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The Legal Interpretation of Solidarity in International Energy Relations

Doctoral Thesis

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Abstract

In this dissertation, the principle of solidarity is examined within the realm of international energy relations, an investigation necessitated by the increasing global dependence on energy imports and a shifting focus towards energy security. Solidarity, as a concept, is progressively capturing legislative attention, prompting a comprehensive understanding of its implications and potential in this critical domain.

Chapter one embarks on a robust exploration of the principle of solidarity within international law, extending its applicability to international energy law. This foundational chapter illuminates the intricacies of the principle, providing a theoretical bedrock for the ensuing analysis.

The second chapter investigates the legal intricacies of energy policy within the European Union, delving into its ramifications for solidarity among Member States. This exploration elucidates the integral role of solidarity within the European Union's energy paradigm, underpinning the discourse of mutual reliance and support.

The Nord Stream 2 project's inherent conflict takes centre stage in the third chapter, in which its implications are analysed through the lens of the principle of solidarity. Further, the Gazprom-Ukraine conflict and its impacts on Europe's energy security provide a real-world context, enabling a practical understanding of the principle's application.

Chapter four elucidates the prospective role of the principle of solidarity in shaping the trajectory of international energy relations, particularly focusing on innovative strategies for energy crisis management and energy security enhancement.

The fifth chapter underscores the surging importance of renewable energies and discusses the associated challenges of the energy transition within the context of solidarity. This section advocates for the infusion of the solidarity principle into the blueprint of energy policies targeting sustainability and renewable energy sources.

The dissertation concludes with several overarching deductions. Firstly, the principle of solidarity plays an indispensable role in international energy law, with effective implementation being vital for ensuring energy security and managing the energy transition. Secondly, it argues that the concept of energy solidarity should be interpreted dynamically, considering individual interests and the context of time. Thirdly, in EU law, there exists an inherent duty of care for Member States to conscientiously consider the substantial interests of other EU Member States, their competitors, and consumers in their energy policy decisions. Lastly, at the international level, energy solidarity subtly infuses itself in the form of energy cooperation, incorporating the interests of all participants and striving to reinforce shared energy security. Thus, the study underscores the necessity of embedding the principle of solidarity within the fabric of energy policies at both regional and international levels.

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List of Abbreviations

Art.	Article
BITs	bilateral investment treaties
BNetzA	Bundesnetzagentur
BRI	Belt and Road Initiative
CSDP	Common Security and Defence Policy
DNV GL	Det Norske Veritas Germanischer Lloyd
ECJ	European Court of Justice
ECSC	European Coal and Steel Community
ECT	Energy Charter Treaty
EEC	European Economic Community
ENGIE	Energy Management Holding Switzerland AG
et al.	et alii
EU	European Union
EU Commission	European Commission
EU Council	European Council
EU Parliament	European Parliament
EUGAL	Europäische Gasanbindungsleitung
EURATOM Community	European Atomic Energy Community
EnWG	Energiewirtschaftsgesetz
FRES	Framework Regulation for Energy Solidarity
GATT	General Agreement on Tariffs and Trade
ICSID	International Center for Investment Dispute Settlement
ICJ	International Court of Justice
ICJ Statute	Statute of the International Court of Justice
IEA	International Energy Agency
IRENA	International Renewable Energy Agency
IWW	Industrial Workers of the World
NATO	North Atlantic Treaty Organization
lit.	litera
MFN	Most Favored Nation
NDAA	National Defense Authorization Act
NEL	Norddeutsche Erdgas-Leitung
OPAL	Ostsee-Pipeline-Anbindungsleitung
p.	page
para.	paragraph
paras.	paragraphs
PEESA	Protecting Europe's Energy Security Act
PEESCA	Protecting Europe's Energy Security Clarification Act
PGNiG	Polskie Górnictwo Naftowe i Gazownictwo
PJSC Gazprom	Public Joint Stock Company Gazprom
pp.	pages
PPPs	public-private partnerships
Q.	Question
Sec.	Section
TEU	Treaty on the European Union
TFEU	Treaty on the Functioning of the European Union
UAW	United Automobile Workers
UGTS	Ukrainian Gas Transmission System
UNCLOS	United Nations Convention on the Law of the Sea

UNDP
UNFCCC
Vienna Convention
Wintershall
WTO

United Nations Development Programme
United Nations Framework Convention on Climate Change
Vienna Convention on the Law of Treaties
Wintershall Nederland Transport and Trading B.V.
World Trade Organization

Introduction

In the dynamic and evolving landscape of global energy relations, the concept of energy solidarity has surged to prominence, resonating within policy discussions, legal systems, and academic debates.¹ This timely and relevant principle arises from the tangled nexus of international energy relations, balancing a multitude of economic, environmental, and geopolitical considerations.² The Paris Climate Agreement³ stands as a testament to the growing significance of energy solidarity in our intricately connected world.⁴

Energy solidarity, with its call for equitable resource distribution and mutual responsibility, offers a vital guiding beacon in the complex choreography of energy production, consumption, and transportation that surpasses national boundaries.⁵ Confronted with the challenges of climate change and energy security, energy solidarity shifts from an ideological construct to a practical instrument of European policy and legal actions.⁶

Yet, despite its rising importance and acknowledgment, a definitive and universally accepted interpretation of energy solidarity remains elusive.⁷ This principle, while openly invoked in legal scenarios such as in case *OPAL (C-848/19 P)*⁸ adjudicated by the European Court of Justice (ECJ), and subtly interwoven within Article 6 of the Paris Agreement⁹, is characterized by a certain obscurity and inconsistency in its definition and application.¹⁰ This shortfall could lead to interpretive disparities, potentially giving rise to legal complexities and disruptions in international energy relations.

¹ Goldthau & Sovacool, 2012, pp. 232-233; Andoura, 2013, pp. 1-2.

² Tomaszewski, 2018, p. 7; LaBelle, 2023, pp. 9-10.

³ UNFCCC, 2015, p. 1.

⁴ UNFCCC, 2015, p. 3; Andoura, 2013, p. 18.

⁵ Andoura, 2013, p. 18; Tomaszewski, 2018, p. 10.

⁶ ECJ, 2021, paras. 32-33.

⁷ Tomaszewski, 2018, p. 7; Banet, 2023, p. 20.

⁸ ECJ, 2021, para. 1.

⁹ UNFCCC, 2015, p. 3.

¹⁰ Tomaszewski, 2018, p. 10; Banet, 2023, p. 13.

1. Research Objective

The primary objective of this research is to thoroughly explore and define the concept of energy solidarity in the context of international energy relations. This is undertaken by dissecting the term's etymology, tracing its historical development, understanding its theoretical underpinnings, and investigating its legal implications across different judicial systems. The research further aims to critically analyze the principle's role within the international legal and policy frameworks, seeking to comprehend its application and impact in shaping international energy relations.

Given the ambiguity and inconsistencies surrounding the interpretation of energy solidarity, the research sets out to provide a coherent and comprehensive definition that aligns with the complexities of modern energy dynamics. To achieve this, the research incorporates interdisciplinary perspectives and employs a variety of legal methods, from analytical and normative to comparative, that deepen our understanding of this complex principle.

In congruence with the results obtained, the ultimate goal of this research is to present an operational understanding of energy solidarity, enabling its effective utilization in the formulation and implementation of international energy law and policy. By doing so, the research aspires to contribute constructively to the discourse on international energy relations and guide future academic inquiries and policy initiatives in this vital sphere.

2 Theoretical Framework

This dissertation's theoretical framework draws upon a myriad of academic fields, including international relations, political science, law, and energy studies, to explore and define the concept of energy solidarity. It integrates theories of international law and diplomacy, political philosophy, and energy policy to analyze the evolution and impact of energy solidarity in international energy relations.

At its core, the theoretical framework acknowledges the intertwined nature of energy, politics, and law, and emphasizes the role of energy solidarity in this complex triad. It assumes that energy solidarity is not just a standalone principle, but a multi-faceted concept that intersects various aspects of international relations, from policy and law to trade and environment.

The theoretical framework is designed to progressively build on the understanding of energy solidarity. It starts with the etymological analysis and historical evolution of the term, moves to its theoretical underpinnings in political and legal thought, and further expands to its practical implications in contemporary international energy relations.

The framework ultimately aims to contextualize the principle of energy solidarity within international energy law and policy, offering a comprehensive perspective that aligns with the research findings. It thereby contributes to the holistic understanding of energy solidarity and its function in fostering sustainable, equitable, and secure global energy dynamics.

2.1 Defining Constructs: Solidarity, International Energy Relations, and Legal Interpretation

In the comprehensive structure of this dissertation, three primary constructs - solidarity, international energy relations, and legal interpretation - serve as crucial elements that shape the discourse.

Solidarity is a concept deeply rooted in social theory and political philosophy, traditionally signifying unity and mutual support within a group or community.¹¹ In the context of international energy relations, it represents an imperative for shared responsibility, equitable resource distribution, and harmonious cooperation among nations.¹²

¹¹ Andoura, 2013, p. 18; Nicoli, Burgoon, & van der Duin, 2023.

¹² Andoura, 2013, p. 31; Ryś, 2022, p. 157.

International energy relations embody the complex network of global energy dynamics, which span across production, transportation, and consumption of energy resources.¹³ The study dissects these relations, both from an economic and geopolitical perspective, to understand the integral role energy solidarity plays in ensuring stability, security, and sustainability within this network.

Legal interpretation refers to the process of determining the meaning and application of legal principles, including energy solidarity, within international law. The research investigates the varying interpretations of energy solidarity, highlighting how these variations can influence policy decisions, legal judgments, and ultimately, the dynamics of international energy relations.

These constructs serve as the conceptual scaffolding of this research. Their interplay forms the crux of the examination into the principle of energy solidarity, illuminating its role in international energy law and policy, and the potential it holds for fostering a more equitable and sustainable global energy landscape. The theoretical framing of these terms, thus, closely corresponds with the findings and conclusions of this dissertation.

2.2 Conceptual Insights on Solidarity in Global Energy Dynamics

This segment of the research delves into the theoretical underpinnings of the principle of solidarity as it emerges in international energy relations. Pulling from a diverse range of perspectives in political philosophy, sociology, and legal theory, it aims to offer a nuanced comprehension of this principle's role in molding the contours of global energy dynamics.

The concept of solidarity is examined from an array of theoretical vantage points, including its conceptualization as a moral, social, and legal obligation.¹⁴ Additionally, its role as a guiding principle in energy policies, treaties, and disputes is assessed.¹⁵ The theoretical perspectives on solidarity further untangle its importance in navigating the complexities and

¹³ Misiągiewicz, 2022, p. 8.

¹⁴ Thome, 1999, p. 102; Huhta & Reins, 2023, p. 1.

¹⁵ Huhta & Reins, 2023, p. 1.

tensions inherent in international energy relations, such as issues pertaining to energy security, fairness in resource distribution, and environmental sustainability.

These theoretical insights into the notion of solidarity provide a critical lens through which the findings throughout the dissertation are interpreted and analyzed. By establishing the theoretical foundations of solidarity in the context of international energy relations, this section paves the way for an in-depth exploration of how the principle is understood, applied, and potentially redefined in international energy law and policy.

3 Methodological Approach

This dissertation applies a meticulously designed methodological approach to examine the complex implications of solidarity in international energy relations. The objective is to elucidate the significance, implementation, and interpretation of energy solidarity within the wider context of global energy dynamics.

The adopted approach integrates an interdisciplinary perspective with a variety of methodological techniques to foster a detailed and nuanced understanding of energy solidarity. This methodology is rooted in a blend of analytical, normative, and, to some extent, comparative research methods, which also encompass relevant political, economic, and societal aspects.¹⁶ This comprehensive approach allows for an in-depth exploration and interpretation of the principle of solidarity within legal frameworks and its wider implications.

An exhaustive examination of current legal frameworks, international agreements and academic works is conducted. These methods are harnessed to dissect the intricate nature of international energy relations and the role energy solidarity occupies within this landscape.

¹⁶ Hart, 1961, p. 86

This methodological strategy undergirds not only the analysis, but it also molds the discussions, enabling the presentation of a well-founded perspective on energy solidarity that aligns with the research goals and enriches the broader academic discourse.

Furthermore, the dissertation engages with expert theories and insights from key stakeholders and legal scholars. Their perspectives on the legal interpretation of solidarity in the context of international energy relations are considered, providing a qualitative approach that captures nuanced, context-specific insights and thereby strengthens the overall analysis.

3.1 Implementing Analytical and Normative Legal Approaches

This dissertation fundamentally relies on the synergistic application of analytical and normative legal research methodologies. Together, they form a robust framework that fosters not only a comprehensive understanding of the principle of energy solidarity but also encourages thoughtful critique, aligning with the ultimate findings and insights of the study.

The analytical approach serves as a tool to disentangle and highlight the legal aspects of solidarity, especially within the scope of international energy relations. It encompasses a thorough examination of legal texts, international agreements, and significant court cases, to clarify the role and interpretation of energy solidarity within existing legal contexts.¹⁷

Simultaneously, the normative legal methodology propels the research beyond mere understanding. It instigates a critical evaluation of the existing definition of energy solidarity. This methodology goes beyond simple assessment to propose how the principle of solidarity could, or indeed should, be applied within the framework of international energy law.¹⁸

¹⁷ Bodenheimer, 1956, pp. 1080-1083.

¹⁸ Christie, 1987, p. 157.

By combining these methodologies, the research is grounded in comprehensive legal analysis and driven by insightful critique. This ensures a seamless correlation with the final insights presented in the conclusion of this dissertation.

3.2 Systematic and Teleological Interpretation

This dissertation utilises systematic and teleological interpretation techniques, integral to yielding an in-depth understanding of the principle of energy solidarity, and ensuring coherence with the ultimate findings of this study.

A systematic interpretation is employed as a tool to scrutinise the principle of energy solidarity within the comprehensive structure of international law. It facilitates an evaluation of how this principle is interwoven with broader legal frameworks, through an analysis of various treaties, legal texts, and judicial precedents in light of their overall context and objectives.¹⁹

Simultaneously, a teleological interpretation is leveraged to extend the inquiry beyond the immediate legal text.²⁰ It enables the study to unearth the underlying objectives and aspirations encapsulated within the principle of energy solidarity, aligning its legal manifestations with the larger societal and policy goals they aim to serve.

The harmonious application of these interpretive techniques ensures a well-rounded understanding of the concept of energy solidarity. It empowers the study to critically examine its application and interpretation within the sphere of international energy law, thereby laying a solid foundation for the final conclusions and recommendations of the research.

¹⁹ Endicott, 2011, p. 20.

²⁰ Endicott, 2011, p. 10.

3.3 Integration of Interdisciplinary Perspectives

The integration of interdisciplinary perspectives is a key aspect of this dissertation. The amalgamation of insights from fields such as international law, energy policy, geopolitics, and environmental studies provides a broad, multifaceted view of energy solidarity. This method allows for an in-depth analysis that not only explains the concept within the framework of international law but also understands its implications on a global scale. It aligns with the ultimate findings of the research, further bolstering the practicality and validity of the results.

Chapter One: An Examination of the Term Energy Solidarity in Academic Discourse

Chapter One encapsulates an investigation of the term energy solidarity within academic discourse. After setting the research objectives, the chapter lays down the theoretical framework, explaining key terms such as solidarity, international energy relations, and legal interpretation. It further elaborates on the methodological approach which incorporates analytical, normative, and comparative legal methods.

The chapter then ventures into a historical exploration of energy solidarity, tracing its etymological development across various eras and its manifestations in different national contexts.²¹ This interdisciplinary examination serves as a foundation for understanding the modern application of the principle.

Having elucidated the historical and theoretical foundation of energy solidarity, the subsequent section delves into the intricate legal boundaries and implications of energy solidarity. The focus shifts to international law, examining treaty law, customary international law, generally recognized principles of law, and the influence of the World Trade Organization. It also scrutinizes the role of energy solidarity in international law through various jurisprudential theories.

In addition, the chapter explores the principle of the most favored nation, security exceptions in General Agreement on Tariffs and Trade²² (GATT) 1994, and their relevance to energy solidarity. Finally, it delves into general principles of international law, discussing concepts like cooperation, good faith, and the principle of equitable utilization.²³ All these aspects are analyzed in relation to the concept of energy solidarity.

²¹ Huhta & Reins, 2023, p. 11.

²² GATT, 1994.

²³ Shaw, 2008, p. 29; Huhta & Reins, 2023, p. 11.

1. Introduction

This initial chapter seeks to scrutinize and deconstruct the term energy solidarity. It traces its origins, evolution, and implications across various time periods, cultures, and legal systems. By employing interdisciplinary perspectives and diverse legal methods - analytical, normative, and comparative - this analysis seeks to illuminate the complexity of energy solidarity and clarify its role within the boundaries of international law.

The exploration acknowledges the multifaceted nature of energy solidarity, mirroring the complexity of the international energy landscape it navigates. The objective is to demystify this principle, anchoring it within a robust theoretical and legal framework that bolsters its practical applicability and fosters more sustainable international energy relations.

From the philosophical teachings of Aristotle to the jurisprudential theories of Hart, through political shifts from the French Revolution to modern German and Polish viewpoints, to legal precedents set by the World Trade Organization and international courts - this analysis aims to enrich the discourse on energy solidarity. By fostering a progressive understanding of the principle, it sets the foundation for the ensuing chapters that delve deeper into the impacts and applications of energy solidarity in international energy law and policy.

