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Armenia's Structural Dependence on Russia: Trade, Energy, Security

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1. Introduction

Armenia's relationship with Russia, once its traditional ally, has now shifted to viewing it as a hostile actor. This change has been driven by Russia's security failures since the ceasefire of the 2020 Nagorno-Karabakh War. This relationship further deteriorated following Azerbaijan's attacks on Armenia in 2022 and on Nagorno-Karabakh in 2023, which resulted in the ethnic cleansing of the territory's Armenians, despite the presence of Russian peacekeepers. Moreover, Russia's growing alignment with Azerbaijan in the conflict with Armenia has further contributed to the perception of Russia as an adverse power. In response, Armenia is actively diversifying its political ties by strengthening relations with the West.

Despite these political shifts, Armenia's structural dependencies on Russia persist, and have even deepened in some areas. This is particularly evident in key sectors of trade and energy. While the security landscape is changing alongside political developments, the effects of past overreliance on Russia for security still linger and merit examination. These three main areas of dependence—trade, energy, and security—are reinforced by Armenia's membership in Russia-led regional frameworks like the Eurasian Economic Union (EAEU) and the Collective Security Treaty Organization (CSTO).

Overdependence on a single country for essential state functions like trade, energy, and security creates vulnerability to supplier leverage, trade shocks, and neglect of development (World Bank, 2019, 136). In its January 2024 rating on Armenia, the American credit rating agency Fitch noted that the Armenian economy remains “highly dependent on Russia for trade and energy,” and stated that “meaningful diversification away from Russia” is not expected in the near term (Fitch Ratings, 2024). Recommendations include supplier diversification and developing domestic resources. However, diversification is challenging, especially for small, landlocked countries like Armenia (World Bank 2019).

This overreliance on Russia creates vulnerabilities. For instance, in November 2023 and July 2024, a Russian government agency blocked the import of numerous Armenian food products for over a week. This action significantly impacted tens

of thousands of Armenian farmers and greenhouse owners who heavily depend on the Russian market (RFE/RL Azatutyun, 2023; Saribekyan, 2024). The official explanation citing concerns over product quality is questionable and the motive behind the move could be seen as political—a warning against Armenia's Western pivot. Regardless of intent, this incident exposes a significant vulnerability that could be exploited.

This research paper explores the key dependencies (trade, energy, and security) of Armenia on Russia and to what extent they can be feasibly addressed or mitigated. There are policies that could be adopted to help address the problem and this research explores those as well. Russian Leverage in Armenia aims to address the lack of in-depth and systematic analyses of the critical sectors controlled by Russia in Armenia. The objective is to evaluate the specific threats posed by overreliance on Russia to Armenian strategic autonomy and geopolitical agency. The project also aims to provide recommendations on addressing and mitigating these dependencies.

Background | Trade

Armenia's trade relationship with Russia is deeply interwoven, involving substantial flows of goods, services, and remittances. The longstanding trade ties between the two countries are reinforced by Armenia's membership in the EAEU since 2015. This membership, has strengthened economic integration, making Russia Armenia's largest trading partner.

In recent years, the scale of bilateral trade between Armenia and Russia has dramatically increased. In 2022, bilateral trade nearly doubled to USD 5.3 billion, with Armenian exports to Russia tripling from USD 850 million in 2021 to USD 2.4 billion (Statistical Committee of the Republic of Armenia, 2022), representing 51% of Armenia's total exports (Civilnet, 2023). In 2023, bilateral trade surged to USD 7.3 billion (Statistical Committee of the Republic of Armenia, n.d.), with Russia responsible for more than one-third of Armenia's foreign trade (Fitch Ratings, 2024). Armenia's exports to fellow EAEU member states during this period totaled USD 3.3 billion (Armenpress, 2024), surpassing the entire export volume of the previous year. However, this increase is partly due to the re-export of goods to Russia. As Western markets became increasingly inaccessible to Russia due to sanctions over the Russo-Ukrainian war, there was a surge of exports to Armenia, only heightening economic dependence on the country.

