



Geopolitics, Sustainability, and the Future of Energy

The role of International Institutions and Private Enterprises



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Part 1

Introduction

International organizations play a critical role in shaping global governance by providing frameworks for cooperation and addressing transnational challenges. From climate change to public health, these organizations rely on legal authority, legitimacy, and the voluntary participation of states to fulfill their mandates. However, the tension between state sovereignty and multilateralism frequently tests their effectiveness, especially when powerful leaders prioritize national interests over collective goals.

This report examines the dual dimensions of international organizations: their legal foundations and their political dynamics. It highlights the theoretical underpinnings of their power, focusing on the interplay between functionalist assumptions and the realities of unilateral actions, such as Donald Trump's recent withdrawal of the United States from the World Health Organization. By exploring these dynamics, the report aims to understand the limitations and opportunities of international organizations in navigating the complexities of modern global governance.

1. Legal Doctrines: Attributed and implied powers

1.1. Attributed Powers: The explicit basis of competences

Attributed powers, also known as express powers, are those explicitly defined and enumerated in the founding treaties of an international organization. These powers constitute the legal framework within which organizations must operate, serving both as a guide and a limitation for their actions.

Key example: The United Nations Security Council (UNSC)

The UNSC, established by the United Nations Charter (1945), has attributed powers related to maintaining international peace and security. According to Chapter VII of the Charter, the UNSC is authorized to:

- Determine threats to peace (Article 39).
- Impose economic and diplomatic sanctions (Article 41).
- Authorize the use of military force (Article 42).

However, these powers are constrained by the veto rights of its five permanent members (China, the United States, France, Russia, and the United Kingdom), which has frequently led to paralysis in decision-making on key issues such as the Syrian conflict and the war in Ukraine (Hurd, 2011, p. 78). This limitation underscores how attributed powers, while explicit, can fall short when national interests override collective action.

Critical Analysis

While attributed powers provide clarity and predictability, they can also hinder effectiveness. The rigidity of these powers prevents international organizations from responding swiftly to emerging challenges, such as climate change or pandemics, which were not foreseen in the original treaties. This legal void highlights the importance of implied powers as a mechanism for flexibility and adaptation.

1.2. Implied Powers: The Necessary Expansion for Effectiveness

Implied powers derive from the principle that an international organization must have the capacity to take all necessary actions to achieve the objectives outlined in its founding treaty, even if such actions are not explicitly stated. This concept was first recognized in the International Court of Justice (ICJ) advisory opinion on reparations (1949).

Legal Basis

In the reparations case, the ICJ concluded that while the UN Charter did not explicitly grant the UN the ability to claim compensation on behalf of its staff, such a power was implied by its general mandate to promote international peace and security. This precedent established that implied powers are essential for the fulfillment of an organization's purpose.

Critical Analysis

Implied powers offer flexibility and adaptability, but they also generate tensions with member states, especially when these perceive the organization as overstepping its mandate. For instance, the International Monetary Fund (IMF) has been criticized for exceeding its remit by imposing austerity measures on debtor states, reflecting the challenges of balancing implied powers with national sovereignty (Hurd, 2011, p. 92).

1.3. Limitations of Attributed and Implied Powers

Both attributed and implied powers face significant limitations:

1. Dependence on State Cooperation

Implied powers rely on states' willingness to recognize and respect them. For example, the United States' withdrawal from the Paris Agreement (2017) weakened global climate efforts, illustrating how state non-cooperation can undermine implied powers.

2. Tensions with State Sovereignty

Implied powers often lead to conflicts when states perceive them as infringing on exclusive national competences. A notable case is the Greek debt crisis, where IMF-imposed austerity measures were viewed as an intrusion into national economic policy (Klabbers, 2024, p. 78).

3. Lack of Binding Enforcement Mechanisms

Many frameworks, such as the Paris Agreement, lack coercive enforcement tools, relying instead on voluntary commitments. This limitation undermines the ability of international organizations to ensure compliance (United Nations, 2015, Article 28).

1.4. Proposals to Strengthen Legal Frameworks

Given these limitations, structural reforms are necessary to enhance the effectiveness of legal doctrines in international organizations:

- **Clarity in Founding Treaties:** Revising and updating treaties to include explicit competences in emerging areas such as artificial intelligence and cybersecurity.
- **Binding Enforcement Mechanisms:** Developing systems that balance the flexibility of implied powers with tools for ensuring compliance.
- **Reducing State Dependence:** Encouraging partnerships with non-state actors, such as NGOs and private enterprises, to diversify support and reduce exclusive reliance on states.