2. Tracing the Etymological Development of Energy Solidarity: An Interdisciplinary Examination

To fully comprehend the concept of solidarity, it is essential to delve into its philosophical, historical, and sociological roots.²⁴ The interpretation of solidarity has significantly changed over the centuries and has been shaped by different social, political, and historical contexts.²⁵ The term itself derives from the Latin word *solidus*, which means complete.²⁶ In the

²⁴ Durkheim, 1893/1933, pp. 111-131; Durkheim, 1893/1933, pp. 70-89.

²⁵ Stjernø, 2005.

²⁶ ten Have & Patrão Neves, 2021.

following section, the development of the understanding of solidarity is chronologically traced based on its philosophical and sociological origins.

2.1 Historical Development of Solidarity

This section provides a comprehensive historical review of the principle of solidarity. The focus will be on establishing a thorough understanding of how the concept has evolved and become engrained in our current discourse. This section establishes a crucial foundation for the study by analyzing the roots and progression of energy solidarity. This analysis is divided into two parts: the Pre-Solidarity Era, and the period of Solidarity's Explicit Emergence. This structure aids in the exploration of the concept's transformation and its implications for the research objective.

2.1.1 Pre-Solidarity Era: Engaging with Precursor Thoughts

This subsection commences with a meticulous historical examination of precursor thoughts on solidarity that have shaped the modern understanding of the principle of solidarity. By analyzing the evolution of this concept in the works of key figures from Aristotle to Kant, the narrative investigates how these philosophical constructs have indirectly contributed to the principle of solidarity.

By providing a comprehensive historical framework, this exploration paves the way for a subsequent analysis of energy solidarity. An understanding of the evolution of the principle proves instrumental in the development of a legal evaluative criterion.

2.1.1.1 Aristotle and the Concept of Community

One of the earliest forms of solidarity can be traced back to the works of Aristotle (384-322 BC).²⁷ In his work "Politics"²⁸, Aristotle argued that the state is more than just an association

²⁷ Aristotle, 1998, Book VII, pp. 202-203.

²⁸ Aristotle, 1998, I, p. 10; Russell, 2014, pp. 1–2; Aristotle, 1998, VIII.

of individuals who join together for purely pragmatic or economic reasons.²⁹ Rather, he emphasized that the members of a political community are linked by a bond of friendship and mutual care.³⁰ Aristotle referred to this bond as *philia*, which he defined as a kind of love based on the common pursuit of the good.³¹ Although Aristotle did not explicitly use the term *solidarity*, his concept of community is grounded in a similar idea. Aristotle thus emphasized the importance of friendship and justice as fundamental aspects of community life, thereby laying an important foundation for the understanding of *solidarity* as a core principle of social relations.³²

2.1.1.2 Thomas Aquinas and the Idea of Charity

During the Middle Ages, it was the philosopher and theologian Thomas Aquinas (1225-1274) who elaborated on the idea of *charity*.³³ Aquinas contended that genuine love encapsulates not only an emotional attachment but also an active readiness to assist and aid others.³⁴ His perspective was influenced by the Christian mandate of *charity* and significantly impacted Western moral theology and ethics. The writings of Aquinas, who underscored the importance of *charity* and asserted that the common good is the paramount objective of political communities, can be seen as a crucial contribution to the understanding of *solidarity*.³⁵ Aquinas' conception of *charity* can be considered a precursor to the modern understanding of *solidarity*.

2.1.1.3 René Descartes and Individual Autonomy

Moreover, philosopher René Descartes (1596-1650) offers a reflection on the individual self and its relationship with the world in his "*Meditations on First Philosophy*".³⁶ Descartes underscored the importance of doubt and subjective experience.³⁷ These concepts have made

²⁹ Russell, 2014, p. 2.

³⁰ Aristotle, 1998, III, p. 80; Aristotle, 1998, VIII; Finnis, 2011, p. 145.

³¹ Russell, 2014, p. 3; Aristotle, 1998, VIII.

³² Finnis, 2011, p. 145; Russell, 2014, pp. 6-7.

³³ Aquinas, 1265-1274, II, Q. 26, A. 3, pp. 943-944.

³⁴ Aquinas, 1265-1274, II, Q. 189, A. 2, p. 2673; Aquinas, 1265-1274, II, Q. 26, A. 3, pp. 943-944.

³⁵ Aquinas, 1265-1274, II, Q. 189, A. 2, p. 2673; Aquinas, 1265-1274, II, Q. 26, A. 3, pp. 943-944.

³⁶ Descartes, 1641/1911, p. 1.

³⁷ Descartes, 1641/1911, p. 28; Hatfield, 2002.

a significant contribution to the modern understanding of individual autonomy and responsibility, which are also central aspects of the concept of solidarity.

In his meditations, Descartes explored the nature of the self and its connection to the broader world, touching upon themes that are crucial to the notion of solidarity.³⁸ He emphasized the significance of personal doubt and individual experience in the formation of knowledge and understanding.³⁹

These themes, closely linked with the concept of solidarity, continue to shape discussions about social responsibility and collective action in modern society.

2.1.1.4 Immanuel Kant and Universal Human Community

The Enlightenment era represented a pivotal shift in our understanding of solidarity. Immanuel Kant (1724-1804), in his "Metaphysik der Sitten"⁴⁰, argued for a universal human community grounded in reason.⁴¹ Kant emphasized that every person has an innate right to freedom, thus obliging all to reciprocate this same respect and freedom to others.⁴²

Furthermore, Kant introduced the notion of universal human love, suggesting that every individual carries a responsibility towards others, and we are all part of a collective human family.⁴³ This idea of universal solidarity served as the cornerstone for the ensuing human rights discourses.

³⁸ Descartes, 1641/1911, pp. 2-4; Hatfield, 2002.

³⁹ Descartes, 1641/1911, p. 27; Hatfield, 2002, p. 32.

⁴⁰ Kant, 1797/1920.

⁴¹ Kant, 1797/1920; Wood, 1999.

⁴² Kant, 1797/1920, p. 5; Kant, 1785/1998, pp. 26-32, Kant, 1797/1968, p. 230; Wood, 1999, p. 7; Freeman, 2007, 274.

⁴³ Kant, 1797/1968, p. 230; Kant, 1797, 2016, pp. 230-231.

2.1.2 Solidarity's Explicit Emergence: A Recognition of the Principle

This subsection turns its focus towards explicit recognitions of solidarity in the works of various influential thinkers from Proudhon to Rawls. Each subsection represents an investigation into the thinkers' engagement with the concept of solidarity, their conceptual developments, and their lasting impact on the understanding of the principle. The methodological approach employed here is one of detailed content analysis of the original works, aided by interpretive insights from a wide range of sources to ensure a comprehensive understanding.

The exploration commences with Proudhon's notion of mutualism, as presented in “De la Justice dans la Révolution et dans l'Église,”⁴⁴ followed by a critique of societal norms by Nietzsche, and Owen's vision for societal cooperation. The subsection continues with an examination of Comte's positivist outlook on solidarity, Durkheim's mechanical and organic solidarity, and Malinowski's anthropological insights. Contributions from Rawls' principle of justice as fairness will round out the exploration.

By collating and interpreting these diverse perspectives, a multi-faceted picture of solidarity emerges. This understanding, in turn, directly feeds into the development of a legal evaluative criterion for energy solidarity and aids the formulation of predefined contract clauses. Ultimately, these findings enhance the accuracy and robustness of the main research objective of this dissertation: determining energy solidarity based on its historical and philosophical origins and devising mechanisms for its fulfilment in international agreements.

2.1.2.1 Pierre-Joseph Proudhon and Mutualism

The earliest known work to explicitly engage with the term solidarity is Pierre-Joseph Proudhon's "De la Justice dans la Révolution et dans l'Église,"⁴⁵ published in 1858.⁴⁶ Proudhon, a French social philosopher and influential figure in anarchist thought, employed

⁴⁴ Proudhon, 1858.

⁴⁵ Proudhon, 1858.

⁴⁶ Proudhon, 1858.

the term solidarity to depict a social order where individuals are free and equal, while simultaneously interconnected through a network of mutual aid and cooperation.⁴⁷

In this work and “Du Principe Fédératif”⁴⁸, Proudhon articulated a vision of solidarity that challenged traditional hierarchies and authoritarian structures.⁴⁹ His notion of mutualism presented an alternative form of social organization that stressed the value of voluntary agreements and reciprocal exchange among individuals.⁵⁰

Proudhon's philosophy has profoundly influenced the understanding of solidarity. It brings forth the concept of interdependence among free individuals, emphasizing that the wellbeing of one is inextricably tied to the wellbeing of all. This perspective has resonated in subsequent social and political theories and remains relevant in contemporary discourses on social justice and equity.

2.1.2.2 Robert Owen and Workers' Movement

Robert Owen (1771-1858), a contemporary of Proudhon, was another significant advocate of the concept of solidarity.⁵¹ The British social reformer called for a society founded on cooperation and mutual aid in his writing.⁵² Through his convictions and involvement in the labour movement, he influenced the understanding of solidarity as a cornerstone of the workers' movement.

In his works, Owen crafted utopias of a more equitable society where the needs of all members are taken into account.⁵³ His visions significantly influenced the rise of trade unions and worker cooperatives, contributing to the evolution of the concept of solidarity.

⁴⁷ Proudhon, 1858, p. 214; Reichert, 1980, p. 84.

⁴⁸ Proudhon, 1863, p. 122; Proudhon, 1863, p. 196; Proudhon, 1863, p. 319.

⁴⁹ Proudhon, 1858, pp. 210-215; Proudhon, 1863, p. 319.

⁵⁰ Proudhon, 1858, p. 213; Reichert, 1980.

⁵¹ Owen, 1845.

⁵² Owen, 1840, p. 206.

⁵³ Owen, 1840, p. 205; Owen, 1840, pp. 52-53.

Owen's insistence on collective action and mutual support among workers offered an early conceptualisation of the principles of solidarity that would later be pivotal in labour and socialist movements.⁵⁴ His philosophy provided a framework for thinking about solidarity in a way that was closely linked to social and economic justice.

Owen's ideas continue to resonate in contemporary discussions about workplace rights, income inequality, and the role of cooperation in social change.

2.1.2.3 Friedrich Nietzsche's Alternative Perspective on Solidarity

Friedrich Nietzsche (1844-1900), in his radical critique of traditional Western societal norms and values, including notions of morality and solidarity, offers an alternative perspective. As illustrated in his work "Jenseits von Gut und Böse"⁵⁵, Nietzsche argues that values and norms often serve to shield the power and interests of certain groups, much like how he perceives Kant's "categorical imperative"⁵⁶ as a manifestation of a desire for obedience rather than a universal moral principle.⁵⁷

Consequently, he advocates for a revaluation of all values, emphasising the importance of individual freedom and creativity.⁵⁸ Applied to solidarity, Nietzsche's critique suggests that the norm of solidarity might protect the interests of certain dominant social groups.⁵⁹

He appears to propose that while solidarity fosters communal bonds, it could also potentially impose limitations on personal individuality and growth. His endorsement of a superior individual, who surpasses societal norms and conventional values, implies that an excessive focus on moral values, such as solidarity, could impede the progression towards this ideal.⁶⁰

⁵⁴ Owen, 1840, pp. 52-53.

⁵⁵ Nietzsche, 1886/2016.

⁵⁶ Nietzsche, 1886/2016, p. 72.

⁵⁷ Nietzsche, 1886/2016, p. 72; Solomon, 2003, p. 192.

⁵⁸ Nietzsche, 1886/2016, pp. 80-87; Solomon, 2003, p. 18.

⁵⁹ Nietzsche, 1886/2016, pp. 80-87.

⁶⁰ Nietzsche, 1886/2016.

However, Nietzsche's work is complex and open to various interpretations. His critique does not necessarily indicate a rejection of solidarity but invites a critical examination of how it is conceptualised and implemented.

2.1.2.4 Influence of Auguste Comte and Émile Durkheim

Several influential thinkers have significantly engaged with the concept of solidarity, among whom are Auguste Comte and Émile Durkheim. As pivotal figures in French intellectual history, they contributed significantly to the evolution of sociology as a discipline, with their ideas persistently informing legal and social scientific discussions on solidarity to date.

Auguste Comte (1798 - 1857), recognised as the founder of positivism - a philosophical school that positions science as the sole reliable knowledge - coined the term solidarity in his work "System of Positive Polity".⁶¹ In his oeuvre, he highlighted the interdependency that exists among individuals in society.⁶² According to Comte, solidarity, which he perceived as an expression of social order and harmony, is a fundamental prerequisite for the functioning of society, given the dependency of individuals on each other due to their diverse roles and skills.⁶³ His perception of solidarity was significantly shaped by his idea of "Social Forces"⁶⁴ or social dynamics.

Building on Comte's ideas was Émile Durkheim (1858 - 1917), another significant French sociologist. In his book "The Division of Labour in Society"⁶⁵, Durkheim developed a multifaceted understanding of solidarity, formulating two types - "mechanical"⁶⁶ and "organic".⁶⁷ He characterised 'mechanical' solidarity as a form of social cohesion that relies on shared beliefs and values in relatively homogeneous, small-scale societies.⁶⁸ 'Organic'

⁶¹ Comte, 1852/1875.

⁶² Comte, 1852/1875, p. 223; Gane, 2006, p. 55; Gane, 2006, pp. 65-66.

⁶³ Comte, 1852/1875, pp. 225-228; Gane, 2006, p. 73.

⁶⁴ Comte, 1852/1875, p. 231.

⁶⁵ Durkheim, 1893/1933.

⁶⁶ Durkheim, 1893/1933, pp. 70-89; Giddens, 1971, p. 77.

⁶⁷ Durkheim, 1893/1933, pp. 111-131; Giddens, 1971, p. 76; Giddens, 1971, p. 89.

⁶⁸ Durkheim, 1893/1933, pp. 109-110; Giddens, 1971, pp. 77-79

solidarity, however, applies to modern, industrialised societies dominated by diversity and individuality.⁶⁹

Despite these differences, the dependency on others' performance, that is, interdependency, unifies members of society. For Durkheim, these two contrasting forms of solidarity not only represent various stages of societal development but also typify different ways of living and cooperating in human communities. It is worth noting that both Comte and Durkheim conceptualised solidarity not as an abstract idea but a tangible social reality that structures the cooperation and coexistence of individuals.

2.1.2.5 The Contribution of Bronislaw Malinowski

The 20th century saw the concept of solidarity expanded further with anthropological dimensions being introduced. The Polish anthropologist, Bronislaw Malinowski, in his work "Argonauts of the Western Pacific"⁷⁰, observed how the principle of solidarity significantly contributed to maintaining social order and survival in traditional societies.⁷¹ He posited that humans' basic needs and interests lead to a natural form of solidarity, which remains present in modern societies, albeit often overlooked.⁷²

2.1.2.6 John Rawls and the Principle of Justice as Fairness

The philosopher John Rawls (1921-2002) devised the principle of justice as fairness in his seminal work "A Theory of Justice"⁷³. This principle is premised on the idea of a hypothetical society where members are unaware of their future positions, referred to as the "veil of ignorance".⁷⁴ Under such conditions, Rawls argues, individuals would choose a social order that most benefits those "least advantaged".⁷⁵ Rawls' theory has considerably influenced the understanding of solidarity in modern political philosophy.

⁶⁹ Durkheim, 1893/1933, pp. 129-131; Giddens, 1971, pp. 77-80.

⁷⁰ Malinowski, 1922.

⁷¹ Malinowski, 1922, p. 123.

⁷² Malinowski, 1922, p. 19; Malinowski, 1922, p. 54.

⁷³ Rawls, 1971/1999.

⁷⁴ Rawls, 1971/1999, pp. 102-103.

⁷⁵ Rawls, 1971/1999, p. 131; Freeman, 2007, p. 159; Freeman, 2007, p. 274.

2.1.3 Conclusion

In synthesizing the findings from subsections 2.1.1 and 2.1.2, a more nuanced definition of solidarity can be formed. The historical origins of solidarity, traced from the theories of Aristotle to Kant, serve as the bedrock on which modern interpretations of the principle have been built.

The understanding of solidarity has significantly evolved, from the ancient conception of solidarity as a virtue centered on community, to Kant's Enlightenment insights into a reason-based universal human community.⁷⁶ The principle has been continuously shaped and enriched by diverse philosophical and sociological perspectives, as explored through the explicit recognition of solidarity in the works of thinkers like Proudhon, Nietzsche, Owen, Comte, Durkheim, Malinowski, and Rawls.

The thematic threads of interdependence, mutual aid, and cooperation are consistently woven through these diverse perspectives. However, these are balanced with considerations of “individual freedom”⁷⁷, “diversity”⁷⁸, and “social justice”⁷⁹, demonstrating the principle's adaptability and dynamism.

The combination of these findings leads to a comprehensive and multifaceted definition of solidarity. It is seen as a principle that advocates for the mutual interdependence among individuals and the community, emphasizing “cooperation”⁸⁰, reciprocity, and “Social Forces”⁸¹, while respecting individual freedom and diversity.

This understanding of solidarity will be instrumental in guiding the development of a legal evaluative criterion for energy solidarity. The subsequent sections of this dissertation will

⁷⁶ Kant, 1797/1968, p. 230; Kant, 1797, 2016, pp. 230-231.

