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# Strategic and Systemic Sustainability: Redefining EU Governance Beyond Environmental Policy

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**Abstract**

The European Union (EU) is fundamentally transforming sustainability governance by developing dual approaches that extend far beyond traditional environmental policy. This study explores how EU institutions integrate strategic sustainability, which embeds environmental goals within economic security and geopolitical frameworks, with systemic sustainability, which emphasizes circularity, stakeholder engagement, and long-term resilience. Using hermeneutic methodology, the research analyzes key policy documents including the European Green Deal, Circular Economy Action Plan, and Carbon Border Adjustment Mechanism to reveal how sustainability narratives align with strategic autonomy and economic resilience. The findings demonstrate that sustainability governance now operates as a multi-dimensional paradigm balancing sovereignty, competitiveness, and inclusiveness. The study introduces the Neo-Sovereign Strategic Management (NSSM) framework, conceptualizing sustainability as a strategic field where economic security, geopolitical influence, and environmental objectives converge. This dual strategic–systemic approach represents a paradigm shift from standalone environmental goals toward integrated governance that positions sustainability as both economic driver and geopolitical asset. The research contributes to the sustainability governance literature by providing actionable insights for policymakers navigating the complex intersection of environmental objectives, economic security, and strategic autonomy in contemporary EU governance. Unlike existing models such as multi-level governance or resilience theory, the frameworks conceptualize sustainability as a strategic field where sovereignty, competitiveness, and legitimacy converge.

**Keywords:** strategic sustainability; systemic sustainability; EU governance; sustainability governance; strategic autonomy; economic security; European Green Deal; Sustainable Development Goals (SDGs)



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## 1. Introduction

The European Union (EU) is undergoing a strategic transformation in sustainability governance, driven by the imperatives of climate action, economic resilience, and policy

innovation. Anchored in the European Green Deal (EGD) and aligned with the Sustainable Development Goals (SDGs), EU policies increasingly reflect a green transition that integrates strategic sustainability with stakeholder governance. To sharpen the problem framing within the broader sustainability discourse, we explicitly position our contribution in relation to the Sustainable Development Goals (SDGs). Recent scholarship argues for a pragmatic (i.e., operational and implementation-oriented) reading of the SDGs that reconciles environmental ambition with social welfare and economic feasibility [1]. In this spirit, our Neo-Sovereign Strategic Management (NSSM) framework maps onto a set of anchor SDGs that jointly express the EU's strategic shift: SDG 9 (Industry, Innovation and Infrastructure) through mission-oriented green industrial policy [2]; SDG 12 (Responsible Consumption and Production) via circularity and resource independence [3]; SDG 13 (Climate Action) through decarbonization and CBAM-enabled carbon integrity [4]; SDG 16 (Peace, Justice and Strong Institutions) by strengthening state capacities and regulatory legitimacy [5]; and SDG 17 (Partnerships for the Goals) by advancing "open strategic autonomy" while sustaining international cooperation. Furthermore, by foregrounding territorial resilience and citizen-centric value creation, NSSM also aligns with SDG 11 (Sustainable Cities and Communities), echoing the call to translate SDGs into community-level action and governance [6]. This evolving paradigm seeks to harmonize environmental protection, industrial competitiveness, and inclusive decision-making. Over the years, the EU has emerged as a global frontrunner in sustainability, enacting policies that prioritize habitat conservation, the reduction of greenhouse gas emissions, and the promotion of renewable energy sources [7].

Introduced in 2019, the EGD represents the EU's most ambitious initiative to reconcile economic development with environmental sustainability, integrating the principles of the UN 2030 Agenda and the Paris Climate Agreement [8]. While the EGD advocates for responsible supply chains and a just transition [9], its implementation is fraught with challenges, particularly in balancing sustainability objectives with economic competitiveness and international trade dynamics [10]. Recent crises, such as the COVID-19 pandemic [11] and the war in Ukraine [12], have exacerbated economic pressures, leading to increased demands for more flexible environmental regulations across EU member states. These disruptions have placed significant strain on the EU's low-carbon transition, prompting critical reflection on how sustainability is conceptualized and operationalized within EU institutions [13].

The academic literature reveals divergent perspectives on the governance of sustainability within the EU [14]. Some scholars contend that crises serve to reinforce climate policy, while others interpret the EGD as a paradigmatic shift in environmental governance [15]. Nonetheless, concerns persist regarding the efficacy of monitoring mechanisms [16], the implications for transition economies [17], and the European Commission's influence in shaping sustainability policy [18]. In light of evolving geopolitical and economic challenges, a systematic and critical analysis is imperative to evaluate how EU institutions navigate the complexities of sustainability governance.

This study examines how EU sustainability narratives interweave strategic autonomy, economic security, and governance, contributing to broader debates on sovereignty, resilience, and sustainability. The concept of neo-sovereignty encapsulates how global challenges such as climate change reshape traditional notions of state sovereignty, necessitating both international cooperation [19] and national control over strategic sectors [20,21]. Recent scholarship highlights the influence of this perspective on EU policymaking, particularly through mission-oriented innovation strategies [20]. This aligns with wider discussions on the role of the entrepreneurial state in driving sustainability transitions [21]

and the complexities of integrating diverse stakeholders into global economic governance, where efficiency must be balanced with inclusiveness [22].

In response to these dynamics, recent EU policies emphasize resource efficiency, waste reduction [23], and integrated sustainability strategies that seek to reconcile environmental goals with economic resilience [24]. By analyzing EU policy documents, this study reveals how sustainability discourses reflect strategic imperatives, offering insights for policymakers, businesses, and sustainability practitioners [25,26].

Accordingly, this study aims to investigate how EU sustainability governance reflects and reshapes strategic notions of autonomy, economic security, and stakeholder participation, through the application of the Neo-Sovereign Strategic Management (NSSM) framework. It further contributes to the literature on sustainability governance by exploring how EU institutions manage tensions between integration and national interests [27]. In contrast with multi-level governance approaches, which emphasize institutional complexity, or resilience theory, which privileges system adaptability, NSSM offers a strategic governance lens that highlights the role of sovereignty claims, economic positioning, and political legitimacy in shaping sustainability discourse in the EU.

The research is guided by the following questions:

- RQ1: How do EU sustainability governance narratives reflect the balance between strategic autonomy and global cooperation?
- RQ2: How do economic security concerns shape the EU's sustainability policies, and how do they interact with broader sustainability objectives?
- RQ3: How does the EU reconcile centralized governance mechanisms with the need for multi-level stakeholder engagement in sustainability governance?

This study employs an interpretive research approach [28], acknowledging the iterative nature of sustainability discourse analysis within EU institutions. By contextualizing individual policy documents within the broader EU governance framework, the study captures the multi-layered complexity of sustainability policymaking.

The article's structure is as follows: Section 2 presents the theoretical framework, Section 3 outlines the research design and methodology, Section 4 applies the analytical framework to EU sustainability discourses, Section 5 discusses key implications, and Section 6 concludes with reflections on contributions, limitations, and future research directions.

## 2. Theoretical Framework

To understand the evolution of sustainability governance within the European Union (EU), it is essential to adopt a comprehensive theoretical framework that highlights the interactions among globalization, sovereignty, and sustainability. As trends toward deglobalization and reinforced sovereignty (both national and supranational) continue to shape the landscape, it becomes necessary to evaluate how these dynamics influence sustainable governance strategies across the EU. This section aims to provide a robust theoretical foundation for analyzing sustainability narratives within the Union, presenting an analytical model that elucidates the connections between strategic autonomy, economic security, and governance modalities.

### *2.1. The Globalization–Sovereignty Nexus*

The interplay between globalization and sovereignty has generated significant discussion in international affairs and business scholarship. Lester's [29] trilemma of the world economy suggests that democracy, national sovereignty, and global economic integration cannot be fully achieved simultaneously. Recent policy shifts and geopolitical changes have prompted scholars to reconsider this view. Witt [30] introduces the notions

of de-globalization and slowbalization, which describe the slowing or partial retreat of globalization. In the European Union, these trends appear through a stronger focus on strategic autonomy and the safeguarding of critical industries and technologies. Building on these ideas, Iliana et al. [31] analyze how reduced globalization influences the EU's trade and environmental policies. Similarly, Medushevskii [32] argues that EU sustainability strategies are moving toward a form of neo-sovereignty that emphasizes strategic oversight of vital sectors while maintaining international engagement. This evolution is evident in initiatives supporting local production, resilient supply chains, and renewable energy independence [33]. Anghel et al. [34] further highlight how sustainability efforts are increasingly linked with broader strategic priorities in the EU.

### *2.2. Economic Security Imperative*

Economic security has become a central issue in current policy and management debates, especially in the context of global disruptions. For the European Union (EU), economic security means protecting essential industries, technologies, and resources from external risks, thereby supporting resilience during sustainability transitions [35]. At the operational level, advanced sensing and analytics can stabilize secondary-materials streams by reducing contaminants and variability, thereby lowering dependence on primary raw materials and reinforcing CEAP goals within EU industrial ecosystems [36]. This focus on resilience in supply chains goes beyond individual organizations and informs broader institutional strategies [37]. Gölgeci et al. [38] present a practicalframework for strengthening supply chains during sustainability transitions. Their work highlights the need for redundancy in vital sectors, such as renewable energy, the safeguarding of green technologies through intellectual property regulations, resource independence in critical areas, and robust cybersecurity for smart, sustainable systems [37]. Recent studies underscore the necessity of reliable supply networks to achieve the EU's green technology ambitions [39]. Research by Consoli et al. [40] examines how the EU defends green innovation using patent policies, while Siddi [41] and Oberthür et al. [42] emphasize the geopolitical aspects of economic security in the governance of sustainability.

### *2.3. The Geopolitical Dimension of Sustainability: Eco-Military Mercantilism*

The intersection of environmental policy, economic security, and geopolitical competition has led to the emergence of "eco-military mercantilism". This concept brings together environmental goals with economic and security interests, framing sustainability as both a strategic necessity and a source of competitive advantage. Studies by Cuervo-Cazurra et al. [43] and Fischer [44] highlight how declining trust in globalization influences international policymaking. Feng et al. [45] examine how environmental and security strategies interact in the context of global governance. In the European Union, these dynamics have fostered a form of economic nationalism, where sustainability and strategic autonomy are closely connected. The EU increasingly uses sustainability standards as geopolitical instruments, shaping market access and trade policy. Research by Chiocchetti [46], Fisher et al. [47], and Dupont et al. [48] demonstrates how the EU leverages environmental policy to strengthen both strategic autonomy and economic resilience. Ilinca [49] further explores the external dimensions of the European Green Deal, providing additional evidence of this eco-military mercantilist approach.

### *2.4. Fiscal Policy Paradigm Shift*

The European Union's approach to economic governance has experienced a marked transformation, particularly regarding fiscal policy and the financing of sustainability initiatives. Blanchard et al. [50] identify a move away from strict fiscal rules toward more adaptable economic policies that embed sustainability goals. Supporting this perspective,

de Wilde [51] emphasizes the importance of integrating fiscal and environmental policies within a unified framework. This evolution is characterized by a shift from austerity-driven measures to investments focused on long-term sustainability. Alcidi [52] analyzes how green investment strategies are being implemented under this new fiscal paradigm, while Larch et al. [53] examine the budgetary consequences of these changes. Khedr et al. [54] note a growing acceptance of government involvement as essential for achieving sustainability objectives. Additional research by Vavrik [55] and Jesic et al. [56] highlights the critical role of fiscal flexibility in advancing the EU's environmental ambitions.