Armenia exports agricultural products, textiles, and precious metals to Russia, while importing energy resources, machinery, and foodstuffs. The Russian market continues to be the primary destination for both Armenian exports and imports, underscoring the critical role of Russia in Armenia's trade ecosystem.

The challenge for Armenia lies in balancing its trade relations and finding ways to reduce its heavy reliance on Russia without jeopardizing its economic stability. While Armenia has been expanding its trade and economic relations with other partners (see Statistical Committee of the Republic of Armenia, n.d), particularly Arab countries like the United Arab Emirates¹, much of which was driven by re-exports spurred by the Russian-Ukrainian War, trade and economic relations with Russia remain dominant by comparison.

Energy

With limited domestic resources, Armenia is heavily dependent on Russia for its energy needs. Armenia's domestic energy production comes from various sources: hydrocarbons, nuclear power, thermal energy, hydroelectricity, and a smaller portion from renewables. In terms of energy, Armenia is heavily reliant on Russian gas and oil, a dependency that has been described as structural, with short-term substitution being difficult (Chervyakov & Giucci, 2023). In 2023, Armenia imported 86.6% of its natural gas from Russia, totaling 2,725,280.3 cubic meters, with 2,360,426 cubic meters coming from Russia (ArmlInfo, 2024a). Additionally, 70% of Armenia's petroleum oils were sourced from Russia (ArmlInfo, 2024b).²

Armenia generates a significant portion of its own electricity, which might seem advantageous at first glance. However, the reality is more complex, as a large share of this electricity is derived from natural gas and nuclear power, both heavily reliant on Russia. The Metsamor Nuclear Power Plant³, a key source of Armenia's electricity, operates on Russian technology and nuclear fuel, deepening this dependency. Furthermore, the Armenian energy grid is intricately tied to Russia, with key assets, including the pipelines in Armenia, managed by Gazprom Armenia, a subsidiary of Russia's state-owned Gazprom. This deep integration undermines Armenia's energy security and severely restricts its ability to develop independent energy policies.

Although Armenia engages in limited electricity trade with Georgia, the unsynchronized nature of their networks restricts the volume of exchange (Respondent 3). With its longest borders with Turkey and Azerbaijan closed, Armenia's geographical isolation has left it with few alternatives, making its energy dependence on Russia a necessity rather than a choice.

¹ Armenia's trade with Arab nations reached USD 2.56 billion in 2023, with the UAE dominating at 90% and Iraq at 7%. (Statistical Committee of the Republic of Armenia, n.d.). The UAE is also investing in Armenia's economy, with Masdar committing USD 174 million to a 200-megawatt solar farm in Shirak, though construction hasn't started yet (Nazaretyan, 2024).

² The majority of natural gas is imported from Russia via a pipeline through Georgia, while additional supplies come from Iran under a barter agreement, where Armenia exports electricity in return.

³ The Metsamor NPP is set to be decommissioned in 2036 and plans to build a new plant are ongoing.

Security

Since the 1990s, Armenia has heavily relied on Russia as its primary security guarantor, a relationship shaped by historical ties, geopolitical constraints, and regional conflicts. Russia's military presence in Armenia and role as Armenia's chief arms supplier have been central to this arrangement. This reliance has limited Armenia's foreign policy autonomy and complicated its relations with other global powers.

Armenia relied on Russia for security support after the First Nagorno-Karabakh War given the security threats from Turkey, and the ongoing conflict with Azerbaijan. Given the potential threat from Turkey, Armenia formalized this security arrangement through agreements like joint Armenian-Turkish border protection (1994), the Russian military base in Gyumri (1995), the Treaty of Friendship (1997), and the “strategic partnership” declaration (2000). Armenia's CSTO membership further solidified its dependence on Russia. Military cooperation focused on joint exercises and training, with Armenian units participating in CSTO Rapid Reaction Forces drills and receiving training in Russian institutions. Air defense collaboration was crucial, highlighted by Armenia's participation in exercises, essential due to its limited capacity for fullscale training.

