Kingdom Vision Special Report

www.kingdomvision.co.za

By Orlando Mostert

There Shall Be War No More

The International Crisis of Rare Earth Minerals, the Bottleneck in Armaments, Chips, Missiles and Turbine Manufacture, and the Prophetic Mandate of Isaiah…no more armaments for war!

> *"He shall judge between the nations, and shall decide disputes for many peoples; and they shall beat their swords into plowshares, and their spears into pruning hooks; nation shall not lift up sword against nation, neither shall they learn war anymore."* — **Isaiah 2:4 (ESV)**
>
> *"For to us a child is born, to us a son is given; and the government shall be upon his shoulder, and his name shall be called Wonderful Counselor, Mighty God, Everlasting Father, Prince of Peace."* — **Isaiah 9:6 (ESV)**

China controls the critical rare earths processed to purest form for the production of
- High quality latest nano scale computer chips especially gallium nitride chips for 5G.
- High temperature rare earths for gas turbine blades and specialty magnets
- Rare earths for specially hardened steels for military armaments and munitions

When America and NATO deplete their military arsenals in Ukraine and Iran and If China decides not to supply America and NATO nations for war productions then we enter the era of Isaiah 2:4. As the angels said at the nativity when announcing the birth of the Prince of Peace…"Peace on earth and good will to all men".

Introduction: Swords, Minerals, and the Word of the Lord

In the opening chapters of his prophecy, Isaiah ben Amoz lifts his eyes above the geopolitical anxieties of eighth-century Judah to behold the ultimate horizon of human history. Assyria was massing iron, chariots, and siege engines along the Levantine corridor, and Judah's kings were tempted to trust in alliances, silver, and armaments. Yet the word of the Lord declared a radically different future—not merely a temporary cease-fire negotiated by weary empires, but the dismantling of the machinery of war itself: *"They shall beat their swords into plowshares, and their spears into pruning hooks; nation shall not lift up sword against nation, neither shall they learn war anymore"* (Isaiah 2:4, ESV; echoed verbatim in Micah 4:3). Notice the precision of the prophetic image. God does not command that the iron and bronze be annihilated; He declares that the very materials forged for slaughter will be re-forged into instruments of agriculture, nourishment, and human flourishing.

Twenty-seven centuries later, the nations of the world find themselves locked in an unprecedented material crisis that mirrors Isaiah's metaphor in ways few secular strategists appreciate. Modern warfare no longer runs primarily on iron and bronze. Precision-guided missiles, fifth-generation stealth fighters, phased-array radars, autonomous drones, smart bombs, naval submarines, and military-grade computer chips depend on a narrow group of seventeen chemical elements known as rare earth elements (REEs), alongside allied critical minerals such as gallium and germanium. Without neodymium, praseodymium, dysprosium, terbium, samarium, and yttrium, the most expensive weapons systems on earth cannot steer, sense, withstand extreme heat, or leave the hangar.

At the very moment when global military expenditures have climbed to $2.887 trillion annually according to the Stockholm International Peace Research Institute (SIPRI), the supply chain for these indispensable minerals has fractured. The overwhelming majority of rare earth refining, separation, and permanent magnet manufacturing is concentrated in the People's Republic of China. Beginning in April 2025, Beijing's Ministry of Commerce (MOFCOM) imposed strict export licensing controls on seven medium and heavy rare earth elements—samarium, gadolinium, terbium, dysprosium, lutetium, scandium, and yttrium—along with the alloys and magnets derived from them (CSIS; S&P Global). Even as temporary trade pauses have been extended on other items into early 2027, those April 2025 heavy rare earth restrictions remain firmly in force, triggering acute shortages and price gaps of more than a hundredfold outside China.

Simultaneously, a parallel bottleneck has erupted in the manufacture of heavy-duty gas and aero turbines. The same yttrium-based thermal barrier coatings that shield fighter jet engines from catastrophic melting are required to protect the blades of industrial gas turbines generating electricity for the artificial intelligence data-center boom. Major Western manufacturers—GE Vernova, Siemens Energy, and Mitsubishi Heavy Industries—now carry multi-year backlogs stretching into the 2030s, forcing turbine makers to coordinate directly with the United States government on strategic yttrium stockpiles (Mining.com; Safeguard).

This essay examines these interlocking crises not merely as an industrial or geopolitical puzzle, but as an evangelical scholar reading the times through the lens of Holy Scripture. First, it catalogs the critical rare earth elements required for modern wartime armaments. Second, it documents the structural dependence of NATO and the Western alliance on Chinese refining and magnet production. Third, it analyzes the dual-use crisis in turbine manufacturing that threatens both military aviation and civilian power grids. Fourth, it establishes from Scripture that the Lord is sovereign over all nations and mineral wealth, and that His eternal purpose is peace on earth through Jesus Christ, the Prince of Peace. Fifth, it challenges the stewardship of the United States' near-trillion-dollar defense—increasingly styled in recent policy discourse as a Department of War—against urgent domestic needs in infrastructure, education, and health. Sixth and seventh, it argues that the providential constriction of war-making minerals points toward God's sovereign restraint on armaments and invites the church and the nations to prepare for the fulfillment of Isaiah 2: beating modern rare earth technologies into plowshares of peaceful investment.

