization (SCO)** reflect attempts by these nations to coordinate policies and present alternatives to Western-led institutions <sup>24</sup> <sup>25</sup>. However, the Global South is far from monolithic – these countries span diverse regions and often have divergent interests <sup>26</sup> <sup>27</sup>. Many jealously guard their sovereignty and are reluctant to be seen as aligning behind any one leader (be it the U.S. or China) <sup>27</sup>. Thus, we may see *ad hoc issue-based coalitions* rather than a single unified bloc. For example, African nations cooperating on climate negotiations, Latin American states on trade, or South-South partnerships in technology sharing. By 2075, some currently "developing" nations will undoubtedly be great powers or at least regional superpowers in

their own right, reshaping diplomatic norms to ensure their **civilizational perspectives** are reflected in global governance.

#### **Toward a Multipolar Order**

All these trends point toward a world that is increasingly **multipolar**. The unipolar moment of American dominance after the Cold War has given way to a distributed landscape of power centers. **Major blocs** – the U.S.-led West, a rising China-centric sphere, a still significant (if diminished) Russia, and a strong India – will have to share influence with **regional coalitions** and institutions. The transition has already proven turbulent, as rising powers challenge established rules and institutions struggle to adapt. By mid-century, the international system might resemble a concert of powers (somewhat akin to the 19th century balance, but global and more complex) or conversely fragment into protectionist, inward-looking regions.

One plausible scenario is that no single hegemon emerges triumphant; instead, **power struggles settle into an uneasy equilibrium**. For example, the U.S. could remain militarily superior and a hub of innovation, China could become the largest economy and dominate Asia, India could lead a coalition of Global South democracies, and Europe could form a third pillar allied with the U.S. *ad hoc*. The **Global South's rising GDP and population** will translate into louder demands for representation – we might finally see reforms like an expanded UN Security Council including India, Brazil, or African representation, or new institutions altogether if old ones don't give space 24 2. A multipolar world could bring more **fluid alliances**: countries might shift partnerships based on the issue (e.g., teaming up on climate action but opposing on trade), rather than fixed Cold War-style camps. It could also mean increased risk of miscalculation, as more actors with power means more potential conflicts if norms and communication aren't improved.

In summary, the period to 2075 is likely to witness the end of unquestioned Western primacy and the full arrival of a multipolar order. Such a world will be **complex and contested** – as the U.S. National Intelligence Council foresaw for 2040, "a more contested world" with great-power rivalry, fragmented alliances, and no clear global leadership <sup>28</sup> <sup>29</sup>. Whether this leads to chaos and conflict or a stable new equilibrium depends on how well these powers manage competition and cooperate on common challenges. The next sections examine those very challenges – economic, environmental, technological – which will intersect with geopolitical rivalries to shape the future landscape.

# **Economic Competition, Resources, and the Fight for Influence**

#### **Geo-economic Rivalries and Trade Wars**

Economic strength underpins political power, and in 2025 a fierce competition is underway to secure technological and industrial advantages. The U.S. and China's trade war (initiated in 2018) has evolved into a broader **geo-economic rivalry**. Both countries have imposed tariffs, investment restrictions, and export bans targeting each other's strategic industries (from steel and solar panels to semiconductors and telecoms). This has disrupted global supply chains and forced other nations to navigate between two economic spheres. By limiting China's access to cutting-edge chips and AI technology, the U.S. aims to *"maintain a competitive edge"*, while China's state subsidies and "Made in China 2025" initiative strive for self-sufficiency in high-tech sectors <sup>12</sup> <sup>13</sup>. Over the next decades, this dynamic could intensify. If decoupling deepens, we might see parallel financial systems (for instance, more international trade done in Chinese yuan or digital currencies to bypass the U.S. dollar system), and rival technical standards (e.g., Chinese standards for 6G, AI ethics, etc., versus Western ones).

At the same time, **economic alliances and blocs** are forming. Comprehensive trade agreements like the RCEP (led by ASEAN and China) and the CPTPP (originally the TPP sans the U.S.) encompass large portions of global GDP, often excluding one or more major powers. The *BRICS* bloc is even exploring a joint financial infrastructure to reduce reliance on Western-dominated IMF/World Bank systems <sup>24</sup> <sup>25</sup>. If successful, by 2075 we might see a **more regionalized trading system**: intra-Asia trade booming under Chinese influence, a more protectionist but integrated North America, and an Africa that has realized the potential of the African Continental Free Trade Agreement (AfCFTA) to bolster internal commerce. However, history warns that fragmented trade blocs can reduce overall growth. Policymakers will need to avoid a slide back into 1930s-style protectionism, which would be "bad for global growth in the long run" <sup>30</sup> <sup>31</sup>. Finding a balance between securing national supply chains and preserving the efficiencies of globalization will be a defining economic challenge of the coming decades.

## **Resources and Energy: Scarcity or Transformation?**

Competition for **natural resources** has long been a driver of conflict, and this may worsen as certain resources become scarcer or more valuable in a climate-stressed world. Fresh water is a prime example: many regions face **water scarcity** by 2030–2040 due to climate change and population growth. Major rivers that cross borders (the Nile, Tigris-Euphrates, Indus, Mekong, etc.) could become sources of interstate tension if upstream countries dam or divert water needed by downstream nations. For instance, Ethiopia's filling of the Grand Renaissance Dam on the Nile has raised Egyptian fears over water supply – a preview of *"water wars"* that could erupt absent agreements. By 2075, the Middle East, North Africa, and parts of South Asia might experience severe droughts regularly, heightening the risk of conflict over aquifers and rivers.

**Energy resources** will undergo a dramatic shift. Today's geopolitics are heavily shaped by oil and gas (witness the strategic importance of the Persian Gulf or Russia's gas leverage over Europe). But as the world aims to limit climate change, renewable energy adoption is accelerating. In optimistic scenarios, by midcentury the global economy is largely decarbonized, greatly reducing the strategic importance of oil. This could diminish the geopolitical clout of petrostates like Russia and Saudi Arabia, while boosting countries rich in critical minerals needed for renewables (lithium, cobalt, rare earths). Already, "green technology metals" are dubbed the new oil—for example, China's dominance in rare earth element production gives it leverage since these materials are critical for electronics and defense hardware. If demand for electric vehicles and batteries soars, countries like the Democratic Republic of Congo (cobalt) or Chile (lithium) may become more strategically significant, potentially inviting outside interventions or exploitative deals. We may see **resource cartels** beyond OPEC – perhaps an OPEC-like alliance for lithium or a rare-earth consortium – influencing prices and access.