Russia's largest arms shipment to Armenia (1993-1996) included diverse military systems, leading to all branches of Armenia's Armed Forces becoming heavily dependent on Russia for supplies and maintenance. The subsidized nature of these transfers further entrenched this dependency. Such granted weapons typically reduce recipient autonomy compared to purchased ones (Kinsella, 1998). Although not directly profitable, the recipient's resulting dependency becomes a form of currency reinforcing the supplier's dominant position (Catrina 1988). This dynamic reflects “feudal dominance” in international arms dependence (Väyrynen, 1980), with peripheral clients relying on a single supplier. For the recipient state, this results in eroded sovereignty and risks of supply disruption during crises—when security threats are most severe (Kinsella, 1998).

A crucial factor in deepening Armenia's defense dependence on Russia was the unofficial embargo imposed by the EU, USA, and Canada—countries with the most advanced high-tech weaponry. Additionally, the Parliamentary Assembly of the Council of Europe (PACE) recommended against supplying arms to conflict zones, further limiting Armenia's options. While Russia sold weapons to both Armenia and Azerbaijan, Azerbaijan found alternatives in Israel and Turkey for Western weapons. In contrast, Armenia, grappling with the unresolved Nagorno-Karabakh conflict, lacked access to similar opportunities, forcing it to rely even more heavily on Russia for its defense needs.

Following the defeat in the 2020 Karabakh War, Armenia's military suffered significant losses, particularly in outdated Soviet-Russian weapons and equipment.

Despite this setback, Armenia chose not to diversify its arms suppliers, instead placing another substantial order with Russia by signing a major contract in 2021. Armenia might have continued relying on Russia for defense cooperation were it not for three critical factors: Russia's prolonged aggression against Ukraine, which revealed vulnerabilities in its defense industry; Azerbaijan's renewed aggression against Armenia in September 2022; and the perplexing neutrality of Armenia's CSTO allies, especially Russia. These events finally compelled Armenia to reconsider its military supply strategy.

The September 2022 border clashes and other related negative developments forced Armenia to confront the inadequacies of the Russian arms market. The reliability of these supplies has become increasingly uncertain, given Russia's ongoing and costly war in Ukraine.

3. Armenia's Key Dependencies on Russia

3.1. Armenia's Trade

Before 1991, Armenia's economy was integrated into the Soviet system, dominated by Russia. The USSR's standardization of enterprises, distribution networks, transportation, and the widespread use of the Russian language created enduring path dependencies and structural ties that persisted after the Soviet Union's dissolution. In the post-Soviet era, Russia has continued to assert hegemony over former republics, notably through frameworks like the EAEU (Mazhikeyev & Edwards, 2020). In 2013, Armenia abruptly pivoted from signing an Association Agreement with the EU to joining the Russia-led EAEU, due to pressure from Moscow, which emphasized Armenia's need for Russian security and economic ties especially in light of the unresolved Nagorno-Karabakh conflict.

Armenia's landlocked status, blockaded borders with Turkey and Azerbaijan, and its southern neighbor Iran under Western sanctions create a unique trade environment in which Russia faces less competition from other potential trade partners, for example in Europe or the Middle East, as these places come with higher transport costs. Consequently, Armenia's multilateral resistance—"the barriers to trade that each country faces with all its trading partners" (Adam & Cobham, 2007)—is high. This elevated resistance means that trade with Russia is likely to be more significant than expected, if only accounting for the two countries' relative size and dis-

tance.

Armenia's entry into the EAEU in 2015 solidified its export structure's focus on the Russian market. This led to a significant increase in exports to Russia, especially in basic goods like fresh produce. The shift was primarily driven by Armenia's reliance on Russia for vital resources such as energy and grain, further strengthening the economic bonds between the two nations.

In 2022, Armenia exported goods worth USD 2.36 billion to Russia, with the main exports being broadcasting equipment (USD 247 million), cars (USD 237 million), and hard liquor (USD 236 million) (Observatory of Economic Complexity, 2022). Over the past six years, Armenian exports to Russia have grown at an impressive annualized rate of 32.8% (Observatory of Economic Complexity, 2022), surging from USD 572 million in 2017 to USD 3.41 billion in 2023 (Statistical Committee of Armenia, 2024). However, recent trends indicate a shift. Armenian exports to Russia are expected to decline in 2024, with a 21.4% decrease already recorded from January to April (Grigoryan, 2024).