⁷⁷ Kant, 1797/1920, p. 5; Kant, 1785/1998, pp. 26-32; Kant, 1797/1968, p. 230.

⁷⁸ Durkheim, 1893/1933, pp. 129-131.

⁷⁹ Rawls, 1971/1999, p. 174.

⁸⁰ Owen, 1840, p. 206.

⁸¹ Comte, 1852/1875, p. 231.

explore the practical implications of these theoretical findings, aiming to develop predefined contract clauses to fulfill energy solidarity based on the derived definition. In doing so, the primary research objective of this dissertation will be significantly substantiated.

2.2 Voices of Solidarity: National Trajectories in the Political Sphere

This section aims to examine the complex interplay between solidarity, law, and politics across various national contexts. The focus will be on the role of solidarity within political movements in the history of the Federal Republic of Germany, the Republic of Poland, the Russian Federation, the United States of America and the French Republic. These unique movements, shaped by their geographic and cultural diversity, provide a broad perspective on how solidarity, as a core component of political movements, influences the interpretation of legal norms concerning solidarity.

2.2.1 The French Revolution and the Rise of Solidarity

The French Revolution, spanning from 1789 to 1799, was a critical juncture in the political history of France and indeed, the world, marking a notable emergence of the concept of solidarity as a political construct.⁸² Widely regarded as a pivotal moment in European history, it signaled the decline of absolute monarchy and the ascent of democracy and secularism, with the principle of solidarity being central to this transition.⁸³

Solidarity was vividly embodied in the French populace's collective aspiration for liberty, equality, and “fraternity”⁸⁴ – ideals that were later adopted as the motto of the French Republic.⁸⁵ This spirit of solidarity was further demonstrated in the establishment of political societies and clubs, including the Jacobins, the Cordeliers, and the Girondins.⁸⁶ Notably, these groups played a crucial role in advocating for the common people's rights against monarchical tyranny.⁸⁷

⁸² Doyle, 2018, p. 20.

⁸³ Frysak, 2010, p. 168.

⁸⁴ Drotbohm, 2023, p. 317.

⁸⁵ Drotbohm, 2023, p. 317.

⁸⁶ Röthlisberger, 2010, p. 6.

⁸⁷ Palmer, 2005, pp. 25-27.

Among these groups, the Sans-Culottes, a radical political faction comprising the working class, particularly embodied the solidarity witnessed among the lower social strata. Their collective struggle against the aristocracy was fundamentally driven by a quest for social equality. A defining moment during the French Revolution was the adoption of the Declaration of the Rights of Man and Citizen in August 1789.⁸⁸ Drawing from Enlightenment philosophy and human rights, this landmark document explicitly endorsed national sovereignty, civil liberties, and equal rights.⁸⁹

Beyond merely endorsing these principles, the document represented a significant progression in the understanding of solidarity. It articulated the shared belief that all citizens had a collective obligation to protect others' rights and freedoms. This advancement laid the foundation for the evolution of social solidarity within French society and beyond. In fact, the influence of the French Revolution on the concept of solidarity resonated far beyond its historical epoch. It profoundly impacted the labour movement and the socialist theories of the 19th and 20th centuries, particularly concerning collective action and resistance against exploitation and inequality.

The spirit of solidarity born out of the French Revolution continued to inspire and shape political movements on a global scale.

In conclusion, the French Revolution served as a critical event that shaped the development and interpretation of solidarity as a socio-political concept. It offered a potent exemplar of collective action for equality and justice, the echoes of which continue to resonate in contemporary political and social movements.

2.2.2 Expressions of Solidarity: The German Perspective

The principle of solidarity has significantly shaped political events and movements in German history. Manifestations of this collective action can be seen in various aspects of

⁸⁸ National Assembly of France, 1789.

⁸⁹ National Assembly of France, 1789.

German society, from labor and social movements to unification efforts to support for refugees.⁹⁰

One of the earliest and most profound demonstrations of political solidarity in Germany was seen in the labor movement in the late 19th and early 20th century. The founding of the Social Democratic Party of Germany in 1875, with its focus on workers' rights, marked the beginning of the institutionalization of solidarity in German politics. The SPD has continuously represented the principle of solidarity and incorporated it into its program in 1891, which demanded equality and social rights for workers.⁹¹

Political solidarity also played a crucial role in the reunification of Germany at the end of the 20th century. East and West Germany, divided after World War II, were reunited in 1990 following widespread peaceful protests and diplomatic efforts.⁹² The solidarity of Germans in the face of political and economic challenges was crucial in overcoming the division and building an united Federal Republic of Germany.⁹³

In recent times, political solidarity in the Federal Republic of Germany has become visible in dealing with the refugee crisis. The statement "We can do it"⁹⁴ by Chancellor Angela Merkel in 2015 embodied a message of solidarity and a commitment to humanitarian principles. Despite significant challenges, many Germans have shown solidarity with the refugees through volunteer work, donations, and advocacy.⁹⁵

Political solidarity in the Federal Republic of Germany is also evident in the context of climate activism. Movements like Fridays for Future, inspired by activist Greta Thunberg, have mobilized young people across the Federal Republic of Germany for climate protection.⁹⁶ These movements have not only demonstrated the power of collective action

⁹⁰ Sak & Kadkoy, 2021, p. 227.

⁹¹ Sozialdemokratische Partei Deutschlands, 1891.

⁹² Wiedemann et al., 2019, p. 3; Wiedemann et al., 2019, p. 3.

⁹³ Wiedemann et al., 2019, pp. 5-6.

⁹⁴ Sak and Kadkoy, 2021, p. 227

⁹⁵ Sak and Kadkoy, 2021, p. 227

⁹⁶ Sommer et al., 2019.

but also emphasized the importance of intergenerational solidarity in addressing the global climate crisis.⁹⁷

In summary, political solidarity has been a significant force in Germany and has shaped the country's political landscape throughout its history. Whether in the context of social movements, unification efforts, humanitarian actions, or climate activism, the principle of solidarity has enabled individuals and communities to come together for social justice, equality, and change. It remains a powerful influence in contemporary German politics.

2.2.3 Expressions of Solidarity: An Insight into Polish Political Context

The historical perspective of solidarity in the Republic of Poland, a principle that has shaped the country's social and political identity, dates back to the time of the Polish partitions in the late 18th to early 20th centuries. In 1795, following three partitions in 1772, 1793, and 1795, the territory of the former Polish-Lithuanian Commonwealth was divided among Prussia, Russia, and Austria.⁹⁸ Despite this division and the rule of three different powers, the Polish people remained united by their common cultural heritage, their language, and their deep-rooted desire for independence. Solidarity thus became a critical unifying force that nourished the Polish spirit of resistance and preserved a common national identity.⁹⁹

Throughout the 19th and early 20th centuries, solidarity continued to be a pivotal part of the collective consciousness of the Polish people, motivating and inspiring a series of uprisings and revolutions that took place despite the occupation. This formed the basis for the later “Solidarność”¹⁰⁰ movement in the 20th century. After regaining independence in 1918, Poland began to reshape its national identity and sovereignty, with the concept of solidarity remaining a crucial part of its political and cultural identity through the 20th century, including the communist era.¹⁰¹

⁹⁷ Sommer et al., 2019, p. 42.

⁹⁸ Aust, 2021, pp. 1-2.

⁹⁹ Lukowski & Zawadzki, 2019, pp. 217-219.

¹⁰⁰ Bartkowski, 2009, pp. 1-3.

¹⁰¹ Lukowski & Zawadzki, 2019, pp. 174-180.

The Solidarność trade union, established in 1980 following strikes at the Gdansk Lenin Shipyard, became a symbol of resistance against the communist regime. It was the first independent trade union in a Soviet-bloc country, with Lech Wałęsa, an electrician from the shipyard, as its charismatic leader.¹⁰² The power of collective action and solidarity demonstrated by this movement had significant implications for the political landscape of Poland.

Furthermore, the principle of solidarity played a crucial role in the Republic of Poland's efforts to join the European Union. Despite economic and political challenges, the Polish people demonstrated collective determination and solidarity, leading to their successful attainment of EU membership in 2004.¹⁰³

Today, the concept of solidarity continues to be relevant to Polish politics and society, particularly concerning issues of migration and refugee acceptance.¹⁰⁴ Solidarity remains a significant factor in the Poland's history and development and continues to shape its social and political discourses.¹⁰⁵ The importance of solidarity in the Republic of Poland is both historically grounded and continues to be relevant in the current political landscape. The future political, social, and economic developments in the Republic of Poland may provide further insights into how the principle of solidarity evolves.

2.2.4 Solidarity as Seen Through Russian Lenses

In Russia, the principle of solidarity has also played a significant role, shaping the political landscape and driving social change. One of the most prominent demonstrations of solidarity in Russia was during the Bolshevik Revolution in 1917. Workers, peasants, and soldiers rallied together under the banners of "Peace, Land, and Bread"¹⁰⁶ demonstrating a shared commitment to overturning the existing social and political order. Their united efforts eventually led to the overthrow of the Provisional Government and the establishment of a socialist state.

¹⁰² Lukowski & Zawadzki, 2019, pp. 398-399; Bartkowski, 2009, p. 5.

¹⁰³ Lukowski & Zawadzki, 2019, pp. 324.

¹⁰⁴ Lukowski & Zawadzki, 2019, pp. 426-427.

¹⁰⁵ Lukowski & Zawadzki, 2019, pp. 426-427; ECJ, 2021.

¹⁰⁶ Markwick, 2017.

Solidarity has also been a significant force within the Russian labour movement. The establishment of soviets, or workers' councils, during the revolutions of 1905 and 1917, displayed a profound commitment to collective action. These councils were instrumental in organizing strikes and advocating for workers' rights, reflecting the principle of solidarity amongst the working class.¹⁰⁷

In contemporary Russia, demonstrations of solidarity have often been associated with political opposition movements.¹⁰⁸ For instance, the protest movements that emerged following the 2011 parliamentary elections demonstrated a significant degree of solidarity amongst diverse sections of the population. Protestors rallied together to express their discontent with perceived electoral fraud and to demand political reforms.

Solidarity is also central to the activities of many non-governmental organizations in the Russian Federation that work to protect human rights, promote environmental sustainability, and support vulnerable groups. These organizations often face considerable obstacles, including restrictive laws and negative public sentiment. Still, through solidarity, they continue to strive for social justice and positive change.

In conclusion, solidarity has been a recurring theme in Russian history, influencing significant political events and social movements. It has been a tool for collective action and a mechanism for social change, highlighting its enduring relevance in Russian society.

2.2.5 Solidarity and Its Manifestations: The United States of America

Political solidarity in the United States of America has manifested as a recurring phenomenon in various historical contexts, typically expressed through collective actions for social justice, civil rights, and economic equality.

¹⁰⁷ Efremenko und Evseeva, 2012, pp. 358.

¹⁰⁸ Efremenko und Evseeva, 2012, pp. 353-356.

A notable instance of political solidarity in the United States of America was the Civil Rights Movement of the 1960s.¹⁰⁹ This movement, aimed at achieving racial equality and ending segregation, mobilized a broad array of individuals and organizations.¹¹⁰ The principle of solidarity was a central aspect of this struggle, where African Americans, supported by allies from diverse backgrounds, collectively worked to challenge and reform societal norms and legal structures that perpetuated racial inequality.¹¹¹

The labor movement in the United States of America has also emphasized the importance of solidarity. Unions such as the Industrial Workers of the World¹¹² (IWW) and the United Automobile Workers¹¹³ (UAW) have relied on the solidarity of their members to negotiate better wages, safer working conditions, and fairer labor practices. In this context, the National Labor Relations Act of 1935, also known as the Wagner Act¹¹⁴, secured the right to collective bargaining for unions, thereby strengthening solidarity within the labor movement.

Women's rights movements in the United States of America, from the suffragettes of the early 20th century to the more recent “#MeToo movement”¹¹⁵, have similarly demonstrated the power of solidarity.¹¹⁶ These movements have brought together women and their allies to challenge societal norms and legal structures that solidify gender inequality and advocate for a more equitable society.

In contemporary times, political solidarity remains a prominent aspect of American society. Movements such as “Black Lives Matter”¹¹⁷, “March for Our Lives”¹¹⁸, and the protests against the “Dakota Access Pipeline”¹¹⁹ attest to this enduring commitment to collective action for social justice.

¹⁰⁹ Fairclough, 1987, pp. 387-389.

¹¹⁰ Fairclough, 1987, p. 387.

¹¹¹ Foner, 1970, p. 45; Fairclough, 1987, p. 397.

¹¹² Foner, 1970, p. 45.

¹¹³ Wilentz, 1984, p. 1.

¹¹⁴ National Labor Relations Board, 1935.

¹¹⁵ Williams, Singh & Mezey, 2019, pp. 371-373.

¹¹⁶ Mohajan, 2022, pp. 8-9.

¹¹⁷ Chen, 2021, p. 1.

¹¹⁸ Feinberg et al., 2019, pp. 1-4.

¹¹⁹ United States Court of Appeals for the District of Columbia Circuit, 2021.

In conclusion, political solidarity has played a crucial role in shaping the United States, enabling individuals and communities to unite in the struggle for justice, equality, and change. It has influenced and propelled social and political movements across the country and remains a potent force in contemporary American politics.

2.3 Development of Solidarity in International Energy Relations

The concept of solidarity, with its deep historical roots dating back to Roman law and medieval legal systems, has continuously evolved to reflect changes in societal values and legal norms.¹²⁰ Similarly, the principle of solidarity in international energy relations has undergone several notable transformations over time. These began with the early era of energy diplomacy and the formation of the International Energy Agency (IEA) in the 1970s. During this period, the impetus for solidarity was primarily driven by the need to address energy security issues, a need that was acutely highlighted by the oil crises that emphasized the vulnerability of oil-importing countries.¹²¹

In the subsequent decades of the 1980s and 1990s, solidarity in the global energy landscape shifted towards market liberalization and energy trade expansion. The rise of new energy producers and consumers, coupled with advancements in energy technologies, facilitated a more interconnected and interdependent global energy framework.¹²² During this time, solidarity was manifested through endeavours to establish a more open, competitive energy market for the benefit of all participants.

As the 21st century dawned, a heightened emphasis on environmental sustainability and climate change began to shape international energy relations. There was a growing consensus on transitioning towards cleaner energy sources.¹²³ The concept of energy solidarity began to encompass a wider array of concerns, stretching beyond energy security and market liberalization to incorporate environmental and societal considerations. The

¹²⁰ Bayertz, 1999, p. 3.

¹²¹ Yergin, 2006, p. 523; Yergin, 2006, pp. 635-636.

¹²² Keating et al., 2012, pp. 1-3.

¹²³ Goldthau & Sovacool, 2011, pp. 96-97.

Kyoto Protocol¹²⁴, signed in 1997 and enforced in 2005, is emblematic of this shift as it set legally binding commitments for greenhouse gas emission reductions.¹²⁵

The 2010s represented another significant evolution in energy solidarity, as the global community acknowledged the pressing need for a more sustainable and equitable energy future. The Paris Agreement, adopted in 2015, underscored the collective responsibility of all countries to mitigate climate change by striving to limit global temperature increases.¹²⁶ This period also witnessed the emergence of new forms of energy cooperation, such as the International Renewable Energy Agency (IRENA), established in 2009, aiming to encourage the worldwide adoption of renewable energy.¹²⁷

In recent years, the focus of solidarity in international energy relations has shifted towards addressing the energy trilemma - the simultaneous pursuit of energy security, environmental sustainability, and social equity.¹²⁸ This shift has led to the development of new partnerships, initiatives, and legal instruments aiming to foster collaboration and mutual support among countries in their quest for a more sustainable and secure energy future.

2.4 Conclusion

The history of solidarity is indeed rich, drawing from a multitude of philosophical, sociological, and political influences. It demonstrates how the concept has been continually reinterpreted and adapted over time and across different contexts. It also underscores that the contemporary understanding of solidarity is grounded in a long history of thought and action, marked by a constant drive towards social cohesion, justice, and collective action.

In summary, the concept of solidarity has undergone profound and complex evolution in both philosophical thought and historical progression. Tracing back to its etymological beginnings in the Latin word *solidus* which means complete¹²⁹, the concept of solidarity has

¹²⁴ UNFCCC, 1997.

¹²⁵ Falkner, 2016, pp. 1113-1114; Böhringer, 2003, p. 10.

¹²⁶ Falkner, 2016, pp. 1107-1112.

¹²⁷ IRENA, 2021.

¹²⁸ World Energy Council, 2021, p. 11.

¹²⁹ Braun, 2017, p. 30; ten Have & Patrão Neves, 2021.

undergone substantial development, with its philosophical underpinnings grounded in Aristotle's teachings. The interpretation of this principle has been further expanded and nuanced through the works of philosophers such as Comte and Durkheim. Despite varying viewpoints, with Nietzsche being a notable exception, the heart of these interpretations has remained consistent, underscoring themes of mutual aid and collective responsibility.¹³⁰ As history unfolded, the concept of solidarity has asserted its significance across various social and political movements, indicating its wide-ranging influence and lasting relevance. It is this multifaceted background that enriches the concept and simultaneously presents challenges in its application, especially within the context of international energy law. However, it is precisely this complexity that makes the in-depth exploration of the various dimensions of solidarity and its implementation in legal frameworks so invaluable. This serves as a foundation for “mutual cooperation”¹³¹, equality, energy market liberalization, diversity of energy supply, energy security, consideration of future generations, and sustainable methods of energy production.¹³²

3. Energy Solidarity through the Lens of International Law

This section transitions into an analysis of the legal boundaries and implications surrounding energy solidarity. Focusing on its legal underpinnings in international law, this section aims to distinguish energy solidarity from other legal principles, such as good faith and equitable utilization. The analysis will involve an in-depth study of pertinent legal documents and judgements, as well as an examination of contractual clauses and legal mechanisms relating to or implementing the principle of energy solidarity. The ultimate objective is to render a comprehensive understanding of the legal significance and implications of energy solidarity, investigating how the principle is integrated into the existing legal structures and how it interacts with other fundamental principles of international law.