One must also consider **food security**: climate impacts on agriculture could make fertile land a strategic asset. Nations with vast arable land (like Russia, Canada) might benefit from higher latitudes warming, whereas densely populated import-dependent countries (Middle East, parts of Asia) could face crises. Control of food supply chains might thus become as important as oil was in the 20th century. Countries might stockpile or restrict exports of grains, leading to diplomatic clashes or price wars. A harbinger was the food export bans during crises (like some did during COVID-19). By 2075, **genetically engineered crops** and vertical farming might alleviate some pressures, but in worst-case warming scenarios, large swathes of the tropics could become marginal for traditional farming, triggering global scramble for agricultural innovations and land.

#### The Battle for Hearts, Minds, and Markets

Economic competition is not just about resources and production, but also about **influence** – shaping the rules of the game and winning allies through investment and aid. China's **Belt and Road Initiative (BRI)** exemplifies this: since the 2010s, China has financed infrastructure in dozens of countries, expanding its political sway. While some partner nations benefited from new ports and railways, others fell into debt traps or saw local concerns flare (critiques of neocolonialism). How this plays out to mid-century will affect alignments. If BRI projects succeed and China forges strong economic dependency, a Sinocentric sphere could solidify across Eurasia and Africa. Conversely, if projects backfire or China's economy stalls, partner countries may seek alternatives (like India's or the West's smaller connectivity initiatives). The U.S. and EU have belatedly offered their own infrastructure financing (e.g., the EU's Global Gateway) to counter Chinese influence, suggesting a **contest for development patronage**. By 2075, Africa's vast infrastructure needs and young markets could make it the final arena where great powers vie to "win hearts and markets" – either through genuine partnership or proxy competition.

In addition, **sanctions and financial warfare** have become routine tools of geopolitics (as seen in sanctions on Iran, North Korea, and sweeping sanctions on Russia for the Ukraine war). The effectiveness of sanctions depends on control of global financial arteries – which today the U.S. and EU largely have via the dollar system and institutions like SWIFT. But target states are developing workarounds: Russia and China trade in rubles/yuan, new payment networks and even bartering using cryptocurrencies or gold are being tested. The coming decades might see the **dollar's dominance erode** somewhat as multipolar finance grows <sup>22</sup>

23 . If the dollar is no longer king by 2050 (perhaps sharing reserve status with the yuan or a digital currency), Western sanction power will wane, altering how economic pressure can be applied. Some foresee a bifurcated monetary order with a China-led bloc using a digital yuan and a Western bloc still using dollars/euros – a situation reminiscent of Cold War finance, but with modern tech. This fragmentation, however, carries risks of instability, and could motivate greater cooperation to regulate things like digital currencies or debt relief through revamped global institutions if crises hit.

In summary, the economic front of geopolitical competition through 2075 will be about **who sets the rules** and **who controls the key chokepoints** – from trade routes and supply chains to tech standards and currency flows. Nations will pursue nationalistic strategies to secure prosperity for their citizens, but global challenges like climate will demand collective economic action as well. Striking a balance between competition and cooperation in the economic realm will be crucial to avoid the mistakes of the 1930s and to harness the potential for a more prosperous, sustainable global economy for all.

# Climate Change, Resource Crises, and Mass Migration

#### Climate Change as a "Threat Multiplier"

Climate change is not a distant scenario but an unfolding reality that already complicates global stability – and it will loom ever larger by 2075. Military and security experts often call climate change a "threat multiplier", meaning it exacerbates existing tensions and vulnerabilities <sup>32</sup>. We have early evidence: from 2006–2010, a severe drought in Syria (likely worsened by climate trends) devastated agriculture, displacing rural communities into cities where their grievances contributed to unrest that spiraled into civil war <sup>33</sup>. While not the sole cause, climate stress amplified the conditions for conflict in Syria. Similar links are observed elsewhere – in West Africa's Lake Chad region, shrinking water and grazing land have fueled conflicts between farmers and herders and helped extremist groups recruit from desperate populations. As

global temperatures continue to rise (projected to be +2°C or more by mid-century unless drastic cuts in emissions occur), such scenarios may become commonplace.

By 2050–2075, we can expect **more frequent and intense extreme weather**: mega-droughts, heatwaves, stronger hurricanes, floods, and wildfires will punish various regions. Coastal areas face rising sea levels; for example, low-lying nations (Bangladesh, island states in the Pacific like Kiribati or the Maldives) could see significant land loss or even uninhabitability, forcing relocations of entire communities. These environmental stresses will directly impact national security: armies might be called to respond to disasters more often; vital infrastructure (ports, bases) may be threatened by rising seas; and competition for *survival resources* (water, food, livable land) can ignite conflict. Climate change will also pose new **health security threats** by expanding tropical disease ranges and causing pandemics of vector-borne illnesses in new areas <sup>35</sup> <sup>36</sup>. It's plausible that by 2075, some regions of the world (like parts of the Middle East or South Asia) experience periods of heat so extreme they are barely survivable without continuous air conditioning, putting pressure on governments to support public welfare or else face unrest.

However, climate change could also spur unprecedented cooperation if nations perceive the shared existential threat. The Paris Agreement and subsequent climate summits indicate a recognition of common cause, although action still lags behind targets. In an optimistic outlook, the worsening climate might jolt major powers into a "Climate Coalition" by the 2030s – aligning efforts on clean energy tech, climate adaptation funding for poorer countries, and perhaps even controversial geoengineering research (like injecting aerosols to cool the atmosphere) if warming gets out of control. Such cooperation would entail rethinking governance: maybe by 2050 there's a robust international regime that monitors and enforces emissions cuts (something like an empowered global climate authority). The alternative, a failure to cooperate, could yield climate-driven global chaos by 2075, where nations act unilaterally (e.g., building massive sea walls or even geoengineering without global consent) and conflict erupts over the consequences.