Armenia's trade dependency on Russia is highlighted by Armenia's limited self-sufficiency in certain critical food products, highlighting vulnerabilities in its domestic production capacity. The Armenian State University of Economics, using data from Armenia's Statistical Committee, has identified the top 15 main food products of necessity for Armenia (Vardanyan & Minasyan, 2022). Of these, many have a self-sufficiency ratio of close to 100%, meaning they can be fully covered by domestic production and some others have lower self-sufficiency.⁴ Two critical food products, however, have a very low self-sufficiency rate, something that experts (e.g. Respondent 2 and 3) have also pointed out a key vulnerability in food security: wheat (24.4%) and vegetable oil (9%).

In 2023, 99.9% of Armenia's imported grain came from Russia (343,600 tons) (Hovhannisyan, 2024). Currently, 75% of Armenia's consumed grain is imported from Russia (Respondent 4), while Armenia produced 290,000 tons of grain domestically (Statistical Committee of the Republic of Armenia, 2023)—accounting for only 25% of consumption (Respondent 4). Russia continues to dominate Armenian exports, with three main factors contributing to its sustained prominence in Armenia's export economy. Firstly, Russian quality standards are generally less strict than those of Western markets and allow products of lower standards. This allows Armenian producers to export a wider variety of products without needing extensive manufacturing improvements.⁵

4 High self-sufficiency products are potatoes (101.1%), vegetables (103.9%), fruits and berries (98.2%), grapes (106.7%), eggs (100.3%), mutton and goat meat (100.4%), and fish (143.7%). Those that have lower self-sufficiency rates include legumes (37.3%), sugar (38%), and pork (45.1%).

5 Respondent 3 emphasized that while raw agricultural products currently have no viable alternatives to the Russian market, developing a strong processing industry could open up limited alternative markets for Armenian products. Processed goods are easier to export, less prone to spoilage, and offer higher added value. Achieving this will require thorough research into new markets and enhancements in both marketing and product quality. ⁶ “Mtoe” refers to million tons of oil equivalent.

Secondly, Russian consumers are already familiar with Armenian products (Respondent 1 and 3), making it a receptive market. Lastly, the widespread use of Russian in Armenia eases communication and business transactions, reducing language barriers and leveraging existing networks (Respondent 3). These factors highlight Armenia's need to improve its manufacturing standards, product marketing, and human resources support to expand beyond Russia into new markets.

3.2. Armenia's Energy

According to International Energy Agency's Armenia's Energy Profile 2023, Armenia is heavily dependent on Russia to meet its energy needs, with no other sector of its economy exhibiting a similar level of reliance. The country imports all of its hydrocarbons, with natural gas accounting for 80% of Armenia's energy imports (2.147 Mtoe⁶ out of 2.8 Mtoe in 2020), followed by petroleum oils (0.63 Mtoe in 2020). Russia is the dominant supplier of natural gas, providing 86.6% in 2023, with the remainder coming from Iran. Additionally, Russia holds a near monopoly on petroleum oil and nuclear fuel imports and controls critical infrastructure such as gas pipelines.

Shell Global is a new entry into Armenia's energy market importing petroleum oils from Europe and already holds a 7-8% market share. The fact that Shell petroleum is 5-6% more expensive than Russian petroleum (Respondent 4), is due to customs-free Russian imports, and 6.5% customs fee for products from the EU.

While Armenia's electricity production is fairly diversified, utilizing thermal, hydro, and nuclear plants, 79.65% of the electricity generated is consumed domestically (Armenian Electric Networks, 2023). However, the thermal and nuclear power plants rely on imported gas and uranium, respectively, both of which are primarily sourced from Russia. Although Armenia is a net exporter of electricity, most of this energy is exchanged for natural gas from Iran (Armenpress, 2024a).