### *2.5. State Function Resurgence in Sustainability Governance*

Mazzucato [57] identifies the "entrepreneurial state" as a key driver in advancing sustainability transitions, highlighting the renewed importance of state-led innovation within green sectors. Building on this perspective, Spyromitros [58] explores how both EU institutions and member states are actively shaping sustainability policies. The revitalization of state functions is evident in initiatives such as the establishment of environmental standards, the implementation of proactive industrial strategies, and the promotion of innovation focused on sustainability. Landesmann et al. [59] offer a comprehensive overview of the EU's green industrial policy, while Dupont et al. [60] analyze the Union's influence in global environmental governance. Capasso et al. [61] emphasize the strategic role of green public procurement as an effective tool for encouraging sustainability transitions across EU member states.

### *2.6. Stakeholder Governance Tension*

The development of sustainability governance within the European Union reveals an ongoing tension between centralized authority and broad stakeholder involvement, as noted by Heldt et al. [62]. Börzel [63] identifies specific challenges related to multi-level governance in EU sustainability policy. Dobbs et al. [64] highlight the difficulties of achieving efficient centralized decision-making while maintaining democratic input at different levels. Studies by Torney [65] and Zimmerman79n et al. [66] emphasize the importance of including diverse stakeholders in shaping sustainability initiatives. Fernandez et al. [14] further evaluate how the European Green Deal promotes inclusive engagement among stakeholders.

### *2.7. Constructing the Neo-Sovereign Strategic Management (NSSM) Framework*

Drawing on the preceding theoretical perspectives, this study introduces the Neo-Sovereign Strategic Management (NSSM) framework as a tool for analyzing EU sustainability governance. The NSSM framework clarifies how the EU balances strategic autonomy, economic security, and the complexities of multi-level governance. It synthesizes theories of sustainability governance, debates on strategic autonomy, and concerns about economic security to provide a structured lens for examining policy changes within the EU. Through this framework, the study advances several propositions that help explain the main features of sustainability narratives in EU institutions.

**P1:** In its sustainability narratives, the EU will give strategic autonomy and resilience more priority than global integration [67].

**P2:** The development of EU sustainability, policies and practices will be shaped ever more by issues of economic security [68].

**P3:** Environmental, economic, and security goals will be included in EU sustainability policy [14].

**P4:** Fiscal policies supporting environmental projects will have a more flexible and expanding attitude [69].

**P5:** EU institutions and member states will start to actively support sustainability transitions [70].

**P6:** In sustainability governance, the EU will keep juggling the necessity of centralized efficiency with the extensive involvement of many stakeholders [14].

The six elements of the NSSM framework interact in a dynamic manner to shape EU sustainability policy. This model clarifies core hypotheses that help explain how sustainability narratives develop within EU institutions. Figure 1 presents a conceptual overview, highlighting the key dimensions and their interconnections. Within the broader context of EU sustainable governance, the framework provides a clear and systematic understanding of how strategic autonomy, economic security, eco-military mercantilism, shifts in fiscal policy, the renewed role of the state, and tensions in stakeholder governance collectively influence policy formation.

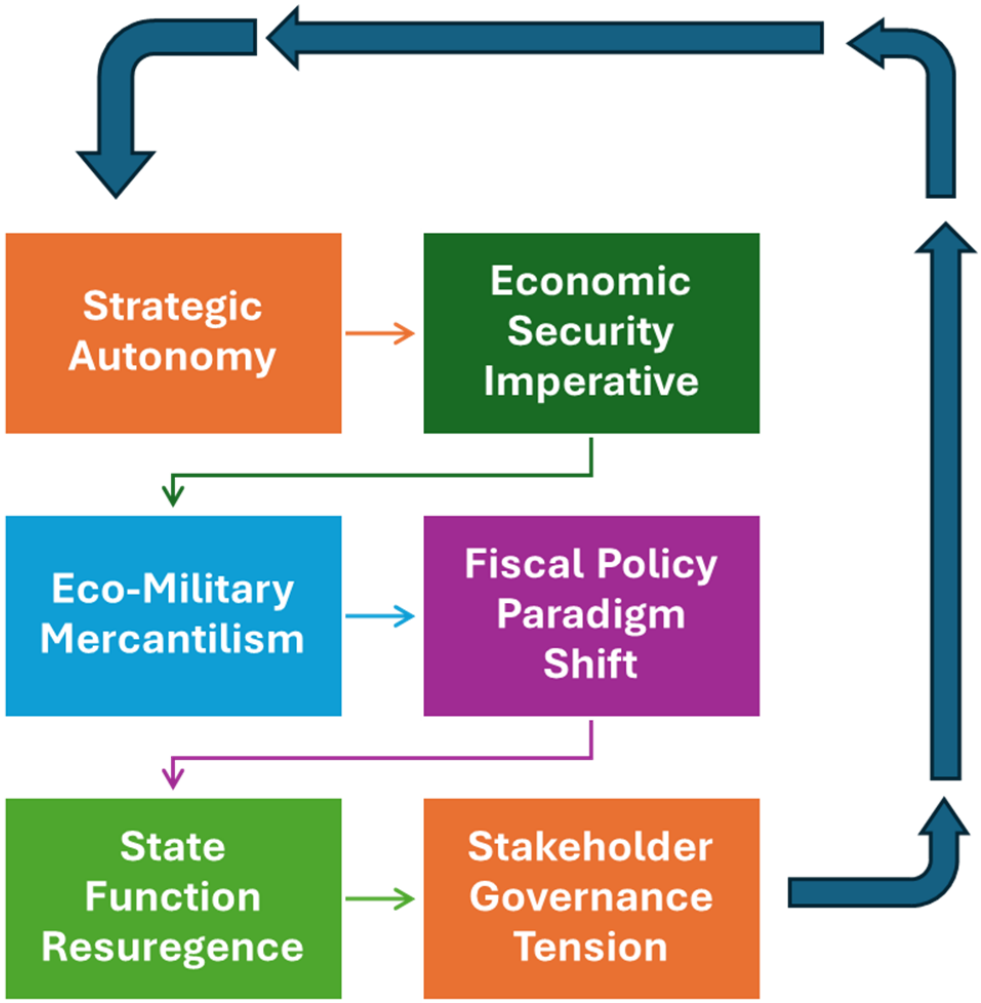


**Figure 1.** Diagram of key topics in the NSSM framework.

The Neo-Sovereign Strategic Management (NSSM) framework describes EU sustainability governance as a dynamic process shaped by six key elements: strategic autonomy, economic security, eco-military mercantilism, fiscal policy reform, renewed state functions, and stakeholder governance tensions. Together, these factors illustrate the shifting relationship between national sovereignty, EU-level coordination, and global connections in sustainability policy.

Figure 1 shows that strategic autonomy and economic security are closely linked. The EU has placed strong emphasis on self-reliance in areas such as renewable energy and green technology [71]. This focus on security has influenced fiscal policy, leading to greater public investment in sustainable projects and a move away from strict austerity [72]. At

the same time, the concept of eco-military mercantilism highlights the geopolitical aspects of sustainability, with measures like carbon border mechanisms supporting EU industry competitiveness and furthering international climate goals [73].

## 3. Methodology and Research Design

This study adopts an interpretive research design, applying hermeneutic analysis to explore sustainability narratives in EU institutions. Given the intricate interplay between environmental goals, economic security, and institutional decision-making, this method provides a flexible and nuanced approach to policy discourse [74]. The analysis relies on the hermeneutic circle, which supports repeated reading, contextualization, and refinement of interpretations. This approach is well suited to policy document analysis, as it helps reveal implicit meanings and trace shifts in strategic priorities. It is particularly effective for understanding responses to external crises and changes in governance patterns. Hermeneutic analysis places policies within their wider economic, political, and social settings, rather than viewing them in isolation. By continually reassessing interpretations as new insights appear [75], the method ensures both flexibility and conceptual clarity. This process also enables the identification of underlying assumptions that shape sustainability narratives over time. In the context of evolving EU policymaking, hermeneutic analysis guarantees that interpretations remain both rigorous and adaptable, reflecting historical developments and emerging trends.

### *3.1. The Hermeneutic Circle Analysis Process*

This study adopts a structured eight-stage hermeneutic design to analyze EU sustainability governance (Figure 2). The approach is iterative, interpretive, and context-aware, aligning with recent advancements in discursive and narrative policy analysis [76–78]. Each stage contributes to a deeper understanding of how strategic themes evolve in EU institutional discourse.

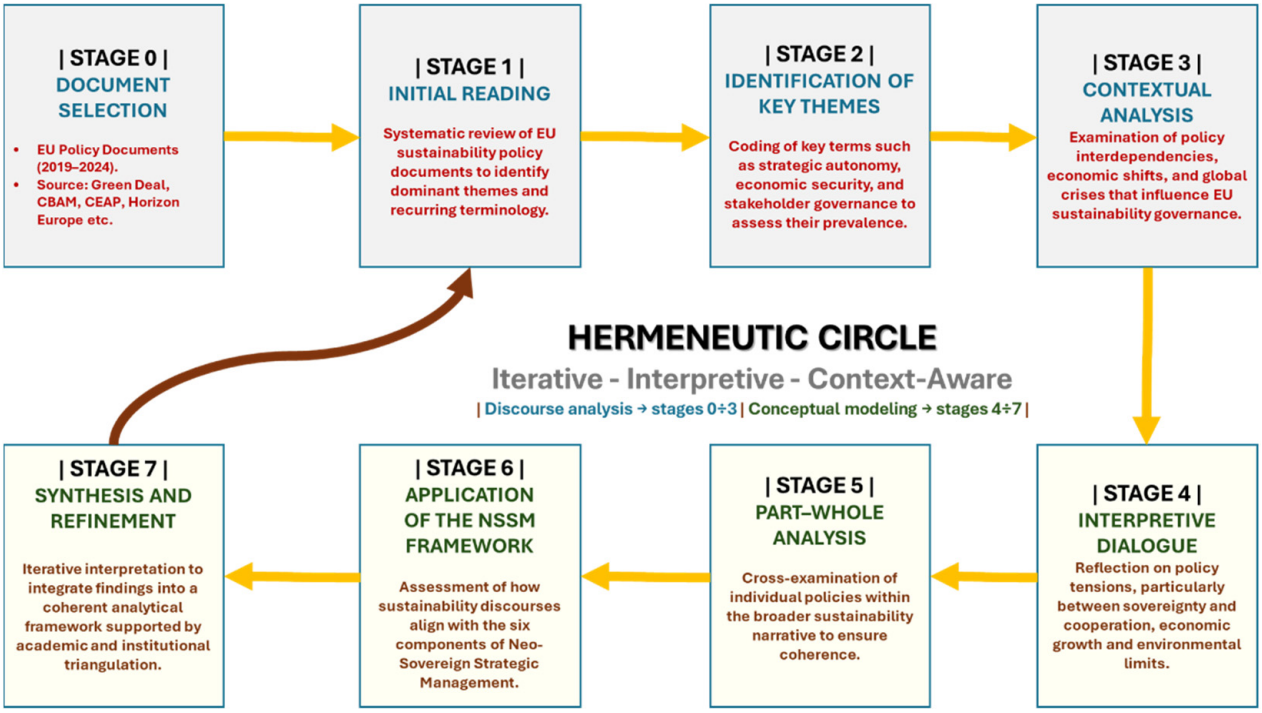


**Figure 2.** Hermeneutic circle analysis process for EU sustainability narratives: an iterative and interpretive methodology structured in eight stages, linking discourse analysis with conceptual modeling.