#### **Resource Scarcity and Conflict**

As climate change progresses and global population rises (possibly around 9.5–10 billion by 2050), certain resources will come under severe strain. **Water scarcity** stands out. Already ~2 billion people live in water-stressed countries; by 2040, some projections suggest a majority of the global population could experience water shortages for at least part of the year. In the absence of effective water management treaties, this can lead to *hydro-political confrontations*. Candidates include: the Indus River (India vs. Pakistan), where glacier retreat and upstream dams could spark tensions between two nuclear-armed rivals; the Euphrates–Tigris (Turkey vs. Syria/Iraq), where Turkish dams could choke flow; or the Nile (Ethiopia vs. Egypt/Sudan) as mentioned. Within countries, water and food scarcity can fuel internal strife or insurgencies, especially in agrarian societies where drought means economic collapse for farmers.

**Mass migration** is one of the most significant predicted outcomes of resource stress and climate disruption. The world is already witnessing large movements of people fleeing conflict and hardship (e.g., Syrian war refugees to Europe, Central Americans to the U.S., Venezuelans across Latin America, etc.). Climate change threatens to vastly multiply these flows. Studies and experts have estimated that, in worst case scenarios, climate change could displace **hundreds of millions** of people by 2050. The **Institute for Economics and Peace** forecasts up to *1.2 billion people* could be uprooted globally by 2050 due to climate-related disasters and ecosystem collapse <sup>37</sup> <sup>38</sup>. Even more moderate scenarios by the World Bank see at least **216 million internal climate migrants** across various regions by 2050 if we fail to curb emissions <sup>39</sup>.

These numbers are staggering – an order of magnitude greater than today's entire international refugee population. Chart from Zurich Insurance/IEP illustrating projected global displacement due to climate change by 2050. The projection shows a potential for up to 1.2 billion climate migrants (bar on the right), a dramatic increase from the tens of millions observed annually in the 2010s.

Mass migration on such a scale could profoundly reshape global politics. In receiving regions (likely wealthier, cooler countries like Europe, North America, or parts of Asia), large influxes of migrants may fuel social backlash, nativist politics, and instability if not managed humanely and effectively. We have already seen how the Syrian refugee wave of 2015 energized populist anti-immigrant movements in Europe. Multiply that by ten or twenty, and the political center could buckle. Conversely, migration might alleviate problems in some aging societies (by providing young workforces) if successfully integrated. Much will depend on **international cooperation on migration** – possibly new frameworks for climate refugees, more equitable burden-sharing, or even planned relocation agreements before crises hit. By 2075, the notion of state sovereignty might be challenged by these flows, prompting either fortress-like isolation or a reimagining of borders (perhaps more open, with regional free movement zones expanding).

Resource scarcity isn't limited to water and food; **energy transition** itself could create new scarcities. As mentioned, critical minerals might be the oil of the future, and competition for mining rights from the deep sea to the Arctic (where melting ice is exposing new frontiers) could cause disputes. The **Arctic region** deserves special mention: as ice retreats, new shipping routes (like the Northern Sea Route) shorten distances between continents, and sizeable oil/gas and mineral deposits become accessible. This has led Arctic-bordering nations (Russia, Canada, U.S., Norway, etc.) to lay claims and bolster their arctic military presence. By mid-century, the Arctic could be a hotspot of rivalry or possibly a model of cooperation (if the Arctic Council continues peaceful management). Should resources dwindle elsewhere, the temptation to exploit the Arctic's riches might override cooperative norms, leading to a scramble reminiscent of past colonial resource grabs.

#### **Adaptation and Survival**

The severity of climate and resource crises by 2075 will depend largely on actions taken in the 2020s–2040s. If strong mitigation keeps warming to 1.5–2°C, many worst-case scenarios can be averted, though significant adaptation will still be needed for changes already locked in. Societies will have to invest heavily in **resilience**: seawalls for coastal cities, redesigned agriculture (drought-resistant crops, perhaps widespread desalination for water, and synthetic foods), urban planning to handle heatwaves, and disaster response systems. Countries that fail to adapt could face state failure – imagine a nation repeatedly pummeled by hurricanes or suffering perpetual drought; its economy and governance might collapse, opening a vacuum for conflict or extremism. In this way, climate impacts could indirectly topple governments, leading to **political system changes** (for instance, a democratic government falls and is replaced by an authoritarian regime promising order amidst chaos, or regions secede because the central government can't provide relief).

Internationally, we might see new kinds of alliances and tensions centered on climate. Nations less affected (maybe those in cooler climates) could become "havens" and might form a bloc prioritizing their own security against migrants. Meanwhile, heavily affected nations might band together to demand reparations or geoengineering interventions from the rest (e.g., a coalition of drowning small island states and Saharan countries could by desperation endorse pumping sulfur into the atmosphere to slow warming). Climate justice debates (who pays for loss and damage) will grow more heated if disasters multiply. Already in 2023

a *Loss and Damage fund* was established in principle to help vulnerable countries – by 2050 such mechanisms might be central to global diplomacy, or, if ignored, could fuel **North-South schisms** where developing nations feel betrayed and align among themselves to seek redress.

In conclusion, climate change and resource scarcity are not just environmental issues – they are deeply intertwined with human security and geopolitical stability. The period to 2075 will test our international system's capacity to handle slow-moving, cumulative crises that respect no borders. The outcome will significantly shape the backdrop for global politics: a future where nations either cooperate to overcome these challenges or one where scarcity fuels never-ending conflict and fragmentation. The next section will examine another set of transformative forces – technological advancements – which will both offer tools to cope with these challenges and introduce entirely new dilemmas for states and societies.

# Technological Disruption and the Future of Warfare & Governance

#### **Artificial Intelligence and Autonomous Weapons**

Advances in **artificial intelligence (AI)** are poised to revolutionize warfare and statecraft between now and 2075. By 2025, AI is already employed in military logistics, intelligence analysis, and cyber defense. But the coming decades could see AI-driven systems take on far more **autonomous combat roles**. The development of **Lethal Autonomous Weapons Systems (LAWS)** – drones, robots or software that can select and engage targets without human intervention – is a controversial yet likely aspect of future conflicts <sup>40</sup> <sup>41</sup>. Major military powers are heavily investing in autonomy: swarms of AI-guided drones, for example, could overwhelm traditional defenses by sheer numbers and adaptive coordination <sup>42</sup> <sup>43</sup>. Imagine hundreds of small drones with explosives collaboratively attacking an airbase from all directions; defending against such swarms may require equally swift AI defenses (like laser turrets guided by AI). By 2040, **smart weapon swarms** in the sea, air, and on land could be a standard feature of war <sup>42</sup> <sup>43</sup>, rendering some conventional platforms (like manned fighter jets or large ships) extremely vulnerable.