2. Political Perspective: Legitimacy and Power in International Relations

2.1. Soft Power and Normative Influence

Constructivist theory emphasizes that norms established by international organizations shape the interests and behavior of states. Normative power allows organizations to influence global agendas, even in the absence of coercive mechanisms.

- Tensions in Global Governance

While normative influence is a key strength, it is also vulnerable to erosion when states challenge the legitimacy of these norms. For instance, the U.S. withdrawal from the WHO not only weakened global health initiatives but also questioned the organization's ability to uphold its normative authority in the face of unilateral decisions.

2.2. Power dynamics among actors

The relationship between international organizations and states is marked by a constant tension between agency and structure. While structures like treaties and institutional norms shape the behavior of states, individual leaders and states retain significant autonomy to challenge these frameworks.

Agency-Structure Framework:

- Agency: Leaders like Donald Trump act as agents who prioritize national sovereignty, often testing the limits of international organizations. His withdrawal from the WHO exemplifies how a single actor can disrupt global governance structures, forcing organizations to adapt to new political realities.
- Structure: Despite these disruptions, the resilience of international organizations lies in their ability to leverage institutional norms and the support of other actors to maintain their relevance. For example, the WHO continued its operations with increased backing from the EU and philanthropic organizations, demonstrating how structures can adapt to challenges posed by agency.

Broader Implications:

This dynamic interplay between agency and structure underscores the dual nature of international organizations as both constrained by and adaptive to the actions of states. Their legitimacy depends on their ability to balance these competing forces.

3. Comparison of Perspectives: Legal and Political

3.1. Complementarity: Legal Authority and Political Legitimacy

The effectiveness of international organizations is rooted in their dual nature: they are at once technical entities that derive their authority from legal frameworks and political actors that depend on legitimacy to operate in a fragmented international system. This complementarity between legal authority and political legitimacy underpins their ability to navigate global governance challenges.

Legal authority as a foundation

Legal authority ensures that international organizations operate within a structured, rules-based framework. Treaties, as binding agreements, provide organizations with clearly defined mandates, competencies, and responsibilities. For instance, the World Health Organization (WHO) was established under the Constitution of the WHO (1946), which outlines its mission to coordinate international health efforts, including combating pandemics and improving global health standards (WHO, 1946, Article 1).

This legal authority provides stability and predictability, allowing member states to trust the organization as a neutral actor. For example, the WHO's coordination during the 2014 Ebola outbreak in West Africa demonstrated how legal mandates enabled it to mobilize resources and guide member states in containing the epidemic (Gostin, 2014, p. 225).

Political Legitimacy: The Key to Cooperation

However, legal authority alone is insufficient. The legitimacy of an international organization stems from the trust and cooperation of its member states. Political legitimacy is particularly important in crises where compliance is voluntary or enforcement mechanisms are weak. For instance, during the COVID-19 pandemic, the WHO relied heavily on state cooperation to implement health measures and disseminate accurate information. While its legal framework enabled it to provide technical guidance, political legitimacy was essential for persuading states to align their national strategies with global recommendations (Gostin et al., 2020, p. 45).

The interaction between these two dimensions (legal authority and political legitimacy) creates a foundation for effective global governance. Legal frameworks provide the “rules of the game,” while legitimacy ensures states are willing to engage and comply.

3.2. Tensions and challenges: Bridging the gap

While complementarity is essential, tensions between legal authority and political legitimacy often arise, particularly in cases where political decisions undermine established legal frameworks. These tensions reveal the structural vulnerabilities of international organizations and highlight the need for mechanisms to reconcile these competing dimensions.

Case Study: U.S. Withdrawal from the WHO

The withdrawal of the United States from the WHO in 2020 under President Donald Trump illustrates how political decisions can undermine legal frameworks. The United States cited alleged inefficiencies in the WHO's pandemic response as the rationale for its withdrawal. However, this decision had profound implications for the organization's legitimacy and effectiveness.

- Impact on Legal Authority:

The WHO's authority, enshrined in its Constitution, depends on the collective support of its member states. The withdrawal of one of its largest financial contributors and a global health leader not only disrupted its operational capacity but also raised questions about its ability to fulfill its mandate. This highlights the fragility of legal authority when it lacks enforcement mechanisms to ensure compliance (Gostin et al., 2020, p. 47).