By concentrating on the legal boundaries and implications of energy solidarity, this section directly addresses the research objective of defining energy solidarity in international law. The analysis of the legal underpinnings and interactions of energy solidarity would

¹³⁰ Nietzsche, 1886/2016, pp. 80-87; Owen, 1840, p. 206.

¹³¹ Ryś, 2022, p. 157.

¹³² ECT, 1994; ECJ, 2021.

substantially contribute to forming a precise definition of the principle, which would in turn facilitate the development of contractual clauses.

3.1 Legal Conception and Application of Energy Solidarity

The aim of this section is to illuminate the legal conception and application of energy solidarity, thereby deepening the understanding of the role and significance of energy solidarity in legal contexts.

The methodology for this section involves a combination of legal analysis and interpretation and reflection on legal theory. Legal norms, court decisions, and other legal materials are analysed to gain a clear picture of the legal conception and application of energy solidarity.

Throughout this chapter, a thorough investigation of the legal dimensions of energy solidarity is conducted, with the understanding of energy solidarity developed in the preceding chapters being kept in mind. This investigation contributes to the completion of the overall picture of energy solidarity and provides new insights into the opportunities and challenges that arise in implementing energy solidarity in legal contexts.

3.2 Primary Sources of International Law

Energy solidarity is a concept that has been gaining attention in international law.¹³³ Even when not explicitly enshrined in agreements, its essence is reflected, albeit indirectly, in a myriad of global treaties and practices. Particularly, implications of energy solidarity can be seen in the established principles of inter-state cooperation and in articulated contractual terms.¹³⁴ An analysis of the sources of international law will be presented immediately next.

¹³³ Ryś, 2022, p. 157.

¹³⁴ Huhta & Reins, 2023, p. 15.

Article 38 para. 1 lit. a–d of the Statute of the International Court of Justice (ICJ Statute)¹³⁵ enumerates the primary sources of international law:

- Article 38 para. 1 lit. a ICJ Statute:
International Conventions
- Article 38 para. 1 lit. b ICJ Statute:
International Customary Law
- Article 38 para. 1 lit. c ICJ Statute:
General Principles of Law Recognized by Civilized Nations
- Article 38 para. 1 lit. d ICJ Statute:
Court Rulings and Teachings of Highly Qualified Publicists

Against this backdrop, this section sets out to explore how energy solidarity is mirrored in international conventions, international customary law, and general principles of law. Moreover, court rulings and academic writings provide complementary perspectives and deepen the context.

The State practice and “*opinio juris*”¹³⁶, or the belief that a particular course of action is legally binding, hold a critical role in international law.¹³⁷ This raises the question of how energy solidarity can be perceived as a principle of international customary law and how it is reflected in the general principles of law recognized by nations.

However, attention must be paid that the “inductive, factual positive science of international law is more of a myth than reality”.¹³⁸ Therefore, the analysis of energy solidarity in international law should be conducted with critical awareness.

¹³⁵ United Nations, 1945, p. 21; Brownlie, 2008, pp. 4-5.

¹³⁶ Simma & Alston, 1992, p. 88.

¹³⁷ Kirchner, 1998, p. 208; ICJ, 1969, p. 44; Simma & Alston, 1992, p. 88; Brownlie, 2008, pp. 8.

¹³⁸ Schachter, 1991, pp. 35-37.

Overall, the analysis of the aforementioned sources of law provides a robust approach. It represents a critical step in answering our central research questions and provides the groundwork for more discussions on specific cases and contexts in the subsequent sections.

3.2.1 Treaty Law

Undeniably, international treaties command a central role within the international law framework, their normative potency being irrefutable. Through the lens of legal sources theory, no necessity arises to probe deeper into these treaties in the current discourse. Therefore, this segment illuminates principal norms and treaties. They stand as concrete legal representations that infuse the principle of energy solidarity with substance.

The primary focus of this section, the examination of energy solidarity through the lens of a principle of international law, dictates a more thorough exploration into the other two principal sources of law. Specifically, international customary law, representing universally accepted legal practices, and general principles of law, recognized by the global community of nations.

International treaties express a consensus of the contracting parties on a specific matter.¹³⁹ However, the process of consensus formation often requires the abandonment of certain positions to enable a compromise. In addition, there is the option of reservations, which according to Article 2 lit. d of the Vienna Convention on the Law of Treaties¹⁴⁰, can be so far-reaching that they can empty the meaning of a treaty or at least cause legal uncertainty in aspects.¹⁴¹

Moreover, the process of adopting international treaties necessitates an important step: integration into the national legal framework through ratification, a procedure that follows the treaty's initial signature. This step, crucial to the validity and effectiveness of the treaty within a state's borders, is occasionally not realized, thereby posing a potential obstacle to

¹³⁹ Borgen, 2005, p. 579.

¹⁴⁰ United Nations, 1969, p. 3.

¹⁴¹ Behnsen, 2007.

the full implementation of the treaty's stipulations. Additionally, the temporal dynamics associated with negotiations can introduce further complications. The negotiation phase can often be a protracted process, influenced by a variety of factors such as geopolitical shifts, changes in domestic policies, or disagreements over specific terms. These time-related issues can be particularly problematic, potentially hindering the effective and timely application of the treaty's provisions. As an example, the United Nations Convention on the Law of the Sea is mentioned here, the negotiations for which began in 1968, which was signed in 1982 and entered into force in 1998.¹⁴² The challenges in applying and enforcing this traditional tool of international law lie in the lack of willingness of states to voluntarily commit to an obligation.¹⁴³

It should be noted that judgments and positions of international courts, although their binding force here exists only *inter partes*, possess a high moral and political authority and therefore can almost be viewed as quasi-legal opinions. However, many significant states have not made or have withdrawn a mandatory submission to the jurisdiction of the International Court of Justice as a neutral third party by declaration under Article 36 para. 2 of the Statute of the International Court of Justice.

It must be considered that energy solidarity is a dynamic and context-dependent concept that is interpreted and applied differently in the various areas of international law.

3.2.2 Customary International Law

Customary international law holds great significance in international law. In earlier times, it was even the primary source of international law.¹⁴⁴ However, it has lost this position to treaty law, especially due to the codification efforts within the United Nations after the Second World War.¹⁴⁵

¹⁴² United Nations, 1998.

¹⁴³ Dyevre, 2010, p. 13.

¹⁴⁴ Simma & Alston, 1992, p. 86; Brownlie, 2008, p. 12.

¹⁴⁵ Shaw, 2008, p. 94; Borgen, 2005, p. 574; Brownlie, 2008, p. 13.

In addition to the fact that customary international law is mentioned as a formal source of international law in Article 38 para. 1 lit. b ICJ Statute¹⁴⁶, the importance of customary international law also lies in the nature of international law which is the absence of a central legislature, states rely on sources of law. Therefore, in contrast to its typically lesser role in most national legal systems, customary law assumes a more pivotal role in the international legal framework. It serves to fill the voids left by contractual regulations. Customary law, evolved over time and defined by long-standing practices accepted as legal obligations, provides an essential complement to treaty law.

However, the fluid nature of international relations, characterized by shifting geopolitical landscapes, evolving norms, and emerging challenges, has a direct bearing on the form and function of customary international law. Consequently, the exact boundaries and applications of customary law can often be nebulous and subject to interpretation.

Customary international law is composed of an objective and a subjective element.¹⁴⁷ In detail, much is disputed, which can be explained by different theories about the reason for the validity of international law.¹⁴⁸ The objective element consists in the general practice, the custom, by which states participate in the creation of customary international law, whereas for the subjective element the conviction of the states is necessary that this practice be law.

3.2.2.1 The Objective Element

When considering the comprehensive articulation of the objective element, substantial discord exists, with the precise nature of its importance remaining a point of debate among scholars and practitioners. Some outrightly dismiss it, challenging traditional perspectives on customary international law and thereby adding an additional layer of complexity to the discourse. Considering the nature of the subject matter, such rejection might appear surprising. However, it can be comprehended when viewed through the lens of specific legal philosophies. Schools of law predicated on the principles of natural law or consensus-

¹⁴⁶ United Nations, 1945, p. 21.

¹⁴⁷ Fastenrath, 1991, pp. 99-101.

¹⁴⁸ Shaw, 2008, pp. 84-86.

oriented legal theories might dismiss the importance of the objective element.¹⁴⁹ Their dismissal stems from their inherent principles, which often prioritize moral considerations or consensus-building over the regularities of state behavior.¹⁵⁰ In this light, the rejection serves as a reflection of the diversity and complexity within the field of jurisprudence itself, where different philosophical traditions interpret and prioritize legal principles in distinct ways. Nevertheless, the objective element is widely recognized in legal academia and practice. However, a meticulous examination of individual aspects of the objective element is indispensable. Central to these considerations are the scope and duration, as well as the mode and nature of practice.

3.2.2.1.1 Duration and Scope of Practice

The required extent and temporal spread of a practice that merits the label universally acknowledged is a topic of ongoing debate.¹⁵¹ In the contemporary era, it is widely suggested that customary international law may establish at a more rapid pace than it did in earlier periods, an evolution attributed to the conditions of our modern existence.¹⁵² This notion can be illustrated by referring to the domains of aviation and space law. In such situations, the law recognizes a regular, unvarying practice implemented over a comparatively condensed timeframe, giving rise to what is colloquially referred to as “instant customary law”.¹⁵³

3.2.2.1.2 Understanding Practice in Customary International Law

The qualifications for recognizing a practice as part of customary international law are complex and can lead to varying interpretations. Several crucial aspects need to be examined, including the identification of pertinent sources to substantiate the practice labelled as customary international law. It can indeed be challenging to discern whether national law, soft law, or resolutions of international organizations should be considered as sources.

¹⁴⁹ Finnis, 2011, pp. 23-34.

¹⁵⁰ Finnis, 2011, pp. 23-34.

¹⁵¹ Shaw, 2008, p. 80; Mendelson, 1998, p. 209.

¹⁵² Shaw, 2008, pp. 80-82.

¹⁵³ Shaw, 2008, p. 74.

Moreover, it remains unclear whether a particular practice would be recognized as customary international law if it is obeyed by all states without exception, or whether it is sufficient if only a majority of states pursue such a practice.

When looking at the establishment of a practice as part of customary international law, it is generally held that a practice observed by the majority of states in most instances is accepted as customary international law. Any deviation from this common practice would not be viewed as the formation of new norms, but rather, would be considered a violation of the existing customary international law. This notion, while debatable, forms a significant aspect of the discourse surrounding the formulation of customary international law.

In addition, there is a debate suggesting that besides general customary international law, more specific forms of customary international law may arise, such as at a regional or bilateral level. These more specific forms could be tied to certain geographical or political contexts and hence limit their universality.¹⁵⁴

3.2.2.2 Decoding the Subjective Aspects

The concept of “*opinio iuris*”¹⁵⁵, the belief in acting out of a legal obligation, is central to the context of customary international law.¹⁵⁶ This notion pertains to the motivation and conviction of states to conduct themselves in a particular manner, derived not from purely contractual or extralegal bases, but rather from the perceived requirement of a legal obligation.

However, this belief is often more difficult to determine, compared to objective actions. Nevertheless, in many cases, it is indicated by the actual behaviour of the states. Moreover, it is not absolutely necessary for all states to share the same legal conviction. However, in the academic debate, a kind of quasi-universal recognition is often postulated.

¹⁵⁴ Shaw, 2008, pp. 92-93; Mendelson, 1998, pp. 215-217.

¹⁵⁵ Simma & Alston, 1992, p. 88; Mendelson, 1998, p. 268.

¹⁵⁶ Shaw, 2008, p. 34.

It is important to note, however, that the political will of states does not necessarily have to coincide with the law. States can make their decisions based on their own criterias and include the consequences of a breach of law in their cost-benefit analysis.¹⁵⁷

Furthermore, there is a stream within legal doctrine, the voluntaristic doctrine, which ascribes greater importance to the conviction of states than to actual practice. This leads to debates, as the practice due to its inertia changes more slowly, while the conviction can change quickly.

Overall, the examination of the subjective element underscores the necessity for a profound understanding of the dynamics between the political decisions and legal obligations of states in a constantly changing international legal order.

3.2.3 Generally Recognized Principles of Law and Their Application to Energy Solidarity

In line with Article 38, para 1, lit. c of the Statute of the International Court of Justice¹⁵⁸, the generally recognized principles of law are a significant source of law. These principles might vary based on the interpretation of international law. Nevertheless, for the purpose of this research, it is vital to ascertain how they could function as a source of international law in fostering an international principle of energy solidarity.

3.2.3.1 Role of the Generally Recognized Principles of Law

The inclusion of generally recognized principles of law in the provision indicates the authors' intention to classify them as an independent category of norms in international law. This is also validated by the preamble to the Charter of the United Nations, which speaks of

¹⁵⁷ Keohane & Nye, 2012.

¹⁵⁸ United Nations, 1945, p. 21.

adherence to the "obligations arising from treaties and other sources of international law"¹⁵⁹, implying several other sources.¹⁶⁰

3.2.3.2 Critique of the Generally Recognized Principles of Law

The general principles of law are legal concepts that can be applied to international law through a comparative process involving national legal systems.¹⁶¹ These general principles of law can signify an underestimated potential for legal development, as they, unlike the other sources in Article 38 para. 1 of the Statute of the International Court of Justice, embody the essence of the idea of law and justice, not just the sovereignty and will of the states.

The challenge in applying these principles, however, lies in their identification. Resorting to these principles can be a test, as they are neither codified nor explicitly stipulated in contracts.¹⁶² This leads to criticism since the ambiguity regarding the identification of these principles can result in them serving as a cover for the exercise of undue discretionary powers. Despite these challenges, the application of the generally recognized principles of law offers a valuable addition to treaties and customary international law and can fill legal gaps in certain cases.

3.2.3.3 Utilization of Generally Recognized Principles of Law for Energy Solidarity

The generally recognized principles of law can contribute significantly to the rise of an international principle of energy solidarity. For instance, the principle of good faith, acknowledged in numerous national legal systems and in contracts, could be used to fortify energy solidarity. It could underscore the obligation of states to shape their energy policy in a manner that serves the interests of the international community and, in particular, its weakest members.

¹⁵⁹ United Nations, 1945.

¹⁶⁰ United Nations, 1945.

¹⁶¹ Verdross & Simme, 1984, para. 597.

¹⁶² Gutteridge, 1952, p. 125.

Generally recognized principles of law could contribute to strengthening the principle of energy solidarity. Especially, the principle of fairness, recognized in various national legal systems, could be used to promote more just and balanced conditions in energy distribution. This principle could clarify the obligation of states to distribute their energy resources fairly and equitably, ensuring that all states have fair access to these resources.

However, to fully exploit the potential of these generally recognized principles of law for the development of an international principle of energy solidarity, a thorough analysis and interpretation of these principles, as well as a review of their application in practice, are needed. This is a task of great significance for both scholars and practitioners.

Although some criticism has been voiced regarding the use of generally recognized principles of law, particularly concerning the fact that their formation process does not involve any international legal generation procedures and merely signifies a transfer of legal concepts, it can be argued that they should rather be perceived as a basis for recognition or as a source of knowledge, rather than as a formal source of international law.¹⁶³

Despite these concerns, the integration of generally recognized principles of law into the analysis and practice of energy solidarity can make a significant contribution to legal development and to addressing some of the most pressing challenges in the energy sector. They can serve as a bridge between national and international energy laws and contribute to promoting a fairer and more sustainable energy policy.

However, it is important to note that these generally recognized principles of law should not be viewed in isolation. They should be considered part of a more comprehensive legal system.¹⁶⁴

¹⁶³ Shaw, 2008.

¹⁶⁴ United Nations, 1945.

3.3 Determinants Guiding the Progression of Energy Solidarity within International Law Sources

This section puts a spotlight on the influence of the World Trade Organization and Energy Charter Treaty in shaping the discourse around energy solidarity. These entities play a vital role in sculpting the legal environment and its subsequent implications for energy solidarity.

International accords addressing energy matters are essential in formulating the guidelines that contour the concept of energy solidarity. Agreements like the Energy Charter Treaty (ECT) establish both the legal framework and operational blueprints for cooperation on the international stage in the energy sphere.¹⁶⁵

Organizations such as the World Trade Organization (WTO) also have substantial impact on the formulation of international energy law, which, in turn, affects the understanding and implementation of energy solidarity. Despite the absence of specific rules or agreements pertaining to the energy sector among WTO Member States, their general principles and obligations - such as the Most Favored Nation principle and the prohibition of quantitative restrictions - remain relevant to international trade in energy goods according to Article 4 of the ECT.¹⁶⁶

3.4 Analyzing the Role of Energy Solidarity in International Law

Comprehending the integral role of energy solidarity in international law illuminates its significant influence on the interpretation and application of legal norms in international energy relations. This understanding further uncovers the complex interplay between the legal concept of energy solidarity and other essential legal principles, namely good faith and equitable utilization.