A concern is that arms control regimes have not caught up to these technologies. There is an ongoing global debate at the UN about banning or regulating autonomous weapons, but reaching consensus is difficult – partly because verification is hard and militaries are reluctant to forsake what could be a decisive edge. If no agreement is reached, we could face an AI arms race. As one analysis noted, arms control might be implausible for widely deployable autonomous systems, and even the U.S. "will feel powerful incentives to create more autonomous systems, including those with lethal force" given the potential advantages <sup>44</sup> <sup>43</sup>. By 2075, the nature of combat may have fundamentally changed: human soldiers might take a backseat to AI "commanders" that process battles at machine speed, with engagements decided by which side has better algorithms and electronic countermeasures. This raises chilling possibilities – could an AI misinterpret intent and escalate a conflict? Could autonomous systems be hacked or go rogue? Such scenarios stray into science fiction, but early forms have already been seen (e.g., an AI gun turret malfunctioning). Ensuring meaningful human control over lethal decisions is likely to be a key ethical demand, but whether that's feasible if one side fears falling behind is uncertain.

On the strategic level, AI also impacts nuclear stability. AI could improve missile defense or anti-submarine tracking, potentially upsetting the delicate **nuclear deterrence** balance by giving one side a perceived first-strike advantage. Conversely, AI might help manage escalation by better predicting adversary moves if used in command-and-control. By mid-century, nuclear powers might incorporate AI to such an extent that some

analysts worry about **automated retaliation systems** or algorithms deciding on ambiguous sensor data – a scenario fraught with risk unless extreme precautions are in place.

Outside the battlefield, AI is a double-edged sword for states. It can greatly enhance intelligence gathering and analysis (e.g., flagging suspicious activities among terabytes of data), help in **wargaming scenarios**, and optimize logistics. But adversaries will likely also deploy AI, leading to moves and countermoves in a hyper-accelerated competition. Smaller states or non-state actors might obtain effective AI weapons cheaply (since drones and code can be mass-produced in ways tanks cannot). This democratization of destructive power could empower terrorist groups with "smart" weapons or defensive AIs that make them harder to eliminate.

#### **Cyber Warfare and Digital Battlefields**

As discussed earlier, cyber warfare is already a core part of conflict, and this will only intensify with greater connectivity. By 2030, the advent of **quantum computing** might render current encryption vulnerable, raising the stakes for securing communications. Nations are racing to develop quantum-resistant encryption and, conversely, quantum code-breaking capabilities. If, say, China or the U.S. gains a decisive quantum advantage first, they could potentially decrypt rivals' secret communications at will – an intelligence coup that might be game-changing (though likely short-lived as others catch up).

The **Internet of Things (IoT)** means that by 2050, tens of billions of devices – from cars to appliances to infrastructure sensors – are online, vastly expanding the "attack surface" for cyber operations. A future conflict could involve crippling an enemy's cities by hacking smart grids, autonomous vehicles, or even household robots, causing internal chaos without firing a shot. Already, analysts recorded dozens of major disinformation campaigns and frequent use of malware like *wipers* to destroy data in conflicts like Ukraine <sup>45</sup> <sup>46</sup>. In a 2050 scenario, an aggressor could unleash *AI-driven cyberattacks* that adapt in real-time to defenses <sup>47</sup> <sup>48</sup>, essentially fighting a digital duel autonomously. This raises huge questions for defense: How do you protect critical infrastructure when everything from banking to healthcare is online and potentially exposed? Cyber defense might evolve to employ "White AI" to counter incoming "Red AI", leading to silent battles in the neural network realm while humans watch.

Furthermore, **space** will be an extension of the cyber and electronic battlefield. With dependence on satellites for communication, navigation, and observation, anti-satellite (ASAT) weapons become extremely destabilizing. By 2025, Russia, China, and the U.S. all have demonstrated ASAT capabilities (destroying their own satellites in tests). In a future war, blinding the enemy's "eyes and ears" in space would be tempting – but doing so could create debris that make orbits unusable (Kessler syndrome) and also risk escalation to full-scale war. Space-based cyber or directed-energy attacks (like hacking satellites or dazzling sensors with lasers) might be used as subtler alternatives. The creation of military Space Forces indicates preparation for conflicts extending to orbit. By 2075, one can imagine **militarized satellites** guarding others, battles between AI-controlled mini-satellites, or even space-based interceptors as part of missile defense. This all feeds into strategic stability debates: the more realms of conflict (land, sea, air, cyber, space, info), the more complex preventing war becomes.

#### Surveillance, Big Data, and Social Control

Advances in AI and big data have enabled a level of state surveillance and social control previously unimaginable, a trend likely to grow worldwide. **China's surveillance state** is the exemplar: hundreds of

millions of CCTV cameras blanket cities, many equipped with AI facial recognition that can identify individuals and track their movements in real time <sup>49</sup> <sup>50</sup>. Paired with extensive databases (from digital payment records to social media activity) and programs like the **Social Credit System**, this creates a comprehensive apparatus of monitoring and shaping citizen behavior. By using AI to analyze this mass data, authorities can flag "suspicious" patterns or dissent early on. Indeed, there is strong evidence of facial recognition being used to specifically target Uyghur minorities in Xinjiang for repression <sup>50</sup> <sup>51</sup>. These technologies confer a form of *digital authoritarianism*: regimes can maintain power not just through brute force, but through pervasive surveillance that nips opposition in the bud and through information control that shapes narratives.

China is exporting elements of this model (surveillance tech, censorship tools) to other governments, a trend that may continue, creating a **model of governance where AI enhances authoritarian control**. By 2075, it's conceivable that most authoritarian states (and even some ostensibly democratic ones) run extensive AI-driven surveillance of public spaces and online activity. The **privacy-security balance** will be a key societal debate: liberal democracies will try to harness tech for security (e.g., monitoring for terrorists) while restraining abuse, but crises like terrorism or pandemics might tip the balance toward more surveillance. Notably, even in the U.S., the number of surveillance cameras has skyrocketed (85 million cameras by 2021, many with advanced monitoring functions) <sup>49</sup> <sup>52</sup>. Europe is pushing back with privacy laws (like GDPR) and some cities banning facial recognition, but the direction of tech is clear.