- Stage 0—Document Selection: A corpus of EU policy documents published between 2019 and 2024 was curated, prioritizing high-impact strategies such as the European Green Deal, CBAM, CEAP, and Horizon Europe.
- Stage 1—Initial Reading: An exploratory reading phase served to identify recurring terms and dominant discursive elements (e.g., "strategic autonomy," "resilience").
- Stage 2—Identification of Key Themes: Using NVivo software, key terms were coded and grouped into six strategic dimensions: Strategic Autonomy, Economic Security, Eco-Military Mercantilism, Fiscal Policy Shift, Return of State Capacity, and Stakeholder Tensions.
- Stage 3—Contextual Analysis: Discourses were interpreted in relation to contextual triggers, such as COVID-19, supply chain disruptions, and geopolitical instability, highlighting shifts in framing and priority.
- Stage 4—Interpretive Dialogue: At this stage, policy tensions were examined—particularly between sovereignty and cooperation, and between economic growth and ecological limits—through dialogical reflection.
- Stage 5—Part–Whole Analysis: Individual policy texts were analyzed in relation to the broader EU governance narrative, ensuring coherence between micro-level discursive shifts and macro-level strategic directions.
- Stage 6—Application of the NSSM Framework: Policy content was aligned with the six dimensions of the Neo-Sovereign Strategic Management framework, facilitating abstraction and model-building.
- Stage 7—Synthesis and Refinement: Final interpretations were iteratively validated through memo writing, triangulation with institutional sources, and peer feedback, resulting in a typology of strategic sustainability governance.

### *3.2. Data Collection and Selection Criteria*

This study analyzes a curated selection of official EU policy documents, strategy reports, and institutional communications focused on sustainability governance. The review centers on materials published from 2019 to 2024, including European Commission policy papers, legislative resolutions from the European Parliament and the Council of the EU, and reports issued by regulatory bodies such as the European Environment Agency and DG Climate Action. To capture shifts in the regulatory environment, the analysis also incorporates sustainability-related communications like EU Taxonomy reports. Documents were chosen for their significance to sustainability governance, institutional authority, and their role in illustrating changing policy narratives. Emphasis is placed on major policy frameworks, including the European Green Deal, Fit for 55, and the Circular Economy Action Plan, rather than less influential technical regulations. This approach ensures a comprehensive perspective by integrating views from EU institutions, legislative authorities, and regulatory agencies.

### *3.3. Analytical Framework and Coding Strategy*

This analysis employs the Neo-Sovereign Strategic Management (NSSM) framework as a guiding lens for interpreting sustainability narratives within the EU. The study identifies six principal dimensions that shape EU sustainability governance. The first, strategic autonomy, focuses on policies that promote self-reliance in critical sectors such as energy, supply chains, and technology. Economic security examines how these policies aim to strengthen resource independence, support resilient trade, and enhance industrial strategy. Eco-military mercantilism explores the geopolitical application of sustainability standards, notably through tools like the Carbon Border Adjustment Mechanism (CBAM). The analysis also considers the shift in fiscal policy, evaluating how financial regulations and investment

priorities increasingly support long-term sustainability goals. The resurgence of state functions highlights the expanding role of public institutions in managing sustainability efforts. Finally, stakeholder governance tensions address the interaction between centralized decision-making and broader stakeholder involvement. Thematic coding, conducted using NVivo software, ensures systematic organization and cross-referencing of key policy themes throughout the study.

To operationalize the hermeneutic analysis, we developed a coding schema in NVivo structured around the six strategic dimensions of the NSSM framework. Each dimension was associated with specific keywords and discursive markers (e.g., "strategic autonomy," "resilience," "carbon border," "stakeholder tension") identified during the initial reading phase. Coding reliability was supported through peer debriefing and iterative memo writing. Thematic saturation was reached when no new categories emerged across the final set of documents. Interpretive bias was mitigated through triangulation with external policy evaluations and the academic literature, as well as through negative case analysis to challenge dominant narratives.

### *3.4. Validity and Reliability Measures*

To ensure validity and reliability, the study adopts a range of methodological safeguards. Peer debriefing is conducted through regular collaborative discussions, allowing for critical reflection on potential interpretative biases. A thick description approach contextualizes EU policies within broader governance trends, enhancing the transferability of the findings. Negative case analysis is employed to identify counterexamples that challenge dominant sustainability narratives, ensuring that conclusions are not based solely on confirmatory evidence.

Methodological triangulation strengthens the analysis by cross-referencing hermeneutic findings with external sustainability assessments, legislative reviews, the academic literature, and independent policy evaluations. Transparency and replicability are supported by a comprehensive audit trail documenting coding decisions, interpretative developments, and reflexive notes. These include memos on meaning attribution, thematic consolidation, and theoretical alignment with the Neo-Sovereign Strategic Management (NSSM) framework, thereby reinforcing analytical rigor.

### *3.5. Ethical Considerations and Methodological Limitations*

As this study relies exclusively on publicly available EU documents, it does not involve human subjects and adheres to core ethical research principles, including transparency, integrity, and responsible interpretation. Transparency is ensured through explicit acknowledgment of data sources and methodological choices, while integrity is upheld by systematically avoiding selective bias and ensuring the inclusion of counterevidence where relevant. Document selection, coding, and interpretation follow established ethical standards, conducted in a systematic and replicable manner.

The use of publicly accessible sources is complemented by the inclusion of diverse institutional perspectives, supporting a balanced and impartial analysis. This approach mitigates the risk of overrepresenting specific policy positions, thereby preserving the neutrality and reliability of the findings.

## 4. Conceptual Results

The Neo-Sovereign Strategic Management (NSSM) framework guided a focused interpretive analysis of EU sustainability narratives, revealing a dynamic and changing policy landscape. This study systematically examined a range of EU policy documents, official speeches, and initiatives, supported by ongoing review of the relevant academic literature. The references listed below are especially significant to this investigation.

1. European Green Deal (2019): This foundational document provided insights into the EU's overarching sustainability strategy and its global positioning [79].
2. Circular Economy Action Plan (2020): Revealed the EU's emphasis on resource independence and resilience [80].
3. European Raw Materials Alliance (2020): Highlighted the link between sustainability and strategic autonomy [81].
4. Updated Industrial Strategy (2021): Introduced the concept of "open strategic autonomy" and emphasized supply chain resilience [82].
5. NextGenerationEU recovery plan (2020): Demonstrated the shift in fiscal policy towards green investment [83].
6. Horizon Europe program: Exemplified the mission-oriented approach to innovation [84].
7. European Climate Pact (2020): Illustrated attempts to address multi-level governance challenges [85].
8. Carbon Border Adjustment Mechanism proposals: Showed the use of environmental standards as strategic tools [86].

This study applies the hermeneutic circle by repeatedly comparing specific policy texts with broader EU narratives and global contexts. Through this cyclical process, the analysis revisits and reinterprets the material, allowing emerging themes to be identified within the NSSM framework. The hermeneutic circle encourages moving between individual sections and the overall meaning of the documents, highlighting how understanding develops through context and ongoing interpretation [87]. By integrating new insights and considering preconceptions, this approach refines thematic understanding over time. The main findings of this research are organized according to the six core dimensions of the NSSM framework, detailed in the following sections.

### *4.1. Globalization–Sovereignty Nexus*

Recent developments in EU sustainability narratives reveal a growing focus on strategic autonomy and resilience, while global collaboration remains central. The European Green Deal and related policies illustrate this evolution by combining sustainability objectives with economic sovereignty, particularly in the areas of energy and raw material security. The launch of the European Raw Materials Alliance in 2020 exemplifies this approach, linking resource independence to environmental targets. Although the EU seeks to minimize external dependencies, its policy discourse continues to highlight the importance of international partnerships. This dynamic reflects a nuanced balance between globalization and sovereignty, as conceptualized within the NSSM framework.

The European Green Deal (2019) and the European Raw Materials Alliance (2020) underscore the interplay between sustainability, strategic autonomy, and global cooperation. Their analysis within the NSSM framework provides insights into how these themes shape EU sustainability governance (Table 1).

**Table 1.** Comparative analysis of strategic autonomy and global cooperation in EU sustainability narratives (Green Deal and Raw Materials Alliance), illustrating NSSM proposition P1.

| Sources | Process | Result |
| --- | --- | --- |
| **European Green Deal (2019) and European Raw Materials Alliance (2020)** | Analyzed the language in both documents, noting the frequency and context of terms like "strategic autonomy", "resilience", and "global cooperation". Identified passages that simultaneously emphasized EU independence and international collaboration. | The European Green Deal states: "The EU will continue to lead international efforts and wants to build alliances with the like-minded". This was juxtaposed with the European Raw Materials Alliance's goal to "secure access to critical and strategic raw materials. . . for EU Industrial Ecosystems". |

1. Initial Reading: The European Green Deal and the European Raw Materials Alliance were examined to identify how they frame strategic autonomy, resilience, and global cooperation. Both emphasize securing critical resources while maintaining multilateral commitments.
2. Identification of Key Themes: The most recurring terms included "strategic autonomy," "resilience," and "global cooperation". The European Green Deal focuses on global leadership, while the Raw Materials Alliance stresses securing critical raw materials for EU industries.
3. Contextual Analysis: Recent global disruptions, such as the COVID-19 pandemic and geopolitical tensions, have reinforced the EU's drive for self-sufficiency in key sectors. Policy shifts reflect a movement away from unchecked globalization towards managed interdependence.
4. Interpretive Dialogue: Key questions emerge: How does the EU balance its need for strategic autonomy with international collaboration? Can the pursuit of resource independence align with global supply chain engagement? The analysis suggests that the EU aims to achieve resilience while sustaining economic openness.
5. Part–Whole Analysis: These policies contribute to a broader EU sustainability vision, blending industrial competitiveness with environmental objectives. The Raw Materials Alliance ensures access to key resources, while the Green Deal promotes sustainable global partnerships.
6. Application of the NSSM Framework: The NSSM framework helps interpret how the EU balances strategic control with global cooperation, ensuring sustainability policies remain viable within evolving geopolitical and economic contexts.
7. Synthesis and Refinement: The findings indicate that strategic autonomy and sustainability are increasingly interwoven in EU governance. While the EU seeks self-sufficiency, it continues engaging in multilateral environmental efforts, maintaining leadership in sustainability governance.

These findings illustrate how the EU's sustainability governance reflects a recalibrated globalization–sovereignty balance. Rather than merely describing policy content, this analysis confirms proposition P1 of the NSSM framework: strategic autonomy and resilience are increasingly prioritized over global integration. The dual emphasis on sovereignty and cooperation reveals a strategic logic in which sustainability serves both environmental and geopolitical objectives.

