

# **Geopolitical Conflict and the Transformation of the Global Economy**

Energy Markets, Inflation, Recession Risk, and Strategic Resource Security

**Special Focus: Canada as a Strategic Resource Economy**

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## **Abstract**

This report examines the macroeconomic consequences of geopolitical conflict on global energy markets, inflation dynamics, recession risk, and strategic resource economies. Particular attention is given to the evolving role of Canada as a reliable supplier of energy, critical minerals, and agricultural inputs in a fragmented global economic system.

Using historical analysis, energy market modeling, and scenario-based forecasting, the report evaluates how disruptions to global energy supply chains influence macroeconomic stability and capital markets. The analysis concludes that geopolitical risk has become a structural feature of the global economy and that resource-rich democracies such as Canada may gain strategic importance as governments seek secure and reliable supply chains.

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## Executive Summary

### The Emerging Geopolitical Resource Economy

The global economy is entering a period in which geopolitical conflict, energy market dynamics, and structural changes in global supply chains increasingly shape economic outcomes. For several decades following the end of the Cold War, international economic integration was characterized by expanding trade networks, relatively stable geopolitical relations, and abundant global liquidity. During that period, businesses and investors operated within an environment where energy markets were broadly integrated and supply chains stretched across continents in pursuit of efficiency and cost minimization.

That environment is evolving.

Recent geopolitical developments—including the war in Ukraine, strategic competition among major powers, and disruptions to global supply chains—have revealed the vulnerability of economic systems that depend heavily on complex international networks for critical resources and industrial inputs. At the same time, inflation pressures emerging in the early 2020s have forced central banks to adopt tighter monetary policies, ending a prolonged period of exceptionally low interest rates that followed the global financial crisis<sup>1</sup>.

Energy markets sit at the center of this transformation. Oil and natural gas remain essential inputs for global transportation, manufacturing, and agriculture. As a result, fluctuations in energy supply and pricing have far-reaching consequences for inflation, industrial production, and economic growth. The energy price surge following Russia's invasion of Ukraine illustrates how geopolitical shocks can rapidly propagate through the global economy<sup>2</sup>.

Simultaneously, the global energy system is undergoing a structural transition. Governments are investing heavily in renewable energy infrastructure, electrical grid modernization, and battery technologies in order to address climate objectives and enhance energy security. These investments are increasing demand for a wide range of industrial metals and minerals, including copper, nickel, lithium, and rare earth elements.

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<sup>1</sup> International Monetary Fund. (2024). World Economic Outlook.

<sup>2</sup> International Energy Agency. (2024). World Energy Outlook.

The combination of geopolitical tensions, energy security concerns, and industrial policy initiatives is reshaping global commodity markets. Demand for natural resources is increasingly driven not only by traditional economic growth but also by strategic policy decisions made by governments seeking to strengthen supply chain resilience and technological leadership.

These developments have several important implications for the global economy.

**Exhibit 1. Graphical Summary of Global Economic Transmission Mechanism**



Source: Author synthesis based on IMF, IEA, BIS, and World Bank analysis.

First, energy markets are likely to remain volatile as geopolitical tensions and supply constraints influence global oil and natural gas production. Historically, energy price shocks have contributed to periods of elevated inflation and slower economic growth<sup>3</sup>. Similar dynamics may continue to influence macroeconomic conditions in the coming decade.

Second, industrial policy and strategic investment are becoming more prominent features of economic policymaking in advanced economies. Governments are increasingly supporting sectors considered essential for national security or long-term economic competitiveness, including semiconductor manufacturing, battery production, and defence technologies.

Third, the growing importance of resource supply chains is elevating the strategic significance of countries that possess abundant natural resources. Resource-rich economies play a critical role in supplying the raw materials required for energy production, infrastructure construction, and advanced manufacturing.

<sup>3</sup> Hamilton, J. (2011). Historical oil shocks. In Handbook of Major Events in Economic History.

Canada occupies a particularly important position within this evolving global economic landscape. The country's extensive reserves of oil, natural gas, uranium, agricultural commodities, and critical minerals position it as a key supplier of resources that are essential for modern industrial economies. Canada's stable political institutions and regulatory environment further enhance its role as a reliable trading partner and investment destination.

The central argument of this report is that the global economy is entering a period that can be described as the **emerging geopolitical resource economy**. In this environment, geopolitical dynamics, energy security considerations, and resource supply chains will increasingly shape economic policy, capital allocation, and global investment patterns.

Understanding these dynamics is essential for policymakers, investors, and businesses seeking to navigate the evolving structure of the global economy.

### **Structural Forces Reshaping the Global Economy**

The global economy entering the mid-2020s is shaped by forces that extend beyond the traditional business cycle. While economic expansions and recessions remain important components of macroeconomic dynamics, structural factors are increasingly influencing the trajectory of global growth, trade patterns, and financial markets.

Three interrelated developments are particularly important.

First, geopolitical tensions have re-emerged as a central driver of economic outcomes. Conflicts between major powers, regional instability, and strategic competition are influencing trade policy, energy markets, and technological investment decisions. Governments are increasingly incorporating national security considerations into economic policy, a shift that reflects the growing intersection between geopolitical strategy and economic activity.

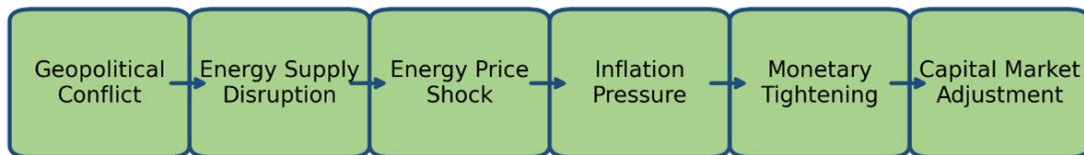
Second, the global energy system is undergoing a period of significant transition. Fossil fuels continue to supply a large portion of the world's energy needs, yet governments and businesses are investing heavily in renewable energy technologies in response to climate change and energy security concerns. This transition is creating a hybrid energy system in which traditional hydrocarbons coexist with expanding renewable energy infrastructure.

Third, global capital markets are evolving as financial institutions and investors adapt to new macroeconomic conditions. The prolonged period of ultra-low interest rates that followed the global financial crisis encouraged significant risk-taking and contributed to rising asset prices across many sectors. As interest rates have increased in response to inflation pressures, investors are reassessing capital allocation strategies and placing greater emphasis on profitability and resilience.

These structural forces interact in ways that amplify their economic impact.

### Exhibit 2. Conceptual Framework: War → Energy → Inflation → Capital Markets

#### Conceptual Transmission Framework



Source: Conceptual model based on macroeconomic transmission literature (IMF, BIS).

Geopolitical tensions influence energy markets, energy price volatility contributes to inflation pressures, and monetary policy responses affect global investment conditions. At the same time, industrial policy initiatives and infrastructure investment programs are reshaping demand for natural resources and strategic commodities.

The result is a global economic system that is becoming more complex and interconnected.

Understanding the implications of these developments requires examining several key themes:

- geopolitical conflict and economic fragmentation
- volatility and structural transition in energy markets
- the rapid expansion of private credit and alternative financing
- evolving dynamics in global equity markets
- persistent supply shortages in housing and real estate
- the strategic importance of resource-rich economies such as Canada

Each of these themes is explored in detail in the chapters that follow.

The report begins by examining how geopolitical conflict influences global trade patterns and economic policy. It then analyzes the structure of global energy markets and the economic implications of energy price volatility. Subsequent sections explore the expansion of private credit markets, the changing dynamics of equity markets, and the structural factors affecting real estate development.

Finally, the report evaluates the strategic role of Canada within the evolving global resource economy and considers the implications of these developments for policymakers and investors.

Together, these analyses demonstrate that the global economy is entering a period in which geopolitical considerations, resource supply chains, and energy market dynamics increasingly shape economic outcomes.

## Section 1. Introduction

### 1.1 Background

The global economy is undergoing a profound structural transformation driven by geopolitical conflict, shifting energy systems, and increasing competition for strategic resources. For much of the period following the end of the Cold War, economic globalization encouraged the development of highly integrated supply chains, expanding international trade and reducing the perceived importance of national resource security.

However, the geopolitical landscape has changed dramatically during the past decade. Strategic competition among major powers has intensified, and the Russia–Ukraine war has reinforced concerns about energy security, supply chain resilience, and geopolitical fragmentation. These developments have reshaped economic policy priorities across advanced economies and have contributed to a renewed emphasis on domestic industrial capacity and secure access to critical commodities.

Energy markets remain central to this transformation. Oil and natural gas continue to supply the majority of global energy demand, while emerging technologies associated with the energy transition require large quantities of minerals such as lithium, nickel, and copper. As a result, countries with significant natural resource endowments are increasingly viewed as strategic partners in the evolving global economy.

Canada occupies a unique position in this context. As one of the world's largest producers of crude oil, natural gas, uranium, and potash, Canada possesses resources that are essential for both traditional energy systems and the transition toward lower-carbon technologies. Combined with strong institutions and political stability, these characteristics position Canada as a reliable supplier in an increasingly uncertain global environment.

Understanding how geopolitical conflict affects energy markets, inflation, and economic growth is therefore essential for policymakers and investors seeking to navigate the emerging economic landscape.

### 1.2 The Re-Emergence of Geopolitical Risk

The relationship between geopolitical conflict and economic outcomes has historically been most visible in energy markets. Major geopolitical events—including the 1973 oil embargo, the Iranian Revolution of 1979, and the Gulf War of 1990—produced significant disruptions to global oil supply and contributed to periods of macroeconomic instability.

More recently, the Russia–Ukraine war has demonstrated how energy dependence can become a critical vulnerability in international economic systems. Prior to the conflict, Europe relied heavily on Russian pipeline gas imports. Following the invasion of Ukraine, sanctions and supply disruptions forced European governments to rapidly diversify energy sources, expand liquefied natural gas imports, and accelerate investment in renewable energy infrastructure.

These developments illustrate the broader economic consequences of geopolitical fragmentation. In addition to affecting energy markets, geopolitical tensions influence defence spending, industrial policy, trade relationships, and capital flows. As a result, the global economy increasingly reflects a combination of economic and strategic considerations.

### **1.3 Structural Changes in the Global Economy**

Several structural changes are reshaping the global economic system:

- 1. Energy market transformation**

Global energy systems are transitioning toward a more diversified mix of fossil fuels, renewable energy, and nuclear power.

- 2. Supply chain regionalization**

Governments and corporations are seeking to reduce dependence on geographically concentrated supply chains.

- 3. Strategic resource competition**

Demand for critical minerals used in renewable energy technologies and advanced manufacturing is rising rapidly.

- 4. Rising defence expenditures**

NATO and other alliances are increasing defence spending in response to geopolitical tensions.

These structural shifts suggest that geopolitical risk will remain a central feature of the global economy for the foreseeable future.

## Section 2. Methodology

### 2.1 Research Framework

This report employs a multi-layered analytical framework designed to evaluate the economic implications of geopolitical conflict for energy markets and global macroeconomic stability.

The analysis integrates three principal approaches:

1. **Historical analysis** of previous energy shocks and geopolitical conflicts
2. **Macroeconomic modeling** of energy price transmission to inflation and economic growth
3. **Scenario analysis** examining potential future conflict outcomes

This approach allows the report to assess both historical precedents and potential future developments in global energy markets.

### 2.2 Data Sources

The analysis draws on data from several major international institutions, including:

- International Energy Agency (IEA)
- International Monetary Fund (IMF)
- World Bank
- NATO Defence Expenditure Reports
- Canada Energy Regulator
- U.S. Energy Information Administration

These datasets provide comprehensive information on global energy production, commodity markets, macroeconomic indicators, and defence spending.

### 2.3 Scenario Modeling Approach

Because geopolitical developments are inherently uncertain, the report uses a scenario-based framework to evaluate potential economic outcomes.

Three primary scenarios are examined:

#### **Scenario 1: Contained Conflict**

Geopolitical tensions remain elevated but do not significantly disrupt global energy supply.

#### **Scenario 2: Regional Escalation**

Conflict expands in energy-producing regions, leading to higher oil and natural gas prices.

### **Scenario 3: Global Energy Shock**

Major disruptions affect global oil transportation routes or multiple producing regions simultaneously.

Each scenario is evaluated in terms of its potential impact on:

- energy prices
- inflation
- global economic growth
- financial markets

### **2.4 Limitations**

While scenario analysis provides a useful framework for evaluating potential outcomes, several limitations should be acknowledged. Geopolitical events are inherently unpredictable, and the precise timing and scale of conflicts cannot be forecast with certainty.

Furthermore, economic outcomes depend on policy responses by governments and central banks, which may vary significantly depending on political and institutional conditions.

Despite these uncertainties, scenario analysis remains a valuable tool for understanding the range of possible economic outcomes associated with geopolitical conflict.

## Section 3. Literature Review: War, Energy Markets, and Macroeconomic Stability

### 3.1 Introduction

The relationship between geopolitical conflict and macroeconomic instability has long been recognized within economic literature. Wars and political crises have historically influenced global economic performance through multiple transmission channels, including disruptions to trade, shifts in fiscal policy, and fluctuations in commodity markets. Among these channels, energy markets—particularly oil—have played a uniquely important role because of their pervasive influence on industrial production, transportation, and consumer prices.

A large body of economic research has examined how oil price shocks influence inflation, economic growth, and financial markets. Early studies focused on the oil crises of the 1970s, which demonstrated how supply disruptions could produce stagflation in advanced economies. More recent research has expanded this analysis to include the effects of financial speculation, energy market integration, and technological changes in energy production.

Understanding the historical relationship between war and energy markets provides important context for evaluating the potential economic consequences of current geopolitical conflicts.

### 3.2 The Oil Shocks of the 1970s

The most widely studied energy shocks occurred during the 1970s, when geopolitical conflict in the Middle East significantly disrupted global oil supply. The first of these events occurred in 1973 following the Yom Kippur War, when members of the Organization of Arab Petroleum Exporting Countries imposed an oil embargo on nations perceived as supporting Israel.