By mid-century, we may live in a world where **anonymity is rare**. Facial recognition and gait analysis mean anyone can be identified in public. Smartphones or successors might continuously record surroundings. Augmented reality glasses could potentially scan faces in real-time (an appalling thought for privacy). From a state perspective, this can help in policing and preventing crime, but it is ripe for abuse by those in power to stifle dissent or target certain groups. Authoritarian regimes might even integrate this with predictive policing – using AI to predict who might commit crimes or rebel, recalling dystopian "pre-crime" concepts.

For state sovereignty, one interesting angle is **data sovereignty**: nations are increasingly insisting that data about their citizens be stored and governed within their borders (to prevent foreign surveillance or influence). For example, some countries mandate that firms keep data on local servers, and there's talk of splinternets (nationally walled-off internets) to maintain info control. By 2075, the global internet might fracture into heavily filtered national networks in authoritarian countries and a somewhat open, but still regulated, internet in democracies (with each requiring digital "passport" verifications for cross-border content flow). This will complicate how ideas spread and could limit the free flow of information that we've known in the early internet age.

On the positive side, technology could also **empower citizens** if used differently: encryption, blockchain, and decentralized networks might give individuals tools to organize and resist tyranny in new ways. The same tech that powers surveillance also creates transparency (e.g., cheap satellite imagery catching genocide evidence, or blockchain preventing government corruption by making transactions public). So a tech-infused future could either be Orwellian or an era of more accountable governance – likely some mix depending on the country. Democracies may adopt "digital democracy" tools: online town halls, referendums via secure apps, AI that helps draft policies reflecting citizen input. If these flourish, some states in 2075 might practice a more direct, participatory democracy enabled by tech. Alternatively, populist manipulation of digital media could continue eroding trust, making governance more dysfunctional.

#### Biotechnology, Biosecurity, and Human Enhancement

The biotechnology revolution – especially **genome editing** tools like CRISPR and advances in synthetic biology – is another game-changer for the coming decades. On one hand, biotech promises breakthroughs in healthcare, agriculture, and industry. On the other, it introduces new vectors for warfare and ethical quandaries that states must navigate.

A frightening prospect is the advent of **next-generation bioweapons**. In the past, only major state programs could weaponize pathogens (and even then with difficulty). Now, the democratization of biotechnology means smaller groups or even talented individuals might engineer deadly pathogens [53] 54 . The cost and time to manipulate genomes have plummeted – sequencing a human genome took \$2.7 billion and 13 years in 2003; today it's a few hundred dollars in under a day 55 56. By 2030s, it could be routine college lab work to edit genes. This diffusion of knowledge "lowers barriers to entry for mass-casualty terrorism" using biology <sup>53</sup> <sup>57</sup>. Experts warn of a "new age of bioterror" where terrorists or roque states tailor viruses for maximum harm <sup>58</sup> <sup>59</sup> . For example, an engineered pathogen might be designed to spread asymptomatically and then trigger high fatality, or even target certain genetic profiles (though the feasibility of an ethnic bioweapon remains debated, it's a nightmare scenario raised in defense circles). The COVID-19 pandemic gave a taste of global disruption from disease; a deliberate super-pathogen release could dwarf that, especially if done covertly to hinder attribution (was it natural or an attack?). This possibility will force states to prioritize biosecurity: better early warning systems, stockpiles of medical countermeasures, and international protocols for rapid response. It may also push treaties like the Biological Weapons Convention (BWC) into the spotlight for strengthening, because currently the BWC has weak verification measures 60 61. By mid-century, there may need to be automated pathogen surveillance globally (using environmental sensors, AI to detect anomalies) akin to missile launch detection, to catch outbreaks whether natural or unnatural.

Biotech also intersects with great-power competition. There is concern that adversaries could use **gene editing in warfare** beyond just weapons – for instance, to enhance their own soldiers (creating, say, troops with higher tolerance to pain or need less sleep via genetic tweaks). China has been rumored in Western media (though not confirmed) to have interest in "biologically enhanced" personnel. If one nation seriously pursues human enhancement for military or intelligence advantages, others might follow, raising a host of ethical issues. An "arms race" for super-soldiers or super-intelligence (via brain-computer interfaces) could commence by mid-century, blurring lines of humanity. International law currently has little to say about genetic enhancements or AI-brain integration.

Another state challenge: **bio-data and privacy**. By 2030 many people will have genome sequences on file; governments might start collecting DNA profiles of citizens ostensibly for health or security. In 2022, for instance, it was reported that world leaders like President Macron refused COVID tests in foreign countries to avoid giving their DNA to potential adversaries 62. This hints at future espionage around genetic data (imagine sabotage via individualized toxins targeting a leader's genetic vulnerabilities). Keeping citizens' genomic data secure might become a national security issue, to prevent hostile use.

On the positive front, biotech offers solutions to some problems highlighted earlier: drought-resistant GM crops to help with climate-induced food shortages, lab-grown meat to reduce resource strain, even carbon-capturing synthetic organisms to fight climate change. Medicine could be revolutionized – by 2075 aging might be substantially slowed, changing demographics and perhaps easing the pension crises of aging

nations. If life expectancy extends radically, that could have societal effects (perhaps leaders serving longer, or generational political tensions if younger cohorts feel locked out by long-living elders).

Governance will have to catch up with **biotech ethics**. By mid-century, we might confront decisions like: Should we allow editing of embryos to eliminate diseases? (Likely yes widely, as that's already on the horizon). What about editing for enhancement – IQ, physical traits? Countries may diverge, with some allowing "designer babies" and others banning them, which could create divergence in human capabilities and new forms of inequality or even international friction (e.g., if citizens of one country start to be genetically taller/stronger on average, will that create perceptions of threat or unfair advantage?). There's also the risk of accidents: a gene-editing experiment could unintentionally create a super-pest or invasive species that upends ecosystems. International frameworks will be needed for gene drives and other powerful biotech that, once released, don't respect borders.

In sum, the biotech and AI revolutions are giving states powerful tools that can either enhance human flourishing or enable unprecedented destruction. The period to 2075 will likely see a bit of both. States will have to expand their concept of security to include **biosecurity and cyberbio defense**, while also grappling with how technologies affect the *social contract*. The next section explores how these forces might shape alliances, political systems, and the map of the world as we look ahead toward 2075, tying together the threads of conflict, technology, and global challenges discussed so far.

