STOCKHOLM SYNDROME AND ENERGY DEPENDENCE: THE INTERPLAY OF NATIONAL PSYCHOLOGY AND GEOPOLITICS

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Abstract: This article innovatively transforms the analytical framework of Stockholm syndrome into a political context to explore the irrational behaviors similar to Stockholm syndrome that countries around the world exhibit when facing the problem of "weaponization of energy interdependence" caused by geopolitical crises, such as coercion and threats from countries with strong political energy control. By studying three major cases - Germany's dependence on Russian natural gas, Japan's dependence on Middle Eastern oil, and Europe's dependence on American shale gas, this article reveals how energy dependence issues cultivate a pathological symptom of "hostage mentality" at the national level. After analysis, we believe that energy security is not just a supply and demand relationship, or a technical or economic issue, but is closely intertwined with national identity, fear mechanisms, and diplomatic psychology. Final conclusion: Overcoming this "national hostage mentality" requires starting from three aspects: energy (especially renewable energy) technology independence, multilateral energy cooperation, and cognitive reconstruction of national decision-makers, and rebuilding the rational psychology of national energy strategy.

Key words: energy dependence; Stockholm Syndrome; geopolitics; national psychology; irrational behavior

JEL: D03, F52, Q48, Q40

1. Introduction

The core contradiction in the global energy supply and demand relationship lies in the excessive concentration of traditional energy geographical distribution and the geopolitical crisis that has turned trade routes into "pipeline politics" weapons. According to data from the International Energy Agency (IEA) in it's 2024 report: about 60% of the world's oil products and 40% of natural gas products are produced or transported in the Middle-East Zone and other geopolitically sensitive region (IEA, 2024). Against this backdrop, certain states—under coercion by energy-controlling actors—exhibit behaviour that runs counter to traditional rationalist theories of international relations (Directorate-General for External Policies of the European Parliament, 2018; Danish Institute for International Studies [DIIS], 2024), such as Germany's hesitation to sanction Russia in the early phase of the Russo-Ukrainian War, Japan's prolonged neutrality regarding Middle Eastern conflicts, and Europe's passive acceptance of high-priced U.S. liquefied natural gas (LNG).

This paper innovatively applies the psychological framework of Stockholm Syndrome to the study of international relations, arguing that the control–dependency dynamic in energy relationships mirrors the mechanisms found in individual hostage situations. Through case studies and theoretical synthesis, it seeks to answer two questions: Why do states opt for irrational compromise under threats to their energy security? And how are these compromises rationalized through emotional and cognitive mechanisms?

2. Stockholm Syndrome and the Logic of State Behavior

2.1 Conceptual Deepening: Psychological Transposition from the Individual to the State Stockholm Syndrome was first introduced by Swedish criminologist Nils Bejerot to describe the emotional bond that hostages develop toward their captors, and has since been applied in broader contexts—including domestic abuse, human trafficking, and debates over gender, race politics, and international relations (Namnyak et al., 2008; Adorjan et al., 2012). Its core mechanisms are:

- Survival dependency: Hostages, with all resources under captor control, develop a fundamental dependence for survival.
- Fear adaptation: Prolonged exposure to threats leads individuals to alleviate psychological stress through emotional identification with their captor.
- Cognitive distortion: Intermittent acts of kindness by the captor are magnified into a generally benevolent image, thereby rationalizing violent or coercive behavior.

At the state level, energy dependence likewise engenders a form of "structural survival dependency" (Spencer, 2009; Caporaso, 1978), analogous to the recently articulated concept of "weaponized interdependence" (Farrell & Newman, 2019). For instance, Germany's institutionalized reliance on Russia for 55 percent of its natural gas—embodied in infrastructure such as the Nord Stream pipelines—creates exactly this kind of dependency (Wood, 2024). When Russia leverages the threat of supply cuts, the German government typically attributes ensuing crises to "market fluctuations" rather than to political coercion, a clear manifestation of cognitive distortion.