1. Critical Rare Earths Required for Wartime Armaments

The seventeen rare earth elements—comprising the fifteen lanthanides from lanthanum to lutetium, plus scandium and yttrium—are misnamed in one sense and aptly named in another. Geologically, elements such as neodymium and cerium are roughly as abundant in the earth's crust as copper or nickel. Yet they rarely occur in concentrated, economically viable ore bodies, and their nearly identical chemical properties make separating one element from another an arduous, capital-intensive, and environmentally hazardous metallurgical undertaking. Precisely because of their unique 4f electron configurations, however, rare earths possess unmatched magnetic, optical, phosphorescent, and high-temperature properties for which defense engineers have found no equal substitutes.

1.1 Permanent Magnet Elements: Neodymium, Praseodymium, Dysprosium, Terbium, and Samarium

Modern precision warfare is fundamentally electromechanical. Every fin actuator on a cruise missile, every gimbaled seeker head on a smart bomb, every brushless motor on a tactical drone, and every flight-control surface on a stealth fighter relies on high-flux permanent magnets. Two families of rare earth magnets dominate defense manufacturing:

- Neodymium (Nd) and Praseodymium (Pr): These light rare earths form the core of neodymium-iron-boron (NdFeB) magnets, the strongest commercial permanent magnets known to science. NdFeB magnets provide high torque-to-weight ratios essential for compact actuators in unmanned aerial vehicles (UAVs), Joint Direct Attack Munitions (JDAMs), Tomahawk cruise missiles, and fighter aircraft flight controls (Mining.com).
- Dysprosium (Dy) and Terbium (Tb): Pure NdFeB magnets lose coercivity and demagnetize at elevated operating temperatures. Adding 2% to 10% dysprosium or terbium preserves magnetic strength inside missile airframes, electric drive motors, and aircraft engine bays. Terbium and dysprosium are also alloyed with iron to form Terfenol-D, a magnetostrictive material critical for naval sonar transducers in submarines and surface warships.
- Samarium (Sm): Combined with cobalt, samarium forms SmCo magnets that operate reliably at extreme temperatures exceeding 300°C and resist corrosion without heavy protective plating. SmCo magnets are indispensable in missile guidance fins (such as the AIM-9 Sidewinder and Iron Dome interceptors), aircraft power generators, and hypersonic systems. Defense contractor Lockheed Martin alone consumes substantial quantities of samarium, with roughly 50 pounds of SmCo magnets embedded in each F-35 fighter jet (Mining.com).

1.2 High-Temperature, Optical, and Electronic Minerals: Yttrium, Gadolinium, Europium, Gallium, and Germanium

Beyond magnets, a second tier of rare earths and companion critical minerals enables the thermal, optical, and computational architecture of the modern battlespace:

- Yttrium (Y): Yttrium is the cornerstone of yttria-stabilized zirconia (YSZ) thermal barrier coatings applied to turbine blades in military jet engines, allowing engines to burn hotter and achieve greater thrust-to-weight efficiency without melting. Yttrium-iron-garnet (YIG) filters and oscillators are equally vital in electronic

warfare jamming suites, radar-absorbent materials, and solid-state lasers (Mining.com; Volt Insight).

- Gadolinium (Gd), Europium (Eu), Erbium (Er), and Scandium (Sc): Gadolinium and europium are used in night-vision phosphors, laser rangefinders, and secure optical communications. Erbium is added to vanadium-infused steel alloys to improve malleability in jet engine components, while scandium-aluminum alloys provide lightweight structural strength for aerospace frames.
- Gallium (Ga) and Germanium (Ge) in Chips and Radars: Although classified separately from the seventeen lanthanides, gallium and germanium are routinely grouped with rare earths in strategic mineral policy—and both were placed under Chinese export controls in August 2023 (Rare Earth Mining Guide). Gallium nitride (GaN) and gallium arsenide (GaAs) semiconductors power Active Electronically Scanned Array (AESA) radars, satellite communications, and high-frequency military microchips, while germanium is essential for infrared optics and night-vision targeting pods. Rare earths such as cerium and lanthanum are also used in chemical-mechanical planarization (CMP) slurries to polish advanced silicon wafers for military computer chips.

Table 1 summarizes the principal elements required across wartime armaments, their specific defense functions, and the severity of their current supply-chain exposure.