# **Future Alliances and Global Order (2025–2075)**

### **Evolving Alliances and Blocs**

The alliance structures of today will not remain static over 50 years; new coalitions will form, old ones may transform or dissolve, and some relationships will realign in response to shifting power and threats. As of 2025, **NATO** has been rejuvenated by the challenge of Russia, expanding its membership and forward deployments along Europe's eastern flank. In the near future, NATO may further widen (talk of Ukraine or Georgia membership exists, though contentious) and pivot to also address China's rise (NATO has for the first time mentioned China in strategic documents). By 2075, NATO could either stand as a greatly enlarged collective security pact spanning likeminded democracies (perhaps including partners like Japan or Australia in some associate status), or it could fade if the original rationale (Russian threat) wanes and internal rifts (over burden-sharing or differing priorities) grow. An alternative outcome could be Europe developing its **own defense union** if U.S. commitment falters – e.g., an EU Army or a revival of the Western European Union concept, enabling Europe to act independently of NATO in some cases.

In the Indo-Pacific, we may witness the birth of a more formalized coalition akin to a "Pacific NATO". The QUAD (U.S., Japan, India, Australia) could deepen into a defense alliance if China becomes more aggressive. Already, we see steps: increased joint military exercises, intelligence sharing, and logistic support agreements among these nations. By mid-century, one could imagine an "Indo-Pacific Treaty Organization" that also ropes in countries like Vietnam, South Korea, or others fearful of Chinese hegemony. The AUKUS deal (Australia, UK, U.S.) for submarines hints at Anglo alliances pivoting to Asia. If China were to, say, attack Taiwan or otherwise use force, it would likely cement a formal anti-China bloc for decades. Conversely, if China rises peacefully and integrates somewhat, some U.S. allies might drift, hedging between East and West to maximize autonomy (we already see some hedging by the Philippines or Thailand). Thus, future Asian alignments are very contingent on China's behavior and U.S. strategy.

Meanwhile, the concept of the "Global South" alliance is less about one bloc and more about multiple centers of cooperation. The expansion of BRICS to include additional major developing economies (as happened in 2024 with invitations to Saudi Arabia, UAE, Egypt, Argentina, etc.) suggests a potential embryonic counterweight to G7. By 2075, BRICS could either dissipate if internal interests clash (e.g., India and China's rivalry can limit BRICS cohesion) or institutionalize into something more coherent (sometimes dubbed BRICS+ union). Likewise, organizations like the African Union (AU) or regional bodies (ASEAN in SE Asia, Mercosur/USAN in South America) might become more assertive collectively. The African Union, for instance, aspires to an integrated economic and perhaps political union by 2063 (its Agenda 2063 vision). If Africa's booming population and economy are harnessed, the AU could demand a permanent UN Security Council seat and swing considerable weight in trade negotiations or climate talks. Alternatively, if national interests dominate, these bodies may remain more talk-shops than action.

We also see the rise of **issue-based alliances**: countries banding together on single issues regardless of geography or ideology. For instance, a *Climate Action Coalition* of ambitious countries across continents pushing stronger carbon cuts (counterweighted by a coalition of fossil fuel exporters resisting). Or an alliance on tech standards – perhaps democracies aligning to ensure AI is used ethically vs. an authoritarian grouping that rejects those constraints. With the tech and economic fragmentation earlier discussed, standard-setting bodies (for internet governance, AI norms, space usage, etc.) themselves become arenas of alliance-building. By 2075, there might be a formal *"Digital Nations"* agreement among democracies to keep the internet open and secure, while authoritarian states adhere to a different set of cyber governance rules – effectively two internets with two governance regimes.

It's also worth noting possible **reconciliation and new friendships**: not all future is conflict. Long-time adversaries can realign given new generations or external shocks. For example, *Arab–Israeli normalization* (already underway with some Gulf states) could by 2050 create a Middle Eastern security bloc uniting former enemies against Iran or extremist threats. If Iran moderates post-Islamic Republic (a scenario some foresee in the event of regime change by 2040s), it could even join a regional security framework, transforming Middle East dynamics profoundly. In Asia, if *Korean reunification* were to occur (through North Korean collapse or gradual integration), a united Korea might alter alliance needs (maybe a unified Korea is neutral, or maybe it stays allied with the U.S. while engaging China economically). Another wildcard: *Turkey's trajectory* – it's a NATO member but with independent streak; by 2075 it might either recommit to the West or pivot fully Eurasian and lead its own Turkic-Islamic bloc. Similarly, *India's alliances* could shift: though non-aligned now, a more powerful India might form its own network in the Indian Ocean (with East Africa, Gulf, Southeast Asia partners) focusing on maritime security, or it might deepen ties with the West if Chinese rivalry sharpens.

#### **Shifts in Territorial Boundaries**

The world map of 2075 will likely have changes from that of 2025, though such shifts tend to be difficult and often violent. Some potential changes in territorial boundaries and status include:

• Resolved and Unresolved Wars: The outcome of the Russia-Ukraine war could redraw borders in Eastern Europe. Possible outcomes range from Ukraine regaining its occupied territories (including Crimea) if Russia's regime collapses or is pressured – to Russia cementing control over some eastern regions if it outlasts Ukraine's resistance. A frozen conflict line might harden into a de facto border if neither side achieves total victory, reminiscent of the Korean DMZ but in Europe. By 2075, the formal status might still be disputed (like we see with Israel/Palestine over decades), or a peace treaty might

have eventually set new recognized borders. Similarly, the status of **Taiwan** is a huge question mark: it could remain a self-governing entity (best case peacefully maintaining deterrence), or it could be forcibly unified into the PRC – which would drastically shift East Asia's strategic map and likely lead to U.S. basing in other Pacific islands as a counter. There's also a slim chance of a negotiated "one country, two systems" formula resurrected if leaderships change, but given Hong Kong's experience that seems unlikely to be acceptable to Taiwanese.