2.2 Irrational Features of State Behavior under Energy Dependence

Energy-dependent states' policy choices often exhibit the following paradoxes:

- Risk attenuation: After the 2014 Crimea crisis, Russia repeatedly threatened to cut gas supplies to Ukraine, yet Germany continued to advance the Nord Stream 2 project—thereby underestimating the cumulative effect of geopolitical risks (Dempsey, 2016).
- Emotional projection: Several countries, including Japan, have characterized their Middle East energy imports as "long-term cooperation based on mutual trust" (Pang, 2022), while downplaying the risks associated with the spread of religious extremism in the region (Yang et al., 2024).
- Suppression of alternative pathways: Although the European Union possesses technological advantages in renewable energy, China accounted for two-thirds of the global increase in renewable energy capacity in 2023 (International Renewable Energy Agency [IRENA], 2024).

State behavior in energy dependence closely mirrors Stockholm Syndrome's dynamics of "refusal to escape" and "inability to escape," highlighting the tension between emotional attachment and rational calculation in national decision-making.

2.3 Analogy Between Individual and State-Level Irrational Characteristics

The analogy between individual-level Stockholm Syndrome and state-level energy dependence reveals a pattern of psychological and strategic irrationality. Just as hostages may develop emotional bonds and cognitive distortions under coercive control, states heavily reliant on a dominant energy supplier can internalize narratives that rationalize their dependency. Fear of disruption, strategic vulnerability, and a desire for stability prompt states to downplay risks, avoid diversification, and engage in appeasement-like diplomacy. This framework helps to interpret energy policy inertia not merely as a rational calculation but as a deeper syndrome of dependence and denial (Table 1).

Stockholm Sy	yndrome	Energy Dependence (State	Analogy Description
(Individual Level)		Level)	Analogy Description
The hostage is un captor's control	nder the	The state is dependent on a single or dominant energy supplier	Energy routes, pricing, and supply rhythm are dictated by an external actor
Fear-based control and dependence distort cog	d survival gnition	Strategic vulnerability and essential energy needs lead to policy conservatism	Fear of supply disruption causes hesitation and restraint in policymaking

 Table 1. Stockholm Syndrome (Individual Level) vs. Energy Dependence (State Level)

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Emotional attachment and empathy toward the captor	A narrative of "friendly cooperation" is constructed with the energy supplier	Positive aspects of cooperation are emphasized while political risks are downplayed
Captor's actions are rationalized as "necessitated"	Energy coercion is framed as "legitimate market behavior" or "strategic necessity"	High prices, supply disruptions, and pressure are rationalized
Reluctance to escape or accept external help	Reluctance to diversify, delay in alternative investments	Hesitation toward diversifying energy sources, suppliers, or technologies
Submissiveness in exchange for a sense of safety	Diplomatic restraint and self- diminishment to ensure supply continuity	Conflict avoidance and restricted countermeasures
Denial of the dangerous situation	Denial of security risks posed by energy dependence	Officials and media minimize or obscure the actual risks

Source: Author's creation

3. The Institutional and Structural Logic of Energy Dependence

3.1 Path Dependence through Infrastructure

Massive investments in energy transport infrastructure—such as pipelines and ports—create rigid, long-term dependencies. The Nord Stream 2 pipeline, costing €11 billion, directly tied the interests of major German energy companies to Russia's Gazprom (Smith, 2023; Russell, 2021). Once such infrastructure is established, alternative routes (e.g., Norwegian gas or LNG imports) are marginalized due to significantly higher costs. This **"sunk cost effect"** limits a state's ability to abandon existing dependencies, even in the face of shifting geopolitical realities.

3.2 Contractual and Political Stickiness

Long-term energy purchase agreements—typically spanning 20 to 30 years—institutionalize supplier-consumer relationships. For instance, Japan's crude oil contracts with the United Arab Emirates include "**take-or-pay**" clauses that oblige Japan to pay the contracted price even if global oil prices drop significantly (U.S. Department of Commerce, 2025; Energy Connects, 2025). While these clauses are intended to secure stable supply, they in fact reduce bargaining power and **lock states into historical energy decisions**, rendering them financially and politically bound to past commitments.

4. Case Study: Manifestations of the "Hostage Mentality" in Nation-States

4.1 Germany's Strategic Miscalculation in Russian Gas Dependence

Germany's energy transition strategy is marked by a central contradiction between **nuclear phaseout** and **carbon reduction** targets (Federal Ministry for Economic Affairs and Climate Action, 2023). Following the Fukushima nuclear disaster in 2011, Germany shut down all nuclear power plants, leading to a 40% surge in natural gas consumption (CEIC Data, 2024). Despite Russia's repeated gas cutoffs to Ukraine in 2006, 2009, and 2014, German policymakers continued to regard Russian gas as the most viable "transition energy" due to its economic advantages (Bros et al., 2017).