Element / Mineral	Primary Defense Form	Key Armament Applications	Supply Vulnerability
Neodymium (Nd) & Praseodymium (Pr)	NdFeB sintered magnets	Drone motors, JDAM smart bombs, missile actuators, EVs	High: 90%+ refining & magnet fabrication in China
Dysprosium (Dy) & Terbium (Tb)	Heavy REE magnet additives; Terfenol-D	High-temp fighter/missile magnets; submarine sonar	Severe: April 2025 export licenses; near-zero non-China separation
Samarium (Sm)	SmCo high-temp magnets	AIM-9 Sidewinder, Iron Dome interceptors, F-35 generators	Severe: Near-monopoly Chinese supply; April 2025 controls

Element / Mineral	Primary Defense Form	Key Armament Applications	Supply Vulnerability
Yttrium (Y)	YSZ coatings; YIG crystals	Jet engine thermal barrier coatings, lasers, radar, EW	Extreme: ~100% U.S. import reliance; 4,400%+ price surge
Gadolinium (Gd) & Europium (Eu)	Phosphors, optical crystals	Night-vision, laser target designators, optical sensors	High: Gd under April 2025 export licensing
Gallium (Ga) & Germanium (Ge)	GaN/GaAs wafers; IR optics	AESA radars, military computer chips, thermal imaging	Severe: Under separate Chinese export controls since Aug 2023

1.3 Platform-Level Material Intensity

When these element-level requirements are aggregated at the level of major weapons platforms, the physical scale of modern military dependence becomes unmistakable. According to U.S. Congressional Research Service and industry analyses compiled by Mining.com, Neoterra Partners, and Benchmark Mineral Intelligence cited by Foreign Policy, a single Lockheed Martin F-35 Lightning II stealth fighter requires approximately 900 to 920 pounds (417 kg) of rare earth materials. Naval platforms are even more mineral-intensive: an Arleigh Burke-class DDG-51 guided-missile destroyer incorporates 5,200 to over 5,700 pounds of rare earths, while a single Virginia-class nuclear attack submarine requires 9,200 to 10,000 pounds (4.6 tons). Table 2 illustrates this platform-level exposure.

Weapons Platform	Est. Rare Earth Mass	Critical Minerals Required	Primary Supply Choke Point
F-35 Lightning II Fighter	~900–920 lbs (417 kg)	Nd, Pr, Dy, Tb, Sm (~50 lbs SmCo), Y	Sintered magnets & YSZ jet-engine coatings

Weapons Platform	Est. Rare Earth Mass	Critical Minerals Required	Primary Supply Choke Point
Arleigh Burke DDG-51 Destroyer	5,200–5,700+ lbs	Nd, Pr, Dy, Tb, Ga (SPY-6 radar)	Heavy REE magnet alloys & GaN radar chips
Virginia-Class Submarine	9,200–10,000+ lbs	Nd, Pr, Dy, Tb (Terfenol-D sonar)	Dysprosium & terbium heavy separation
Precision Missiles & Smart Bombs	Several lbs per unit (high attrition)	Sm, Dy, Tb, Nd, Pr, Ga	Rapid interceptor drawdown in active conflicts

Crucially, precision munitions are consumable items. In high-intensity regional conflicts—such as the recent exchanges involving ballistic missile interceptors in the Middle East and air-defense attrition in Eastern Europe—stockpiles of Tomahawk, AMRAAM, Patriot, and Iron Dome interceptors are expended rapidly, forcing defense ministries to reorder thousands of guidance units whose magnet and chip supply chains pass through adversarial territory (Mining.com).

2. Western and NATO Dependence on China

The central paradox of Western defense industrial policy is that NATO nations possess the world's largest military budgets yet lack sovereign control over the foundational materials of their own weapons. This vulnerability did not arise overnight. Over the past three decades, Western governments and corporations offshored the chemically complex, energy-intensive, and environmentally burdensome stages of rare earth separation and metal refining to China, while retaining high-margin aerospace and defense assembly at home. In 1992, Deng Xiaoping famously remarked, "The Middle East has oil; China has rare earths." Beijing's subsequent state-directed industrial policy turned that geological endowment into a near-total midstream monopoly.

2.1 Mining Versus Refining and Magnet Fabrication

Public commentary often confuses mining with refining. According to the U.S. Geological Survey (USGS) Mineral Commodity Summaries 2026, China accounted for 69.2% of global rare earth mine production in 2025 (approximately 270,000 metric tons

of rare earth oxide equivalent), followed distantly by the United States at 13.1% (51,000 metric tons), Myanmar at 9.7% (38,000 metric tons), and Australia at 4.6% (18,000 metric tons). Yet mining is only the first and least constraining link in the chain. Even ore mined in California or Western Australia has historically been shipped to China for chemical separation, metal reduction, and magnet sintering.

As documented by the International Energy Agency (IEA) and the United States Studies Centre (USSC), China controls approximately 85% to 91% of global rare earth refining and separation capacity and 92% to 94% of sintered permanent magnet manufacturing. For heavy rare earths—specifically dysprosium, terbium, and yttrium—Western commercial separation capacity has been effectively zero. Figure 1 illustrates this steepening pyramid of concentration across the value chain.