- Impact on Political Legitimacy:

The withdrawal damaged the WHO's credibility, as it was framed as failing to act as a neutral arbiter. This decision undermined trust in the organization, particularly among states skeptical of its capacity to navigate geopolitical pressures. The perception of political bias weakened the WHO's standing as a legitimate actor in global health governance (Hurd, 2011, p. 98).

Broader Implications: Sovereignty vs. Multilateralism

The U.S. withdrawal exemplifies the broader tension between state sovereignty and multilateralism. States often prioritize national interests over collective action, challenging the legitimacy of international organizations. For instance:

- In the context of the Paris Agreement, the United States' withdrawal in 2017 signaled a rejection of collective responsibility for climate change. This decision, while legally permissible under Article 28 of the agreement, undermined the normative influence of the framework and weakened global cooperation on climate policy (Klabbers, 2024, p. 89).

- Similarly, disputes within the World Trade Organization (WTO) regarding the Appellate Body's rulings highlight how states challenge legal decisions that conflict with national priorities, undermining the WTO's legal authority (Hurd, 2011, p. 102).

3.3. The Need for Stronger Mechanisms

To address the challenges arising from the interplay of legal authority and political legitimacy, international organizations must adopt reforms that strengthen their ability to bridge the gap between these dimensions.

Strengthening Political Legitimacy

1. Transparency and Accountability:

Transparency in decision-making processes can enhance trust among member states and the public. For example, the International Monetary Fund (IMF) has improved its legitimacy by publishing detailed reports on loan conditions and engaging with civil society actors (Klabbers, 2024, p. 112).

2. Inclusive Governance:

Expanding the participation of non-state actors, such as NGOs and private enterprises, can diversify support for international organizations. During the U.S. withdrawal from the WHO, philanthropic contributions from actors like the Bill & Melinda Gates Foundation helped stabilize funding, demonstrating the value of inclusive governance models (Gostin et al., 2020, p. 51).

Reinforcing Legal authority

1. Enforceable Commitments:

Legal frameworks must include enforcement mechanisms to ensure compliance. For instance, the lack of binding targets in the Paris Agreement has limited its effectiveness, as states can withdraw or fail to meet commitments without significant repercussions (United Nations, 2015, Article 28).

2. Flexibility to address emerging challenges:

Legal frameworks should allow organizations to adapt to new global challenges, such as artificial intelligence and cybersecurity. The European Union's use of implied powers in climate policy illustrates how flexibility can enable organizations to remain relevant (Klabbers, 2024, p. 115).

Conclusion

The relationship between legal authority and political legitimacy is central to the effectiveness of international organizations. While legal frameworks provide a foundation for rules-based governance, political legitimacy ensures the trust and cooperation necessary for implementation. However, as demonstrated by cases such as the U.S. withdrawal from the WHO and the Paris Agreement, tensions between these dimensions can undermine organizational effectiveness. Addressing these challenges requires reforms that enhance transparency, inclusivity, and enforceability, ensuring that international organizations remain resilient and capable of addressing global challenges in an increasingly polarized world.

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Part 2

Introduction

The decision of the United States to withdraw from the Paris Agreement in 2025 under President Donald Trump represents a significant turning point in global climate governance. As one of the world's largest emitters of greenhouse gases, the U.S. departure poses a challenge to the effectiveness of multilateral frameworks designed to combat climate change and advance renewable energy initiatives (Hurd, 2011, p. 78).

This case study analyzes the implications of this decision for international organizations, states, and private enterprises. While the withdrawal underscores the sovereignty of individual nations and the importance of strong leadership, it also raises critical questions about the collective responsibility to address climate change and the future of sustainable energy transitions (Klabbers, 2024, p. 45).

From the perspective of the agency-structure framework, this decision highlights the tension between the autonomy of actors like Trump and the structural expectations of international frameworks. By acting as an agent prioritizing national sovereignty, Trump challenged the normative authority of the Paris Agreement, testing the resilience of multilateral efforts to address global challenges.

Drawing on concepts such as green liberalism and the role of private actors, this section explores how global responses to the withdrawal highlight the resilience of multilateral efforts, the growing influence of private enterprises, and the urgent need for diversified and sustainable energy sources such as green hydrogen. By focusing on these dynamics, the study aims to bridge the gap between political sovereignty and collective action in addressing one of the most pressing global challenges of our time.

1. Impact on International Organizations

The withdrawal of the United States from the Paris Agreement in 2025 under Donald Trump posed significant challenges for international organizations, particularly in terms of legitimacy, legal frameworks, and the broader goals of multilateral cooperation.