The embargo caused global oil prices to increase dramatically, rising from approximately **\$3 per barrel in 1973 to nearly \$12 per barrel in 1974**, representing a fourfold increase<sup>4</sup>. This rapid escalation in energy prices had profound economic consequences for industrialized economies that relied heavily on imported oil.

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<sup>4</sup> Hamilton, J. (2011). Historical oil shocks. In Handbook of Major Events in Economic History.

Research has shown that the oil price shock contributed to a period of stagflation characterized by rising inflation and declining economic growth. Blinder and Rudd argue that supply shocks—including energy price increases—played a significant role in generating the high inflation experienced during the 1970s. Central banks struggled to respond effectively because traditional monetary tightening policies could reduce inflation but risked exacerbating unemployment<sup>5</sup>.

The economic consequences of the 1973 oil shock demonstrated the vulnerability of industrial economies to disruptions in global energy supply.

### **3.3 The Iranian Revolution and the Second Oil Shock**

A second major energy shock occurred in 1979 following the Iranian Revolution. Political instability in Iran disrupted oil production and reduced global supply, causing oil prices to double between 1978 and 1980. The resulting increase in energy prices once again contributed to inflationary pressures across advanced economies.

This second oil shock further reinforced the importance of energy markets in shaping macroeconomic outcomes. Rising oil prices increased production costs for manufacturers and reduced disposable income for consumers, slowing economic growth. At the same time, inflation accelerated, forcing central banks to implement restrictive monetary policies.

The Federal Reserve, under Chairman Paul Volcker, responded to rising inflation by sharply increasing interest rates. This policy ultimately succeeded in reducing inflation but also contributed to a severe recession in the early 1980s<sup>6</sup>.

The events of the late 1970s established the modern understanding of how energy price shocks can influence macroeconomic stability.

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<sup>5</sup> Blinder, A., & Rudd, J. (2013). The supply-shock explanation of the Great Stagflation revisited. NBER Working Paper.

<sup>6</sup> Goodfriend, M., & King, R. (2005). The incredible Volcker disinflation. *Journal of Monetary Economics*.

### 3.4 The Gulf War and Energy Market Volatility

Another important case study occurred in 1990 when Iraq invaded Kuwait, disrupting oil production in the Persian Gulf. Oil prices increased sharply as markets reacted to the potential for prolonged supply disruptions. Brent crude prices rose from approximately **\$17 per barrel in mid-1990 to more than \$40 per barrel by October of that year**<sup>7</sup>.

Although the disruption was relatively short-lived, the episode demonstrated that geopolitical conflict in oil-producing regions could still produce significant price volatility. However, the macroeconomic consequences were less severe than those experienced during the 1970s.

Several factors contributed to this difference. By the 1990s, advanced economies had become less energy-intensive, meaning that energy costs represented a smaller share of total economic activity. In addition, global oil markets had become more diversified, reducing dependence on any single producing region. Nevertheless, the Gulf War reinforced the importance of geopolitical risk in shaping energy markets.

### 3.5 Oil Price Shocks and Recessions

A substantial body of research has examined the relationship between oil price shocks and economic recessions. Hamilton found that many postwar recessions in the United States were preceded by significant increases in oil prices<sup>8</sup>. These price increases act as a tax on consumers and businesses, reducing purchasing power and raising production costs.

The mechanism through which oil shocks influence economic activity operates through several channels:

1. **Consumer spending effects**  
Higher fuel costs reduce disposable income available for other purchases.
2. **Production cost increases**  
Energy-intensive industries experience rising operating expenses.
3. **Monetary policy response**  
Central banks may raise interest rates to combat inflation.
4. **Financial market volatility**  
Investors often react to geopolitical uncertainty by reducing risk exposure.

These channels collectively explain why energy price shocks frequently coincide with economic downturns.

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<sup>7</sup> Kilian, L. (2008). Exogenous oil supply shocks and the macroeconomy. *Review of Economics and Statistics*.

<sup>8</sup> Hamilton, J. (2009). Causes and consequences of the oil shock of 2007–2008. NBER Working Paper.

### **3.6 Structural Changes in Energy Markets**

While historical research demonstrates the powerful economic effects of energy shocks, the structure of global energy markets has evolved significantly in recent decades. Technological innovations such as hydraulic fracturing and horizontal drilling have increased oil and natural gas production in countries such as the United States and Canada.

The expansion of liquefied natural gas infrastructure has also transformed global gas markets, allowing energy to be transported more flexibly across regions. These developments have increased the resilience of global energy supply systems and reduced dependence on individual producers.

Nevertheless, geopolitical risk remains an important factor influencing energy markets. Because oil production remains geographically concentrated, disruptions in major producing regions can still produce significant price volatility.

### **3.7 War, Fiscal Policy, and Industrial Strategy**

Recent literature has also examined the broader economic consequences of geopolitical conflict beyond energy markets. Wars often lead to increased government spending, particularly in defence and infrastructure sectors. This expansion of fiscal policy can stimulate economic activity in certain industries while increasing public debt.

In addition, governments frequently implement industrial policies aimed at strengthening domestic production capacity for strategic goods such as semiconductors, energy infrastructure, and critical minerals. These policies reflect a growing recognition that economic resilience requires secure access to key resources and technologies.

The re-emergence of industrial policy has become a defining feature of the global economic landscape in the years following the Russia–Ukraine war.

### **3.8 Implications for the Current Geopolitical Environment**

The historical and academic literature reviewed in this section suggests several important conclusions relevant to the present geopolitical environment.

First, energy markets remain a central transmission channel through which geopolitical conflict influences macroeconomic outcomes. Oil price shocks can generate inflation, reduce economic growth, and increase financial market volatility.

Second, the economic impact of energy shocks depends on the structure of the global energy system. Diversified supply sources and improved energy efficiency can reduce vulnerability to disruptions.

Third, geopolitical conflict often triggers broader economic adjustments, including increased defence spending and industrial policy initiatives.

These insights provide an important foundation for analyzing the potential economic consequences of current geopolitical conflicts and for understanding the strategic importance of resource-rich economies such as Canada.

## Section 4. Structure of Global Energy Markets

### 4.1 Introduction

Energy markets represent one of the most strategically important components of the global economic system. Oil, natural gas, coal, nuclear energy, and renewable power collectively underpin modern industrial production, transportation systems, and electricity generation. Because energy inputs are embedded in nearly every sector of the economy, fluctuations in energy supply and prices can have profound macroeconomic consequences.

The structure of global energy markets has evolved significantly over the past several decades. Technological innovation, geopolitical competition, and policy responses to climate change have all contributed to shifts in production patterns and consumption trends. Understanding the current structure of energy markets is essential for assessing how geopolitical conflict can influence global economic stability.

This section examines the major components of the global energy system, including oil markets, natural gas and liquefied natural gas (LNG) trade, renewable energy expansion, and nuclear power development.

### 4.2 Global Oil Markets

#### Importance of Oil in the Global Economy

Oil remains the single most important energy commodity in the global economy. Despite increasing investment in renewable energy technologies, petroleum products continue to dominate transportation fuels and play a significant role in petrochemical production.

According to the International Energy Agency (IEA), global oil demand exceeded **102 million barrels per day in 2024**, reflecting continued growth in transportation, aviation, and industrial energy consumption. Oil therefore remains a critical driver of global economic activity<sup>9</sup>.

Oil markets are characterized by several structural features that influence price dynamics:

1. **Geographic concentration of reserves**  
A significant portion of global oil reserves is located in the Middle East.
2. **Capital-intensive production**  
Developing oil fields requires large upfront investment.

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<sup>9</sup> International Energy Agency. (2024). World Energy Outlook.

3. **Long investment cycles**

Production projects often operate for decades.

4. **Global price integration**

Oil prices are largely determined in global markets rather than regional markets.

These characteristics make oil markets particularly sensitive to geopolitical developments.

**Table 1. Global Oil Production by Major Producers**

Country	Production (million barrels/day)
United States	~12.9
Saudi Arabia	~10.8
Russia	~10.1
Canada	~5.6
Iraq	~4.5

Source: U.S. Energy Information Administration (2024)

### 4.3 OPEC and Market Stabilization

#### The Role of OPEC

The Organization of the Petroleum Exporting Countries (OPEC) has historically played a central role in managing global oil supply. By coordinating production levels among member states, OPEC attempts to influence oil prices and stabilize global markets.

In recent years, the organization has expanded into the **OPEC+ alliance**, which includes additional producers such as Russia and Kazakhstan. This broader coalition accounts for a significant share of global oil production.

OPEC+ production decisions can influence global oil prices by adjusting supply levels. For example, production cuts implemented by OPEC+ during periods of weak demand can help support oil prices.

However, the organization's ability to control prices is constrained by production growth in non-OPEC countries, particularly the United States.

#### 4.4 The Rise of U.S. Shale Production

One of the most significant structural changes in global energy markets has been the rise of shale oil and natural gas production in the United States. Technological innovations such as hydraulic fracturing and horizontal drilling dramatically increased U.S. oil production beginning in the late 2000s.

As a result, the United States became the world's largest oil producer by the late 2010s. This development reduced U.S. dependence on imported oil and contributed to increased global supply.

The expansion of shale production has also introduced greater flexibility into global oil markets. Unlike conventional oil projects, shale wells can be developed relatively quickly, allowing producers to respond more rapidly to changes in market prices.

#### 4.5 Natural Gas Markets

##### Regional Structure of Gas Markets

Natural gas markets historically differed from oil markets in that they were largely regional rather than global. Gas transportation depended primarily on pipelines connecting producers with nearby consumers.

As a result, gas prices often varied significantly between regions such as North America, Europe, and Asia. However, the development of liquefied natural gas (LNG) technology has transformed global gas markets by enabling long-distance maritime transport of natural gas.

**Table 2. Growth in Global LNG Trade**

<b>Year</b>	<b>LNG Trade Volume (billion cubic meters)</b>
2005	140
2015	250
2020	360
2024	420

Source: International Energy Agency Gas Market Report

## LNG Market Expansion

LNG is produced by cooling natural gas to extremely low temperatures, converting it into a liquid that can be transported by specialized ships. Once delivered to import terminals, the LNG is regasified and distributed through local pipeline networks.

This technology has effectively globalized natural gas markets. Countries without domestic gas resources can now import LNG from distant producers, increasing energy security and supply diversification.

Major LNG exporters include:

- United States
- Qatar
- Australia
- Russia

Canada joined this group in 2025 when the LNG Canada project began exporting natural gas from British Columbia.

## 4.6 Renewable Energy Expansion

### Growth of Renewable Power

Renewable energy technologies—including wind, solar, and hydroelectric power—have expanded rapidly in recent decades. Government policies aimed at reducing greenhouse gas emissions have accelerated investment in renewable electricity generation.

According to the International Energy Agency, renewable energy capacity additions reached record levels in recent years, driven primarily by solar and wind installations<sup>10</sup>.

Renewable energy offers several advantages:

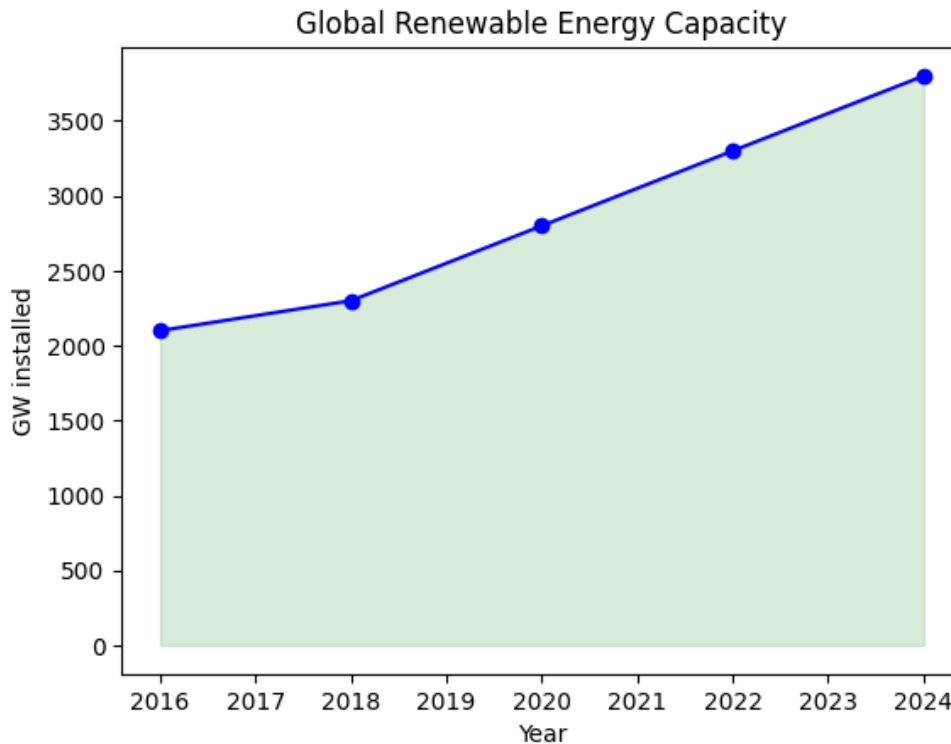
- low operating costs
- reduced carbon emissions
- energy diversification

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<sup>10</sup> International Energy Agency. (2024). World Energy Outlook.

However, renewable power generation is also characterized by variability because wind and solar output depend on weather conditions.

**Exhibit 3. Global Renewable Energy Capacity**



Source: IEA Renewables Report (2024)

## 4.7 Nuclear Energy

### Nuclear Power and Energy Security

Nuclear power provides approximately **10% of global electricity generation**, making it one of the largest sources of low-carbon energy in the world<sup>11</sup>.

Unlike renewable energy sources, nuclear power plants can generate electricity continuously, providing stable baseload power for electricity grids.

<sup>11</sup> World Nuclear Association. (2024). World Uranium Mining Production.

In recent years, several countries have renewed interest in nuclear energy as a way to achieve climate goals while maintaining energy security.

Canada plays an important role in global nuclear energy markets because it is one of the world's largest producers of uranium.