It was not until the outbreak of the Russia-Ukraine war in 2022 that Germany's slow response to sanctioning Russian energy provoked internal tensions within the EU (Reuters, 2024). The Scholz administration initially **only suspended** the approval of Nord Stream 2, but stopped short of implementing a comprehensive ban on Russian gas imports. This strategy of **"incremental decoupling"** drew sharp criticism (Amelang et al., 2023), highlighting a cognitive dissonance between Germany's long-standing emotional alignment with the narrative of "pragmatic cooperation" with Russia and the emerging security threat.

4.2 Japan and the Middle East: The Cost of Silent Diplomacy

Japan's energy policy is characterized by a "double vulnerability": as an island nation with scarce natural resources, it imports nearly all of its oil and natural gas, with more than 90% of oil imports originating from the Middle East (U.S. Energy Information Administration [EIA], 2023). In response, Japan has long pursued a strategy of "neutral diversification diplomacy," seeking to maintain stable energy supplies while avoiding entanglement in regional political controversies (Kim, 2006; Yu, 1999). This strategy manifests in several ways:

- Avoiding criticism of Saudi Arabia's human rights record (Ministry of Foreign Affairs of Japan, 2015; United Nations Security Council, 2016);
- Refusing to support either side in the Yemeni civil war (Ministry of Foreign Affairs of Japan, 2022).

While this approach has helped secure short-term energy stability, it has resulted in Japan's marginalization in Middle Eastern geopolitics. During the 2019 tanker attacks in the Strait of Hormuz, Japan was compelled to negotiate escort measures with the U.S. independently, exposing its lack of strategic autonomy.

4.3 Europe's "Grateful Compliance" with U.S. Shale Gas

Following the Russia-Ukraine war, European imports of liquefied natural gas (LNG) surged, with the U.S. share rising from 21% in 2021 to 48% in 2023 (EIA, 2024). However, the cost of U.S. LNG reached as high as \$40 per million British thermal units—three to six times the pre-war price of Russian gas. The European Commission framed this as a "justifiable premium" and used the rhetoric of "energy solidarity" to garner support among member states for accepting elevated prices (Letta, 2024).

This narrative, however, obscures underlying **structural asymmetries**: U.S. companies benefited from generous subsidies under the Inflation Reduction Act, while European firms—lacking comparable bargaining power—were left to shoulder inflated costs. Josep Borrell, the EU's High Representative for Foreign Affairs and Security Policy, emphasized the necessity of **diversifying energy sources** to reduce dependency on any single supplier (European External Action Service [EEAS], 2022).

4.4 China's Lessons from Coal Dependence on Australia

Prior to 2020, over 50% of China's coking coal imports originated from Australia. However, when Australia adopted a more confrontational stance toward China in alignment with the United States, Beijing responded by imposing a coal import ban on Australian shipments. This move catalyzed a rapid domestic adjustment, including accelerated coal production expansion and diversification of import sources from Mongolia and Russia. By 2022, China had reduced its dependence on Australian coal to just 8% (Nordberg, 2025).

This case illustrates that **proactively breaking path dependence** can reshape national energy security. However, such success requires **strong policy enforcement** and **adequate reserves of alternative resources**, underscoring the critical role of state capacity in managing strategic vulnerabilities.

5. Conclusion: National Cognitive Biases and Emotional Mechanisms in Foreign Policy 5.1 Narrative Construction and Emotional Bonding

Energy-dependent states frequently deploy specific narratives to alleviate cognitive dissonance:

- Romanticizing History: Germany framed the Nord Stream project as a continuation of Willy Brandt's Ostpolitik, symbolizing a "bridge of peace" with the East.
- Depoliticizing through Technology: Japan justified its Middle East oil imports by emphasizing "refining compatibility," thereby sidestepping discussions of political risk.

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• Moral Elevation: Europe recast the high cost of LNG imports as "the price of defending freedom," transforming a market-based compromise into an alliance of values.

These narratives, diffused through media and academic discourse, become embedded in national strategic culture, shaping long-term policy orientations.