- New Nations and Separatist Movements: History shows that across 50-year spans, some countries dissolve and new ones emerge. By 2075, we might see **new independent states** formed from today's unresolved conflicts. For instance, *Kurdistan* the Kurds spread across Iraq, Syria, Turkey, and Iran have long aspired to statehood; turmoil in those regions could one day lead to an independent Kurdish state (most likely carved from a collapsed Syria or Iraq). *Scotland* could break from the UK in some future referendum, making it an independent country in Europe (and perhaps an EU member) a civilized boundary change if it occurs. Other potential separatist trajectories: *Catalonia* from Spain (though currently stymied), *Quebec* from Canada (less likely now than decades ago), or *secession of regions due to climate* imagine coastal regions wanting different policies than inland, etc. In Africa, there are also latent separatist desires (for example, the English-speaking region of Cameroon (Ambazonia) or Biafra in Nigeria). If governance fails to improve, some African states might see de facto breakaways. South Sudan's birth in 2011 may not be the last African border change by 2075.
- Union or Integration of States: Conversely, some borders might blur due to integration. The EU, if it doesn't fragment, could become more federated not erasing nations but acting almost like a single state externally. In another angle, unification of Korea is a possibility if conditions converge (likely via North's collapse or abrupt opening; South absorbing North). This would remove the DMZ line and create a single Korea a major geopolitical event. China's internal borders could also change: while secession is China's red line, one can't fully rule out scenarios where, say, a loosening CCP grip leads to more autonomy for regions like Tibet or Xinjiang (though independence is unlikely absent extreme upheaval). On a more speculative note, if climate change renders some small states unviable (e.g., atoll nations sinking), their people might form a diaspora nation retaining U.N. membership but with no territory, which could challenge the traditional notion that a country must have land.
- Arctic and Maritime Boundaries: Melting Arctic ice will open new navigation routes and resource sites, which may lead to finalized maritime boundaries in the Arctic Ocean. There are overlapping claims (e.g., the Lomonosov Ridge claim by Russia vs others) that might be settled by negotiation or adjudication by bodies like the UNCLOS tribunal. It's possible by 2075 the Arctic is partitioned amicably, or conversely, we could see a standoff with military deployments around the North Pole. Similarly, the South China Sea disputes (China's nine-dash line vs ASEAN claimants) could either be resolved by a code of conduct and joint development zones or could escalate if China simply enforces control; by 2075 we'll know, as resource extraction and naval power will bring matters to a head likely well before then.
- City-States and Special Zones: Another trend could be the rise of powerful city-states or autonomous zones. If national governments struggle, major cities might take more control (some already act on global stage for climate and trade). One could envision a scenario where, for instance, Hong Kong or Singapore-like entities proliferate perhaps an independent Dubai if the UAE's structure changed, or new charters for tech hub cities that operate under different rules than their

host country. There are also futuristic proposals for floating cities or space habitats (by 2075 maybe early stages of orbital or lunar settlements) – if those become real, their governance (national extension or independent?) adds a new dimension to sovereignty.

In summary, some current maps will likely be redrawn: conflict outcomes, secessions, and integrations will all play a part. The norm of inviolable borders has been strong post-1945 (few new countries formed relative to earlier eras), but under stress from war and climate, we may see more fluidity by mid-century. Every change will come with contention, so how the international community handles self-determination vs. territorial integrity debates will be crucial to avoid every secession turning violent. Perhaps new models like **confederations or autonomy arrangements** can address grievances without full breakup (e.g., federalism for ethnically divided states, or shared sovereignty over contested land). The hope is for peaceful evolution of the map, but history suggests many changes will be wrought by conflict unless proactive diplomacy intervenes.

#### **Political Systems and Governance Models in 2075**

The final piece of this outlook is how the internal nature of states might evolve. The tug-of-war between **authoritarianism and democracy** is a defining feature of current politics. We've seen over a decade of democratic backsliding in many countries – from Turkey to Brazil (though it rebounded), to Hungary, to the U.S. experiencing unprecedented strain with populism. Meanwhile, China's success has been touted by some as evidence that authoritarian governance can be effective for development. By 2075, what forms of government will be ascendant?

One possibility is a continued **diversification of governance models**. Some states may become highly technocratic, even integrating AI into governance (e.g., using AI to run day-to-day city management or allocate resources optimally). Others might double down on nationalist populism with charismatic strongmen (a pattern that can repeat). We might also see **hybrid regimes** that mix elements: e.g., a formally communist one-party state that nonetheless holds local elections and allows a capitalist economy (essentially China's model refined), or an electoral democracy that heavily regulates speech and uses surveillance (a potential outcome if Western states adopt too many authoritarian tools in crisis).

If current worries about democracy's fragility prove true, by mid-century more states could slide into authoritarianism, citing efficiency or security (especially under climate and migration pressures). **Environmental authoritarianism** is a concept where some argue only a strong central authority can enforce the tough measures to combat climate change (like curbing consumption, relocating populations, etc.). It's conceivable a climate-ravaged world might see publics willingly cede freedoms for survival, ushering in more authoritarian governments globally.

On the other hand, the spread of education, the empowerment of individuals via technology, and global norms might also produce waves of **democratization**. The youth of today in autocratic countries are often more connected and aware of alternatives than any prior generation. If regimes fail to deliver (economically or in disasters), public uprisings akin to the Arab Spring could occur, perhaps with more success next time or in different regions (imagine an "African Spring" or upheavals in a post-Putin Russia leading to democratization). So it's quite plausible that we'll have cycles: some places get freer, others more repressive, as global conditions change. By 2075, maybe some of today's authoritarian giants like China will have evolved to include more citizen participation (as the middle class demands say in governance), while some of today's democracies might become more restrictive.

We also must consider **non-state governance**. The influence of **mega-corporations** and private tech networks may grow to rival governments in some domains. Already, companies like Google or Facebook manage communication platforms used by billions, often making quasi-governance decisions (content moderation, data rules) that affect civic life. By mid-century, if say a corporation provides basic income or runs city services in a quasi-state manner, or if people's primary community is an online network with its own rules, the traditional nation-state might share space with new governance actors. We might see more special economic zones or privately governed smart cities run by corporate contracts. Some futurists even imagine "cloud nations" – groups of people connected by identity or interest across borders who leverage virtual currency and networks to operate like a polity (there are early attempts, e.g., **Estonia's e-residency** program or groups like Bitnation). If these mature, sovereignty could be partly redefined: one could *opt into* a form of governance not solely tied to where you live physically.

The **social contract** inside countries will also be tested by inequality and technology. If automation (driven by AI and robotics) eliminates many traditional jobs by 2050, governments may need to adopt new economic models (such as Universal Basic Income, UBI). That, in turn, changes the citizen-state relationship – perhaps states become more like guarantors of a baseline livelihood while people focus on creative pursuits. Or if mishandled, mass unemployment could fuel unrest and extremist politics. So economic governance (capitalism as we know it vs. some evolved form) is a big question. Climate stress might force more collectivist, government-directed economies (wartime-like mobilization to cut carbon), whereas rapid tech growth with strong markets might increase wealth but also inequality unless redistributed.