¹⁶⁵ Energy Charter Secretariat, 2004, pp. 10-11.

¹⁶⁶ ECT, 1994/2016, pp. 44-45.

The methodology involves a two-pronged approach:

- **Legal Analytical Approach:** This entails a critical examination of energy solidarity as it is interpreted and implemented across various legal contexts. By exploring its conceptual underpinnings and operational mechanisms, a deeper understanding of energy solidarity is achieved.
- **Legal Theoretical Perspectives:** By exploring legal theories and philosophical debates surrounding energy solidarity and its underlying principles like equity, justice, and mutual benefit, the understanding of energy solidarity transcends its practical application.

It's crucial to note that energy solidarity, while pivotal in international energy law, does not exist in isolation. It interacts with numerous other legal principles, such as good faith, equitable utilization, sustainable development, and the prevention of significant transboundary harm.¹⁶⁷ This interaction occasionally results in conflicts between energy solidarity and these other principles.

For instance, the principle of energy solidarity, which often advocates for equitable access to energy resources, might conflict with principles like equitable utilization or sustainable development. These principles could require limitations on access to ensure sustainable resource use. Similarly, the principle of good faith might conflict with energy solidarity when individual state interests conflict with collective interests.¹⁶⁸

Hence, navigating these complexities requires a balanced approach that respects all relevant principles and preserves the integrity of the international legal order.

¹⁶⁷ Huhta & Reins, 2023, p. 11.

¹⁶⁸ United Nations, 1969, p. 13; LaBelle, 2023, p. 16.

3.1.1 International Treaties

The notion of solidarity in international energy relations is not an abstract or purely philosophical construct. Instead, it is deeply embedded in, and shaped by, the legal architecture that governs energy interactions between nations. This principle, deeply engraved in various international agreements, plays a decisive role in coordinating global responses to the pressing challenges of climate change and energy security.

Key to understanding this legal facet of energy solidarity are foundational agreements such as the United Nations Framework Convention on Climate Change (UNFCCC) and the Energy Charter Treaty (ECT). The UNFCCC, established in 1992, inaugurated a global strategy for climate change mitigation, becoming the precursor for later agreements like the Kyoto Protocol¹⁶⁹ and the Paris Agreement¹⁷⁰. A cornerstone principle within the UNFCCC is the concept of "common but differentiated responsibilities"¹⁷¹. This provision recognizes that while all nations bear a collective duty to combat climate change, it falls upon the developed countries, owing to their historical contribution to global emissions, to lead the charge in reducing emissions.¹⁷² The implicit call for solidarity in this principle underlines the indispensable need for cooperation and mutual support among nations to effectively achieve global climate goals.

The subsequent sections will provide a comprehensive overview of key international agreements pertinent to energy relations. The examination of these treaties will further elucidate the role of solidarity as an underpinning principle in the management and evolution of global energy systems.

Each of the following agreements and the two initiatives will be presented with an outline of its date of adoption, core objectives, and explicit or implicit references to the principle of solidarity:

¹⁶⁹ UNFCCC, 1997.

¹⁷⁰ UNFCCC, 2015.

¹⁷¹ Barral, 2018, p. 4; Wang & Gao, 2018, p. 253.

¹⁷² Perez, 2003, pp. 39-40; Bouzarovski, 2018, p. 29.

- **United Nations Framework Convention on Climate Change**¹⁷³: This framework was signed in 1992, with the principle of “common but differentiated responsibilities” outlined in Article 31 of the United Nations Framework Convention on Climate Change (UNFCCC). It stresses the importance of cooperation and solidarity among nations in addressing climate change.
- **Kyoto Protocol**¹⁷⁴: An extension of the UNFCCC, this agreement from 1997 uses Articles 10 and 11 Kyoto Protocol to emphasize the responsibility of developed countries to lead the charge in reducing emissions.
- **Paris Agreement**¹⁷⁵: Under the UNFCCC framework, this impactful agreement was ratified in 2015, expressing a strong commitment to addressing the issue of climate change. The goal of limiting the global temperature rise to well below 2 degrees Celsius is set out in Article 2 of the Paris Agreement.
- **Energy Charter Treaty**¹⁷⁶: This multilateral treaty, ratified in 1994, places a focus on cooperation in the development of energy infrastructure, the promotion of energy efficiency, and environmental protection in Articles 19 and 6 Energy Charter Treaty, with a particular emphasis on the European continent.
- **European Energy Union**¹⁷⁷: This initiative, reflected in the 2015 Communication on Energy Union, represents the European Union's effort to boost energy security, sustainability, and competitiveness within the bloc, embodying the principle of solidarity.

¹⁷³ UNFCCC, 1992.

¹⁷⁴ UNFCCC, 1997.

¹⁷⁵ UNFCCC, 2015.

¹⁷⁶ ECT, 1994/2016.

¹⁷⁷ European Commission, 2015.

- **Belt and Road Initiative**¹⁷⁸: Spearheaded by China, this ambitious infrastructure project underscores the importance of energy connectivity and cooperation between China and other Eurasian nations. It signifies a shift in the balance of power in international energy relations.

By exploring these agreements in detail, a clearer understanding of the ways in which solidarity has shaped the rules governing international energy relations will emerge, emphasizing the indispensable role of cooperation and shared responsibility in navigating the complex challenges of global energy governance.

The Energy Charter Treaty, ratified in 1994, is a multilateral treaty formulated to bolster energy cooperation and protect investments among its signatories, primarily focusing on the European continent.¹⁷⁹ The ECT highlights the importance of solidarity through various provisions, including those that encourage cooperation in the development of energy infrastructure, promotion of energy efficiency and environmental protection, and facilitation of energy trade and transit.¹⁸⁰ By fostering a sense of shared responsibility and mutual support, the ECT contributes to the evolution of a more interconnected and resilient energy system within the region.

The European Union has persistently underscored the significance of energy solidarity among its Member States. This emphasis is mirrored in the EU's energy policies and initiatives, such as the “European Energy Union”¹⁸¹, which aspires to enhance energy security, sustainability, and competitiveness within the European Union.

In the sphere of global geopolitics, the ascent of emerging economies, such as China and India, has resulted in a shift in the balance of power in international energy relations. As these countries rise to become more influential actors in the global energy landscape, their perspectives on energy solidarity gain increasing significance.¹⁸² For instance, China has

¹⁷⁸ Coenen et al., 2020, pp. 1-3.

¹⁷⁹ ECT, 1994/2016, p. 31.

¹⁸⁰ ECT, 1994/2016.

¹⁸¹ European Commission, 2015; LaBelle, 2023, p. 16.

¹⁸² Keating et al., 2012, pp. 1-2;

been actively advancing its “Belt and Road Initiative”¹⁸³ (BRI), which comprises various energy infrastructure projects intended to enhance energy connectivity and cooperation between China and other Eurasian nations.¹⁸⁴

Diving deeper into the progression of solidarity within international energy relations, it becomes evident that this concept has significantly evolves. Contemporary understanding of solidarity within the energy sector encapsulates a broad spectrum of issues, spanning from climate change mitigation and adaptation to energy security and sustainable development. This multifaceted manifestation of solidarity resonates with the escalating complexity of the global energy landscape and the concomitant challenges it presents to policymakers.

The future evolution of solidarity in international energy relations is likely to be shaped by prevailing trends and emerging challenges. For instance, the global transition towards cleaner and more sustainable energy sources, such as renewables and low-carbon technologies, will necessitate enhanced cooperation and coordination among countries to ensure a smooth and equitable transition.¹⁸⁵ Additionally, the growing interconnectedness of energy systems, facilitated by digitalization and technological innovation, will further underscore the importance of solidarity in managing the risks and opportunities associated with these advancements.¹⁸⁶

One potential strategy to enhance solidarity in international energy relations is through the development of regional energy cooperation frameworks. Such frameworks can facilitate cross-border collaboration on energy infrastructure, capacity building, and technology transfer. They also promote the harmonization of energy policies and regulations among participating countries.¹⁸⁷

International organizations and institutions can also play a pivotal role in promoting energy solidarity by providing platforms for dialogue, coordination, and cooperation among nations. Organizations such as the International Energy Agency (IEA), the International Renewable

¹⁸³ Coenen et al., 2020, pp. 1-3.

¹⁸⁴ Coenen et al., 2020, pp. 1-3.

¹⁸⁵ IRENA, 2021; Goldthau & Sovacool, 2012, p. 238.

¹⁸⁶ IRENA, 2021.

¹⁸⁷ Söderbaum & Van Langenhove, 2006, pp. 117-130.

Energy Agency (IRENA), and the United Nations Development Programme (UNDP) have all launched initiatives aimed at supporting nations in their quest to meet their energy and climate objectives. Additionally, public-private partnerships (PPPs) can be a valuable tool for fostering solidarity in international energy relations, as they can unite governments, private sector actors, and civil society organizations to develop and implement innovative solutions to common energy challenges. It is crucial for nations to engage in ongoing dialogue and the exchange of best practices on energy policy and governance, as this can foster trust, mutual understanding, and a sense of shared responsibility among nations.¹⁸⁸

In conclusion, the concept of solidarity in international energy relations is of paramount importance in the face of the complex and interconnected challenges that define the global energy landscape. By adopting innovative strategies and fostering greater cooperation and shared responsibility among nations, the international community can work together to build a more sustainable, secure, and equitable energy future for all.

3.4.1 Jurisprudential Theories

This section reflects on various jurisprudential approaches, including the work of Hart, as well as concepts such as natural law, legal pluralism, and legal realism, and their influence on the understanding and application of energy solidarity.

3.4.1.1 Hart

Herbert L.A. Hart, an eminent figure of legal positivism, offers a useful perspective on law, particularly pertinent in the exploration of the formal aspects of energy solidarity in legal contexts. Hart proposes that the law is composed of two key types of rules: primary and secondary.¹⁸⁹ Primary rules prescribe particular behaviors, while secondary rules manage and apply primary rules.¹⁹⁰ Applying this model to the concept of energy solidarity in law yields insightful perspectives.

¹⁸⁸ Florini & Sovacool, 2011.

¹⁸⁹ Hart, 1961, p. 79.

¹⁹⁰ Hart, 1961, pp. 79–89.

At the primary rule level, energy solidarity could be reflected in diverse statutory and contractual obligations dictating specific actions or behaviors in relation to energy production, distribution, and usage. Article 194 of the Treaty on the Functioning of the European Union (TFEU) exemplifies this, defining energy solidarity as a goal of EU energy policy.¹⁹¹

Secondary rules might include processes for amending or clarifying these obligations, ascertaining their validity, and resolving disputes over their interpretation or application. The jurisprudence of the European Court of Justice (ECJ), particularly in cases where energy solidarity interpretation has been debated, like in the OPAL gas pipeline case, exemplifies this.¹⁹²

Hart's theory characterizes law as a societal construct, born from consensus.¹⁹³ As such, energy solidarity can be a legitimate part of the law if it is codified in legislation or contracts and acknowledged by society's members. However, Hart's theory pays less attention to the law's moral or ethical aspects. He separates the legality of a rule from its moral correctness or fairness.¹⁹⁴ Therefore, Hart's theory may offer less insight into the moral or ethical dimensions of energy solidarity, like questions of justice, equality, or sustainability. For a comprehensive understanding of energy solidarity, it may be beneficial to consider Hart's theory alongside other theoretical approaches to law.

Applying Hart's theory to the concept of energy solidarity necessitates differentiating between primary and secondary rules. Primary rules prescribe behaviors, such as specific actions or behaviors related to energy production, distribution, and usage.¹⁹⁵ Secondary rules, in contrast, regulate the implementation and management of these primary rules.¹⁹⁶

¹⁹¹ Kaschny, 2023, p. 282; TFEU, 2012.

¹⁹² ECJ, 2021, paras. 30-33

¹⁹³ Hart, 1961, p. 86.

¹⁹⁴ Hart, 1961, p. 86.

¹⁹⁵ Hart, 1961, p. 85.

¹⁹⁶ Hart, 1961, p. 86.

This differentiation between primary and secondary rules allows the identification of various ways energy solidarity can manifest in laws and contracts, and it provides a helpful analytical tool for investigating the different mechanisms within the legal system to ensure adherence to energy solidarity principles.¹⁹⁷

Hart emphasizes that rules are perceived as obligations when there's a strong demand for conformity and significant social pressure on those deviating or threatening to deviate.¹⁹⁸ This insight is crucial to the analysis of energy solidarity, emphasizing the need to consider both formal and informal social and cultural factors influencing behavior.

For instance, in a society that values environmental protection and sustainable energy, the expectation for responsible energy practices by corporations and individuals might be seen as a moral obligation.¹⁹⁹ In contrast, in situations where strong commercial interests conflict with energy solidarity, the recognition of energy solidarity as an obligation might decrease, even in the presence of laws mandating it.

Hart also underlines the role of social pressure forms in complying with rules and the distinction between moral obligations and rudimentary legal forms.²⁰⁰ These aspects of Hart's theory can assist in deepening the understanding of various forms and manifestations of energy solidarity, along with the specific challenges and dynamics that may arise in its implementation.

Furthermore, Hart's work illuminates our understanding of the term 'obligation.' He posits that obligations often associate with rules deemed necessary for maintaining societal life or a highly valued aspect thereof.²⁰¹ Given its importance in maintaining societal and environmental balance, energy solidarity could fit into this category.

¹⁹⁷ Hart, 1961, p. 86.

¹⁹⁸ Hart, 1961, p. 87.

¹⁹⁹ Hart, 1961, p. 87.

²⁰⁰ Hart, 1961, p. 87.

²⁰¹ Hart, 1961, p. 86.

Nevertheless, Hart's theory, while providing an insightful framework for understanding the formal aspects of energy solidarity in legal contexts, may not fully address some facets of energy solidarity. Hart suggests that obligation or duty often conflicts with the interests of the party owing the duty.²⁰² This might be particularly relevant in the context of energy solidarity, where commercial interests or individual freedoms could conflict with broader societal or environmental goals of energy solidarity.

In conclusion, Hart's theory provides a compelling framework for understanding how energy solidarity might be encapsulated in both primary and secondary rules, and how social pressure can shape our interpretation and enforcement of these rules. However, to gain a more comprehensive and nuanced understanding of energy solidarity, it may be necessary to complement Hart's theory with other theoretical approaches that can address its moral or ethical dimensions.

3.4.1.2 Natural Law Theory

The theory of Natural Law serves as a crucial lens through which the principle of energy solidarity can be understood. At its core, Natural Law theory posits that certain rights or values are inherent and universally recognized through human reason, and law should be based on these inherent rights or principles.²⁰³

Within the context of energy solidarity, Natural Law can provide a foundational understanding of why solidarity principles should be incorporated into energy law. The primary reason comes from the concept of "common good"²⁰⁴, an integral part of Natural Law theory. This principle stipulates that certain goods, such as the environment or energy resources, are common to all and should be shared equitably.²⁰⁵ Energy resources can be considered as such common goods, the equitable distribution and management of which is a global responsibility. Moreover, energy solidarity, as a principle, aligns with Natural Law's emphasis on morality and ethics in law. The ethical dimension of energy solidarity – the call

²⁰² Hart, 1961, p. 87.

²⁰³ Finnis, 2011, p. 23; Shaw, 2008, pp. 24-27.

²⁰⁴ Finnis, 2011, p. 125.

²⁰⁵ Finnis, 2011, pp. 155-160.

for cooperation, shared responsibility, and equitable access to energy resources – resonates with Natural Law's insistence on morality's place within legal systems.

However, a potential critique could be that the concept of Natural Law tends to be more philosophical and lacks concrete mechanisms for implementation. While it provides a strong ethical foundation for energy solidarity, how this translates into practical, enforceable laws can be challenging and may require incorporation of elements from other legal theories.

Therefore, Natural Law offers a theoretical underpinning for energy solidarity, emphasizing the moral and ethical dimensions of legal obligations and cooperation in energy law. Yet, its practical implementation may require a synthesis with other legal and normative frameworks.

3.4.1.3 Legal Pluralism

Legal pluralism is a theoretical framework that acknowledges the existence and interaction of multiple legal orders within a social field.²⁰⁶ It challenges the traditional monist view that there is one dominant legal order within a given jurisdiction.²⁰⁷ This perspective can offer valuable insights into the understanding and implementation of energy solidarity.

In the context of energy solidarity, legal pluralism recognizes that multiple legal frameworks and norms - international, national, regional, and perhaps even industry-specific – may play a role in shaping energy policies and practices. For instance, the concept of energy solidarity may be embedded and interpreted differently in European Union law, national energy laws of EU Member States, international treaties, and corporate policies of energy companies. These multiple legal orders may intersect, compete, or cooperate with each other, creating a complex legal landscape for energy solidarity.²⁰⁸

²⁰⁶ Twining, 2009, pp. 515–516.

²⁰⁷ Twining, 2009, pp. 515–516.

²⁰⁸ Tamanaha, 2008, p. 22.

This multiplicity and interplay of legal orders can both challenge and enhance the implementation of energy solidarity. On the one hand, differences and contradictions between different legal orders may lead to conflicts and uncertainties. For instance, the principle of energy solidarity in EU law may clash with national energy policies or with principles of international trade law.