5.2 Fear-Driven Policy Paralysis

The psychological concept of loss aversion helps explain inertia in energy transition policies (Kahneman & Tversky, 1979)): policymakers tend to prefer the "certain loss" of maintaining dependence (e.g., high-priced energy) over the uncertain risks of transformation (e.g., technological failure or geopolitical backlash). For instance, although the EU proposed an "Energy Union" as early as 2014 (European Commission, 2015), internal divergences among member states delayed its realization. It was only after the 2022 crisis that the plan gained significant momentum (European Commission, 2022).

6. How to overcome the "National Hostage Psychology"

6.1 Technological Autonomy: Moving Beyond "Energy Nationalism"

To promote autonomous technology, it is necessary to break through the narrow understanding of "energy ethnic nationalism" by the leadership of each country, to achieve progress in clean energy technology and infrastructure construction, the following cases provide us with reference:

- The German plan for 2030, the wind power plant capacity target will be increased from 80 GW to 150 GW, and the construction of the corresponding hydrogen storage and energy storage system, in order to cope with the energy crisis.
- Japan is rethinking the nuclear safety system, borrowing from France's small modular reactor (SMR) technology to ease public concerns and reduce nuclear energy risks.
- China's breakthrough in ultra high voltage transmission technology provides the basis for energy interconnection in Asia, renewable energy can be transported on the large scale, and reduce dependence on maritime energy transportation channels, it can reduce strategic risks.

6.2 Regional Cooperation:

Under the trend of global energy structure reshaping, multilateral cooperation is becoming a key way to achieve energy security and low-carbon transformation goals. The European Union and its member states have effectively suppressed natural gas prices within the EU to cope with the energy crisis by establishing a natural gas procurement cooperation mechanism, thereby reducing overall import costs and enhancing collective bargaining power (European Commission, 2023). Similarly, in Asia, China, Japan and South Korea are expected to jointly develop the Northeast Asian Super Grid, Mongolia will make full use of wind energy and Russia will form complementary cooperation in the use of hydropower resources, promote regional energy interconnection and coordinated use of clean energy, and ensure energy security (IRENA, 2024). At the same time, countries around the world are also exploring new forms of mutually beneficial cooperation, which can not only reduce dependence on developed economies in technology and equipment, but also help to achieve diversification and fairness in the global clean energy supply pattern.

6.3 Cognitive Reframing

In the context of energy transformation and geopolitical reconstruction, the transition from "mutual dependence" to "mutual equality" requires a deep reconstruction of thinking. First, governments and international organizations should strengthen risk education mechanisms, regularly publish energy security reports, quantify the costs and risks of energy dependence, and evaluate the feasibility of diversified energy construction to enhance the strategic awareness of the whole society. Secondly, when shaping the relationship between energy and national security, the state's official media should

go beyond moral and idealistic statements and turn to a rational discourse framework dominated by national interests to promote the whole society's understanding of the nature of cooperation rather than coercive relations. More importantly, national leaders and policymakers themselves also need strategic vision, and by participating in crisis strategic dialogues led by third-party organizations, they can enhance their ability to make rational judgments and respond in high-risk environments and avoid irrational policy implementation driven by fear.

7. Conclusion

From the theoretical perspective of Stockholm syndrome, energy dependence is not only a external geopolitical tool, but also a manifestation of a country's collective psychological structure, reflecting the "emotional surrender" formed by the country in the long-term imbalance of power relations. In this framework, countries may be developing unreasonable dependence on energy suppliers and find it difficult to quickly get rid of this dependence when facing strategic risks.

When German Chancellor Olaf Scholz publicly stated that Russian natural energy will eventually damage the EU industry and economy, his remarks were not only based on economic assessments, but also reflected deep concerns about the possible imbalance of control in energy relations. This emotional political expression reveals the "psychological capture effect" formed by the EU's long-term dependence on Russian energy, and is also a symbolic expression of the EU's attempt to get rid of dependence and rebuild strategic independence at the cognitive level.

Overcoming the "national hostage mentality" requires a multidimensional transformation: 1.Technologically: It involves breaking path dependency. 2.Institutionally, It demands reinforcing collective action; 3. Cognitively: It calls for reconstructing rational risk perception. Only through such comprehensive reforms can energy security shift from a reactive posture of survival to a proactive mode of strategic shaping—serving not just short-term needs but the long-term autonomy and interests of the nation.

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