**Table 3. Global Uranium Production**

<b>Country</b>	<b>Share of Global Production</b>
Kazakhstan	~43%
Canada	~15%
Namibia	~11%
Australia	~8%

Source: World Nuclear Association (2024)

#### **4.8 Energy Market Integration and Geopolitical Risk**

Despite diversification of energy sources, geopolitical risk remains an important factor influencing energy markets. Oil production remains geographically concentrated, and major shipping routes are vulnerable to disruption.

Furthermore, energy infrastructure projects often require decades of planning and investment. As a result, supply responses to price increases can be slow.

These characteristics mean that geopolitical conflicts can still produce significant energy price volatility, even in a more diversified energy system.

#### **4.9 Implications for the Global Economy**

The structure of global energy markets suggests that energy prices will remain a critical driver of inflation, economic growth, and financial market stability.

Although renewable energy is expanding rapidly, fossil fuels continue to play a dominant role in global energy supply. Consequently, geopolitical conflicts affecting oil and natural gas production can still have significant macroeconomic consequences.

Understanding the structure of energy markets therefore provides an essential foundation for analyzing how geopolitical conflict influences the global economy.

## Section 5. Energy Price Transmission to Inflation

### 5.1 Introduction

Energy prices play a central role in the transmission of inflation throughout the global economy. Oil, natural gas, and electricity are fundamental inputs into transportation systems, industrial production, agriculture, and household consumption. As a result, fluctuations in energy prices can rapidly influence inflation rates across multiple sectors of the economy.

Historically, large increases in energy prices have coincided with periods of elevated inflation and economic instability. Episodes such as the oil crises of the 1970s, the Gulf War in 1990, the commodity price surge of the mid-2000s, and the energy shock following the Russia–Ukraine conflict demonstrate how energy markets can influence global macroeconomic outcomes<sup>12,13</sup>

Understanding the mechanisms through which energy prices affect inflation is therefore critical for policymakers, investors, and businesses attempting to assess the economic consequences of geopolitical conflict.

### 5.2 Direct Energy Price Effects on Consumer Inflation

Energy prices affect inflation most immediately through direct changes in the cost of fuel and electricity. Consumer price indices (CPI) in most countries include energy components such as gasoline, heating fuel, natural gas, and electricity.

When oil prices rise, retail fuel prices typically increase within weeks, directly raising the energy component of CPI. For example, during the energy shock of 2022, global oil prices rose above **\$120 per barrel**, contributing significantly to the surge in inflation experienced across advanced economies<sup>14</sup>.

The strong correlation between energy prices and inflation reflects the fundamental role of fuel and electricity in household consumption. Energy price increases effectively function as a consumption tax, reducing disposable income available for other goods and services.

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<sup>12</sup> Hamilton, J. D. (2011). Historical oil shocks. In Handbook of Major Events in Economic History.

<sup>13</sup> International Monetary Fund. (2023). World Economic Outlook.

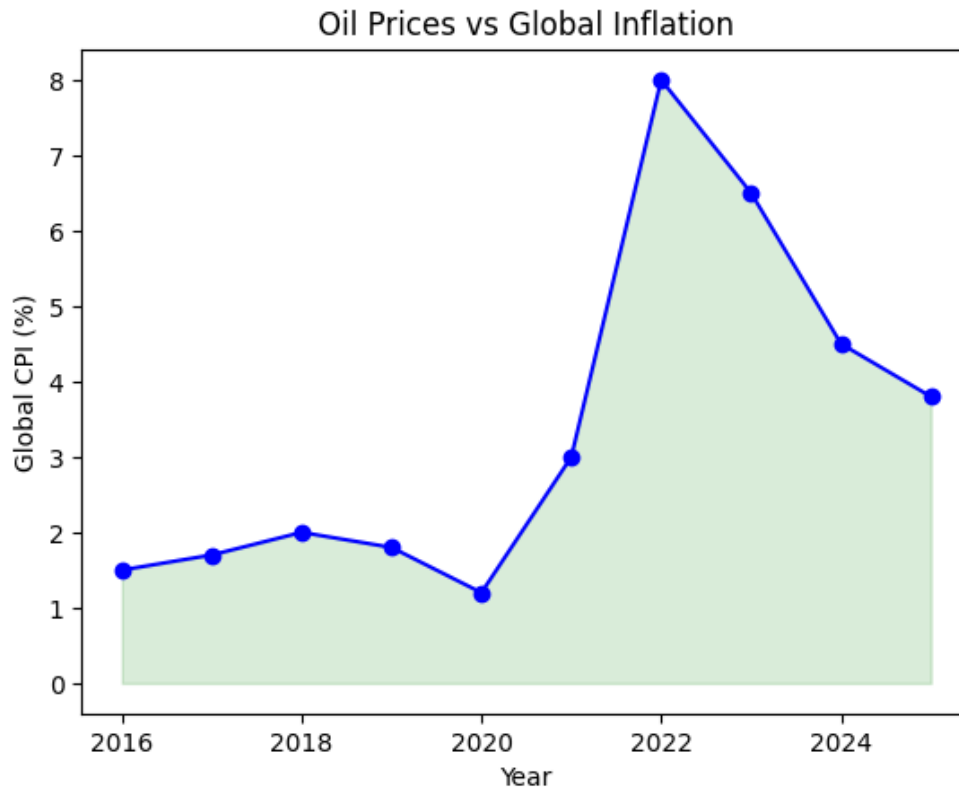
<sup>14</sup> International Monetary Fund. (2023). World Economic Outlook.

**Table 4. Global Inflation and Oil Prices (2000-2024)**

Year	Brent Oil Price (USD/barrel)	Global CPI Inflation (%)
2000	28	4.0
2008	97	6.0
2014	99	3.2
2020	41	2.0
2022	101	8.7
2024	83	5.8

Source: IMF World Economic Outlook (2024); World Bank Commodity Markets Outlook (2024).

**Exhibit 4. Oil Prices vs Global Inflation**



Source: IMF World Economic Outlook; IEA Oil Market Report (2024)

### 5.3 Indirect Transmission Through Production Costs

Energy prices also influence inflation indirectly through their impact on production costs. Many industries depend heavily on energy inputs, including manufacturing, transportation, agriculture, and construction. Higher energy prices increase operating costs for firms, which may pass these increases on to consumers through higher prices. This process is known as **cost-push inflation**.

Transportation costs represent one of the most important transmission channels. Because goods must be transported through global supply chains before reaching consumers, increases in fuel prices raise shipping costs for manufacturers and retailers.

The global logistics system is particularly sensitive to energy prices because maritime shipping, trucking, and aviation all rely heavily on petroleum products. According to the International Energy Agency, transportation accounts for nearly **60% of global oil demand**<sup>15</sup>.

As fuel costs increase, shipping rates rise, contributing to higher prices for a wide range of consumer goods.

### 5.4 Energy Prices and Food Inflation

Agriculture represents another major transmission channel through which energy prices influence inflation. Modern agricultural production relies heavily on energy inputs, including fuel for farm equipment, electricity for irrigation, and natural gas used in fertilizer production.

Nitrogen fertilizer, for example, is produced using natural gas as a primary feedstock. When natural gas prices rise sharply, fertilizer costs increase, raising agricultural production expenses.

These higher input costs ultimately contribute to food inflation, which can be particularly destabilizing in developing economies where food represents a larger share of household consumption.

According to the Food and Agriculture Organization (FAO), fertilizer prices increased more than **80% between 2021 and 2022**, largely due to rising natural gas costs<sup>16</sup>.

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<sup>15</sup>International Energy Agency. (2024). World Energy Outlook.

<sup>16</sup> Food and Agriculture Organization. (2023). Fertilizer Market Report.

## 5.5 Inflation Expectations and Monetary Policy

Energy price shocks can also influence inflation through changes in expectations. When households and businesses expect prices to rise, they may adjust their behavior accordingly.

Workers may demand higher wages to compensate for rising living costs, while firms may increase prices preemptively in anticipation of future cost increases.

This process can create a feedback loop known as a **wage-price spiral**, in which rising wages and prices reinforce each other.

Central banks therefore monitor energy prices closely when assessing inflation risks. Persistent increases in energy prices can cause inflation expectations to become unanchored, forcing central banks to tighten monetary policy.

During the inflation surge of 2022–2023, central banks across advanced economies implemented aggressive interest rate increases in an effort to control inflationary pressures linked partly to rising energy costs <sup>17</sup>.

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<sup>17</sup> Bank for International Settlements. (2023). Annual Economic Report.

## 5.6 Historical Energy-Driven Inflation Episodes

Several historical episodes illustrate the relationship between energy price shocks and inflation.

### 1970s Oil Crisis

The oil embargo of 1973 caused global oil prices to quadruple, leading to widespread inflation across industrialized economies. U.S. inflation rose above **11% in 1974**, while many European countries experienced similarly high inflation rates<sup>18</sup>.

### 2007–2008 Commodity Price Surge

Global oil prices surged to **\$147 per barrel in 2008**, contributing to rising inflation before the onset of the global financial crisis<sup>19</sup>.

### Russia–Ukraine War Energy Shock

Following Russia's invasion of Ukraine in 2022, energy markets experienced severe disruption. Natural gas prices in Europe rose to record levels, contributing to the highest inflation rates experienced in advanced economies in several decades<sup>20</sup>.

## 5.7 Global Inflation Sensitivity to Energy Prices

Economic research suggests that the inflationary impact of energy price shocks depends on several factors:

1. **Energy intensity of the economy**

Economies that rely heavily on energy-intensive industries are more vulnerable.

2. **Energy import dependence**

Countries that rely on imported energy face greater exposure to price volatility.

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<sup>18</sup> Hamilton, J. D. (2011). Historical oil shocks. In Handbook of Major Events in Economic History.

<sup>19</sup> Kilian, L. (2009). Not all oil price shocks are alike. American Economic Review.

<sup>20</sup> International Monetary Fund. (2023). World Economic Outlook.

3. **Monetary policy credibility**

Central banks with strong anti-inflation credibility can prevent inflation expectations from rising excessively.

4. **Fiscal policy responses**

Government subsidies or tax adjustments can offset some of the impact of rising energy prices.

Advanced economies have generally reduced their energy intensity over the past several decades, which has moderated the macroeconomic impact of energy price shocks. However, energy prices remain a significant driver of inflation during periods of geopolitical disruption.

### **5.8 Implications for Current Geopolitical Conflict**

The current geopolitical environment suggests that energy prices will remain a key determinant of global inflation dynamics in the coming years. Conflicts involving major energy-producing regions can disrupt supply chains and reduce production capacity, pushing prices higher.

At the same time, the ongoing energy transition toward renewable energy sources introduces additional complexity into global energy markets. Investment in renewable infrastructure may reduce long-term dependence on fossil fuels, but the transition period may involve significant volatility as energy systems evolve.

For policymakers, managing inflation in such an environment requires careful coordination of monetary policy, fiscal policy, and energy policy.

## Section 6. War Economies: Russia, Ukraine, and Strategic Resource Conflict

### 6.1 Introduction

Modern warfare increasingly operates not only on the battlefield but also within global economic systems. Energy supply chains, financial markets, trade flows, and industrial production have become central elements of geopolitical competition. The conflict between Russia and Ukraine illustrates how large-scale wars between states can reshape economic relationships far beyond the immediate geographic region of the conflict.

Russia is one of the world's largest exporters of oil, natural gas, and several strategic commodities. Ukraine, while smaller economically, occupies an important position in global agricultural supply chains and regional industrial production. The war therefore has implications that extend into global energy markets, food security, inflation dynamics, and the broader architecture of international trade.

The economic consequences of the conflict have unfolded through three primary channels: disruptions to commodity markets, sanctions targeting Russia's financial and energy sectors, and the fiscal and reconstruction challenges faced by Ukraine. Together these developments have produced one of the most significant geopolitical economic shocks since the end of the Cold War.

### 6.2 Russia's Wartime Economic Structure

#### Energy Dependence in the Russian Economy

Russia's economy has historically relied heavily on energy exports. Oil and natural gas revenues constitute a significant share of government income and foreign exchange earnings. Prior to the invasion of Ukraine in 2022, energy exports accounted for roughly **45 percent of Russia's federal budget revenues**<sup>21</sup>.

This dependence on energy exports has shaped the structure of the Russian economy. The country possesses vast reserves of hydrocarbons and has developed extensive infrastructure to transport oil and natural gas to global markets. Major pipeline systems historically connected Russian gas fields with European consumers, while maritime shipping routes facilitated crude oil exports to global markets.

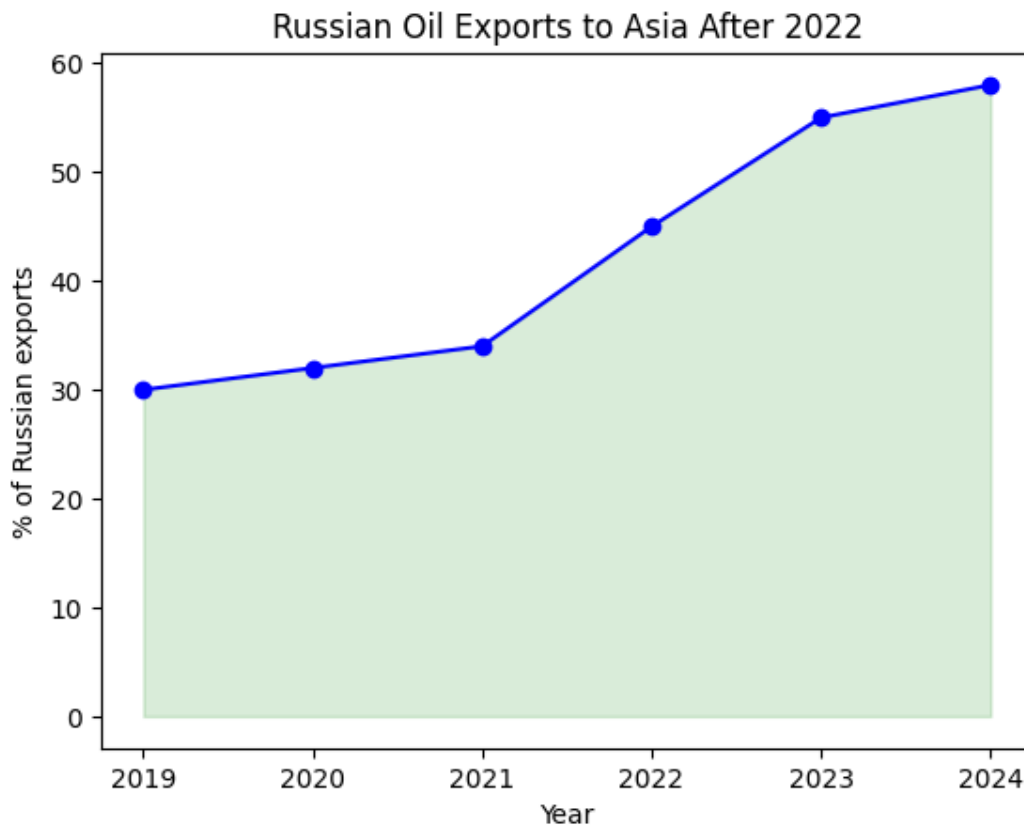
However, the war and subsequent sanctions imposed by Western nations have disrupted many of these trade relationships. European countries have significantly reduced imports of Russian natural gas and oil, forcing Russia to redirect exports toward alternative markets, particularly China and India.