On the other hand, the interplay of multiple legal orders can also create opportunities for enhancing energy solidarity. For instance, the principle of energy solidarity can be reinforced and specified through multiple legal orders. It can be embedded more effectively in EU's sources of law, detailed in national energy laws, further specified in regional or municipal agreements, and adopted in corporate policies of energy companies. In this way, legal pluralism can contribute to the richness, flexibility, and practical relevance of energy solidarity.²⁰⁹

To sum up, legal pluralism provides a valuable perspective for understanding the complex legal landscape of energy solidarity. It encourages us to look beyond single legal orders and to consider the multiple, overlapping legal orders that shape the concept and practice of energy solidarity. However, the application of legal pluralism also requires careful analysis and management of the potential conflicts and synergies between different legal orders.

3.4.1.4 Legal Realism

Legal Realism, a school of thought that emerged around the year 1896, offers a unique perspective that can enrich the understanding of energy solidarity.²¹⁰ Legal realists argue that law is not merely a set of fixed rules objectively applied by courts but is a product of the interpretations of judges and broader socio-political dynamics.²¹¹ This viewpoint can add additional layers of analysis to the concept of energy solidarity.

²⁰⁹ Merry, 1988, p. 870.

²¹⁰ Holmes, 1897.

²¹¹ Holmes, 1897, p. 467.

When applied to the concept of energy solidarity, Legal Realism can illuminate what influences the application of this principle. Legal realists would argue that energy solidarity is not solely a normative legal principle outlined in treaties or legislation, but is also significantly shaped by the interpretations and decisions of relevant actors, including courts, policymakers, and energy companies. For example, the interpretation of energy solidarity by the European Court of Justice (ECJ) in the case OPAL (C-848/19 P)²¹² could be understood not only as the application of a legal principle but also as the result of the judges' interpretations, which may be influenced by broader political and economic factors.

Furthermore, Legal Realism can provide insights into the political dynamics surrounding energy solidarity. The realists would emphasize that law, including the principle of energy solidarity, is intertwined with politics and power relations. This could lead to a critical examination of how power dynamics among states, energy companies, and other stakeholders influence the definition, interpretation, and application of energy solidarity.

In summary, Legal Realism can provide a valuable theoretical lens to critically examine the concept of energy solidarity in law. By emphasizing the roles of judicial interpretation and socio-political dynamics, Legal Realism could contribute to a more nuanced and comprehensive understanding of energy solidarity.

3.4.1.5 Conclusion

This section has examined various jurisprudential perspectives and their relevance in understanding and applying the principle of energy solidarity. Each of the approaches considered - Hart's legal theory, Natural Law theory, Legal Pluralism, and Legal Realism - offer unique insights and highlight different aspects of energy solidarity.

Hart's theory allows us to investigate the formal interplay of primary and secondary rules, while Natural Law underscores the ethical and moral dimensions of energy solidarity.²¹³ Legal Pluralism points out the complexity and dynamism resulting from the interaction of

²¹² ECJ, 2021.

²¹³ Hart, 1961, p. 79; Finnis, 2011, p. 125.

multiple legal orders, and Legal Realism draws attention to the influences of judicial interpretation and broader socio-political dynamics on the application of the principle of energy solidarity.

However, none of the theories alone can capture the full complexity of energy solidarity. It becomes apparent that a comprehensive consideration of this principle requires the integration of various jurisprudential perspectives. It is important to take into account the various dimensions - formal, ethical, pluralistic, and realistic - in order to understand and effectively apply the principle of energy solidarity in its full complexity.

Finally, this analysis makes clear that energy solidarity is not a rigid or isolated concept. Instead, it is a dynamic principle influenced by both formal legal structures and norms as well as broader socio-political dynamics. It is therefore crucial to adopt a flexible and critical approach to the consideration and application of energy solidarity, always taking into account the diverse contexts and influences that shape its design and implementation.

3.4.2 Most Favored Nation Principle

After a comprehensive exploration of energy solidarity through various jurisprudential lenses, attention is now shifted towards another principle with significant implications for the energy world: the Most Favored Nation (MFN) principle. As a cornerstone of the regulatory framework of the World Trade Organization, the MFN principle offers an additional perspective on international equity and cooperation, concepts that are central to the discussion of energy solidarity.²¹⁴ This transition provides an opportunity to contextualize energy solidarity within the broader landscape of international trade and regulation. This principle, enshrined in Article I:1 of the General Agreement on Tariffs and Trade (GATT) 1994²¹⁵, establishes a regulatory foundation that encourages equitable trade relationships among nations.

²¹⁴ WTO, 1994; Council of European Union, 1994.

²¹⁵ GATT, 1994; WTO, n.d.-a.

As detailed in Article I:1 of GATT 1994, "any advantage, favour, privilege, or immunity granted by any contracting party to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other contracting parties".²¹⁶

In essence, the MFN principle stipulates that if a WTO member state extends favorable terms to one trading partner, these identical terms must be granted to all other WTO members. By ensuring non-discrimination among trading partners, the MFN principle seeks to create a level playing field in global trade. This commitment to non-discrimination engenders a sense of solidarity among Member States, upholding the principles of mutual support and collective progress - fundamental tenets of the concept of solidarity.

3.4.2.1 Relationship with Energy Solidarity

The MFN principle reinforces solidarity among Member States, grounded in the belief that no member should be disadvantaged at the expense of another. This principle promotes equality and fairness, which harmonize with the foundational principles of solidarity - mutual support and collective progress.

In the WTO Appellate Body report "US – Shrimp", the Appellate Body characterized the fundamental essence of the MFN principle as barring "arbitrary or unjustifiable discrimination"²¹⁷, while simultaneously acting as a bulwark against disguised restrictions on international trade.²¹⁸ Thereby, the enforcement of the MFN principle upholds a balance among member nations, stimulating smooth international trade, in what can be seen as a manifestation of economic cohesion.

The link between the MFN principle and solidarity is also mirrored in international energy law. For example, the Energy Charter Treaty (ECT) obliges contracting parties to grant MFN status in energy trade, while simultaneously advocating for energy efficiency and

²¹⁶ WTO, n.d.-a, p. 2.

²¹⁷ WTO Analytical Index, 2023, p. 80.

²¹⁸ WTO Analytical Index, 2023, pp. 80-82

cooperation in the energy sector.²¹⁹ These commitments illustrate the connection between the MFN principle and a form of energy solidarity that advocates cooperation and mutual progress.

3.4.2.2 Unraveling the Complexities

However, the relationship between the MFN principle and solidarity presents several complexities. These were brought to light in the WTO Appellate Body report "European Communities – Conditions for the Granting of Tariff Preferences to Developing Countries".²²⁰ Although the MFN principle assures non-discrimination, it does not prohibit members from instituting measures to redress inequalities and support developing countries.²²¹ Solidarity is not merely about identical treatment of all members as it also involves recognizing disparities and instituting measures to address them.

While the MFN principle fosters a form of solidarity based on non-discrimination and equal treatment, it should be interpreted within the broader framework of solidarity. This wider perspective acknowledges the need for tailored measures to assist members who might be disadvantaged due to structural factors, emphasizing the collective responsibility of members to cultivate a fair and balanced international trade system.

However, it's crucial to note that the application of the MFN principle does not inherently facilitate solidarity. In some cases, there may be tensions between the two concepts. For instance, rigid application of the MFN principle may restrict states' abilities to implement measures supporting disadvantaged groups or promoting environmentally friendly energy technologies. Thus, the effective execution of solidarity within the context of the MFN principle necessitates careful balancing and potential adjustments to the legal framework to accomplish specific objectives.

²¹⁹ ECT, 1994.

²²⁰ Grossman & Sykes, 2005.

²²¹ Grossman & Sykes, 2005, pp. 1-2.

3.4.2.3 Conclusion

In conclusion, the intersection between the MFN principle and solidarity is multifaceted and layered. A balanced and judicious application of the MFN principle can contribute to strengthening solidarity by prohibiting discrimination and fostering fair trade. Simultaneously, realizing the full potential of solidarity requires recognizing and addressing differences and inequalities among members, potentially necessitating adjustments to the legal framework to implement specific solidarity measures.

3.4.3 Security Exceptions in WTO Agreements and Their Relevance to Energy Solidarity

A fundamental element of WTO law, which could also be relevant in the context of energy solidarity, is the principle of security exceptions, as stipulated in Article XXI of the GATT 1994²²². Article XXI lit. a of the GATT 1994²²³ allows Member States to take measures they deem necessary for the protection of their "essential security interests"²²⁴, even if such measures would otherwise be in violation of their obligations under the GATT 1994.

According to the Article 3:2 WTO Dispute Settlement Body, interpretive issues in WTO disputes are to be resolved by applying the customary rules of interpretation of international law.²²⁵ These rules also include those codified in Articles 31 and 32 of the Vienna Convention on the Law of Treaties (Vienna Convention).²²⁶ Article 31 para. 1 of the Vienna Convention stipulates that a treaty is to be interpreted in good faith according to the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.²²⁷

In relation to energy solidarity, these principles could be relevant in several ways. First, they could help interpret the term essential security interests in the context of energy issues. For

²²² WTO, n.d.-a, p. 56.

²²³ WTO, n.d.-a, p. 56.

²²⁴ WTO, n.d.-a, p. 56.

²²⁵ WTO, n.d-b, p. 354.

²²⁶ United Nations, 1969, p. 13.

²²⁷ United Nations, 1969, p. 13.

example, states could argue that ensuring a safe and reliable energy supply represents an essential security interest that allows them to take certain measures that would otherwise violate their WTO obligations.

Second, these principles could also help clarify the relationship between WTO law and other international obligations in the field of energy. For instance, if a state takes measures to promote energy solidarity that might violate its WTO obligations, the principles of the Vienna Convention on the Law of Treaties²²⁸ could help determine whether these measures are permissible nonetheless.

In conclusion, the rules and principles of WTO law can play a significant role in formulating and applying the principle of energy solidarity. It is crucial to take into account the specific circumstances and contexts in which these rules and principles are applied.

3.4.3.1 Evaluation

The decision of the World Trade Organization (WTO) panel in regard to the national security exceptions as stipulated in Article XXI lit. b iii) of GATT 1994²²⁹ has significant implications for international law, particularly in terms of the enforcement of energy solidarity.²³⁰ These exceptions, as elucidated in the WTO decision, signal a potential conflict between national security interests and international obligations, thereby setting crucial boundaries for the exercise of energy solidarity in the international context.

The panel's findings confirm that national security interests can pose a potential hindrance to the realization of energy solidarity, especially when such solidarity is demanded by one state from another third state.²³¹ In such instances, a state can undertake measures it deems necessary for the protection of its "essential security interests"²³², even if these measures would otherwise contravene its WTO obligations. This poses a range of complex questions,

²²⁸ United Nations, 1969.

²²⁹ WTO, n.d.-a, p. 56.

²³⁰ World Trade Organization, 2019.

²³¹ World Trade Organization, 2019.

²³² WTO, n.d.-a, p. 56.

particularly in relation to the interaction between international and national norms and obligations.

Simultaneously, the demand for energy solidarity itself can be based on national security interests. This implies that a state could potentially invoke the principle of energy solidarity to justify measures it considers necessary to protect its national security interests. In this sense, energy solidarity can serve both as a tool to foster international cooperation and interdependence, and as a basis for the exercise of national security interests.

Therefore, the enforcement of energy solidarity whilst considering national security interests presents a challenge that requires careful deliberation and interpretation of national and international norms and obligations. This challenge underscores the need for further research into the principle of energy solidarity to ensure a balanced and effective framework for addressing energy matters at an international level.

3.4.3.2 Conclusion

The conclusion that can be drawn from this discussion is multifaceted. Firstly, WTO law, particularly the principle of security exceptions, plays a significant role in the context of energy solidarity. This principle provides room for states to prioritize their "essential security interests"²³³, which may be interpreted to include ensuring a safe and reliable energy supply.

Secondly, the customary rules of international law, as codified in the Vienna Convention on the Law of Treaties²³⁴, are valuable tools in interpreting terms and resolving disputes in the context of WTO obligations.²³⁵ They could provide the framework to balance obligations under WTO law and the requirements of energy solidarity, particularly when they seem to conflict.

²³³ WTO, n.d.-a, p. 56.

²³⁴ United Nations, 1969, p. 13

²³⁵ United Nations, 1969, p. 2

Thirdly, while the legal principles and frameworks provide some guidance, the specific circumstances and contexts play a critical role in interpreting these laws and applying them to the principle of energy solidarity. Therefore, states and international bodies need to consider these factors carefully when making decisions related to energy solidarity.

Lastly, the interplay between different areas of international law, such as trade law under the WTO and various energy-related obligations, can be complex. The application of the principle of energy solidarity needs careful handling to respect the nuances of these interactions.

Overall, the discussion highlights the importance of a nuanced understanding of WTO law and international legal principles in the context of energy solidarity. It underscores the need for judicious and context-specific interpretation and application of these legal principles to ensure both adherence to international trade laws and the promotion of energy solidarity.

3.5 General Principles of International Law

International law is a body of rules, norms, and principles that govern relations among states and other international actors.²³⁶ The general principles of international law play a crucial role in shaping and defining the conduct of states in various areas, including international energy relations. These principles, derived from customary law, treaty law, and the jurisprudence of international courts and tribunals, serve as a foundation for the development and interpretation of specific rules and obligations.²³⁷

In the context of international energy relations, the general principles of international law, such as the principle of cooperation, good faith, equitable utilization, and the obligation to prevent harm, have a significant impact on state behavior and the formation of energy policies. The application of these principles fosters collaboration among states, promotes the sustainable use of energy resources, and ensures the protection of the environment and the interests of all stakeholders involved.

²³⁶ Perez, 2003, p. 36.

²³⁷ Brunnée & Toope, 2011, pp. 312-315.

Understanding the implications of these general principles in international energy relations is crucial for legal practitioners, policymakers, and scholars who aim to analyze and resolve energy-related disputes and challenges. The following sections will provide an in-depth analysis of some of the key principles of international law as they pertain to international energy relations, with a particular focus on the principle of cooperation, the principle of good faith, and the principle of equitable utilization.

3.5.1 Examining the Legal Meaning of Cooperation

The principle of cooperation, as an indispensable aspect of international law, has been analyzed and interpreted through a multitude of lenses, including those of states, international organizations, courts, arbitral tribunals, and scholars. Cooperation is seen as a process or means enabling states to collectively address shared challenges and realize common objectives, particularly in the context of international energy relations.²³⁸

Considering the genesis of solidarity, cooperation can be perceived as an essential precursor. It facilitates understanding and coordination of actions, consequently leading to the achievement of shared objectives and the fostering of mutual benefits.²³⁹

3.5.1.1 A Comparison between Cooperation and Solidarity

Cooperation and solidarity are interrelated concepts that both contribute to the promotion of harmonious and mutually supportive relationships among states in the international legal system. While cooperation focuses on the process by which states collaborate to achieve common goals, solidarity emphasizes the underlying values of unity, interdependence, and shared responsibility that inform and guide cooperative endeavors. In this sense, solidarity can be considered as the moral and philosophical foundation upon which the principle of cooperation is based.

²³⁸ ECT, 1994; Huhta & Reins, 2023, p. 13.

²³⁹ Huhta & Reins, 2023, p. 13; Villarreal, 2021, p. 31.

The relationship between cooperation and solidarity may vary according to the specific context and legal regime governing international energy relations. For instance, in the European Union, the principle of solidarity is explicitly enshrined in the Treaty on the Functioning of the European Union (TFEU) and is interpreted as a guiding principle for Member States' actions in the field of energy policy. In contrast, within the framework of the United Nations, the principle of cooperation is more prominently featured in the Charter, which calls upon states to cooperate in addressing global challenges such as energy security and climate change.

3.5.1.2 Interpretation of Cooperation in International Courts and Arbitral Tribunals

International courts and arbitral tribunals have played a crucial role in interpreting and applying the principle of cooperation in the context of international energy disputes. For example, the International Court of Justice (ICJ) in the case *Gabcikovo-Nagymaros*²⁴⁰ emphasized the duty of the Kingdom of Hungary and the Slovak Republic to engage in good faith negotiations and cooperate in the management of the shared Danube River, which involved the construction of a joint hydroelectric power project.²⁴¹ Similarly, in the case *Pulp Mills*²⁴² between Argentine Republic and Oriental Republic of Uruguay, the ICJ highlighted the obligation of the parties to cooperate in the protection of the shared River Oriental Republic of Uruguay from potential environmental harm caused by the operation of a pulp mill.²⁴³

Arbitral tribunals operating under the auspices of institutions such as the International Centre for Settlement of Investment Disputes (ICSID) and the PCA have also addressed issues related to cooperation in the energy sector. In cases involving disputes over the development and operation of cross-border energy infrastructure projects, such as pipelines and power plants, tribunals have often emphasized the parties' duty to cooperate in good faith and to seek mutually beneficial solutions to their differences.

²⁴⁰ ICJ, 1997, p. 1.

²⁴¹ ICJ, 1997, p. 80.

²⁴² ICJ, 2007, p. 1.

²⁴³ ICJ, 2007, p. 17.

3.5.1.3 Stakeholders' Perspectives on Cooperation in International Energy Relations

States, international organizations, and other stakeholders involved in international energy relations have expressed varying perspectives on the nature and scope of the principle of cooperation. Some states and international organizations, such as the Energy Charter Secretariat, have advocated for a broad interpretation of cooperation that encompasses not only formal legal obligations but also voluntary commitments, partnerships, and collaborative initiatives aimed at promoting energy security, sustainability, and market integration.²⁴⁴ This perspective highlights the need for flexibility and adaptability in the implementation of cooperative measures, recognizing the diverse interests and capacities of states and other actors in the energy sector.