Armenia's energy landscape presents a mixed picture of progress and challenges. Between 2000 and 2020, the country saw a dramatic increase in energy consumption, outpacing global growth significantly by 136% compared to the global average of 36% (International Energy Agency, 2023). Despite this growth, Armenia's per capita energy consumption remains below global and European averages (Ritchie et al., 2023). Armenia currently has enough electricity-generating capacity to satisfy its domestic needs, but demand is expected to increase by up to three percent each year. The country's electricity is mainly produced by the Armenian Nuclear Power Plant (ANPP), hydroelectric stations, and thermal power plants, while solar energy accounts for less than two percent of the total generation (International Trade Administration, 2023).

Armenia's energy policy has evolved since 2013, starting with the National Energy Security Concept focusing on fuel diversification and capacity increase. The

latest framework, approved in 2021, includes the Energy Sector Development Strategic Programme to 2040 and its Action Plan (The Republic of Armenia, 2020).

The Armenian government has already turned to developing renewable energy sources, which will contribute to energy sustainability and reduced import dependency making it a priority to increase the share of renewables (66% by 2036), with additional capacities of 191 MW of hydro, 500 MW of wind, and 950 MW of solar to meet this target (International Energy Agency, 2023). While the International Energy Agency (2023) says that Armenia's small hydropower potential, a focus of the government's development, is significant, experts such as Respondent 2, say that hydropower potential has been reached. While residential heating and transport rely heavily on natural gas, developing renewables, and particularly solar power, could allow for switching to renewable electricity in heating and transport in the future.

3.3 Armenia's Security Dependence on Russia

The need to shift away from Russian arms became evident after Azerbaijan's attacks in September 2022 and the ethnic cleansing in Nagorno-Karabakh in September 2023. These events led Armenia to reassess its strategy and recognize the limits of relying solely on Russian arms. This was further underscored by Russia's ongoing aggression against Ukraine, which exposed flaws in its defense industry and disrupted supplies, along with the neutrality of Armenia's CSTO allies, especially Russia, in the conflict with Azerbaijan.

Following the September 2022 attacks, Armenia sought to strengthen its defense capabilities by directly engaging with the governments of India and France to establish defense cooperation and secure permission to purchase military equipment from their enterprises. Additionally, Armenia has signed military cooperation agreements with the Czech Republic and Greece, broadening its defense partnerships. Progress has also been made in cooperation with the United States, particularly in areas such as military education, advisory support, and joint military exercises involving the Armenian army's peacekeeping brigade.

Russia's share of Armenia's arms imports has plummeted from 96% to less than 10% in just four years (Chukhuran et al., 2024). This dramatic shift highlights Armenia's willingness to secure weapons from more reliable sources, even at a higher cost, to enhance its security. The remaining 10% could also even reflect undelivered weapons that Armenia had already paid for under a 2021 contract with Russia.

Despite efforts to diversify its defense partnerships, the process of phasing out the Soviet-Russian military legacy has not accelerated. The Armenian army remains heavily reliant on Soviet-Russian weapons, which will continue to require

Russian-standard ammunition, spare parts, and components for years. Shortages in these supplies could significantly impact Armenia's defense capabilities and reducing this dependence will demand substantial time, financial resources, and careful selection of new partners.

Transitioning to new standards and calibers involves several challenges, including the need for retraining personnel and integrating new defense technologies. This shift will necessitate comprehensive reforms throughout the armed forces and a strategic approach to recruiting and training specialists to meet the country's evolving defense needs. During this transition period, the Armenian army may operate with a mix of Western and Soviet-Russian weapons. This combination could complicate efforts to unify the army and create difficulties in servicing and maintaining Russian equipment without the support of Russian specialists and enterprises.

Armenia has secured a military cooperation agreement with India, a major operator of Russian military equipment like Su-30 fighters and armored vehicles, with much of this equipment produced and serviced by Indian specialists. India's expertise could be leveraged to replace Russia's role in supporting Armenia's defense. Similarly, the Czech Republic, with its experience in repairing and upgrading Russian equipment, will help Armenia maintain its existing Russian arms. The recent agreement between Armenia and the Czech Republic acknowledges this capability and aims to address the challenges of modernizing Russian weapons while reducing reliance on Russian supplies.