The European Green Deal (2019) and the European Raw Materials Alliance (2020) demonstrate how the EU integrates strategic autonomy with global cooperation in its sustainability policy. The Raw Materials Alliance prioritizes securing essential resources, while the Green Deal advances the EU's position as a leader in environmental governance. This approach, consistent with the NSSM framework, highlights the balance between main-

taining sovereignty and engaging in international collaboration. The evidence shows that the pursuit of strategic autonomy is closely linked to broader sustainability objectives, supporting RQ1. By connecting economic independence with collective climate action, the EU strengthens its governance model and affirms its leadership in global sustainability efforts.

### *4.2. Economic Security Imperative*

Amid recent global crises, economic security has become central to the EU's sustainability narratives. The Updated Industrial Strategy of 2021 highlights the need for resilient supply chains in green technology sectors, introducing "open strategic autonomy" as a guiding principle that balances resource protection with global leadership in clean technologies. Key initiatives such as the European Battery Alliance and the European Clean Hydrogen Alliance illustrate this approach. These efforts strategically align environmental goals with economic resilience, supporting the long-term sustainability of Europe's green technology sector.

The Updated Industrial Strategy (2021) and the Circular Economy Action Plan (2020) illustrate how the European Union weaves economic security into its sustainability agenda, emphasizing both supply chain resilience and resource independence (Table 2). These initiatives exemplify the principle of open strategic autonomy, combining efforts to protect against supply disruptions with the pursuit of leadership in green technologies. Applying the NSSM framework to these policies clarifies the evolving strategy that connects economic stability with environmental objectives.

**Table 2.** Comparative analysis of economic security imperatives in EU sustainability narratives (Industrial Strategy and CEAP), aligned with NSSM proposition P2.

| Sources | Process | Result |
| --- | --- | --- |
| **Updated Industrial Strategy (2021) and Circular Economy Action Plan (2020)** | Examined both documents for references to supply chain security, resource dependency, and economic resilience. Tracked the evolution of these concepts from the 2020 to 2021 documents. | The Updated Industrial Strategy introduces "open strategic autonomy", combining "global leadership in green technologies with measures to protect against supply disruptions". The Circular Economy Action Plan emphasizes the need to "reduce dependency on primary raw materials". |

1. Initial Reading: The Updated Industrial Strategy (2021) and the Circular Economy Action Plan (2020) were examined to understand how they frame economic security and sustainability. Both emphasize supply chain security, resource resilience, and strategic autonomy.
2. Identification of Key Themes: Key recurring terms included "supply chain security," "resource dependence," and "economic resilience". The Industrial Strategy stresses "open strategic autonomy," ensuring stable access to key green technologies, while the Circular Economy Action Plan promotes reducing dependency on primary raw materials.
3. Contextual Analysis: The COVID-19 pandemic and geopolitical disruptions reinforced the EU's need to secure critical resources. These policies highlight a shift from globalization to controlled interdependence, strengthening the EU's industrial base while mitigating supply vulnerabilities.
4. Interpretive Dialogue: Key questions arose: How does "open strategic autonomy" align with the EU's global leadership in sustainability? How can the EU reduce

external dependencies while preserving international trade partnerships? The analysis reveals that the EU seeks resilience without full disengagement from global markets.

5. Part–Whole Analysis: Both policies fit into the broader EU sustainability strategy, balancing economic self-sufficiency with environmental goals. The Circular Economy Action Plan supports resource independence, while the Industrial Strategy promotes securing green technology supply chains.
6. Application of the NSSM Framework: The Neo-Sovereign Strategic Management (NSSM) framework helps explain how the EU reconciles economic resilience with sustainability, strategic autonomy with global cooperation, ensuring policies remain economically viable and internationally relevant.
7. Synthesis and Refinement: The findings underscore a delicate equilibrium: EU sustainability narratives are increasingly linked to economic security. This ensures critical resource independence while maintaining a global leadership position in sustainability governance.

The interpretive synthesis of these documents supports proposition P2 of the NSSM framework, which posits that economic security imperatives are central to EU sustainability governance. The notion of "open strategic autonomy" exemplifies how the EU integrates environmental goals with industrial resilience, using sustainability as a strategic tool to mitigate external dependencies and reinforce competitiveness. The Circular Economy Action Plan (2020) and the Updated Industrial Strategy (2021) demonstrate how the European Union embeds economic security within its sustainability agenda. Both documents highlight the importance of securing supply chains, achieving resource independence, and fostering economic resilience as foundational elements of strategic autonomy. The Industrial Strategy advances the concept of "open strategic autonomy," aiming to mitigate supply disruptions while maintaining a leadership role in green technologies. In parallel, the Circular Economy Action Plan prioritizes reducing dependence on primary raw materials to strengthen resource sovereignty. Drawing on the hermeneutic circle, these findings indicate that economic security operates as a central driver of sustainability policy, rather than a supplementary concern. The NSSM framework provides a useful lens for understanding how the EU balances self-reliance with international collaboration, clarifying the influence of economic security on green innovation, supply chain robustness, and the Union's geopolitical stance. This analysis supports RQ2 by illustrating how economic imperatives increasingly shape and interact with the broader sustainability goals of EU governance.

### *4.3. Eco-Military Mercantilism*

The European Union's approach to sustainability governance has evolved, increasingly linking environmental policy with economic and geopolitical aims. This development reflects the principle of eco-military mercantilism, where environmental initiatives become strategic assets that strengthen national competitiveness while advancing sustainability. Policies such as the European Green Deal and the Carbon Border Adjustment Mechanism illustrate how the EU leverages environmental standards as tools for trade and security. Through regulatory measures embedded in broader economic frameworks, the EU seeks to reinforce both economic stability and strategic independence.

The European Green Deal (2019) and CBAM proposals demonstrate how environmental regulations intersect with economic security and global influence. Their analysis within the NSSM framework provides insight into how sustainability governance is strategically instrumentalized (see Table 3).

**Table 3.** Comparative analysis of eco-military mercantilism in EU sustainability narratives (Green Deal and CBAM), supporting NSSM proposition P3.

| Sources | Process | Result |
| --- | --- | --- |
| **European Green Deal (2019) and Carbon Border Adjustment Mechanism proposals** | Looked for instances where environmental policies were framed in terms of diplomatic influence or competitive advantage. Analyzed the language used to justify the Carbon Border Adjustment Mechanism. | The European Green Deal states that "EU diplomacy and financial tools should be used to ensure that green alliances are part of its relations with Africa and other partner countries and regions". The Carbon Border Adjustment Mechanism is presented as both an environmental measure and a tool to ensure a "level playing field" in international trade. |

1. Initial Reading: The European Green Deal and CBAM proposals were analyzed to understand how they link sustainability with economic and diplomatic influence. Both emphasize the dual role of environmental standards in advancing global climate goals and securing European industrial leadership.
2. Identification of Key Themes: Recurring terms included "environmental standards," "diplomatic influence," and "competitive advantage". The EGD frames sustainability as a tool for international coalitions, while CBAM ensures a level playing field in trade.
3. Contextual Analysis: In response to global economic shifts, the EU increasingly ties sustainability to economic security. CBAM protects EU industries from carbon leakage while reinforcing the bloc's leadership in green innovation.
4. Interpretive Dialogue: Key questions emerge: How does CBAM balance environmental objectives with economic competitiveness? Can the EU's use of environmental diplomacy strengthen its strategic autonomy while maintaining global trade relations? The analysis indicates a calculated approach to sustainability-driven economic governance.
5. Part–Whole Analysis: These policies fit within a broader EU strategy, intertwining climate action with industrial policy. CBAM exemplifies how sustainability norms function as both economic safeguards and global regulatory standards.
6. Application of the NSSM Framework: The NSSM framework contextualizes how environmental governance merges with security and trade, positioning sustainability as a geopolitical asset rather than just a climate commitment.
7. Synthesis and Refinement: The findings reveal that EU sustainability policies increasingly function as instruments of economic strategy, reinforcing strategic autonomy while maintaining multilateral engagement.

This table exemplifies proposition P3 of the NSSM framework, highlighting how environmental standards are strategically leveraged to reinforce economic and geopolitical objectives. The European Green Deal (2019) and the Carbon Border Adjustment Mechanism (CBAM) proposals illustrate how sustainability regulations shape the EU's economic and strategic direction. The Green Deal advances environmental diplomacy by integrating climate goals into external relations, while CBAM supports trade competitiveness by applying carbon pricing to imports. As analyzed in Table 3 through the hermeneutic circle, these policies reflect an evolving governance model in which environmental objectives intersect with economic security and global influence. The NSSM framework offers a clear perspective on how sustainability functions as a geopolitical tool. This approach aligns with RQ3, highlighting how the EU addresses regulatory authority and stakeholder engagement during sustainability transitions.

These dynamics also intersect with stakeholder governance tensions, as the strategic use of environmental standards (e.g., CBAM) often generates friction between centralized EU regulatory authority and the diverse interests of member states, industries, and civil

society actors. This cross-component interaction highlights how eco-military mercantilism can exacerbate governance complexity, reinforcing the need for inclusive mechanisms to legitimize strategic sustainability policies.

### *4.4. Fiscal Policy Paradigm Shift*

The European Union has moved from an austerity-focused fiscal policy toward a more flexible, investment-oriented approach that incorporates sustainability into economic recovery efforts. This evolution is evident in the NextGenerationEU recovery plan and the Updated Industrial Strategy, both of which emphasize fiscal adaptability and sustained green investment. By adopting this strategy, the EU aims to secure economic stability while advancing sustainability, embedding resilience and green growth as core elements of its financial policy.

The present analysis seeks to demonstrate how fiscal policies have evolved to prioritize sustainability, as illustrated by the 2020 NextGenerationEU recovery plan and the 2021 Updated Industrial Strategy. Utilizing the NSSM framework, the subsequent discussion will unpack how the EU reconciles fiscal flexibility with green investment imperatives.

1. Initial Reading: The NextGenerationEU plan and Updated Industrial Strategy were examined to assess how fiscal policy narratives incorporate sustainability. Both emphasize green investments and economic resilience.
2. Identification of Key Themes: Key terms include "green investments," "economic recovery," and "fiscal flexibility". The recovery plan highlights sustainability as a driver of economic renewal, while the Industrial Strategy promotes investment in green technologies.
3. Contextual Analysis: The COVID-19 crisis reinforced the EU's need for flexible fiscal measures. These policies reflect a shift from rigid austerity to proactive, sustainability-oriented financial planning.
4. Interpretive Dialogue: Key questions emerged: How does fiscal flexibility enable green investments while maintaining economic stability? How do EU institutions balance short-term recovery with long-term sustainability? The analysis suggests a strategic recalibration toward sustainability-driven economic governance.
5. Part–Whole Analysis: These policies align within the EU's broader sustainability agenda, where fiscal policy shifts from constraint-based governance to enabling green industrial transformation.
6. Application of the NSSM Framework: The NSSM framework contextualizes this fiscal shift, demonstrating how sustainability goals are embedded within economic security strategies, ensuring both resilience and competitiveness.
7. Synthesis and Refinement: The findings confirm that fiscal flexibility and sustainability investments are now central to EU economic governance, securing long-term resilience while fostering a sustainable growth model.

The NextGenerationEU plan (2020) and the Updated Industrial Strategy (2021) illustrate a significant transformation in the EU's fiscal policy, which is now centered on sustainability and economic security. The recovery plan links economic renewal to sustained investment in green initiatives, while the Industrial Strategy advances European leadership in green technologies. As shown in Table 4, the hermeneutic analysis identifies a clear movement away from austerity toward strategic investment in sustainability. This shift aligns economic security with long-term environmental goals. The NSSM framework helps explain this development by situating fiscal policy as a foundation for both sustainability and the EU's pursuit of strategic autonomy. These findings support RQ2, demonstrating that concerns about economic security are now integrated into EU sustainability policy, embedding resilience within a growth-oriented fiscal framework.