In contrast, some stakeholders, particularly those from developing countries, have called for a more structured and binding approach to cooperation in international energy relations, emphasizing the need for equitable access to energy resources, technology transfer, and financial support.²⁴⁵ This viewpoint underscores the importance of solidarity and shared responsibility among states, particularly between developed and developing countries, in addressing the global challenges of energy security, climate change, and sustainable development.

National courts and regulatory authorities have also contributed to the interpretation and application of the principle of cooperation in the energy sector, particularly in the context of cross-border energy trade, investment, and environmental regulation. For instance, the European Court of Justice (ECJ) has played a pivotal role in shaping the EU's internal energy market by ensuring the consistent application of the principles of cooperation and solidarity among Member States. National courts in countries such as the United States of America, Canada, and Australia have similarly grappled with issues related to cooperation in the regulation of energy markets, infrastructure development, and environmental protection.

In conclusion, the principle of cooperation in international energy relations is a multifaceted concept that encompasses a wide range of legal and policy issues, reflecting the diverse

²⁴⁴ Energy Charter Secretariat, 2004, p. 18.

²⁴⁵ Karekezi et al., 2023, p. 186; Banet, 2023, p. 12; Karekezi et al., 2023, p. 179.

perspectives and interests of states and other stakeholders. By examining the various interpretations and applications of cooperation in different contexts, it becomes evident that the principle is closely intertwined with the values of solidarity, shared responsibility, and interdependence that underpin the international legal system. As the global community faces unprecedented challenges in the energy sector, the importance of fostering cooperation and solidarity among states and other actors will only continue to grow.

3.5.2 Relationship between Good Faith and Energy Solidarity

The principle of good faith is a cardinal rule of international law that mandates states to behave honestly and with sincerity in their interactions with one another.²⁴⁶ It is an intrinsic part of the international legal system and pervades many facets of international law, including treaty interpretation, dispute resolution, and the application of customary international law.²⁴⁷ Within international energy relations, the principle of good faith is pivotal in cultivating trust, stability, and predictability among states, thus fostering a favorable environment for collaboration and the attainment of collective objectives.²⁴⁸

The relationship between good faith and solidarity becomes apparent when exploring how the principle of good faith undergirds the cooperative efforts central to the concept of solidarity. In accordance with Article 31 para. 1 of the Vienna Convention on the Law of Treaties, good faith serves as a guide that ensures states act in alignment with the spirit of solidarity. This manifests in showing respect for the rights and interests of other states and working towards mutually advantageous outcomes.²⁴⁹ This is particularly crucial in international energy relations where states often encounter complex challenges that necessitate coordinated action and the sharing of resources, technology, and knowledge.

During the negotiation, interpretation, and implementation of international energy agreements, the principle of good faith obliges states to adhere to agreed terms and abstain from any conduct that would jeopardize the objectives of the agreement or the rights of other

²⁴⁶ Ryś, 2022, p. 157; ECJ, 2021, para. 14.

²⁴⁷ Shaw, 2008, p. 34.

²⁴⁸ Simma & Alston, 1992, p. 100.

²⁴⁹ United Nations, 1969, p. 12.

parties. This includes, for instance, the duty to negotiate in good faith, which compels states to make genuine efforts to reach an acceptable agreement, and avoid tactics that would hinder or thwart the negotiation process. The principle of “good faith”²⁵⁰ is mirrored in the principle of “pacta sunt servanda”²⁵¹, which mandates that states must fulfill their treaty obligations in good faith, irrespective of any changes in circumstances or the balance of benefits among the parties.²⁵²

The principle of good faith also extends to the resolution of disputes in international energy relations, where it compels states to exhaust all peaceful means of settlement before resorting to confrontational measures. This involves the duty to make genuine attempts to resolve disputes through negotiation, mediation, or other forms of dispute resolution, and the obligation to comply in good faith with the rulings of international courts and tribunals. In this manner, the principle of good faith fortifies the commitment to solidarity by advocating for the peaceful resolution of disputes and prompting states to seek mutually beneficial solutions rather than pursuing unilateral actions that may undermine the principles of interdependence and shared responsibility.²⁵³

The principle of good faith and the concept of solidarity are therefore closely interwoven in the context of international energy relations. By nurturing trust, enhancing cooperation, and advocating for the respect of rights and interests of other states, the principle of good faith serves as a fundamental pillar for embodying the values and objectives inherent in the concept of solidarity. This remains crucial after the conclusion of an agreement and in situations of conflict. As the challenges facing the global energy landscape continue to evolve, the importance of adhering to the principle of good faith in international energy relations will only increase, underscoring the necessity for states to act in the spirit of solidarity and collaborate in the pursuit of shared goals and the common good.

The interplay between good faith and solidarity is manifest in various aspects of international energy relations, including the negotiation, interpretation, and implementation of international energy agreements, dispute resolution, and the application of customary

²⁵⁰ Shaw, 2008, p. 50.

²⁵¹ Shaw, 2008, p. 50.

²⁵² Shaw, 2008, p. 50.

²⁵³ Tomaszewski, 2019, p. 8; Shaw, 2008, pp. 103-104.

international law. By ensuring that states behave in a manner aligned with the spirit of solidarity and respectful of the rights and interests of other states, the principle of good faith helps to create a cooperative, stable, and predictable environment in international energy relations.

In summary, the principle of good faith and the concept of solidarity are closely interconnected in international energy relations. Both principles aim to foster trust, cooperation, and respect for the rights and interests of other states, ultimately contributing to the achievement of shared objectives and the common good. As the global energy landscape continues to encounter complex challenges, adhering to the principle of good faith and embracing the spirit of solidarity will be paramount for states to work collectively in the pursuit of sustainable and mutually beneficial solutions.

3.5.3 The Legal Scope of Equitable Utilization

Having explored the principle of good faith and its relationship with the concept of solidarity in the previous section, it is important to examine another fundamental principle of international law that contributes to the realization of solidarity in international energy relations - the principle of equitable utilization. This principle is a cornerstone of international law governing the shared use of resources, including energy resources, among states.²⁵⁴ In the context of international energy relations, this principle plays a significant role in ensuring that states engage in fair, balanced, and sustainable use of energy resources, taking into consideration the rights and interests of all stakeholders involved.²⁵⁵ This section will analyze the principle of equitable utilization, its relevance to the concept of solidarity in international energy relations, and its application in practice, particularly in the context of transboundary energy resources and projects.

²⁵⁴ McCaffrey, 1989, pp. 509-510.

²⁵⁵ Handl, 1979, pp. 43-44.

3.5.3.1 Definition

The principle of equitable utilization stems from the broader concept of equity in international law, which seeks to ensure fairness and justice in the distribution and use of resources among states.²⁵⁶ This principle is especially relevant in the context of transboundary resources, such as shared watercourses and cross-border energy projects, where the interests of multiple states need to be balanced in order to achieve sustainable development and maintain international peace and security.²⁵⁷

Equitable utilization requires states to take into account various factors when determining the allocation and use of shared resources, including geographical, hydrological, economic, and social factors, as well as the needs and interests of the states involved. The aim is to ensure that all states have a fair opportunity to utilize the shared resources and that the benefits and burdens associated with the use of those resources are distributed equitably among the states concerned.²⁵⁸

3.5.3.2 Comparison between Equitable Utilization and Solidarity

The principle of equitable utilization plays a crucial role in fostering solidarity in international energy relations by promoting a fair and balanced approach to the use of shared energy resources and the development of joint energy projects.²⁵⁹ This principle encourages states to engage in cooperative arrangements that take into account the needs and interests of all stakeholders, thus facilitating the achievement of shared goals and fostering a sense of interdependence and mutual support.

In this regard, the principle of equitable utilization can be seen as complementary to the principles of cooperation and good faith discussed in the previous sections. By ensuring a fair and balanced allocation of resources and benefits, equitable utilization helps to build

²⁵⁶ Salman, 2021, p. 186.

²⁵⁷ Handl, 1979.

²⁵⁸ Salman, 2021, pp. 187-188.

²⁵⁹ Handl, 1979, p. 42.

trust among states and fosters a spirit of collaboration that is essential for the effective implementation of cooperative arrangements in the energy sector.

3.5.3.3 Interpretation of Equitable Utilization by International Court of Justice

The principle of equitable utilization has been applied in various contexts, particularly in the management of transboundary water resources, where it has been recognized by international courts and tribunals as a fundamental principle of international water law. For instance, the International Court of Justice (ICJ) has underscored the significance of equitable utilization in various instances, including the case “Gabcikovo-Nagymaros”²⁶⁰ between the Kingdom of Hungary and the Slovak Republic, and the case “Pulp Mills”²⁶¹ involving the Argentine Republic and the Oriental Republic of Uruguay. In the latter case, it referred to the principle as “optimum and rational utilization”.²⁶² While the principle of equitable utilization has been primarily developed in the context of water resources, its underlying rationale and principles can also be applied to other shared resources, including energy resources and infrastructure. In the case of transboundary energy projects, such as cross-border pipelines or electricity grids, the principle of equitable utilization may require states to take into account the needs and interests of all parties involved, as well as the potential environmental, social, and economic impacts of the project. Moreover, the principle of equitable utilization can also inform the development of international energy agreements and regulatory frameworks, by ensuring that the rights and obligations of states are balanced and that the benefits and burdens associated with the use of energy resources are equitably shared among the parties.

In conclusion, the principle of equitable utilization is a vital component of international law that contributes to the realization of solidarity in international energy relations. By promoting a fair and balanced approach to the use of shared energy resources and the development of joint energy projects, this principle fosters a sense of interdependence and mutual support among states, which is essential for achieving sustainable development and maintaining international peace and security in the energy sector. As the global energy landscape continues to evolve, the importance of adhering to the principle of equitable utilization will

²⁶⁰ ICJ, 1997.

²⁶¹ ICJ, 2007.

²⁶² ICJ, 2007, p. 5.

only become more crucial in fostering cooperation, solidarity, and shared responsibility in international energy governance.

In conclusion, the principle of equitable utilization is a vital component of international law that contributes to the realization of solidarity in international energy relations. By promoting a fair and balanced approach to the use of shared energy resources and the development of joint energy projects, this principle fosters a sense of interdependence and mutual support among states, which is essential for achieving sustainable development and maintaining international peace and security in the energy sector. As the global energy landscape continues to evolve, the importance of adhering to the principle of equitable utilization will only become more crucial in fostering cooperation, solidarity, and shared responsibility in international energy governance.

4. Conclusions

Chapter One has enabled an in-depth, multi-dimensional exploration of the term 'energy solidarity', encompassing its historical, philosophical, political, and legal aspects. By incorporating a multitude of sources and theoretical approaches, a rich and multifaceted understanding of energy solidarity has been achieved.

The analysis of the evolution of the concept of solidarity has illuminated the progression from philosophical foundations laid by Aristotle, Thomas Aquinas, René Descartes, and Immanuel Kant, towards explicit formulations of solidarity in the writings of Pierre-Joseph Proudhon, Robert Owen, among others.

Political aspects of solidarity were scrutinized from various national perspectives, highlighting the diverse expressions and applications of this concept in the political arena. This investigation underscored the flexibility of the concept of solidarity and its ability to permeate diverse cultural and political contexts.

In the sphere of international law, the role of energy solidarity as a guiding principle for the interpretation and application of international norms and regulations was examined. Treaty law, customary law, and the role of the World Trade Organization were thoroughly analyzed to comprehend the legal dimensions of energy solidarity.

The research findings from Chapter One lay a solid foundation for Chapter Two, which proceeds with a legal analysis of energy solidarity within the context of European energy policy. The examination has made it clear that energy solidarity plays a central role in shaping global energy policy and is a pivotal tool in addressing growing global energy and climate challenges.

Chapter Two: Examination of Energy Solidarity within the Framework of EU Law

This chapter delves into the history of integration in the European gas internal market, tracing the evolution of policies and their impact on energy solidarity. From the early phases and the Treaty of Rome to EU enlargements, the Energy Charter Treaty, and the Treaty of Lisbon, we unravel the complex interplay between energy policy and the principles of energy solidarity.

This analysis engages with various regulations that underpin the concept of energy solidarity. This includes the Treaty on the Functioning of the European Union (TFEU), the Energy Charter Treaty, Regulation (2019/941/EU)²⁶³, Regulation (2017/1938/EU)²⁶⁴, Regulation (715/2009/EC)²⁶⁵, and Directive (2009/73/EC)²⁶⁶. Each of these regulations plays a crucial role in establishing the legal framework within which energy solidarity is defined and implemented.²⁶⁷

The chapter employs various principles of interpretation - literal, teleological, historical genetic, and EU-law conform - to dissect and understand the concept of energy solidarity. The judicial interpretation by the Court of Justice of the European Union (ECJ) in the case OPAL (C-848/19 P)²⁶⁸ provides additional insights into the application of energy solidarity principles in practice.

Lastly, the chapter critically evaluates energy solidarity in the context of European law, discussing its delineation from the general concept of solidarity, its teleology, and its historical genetic interpretation. The chapter further analyzes the interpretation of energy solidarity by the ECJ in the case OPAL (C-848/19 P)²⁶⁹, including the disputes over the legal

²⁶³ EU, 2019.

²⁶⁴ EU, 2017.

²⁶⁵ EU, 2009a.

²⁶⁶ EU, 2009b.

²⁶⁷ LaBelle, 2023, p. 16.

²⁶⁸ ECJ, 2021.

²⁶⁹ ECJ, 2021.

binding nature of energy solidarity in Article 194 para. 1 TFEU, and the specification of essential interests within the context of energy solidarity.²⁷⁰

Through this comprehensive examination, the chapter offers vital insights into how energy solidarity principles can navigate the complex landscape of energy politics, market dynamics, and legal frameworks in the European Union. It also underscores the need for well-crafted legal provisions that can promote energy solidarity amid divergent interests and geopolitical challenges.

1. Introduction

The integration of the European gas internal market has a complex and multi-faceted history. Initially, European countries were primarily focused on securing their own national energy needs, leading to a fragmented market with significant barriers to cross-border trade in gas. However, as the realization grew that a unified internal gas market would benefit all Member States by promoting competitiveness, ensuring security of supply, and fostering solidarity, efforts began to integrate the market.

This integration process was driven by several key European Directives and Regulations, which gradually established the common rules necessary for the creation of an integrated gas market.²⁷¹ This includes the liberalization of the gas market, the unbundling of gas supply and transmission operations, and the establishment of regulatory bodies to oversee the market.²⁷²

In recent years, there has been an increased focus on enhancing cross-border interconnectivity, transparency, and competition, all of which are deemed crucial for the realization of a truly integrated European internal gas market. These efforts are in accordance with Article 194, para. 1 lit. d of the TFEU. However, despite the significant progress made, challenges remain. These include regional disparities in market development, the need for

²⁷⁰ Kaschny, 2023, p. 290.

²⁷¹ Tomaszewski, 2018, p. 7.

²⁷² Heffron et al., 2018, p. 34.

further infrastructure investment, and the complex issue of external supply dependency, particularly from the Russian Federation.²⁷³

The exploration of the role of energy solidarity in this context, especially in relation to the Nord Stream 2 project, is a key focus of this dissertation. Through examining the potential of contractual provisions in promoting energy solidarity, this study contributes to the ongoing discourse on how to overcome the remaining challenges and achieve a fully integrated European gas internal market.

1.1 Early Phase and the Treaty of Rome

From the inception of the European Union's predecessor, the European Coal and Steel Community (ECSC) in 1951, the principle of solidarity was integral to its foundational legal fabric. The 1951 Preamble to the Treaty Establishing the European Coal and Steel Community stated, “Europe can be built only through real practical achievements which will first of all create real solidarity”²⁷⁴ thereby situating solidarity as a cornerstone of the European integration project.²⁷⁵

The signing of the “Treaty of Rome”²⁷⁶ in 1957, marking the founding of the European Economic Community (EEC), was a milestone in the history of European integration. While it didn't have an explicit energy policy, it laid down important basic principles for the creation of a common market, which would impact the development of European energy policy.

The principles of free movement of goods and competition, enshrined in the Treaty of Rome, formed the core of the gradual liberalization of energy markets in Europe. This process began seriously in the 1990s and was supported by subsequent legislation and treaties.

²⁷³ Ennuschat, 2015, pp. 1553-1554.

²⁷⁴ European Coal and Steel Community, 1951.

²⁷⁵ Sangiovanni, 2013, p. 213; Huhta & Reins, 2023, p. 4; Banet, 2023, p. 14.

²⁷⁶ Treaty of Rome, 1957.

Moreover, the Treaty of Rome, despite lacking specific provisions on energy policy, was meant to serve as a foundation for joint work on energy issues. Thus, the European Coal and Steel Communities (ECSC) and the “European Atomic Energy Community”²⁷⁷ (EURATOM Community) the promotion of peaceful nuclear energy use were established even before the Treaty of Rome, serving as important precursors of the common energy policy.

Overall, the significance of the Treaty of Rome for European energy policy cannot be underestimated, even if its impacts were rather indirect and unfolded over a longer period. The basic principles it established continue to shape EU energy policy to this day and contribute to addressing challenges in terms of energy security, energy efficiency, and environmental protection.