1.1. Loss of Legitimacy

International organizations like the U.N. Framework Convention on Climate Change (UNFCCC) rely heavily on the perception of legitimacy to maintain global cooperation. The departure of a key player such as the United States weakens this legitimacy, as it sends a message that the framework lacks sufficient incentives or authority to retain its most influential members (Hurd, 2011, p. 78).

- Example: The Paris Agreement operates on voluntary commitments rather than legally binding targets. This flexibility was initially seen as a strength, enabling broad participation, but the withdrawal of the U.S. highlights how such voluntary mechanisms are vulnerable to shifts in political leadership (Klabbers, 2024, p. 45).

1.2. Legal Challenges

The legal framework of the Paris Agreement underscores the limitations of international law in enforcing compliance. Article 28 of the agreement allows signatories to withdraw after three years, followed by a one-year waiting period, demonstrating a structural weakness that prioritizes state sovereignty over collective action (United Nations, 1945).

- Case Analysis: While the United States acted within its legal rights to withdraw, this decision exposes the need for stronger enforcement mechanisms or incentives to ensure long-term commitment. Without such mechanisms, international organizations struggle to sustain momentum in addressing global challenges like climate change (Hurd, 2011, p. 92).

1.3. Resilience of Multilateral Frameworks

Despite the setbacks, the Paris Agreement and the UNFCCC have demonstrated resilience by continuing to push for global climate action. The leadership vacuum left by the United States has been partially filled by other actors, such as the European Union and China, which have reaffirmed their commitments and taken steps to strengthen international cooperation.

- Example: The European Green Deal represents a direct response to climate challenges, positioning the EU as a global leader in sustainability and renewable energy. Similarly, China's investments in green technology signal a shift toward a more diversified leadership in global climate governance (Klabbers, 2024, p. 78).

2. Role of other actors

While the withdrawal of the United States from the Paris Agreement posed significant challenges to global climate governance, it also underscored the critical role of other actors (states, non-governmental organizations (NGOs), and private enterprises) in sustaining multilateral efforts and driving the transition to renewable energy.

2.1. States

The leadership void left by the U.S. was swiftly addressed by other major actors, particularly the European Union and China, which stepped up their commitments to the Paris Agreement and renewable energy.

- European Union (EU):

The EU has reinforced its leadership in climate policy through ambitious frameworks like the European Green Deal, which aims to achieve carbon neutrality by 2050. By positioning itself as a global leader, the EU demonstrates how regional alliances can counterbalance the absence of a major player (Klabbers, 2024, p. 67).

- Example: The EU's investment in green hydrogen infrastructure highlights its dedication to innovation and sustainability, ensuring progress in renewable energy despite geopolitical challenges (Klabbers, 2024, p. 78).

- China:

As the world's largest emitter, China's active participation in the Paris Agreement and investments in green technology signal its intent to lead global climate efforts. Through initiatives like the Belt and Road Initiative, China has begun integrating renewable energy projects into its international collaborations, shifting the narrative toward sustainability (Hurd, 2011, p. 45).

2.2. Non-Governmental Organizations (NGOs)

NGOs play a vital role in maintaining pressure on governments and raising public awareness about climate change, ensuring that global climate goals remain a priority even amid political instability.

- Greenpeace and Activist Movements:

Organizations like Greenpeace continue to advocate for stronger climate policies and hold governments accountable. Similarly, youth-led movements inspired by activists like G. Thunberg amplify the urgency of climate action, mobilizing public opinion to counteract political setbacks (Hurd, 2011, p. 78).

- Climate Litigation:

NGOs have increasingly used legal channels to hold states and corporations accountable for their environmental impact. For instance, climate lawsuits filed against governments highlight the growing role of civil society in enforcing global commitments (Klabbers, 2024, p. 92).

2.3. Private Enterprises

Private companies are critical drivers of innovation and investment in renewable energy, often advancing climate goals independently of government actions. The withdrawal of the U.S from the Paris Agreement has further highlighted the importance of private initiatives in bridging the gaps left by political decisions.

- Quantum Dimension as a Case Study:

Quantum Dimension exemplifies the role of private enterprises in fostering sustainability. By connecting European companies with opportunities in Latin America, particularly in green hydrogen projects, the company contributes to the development of sustainable business and strengthens global cooperation in renewable energy.