**Table 5. Russian Oil Export Destinations Before and After the Ukraine War**

Region	Share of Russian Oil Exports (2021)	Share of Russian Oil Exports (2024)
European Union	~49%	~8%
China	~15%	~32%
India	~2%	~35%
Other Asia	~10%	~15%
Other regions	~24%	~10%

Source: International Energy Agency Oil Market Report (2024).

**Exhibit 5. Russian Oil Exports to Asia After 2022**



Source: IEA Oil Market Report (2024)

<sup>21</sup> International Energy Agency. (2023). Oil Market Report.

## Sanctions and Financial Isolation

Following the invasion of Ukraine, the United States, the European Union, and several allied countries implemented sweeping economic sanctions targeting Russia's financial sector, central bank reserves, and major state-owned enterprises. These sanctions were designed to restrict Russia's access to global financial markets and reduce the government's ability to finance military operations.

Key sanctions measures included:

- freezing approximately **\$300 billion in Russian central bank reserves held abroad**<sup>22</sup>.
- removing several Russian banks from the SWIFT international payment system
- imposing price caps on Russian oil exports
- restricting exports of advanced technology and industrial equipment

Despite these measures, Russia's economy has demonstrated a degree of resilience. High energy prices during the early phase of the war helped offset the impact of reduced export volumes, while increased trade with Asian markets provided alternative outlets for Russian commodities.

However, sanctions have significantly reduced Russia's long-term economic prospects by limiting access to technology, capital markets, and foreign investment.

## 6.3 Russia's Fiscal Policy and Wartime Spending

### Military Expenditures

War economies often require substantial increases in government spending, particularly on defence and military production. Russia has significantly expanded its military budget since the start of the war.

Estimates suggest that Russian defence spending rose to approximately **6 percent of GDP in 2024**, representing one of the largest increases in military expenditures among major economies<sup>23</sup>.

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<sup>22</sup> International Monetary Fund. (2023). World Economic Outlook.

<sup>23</sup> Stockholm International Peace Research Institute. (2024). Military Expenditure Database.

This expansion in defence spending has had several economic consequences:

- increased demand for industrial production
- expansion of military manufacturing sectors
- higher government deficits

Although military spending can stimulate certain industries, it also diverts resources from other sectors of the economy.

**Table 6. Russian Defence Spending as Share of GDP**

Year	Defence Spending (% GDP)
2015	4.2
2018	3.9
2021	3.6
2023	5.5
2024	6.0

Source: SIPRI Military Expenditure Database (2024).

## 6.4 Ukraine's Economic Contraction

### GDP Collapse

The economic impact of the war on Ukraine has been severe. Large portions of the country's industrial infrastructure have been damaged or destroyed, while millions of citizens have been displaced internally or have fled abroad.

Ukraine's economy contracted by approximately **29 percent in 2022**, representing one of the largest economic declines experienced by any country in recent decades<sup>24</sup>.

Industrial production has been particularly affected in eastern regions where many heavy manufacturing facilities were located prior to the war.

<sup>24</sup> World Bank. (2023). Ukraine Economic Update.

**Table 7. Ukraine GDP Index (2019–2024)**

<b>Year</b>	<b>GDP Index (2019 = 100)</b>
2019	100
2020	96
2021	103
2022	71
2023	76
2024	82

Source: World Bank Ukraine Economic Update (2024).

## **6.5 Ukraine Reconstruction Economics**

### **Scale of Reconstruction**

Rebuilding Ukraine's infrastructure and economy will require substantial financial resources. The World Bank estimates that total reconstruction costs could exceed **\$400 billion**, depending on the duration and severity of the conflict<sup>25</sup>.

Reconstruction will involve rebuilding:

- housing
- transportation infrastructure
- energy systems
- industrial facilities
- public services

Financing such large-scale reconstruction efforts will likely require a combination of international aid, private investment, and multilateral development financing.

<sup>25</sup> World Bank. (2024). Ukraine Reconstruction Needs Assessment.

## 6.6 Global Commodity Market Effects

### Energy Markets

Russia remains one of the world's largest producers of oil and natural gas. Disruptions to Russian exports therefore influence global energy prices and supply dynamics.

The war has contributed to increased volatility in oil and gas markets as countries attempt to secure alternative energy supplies.

### Agricultural Markets

Ukraine and Russia together account for a significant share of global grain exports. The war disrupted agricultural production and export routes, raising concerns about global food security.

Ukraine was responsible for approximately **10 percent of global wheat exports and nearly 15 percent of corn exports** prior to the war<sup>26</sup>.

Disruptions to these exports contributed to rising global food prices during the early stages of the conflict.

## 6.7 Strategic Resource Competition

The war has also highlighted the strategic importance of natural resources in modern geopolitical competition. Energy resources, agricultural commodities, and critical minerals all play important roles in economic security.

Countries are increasingly prioritizing supply chain resilience and domestic production capacity for strategic commodities.

This trend is contributing to a broader shift toward resource security policies and industrial strategies in many advanced economies.

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<sup>26</sup> Food and Agriculture Organization. (2023). Global Food Market Report.

## **6.8 Implications for the Global Economy**

The economic consequences of the Russia–Ukraine war extend far beyond the immediate region of conflict. Energy market volatility, rising defence spending, and disruptions to agricultural supply chains have influenced global inflation and economic growth.

These developments also illustrate how geopolitical conflict can reshape international trade patterns and accelerate structural changes in global commodity markets.

For resource-rich countries such as Canada, these shifts may create both economic opportunities and policy challenges as global demand for energy and strategic commodities evolves.

## Section 7. NATO, European Defence Expansion, and Strategic Industrial Policy

### 7.1 Introduction

The geopolitical shock created by the Russia–Ukraine war has fundamentally altered the security and economic priorities of European countries. For several decades following the end of the Cold War, defence spending across most European states declined significantly as governments prioritized social spending and economic integration over military preparedness. The invasion of Ukraine in February 2022 reversed this trajectory almost immediately, triggering a rapid reassessment of security policy across the NATO alliance.

The war has not only reshaped military strategy but has also accelerated broader changes in industrial policy, defence production, and energy security planning. Governments across Europe have increased military budgets, expanded domestic defence manufacturing, and invested heavily in infrastructure designed to reduce dependence on Russian energy supplies. These changes reflect a broader recognition that economic resilience and national security are closely interconnected.

Within the broader geopolitical economic system, defence spending expansion represents an important secondary transmission channel through which geopolitical conflict affects global economic activity. War and strategic competition increase demand for military equipment, infrastructure, and strategic commodities, creating new pressures within global supply chains and industrial production networks.

### 7.2 NATO Defence Spending Trends

#### The Post–Cold War Decline

Following the collapse of the Soviet Union in 1991, many European governments significantly reduced defence spending as the perceived threat of large-scale interstate conflict diminished. NATO members shifted resources toward domestic social programs and economic integration initiatives within the European Union.

By the late 2010s, several major NATO members were spending well below the alliance’s recommended defence spending target of **2 percent of GDP**. Germany, for example, spent approximately **1.2 percent of GDP on defence in 2021**, while Italy and Spain spent even less<sup>27</sup>

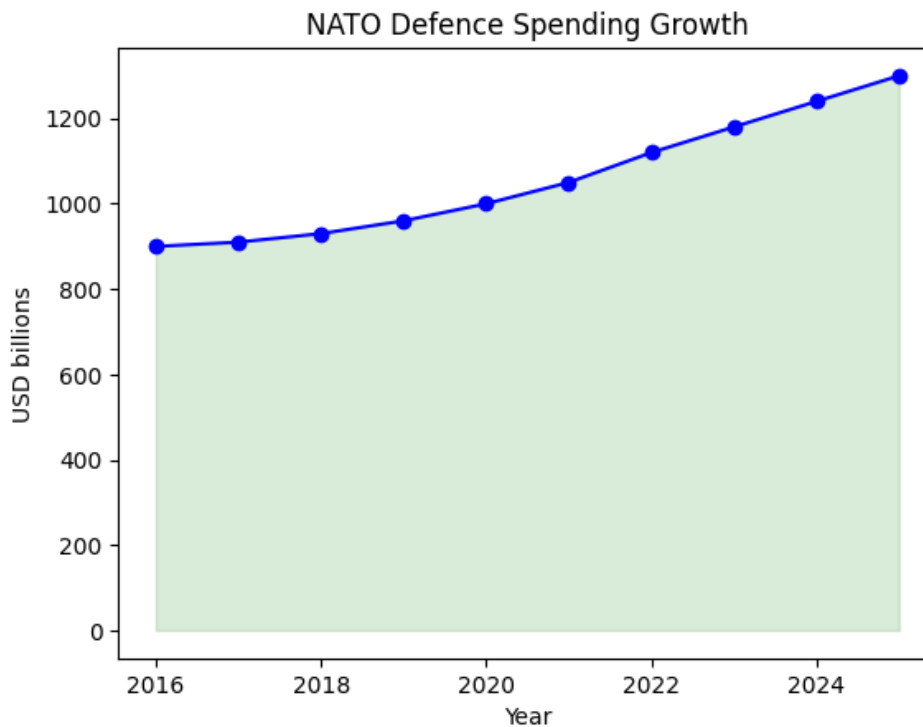
This decline in military spending reflected broader political and economic priorities across Europe during the post–Cold War era.

**Table 8. NATO Defence Spending as Share of GDP**

Country	2015	2021	2024
United States	3.6%	3.5%	3.4%
United Kingdom	2.1%	2.2%	2.3%
Germany	1.2%	1.2%	2.0%
Poland	2.2%	2.4%	3.8%
NATO Average	2.4%	2.2%	2.7%

Source: NATO Defence Expenditure Report (2024).

**Exhibit 6. NATO Defence Spending Growth**



Source: NATO Defence Expenditure Report (2024)

<sup>27</sup> North Atlantic Treaty Organization. (2023). Defence Expenditure of NATO Countries.

## Rapid Rearmament Following the Ukraine War

The invasion of Ukraine triggered the most significant increase in European defence spending in decades. Governments across NATO announced major increases in military budgets and new investments in defence infrastructure.

Germany introduced a **€100 billion special defence fund** to modernize its military capabilities, marking a major shift in the country's defence policy<sup>28</sup>. Poland increased defence spending to nearly **4 percent of GDP**, becoming one of the largest military spenders in Europe relative to the size of its economy<sup>29</sup>.

These spending increases reflect a broader recognition that European security requires greater military capacity and industrial resilience.

## 7.3 Defence Industrial Expansion

### Supply Constraints in Defence Manufacturing

The surge in defence spending has placed significant pressure on global defence manufacturing capacity. Many European defence industries were structured for relatively low production volumes following decades of reduced military demand. As a result, the rapid expansion of defence procurement has exposed capacity constraints across several segments of the defence supply chain.

Production bottlenecks have emerged in areas such as:

- artillery ammunition
- missile systems
- armored vehicles
- military electronics

Expanding production capacity requires significant investment in industrial infrastructure, workforce training, and supply chain development.

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<sup>28</sup> European Commission. (2023). European Defence Industry Strategy.

<sup>29</sup> Stockholm International Peace Research Institute. (2024). Military Expenditure Database.

## **Industrial Policy and Strategic Manufacturing**

To address these constraints, several European governments have implemented industrial policy initiatives designed to expand domestic defence manufacturing capacity. These initiatives aim to strengthen supply chains and reduce reliance on foreign suppliers for critical military technologies.

The European Union has launched several programs aimed at supporting defence industry development, including the **European Defence Fund**, which provides financial support for collaborative defence research and development projects<sup>30</sup>.

These policies reflect a broader shift toward strategic industrial policy across advanced economies, particularly in sectors considered essential for national security.

## **7.4 Energy Security and European Policy**

### **Dependence on Russian Natural Gas**

Prior to the Ukraine war, several European countries relied heavily on Russian natural gas imports. Russia supplied approximately **40 percent of the European Union's natural gas imports in 2021**, making it the largest external supplier of gas to Europe<sup>31</sup>.

This dependence created significant economic and geopolitical vulnerability. When Russia reduced gas exports following the invasion of Ukraine, European energy markets experienced extreme volatility, with natural gas prices reaching record levels during 2022.

### **LNG Infrastructure Expansion**

In response to the disruption of Russian gas supplies, European governments rapidly expanded liquefied natural gas (LNG) import capacity. Several countries constructed new LNG terminals to facilitate imports from alternative suppliers, including the United States, Qatar, and other global gas producers.

Germany, which previously had no LNG import terminals, commissioned multiple floating LNG import facilities within two years of the invasion. This rapid infrastructure expansion reflects the urgency with which European governments sought to diversify energy supply sources.

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<sup>30</sup> European Commission. (2024). European Defence Fund Annual Report.

<sup>31</sup> International Energy Agency. (2023). World Energy Outlook.