**Table 4.** Comparative analysis of fiscal policy paradigm shift in EU sustainability narratives.

| Sources | Process | Result |
| --- | --- | --- |
| **NextGenerationEU recovery plan (2020) and Updated Industrial Strategy (2021)** | Compared the fiscal language in these plans to previous EU economic documents. Noted the emphasis on green investments and the linking of economic recovery to sustainability goals. | The NextGenerationEU plan states it "turns the immense challenge we face into an opportunity, not only by supporting the recovery but also by investing in our future". The Updated Industrial Strategy reinforces this shift by emphasizing investment in green technologies. |

### *4.5. State Function Resurgence*

The European Union's sustainability governance has experienced a significant transformation, characterized by the renewed prominence of state functions. Public institutions now play a central role in advancing environmental and industrial transitions. Notable initiatives such as Horizon Europe and the Updated Industrial Strategy embody this shift, reflecting Mazzucato's concept of the "entrepreneurial state" (Mazzucato, 2011). These policies move away from traditional market-based approaches and prioritize mission-oriented innovation as a catalyst for sustainability. Both Horizon Europe (2021) and the Updated Industrial Strategy demonstrate how the EU combines state-led action with sustainability objectives.

Their analysis within the NSSM framework unpacks the evolving role of public institutions in fostering green and digital transformation.

1. Initial Reading: The Horizon Europe program and Updated Industrial Strategy were examined to assess how they frame state involvement in sustainability. Both highlight government leadership in research, innovation, and industrial transformation.
2. Identification of Key Themes: Key recurring terms include "mission-oriented approach," "entrepreneurial state," and "industrial transformation". Horizon Europe aligns with state-driven innovation, while the Industrial Strategy reinforces public investment in the green and digital transitions.
3. Contextual Analysis: Climate change and digitalization have reinforced the EU's need for state-led sustainability initiatives, shifting the focus from market-driven approaches to proactive governance.
4. Interpretive Dialogue: Key questions emerged: How does state intervention balance regulatory efficiency with industrial innovation? How do mission-oriented policies accelerate sustainability transitions while ensuring economic competitiveness? The analysis highlights an evolving governance model where public institutions actively shape sustainable industrial policy.
5. Part–Whole Analysis: These policies align within the EU's broader sustainability framework, where state-led projects complement regulatory measures to drive systemic transformation.
6. Application of the NSSM Framework: The NSSM framework contextualizes the state's expanded role, demonstrating how the EU integrates strategic autonomy with global cooperation while directing sustainability initiatives.
7. Synthesis and Refinement: The findings confirm a shift from regulatory oversight to active state intervention, positioning public institutions as key drivers of sustainable innovation and industrial transformation.

This analysis clarifies how the European Union is adjusting its governance approach, as reflected in the Horizon Europe program (2021) and the Updated Industrial Strategy (2021). Horizon Europe highlights the central role of the state in advancing sustainability, while the Updated Industrial Strategy encourages public investment in green and digital innovation. Horizon Europe exemplifies the mission-oriented approach of the entrepreneurial state.

The hermeneutic analysis in Table 5 reveals a deliberate shift, with public institutions now actively guiding sustainability efforts instead of only enforcing rules. The NSSM framework offers a valuable perspective for understanding this change, showing that the renewed focus on state function strengthens strategic autonomy, economic resilience, and sustainability governance. These results are consistent with RQ1 and RQ3, demonstrating that state-led sustainability governance can balance autonomy, international cooperation, and stakeholder involvement.

**Table 5.** Comparative analysis of state function resurgence in EU sustainability narratives.

| Sources | Process | Result |
| --- | --- | --- |
| **Horizon Europe program and Updated Industrial Strategy (2021)** | Analyzed the role ascribed to public institutions in driving innovation and industrial development. Compared this to previous, more market-led approaches. | Horizon Europe's mission-oriented approach aligns with Mazzucato's concept of the entrepreneurial state.The Updated Industrial Strategy explicitly aims to "support the green and digital transformation of EU industry". |

### *4.6. Stakeholder Governance Tension*

The European Union's approach to sustainability governance reflects ongoing tension between centralized authority and broad stakeholder involvement. The European Green Deal adopts a primarily top-down model, whereas the European Climate Pact (2020) and the Circular Economy Action Plan (2020) emphasize participation across multiple levels. Together, these policies illustrate the EU's effort to achieve both efficient governance and stakeholder inclusivity, consistent with the principles outlined in the NSSM framework.

The European Green Deal, the Climate Pact, and the Circular Economy Action Plan are indicative of the way the EU navigates governance tensions. Their analysis within the NSSM framework elucidates the interplay between regulatory authority and participatory governance.

1. Initial Reading: The three policies were examined to assess how they frame sustainability governance. The Green Deal focuses on centralized oversight, while the Climate Pact promotes community and business involvement.
2. Identification of Key Themes: Key recurring terms include "centralized decision-making," "stakeholder engagement," and "multi-level governance". The Climate Pact fosters public participation, contrasting with the Green Deal's structured regulatory control.
3. Contextual Analysis: Climate change and global sustainability commitments highlight the challenge of balancing governance efficiency with stakeholder inclusion. EU sustainability policies seek to integrate diverse actors while ensuring regulatory coherence.
4. Interpretive Dialogue: Key questions arose: How can top-down governance accommodate decentralized sustainability initiatives? How do participatory frameworks ensure policy effectiveness? The analysis reveals a governance model seeking to reconcile institutional control with collaborative policymaking.
5. Part–Whole Analysis: These policies are consistent with the overarching EU strategy, which seeks to balance top-down policy directives with stakeholder-driven sustainability efforts. The Circular Economy Action Plan emphasizes the role of industry in the transition to a greener economy.
6. Application of the NSSM Framework: The NSSM framework contextualizes the EU's governance duality, showing how centralized authority and stakeholder participation coexist in sustainability policymaking.

7. Synthesis and Refinement: The findings confirm that EU sustainability governance relies on a hybrid approach, integrating regulatory control with multi-level engagement to enhance policy legitimacy and effectiveness.

The European Green Deal, Climate Pact, and Circular Economy Action Plan illustrate the European Union's effort to achieve a balance between centralized authority and broad stakeholder engagement. The Green Deal outlines strategic objectives at the institutional level, while the Climate Pact and Circular Economy Action Plan promote participation from a wide range of actors, including citizens, businesses, and industry representatives (see Table 6). Through these policies, the EU addresses governance challenges by ensuring that sustainability transitions are both coherent and inclusive. The NSSM framework serves as an analytical tool for interpreting these developments, clarifying how centralized decision-making interacts with multi-level stakeholder involvement. These findings support RQ3 by showing the EU's commitment to combining regulatory leadership with participatory processes, ultimately fostering a more effective and legitimate sustainability transition.

**Table 6.** Comparative analysis of stakeholder governance tension in EU sustainability narratives.

| Sources | Process | Result |
| --- | --- | --- |
| **European Green Deal (2019), European Climate Pact (2020), and Circular Economy Action Plan (2020)** | Examined the governance structures proposed in these documents, noting the balance between centralized policymaking and stakeholder engagement initiatives. | While the European Green Deal represents a top-down approach, the European Climate Pact aims to "engage citizens and communities in action for our climate and environment". The Circular Economy Action Plan also emphasizes the need for broad stakeholder engagement in its implementation. |

### *4.7. NSSM Conceptual Model*

Figure 3 visually presents the six interconnected components of the NSSM framework, highlighting their systemic relationships within EU sustainability governance. This model clarifies how external strategies, fiscal policy paradigms, and governance structures interact to shape EU policy narratives. The Globalization-Sovereignty Nexus, Economic Security Imperative, and Eco-Military Mercantilism form a triad of outward-facing strategies that direct the EU's approach to global sustainability challenges. These external dimensions are closely linked with the Fiscal Policy Paradigm Shift, which serves as a regulatory bridge, ensuring alignment between external sustainability objectives and internal governance priorities. On the governance side, State Function Resurgence and Stakeholder Governance Tension illustrate the ongoing balance between institutional leadership and engagement from multiple levels of stakeholders. The model's bidirectional relationships demonstrate that changes in one domain, such as increased emphasis on economic security, can lead to cascading effects across fiscal priorities, state intervention, and governance arrangements. Developed through hermeneutic analysis of EU sustainability discourse, this conceptual model offers a clear framework for understanding how NSSM dynamics collectively influence the evolution of EU sustainability governance.

The conceptual model emphasizes that the six components of the NSSM framework are not isolated but dynamically interrelated. For instance, eco-military mercantilism influences stakeholder governance by introducing strategic pressures that challenge participatory legitimacy. Similarly, economic security imperatives shape fiscal policy flexibility and reinforce the resurgence of state functions. These interdependencies underscore the systemic nature of EU sustainability governance and validate the NSSM framework as a tool for analyzing multi-dimensional strategic alignment.

