

To what extent is energy policy harmonisation across the EU key to energy transition in the region?

Introduction

As the EU accelerates renewable energy deployment and tightens decarbonisation targets, policy harmonisation is a contested approach, seen by some as essential for coordination and investment, yet by others as a constraint on national flexibility and innovation.

This study examines how harmonisation influences three critical aspects of energy transition: the economic and political trade-offs between competitiveness and climate ambition, the regulatory dynamics affecting renewable deployment, and the technical coordination requirements for integrating variable renewable generation.

With decarbonisation pressures intensifying and member states navigate conflicting imperatives around energy security, affordability, and sustainability, determining where energy policy harmonisation helps and where it hinders becomes increasingly crucial for policy design.

Methodology

Data collection: Taking a qualitative approach, this research used 30–45-minute semi-structured interviews to explore how energy policy harmonisation affects the EU's energy transition.

Sampling strategy: 16 semi structured interviews were conducted both in-person and virtually with private and public stakeholders across Brussels, Germany and France.

Data analysis: Interview transcripts were analysed thematically, categorising stakeholder perspectives into key themes while triangulating findings with policy documents and literature to enhance validity.

Mitigating limitations: despite a small sample size, our open-ended standardised interview guide, sensitive insights from stakeholders and triangulation with academic literature enhanced the credibility and validity of this research.

Results and Discussions

Finding 1: achieving economic competitiveness vs addressing climate action and flexibility.

Policy harmonization reduces transition costs: Aligning carbon taxes, subsidies, and emissions trading across EU states helps make low-carbon technologies and renewable energy systems more economically viable.

Prevents short-term competition from undermining climate goals: Shared frameworks and cross-border cooperation avoid a "race to the bottom," ensuring member states balance economic competitiveness with climate ambition.

Finding 2: Bureaucratic barriers hinder renewable deployment.

Bureaucratic complexity slows renewable deployment: While policy harmonisation reduces legislative uncertainty, it increases administrative burdens and lengthy approval processes, delaying investment and implementation of renewable energy projects.

Stakeholder influence creates a policy-implementation gap: Corporate lobbying and geopolitical pressures shift EU priorities toward short-term energy security, allowing continued reliance on fossil fuels and hindering the consistent deployment of renewables.

Impact to harmonisation: harmonised policies often fail to translate into actionable renewable deployment, reducing the practical benefits of EU-wide coordination.

Finding 3: essential infrastructure required for renewable integration

Grid Restructuring Needed: Current harmonization mechanisms cannot fully support the grid changes required for integrating variable renewables, creating coordination challenges.

Market Fragmentation: Divergent market rules across EU states prevent effective cross-border balancing and capital allocation for renewable energy systems.

Implementation Gaps: Existing technical standards exist on paper but are hindered by administrative delays and limited infrastructure, reducing their practical impact on renewable integration.

Our central finding was that energy policy harmonization is crucial for the EU's energy transition, but its effectiveness depends on balancing economic, regulatory, and technical considerations to ensure practical, cross-border deployment of renewables.

Conclusion

- Harmonization is key to balancing economic competitiveness with climate ambition through aligned taxes, subsidies, and emissions trading.
- Regulatory frameworks must balance inclusivity and efficiency, avoiding excessive bureaucracy that slows renewable deployment.
- Coordinated infrastructure including grid standards, interconnections, and market rules are essential for effective integration of renewables.