- Impact: Such initiatives demonstrate how private actors can sustain momentum in renewable energy transitions, even when political leadership falters.

- Corporate Commitments:

Major corporations like Google, Apple, and Tesla have made significant strides in reducing their carbon footprints and investing in renewable energy. Their efforts reinforce the idea that the private sector can lead by example, inspiring both governments and other businesses (Klabbers, 2024, p. 67).

2.4. Reflection

The withdrawal of the U.S. from the Paris Agreement underscores the interdependence of states, NGOs, and private enterprises in addressing climate change. While states provide the frameworks for cooperation, NGOs ensure accountability, and private enterprises drive innovation. Together, these actors demonstrate that multilateral efforts can persist and evolve, even in the face of unilateral actions by powerful states.

3. Implications for Global Climate and Energy Policy

The United States' withdrawal from the Paris Agreement not only disrupted global climate governance but also highlighted critical challenges and opportunities for advancing renewable energy and addressing climate inequalities.

3.1. Diversification of Energy Sources

The withdrawal of a major global emitter such as the U.S underscores the need for regions like Europe to reduce dependency on fossil fuels and accelerate the transition to renewable energy.

- The Role of Green Hydrogen:

As emphasized in Paulina Santoro's policy brief, green hydrogen emerges as a key pillar in the diversification of energy sources. The EU's investment in green hydrogen technologies and infrastructure not only mitigates reliance on traditional energy but also positions Europe as a global leader in sustainable energy innovation (Santoro, 2025).

- Quantum Dimension's Contribution:

Companies like Quantum Dimension play a crucial role in facilitating partnerships between Europe and Latin America, enabling the development of sustainable business and advancing the global energy transition.

- Global Trends:

China's leadership in solar and wind energy, alongside private sector innovations, demonstrates how investment in renewable energy can drive both economic growth and environmental sustainability, filling the leadership void left by the U.S. (Hurd, 2011, p. 78).

3.2. Environmental Inequalities

The decision to withdraw from the Paris Agreement exacerbates existing environmental inequalities, disproportionately affecting vulnerable populations in the Global South.

- Key Insights from Environmental Economics:

According to the lecture on environmental inequalities, developed nations like the United States contribute the most to climate change but often evade its worst consequences. Meanwhile, developing countries face the brunt of climate-related disasters despite their minimal contributions to global emissions (Lecture 12: Environmental Inequalities, 2025).

3.3. The Future of Climate Leadership

The withdrawal of the United States also raises important questions about who will lead global climate efforts and how multilateral frameworks can remain resilient.

- European Union as a Climate Leader:

The EU has taken bold steps to fill the leadership void, with initiatives such as the European Green Deal and a strong focus on international partnerships in renewable energy. These actions demonstrate the capacity of regional organizations to advance global climate goals even in the absence of traditional leaders (Klabbers, 2024, p. 67).

- Private Sector Leadership:

The role of private enterprises, particularly those committed to sustainability, becomes increasingly significant. Quantum Dimension, alongside global corporations like Tesla and Microsoft, exemplifies how businesses can drive innovation and promote renewable energy initiatives independently of government policies (Santoro, 2025).

- Rebuilding Trust in Multilateralism:

For international frameworks to regain trust and effectiveness, stronger incentives and accountability mechanisms are needed to ensure long-term commitment from all members (Hurd, 2011, p. 45).

3.4. Reflection

The United States' withdrawal from the Paris Agreement serves as a wake-up call for the global community, emphasizing the need for stronger, more resilient frameworks that balance state sovereignty with collective responsibility. By diversifying energy sources, addressing environmental inequalities, and fostering leadership among states and private actors, the international community can continue to advance climate goals despite significant challenges (Klabbers, 2024, p. 78).

Conclusion

Donald Trump's decision to withdraw the United States reflects the tension between agency and structure, highlighting how strong leadership can prioritize sovereignty and national interests over collective frameworks. While such decisions underscore the value of strong and decisive leaders, they also reveal the challenges multilateral frameworks face when individual actors prioritize unilateral action over global cooperation.

Despite these setbacks, the resilience of international organizations, coupled with the proactive role of other states, NGOs, and private enterprises, offers hope for continued progress. The European Union, for example, has emerged as a leader in sustainability initiatives, while private companies exemplify how innovation and international partnerships can sustain momentum in the renewable energy transition. Furthermore, the emphasis on diversifying energy sources, particularly through green hydrogen, demonstrates how global efforts can adapt and evolve even in the face of political challenges.

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