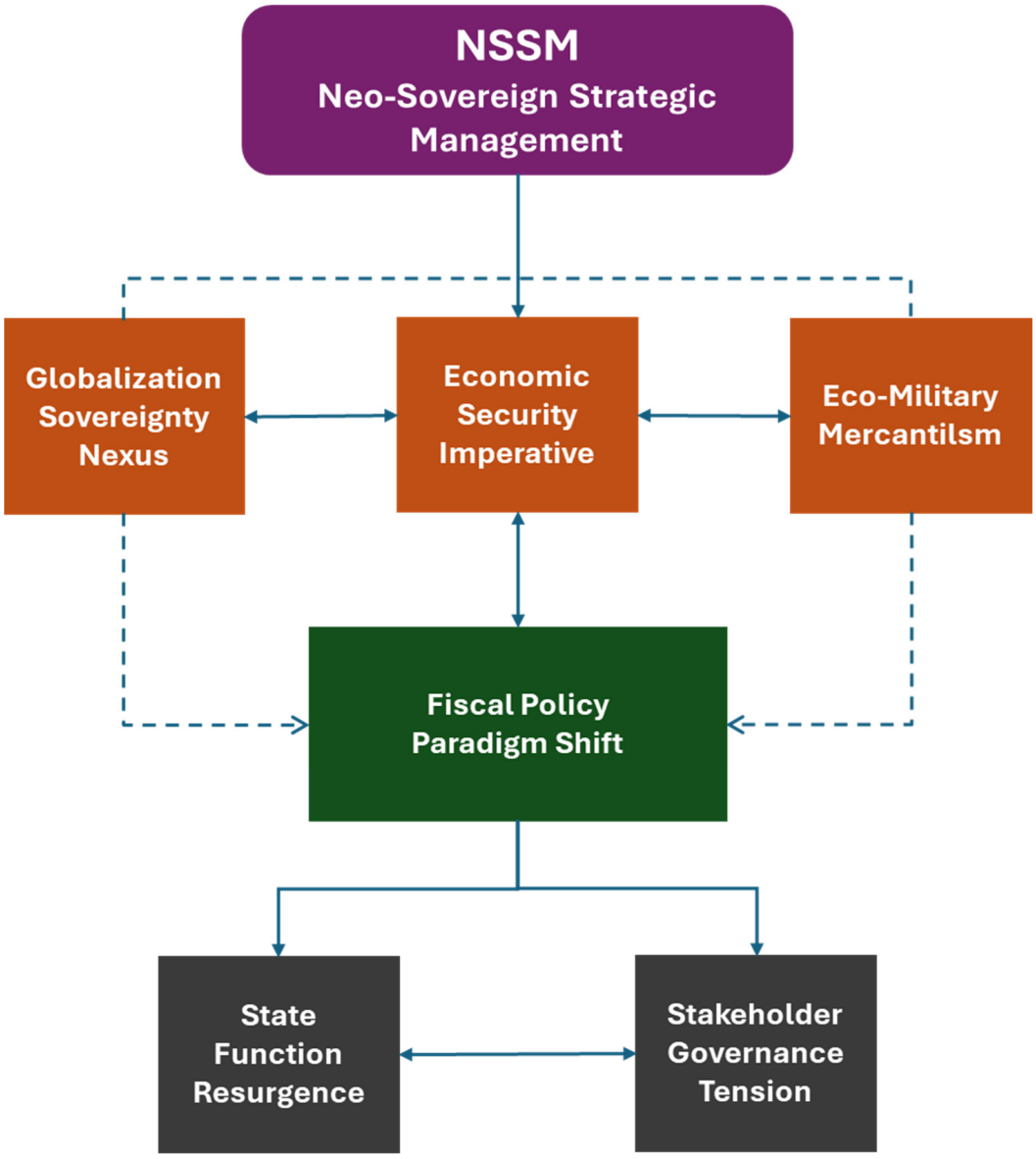


**Figure 3.** Conceptual model for NSSM framework.

## 5. Discussion of Results

This study applies the Neo-Sovereign Strategic Management (NSSM) framework to examine the European Union's (EU) approach to sustainability governance. The strategic-systemic approach to sustainability governance proposed in this study enables the integration of sustainability principles not only within environmental policy, but also across economic management, institutional governance, and industrial innovation. This interdisciplinary perspective fosters convergence between social, economic, and environmental sciences, supporting a holistic transition towards sustainable development. The analysis demonstrates how the EU seeks to balance strategic autonomy, economic security, and stakeholder involvement. By reviewing key policy initiatives, this research traces the changing role of sustainability in the context of global challenges and evolving governance models.

### *5.1. Strategic Autonomy and Global Cooperation (RQ1)*

EU sustainability policy has shifted to emphasize both strategic autonomy and international collaboration. The European Green Deal and the Raw Materials Alliance are central examples, aiming to reduce reliance on external resources while supporting joint climate

efforts. Sustainability now functions as a tool for advancing resource security, energy transitions, and industrial decarbonization. This dual focus reflects the Globalization–Sovereignty Nexus within the NSSM framework, where the EU seeks resilience without isolating itself from global cooperation. A pragmatic approach to the SDGs, as advocated in the recent literature, allows for the translation of global objectives into measurable indicators and operational actions across multiple domains—from green finance and resource management to public participation and digital transformation.

### *5.2. Economic Security and Sustainability Objectives (RQ2)*

The governance of sustainability in the EU has moved from a purely ecological perspective to a model that integrates economic security and resilience. Policies such as the Circular Economy Action Plan, the Updated Industrial Strategy, and the Carbon Border Adjustment Mechanism (CBAM) illustrate this evolution. These initiatives show how sustainability is linked to trade stability and resource independence. The concept of eco-military mercantilism highlights the use of environmental standards to support economic and geopolitical aims. Additionally, the NextGenerationEU recovery plan demonstrates the importance of public investment, connecting green innovation with competitiveness and robust trade systems. The paradigm shift in fiscal policy and the emphasis on green industrial strategies underscore the importance of aligning financial instruments, industrial policy, and technological innovation with sustainability goals, thus bridging the gap between economic imperatives and environmental stewardship.

### *5.3. Centralized Governance and Stakeholder Engagement (RQ3)*

The EU continues to address the tension between centralized decision-making and the inclusion of diverse stakeholders in sustainability policy. The European Green Deal represents a regulatory, top-down approach, while the European Climate Pact encourages broader participation. Horizon Europe supports innovation led by public institutions, and the Circular Economy Action Plan fosters collaboration with industry and civil society. By foregrounding community-level outcomes and territorial resilience, the NSSM framework supports the implementation of sustainability strategies that are sensitive to local contexts, thereby enhancing the social legitimacy and effectiveness of policy interventions. This dual structure, a central element of the Stakeholder Governance Tension in the NSSM framework, highlights the ongoing challenge of achieving both regulatory clarity and multi-level engagement. The tension between centralized governance and stakeholder engagement, as analyzed through the NSSM framework, finds practical application both in European policymaking and in corporate sustainability management, highlighting the need for multi-level coordination and participatory approaches across sectors. Ensuring alignment among EU institutions, member states, and businesses remains a key governance issue.

### *5.4. Summary of Key Findings*

The present analysis, utilizing the NSSM framework, provides novel insights into the EU's sustainability governance by unveiling its multifaceted strategic nature (see Table 7 for a synopsis of how our findings address the revised research questions). By operationalizing the SDGs through the Neo-Sovereign Strategic Management (NSSM) framework, our analysis demonstrates how sustainability objectives can be translated into actionable strategies in fields as diverse as public policy, business management, technological innovation, and territorial planning.

**Table 7.** Key findings and corresponding tables for research questions.

| Research Question | Key Findings | Corresponding Table |
| --- | --- | --- |
| **RQ1:** How do EU sustainability governance narratives reflect the balance between strategic autonomy and global cooperation? | EU institutions increasingly frame sustainability as both an environmental and strategic priority. The European Green Deal and the European Raw Materials Alliance illustrate how policies emphasize strategic autonomy while maintaining global cooperation. | Table 1 |
| **RQ2:** How do economic security concerns shape the EU's sustainability policies, and how do they interact with broader sustainability objectives? | Economic security considerations are deeply embedded in EU sustainability policies. The European Circular Economy Action Plan, the Updated Industrial Strategy, and the Carbon Border Adjustment Mechanism reflect a shift toward resource independence, trade resilience, and strategic positioning. | Tables 2 and 3 |
| **RQ3:** How does the EU reconcile centralized governance mechanisms with the need for multi-level stakeholder engagement in sustainability governance? | The EU's governance approach balances centralized decision-making with stakeholder participation. While the European Green Deal and Horizon Europe program illustrate strong state intervention, initiatives like the European Climate Pact highlight the push for multi-level engagement. | Tables 4–6 |

### *5.5. Implications for EU Sustainability Governance*

The governance of sustainability in the European Union (EU) is increasingly shaped by the balance between strategic autonomy, economic security, and global cooperation. This phenomenon reflects the Neo-Sovereign Strategic Management (NSSM) paradigm. The NSSM is an evolving model that redefines sovereignty, positioning sustainability as both an economic transformation tool and a geopolitical strategy.

1. **Globalization–Sovereignty Nexus:** The EU recalibrates sustainability governance by prioritizing strategic autonomy while maintaining multilateral engagement, blending domestic resilience with global cooperation.
2. **Economic Security Imperative:** Sustainability policies now integrate resource independence, supply chain resilience, and green industrial strategies, reinforcing the EU's economic sovereignty and competitiveness.
3. **Eco-Military Mercantilism:** Sustainability standards, like CBAM, are increasingly used as geopolitical and trade instruments, aligning climate action with economic and technological leadership.
4. **Fiscal Policy Paradigm Shift:** The EU's move towards growth-oriented, flexible fiscal policies prioritizes long-term green investment over deficit reduction, strengthening state intervention in sustainability financing.
5. **State Function Resurgence:** Public institutions play a growing role in sustainability transitions, exemplified by Horizon Europe and Green Industrial Strategies, marking a shift from market-led to state-driven policies.
6. **Stakeholder Governance Tension:** EU governance balances top-down regulations (European Green Deal) with participatory initiatives (European Climate Pact), underscoring the challenge of aligning diverse stakeholders while maintaining regulatory efficiency.

Ultimately, the NSSM framework provides a robust analytical lens for understanding how strategic autonomy, economic security, and stakeholder governance interact to shape sustainability outcomes across environmental, economic, and institutional fields.

## 6. Conclusions

This study examines how sustainability governance in the European Union is evolving, focusing on policy responses to strategic autonomy, economic security, and the challenges of multi-level governance. The EU's sustainability strategy, guided by the climate action objectives in SDG 13, increasingly connects climate policy with industrial growth and strategic independence. Sustainability is now seen as both an economic and geopolitical priority, leading to a greater emphasis on state-driven transitions, strong regulatory frameworks, and adaptable fiscal policies. The findings indicate a strategic shift, where environmental objectives are integrated into industrial planning, trade policy, and economic security approaches.

### *6.1. Theoretical Implications*

This research makes an important contribution to the sustainability governance literature by applying the Neo-Sovereign Strategic Management (NSSM) framework. The NSSM framework positions sustainability as both an economic resource and a tool for strategic action. By using this approach, the study expands the understanding of sustainability beyond a technical or adaptive issue, highlighting its role as a contested political space where the EU seeks to define strategic autonomy. The analysis emphasizes the Globalization–Sovereignty Nexus, which requires sustainability policies to balance national resilience with international cooperation. Integrating economic security into sustainability policy signals a stronger paradigm, with a focus on resource independence, energy security, and industrial competitiveness. The study also advances the concept of eco-military mercantilism, showing how environmental policy can serve as an instrument for trade benefits and geopolitical influence. The EU's adoption of carbon border mechanisms and industrial strategies demonstrates the use of sustainability to strengthen global standing. Moreover, the renewed role of public institutions in sustainability governance supports mission-oriented approaches, where the state leads industrial transformation. Finally, the research contributes to the debate on multi-level governance by illustrating the challenges between centralized control and stakeholder involvement in EU sustainability transitions.

### *6.2. Practical Implications*

The findings provide valuable guidance for policymakers, businesses, and sustainability professionals. Policymakers should work to improve policy coherence by aligning sustainability efforts with economic security, industrial development, and trade. The EU Taxonomy for Sustainable Finance and related investment tools ought to focus on building strong supply chains, supporting clean technologies, and advancing strategic autonomy. To address governance challenges, it is important to broaden stakeholder involvement by using digital participation platforms, organizing multi-stakeholder forums, and encouraging collaborative decision-making. For businesses, anticipating regulatory changes, geopolitical uncertainties, and new sustainability standards is essential. Companies in renewable energy, the circular economy, and green technology should ensure their research, development, and investment plans match EU objectives. Considering economic security, such as diversifying supply chains, relocating key production, and maintaining technological independence, is key to achieving long-term sustainability and competitiveness. Integrated sustainability strategies should also emphasize circular economy practices, sustainable finance, and digital innovation to support cleaner production and efficient resource use. Finally, strengthening innovation policies driven by clear missions, fostering public–private partnerships, and supporting sustainability-focused industrial policies are crucial steps toward systemic transformation.