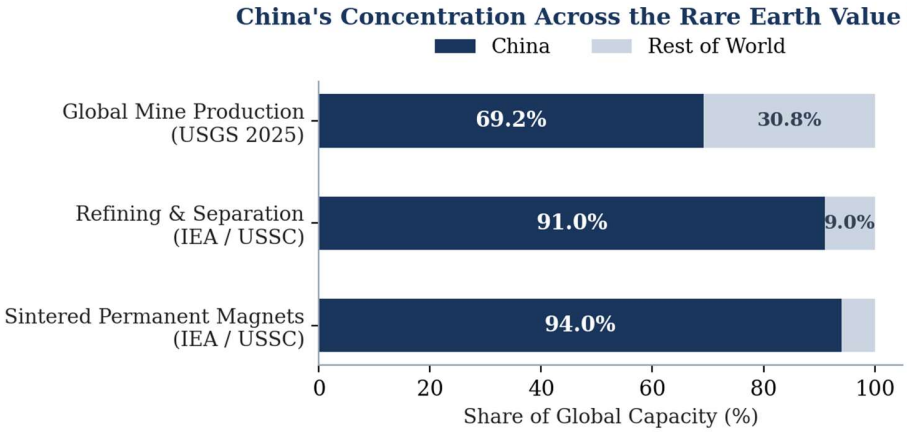


Figure 1: China's share of global rare earth mining, refining, and permanent magnet production (USGS MCS 2026; IEA; USSC).

2.2 The 2025–2026 Export Control Shock and NATO's Structural Fragility

The strategic consequences of this monopoly became acute on April 4, 2025, when China's Ministry of Commerce and General Administration of Customs placed seven medium and heavy rare earth elements—samarium, gadolinium, terbium, dysprosium, lutetium, scandium, and yttrium—along with their alloys, oxides, and downstream SmCo and Dy/Tb-containing NdFeB magnets under mandatory dual-use export licensing (SDM Magnetics; Andersen Institute). Every shipment now requires state-council export approval, allowing Beijing to meter or deny supplies to Western defense contractors with surgical precision.

Although China subsequently extended a temporary suspension of separate October 2025 controls on five other elements (such as europium and ytterbium) until January 10, 2027, S&P Global and Crux Investor) report as of November 2026 that the April

2025 licensing regime on the seven core military rare earths remains fully intact. The resulting market dislocation has been dramatic: Chinese yttrium oxide exports fell to roughly 40% of their 2023–2024 average (with shipments to Japan dropping 97.7% in January–May 2026), driving European yttrium prices to $1.15 million per metric ton compared to $9,144 per ton inside China—a 125-fold price disparity (The Oregon Group; Crux Investor). Meanwhile, North American dysprosium oxide surged 242% between March and October 2026 to $4,100 per kilogram, against $215–$220 per kilogram domestically in China.

For NATO, this exposes a systemic vulnerability that no amount of short-term defense appropriations can erase. In 2022, the Pentagon briefly had to halt F-35 deliveries after discovering a Chinese-origin samarium-cobalt magnet inside the aircraft's turbomachine pump, ultimately issuing a national-security waiver to keep production moving (Karve International). Since 2020, the U.S. Department of Defense has invested over $439 million in domestic mine-to-magnet initiatives such as MP Materials, and executive orders have invoked the Defense Production Act. Yet U.S. mine permitting averages 29 years, and industry analysts estimate that establishing a fully independent non-Chinese mine-to-magnet supply chain will require $20 billion to $30 billion over a full decade (Neoterra Partners). Across the 32 members of NATO, fragmented industrial policies and scarce refining infrastructure mean that a single chokepoint in heavy rare earths constrains the entire alliance's readiness.

3. The Crisis in Turbine Manufacture: Energy and Aerospace

The rare earth bottleneck is not confined to weapons factories; it strikes simultaneously at the heart of civilian energy infrastructure and military propulsion. Both heavy-duty industrial gas turbines—the workhorses of modern baseload electricity—and military turbofan jet engines rely on identical materials science. In particular, both depend on yttria-stabilized zirconia (YSZ) thermal barrier coatings to survive combustion temperatures that exceed the melting point of the underlying nickel-based superalloys.

3.1 AI Power Demand Meets a Five-Year Turbine Backlog

Between 2024 and 2026, the rapid build-out of hyperscale artificial intelligence data centers triggered an unprecedented surge in electricity demand. The International Energy Agency) projects global data-center electricity consumption to roughly double to 945 terawatt-hours by 2030, and natural gas turbines remain the primary source of dispatchable, 24/7 power where grid interconnections lag. Yet global heavy-duty gas turbine manufacturing is an oligopoly dominated by three Western and allied firms: GE

Vernova, Siemens Energy, and Mitsubishi Heavy Industries (Moomoo / Great Wall Securities).

By mid-2026, order books at these manufacturers had stretched four to five years into the future, pushing new delivery slots into the early 2030s. GE Vernova reported 116 GW of gas turbine equipment in backlog and slot reservations as of Q2 2026 (comprising 53 GW of firm backlog and 63 GW of reservations) against an annual production capacity of roughly 20 GW, while Siemens Energy reported 69 GW of firm backlog alongside 26 GW of reservations (Project 54; Safeguard). This physical scarcity has given turbine makers extraordinary pricing power—first-half 2026 orders at GE Vernova were priced more than 20% above late-2025 levels—even as utilities and AI developers compete fiercely for manufacturing slots.