**Table 9. European Union Natural Gas Import Sources**

Supplier	Share of EU Gas Imports (2021)	Share (2024)
Russia	40%	8%
Norway	22%	30%
LNG Imports	20%	42%
Algeria	11%	14%

Source: International Energy Agency Gas Market Report (2024).

The shift toward LNG imports has significantly reshaped global natural gas trade flows and increased competition for LNG cargoes in international markets.

## 7.5 Fiscal Implications of Rearmament

### Long-Term Budgetary Effects

The increase in defence spending across NATO countries has important fiscal implications. Sustained military spending increases require governments to allocate larger portions of national budgets toward defence expenditures, potentially affecting other areas of public spending.

According to estimates from the Stockholm International Peace Research Institute, global military expenditures exceeded **\$2.4 trillion in 2024**, representing the highest level of defence spending ever recorded<sup>32</sup>.

Although defence spending can stimulate certain sectors of the economy, particularly manufacturing and technology industries, it also contributes to higher government deficits if not offset by increased tax revenues or spending reductions elsewhere.

## 7.6 Strategic Commodity Demand

The expansion of defence manufacturing also increases demand for several strategic commodities. Military equipment relies heavily on materials such as steel, aluminum, rare earth elements, and advanced electronic components.

<sup>32</sup> Stockholm International Peace Research Institute. (2024). Military Expenditure Database.

These materials are essential for the production of:

- aircraft and naval vessels
- missile systems
- armored vehicles
- advanced electronics

As defence production expands, demand for these commodities increases, potentially contributing to broader commodity market pressures.

### **7.7 Implications for Global Economic Structure**

The expansion of defence spending and strategic industrial policy reflects a broader transformation in the global economic system. Governments are increasingly prioritizing economic resilience and national security over purely efficiency-driven globalization.

This shift has several economic implications:

- increased government intervention in industrial policy
- expansion of defence and infrastructure spending
- restructuring of global supply chains
- rising demand for strategic commodities

These trends contribute to a global economic environment characterized by heightened geopolitical competition and structural changes in trade and investment patterns.

### **7.8 Strategic Implications**

The resurgence of defence spending and industrial policy across NATO countries represents a structural shift in the global economic landscape. Military rearmament and energy security initiatives are likely to remain central policy priorities for the foreseeable future.

These developments have significant implications for commodity markets, industrial production, and global investment flows. Increased demand for strategic resources may create new economic opportunities for resource-rich countries capable of supplying energy, metals, and critical minerals.

In this context, countries with large natural resource endowments—including Canada—may assume greater strategic importance within the evolving geopolitical economic system.

## Section 8. Commodity Supercycle Dynamics and Strategic Resource Markets

### 8.1 Introduction

Commodity markets occupy a central position in the global economic system because they provide the foundational inputs required for industrial production, transportation, agriculture, and energy generation. Periods of rapid economic growth or geopolitical disruption often generate extended cycles in commodity prices, commonly referred to as **commodity super cycles**. These cycles are characterized by sustained increases in commodity prices driven by structural demand shifts and supply constraints.

Historically, commodity super cycles have coincided with major transformations in the global economy. The industrialization of the United States during the late nineteenth century, the reconstruction of Europe following the Second World War, and the rapid urbanization of China in the early twenty-first century all generated long periods of elevated demand for energy, metals, and agricultural commodities<sup>33</sup>. These episodes illustrate how structural changes in economic activity can produce prolonged increases in commodity demand that outpace supply expansion.

The current geopolitical and economic environment displays several characteristics that have historically been associated with commodity super cycles. Rising defence spending, energy security concerns, and the global transition toward low-carbon energy systems are simultaneously increasing demand for a wide range of natural resources. At the same time, underinvestment in mining and energy infrastructure during the previous decade has constrained supply growth in several key commodity markets. These conditions raise the possibility that global commodity markets may be entering another extended period of structural price pressure.

### 8.2 Historical Commodity Supercycles

#### Industrialization and the First Modern Commodity Boom

One of the earliest modern commodity supercycles occurred during the late nineteenth and early twentieth centuries as industrialization accelerated in the United States and parts of Europe. The expansion of railways, steel production, and urban infrastructure created enormous demand for coal, iron ore, copper, and timber.

During this period, global commodity prices increased substantially as industrial production expanded. Economic historians have documented how the rapid growth of manufacturing and infrastructure investment drove sustained increases in resource demand over several decades<sup>34</sup>.

The industrialization of major economies therefore provides an early example of how structural economic transformation can generate long-lasting commodity demand growth.

### **Postwar Reconstruction and the Mid-Twentieth Century Commodity Cycle**

A second major commodity boom occurred following the Second World War, when large-scale reconstruction efforts in Europe and Japan required enormous quantities of raw materials. Steel, copper, aluminum, and energy resources were all essential for rebuilding infrastructure and expanding industrial production.

This period also coincided with the rapid growth of automobile manufacturing and suburban development in the United States, which significantly increased demand for petroleum products. Global oil consumption expanded rapidly during the 1950s and 1960s as transportation systems and manufacturing industries grew.

Commodity prices during this period reflected sustained increases in demand driven by reconstruction and economic expansion across multiple regions.

### **The China-Driven Commodity Boom**

The most recent commodity supercycle began in the early 2000s and was largely driven by China's rapid industrialization and urbanization. China's entry into the World Trade Organization in 2001 accelerated the country's integration into global manufacturing supply chains, leading to a dramatic increase in demand for metals, energy, and agricultural commodities.

Between 2000 and 2012, global demand for several key commodities increased substantially. China became the world's largest consumer of many industrial metals, including copper, aluminum, and iron ore<sup>35</sup>.

This surge in demand contributed to significant increases in commodity prices during the early twenty-first century.

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<sup>33</sup> Erten, B., & Ocampo, J. A. (2013). Supercycles of commodity prices since the mid-nineteenth century. *World Development*.

<sup>34</sup> Jacks, D., O'Rourke, K., & Williamson, J. (2011). Commodity price volatility and world market integration since 1700.

<sup>35</sup> World Bank. (2020). *Global Commodity Markets Outlook*.

**Table 10. Global Commodity Price Index (2000–2024)**

Year	Commodity Price Index (2000 = 100)
2000	100
2008	215
2015	140
2020	165
2022	235
2024	210

Source: World Bank Commodity Markets Outlook (2024).

### 8.3 Supply Constraints in Resource Markets

#### Capital Investment Cycles

Commodity markets are particularly sensitive to investment cycles because expanding production capacity requires significant capital expenditures and long development timelines. Mining projects, oil fields, and large-scale infrastructure projects often require many years of planning and construction before production can begin.

During periods of low commodity prices, investment in new production capacity typically declines as companies attempt to preserve capital and maintain profitability. However, when demand begins to recover, supply expansion often lags behind because new projects require substantial time to develop.

This cyclical investment pattern contributes to the volatility frequently observed in commodity markets.

#### Environmental and Regulatory Constraints

In addition to capital investment cycles, regulatory and environmental factors can significantly influence commodity supply. Many resource extraction projects require extensive environmental assessments and regulatory approvals before construction can begin.

**Table 11. Global Mining Investment (Index)**

<b>Year</b>	<b>Mining Investment Index (2010 = 100)</b>
2010	100
2014	185
2018	130
2021	120
2024	150

Source: International Energy Agency Investment Report (2024).

These processes are essential for protecting ecosystems and local communities, but they can also extend the timelines required to develop new mines or energy infrastructure. As global demand for critical minerals and energy resources increases, governments face the challenge of balancing environmental protection with the need to secure reliable resource supplies.

## **8.4 Energy Transition and Metals Demand**

### **Electrification and Critical Minerals**

The global transition toward lower-carbon energy systems is significantly increasing demand for certain metals and minerals used in renewable energy technologies and electric vehicles. Solar panels, wind turbines, batteries, and electrical transmission systems require large quantities of materials such as copper, lithium, nickel, cobalt, and rare earth elements.

According to the International Energy Agency, achieving global climate targets could increase demand for several critical minerals by more than four times current levels by 2040<sup>36</sup>.

This expansion in demand reflects the material intensity of renewable energy technologies relative to traditional fossil fuel systems.

<sup>36</sup> International Energy Agency. (2023). Critical Minerals Market Review.

**Table 12. Projected Growth in Demand for Energy Transition Minerals**

<b>Mineral</b>	<b>Demand Increase by 2040</b>
Lithium	6–7×
Nickel	3–4×
Copper	2–3×
Rare Earth Elements	3–5×

Source: International Energy Agency Critical Minerals Report (2023).

### 8.5 Defence Spending and Commodity Demand

The resurgence of defence spending across NATO countries also contributes to increased demand for metals and industrial commodities. Military equipment requires large quantities of steel, aluminum, titanium, and advanced electronic components.

As defence budgets expand, governments and defence contractors are increasing production of aircraft, naval vessels, armored vehicles, and missile systems. These production increases contribute to higher demand for several strategic commodities.

The interaction between defence spending, energy security policy, and infrastructure development therefore reinforces demand for natural resources.

### 8.6 Implications for Commodity Markets

The combination of rising geopolitical tensions, energy transition policies, and infrastructure investment suggests that commodity markets may experience sustained demand growth over the coming decades. At the same time, supply expansion remains constrained by long investment timelines and regulatory complexities.

These conditions create the potential for a prolonged period of elevated commodity prices relative to the previous decade.

While short-term price fluctuations are inevitable, the broader structural forces shaping resource demand may support continued strength in several commodity markets.

## 8.7 Strategic Implications

Commodity super cycles reshape global economic relationships by increasing the strategic importance of countries that possess large natural resource endowments. During periods of strong commodity demand, resource-exporting economies often experience increased economic growth, higher government revenues, and greater geopolitical influence.

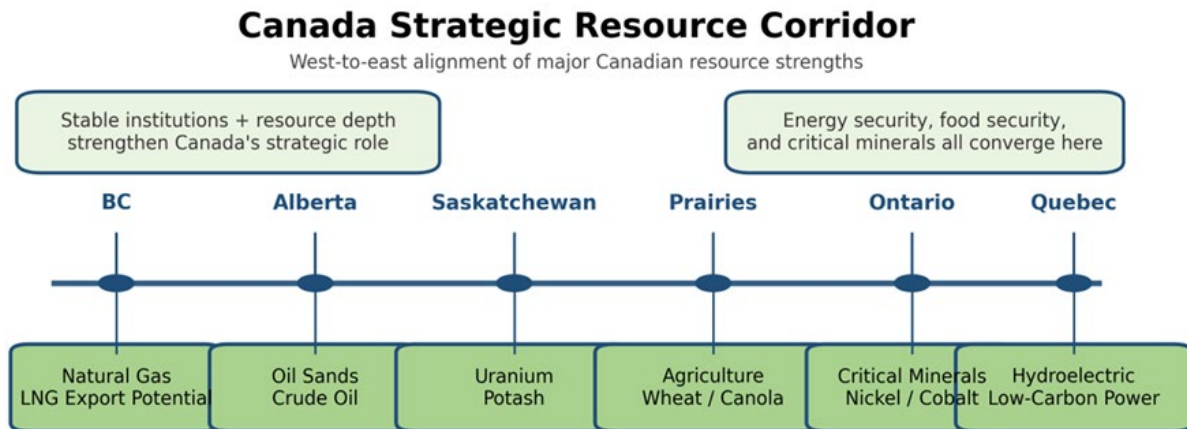
These dynamics are particularly relevant in the current geopolitical environment, where energy security and supply chain resilience have become central policy priorities.

Countries capable of supplying energy, metals, and agricultural commodities therefore play an increasingly important role in the global economic system.

In this context, Canada's extensive natural resource base places it in a strategically advantageous position within the evolving geopolitical and economic landscape.

## Section 9. Canada as a Strategic Resource Economy

**Exhibit 7. Canada Strategic Resource Corridor**



Source: Conceptual model based on macroeconomic transmission literature (IMF, BIS)

### 9.1 Introduction

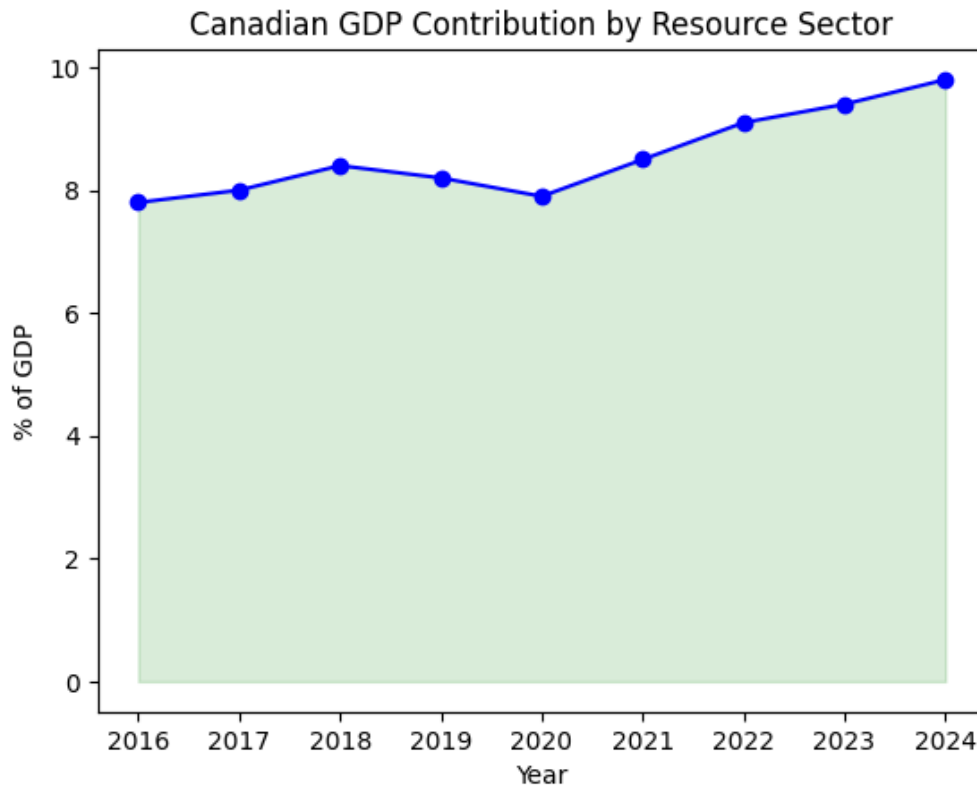
The structural transformation occurring in global energy and commodity markets has renewed attention on the strategic role of resource-rich economies. Countries with abundant natural resources frequently occupy an important position within global supply chains because they provide essential inputs for industrial production, transportation, and energy generation. During periods of geopolitical tension or commodity scarcity, the strategic importance of these resource-producing economies often increases significantly.