### *6.3. Strategic Sustainability and Systemic Sustainability in EU Governance*

The results show that EU sustainability governance is increasingly linked to Strategic Sustainability, as environmental goals become part of broader economic, industrial, and geopolitical strategies. This systemic approach weaves sustainability into long-term resilience planning, focusing on industrial sovereignty, resource security, and regulatory leadership. Instead of viewing sustainability as a separate aim, EU policies adopt a Systemic Sustainability perspective, recognizing the strong connections between climate action, economic security, and industrial competitiveness. The EU's model positions sustainability as a central driver of economic and political stability, reflecting a move toward more integrated governance that balances environmental, economic, and social needs. This development underlines the importance of adaptive, mission-driven policies that can coordinate across different levels of governance and promote collaboration across sectors.

### *6.4. Limitations and Future Research Directions*

This study offers insights into EU sustainability governance, yet it is not without its limitations. The research is dependent on official EU policy documents, which may result in the omission of informal governance and civil society perspectives. This reliance on institutional sources may introduce a policy framing bias, as official narratives tend to emphasize coherence, legitimacy, and strategic alignment, potentially omitting dissenting or contested perspectives. As a result, the robustness of the findings is contingent on the interpretive neutrality of the hermeneutic method and the triangulation strategies employed. Future studies should broaden the methodological approaches by including stakeholder interviews, civil society reports, and media analysis to capture diverse perspectives and challenge prevailing narratives. Integrating case studies alongside stakeholder engagement will enrich the evidence base. While the current focus on policies from 2019 to 2024 highlights recent developments, adopting a historical lens could provide deeper context. The qualitative methodology offers valuable insights, yet empirical validation would be strengthened by adding policy impact assessments, econometric models, and survey data. Expanding research beyond an EU-centric view is important, as national-level variations may influence how sustainability policies are implemented. Comparative analysis with models from China, the United States, and the Global South would further enhance understanding. Additionally, future work should examine the interaction between Strategic Sustainability and Systemic Sustainability, particularly how this relationship affects policy coherence, industrial transformation, and stakeholder participation. Exploring these areas will help develop a more integrated perspective on sustainability governance. Applying the NSSM framework to specific sectors such as energy, transport, and manufacturing, supported by quantitative assessment, will refine its practical relevance.

To empirically validate the NSSM framework, future studies could operationalize its six dimensions using quantitative indicators. For example, Strategic Autonomy could be measured through import dependency ratios in critical sectors; Economic Security through supply chain disruption indices; Eco-Military Mercantilism via trade policy instruments like CBAM; Fiscal Flexibility through green investment ratios; State Function Resurgence through public R&D expenditure in sustainability; and Stakeholder Governance Tension through metrics of participatory policymaking (e.g., number of consultations, diversity of actors involved). Datasets from Eurostat, OECD, and the European Environment Agency could support such analyses.

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## References


1. D'Adamo, I.; Gastaldi, M.; Nallapaneni, M.K. Europe Moves toward Pragmatic Sustainability: A More Human and Fraternal Approach. *Sustainability* **2024**, *16*, 6161. [CrossRef]
2. Shafik, W. SDG 9: Industry, Innovation, and Infrastructure—Smart Technologies for Sustainable Industry. In *Factoring Technology in Global Sustainability: A Focus on the Sustainable Development Goals*; Shafik, W., Ed.; Springer Nature: Singapore, 2025; pp. 305–331, ISBN 978-981-96-7299-8.
3. Binh, N.T.; Caroline, S.; Thi Ai Nhi, T.; Tu, N.M.; Tien, L.V.T.; Minh, L.B.N.; Quan, N.H. Sustainable Consumption and Production from Water Circularity Perspectives (SDG 12). In *Water Matters*; Elsevier: Amsterdam, The Netherlands, 2024; pp. 247–260.
4. Deng, L.; Sulaiman, R.; Baharin, H.; Mohamad, U.H.; Pansera, B.A.; Santoro, D. Smart Circular Economy Designed for the Decarbonization of Waste from Industry to Promote Net Zero and Sustainable Development Goals. *Comput. Ind. Eng.* **2025**, *208*, 111470. [CrossRef]
5. Katariya, M.; Mathur, A.; Singh, S. Role of Intelligent Manufacturing in Achieving SDGs. In *Smart Cities and Sustainable Manufacturing*; Elsevier: Amsterdam, The Netherlands, 2025; pp. 9–28.
6. D'Adamo, I. Sustainable Communities: We Are the World. *Sci. Rep.* **2025**, *15*, 8068. [CrossRef] [PubMed]
7. Camilleri, M.A. Environmental, Social and Governance Disclosures in Europe. *Sustain. Account. Manag. Policy J.* **2015**, *6*, 224–242. [CrossRef]
8. Schunz, S. The 'European Green Deal'—A Paradigm Shift? Transformations in the European Union's Sustainability Meta-Discourse. *Political Res. Exch.* **2022**, *4*. [CrossRef]
9. Davidescu, S.; Buzogány, A. Cutting Deals: Transnational Advocacy Networks and the European Union Timber Regulation at the Eastern Border. *Int. Spect.* **2021**, *56*, 105–118. [CrossRef]
10. Weber, G.; Ardila, L.; Cabras, I. Just Transition and the European Green Deal: The Case of Coal Mining in Colombia. In *Making the European Green Deal Work: EU Sustainability Policies at Home and Abroad*; Routledge: Abingdon, UK, 2023; pp. 177–192. [CrossRef]
11. Dupont, C.; Oberthür, S.; von Homeyer, I. The COVID-19 Crisis: A Critical Juncture for EU Climate Policy Development? *J. Eur. Integr.* **2020**, *42*, 1095–1110. [CrossRef]
12. Mišík, M.; Nosko, A. Post-Pandemic Lessons for EU Energy and Climate Policy after the Russian Invasion of Ukraine: Introduction to a Special Issue on EU Green Recovery in the Post-COVID-19 Period. *Energy Policy* **2023**, *177*, 113546. [CrossRef]
13. Kreienkamp, J.; Pegram, T.; Coen, D. Explaining Transformative Change in EU Climate Policy: Multilevel Problems, Policies, and Politics. *J. Eur. Integr.* **2022**, *44*, 731–748. [CrossRef]
14. Fernandez, R.; Schoenefeld, J.J.; Hoerber, T.; Oberthür, S. Europe's Transition to Sustainability: Actors, Approaches and Policies. *Int. Spect.* **2021**, *56*, 1–6. [CrossRef]
15. Schunz, S. The European Union's Environmental and Climate Change Policies. In *International Relations and the European Union*; Hill, C., Smith, M., Vanhoonacker, S., Eds.; Oxford University Press: Oxford, UK, 2023; pp. 268–291, ISBN 9780192897343.
16. Wood, M. Europe's New Technocracy: Boundaries of Public Participation in EU Institutions. *J. Common Mark. Stud.* **2021**, *59*, 459–473. [CrossRef]
17. Gronow, A. Not by Rules or Choice Alone: A Pragmatist Critique of Institution Theories in Economics and Sociology. *J. Institutional Econ.* **2008**, *4*, 351–373. [CrossRef]
18. Bianchini, S. How Partitions Affect the Nature of Democracy in Europe Today. In *Liquid Nationalism and State Partitions in Europe*; Edward Elgar Publishing Ltd.: Cheltenham, UK, 2017; pp. 256–290. [CrossRef]
19. Fu, H.Z.; Waltman, L. A Large-Scale Bibliometric Analysis of Global Climate Change Research between 2001 and 2018. *Clim. Change* **2022**, *170*, 1–21. [CrossRef]
20. Mazzucato, M. *Mission Economy: A Moonshot Guide to Changing Capitalism*; Penguin: London, UK, 2021.
21. Caitlin, E. Werrell; Francesco Femia Climate Change, the Erosion of State Sovereignty, and World Order on JSTOR. *Brown J. World Aff.* **2016**, *22*, 221–235.
22. Fioretos, O.; Heldt, E.C.; Enia, E.; Heldt, C. Legacies and Innovations in Global Economic Governance since Bretton Woods. *Rev. Int. Political Econ.* **2019**, *26*, 1089–1111. [CrossRef]
23. Hartley, K.; Schülzchen, S.; Bakker, C.A.; Kirchherr, J. A Policy Framework for the Circular Economy: Lessons from the EU. *J. Clean. Prod.* **2023**, *412*, 137176. [CrossRef]
24. Gatto, A. Quantifying Management Efficiency of Energy Recovery from Waste for the Circular Economy Transition in Europe. *J. Clean. Prod.* **2023**, *414*, 136948. [CrossRef]
25. Stefanis, C.; Stavropoulos, A.; Stavropoulou, E.; Tsigalou, C.; Constantinidis, T.C.; Bezirtzoglou, E. A Spotlight on Environmental Sustainability in View of the European Green Deal. *Sustainability* **2024**, *16*, 4654. [CrossRef]