3.2 The Yttrium Chokepoint and China's Strategic Turbine Push

Overlaying this manufacturing backlog is the acute shortage of yttrium. The United States is nearly 100% import-reliant on China for yttrium, with consultancy Project Blue estimating 2025 U.S. demand at 516 metric tons against just 87 metric tons of direct Chinese imports (Volt Insight). In December 2025, GE Vernova CEO Scott Strazik publicly confirmed that the company was working directly with the U.S. government to build strategic yttrium stockpiles while researching alternative coatings that carry cost and performance trade-offs (Mining.com; RawMaterials.net).

Turbine / Supply Metric	2025–2026 Status	Dual-Use Impact (Energy & Defense)
GE Vernova Order Book	116 GW total (53 GW firm + 63 GW reservations) vs ~20 GW/yr output	Delivery lead times stretched 4–5 years into early 2030s
Siemens Energy Backlog	69 GW firm backlog + 26 GW reservations (Aug 2026)	25%+ of order book tied to AI data centers; severe grid queue
U.S. Yttrium Supply Gap	516 t estimated 2025 demand vs 87 t direct Chinese imports	Threatens YSZ thermal barrier coatings for both gas & jet turbines

Turbine / Supply Metric	2025–2026 Status	Dual-Use Impact (Energy & Defense)
China Domestic Turbine Push	Dongfang & Shanghai Electric exporting to overseas data centers	Beijing targeting fully independent turbine supply chain by 2030

While Western turbine makers scramble for yttrium and cast-blade capacity, Chinese state-backed manufacturers such as Dongfang Electric and Shanghai Electric—insulated by domestic access to rare earths—are aggressively pursuing overseas data-center power contracts while working toward a self-sufficient heavy-duty gas turbine supply chain by 2030 (Tecshx; Magica). The lesson for Western policymakers is unmistakable: the same mineral scarcity that hobbles military jet-engine sustainment simultaneously threatens the electrical grid required for domestic industry and artificial intelligence. War-making capacity and peaceful energy abundance are competing for the exact same constrained atoms.

4. God's Sovereignty and the Plan of Peace Through Christ

Secular geopolitics interprets the rare earth and turbine crises solely in terms of trade wars, industrial policy, and Great Power competition. Yet an evangelical theology of history refuses to stop at secondary causes. Scripture teaches that the living God is neither a passive spectator to mineral markets nor a mere tribal deity of one nation. He is the Creator, Owner, and Sovereign Governor of the entire earth and every element within its crust.

4.1 Absolute Sovereignty Over Earth, Resources, and Nations

The biblical witness begins with radical ownership: *"The earth is the Lord's and the fullness thereof, the world and those who dwell therein"* (Psalm 24:1, ESV). Every deposit of bastnäsite, monazite, and ionic adsorption clay—whether buried beneath Inner Mongolia, Mountain Pass, or South African fly ash—belongs by right of creation to Almighty God. In Job 28, the inspired poet marvels that while human beings tunnel into dark mountains to extract ore and precious metals, wisdom and ultimate sovereignty belong to God alone, who sets bounds for the wind and measures out the waters.

This sovereignty extends equally to the rise, fall, and constraint of geopolitical superpowers. Daniel's confession before the Babylonian court stands as the charter of biblical historiography: *"He changes times and seasons; he removes kings and sets up*

kings" (Daniel 2:21), for *"the Most High rules the kingdom of men and gives it to whom he will"* (Daniel 4:17). Throughout the Old Testament, the Lord repeatedly raises up foreign empires—Assyria as the "rod of my anger" (Isaiah 10:5), Babylon under Nebuchadnezzar (Habakkuk 1:6), and Cyrus of Persia (Isaiah 45:1–7)—to humble proud nations, check military hubris, and advance His redemptive purposes. Crucially, those instruments do not need to acknowledge Yahweh to serve His providential ends; as Proverbs 21:1 declares, *"The king's heart is a stream of water in the hand of the Lord; he turns it wherever he will."*

> *"Come, behold the works of the Lord, how he has brought desolations on the earth. He makes wars cease to the end of the earth; he breaks the bow and shatters the spear; he burns the chariots with fire."* — Psalm 46:8–9 (ESV)

4.2 The Eternal Plan of Peace Through Jesus, the Prince of Peace

If God is sovereign over the nations, what is the overarching goal of His governance? Scripture answers with a single, luminous word: *shalom*—peace, wholeness, and goodwill among humanity reconciled to God through His Son, Jesus Christ. Long before Bethlehem, the prophet Isaiah bound the Messiah's royal title directly to the end of militarism. Immediately after describing the burning of every warrior's boot and blood-stained garment (Isaiah 9:5), Isaiah proclaims:

> *"For to us a child is born, to us a son is given; and the government shall be upon his shoulder, and his name shall be called Wonderful Counselor, Mighty God, Everlasting Father, Prince of Peace. Of the increase of his government and of peace there will be no end."* — Isaiah 9:6–7 (ESV)

At the incarnation, the heavenly host echoed this prophetic promise over the fields of Judea: *"Glory to God in the highest, and on earth peace among men"* (Luke 2:14). Jesus Himself distinguished His peace from the fragile, armed deterrence of empires: *"Peace I leave with you; my peace I give to you. Not as the world gives do I give to you"* (John 14:27). In the Sermon on the Mount, He pronounced blessing not on the architects of superior firepower, but on the peacemakers: *"Blessed are the peacemakers, for they shall be called sons of God"* (Matthew 5:9). And at the cross, the Apostle Paul writes, Christ *"is our peace,"* breaking down the dividing wall of hostility between nations and reconciling all things to Himself, *"making peace by the blood of his cross"* (Ephesians 2:14; Colossians 1:20).