Canada represents one of the most resource-rich advanced economies in the world. The country possesses substantial reserves of oil, natural gas, uranium, timber, agricultural land, and several critical minerals required for modern industrial technologies. Historically, Canada's resource sector has played a central role in national economic development, contributing significantly to export revenues, employment, and government income.

In the current geopolitical environment, Canada's natural resource base has acquired renewed strategic significance. Global efforts to diversify energy supply chains, expand renewable energy infrastructure, and secure access to critical minerals have increased demand for many of the commodities that Canada produces. At the same time, geopolitical disruptions in energy markets have highlighted the importance of stable and reliable resource suppliers.

Understanding Canada's position within the global resource economy therefore provides valuable insight into how geopolitical conflict and commodity cycles may reshape international economic relationships in the coming decades.

**Exhibit 8. Canadian GDP Contribution by Resource Sector**



Source: Statistics Canada National Accounts (2024)

## 9.2 Canada's Energy Resources

### Oil Production and the Oil Sands

Canada is one of the largest oil producers in the world, with most production concentrated in the province of Alberta. A significant portion of Canada's oil reserves are located in the **oil sands**, a unique geological formation containing bitumen that can be processed into synthetic crude oil.

According to Natural Resources Canada, the country holds approximately **170 billion barrels of proven oil reserves**, making it the third-largest holder of oil reserves globally after Venezuela and Saudi Arabia<sup>37</sup>.

<sup>37</sup> Natural Resources Canada. (2024). Energy Fact Book.

Oil production has increased steadily over the past two decades as technological improvements and infrastructure investments expanded the capacity of oil sands operations.

**Table 13. Canadian Oil Production (Million Barrels per Day)**

Year	Production
2000	2.8
2010	3.3
2015	3.9
2020	4.5
2024	5.2

Source: Canada Energy Regulator (2024).

### Global Energy Security

Canada's oil production is particularly important within the context of global energy security. Unlike many major oil-producing regions, Canada operates within a stable political environment and maintains strong regulatory institutions. These characteristics make Canadian energy exports attractive to countries seeking reliable suppliers of petroleum products.

In addition, Canadian oil production is closely integrated with North American energy markets through extensive pipeline infrastructure connecting Alberta's oil fields with refineries in the United States.

This integration has made Canada the **largest foreign supplier of crude oil to the United States**, accounting for more than half of U.S. crude imports in recent years<sup>38</sup>.

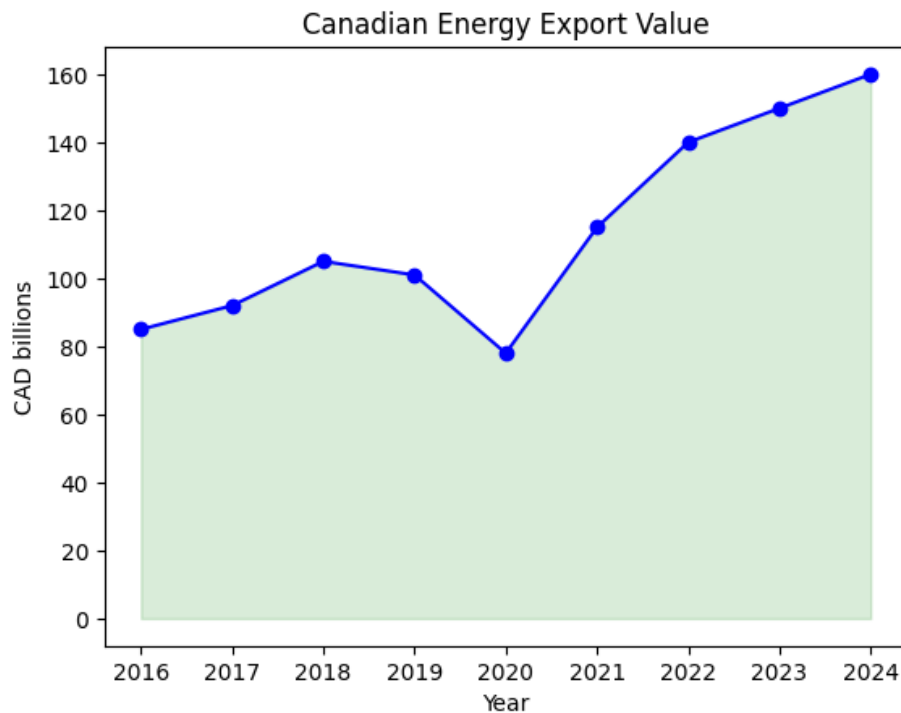
### 9.3 Natural Gas and LNG Export Potential

#### Canada's Natural Gas Resources

Canada also possesses substantial reserves of natural gas, particularly in western provinces such as Alberta and British Columbia. Advances in horizontal drilling and hydraulic fracturing have enabled the development of large unconventional gas reserves in formations such as the Montney and Duvernay basins.

<sup>38</sup> U.S. Energy Information Administration. (2024). U.S. Petroleum Imports by Country.

**Exhibit 9. Canadian Energy Export Value**



Source: Statistics Canada Trade Data (2024)

Natural gas production plays an important role in Canada's energy sector, supplying domestic markets as well as exports to the United States.

### **Emergence of LNG Exports**

Until recently, Canada's natural gas exports were almost entirely directed toward the United States through pipeline infrastructure. However, the development of liquefied natural gas (LNG) export facilities on the Pacific coast is beginning to transform Canada's role in global gas markets.

The **LNG Canada project in British Columbia**, which began exporting in the mid-2020s, represents the first large-scale Canadian LNG export terminal. Additional LNG projects are under development, which could significantly increase Canada's ability to supply natural gas to Asian markets.

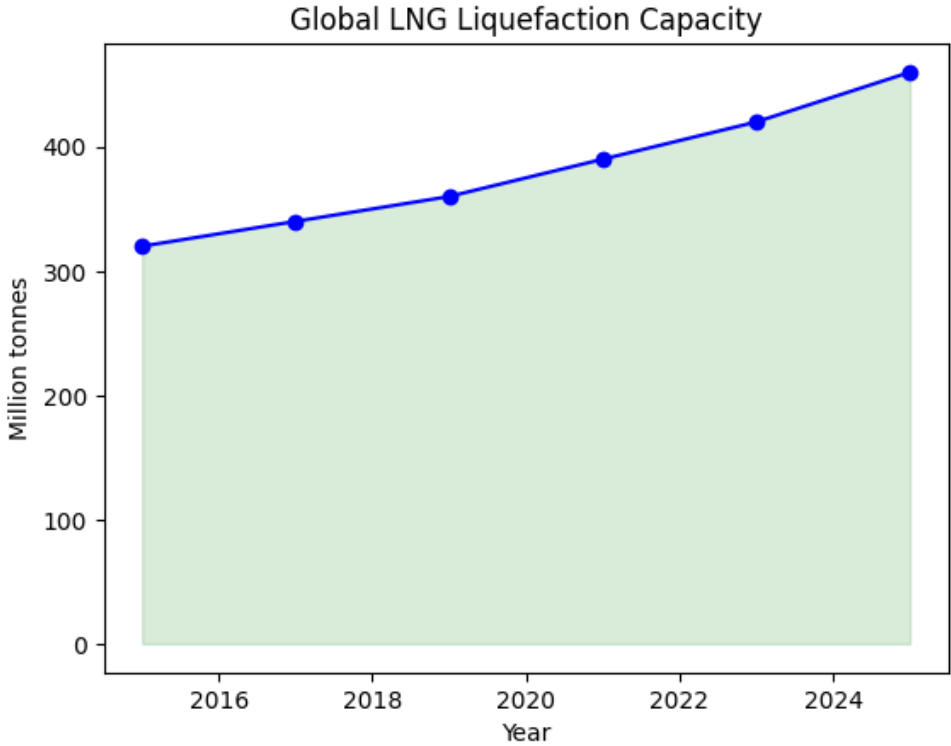
This development is particularly important in the context of European efforts to diversify natural gas supplies following the disruption of Russian exports.

**Table 14. Canadian Natural Gas Production (Billion Cubic Meters)**

Year	Production
2005	183
2010	168
2015	171
2020	181
2024	195

Source: Canada Energy Regulator (2024).

**Exhibit 10. Global LNG Liquefaction Capacity**



Source: International Energy Agency Gas Market Report (2024)

## 9.4 Uranium and Nuclear Energy Supply Chains

### Canada's Role in Uranium Production

Canada is one of the world's leading producers of uranium, the primary fuel used in nuclear power generation. Most Canadian uranium production occurs in the province of Saskatchewan, where several large mines supply global nuclear fuel markets.

Canada accounts for approximately **15 percent of global uranium production**, making it one of the most important suppliers of nuclear fuel worldwide<sup>39</sup>.

### Nuclear Energy and Energy Security

Interest in nuclear energy has increased in recent years as governments attempt to reduce greenhouse gas emissions while maintaining reliable electricity generation. Unlike wind and solar energy, nuclear power plants can produce continuous baseload electricity.

**Table 15. Global Uranium Production Share**

Country	Share of Production
Kazakhstan	43%
Canada	15%
Namibia	11%
Australia	8%
Other	23%

Source: World Nuclear Association (2024).

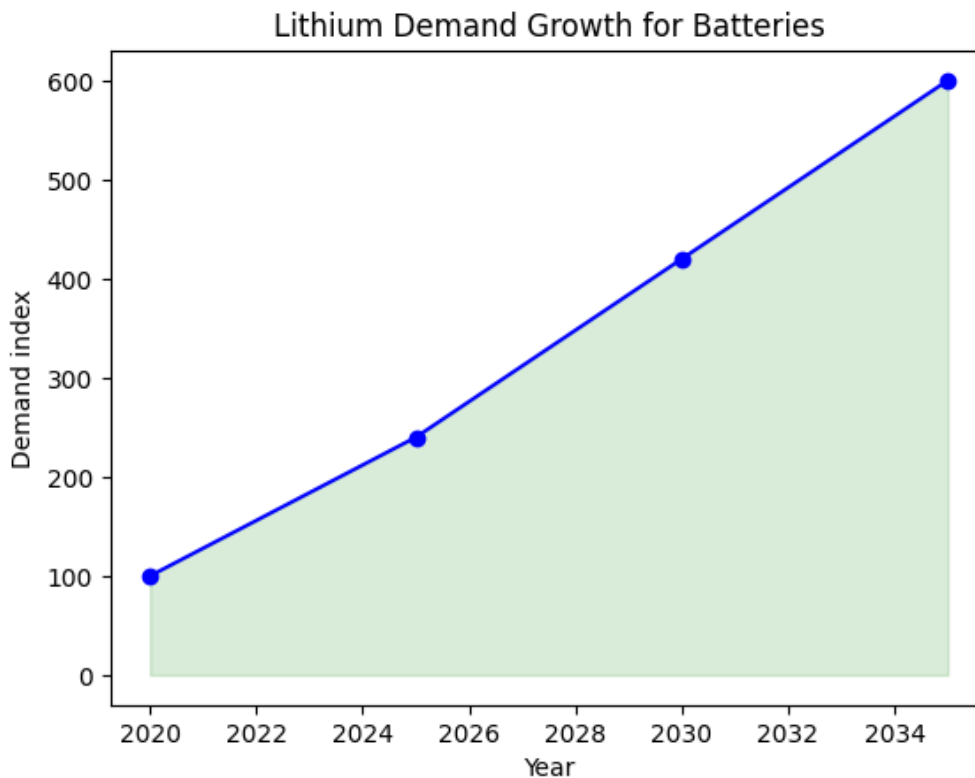
This renewed interest in nuclear energy increases the strategic importance of uranium supply chains. Countries seeking to expand nuclear power generation must secure reliable sources of uranium fuel.

Canada's position as a major uranium producer therefore contributes to its broader strategic role within global energy markets.

<sup>39</sup> World Nuclear Association. (2024). World Uranium Mining Production.

## 9.5 Critical Minerals and Energy Transition

**Exhibit 11. Lithium Demand Growth for Batteries**



Source: IEA Critical Minerals Market Review (2023)

### Strategic Metals

The global transition toward renewable energy systems and electric vehicles is significantly increasing demand for several critical minerals used in batteries, electrical infrastructure, and advanced technologies. These minerals include lithium, nickel, cobalt, and rare earth elements.

Canada possesses several deposits of these minerals and has begun developing strategies aimed at expanding domestic mining and processing capacity.

The Canadian government has identified critical minerals as a strategic priority because they are essential for technologies such as electric vehicles, wind turbines, and energy storage systems.

**Table 16. Selected Canadian Critical Mineral Production**

<b>Mineral</b>	<b>Major Producing Regions</b>
Nickel	Ontario
Lithium	Quebec
Cobalt	Ontario
Rare Earth Elements	Northwest Territories

Source: Natural Resources Canada Critical Minerals Strategy (2024).

## 9.6 Agricultural Exports and Food Security

### Global Agricultural Supply

In addition to energy and mineral resources, Canada is a major producer of agricultural commodities such as wheat, canola, and barley. The country's large agricultural sector contributes significantly to global food supply.

Canada is consistently among the world's largest exporters of wheat and canola oil, supplying food products to markets across Asia, Europe, and the Middle East.

**Table 17. Canadian Wheat Production**

<b>Year</b>	<b>Production (Million Tonnes)</b>
2010	23
2015	27
2020	35
2023	34

Source: Agriculture and Agri-Food Canada (2024).