The European Council approved a €10 million European Peace Facility (EPF) assistance for Armenia's Armed Forces, a first in EU-Armenia relations. This aims to enhance military logistics, civilian protection, and interoperability with international missions. It includes a deployable tent camp for a battalion-sized unit, boosting Armenia's resilience and crisis response. However, this alone will not create significant change. The U.S. is also expanding support for Armenia, focusing on military education and training. Joint exercises in September 2023 and July 2024 aimed to improve U.S.-Armenia interoperability in peacekeeping and stability operations (Rupert, 2024).

4. Policy Recommendations

Any effort at diversification, whether in trade, energy, or defense, is complex and difficult. In Russia's case, Armenia's diversification will be seen as a geopolitical challenge to its regional influence and it has threatened consequences (Mirzoyan, 2024). Armenia's successful diversification, then, must be gradual while being long-term and strategic.

Armenia is not in a position to make immediate choices and shifts. At the same

time, Yerevan faces a paucity of options that must be acknowledged and considered. Policy decisions in Armenia's case must always consider security implications, as long as Azerbaijan continues to pursue aggressive, maximalist policies towards Armenia.

Armenia requires a clear vision that bridges the gap between the necessity of realpolitik and the aspiration to move beyond existing policy limitations. A long-term strategy is needed that encourages a more comprehensive approach in which all the different state institutions can complement one another in working towards defined goals. The approach would aim at a proactive diversification of alliances, strengthened economic capabilities and political reforms to enhance Armenia's state resilience.

4.1 Recommendations for Reduced Trade Dependency

Drawing from World Bank Group support examples, trade diversification emerges as a key solution. This approach includes: (i) export diversification (introducing new or improved products to new markets) and (ii) domestic production diversification (World Bank, 2019). To achieve this, the following recommendations are proposed:

■ Address Food Security

By investing in domestic grain production in particular, the country can reduce this key dependence, bolster self-sufficiency, and create a more resilient food supply chain. State subsidies for local producers would allow Armenian grain to compete with Russian imports in terms of both price and quality, enhancing domestic food security (Respondent 4).

Recommendations:

- Subsidize 30% of the grain price for domestic producers to make locally produced grain competitive with Russian imports.⁶
- Increase the cultivation of wheat on non-arable land, utilizing the 50% of Armenia's uncultivated land to boost domestic production and reduce import dependency.

Identify and Penetrate New Export Markets

Expanding into new markets requires Armenian producers to gain a deep

⁶ Currently, Armenian subsidies are only 3% of the agricultural GDP, compared to 30% in the EU and 45% in the U.S. (Respondent 4).

understanding of different consumer needs and to adapt their product designs accordingly. This process demands long-term strategic thinking and may require short-term sacrifices, such as reduced revenue, to achieve sustainable growth and resilience (Respondent 2). The goal should be to diversify sources of trade, energy, and security, not to necessarily abandon Russia for these purposes.

As it can be difficult to convince Armenian producers to look for alternative markets and leave their comfort zone, the Armenian government should take the lead in this process and provide support to local producers in penetrating new markets (Respondent 3). Armenia should prioritize investing in human capital to enhance capabilities for market diversification. This involves exploring new markets, meeting international standards, and innovating in processing techniques. While challenging due to Armenia's size, this shift is crucial for economic resilience and requires commitment from both exporters and the government (Respondent 3).

Armenian producers should:

- Understand diverse consumer needs in new markets, particularly in Europe and the Middle East, and adapt product designs accordingly. For instance, consider reducing brandy production in favor of increasing wine production. Wine, being a more massmarket product, will find easier entry into these new markets (Respondent 4).
- Embrace long-term strategic thinking, even if it means short-term revenue sacrifices for sustainable growth (Respondent 3).
- Diversify trade, energy, and security sources, but not necessarily abandon Russia entirely.
- Invest in human capital to enhance capabilities for market diversification, including meeting international standards and innovating in processing techniques, and devising new products.
- Together with cooperation from the Armenian government, develop a robust processing industry to make agricultural products more exportable, reduce spoilage risks, and add value.
- Understand the regulatory and consumer landscapes of new markets for successful entry.