Evangelical theology recognizes a vital balance here. In a fallen world still awaiting the visible return of Christ, civil magistrates bear the sword as God's servants to restrain evil

and maintain just order (Romans 13:1–4). Scripture does not endorse naive, unilateral surrender to tyranny. Yet there is a profound moral gulf between legitimate, proportionate defense and the idolatrous pursuit of perpetual military supremacy. When nations trust in *"chariots because they are many and in horsemen because they are very strong, but do not look to the Holy One of Israel"* (Isaiah 31:1; cf. Psalm 20:7), they cross from lawful stewardship into spiritual rebellion. God's declared plan for humanity is not an eternal arms race; it is the reign of the Prince of Peace, under whom the church is commissioned as ambassadors of reconciliation (2 Corinthians 5:18–20) and commanded, *"If possible, so far as it depends on you, live peaceably with all"* (Romans 12:18).

5. The Stewardship Crisis: America's Department of War Versus Human Flourishing

Against the backdrop of God's sovereignty and the rare earth supply crunch, the fiscal priorities of the United States demand urgent moral scrutiny. According to SIPRI's April 2026 Fact Sheet, global military expenditure reached $2,887 billion in 2025—the eleventh consecutive year of real-terms growth, lifting the global military burden to 2.5% of world GDP. The 32 member states of NATO accounted for $1,581 billion, or 55% of all military spending on earth. The United States alone spent $954 billion in 2025—representing 33% of global military expenditure and exceeding the combined spending of the next six largest military powers ($905 billion), as documented by the Peter G. Peterson Foundation).

Far from moderating, Washington's appetite for armaments has intensified. The FY 2026 budget request published by the Office of the Under Secretary of War (Comptroller) at comptroller.war.gov) totaled $961.6 billion—a 13.4% jump—while congressional appropriations for 2026 pushed total U.S. defense outlays past $1 trillion, with active proposals for $1.1 trillion to $1.5 trillion in FY 2027 (SIPRI Press Release; Holland & Knight). Even the linguistic shift back toward styling the Pentagon as a "Department of War" signals a psychological normalization of perpetual armed conflict. Figure 2 illustrates the sheer scale of U.S. spending relative to the rest of the world.

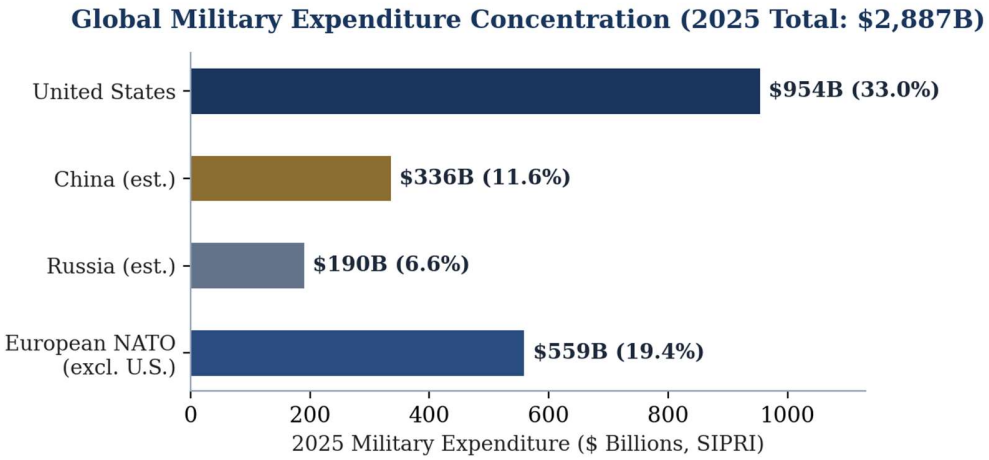


Figure 2: Global military expenditure concentration in 2025 (SIPRI Military Expenditure Database, April 2026).

5.1 Opportunity Cost: Infrastructure, Education, and Health

How long can America—or any nation—continue to pour roughly one trillion dollars every year into a Department of War when its own physical infrastructure, public education, and healthcare systems face compounding strain? In biblical ethics, budgets are moral documents. Jesus declared, *"For where your treasure is, there your heart will be also"* (Matthew 6:21). Every billion dollars allocated to a submarine or missile interceptor that sits idle—or worse, is consumed in endless regional escalations—is a billion dollars withheld from the common good:

- Productive Infrastructure and Energy Resilience: Bridges, rail corridors, water treatment systems, rural broadband, and high-voltage electrical grids require sustained capital. Redirecting even a fraction of annual armaments spending toward grid modernization and non-military turbine manufacturing would alleviate the very energy bottlenecks threatening domestic industry.
- Education and Scientific Formation: The West's rare earth vulnerability itself stems in part from decades of educational neglect in extractive metallurgy, chemical engineering, and vocational trades (Karve International). Investing in schools, universities, and technical apprenticeships equips a generation to build rather than destroy.
- Public Health and Human Dignity: Every human being bears the image of God (Genesis 1:27). Chronic disease, mental health crises, and unaffordable medical care erode communities from within. As Marshall Islands President Hilda Heine recently pleaded before world leaders at COP31 in November 2026: (The Hindu).