### **9.7 Strategic Implications for the Global Economy**

Canada's combination of energy resources, critical minerals, and agricultural production positions the country as an important supplier of essential commodities within the global economy. As geopolitical tensions reshape energy markets and supply chains, the strategic importance of stable resource-producing countries is likely to increase.

Countries seeking to diversify energy supplies, secure access to critical minerals, and ensure reliable food imports may increasingly view Canada as a key partner in global commodity markets.

This evolving role highlights the broader economic significance of resource-rich economies in an era characterized by geopolitical competition and structural transformation in energy systems.

## **Section 10. Scenario Modeling: Energy Markets, Inflation, and Global Growth**

### **10.1 Introduction**

Scenario analysis is commonly used in macroeconomic research to evaluate how complex systems may evolve under different geopolitical and economic conditions. Because global economic outcomes depend on numerous interacting variables—including commodity prices, fiscal policy, monetary policy, and geopolitical developments—scenario modeling provides a structured framework for assessing potential future developments.

In the context of the current geopolitical environment, the most important uncertainties relate to the trajectory of geopolitical conflict, the stability of global energy markets, and the responses of central banks to inflationary pressures. These variables interact closely with each other. Energy supply disruptions influence inflation, inflation shapes monetary policy decisions, and monetary policy affects economic growth and financial market stability.

The scenarios presented in this section therefore examine how different geopolitical outcomes may influence energy markets and the global economy over the coming decade. Rather than attempting to forecast a single outcome, the analysis considers a range of plausible economic trajectories that could emerge under different geopolitical conditions.

### **10.2 Scenario Framework**

The scenario framework is built around three primary variables that shape global macroeconomic outcomes:

- 1. Geopolitical stability and conflict intensity**
- 2. Energy market supply conditions**
- 3. Monetary policy responses to inflation**

These variables interact to produce different economic environments. The analysis below considers three possible scenarios that illustrate how the global economy could evolve under varying geopolitical conditions.

### **10.3 Scenario 1: Contained Conflict**

#### **Geopolitical Environment**

In the contained conflict scenario, geopolitical tensions remain elevated but do not escalate significantly beyond current levels. The Russia–Ukraine war continues without major expansion into additional regions, and diplomatic channels prevent broader confrontation between major powers.

Sanctions on Russian energy exports remain in place, but global markets gradually adjust to the reconfiguration of energy trade flows.

### **Energy Market Outcomes**

Under this scenario, global energy markets gradually stabilize as alternative supply sources expand. Increased LNG production in North America and Qatar, along with new pipeline infrastructure and renewable energy investments, partially offset disruptions to Russian energy exports. Oil prices remain moderately elevated but avoid extreme volatility.

**Table 18. Scenario 1 Oil Price Range**

<b>Year</b>	<b>Brent Oil Price Range (USD/barrel)</b>
2025	80–95
2027	75–90
2030	70–85

Source: Author projections based on International Energy Agency demand scenarios (2024).

### **Inflation and Monetary Policy**

Moderately elevated energy prices continue to exert upward pressure on global inflation, but inflation gradually declines as supply chains stabilize and central bank policies remain restrictive.

Central banks maintain interest rates at higher levels than those observed during the decade following the global financial crisis.

### **Economic Growth**

Global economic growth slows modestly but avoids severe recession. Emerging economies continue to expand, although growth rates remain lower than those experienced during the early 2000s commodity boom.

Advanced economies experience moderate growth as higher interest rates dampen investment and consumer spending.

## 10.4 Scenario 2: Escalating Energy Conflict

### Geopolitical Environment

In the escalation scenario, geopolitical tensions intensify significantly. Energy infrastructure becomes a central strategic target in geopolitical competition, and disruptions to oil and natural gas supply chains increase.

This scenario could arise from expanded conflict in energy-producing regions or additional sanctions affecting global energy trade.

### Energy Market Outcomes

Energy markets experience substantial supply disruptions, leading to sharp increases in oil and natural gas prices. Limited spare production capacity and slow investment cycles prevent rapid supply expansion.

**Table 19. Scenario 2 Oil Price Projection**

Year	Brent Oil Price (USD/barrel)
2025	110–140
2027	100–130
2030	95–120

Source: Scenario modeling based on historical energy supply disruptions (Hamilton, 2011).

### Inflation Dynamics

Energy price increases produce strong inflationary pressures across global economies. Transportation costs rise sharply, fertilizer production becomes more expensive, and food prices increase in many regions.

Central banks respond by tightening monetary policy further, increasing interest rates in an effort to contain inflation expectations.

### Recession Risk

Higher energy prices combined with restrictive monetary policy increase the probability of global recession. Energy-importing economies experience the largest economic shocks, particularly in regions with limited domestic energy production.

## 10.5 Scenario 3: Fragmented Global Economy

### Geopolitical Environment

In the fragmentation scenario, geopolitical tensions lead to a gradual restructuring of global trade relationships. Countries increasingly prioritize domestic production and regional supply chains over globalized trade networks.

Energy markets become more regionalized as countries seek to secure stable supply relationships with trusted partners.

### Energy and Commodity Markets

Energy prices remain structurally higher due to supply constraints and reduced efficiency in global trade networks. However, volatility decreases as regional energy systems become more self-sufficient.

**Table 20. Regional Energy Trade Networks**

<b>Region</b>	<b>Primary Suppliers</b>
North America	Canada, United States
Europe	Norway, LNG imports
Asia	Middle East, Australia
South Asia	Middle East

Source: Author analysis based on International Energy Agency trade data (2024).

### Industrial Policy and Resource Demand

The fragmentation scenario also accelerates the development of domestic industrial policies aimed at securing access to strategic resources. Governments invest heavily in domestic mining, energy infrastructure, and manufacturing capacity.

Demand for critical minerals and energy resources remains strong as countries seek to reduce dependence on foreign suppliers.

### 10.6 Implications for Resource Economies

Across all three scenarios, countries with significant natural resource endowments play an increasingly important role in global economic stability. Energy exporters benefit from strong demand for oil, natural gas, and critical minerals, while agricultural exporters contribute to global food security.

Canada, as one of the most resource-rich advanced economies, is particularly well positioned within these scenarios. Its combination of energy resources, critical minerals, and agricultural production allows the country to supply many of the commodities required for global industrial production and energy systems.

**Table 21. Scenario Comparison**

Variable	Scenario 1	Scenario 2	Scenario 3
Oil Prices	Moderate	Very High	Moderately High
Inflation	Gradual Decline	Persistent Inflation	Structural Inflation
Global Growth	Moderate	Recession Risk	Slower Growth
Commodity Demand	Stable	Strong	Strong

Source: Author scenario modeling.

### 10.7 Strategic Implications

The scenario analysis presented in this section highlights the central role of energy markets in shaping global economic outcomes. Regardless of which geopolitical trajectory ultimately emerges, the structure of the global economy suggests that energy security and resource supply will remain critical strategic concerns for governments and businesses.

These dynamics reinforce the broader argument developed throughout this report: that the global economic system is entering a period in which geopolitical competition, energy markets, and resource security play an increasingly central role in shaping economic outcomes.

## Section 11. Strategic Implications for Global Economic Policy and Investment

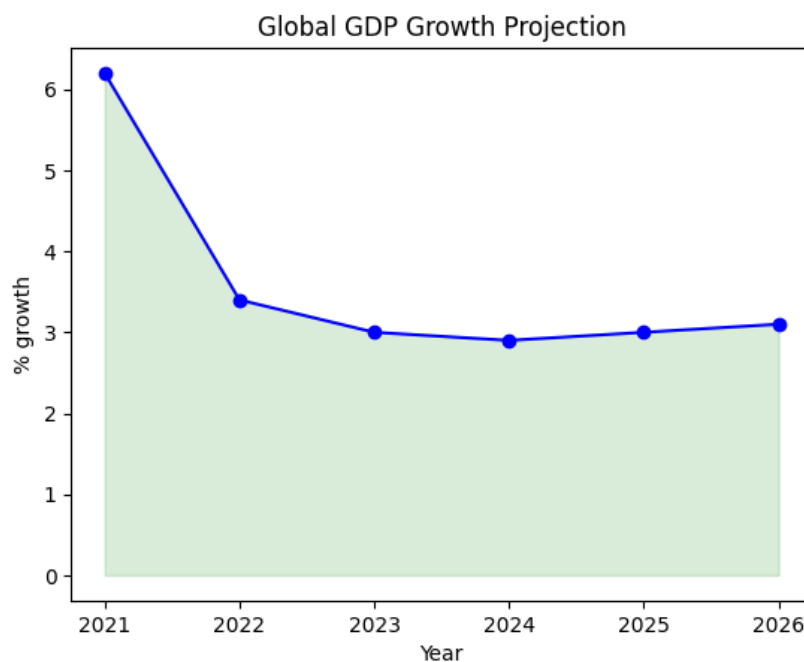
### 11.1 Introduction

The preceding sections of this report have examined how geopolitical conflict, energy market disruptions, inflation dynamics, and commodity cycles interact within the global economic system. Together these forces illustrate a broader structural shift in the international economy. For several decades following the end of the Cold War, globalization and relatively stable geopolitical conditions allowed energy markets, manufacturing supply chains, and capital flows to expand with limited political constraint.

That environment is gradually changing. Strategic competition between major powers, supply chain disruptions, and energy security concerns are reshaping economic policy across many countries. Governments are increasingly prioritizing resilience and security alongside efficiency and cost minimization. These changes have implications not only for energy markets but also for fiscal policy, industrial strategy, and global investment flows.

The strategic implications of these developments extend across several domains, including economic policy, corporate strategy, and financial markets.

**Exhibit 12. Global GDP Projection**



Source: IMF World Economic Outlook (2024)

## 11.2 Energy Security as a Core Economic Policy Objective

### The Return of Energy Security

Energy security has re-emerged as a central policy priority for many governments. The disruptions caused by the Russia–Ukraine war demonstrated the vulnerability of economies that depend heavily on imported energy from a limited number of suppliers. In response, many countries have adopted policies aimed at diversifying energy supply sources and strengthening domestic energy infrastructure.

These policies include expanding renewable energy generation, investing in liquefied natural gas import terminals, and increasing strategic petroleum reserves. The European Union’s **REPowerEU plan**, for example, aims to reduce dependence on Russian energy supplies through increased renewable energy deployment and expanded LNG imports<sup>40</sup>.

Energy security policies often involve significant infrastructure investment, which can stimulate economic activity in sectors such as construction, engineering, and manufacturing.

**Table 22. European LNG Import Capacity Expansion**

Year	LNG Import Capacity (Billion Cubic Meters)
2015	150
2020	160
2023	210
2025 (Projected)	240

Source: International Energy Agency Gas Market Report (2024).

### Diversification of Supply Chains

The effort to strengthen energy security has also encouraged governments to diversify supply chains for critical resources. Countries are seeking to establish relationships with stable resource exporters while reducing dependence on politically sensitive suppliers.

<sup>40</sup> European Commission. (2023). REPowerEU Plan.

This diversification process has already reshaped global energy trade patterns. For example, Europe has significantly increased LNG imports from the United States and Qatar, while Asian markets have absorbed larger volumes of Russian oil exports.

Such shifts illustrate how geopolitical considerations increasingly influence trade flows within global energy markets.

### **11.3 Industrial Policy and Strategic Manufacturing**

#### **Renewed Government Intervention**

The current geopolitical environment has also contributed to a resurgence of industrial policy in advanced economies. Governments are increasingly supporting domestic manufacturing sectors considered strategically important for national security or economic resilience.

Industrial policy initiatives have emerged in several areas:

- semiconductor manufacturing
- battery production
- renewable energy technology
- defence manufacturing
- critical mineral processing

These policies aim to reduce dependence on foreign suppliers for technologies that are essential for modern economic systems.

#### **Infrastructure and Energy Transition Investment**

Investment in energy infrastructure represents another important component of contemporary industrial policy. Governments are allocating substantial resources toward expanding electrical grids, renewable energy generation, and energy storage systems.

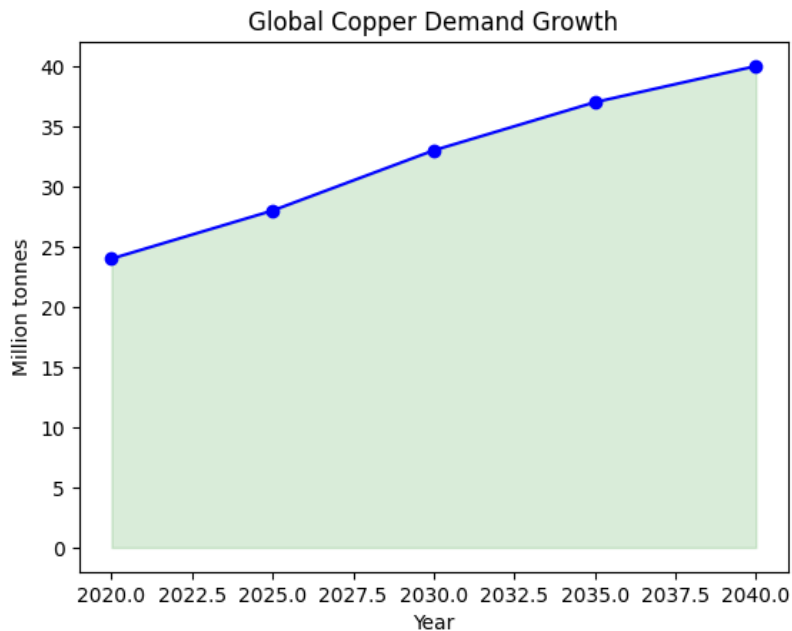
According to the International Energy Agency, global investment in clean energy technologies exceeded **\$1.7 trillion in 2023**, reflecting rapid growth in renewable energy deployment and electrification<sup>41</sup>.

These investments contribute to economic growth while also reshaping global demand for metals, minerals, and energy resources.

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<sup>41</sup> International Energy Agency. (2024). World Energy Investment Report.