The Armenian government should:

- Lead efforts to support local producers in exploring new markets.
- Strengthen trade ties with the Gulf region, particularly the UAE, and provide support to local producers to meet challenges like limited business connections, language barriers, and competition from other exporters.
- Invest in necessary infrastructure, such as reliable air transport and accelerate the building of key road infrastructure that could facilitate trade with neighboring countries and beyond.
- Reimburse logistical costs to local producers to promote the export of agricultural and other products (Respondent 4).
- Strive to negotiate lower transit fees for passage through Iran to Gulf countries (Respondent 4).

4.2. Recommendations for Energy Diversification

Armenia has prioritized the diversification of its energy sources as a core aspect of its energy security policy. While progress has been made, implementation remains in its early stages, and further work is needed to explore new avenues for diversification and enhance existing efforts.

The current global environment creates challenges for poor, small, landlocked and/or resourcedependent countries, a range of new diversification routes can be followed.

Diversify Hydrocarbons Supply

- Increase gas imports from Iran by raising pipeline pressure, potentially boosting Iran's share from 1.2 to 1.7 cubic meters (Respondent 3). Buy back the gas pipelines owned by Gazprom's Armenian subsidiary to reduce dependence on the Russian state company and seek financial assistance from Western partners for this endeavor (Respondent 4).
- Construct high-voltage transmission lines between Armenia-Iran and Armenia-Georgia to connect with the North-South Energy Corridor (Respondent 3).
- Synchronize electrical networks with Georgia to facilitate power exchange and improve grid stability (Respondent 1,2, and 3).

Enhance Regional Energy Integration

- Modernize existing power plants to increase supply in line with capacity. Accelerate the search for a partner to develop a new nuclear power plant—several countries have been considered, so it's time to make a decision and move forward.
- Expand renewable energy capacity, with a focus on solar power. Explore the potential for exporting excess solar energy production.

Boost Domestic Energy Production

- Implement measures outlined in the second National Energy Efficiency Action Plan (NEEAP-2) developed in 2020.
- Encourage adoption of energy-efficient technologies in both residential and industrial sectors.
- Develop public awareness campaigns to promote energy conservation.

Improve Energy Efficiency

- Develop production capacities to meet growing energy demand.
- Carry out large-scale reconstruction of substations and power lines to improve energy distribution efficiency and reliability.

Invest in Infrastructure

- Develop production capacities to meet growing energy demand.
- Carry out large-scale reconstruction of substations and power lines to improve energy distribution efficiency and reliability.

4.3. Recommendations for Security Diversification

Diversify Defense Partnerships

Deepen defense agreements with India and the Czech Republic, who have the capacity and expertise to support ongoing maintenance of Russian weaponry. Eventually, expand beyond these countries to focus on nations with advanced military technology and robust defense industries, taking into account cost-benefit analysis.

Manage the Transition from Soviet - Russian Equipment

- Gradually replace Soviet-Russian military equipment with new technologies from diverse sources, ensuring a phased approach to avoid operational gaps.
- Develop a transitional plan to manage the coexistence of Russian and Western weapons, including interoperability measures and mixed-technology maintenance strategies, using Ukraine's experience as a model.

Ensure Continuity of Supply for Existing Equipment

- Maintain access to Russian-standard ammunition, spare parts, and components through strategic partnerships, avoiding reliance on a single source.
- Utilize existing agreements with India and the Czech Republic to support the maintenance and operation of Soviet-Russian equipment until a complete transition is achieved.

Implement Comprehensive Armed Forces Reforms

- Undertake comprehensive reforms across the armed forces to align with new standards and operational requirements.
- Develop a strategic approach to recruiting and training specialists, focusing on skills needed for the new defense technologies and systems.

Plan for Technological Integration

- Create detailed plans for integrating new military technologies and standards, including retraining personnel and updating operational procedures.
- Implement strategies to manage the transition to new c

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- Expert Interviews

- Respondent 1, former government official and expert in development economics. Interview carried out May 16, 2024.
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- Respondent 2, energy expert at a major U.S. government contractor. Interview carried out June 5, 2024.
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- Respondent 3, economist and head of economic risk assessment organization. June 11, 2024.
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- Respondent 4, high-ranking former government official familiar with government's economic development strategies. September 3, 2024.