26. Di Felice, L.J.; Pérez-Sánchez, L.; Manfroni, M.; Giampietro, M. Towards Nexus Thinking in Energy Systems Modelling: A Multi-Scale, Embodied Perspective. *Energy Policy* **2024**, *187*, 114052. [CrossRef]
27. Delgado-Algarra, J.; Bernal-Bravo, C.; Lorca-Marín, A.A.; Kamí Nska, A.M.; Opalí Nski, Ł.; Wyci´slik, Ł.W. The Landscapes of Sustainability in the Library and Information Science: Systematic Literature Review. *Sustainability* **2022**, *14*, 441. [CrossRef]
28. Flick, U. *The SAGE Handbook of Qualitative Research Design*; Sage Publications: Thousand Oaks, CA, USA, 2022; pp. 1–100.
29. Lester, S. The Globalization Paradox: Democracy and the Future of the World Economy by Dani Rodrik New York: Norton, 2011. *World Trade Rev.* **2011**, *10*, 409–417. [CrossRef]
30. Witt, M.A. De-Globalization: Theories, Predictions, and Opportunities for International Business Research. *J. Int. Bus. Stud.* **2019**, *50*, 1053–1077. [CrossRef]
31. Iliana, O.; Gracia, M. The End of Globalisation? A Reflection on the Effects of the COVID-19 Crisis Using the Elcano Global Presence Index. *Análisis del Real Instituto Elcano* **2020**, *60*, 1–40. Available online: https://www.realinstitutoelcano.org/monografias/la-globalizacion-en-tiempos-de-pandemia/ (accessed on 1 August 2025).
32. Medushevskii, A.N. Global Constitutionalism: The Theory of the Global Legal Order or a New Political Ideology? *Hist. Prov.—Zurnal. Reg. Istor.* **2020**, *4*, 974–1019. [CrossRef]
33. Porak, L. Political Sovereignty in Tension with Global Capitalist Accumulation: The Case of the European Socio-Economic Strategy. *Crit. Policy Stud.* **2024**, *18*, 490–513. [CrossRef]
34. Anghel, S.E.; Immenkamp, B.; Lazarou, E.; Saulnier, J.L.; Wilson, A.B. *On the Path to "Strategic Autonomy": The EU in an Evolving Geopolitical Environment*; European Parliamentary Research Service: Brussels, Belgium, 2020.
35. Ketchen, D.J.; Craighead, C.W. Research at the Intersection of Entrepreneurship, Supply Chain Management, and Strategic Management: Opportunities Highlighted by COVID-19. *J. Manage* **2020**, *46*, 1330–1341. [CrossRef]
36. Palmieri, R.; Gasbarrone, R.; Fiore, L. Hyperspectral Imaging for Sustainable Waste Recycling. *Sustainability* **2023**, *15*, 7752. [CrossRef]
37. White, J. Constitutionalizing the EU in an Age of Emergencies. *JCMS J. Common Mark. Stud.* **2023**, *61*, 781–796. [CrossRef]
38. Gölgeci, I.; Gligor, D.M.; Bayraktar, E.; Delen, D. Reimagining Global Value Chains in the Face of Extreme Events and Contexts: Recent Insights and Future Research Opportunities. *J. Bus. Res.* **2023**, *160*, 113721. [CrossRef]
39. Mao, Y.L.; Shang, S.S.C. Developing a Green Ecosystem Service Platform for EU Environmental Regulations Using Design Science Research Methodology. In Proceedings of the 23rd IEEE/ACIS International Conference on Computer and Information Science, ICIS 2023, Wuxi, China, 23–25 June 2023; pp. 109–114. [CrossRef]
40. Consoli, D.; Costantini, V.; Paglialunga, E. We're in This Together: Sustainable Energy and Economic Competitiveness in the EU. *Res. Policy* **2023**, *52*, 104644. [CrossRef]
41. Siddi, M. European Energy Politics: The Green Transition and EU-Russia Energy Relations. In *European Energy Politics: The Green Transition and EU-Russia Energy Relations*; Edward Elgar Publishing Ltd.: Cheltenham, UK, 2023; pp. 1–153. [CrossRef]
42. Oberthür, S.; Dupont, C. The European Union's International Climate Leadership: Towards a Grand Climate Strategy? *J. Eur. Public Policy* **2021**, *28*, 1095–1114. [CrossRef]
43. Cuervo-Cazurra, A.; Doz, Y.; Gaur, A. Skepticism of Globalization and Global Strategy: Increasing Regulations and Countervailing Strategies. *Glob. Strategy J.* **2020**, *10*, 3–31. [CrossRef]
44. Fischer, J.A.V. Globalization and Political Trust, Munich Personal RePEc Archive. 2012. Available online: https://mpra.ub.uni-muenchen.de/37763/ (accessed on 1 August 2025).
45. Feng, Y.; Sabir, S.A.; Quddus, A.; Wang, J.; Abbas, S. Do the Grey Clouds of Geopolitical Risk and Political Globalization Exacerbate Environmental Degradation? Evidence from Resource-Rich Countries. *Resour. Policy* **2024**, *89*, 104533. [CrossRef]
46. Chiocchetti, P. A Quantitative Analysis of Legal Integration and Differentiation in the European Union, 1958–2020. *JCMS J. Common Mark. Stud.* **2023**, *61*, 1337–1359. [CrossRef]
47. Fisher, L.; Sandberg, A. A Safe Governance Space for Humanity: Necessary Conditions for the Governance of Global Catastrophic Risks. *Glob. Policy* **2022**, *13*, 792–807. [CrossRef] [PubMed]
48. Dupont, C.; Moore, B.; Boasson, E.L.; Gravey, V.; Jordan, A.; Kivimaa, P.; Kulovesi, K.; Kuzemko, C.; Oberthür, S.; Panchuk, D.; et al. Three Decades of EU Climate Policy: Racing toward Climate Neutrality? *Wiley Interdiscip. Rev. Clim. Change* **2024**, *15*, e863. [CrossRef]
49. Ilinca, D. Development of European Security and Defence Cooperation in Support of the European Union's External Action. Financial Sustainability and Institutional Convergence. *Bull. Carol I Natl. Def. Univ.* **2023**, *12*, 43–55. [CrossRef]
50. Blanchard, O.; Leandro, A.; Zettelmeyer, J.; Arnold, N.; Barkbu, B.; Barrett, P.; Beetsma, R.; Bénassy-Quéré, A.; Bergthaler, W.; Boone, L.; et al. Redesigning EU Fiscal Rules: From Rules to Standards. *Econ. Policy* **2021**, *36*, 195–236. [CrossRef]
51. de Wilde, P. Peace, Prosperity and Protection: Narratives of Integration and the 'Justification Jungle' of Europe's Public Spheres. *JCMS J. Common Mark. Stud.* **2023**, *61*, 1194–1210. [CrossRef]
52. Alcidi, C. Debt Sustainability in the Emerging New EU Fiscal Framework: A Major Change. *Econ. Voice* **2023**, *20*, 97–102. [CrossRef]

53. Larch, M.; Wanner, J. The Consequences of Non-Participation in the Paris Agreement. *Eur. Econ. Rev.* **2024**, *163*, 104699. [CrossRef]
54. Khedr, S.; Rehdanz, K.; Brouwer, R.; van Beukering, P.; Dijkstra, H.; Duijndam, S.; Okoli, I.C. Public Preferences for Marine Plastic Litter Management across Europe. *Ecol. Econ.* **2023**, *204*, 107609. [CrossRef]
55. Vavrik, U.A. EU Perspectives on Sustainable Development: Aligning the EU Budget to the UN SDGs by 2030. In *Current Global Practices of Corporate Social Responsibility*; CSR, Sustainability, Ethics and Governance; Springer: Cham, Switzerland, 2021; pp. 841–864. [CrossRef]
56. Jesic, J.; Okanovic, A.; Panic, A.A. Net Zero 2050 as an EU Priroty: Modeling a System for Efficient Investments in Eco Innovation for Climate Change Mitigation. *Energy Sustain. Soc.* **2021**, *11*, 50. [CrossRef]
57. Mazzucato, M. The Inclusive Entrepreneurial State: Collective Wealth Creation and Distribution. *Oxf. Open Econ.* **2024**, *3*, i1031–i1039. [CrossRef]
58. Spyromitros, E. Determinants of Green Innovation: The Role of Monetary Policy and Central Bank Characteristics. *Sustainability* **2023**, *15*, 7907. [CrossRef]
59. Landesmann, M.A.; Stöllinger, R. The European Union's Industrial Policy. In *The Oxford Handbook of Industrial Policy*; OUP Oxford: Oxford, UK, 2020; pp. 621–660. [CrossRef]
60. Dupont, C.; Be, C.D.; Rosamond, J.; Be Bishoy, J.R.; Zaki, L. Investigating the Scientific Knowledge–Policy Interface in EU Climate Policy. *Policy Polit.* **2024**, *52*, 88–107. [CrossRef]
61. Capasso, M.; Hansen, T.; Heiberg, J.; Klitkou, A.; Steen, M. Green Growth—A Synthesis of Scientific Findings. *Technol. Forecast. Soc. Change* **2019**, *146*, 390–402. [CrossRef]
62. Heldt, E.C.; Ríos Camacho, E.; Mueller, T. In Europe We Trust: Selecting and Empowering EU Institutions in Disruptive Circumstances. *J. Eur. Integr.* **2024**, *46*, 235–255. [CrossRef]
63. Börzel, T.A. Multilevel Governance or Multilevel Government? *Br. J. Politics Int. Relat.* **2020**, *22*, 776–783. [CrossRef]
64. Dobbs, M.; Gravey, V.; Petetin, L. Driving the European Green Deal in Turbulent Times. *Politics Gov.* **2021**, *9*, 316–326. [CrossRef]
65. Torney, D. Deliberative Mini-Publics and the European Green Deal in Turbulent Times: The Irish and French Climate Assemblies. *Politics Gov.* **2021**, *9*, 380–390. [CrossRef]
66. Zimmermann, A.; Albers, N.; Kenter, J.O. Deliberating Our Frames: How Members of Multi-Stakeholder Initiatives Use Shared Frames to Tackle Within-Frame Conflicts Over Sustainability Issues. *J. Bus. Ethics* **2022**, *178*, 757–782. [CrossRef]
67. Husarova, K. EU Open Strategic Autonomy Policy as a Trigger of Industrial Development and a Challenge for Regulatory Cooperation. *Her. Khmelnytskyi Natl. Univ. Econ. Sci.* **2023**, *322*, 338–345. [CrossRef]
68. Gehrke, T. EU Open Strategic Autonomy and the Trappings of Geoeconomics. *Eur. Foreign Aff. Rev.* **2022**, *27*, 61–78. [CrossRef]
69. Medeiros, E.; Valente, B. Assessing Impacts of Public Policies towards Environmental Sustainability in an EU Region: North of Portugal. *Eur. Plan. Stud.* **2024**, *32*, 410–429. [CrossRef]
70. McCann, P.; Soete, L. *Place-Based Innovation for Sustainability*; Publications Office of the European Union: Luxembourg, 2020.
71. Liuzzi, D.; Lupi, V.; Vié, A. Sustainability, Cooperation and Mobility of Workers within and between European Countries: A Two-Stage Goal Programming Model. *Ann. Oper. Res.* **2022**, *311*, 749–769. [CrossRef]
72. Bertoni, L. Sustainability as an External Relationship Strategy of the EU. *Lat. Am. J. Eur. Stud.* **2022**, *2*, 172–195. [CrossRef]
73. Herranz-Surrallés, A.; Solorio, I.; Fairbrass, J. Renegotiating Authority in the Energy Union: A Framework for Analysis. *J. Eur. Integr.* **2020**, *42*, 1–17. [CrossRef]
74. Gadamer, H.-G. *Truth and Method*, 1st ed.; Bloomsbury Publishing: London, UK, 2013; ISBN 9781780936000.
75. Wagenaar, H. Transforming Perspectives: The Critical Functions of Interpretive Policy Analysis. In *Handbook of Critical Policy Studies*; Edward Elgar Publishing Ltd.: Cheltenham, UK, 2015; pp. 422–440. [CrossRef]
76. Mayka, L. Bridging Positivist and Interpretative Approaches through Annotation for Transparent Inquiry. *PS Political Sci. Politics* **2021**, *54*, 479–482. [CrossRef]
77. Wiesner, C. Actors, Concepts, Controversies: The Conceptual Politics of European Integration. *Political Res. Exch.* **2023**, *5*, 2258173. [CrossRef]
78. Giacomini, G. Climate Justice as an Interpretative Approach. In *Indigenous Peoples and Climate Justice: A Critical Analysis of International Human Rights Law and Governance*; Giacomini, G., Ed.; Springer International Publishing: Cham, Switzerland, 2022; pp. 27–97, ISBN 978-3-031-09508-5.
79. European Conmission. *The European Green Deal*; European Conmission: Brussels, Belgium, 2019.
80. European Commission. *A New Circular Economy Action Plan*; European Conmission: Brussels, Belgium, 2020.
81. European Commission. *Critical Raw Materials Resilience: Charting a Path towards Greater Security and Sustainability*; European Conmission: Brussels, Belgium, 2020.
82. European Commission. *Updating the 2020 New Industrial Strategy: Building a Stronger Single Market for Europe's Recovery*; European Conmission: Brussels, Belgium, 2021.
83. European Commission. *Europe's Moment: Repair and Prepare for the Next Generation*; European Conmission: Brussels, Belgium, 2020.
84. European Commission. *Horizon Europe Strategic Plan 2021–2024*; European Conmission: Brussels, Belgium, 2021.

85. European Commission. *European Climate Pact*; European Conmission: Brussels, Belgium, 2020.
86. European Commission. *Proposal for a Regulation of the European Parliament and of the Council Establishing a Carbon Border Adjustment Mechanism*; European Conmission: Brussels, Belgium, 2021.
87. Putra, B.A. International Relations and the Concentric Hermeneutic Circle: Wendt's Constructivism and the Inevitability of Circular Interpretations. *Cogent Soc. Sci.* **2023**, *9*, 2272325. [CrossRef]