Finally, consider **international governance**. The UN and Bretton Woods institutions (IMF, World Bank, WTO) were 20th-century creations that many argue are outdated for the 21st. If multipolarity makes bigpower consensus harder, global governance could either stagnate or adapt. By 2075, we might have seen reform or replacement of these bodies. Perhaps a *Council of Major Powers* gets institutionalized (an update of the UN Security Council) including India, Brazil, Nigeria or others. Or maybe functional coalitions take over – for example, a Global Climate Authority to enforce emissions, a World Health Organization with real teeth post-COVID, etc. In a more fragmented scenario, regional governance might trump global – with the EU, AU, etc., each handling issues regionally and less global coordination overall (a fragmented "Westphalian" order). However, existential threats like climate or asteroid defense might necessitate a strong global response structure by then – potentially even a form of world governance in limited domains.

In a speculative RPG-worthy extension, one could imagine by 2075 the concept of **sovereignty evolving**: perhaps some cities declare independence as city-states; some nations voluntarily pool sovereignty in federations; citizenship could become more fluid (people holding multiple citizenships or global citizenship if visa regimes loosen due to labor needs). Technologically, if human colonization of Moon/Mars has begun by then, how those settlements are governed (under Earth nations' extension or new self-rule?) might also set interesting precedents (the Outer Space Treaty forbids claiming celestial bodies, but resource exploitation might change the practice). While space colonies are beyond current reality, later in the century they could become relevant to geopolitical calculus – e.g., competition for moon mining rights involving corporate-state partnerships.

#### **Conclusion: Plausible Futures 2025–2075**

Projecting 50 years ahead, we must acknowledge a wide cone of uncertainty. Nevertheless, current trajectories allow us to sketch several plausible futures for the global political landscape:

- A Multipolar Concert: The U.S., China, India, EU and others manage a turbulent transition to multipolarity without a major war. They establish new norms for coexistence, even as they compete economically and technologically. Global institutions are reformed to give new powers a voice, avoiding complete breakdown of order. Climate change hits hard but spurs cooperation in later decades (after initial failures) leading to massive joint adaptation projects. By 2075, no single ideology dominates there are democratic and authoritarian great powers but a mutual interest in stability prevails, with regional conflicts contained through collective mediation. This is a kind of "Cold Peace" scenario.
- Fragmentation and Conflict: Alternatively, nationalisms and rivalries could overwhelm cooperative impulses. The 2020s–30s see one or more major conflicts: perhaps a U.S.-China war over Taiwan, or a nuclear use in desperation by a rogue state, shattering the long nuclear taboo. Even if such wars are contained, the world might turn inward: trade blocs fully decouple, climate cooperation fails, and countries build fortress borders against waves of migrants. Alliances like NATO or UN could weaken or dissolve as trust erodes. By 2075, the world might look like a patchwork of fortified regions; technology and wealth disparities create resentment, and conflict persists in asymmetrical forms (endless cyber sabotage, proxy wars over resources). In this "Mad Max lite" scenario, global challenges go unaddressed, and humanity's progress possibly stalls or regresses amid crises.
- Renewed Globalization and Networks: There's also an optimistic vision where technological and social innovation produce new solutions. Clean energy breakthroughs, for example, might avert the worst of climate change; AI and biotech might usher in abundance (curing diseases, creating new jobs we can't imagine, providing enough food via synthetic means). In such a case, fear-driven politics might give way by mid-century to a sense of shared destiny especially if humanity faces common threats (climate, pandemics, even discovery of extraterrestrial life or large-scale space exploration can unite civilizations). By 2075 we could see stronger global governance: maybe a reformed UN that actually enforces peace with a standing peacekeeping force, or at least regional unions that are highly effective, linked in a federated world order. Sovereignty would be pooled for greater good in issues like climate and health. People might hold multiple loyalties (to city, nation, and planet). Conflicts wouldn't vanish, but perhaps shift largely to diplomatic and economic arenas with robust conflict-resolution mechanisms preventing most violence. This is a "Star Trek-ish" hopeful scenario, admittedly requiring many things to go right.

Most likely, reality will incorporate elements of all the above in different measures across regions and time periods. Some regions may achieve relative peace and integration, while others remain mired in conflict. The coming 50 years will test our adaptability as a species: **hybrid warfare and AI could make conflicts more unpredictable**, but also provide tools for smarter governance; **climate change will punish poor governance severely**, potentially catalyzing both crises and unprecedented solidarity; **power shifts will disrupt old institutions**, but with creative leadership could lead to more inclusive new ones.

For those building a future RPG setting, the period 2025–2075 offers a rich tapestry: you have the remnants of today's world orders intermingling with transformed landscapes – perhaps drowned cities requiring

refugee arcs, AI-run enclaves alongside collapse zones, and new alliances coexisting with ancient rivalries. It's a world where one can imagine **cyberpunk megacities** under total surveillance, **wilderness areas** contested by warlords and climate migrants, **orbital habitats** symbolizing new frontiers, and **global councils** debating existential risks.

In conclusion, the global political landscape of 2075 will be shaped by how we navigate the tensions and challenges identified in 2025. Traditional conflicts and great-power rivalries are resurging, but they are interwoven with newer domains of contest – cyber, space, information – and amplified by global issues like climate and migration that no nation can solve alone. The choices made in the next few decades – whether towards confrontation or cooperation, authoritarian control or inclusive governance, short-term gains or long-term stewardship – will set us on a path. The hopeful vision is one where humanity confronts these trials and emerges more united and resilient, but preparing for darker scenarios is prudent. This report has highlighted the drivers and possibilities to inform strategic thinking. As an RPG backdrop or a real policy roadmap, it underlines that **the future is not predetermined**: it will be the result of cumulative actions by leaders and citizens across the globe. Our task is to ensure those actions lead to a future that is peaceful, just, and livable – and to be imaginative in anticipating and shaping what is to come.

**Sources:** This report drew on a wide range of current analyses and data. Key sources include security think-tanks and journalism on hybrid warfare <sup>7</sup> <sup>9</sup>, expert predictions on the rise of new superpowers and economic trends <sup>1</sup> <sup>20</sup>, and research on climate migration and biosecurity risks <sup>37</sup> <sup>53</sup>, among others, as cited throughout. These references ground the speculative outlook in present-day knowledge, providing a credible basis for envisioning the world of 2075.

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