

The Transformative Power of the Energy Transition in the EU

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Examining the profound impact of energy transformation on European Union law, governance, and integration processes



Reversing the Lens: How Energy Transition Reshapes EU Law

The EU energy landscape has undergone profound transformations, driven by market liberalization, social shifts, and ambitious climate goals towards carbon neutrality. While EU law has been instrumental in promoting renewable energy, efficiency, and climate mitigation, an underexplored question emerges:

To what extent has the energy transition fundamentally reshaped the very conception of EU law itself?



Research Hypothesis

In responding to the challenges of the energy transition, law—and EU law in particular—has also undergone significant transformations, revealing the **inherent transformative power of the energy transition over law itself.**



Key Research Questions

EU Law Principles

How does the energy transition reshape fundamental principles governing European integration?

Integration Dynamics

How do sustainability goals influence the trajectory of European integration?

Decision-Making Processes

What institutional transformations emerge from energy transition imperatives?

Power Balance

What shifts in authority distribution result from energy transformation?

I. Transforming EU Law Principles

Principle of Solidarity

Article 194 TFEU: "Union policy on energy shall aim, in a spirit of solidarity between Member States..."

ECJ, 15 July 2021, OPAL Case: "the principle of solidarity entails rights and obligations both for the European Union and for the Member States... bound by an obligation of solidarity between themselves and with regard to the common interest of the European Union" (para. 49)

Hypothesis: Energy sector transformations have facilitated recognition of solidarity's binding legal effect.



Principle of Subsidiarity

Article 194 TFEU mandates Union action to "ensure the functioning of the energy market; ensure security of energy supply; promote energy efficiency and renewable forms of energy; and promote the interconnection of energy networks"

These objectives are **inherently transnational**. Climate change demands coordinated solutions transcending national boundaries, positioning the EU as the presumptively superior regulatory entity.

⚠ **Hypothesis:** The energy transition provokes a fundamental reversal in the application of the principle of subsidiarity



II. Transforming Decision-Making Processes

Energy transition imperatives are reshaping traditional EU decision-making mechanisms, introducing new forms of coordination and requiring enhanced institutional flexibility.

⚠ Hypothesis: The energy transition has reoriented decision-making processes from hierarchical (top-down) structures toward more decentralized (bottom-up) modalities



Key examples of evolving decision-making methods:

- **Regulation 2018/1999 on the Governance of the Energy Union and Climate Action:** Introduced *Integrated National Energy and Climate Plans* (NECPs).
- **Paris Agreement:** Introduced *Nationally Determined Contributions* (NDCs).
- **French Climate and Resilience Act (2021):** Introduced *locally determined contributions* toward national renewable energy targets.

III. Transforming Integration Dynamics

Climate Neutrality as a *Meta-Objective* of the European Integration Process?

Regulation 2021/1119 – European Climate Law establishes a binding objective of climate neutrality by 2050, requiring alignment of all EU actions with climate goals.

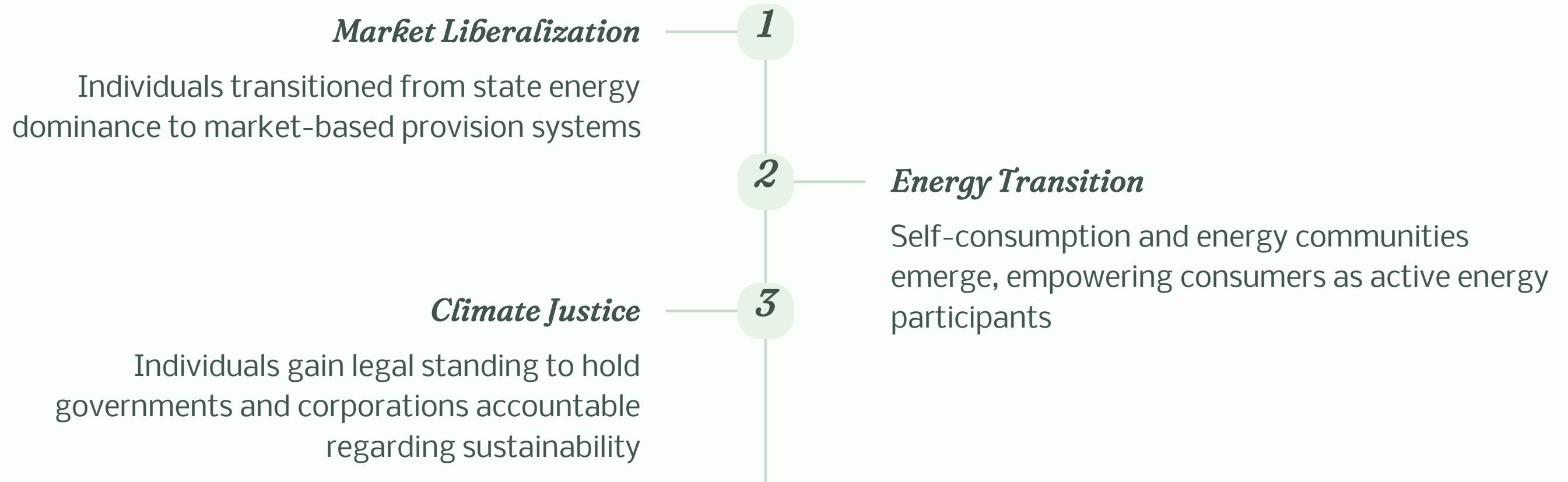
Strategic Autonomy as an *Implicit Objective* of the European Integration Process?

Strategic Autonomy has sporadically emerged from the EU's Institution discourses. It tends to provide coherence and direction to the variety of objectives underpinning of the energy transition.



IV. Transforming Power Balance

Evolving Individual-Energy Relationships



② **Hypothesis:** Exploring Rifkin's theory of the *lateralization of power* in energy transformation

Rifkin's Industrial Revolutions: Reshaping Power

Jeremy Rifkin argues that major industrial revolutions are driven by the simultaneous transformation of energy usage and communication methods, leading to fundamental shifts in political power structures.



First Industrial Revolution: Knowledge & Access

Steam Power + Printing Press: Mass information dissemination broadened participation and access to knowledge.



Second Industrial Revolution: Verticalized Power

Combustion Engine/Electricity + Telephony: Led to increased state intervention and a hierarchical, state-centered power structure.



Third Industrial Revolution: Lateral Power

Internet + Renewables: Promotes local decision-making, polycentric approaches, and a departure from siloed logic.

This shift towards *lateral power* aligns with the EU's energy transition, encouraging inclusive decision-making and citizen participation, challenging traditional hierarchical models.

Future Research Directions

The energy transition is not just a technical shift; it profoundly reshapes EU law itself, driving a fundamental co-evolution between legal frameworks and societal change.

International Law

Do global regimes like the Paris Agreement show similar reconfigurations of legal principles and power relations?

EU Law: Evolution or Revolution

Are current developments mere adaptations, or do they signal a genuine revolution in the European legal order?

Legal Theory

Is this a deeper "transition of law itself," reorienting systems to global and systemic transformations?

Thank you

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