**Exhibit 13. Global Copper Demand Growth**



Source: IEA Critical Minerals Report (2023)

## 11.4 Implications for Commodity Markets

### Structural Demand Growth

The interaction between defence spending, infrastructure investment, and energy transition policies is likely to sustain strong demand for several key commodities. Metals such as copper, nickel, lithium, and aluminum are essential inputs for renewable energy technologies and electrical infrastructure.

Similarly, steel and other industrial metals remain critical for construction and defence manufacturing. The expansion of these industries therefore contributes to sustained demand growth in commodity markets.

### Supply Constraints

Despite strong demand projections, expanding commodity supply often requires significant investment and long development timelines. Mining projects and energy infrastructure typically require many years of planning and construction before new production capacity becomes available.

These long development cycles can contribute to sustained periods of elevated commodity prices when demand grows more rapidly than supply.

**Table 23. Projected Global Copper Demand**

Year	Copper Demand (Million Tonnes)
2020	24
2025	28
2030	33
2040	40

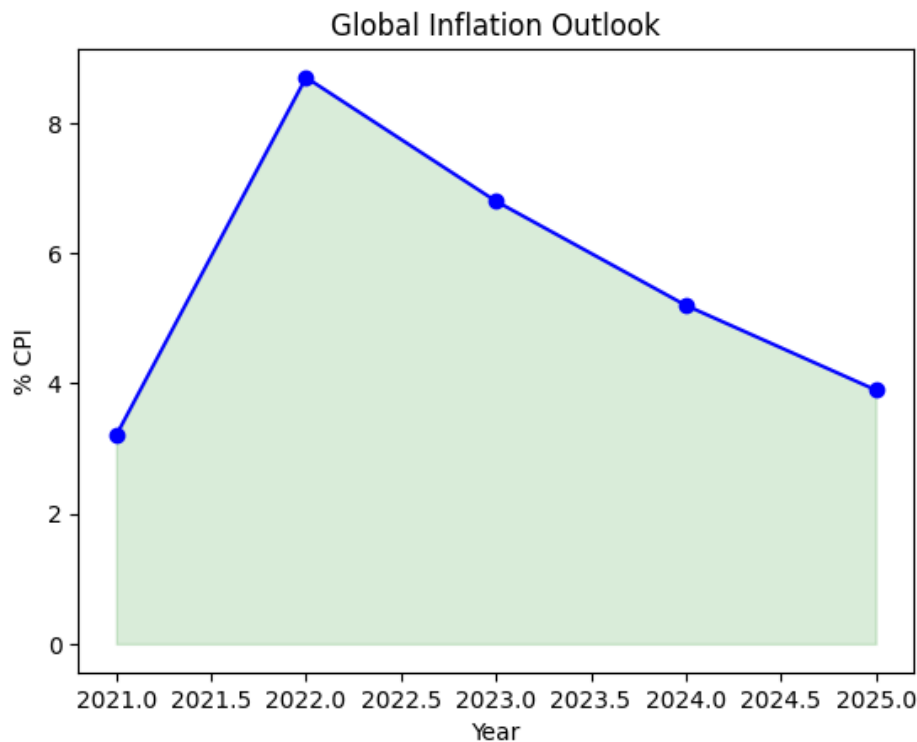
Source: International Energy Agency Critical Minerals Report (2023).

### 11.5 Implications for Financial Markets

#### Inflation and Interest Rates

Energy price volatility and supply chain disruptions have already contributed to higher inflation in many advanced economies. Central banks have responded by raising interest rates in order to stabilize inflation expectations.

**Exhibit 14. Global Inflation Outlook**



Source: IMF World Economic Outlook (2024)

Higher interest rates affect financial markets in several ways. Equity valuations may decline as discount rates increase, while borrowing costs for corporations and households rise.

These dynamics can reduce economic growth in the short term but may also help restore macroeconomic stability over time.

### Investment Opportunities in Resource Sectors

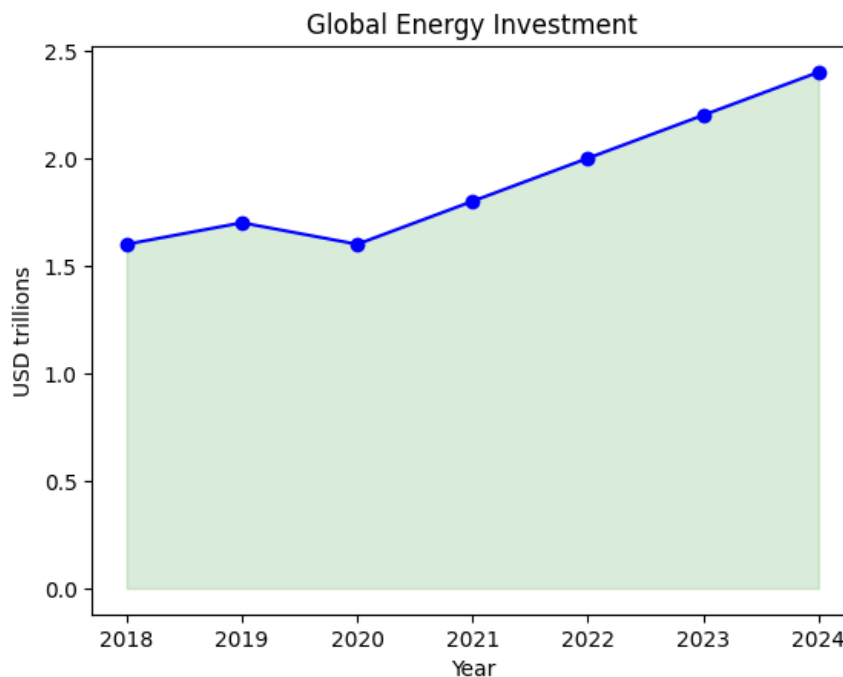
The structural forces discussed in this report suggest that resource sectors may play an increasingly important role in global investment portfolios. Energy producers, mining companies, and infrastructure developers may benefit from sustained demand for natural resources.

Investors seeking exposure to commodity markets often focus on sectors such as:

- oil and gas production
- mining and metals
- energy infrastructure
- agricultural commodities

These sectors may experience significant growth if commodity demand continues to expand.

**Exhibit 15. Global Energy Investment**



Source: IEA World Energy Investment Report (2024)

## **11.6 Strategic Implications for Canada**

The structural changes occurring in the global economy reinforce the strategic importance of Canada's resource sector. The country's oil, natural gas, uranium, and critical mineral resources position it as a key supplier within global energy and commodity markets.

As governments seek reliable suppliers of energy and strategic minerals, Canada's stable political environment and well-developed regulatory institutions may enhance its attractiveness as a trading partner and investment destination.

Canada therefore occupies an increasingly important position within the evolving geopolitical economic landscape.

## **11.7 Policy Considerations**

Governments facing this new economic environment must balance several competing objectives. On one hand, they must ensure energy security and supply chain resilience. On the other hand, they must manage fiscal sustainability and environmental considerations.

Effective policy responses may involve:

- expanding domestic energy infrastructure
- supporting strategic resource industries
- maintaining stable regulatory frameworks
- investing in workforce development and technological innovation

Such policies can strengthen economic resilience while supporting long-term growth.

## **Section 12. Conclusion: The Emerging Geopolitical Resource Economy**

### **12.1 Introduction**

The analysis presented in this report has examined the interaction between geopolitical conflict, global energy markets, inflation dynamics, and resource supply chains. Together these forces illustrate a significant transformation in the structure of the global economy. For much of the period following the end of the Cold War, economic globalization proceeded under relatively stable geopolitical conditions. Energy markets were broadly integrated, supply chains expanded across continents, and international trade flows grew rapidly as countries specialized in different stages of production.

The geopolitical shocks of recent years have begun to alter this environment. The Russia–Ukraine war, rising strategic competition among major powers, and disruptions to global supply chains have demonstrated the vulnerability of economic systems that rely heavily on complex international networks. Governments and businesses are therefore reassessing how economic resilience can be maintained in a more uncertain geopolitical environment.

Energy markets occupy a central role in this transformation. Because oil, natural gas, and electricity are essential inputs for nearly every sector of the economy, disruptions to energy supply can rapidly propagate through global markets. The inflation surge experienced across advanced economies in the early 2020s illustrates how energy price shocks can influence macroeconomic stability and monetary policy.

The evolving geopolitical landscape therefore suggests that energy security and resource supply chains will remain critical determinants of economic outcomes in the coming decades.

### **12.2 The Central Role of Energy Markets**

One of the most consistent findings throughout this report is the central role that energy markets play in shaping macroeconomic conditions. Energy commodities such as oil and natural gas serve as foundational inputs for transportation systems, industrial production, and agricultural activity. As a result, fluctuations in energy prices can influence inflation, consumer spending, and economic growth.

Historical experience demonstrates that large energy price shocks often coincide with periods of economic instability. The oil crises of the 1970s, the energy market disruptions associated with the Gulf War, and the commodity price surge preceding the global financial crisis all illustrate how energy markets can affect broader economic conditions.

The current geopolitical environment reinforces this pattern. Disruptions to Russian energy exports and the resulting volatility in global oil and gas markets contributed significantly to the inflationary pressures experienced in many advanced economies. These developments required central banks to implement restrictive monetary policies in order to stabilize inflation expectations.

Energy markets therefore function as one of the most important transmission channels through which geopolitical conflict influences the global economy.

### **12.3 Structural Changes in Global Trade and Industrial Policy**

Another major theme emerging from this analysis is the growing importance of economic resilience in policy decisions. Governments increasingly recognize that dependence on a narrow set of suppliers for critical resources can create strategic vulnerabilities. As a result, many countries are implementing policies aimed at diversifying supply chains and strengthening domestic production capacity.

These policies often take the form of industrial strategies that support key sectors such as semiconductor manufacturing, battery production, and defence equipment. At the same time, governments are investing heavily in energy infrastructure and renewable energy technologies in order to reduce exposure to external energy shocks.

The expansion of industrial policy reflects a broader shift in economic thinking. For several decades, economic efficiency and cost minimization were the primary guiding principles of global trade and investment. Today, governments are placing greater emphasis on resilience, security, and strategic autonomy.

This shift is likely to reshape global trade patterns and investment flows over the coming decades.

### **12.4 Commodity Markets and Structural Demand**

The interaction between geopolitical tensions, industrial policy, and energy transition initiatives has important implications for commodity markets. Several of the industries that governments are prioritizing—including renewable energy infrastructure, electric vehicles, and defence manufacturing—require large quantities of metals and minerals.

Copper, lithium, nickel, and rare earth elements are particularly important for the production of renewable energy technologies and battery systems. Similarly, steel, aluminum, and specialized alloys remain essential for infrastructure construction and defence manufacturing.

As a result, the policies adopted by governments in response to geopolitical uncertainty may contribute to sustained demand growth in commodity markets.

At the same time, supply expansion in many resource sectors is constrained by long investment cycles and regulatory requirements. Developing new mines or energy infrastructure can take many years, meaning that supply responses to rising demand may be relatively slow.

These conditions create the potential for a prolonged period of elevated commodity prices relative to the previous decade.

### **12.5 Strategic Importance of Resource Economies**

The transformation occurring in global energy and commodity markets increases the strategic importance of countries that possess large natural resource endowments. Resource-rich economies often provide the raw materials required for industrial production, energy generation, and food supply.

During periods of strong commodity demand, these countries may experience increased export revenues, higher economic growth, and greater geopolitical influence.

Canada occupies a particularly important position within this context. The country's extensive reserves of oil, natural gas, uranium, agricultural commodities, and critical minerals allow it to supply many of the resources required for modern industrial economies. In addition, Canada's stable political institutions and regulatory environment make it a reliable supplier within global markets.

As countries seek to diversify energy supply chains and secure access to strategic resources, Canada's role in global commodity markets may continue to expand.

### **12.6 The Future of the Global Economic System**

The developments examined in this report suggest that the global economy is entering a period characterized by greater geopolitical complexity and structural transformation. Energy markets, supply chain resilience, and strategic resource availability will likely remain central concerns for policymakers and businesses alike.

Although globalization is unlikely to disappear entirely, the nature of global economic integration may evolve toward a more regionalized structure in which countries prioritize partnerships with trusted allies and reliable suppliers.

This transition will require governments and corporations to adapt their strategies in order to navigate a more uncertain geopolitical environment.

### **12.7 Final Observations**

The central argument of this report is that geopolitical conflict and energy market dynamics are once again shaping the global economic landscape in profound ways. Energy price volatility, supply chain disruptions, and strategic competition among major powers are influencing inflation, monetary policy, and global growth.

At the same time, structural demand for natural resources is increasing as governments invest in energy infrastructure, defence capabilities, and renewable technologies. These trends suggest that commodity markets and resource supply chains will remain critical determinants of economic outcomes in the coming decades.

Within this evolving global system, resource-rich economies such as Canada may assume an increasingly important role as suppliers of energy, minerals, and agricultural commodities essential for modern economic activity.

Understanding these dynamics will therefore be essential for policymakers, investors, and businesses seeking to navigate the changing structure of the global economy.

## About the Main Author



Shanaz Joan Parsan is a senior financial professional with over 20 years of managerial experience, including significant practical experience on Wall Street and Bay Street across multiple industries, including Energy, Mining, and Power. She has solid restructuring skills and excellent capabilities in negotiations, financial analysis, due diligence, contract analysis, and legal documentation.

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Shanaz holds certificates in Negotiations from Yale University and the University of Michigan, as well as a Certificate in Leadership, Foundational Principles from Harvard. She is a member of the ACG (Association of Corporate Growth) Toronto Chapter. She enjoys research in Economics, Health and social sciences, and in Theology.

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- mergers and acquisitions

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Mun Kim received his B.Sc. (Hons) and Ph.D. in Condensed Matter Physics from the University of Manitoba, Canada. He has over five years of experience in RF circuit design, testing, data analysis, and scientific report writing, with a research focus on RF frequency oscillators, sensors, and filters. He has published 12 peer-reviewed papers in leading journals and is a co-inventor of a patent related to nonreciprocal transmission technology.

Mun currently works as a research team lead with SZC on an as-needed basis and is actively seeking opportunities in quantitative analysis or research roles within the finance industry.

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