The Apostle James diagnoses the root of such misplaced priorities: *"What causes quarrels and what causes fights among you? Is it not this, that your passions are at war within you? You desire and do not have, so you murder"* (James 4:1–2). When a nation spends more on weapons than the next six countries combined yet still feels insecure, the crisis is not a deficit of firepower—it is a crisis of misplaced trust. The rare earth shortage exposes the futility of trying to buy absolute security through hardware whose physical supply chain is already constrained.

6. A Divine Plan Restricting War Armaments Production

When fiscal hubris collides with physical scarcity, the Christian scholar is compelled to ask: is the current restriction of critical rare earth minerals merely an accident of trade policy, or is it an instrument of divine providence? Throughout redemptive history, God has repeatedly restrained human violence by disrupting the material means of war. When Pharaoh's chariots pursued Israel into the Red Sea, the Lord clogged their chariot wheels so that they drove heavily (Exodus 14:25). When Sisera's nine hundred iron chariots threatened Israel, God sent a torrential downpour at the Kishon River to immobilize them in the mud (Judges 4–5). In Isaiah 45:7, the Lord declares, *"I form light and create darkness; I make well-being and create calamity; I am the Lord, who does all these things."*

To discern a divine plan in the rare earth bottleneck is neither to endorse Chinese mercantilism nor to claim private prophetic revelation. Scripture itself provides the theological category of *concurrence*—the truth that God sovereignly overrules the self-interested actions of human actors to accomplish His holy purposes. Joseph summarized this principle to his brothers: *"As for you, you meant evil against me, but God meant it for good"* (Genesis 50:20). Similarly, the early church prayed in Acts 4:27–28 that earthly rulers only did *"whatever your hand and your plan had predestined to take place."* Beijing may impose export licenses on dysprosium, terbium, samarium, and yttrium to gain geopolitical leverage; yet the God who *"works all things according to the counsel of his will"* (Ephesians 1:11) can use those very restrictions to place a providential ceiling on the industrial production of modern armaments.

Consider the practical effect of the 2025–2026 mineral chokepoint. Even with trillion-dollar defense budgets, Western defense contractors cannot rapidly scale up production of F-35s, Virginia-class submarines, or precision-guided interceptors when samarium, dysprosium, and yttrium are rationed and non-Chinese prices sit 10 to 125 times higher than domestic Chinese prices. The material limits of creation are acting as a brake on the escalation of destruction. Rather than viewing this solely as a problem to be solved

by spending $30 billion to replicate military supply chains, believers and thoughtful policymakers should recognize it as a providential summons: God is restricting the swords so that humanity might reconsider the plowshares.

7. The Near-Future Prospect of Isaiah 2's Fulfillment

Where, then, does this trajectory lead? Isaiah 2:2–4 locates the beating of swords into plowshares *"in the latter days,"* when the mountain of the house of the Lord is established as the highest of the mountains and all nations flow to it saying, *"Come, let us go up to the mountain of the Lord… that he may teach us his ways and that we may walk in his paths."* Evangelical Christians rightly recognize that the ultimate, universal abolition of war awaits the return of Jesus Christ and the full manifestation of His kingdom. No human treaty, United Nations resolution, or supply-chain disruption will usher in the Millennium by human strength alone. As the Apostle Paul reminds us, our blessed hope is *"the appearing of the glory of our great God and Savior Jesus Christ"* (Titus 2:13).

Yet biblical eschatology is never an excuse for passive fatalism. Because the future of Christ's kingdom is certain, the church and the nations are called to live in alignment with that future right now. Every prophecy of the coming kingdom carries a present ethical imperative. Just as the early church practiced economic generosity in anticipation of the age to come, so today's stewards of science, industry, and public policy can begin beating the high-technology "swords" of rare earth engineering into the "plowshares" of peaceful human development. Table 4 illustrates how every single critical mineral currently locked into military platforms has an immediate, life-giving civilian counterpart.

Critical Mineral / Tech	Wartime 'Sword' Application	Peaceful 'Plowshare' Investment	Human Flourishing Impact
Nd, Pr, Dy, Tb Magnets	Missile fin actuators, drone motors, submarine drives	Wind turbines, EVs, high-efficiency industrial motors, MRI	Clean transportation, grid power, diagnostic medicine
Yttrium (Y) Coatings	Stealth fighter jet engines, electronic warfare YIG	High-efficiency power-plant gas turbines, LED lighting	Reliable electricity for hospitals, schools, and industry

Critical Mineral / Tech	Wartime 'Sword' Application	Peaceful 'Plowshare' Investment	Human Flourishing Impact
Samarium (Sm) Alloys	Hypersonic & interceptor missile guidance	Precision medical robotics, clean-energy generators	Surgical accuracy and resilient local power
Gallium & Germanium Chips	AESA combat radars, targeting pods, smart bombs	5G/6G broadband, solar photovoltaics, fiber optics	Global education access, rural connectivity, clean energy

Look closely at the symmetry in Table 4. The same rare earth permanent magnets that guide a cruise missile toward a city can power a wind turbine or an MRI scanner that saves a child's life. The same yttrium thermal coatings that protect a bomber's turbine blades can enable cleaner, more efficient baseload electricity for communities across the developing and developed world. The same gallium nitride semiconductors that drive military radar arrays can expand high-speed internet and medical telemetry to underserved regions. God has not placed these remarkable elements in the earth for human slaughter; He placed them there for dominion that cultivates, heals, and blesses (Genesis 1:28; Psalm 8:6–8).

As the world approaches the threshold of what many believers sense is a decisive chapter in prophetic history, the convergence of trillion-dollar war budgets, fragile mineral monopolies, and global exhaustion with conflict creates an extraordinary opening. The command of Isaiah 2—*"neither shall they learn war anymore"*—stands as both a promise of what Christ will soon consummate and a summons to immediate repentance from the idolatry of armaments. Nations that heed this call early by redirecting capital, engineering talent, and rare earth technologies away from destruction and toward infrastructure, education, health, and peaceful energy abundance will align themselves with the grain of God's universe.

Conclusion: Choosing Life Over the Machinery of War

The international crisis of rare earth minerals is a wake-up call written in the periodic table. Modern NATO and Western armaments—from the 920 pounds of rare earths in an F-35 to the 9,200 pounds in a Virginia-class submarine, from Tomahawk missiles to AESA radars—rest on supply chains dominated at 85% to 94% by China's refining and

magnet-making apparatus. Beijing's April 2025 export controls on seven heavy rare earths have exposed this fragility while triggering a parallel crisis in gas and aero turbine manufacturing that threatens both military readiness and the electrical grid.

Yet above the maneuvering of Washington, Brussels, and Beijing sits the throne of the Almighty. The earth and all its minerals belong to the Lord. His declared purpose is peace on earth and goodwill toward mankind through Jesus Christ, the Prince of Peace. In light of that sovereign plan, the United States' trillion-dollar annual expenditure on its Department of War represents a profound crisis of stewardship when infrastructure crumbles, schools struggle, and healthcare costs burden millions. The very mineral restrictions that now constrain weapons production may be received with sober reverence as a providential restraint—a divine nudge away from endless war and toward the day when Isaiah 2 is fulfilled in full.

There shall be war no more. That is not wishful thinking; it is the sworn word of the Lord of hosts. Until the Prince of Peace returns to establish His visible reign over all the earth, let His church proclaim the gospel of reconciliation, and let the nations begin today to beat their rare earth swords into plowshares of life, knowledge, and peace.

Sources and References

Center for Strategic and International Studies (CSIS). "The Consequences of China's New Rare Earths Export Restrictions." April 14, 2025.

Crux Investor. "China's Rare Earth Relief Lets Alternative Suppliers Sell at High Prices." November 12, 2026.

International Energy Agency (IEA). "New projects, partnerships and policies are needed to address supply chain risks for rare earth elements." April 8, 2026.

Karve International. "The Impact of China's Rare Earth Supply Chain Monopoly on National Security." August 27, 2024.

Mining.com. "US-China deal, and more DoD money will not loosen China's grip on military-grade rare earths magnets." June 20, 2025.

Mining.com / Reuters. "GE Vernova working with US government to boost stocks of yttrium." December 9, 2025.

Neoterra Partners. "Changing Pricing Strategy: The Global Rare Earth Element Supply Chain." 2025.

Office of the Under Secretary of War (Comptroller). "FY 2026 Budget Request Overview Book." July 2025.

Peter G. Peterson Foundation. "The United States Spends More on Defense than the Next 6 Countries Combined." May 7, 2026.

Project 54. "GE Vernova: 116 GW Booked, 53 GW Actually Ordered." October 12, 2026.
S&P Global. "China extends rare earth export suspension to January 2027." November 10, 2026.
Safeguard. "Gas turbine order books in 2026: GE Vernova, Siemens Energy, Mitsubishi." October 19, 2026.
SDM Magnetics. "Impact of China's Rare Earth Export Controls on Magnet Export Status." August 1, 2025.
Stockholm International Peace Research Institute (SIPRI). "Trends in World Military Expenditure, 2025." April 27, 2026.
Tecshx. "China Pushes Its Gas Turbine Makers Toward Overseas Data Centers." November 14, 2026.
The Oregon Group. "Rare Earth export controls: China extends pause to January 10." November 9, 2026.
U.S. Geological Survey (USGS) via Farmonaut. "Mineral Commodity Summaries 2026: China's Share of Global Rare Earth Production." April 6, 2026.
United States Studies Centre (USSC). "The missing market: Why US and allies' rare earth derisking needs a demand-side strategy." September 30, 2026.
Volt Insight. "The rare earth nobody was watching (Yttrium)." June 26, 2026.