1.2 Implications of EU Enlargements on Energy Policy

The successive enlargement of the European Union, especially the large waves of accession of countries from Central and Eastern Europe since 2004, has profoundly influenced and further developed the EU's energy policy.²⁷⁸ The new Member States brought both their specific energy policy challenges and their own resources into the Union, leading to diversification and complexity in energy policy.

The expansion of the EU to the east changed the geopolitical environment of European energy policy. Many of the acceding countries were heavily dependent on energy imports, especially Russian natural gas. This increased the importance of energy security on the EU's political agenda and led to the development of strategies for diversifying energy sources and supply routes.²⁷⁹

The new Member States also contributed to the diversification of the EU's energy markets. They brought in a variety of energy sources, including coal, natural gas, and renewable energies.²⁸⁰ However, many of these countries were also faced with significant challenges

²⁷⁷ European Atomic Energy Community, 1957.

²⁷⁸ Hasa, 2021, pp. 19-20.

²⁷⁹ Iakovenko, 2021, pp. 38-40; European Commission, 2022.

²⁸⁰ Hasa, 2021.

in modernizing their energy infrastructure and improving their energy efficiency, setting new priorities for the EU's energy policy.

But the impacts of enlargement were not limited to the challenges. Enlargement also offered new opportunities, such as the potential for expanding renewable energies in the new Member States. Moreover, EU enlargement allowed for greater integration of energy markets, which can lead to more efficient energy production and distribution.²⁸¹

Overall, EU enlargement has significantly shaped European energy policy and helped to sharpen the focus on issues such as energy security, energy efficiency, and renewable energies. The challenges and opportunities created by enlargement continue to shape EU energy policy to this day, making it a complex but fascinating field of research.

1.3 The Influence of the Energy Charter on European Energy Policy

The Energy Charter, launched in 1991, marks a major milestone in shaping international energy relations, with its impact also significantly influencing European energy policy. The Charter and the subsequent Energy Charter Treaty (ECT) provided a multilateral legal framework that regulated cooperation in energy production, conversion, transmission, distribution, and consumption.

One of the core principles of the Energy Charter is the principle of freedom of transit.²⁸² This principle aims to eliminate obstacles to the free transit of energy goods across the territory of the contracting parties. It was a decisive factor for European energy policy, particularly for the integration of energy markets and the security of energy supply in Europe.

Another cornerstone of the Energy Charter is the protection of investments.²⁸³ The ECT provides strong protection for investors and investments in the energy sector, including provisions on fair and equitable treatment, protection against direct or indirect expropriation,

²⁸¹ Moeller, 2008, pp. 382-416.

²⁸² ECT, 1994.

²⁸³ ECT, 1994.

and the right to transfer investment returns. These provisions have significant impacts on energy security and energy solidarity in Europe, as they boost confidence in the energy sector and promote investments in energy infrastructure.

The Energy Charter has also made a significant contribution to energy efficiency and the promotion of sustainable energy practices. It includes provisions that obligate the contracting parties to take measures to improve energy efficiency and reduce the environmental impacts of energy production and use.

Overall, the Energy Charter has played a fundamental role in shaping European energy policy and has established important principles and rules that remain relevant today. Its significance for European energy policy and energy solidarity cannot be underestimated.

However, it is also important to note developments that have called into question aspects of the ECT. The judgment by ECJ in the case *Achmea (C-284/16)*²⁸⁴ ruled that investor-state dispute settlement (ISDS) clauses in intra-EU bilateral investment treaties (BITs) are incompatible with EU law.²⁸⁵ This ruling has implications for the ECT, as it also contains ISDS provisions. The implications of this judgment on the application of the ECT in intra-EU disputes and its compatibility with EU law are still under discussion and underscore the evolving nature of European energy policy and international energy law.²⁸⁶

1.4 Treaty of Lisbon and its meaning to European Energy Solidarity

With the entry into force of the Treaty of Lisbon in 2009, energy policy was for the first time included in the canonical text of the European treaties, signaling the formalized recognition of the growing importance of this sector within the European political landscape. Article 194 of the Treaty on the Functioning of the European Union (TFEU) now sets out specific objectives for European energy policy and explicitly mentions the principle of energy solidarity.

²⁸⁴ ECJ, 2018.

²⁸⁵ ECJ, 2018, para. 59.

²⁸⁶ Lavranos et al., 2023, p. 39.

The security of energy supply, one of the goals outlined in Article 194 para. 1 lit. b TFEU, is a central pillar of European energy policy and is closely linked to the principle of energy solidarity. In times of crises, when the availability or price of energy could be significantly affected, the solidarity clause outlined in Article 222 TFEU ensures that EU Member States cooperate and provide support to minimize the adverse impacts.²⁸⁷

Promotion of energy efficiency and energy saving measures, another central objective of Article 194 para. 1 lit c TFEU, is also closely linked to the principle of energy solidarity. Improving energy efficiency can help to reduce dependence on energy imports and increase supply security, which is in the interest of both individual Member States and the EU as a whole.²⁸⁸

Article 194 para. 1 lit. d of the Treaty of Lisbon establishes a legal foundation for the promotion of renewable energy sources and the reduction of greenhouse gas emissions. This provision plays a crucial role in fostering energy solidarity.²⁸⁹ Expanding renewable energies can reduce dependence on fossil fuels and energy imports while contributing to a fairer distribution of energy sources in Europe.

Finally, the Treaty of Lisbon enshrined the principle of energy solidarity itself, underscoring its role as a fundamental principle of European energy policy. This principle requires that Member States take into account the interests and needs of other Member States when exercising their national energy policies and cooperate in case of energy crises.

2. European Regulations on Solidarity

This chapter discusses the legislative instruments that shape the concept of energy solidarity within the European Union. These include key EU treaties, such as the Treaty on the Functioning of the European Union and the Treaty on the European Union, the Energy Charter Treaty (ECT), and certain EU regulations and directives. Each legal document

²⁸⁷ Banet, 2023, p. 14.

²⁸⁸ European Commission, 2022.

²⁸⁹ TFEU, 2012.

contributes to the understanding and application of the principle of energy solidarity in the context of EU's energy policy.

The first section offers an overview of the TFEU, where the primary legal basis for the principle of energy solidarity is found. Following this, the TEU is briefly examined to highlight the broader principles that guide the EU's actions, including the principle of solidarity.

The subsequent section provides an outline of the Energy Charter Treaty, an international agreement that encourages energy cooperation among signatories, with a particular focus on energy security provisions.

Subsequently, this chapter presents a synopsis of pertinent EU regulations such as Regulation (2019/941/EU)²⁹⁰, which concerns risk-preparedness in the electricity sector, Regulation (2017/1938/EU)²⁹¹, which ensures the security of gas supply, and Regulation (715/2009/EC)²⁹² that sets the conditions for accessing natural gas transmission networks.²⁹³

The chapter concludes with a brief overview of Directive (2009/73/EC)²⁹⁴, also known as the Gas Market Directive. This legal instrument has been crucial in liberalising the EU's energy market, bearing significant consequences for energy security and solidarity. Each of these regulations is introduced briefly, focusing on their respective areas of application.

Through these succinct reviews, this chapter provides a clearer picture of how the principle of energy solidarity is represented and implemented within the legislative framework of the European Union.

²⁹⁰ EU, 2019.

²⁹¹ EU, 2017.

²⁹² EU, 2009a.

²⁹³ Gundel, 2021, pp. 760-761; Nicoli, Burgoon, & van der Duin, 2023.

²⁹⁴ EU, 2009b.

2.1 Treaty on the Functioning of the European Union

Article 194 of the Treaty on the Functioning of the European Union (TFEU) delineates the specific goals for EU energy policy and explicitly enumerates the principle of energy solidarity. It obliges the EU and its Member States to collaborate closely in all matters concerning energy, particularly in measures to ensure energy security. This article serves as the primary legal foundation for the principle of energy solidarity.

Complementing Article 194 TFEU, Article 122 TFEU provides a key mechanism for exercising solidarity in economic matters, particularly in relation to energy. It authorises the European Council, on a proposal from the European Commission, to take necessary measures, especially when difficulties arise in the supply of certain goods, notably in the energy sector. These measures should be adopted "in a spirit of solidarity between Member States"²⁹⁵ underlining the centrality of this principle in the European Union's approach to energy security and supply issues.

Article 222 para. 1 TFEU, also known as the solidarity clause, is another pivotal provision. It states that the Union and its Member States shall act jointly in a spirit of solidarity if a member state is the object of a terrorist attack or the victim of a natural or man-made disaster.²⁹⁶ While this clause does not explicitly mention energy security, it sets a strong precedent for the principle of solidarity across various sectors, including energy.²⁹⁷

Taken together, Article 194 and Article 222 of the TFEU provide a robust legal framework for the application of the principle of solidarity in the EU's energy policy and operationalize the concept in ways that can directly affect policy outcomes.

²⁹⁵ TFEU, 2012.

²⁹⁶ Huhta & Reins, 2023, p. 12; Knodt & Tews, 2014, pp. 267-268; TFEU, 2012; Banet, 2023, p. 14; Yafimava, 2023, p. 1

²⁹⁷ Banet, 2023, p. 15.

2.2 Treaty on the European Union

The Treaty on European Union (TEU), which along with the Treaty on the Functioning of the European Union (TFEU), forms the constitutional basis of the European Union, also includes several key provisions regarding solidarity.

Firstly, Article 2 of the TEU establishes solidarity as one of the fundamental values of the Union. It states:

"The Union is founded on the values of respect for human dignity, freedom, democracy, equality, the rule of law and respect for human rights, including the rights of persons belonging to minorities. These values are common to the Member States in a society in which pluralism, non-discrimination, tolerance, justice, solidarity and equality between women and men prevail."²⁹⁸

The Article 3 para. 3 of the TEU sets out the European Union's aims, refers to a "highly competitive social market economy, aiming at full employment and social progress"²⁹⁹, and to the requirement that the Union "shall combat social exclusion and discrimination, and shall promote social justice and protection, equality between women and men, solidarity between generations and protection of the rights of the child."³⁰⁰

The Article 3 para. 3 of the TEU also establishes that the European Union "shall work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment".

Furthermore, Title V of the TEU, which deals with the Union's external action, also features the principle of solidarity. For example, Article 21 para. 1 and Article 21 para. 2 of the TEU explicitly state that the European Union's external action shall be guided by the principles of

²⁹⁸ TEU, 2012.

²⁹⁹ TEU, 2012.

³⁰⁰ TEU, 2012.

democracy, the rule of law, human rights, and respect for international law, as well as by the principle of solidarity and mutual assistance among Member States.³⁰¹

Lastly, Article 42 para. 7 of the TEU, which is part of the provisions on the Common Security and Defence Policy (CSDP), includes a mutual defence clause which is a form of solidarity among Member States follows the form of Art. 5 NATO Treaty.³⁰²

2.3 Energy Charter Treaty

The Energy Charter Treaty (ECT), ratified in 1994, provides a comprehensive legal framework that encourages cooperation among its signatory states in energy-related matters.³⁰³ The principle of energy solidarity, manifesting particularly in the spheres of investment protection and transit freedom, is a key facet of the ECT.

The aspect of investment protection is centrally stipulated in Article 10 para. 1 of the ECT.³⁰⁴ It mandates the Contracting Parties to promote and establish stable, equitable, favorable, and transparent conditions for investors from other contracting states. This provision, by fostering an environment that is fair and mutually beneficial for investments in the energy sector, underscores the principle of energy solidarity. It accentuates the requirement for transparent, predictable, and equitable regulations that equally apply to all participants in the energy sector. This regulatory approach ensures fairness by requiring all actors, regardless of their size or the scope of operations, to adhere to the same rules and principles, thereby providing them an equal opportunity to succeed.

Furthermore, this provision creates an atmosphere conducive to investments that can be profitable for the investor and beneficial for the host country. For example, a foreign company investing in a local energy project anticipates a reasonable return on investment, while the host country could gain advantages such as job creation, infrastructure development, technology transfer, or an overall enhancement of its domestic energy sector.

³⁰¹ TEU, 2012.

³⁰² von Ondarza, 2014, p. 270; Hartov, 2019.

³⁰³ ECT, 1994/2016.

³⁰⁴ Banet, 2023, p. 11; ECT, 1994/2016, p. 53.

Hence, by advocating for a regulatory environment that is fair and advantageous to all parties involved, this provision underscores the principle of energy solidarity, integral to the Energy Charter Treaty. This principle encourages collaboration, mutual support, and shared benefits among nations, particularly in the field of energy.

Simultaneously, Article 7 of the ECT, which pertains to transit freedom, mandates each Contracting Party to facilitate the transit of Energy Materials and Products.³⁰⁵ This provision enshrines the essence of energy solidarity by advocating for non-discrimination and efficient transit of energy resources, thereby contributing to energy security for all parties involved.

Moving on to the structural elements of the ECT, Article 1 of the ECT provides clear definitions for the key terms used throughout the treaty.³⁰⁶ Although this article does not explicitly mention energy solidarity, its significance lies in establishing a shared language and understanding.³⁰⁷ This shared comprehension is crucial for fostering collaboration among the signatory states and ensures the terms of engagement and cooperation are clear to all parties, facilitating a more seamless implementation of the principle of energy solidarity.

Article 2 of the ECT delineates the primary objective of the Treaty.³⁰⁸ The provision reads: "The provisions of this Treaty shall be applied with a view to promoting long-term cooperation in the energy field, in conformity with the objectives and principles of the [European] Energy Charter."³⁰⁹ The European Energy Charter espouses principles such as market-oriented price formation, non-discrimination, and trade freedom, all of which resonate with the concept of energy solidarity to which especially Article 3 of the ECT attests.³¹⁰

The emphasis on long-term cooperation in the energy field directly aligns with the principle of energy solidarity. It highlights the necessity for collective action and mutual support

³⁰⁵ ECT, 1994/2016, p. 48.

³⁰⁶ ECT, 1994/2016, p. 39.

³⁰⁷ ECT, 1994/2016, p. 39.

³⁰⁸ ECT, 1994/2016, p. 44.

³⁰⁹ ECT, 1994/2016, p. 44.

³¹⁰ ECT, 1994/2016, p. 44.

among nations to address energy challenges and reinforces the idea that collaborative efforts are crucial for the sustainable development and security of the global energy sector.³¹¹

In conclusion, while Articles 1 and 2 of the ECT do not explicitly refer to the principle of energy solidarity, they undeniably establish the foundation for its practical realization. By stipulating a clear framework of terms and objectives, these provisions facilitate cooperation among nations, effectively promoting the principle of energy solidarity in the sphere of international energy relations.

However, the ECT has not yet been successful in codifying the principle of energy solidarity explicitly within its treaty clauses, nor in including an appropriate elucidation of it in Article 1 of the ECT. Although the principle of energy solidarity can be construed as collaboration, cooperation, and reciprocal advantage, according to interpretation rules, and can therefore be considered as legally codified, at least in essence, it would be more beneficial to encapsulate these relatively vague legal terms under a distinctive concept.³¹²

Consolidating these principles under a term with a signaling character would not only streamline their representation but also facilitate the ongoing interpretation and evolution of the principle through arbitral case law. Therefore, while the principle of energy solidarity can be seen as implicitly present within the ECT, the pursuit of a more explicit and systematic inclusion within the treaty's legal text could significantly enhance its practical implementation and effectiveness in international energy relations.

2.4 Risk-Preparedness in the Electricity Sector Regulation (2019/941/EU)

The Regulation (2019/941/EU)³¹³, which came into effect in 2019, establishes the concept of risk-preparedness in the electricity sector and sets out rules to ensure supply security. The regulation emphasizes the principle of solidarity and requires Member States to cooperate in

³¹¹ ECT, 1994/2016.

³¹² ECT, 1994/2016.

³¹³ EU, 2019.

risk assessments, the elaboration of risk-preparedness plans, and in the management of electricity crises.

2.5 Concerning Measures to Safeguard the Security of Gas Supply Regulation (2017/1938/EU)

The Regulation (2017/1938/EU)³¹⁴ on measures to ensure gas supply security also incorporates the principle of energy solidarity. It obliges Member States to cooperate and support each other in crisis situations where the gas supply is at risk.

2.6 Gas Market Regulation (715/2009/EC)

Regulation (715/2009/EC)³¹⁵ sets the conditions for access to natural gas transport networks. The principle of solidarity is notably underlined in Article 16 para. 1 Regulation (715/2009/EC), which stipulates that in crisis situations, network operators are expected to cooperate to their fullest capacity at the behest of competent authorities in order to guarantee the safety of supply.³¹⁶

2.7 Gas Market Directive (2009/73/EC)

Directive (2009/73/EC)³¹⁷, known as the Gas Market Directive, establishes common rules for the natural gas internal market. Considering solidarity, Article 5 of the Directive (2009/73/EC) is significant, stating that Member States take appropriate measures to protect the gas supply security.³¹⁸

Furthermore, Directive (2019/692) amending the Gas Market Directive is important. This directive expands the scope of gas market rules to pipelines from and to third countries and

³¹⁴ EU, 2017.

³¹⁵ EU, 2009a.

³¹⁶ EU, 2009a.

³¹⁷ EU, 2009b.

³¹⁸ EU, 2009b.

obliges these pipelines to adhere to the principle of unbundling, transparency, and non-discrimination. This can also be interpreted as an expression of the principle of energy solidarity as it aims to ensure fair competition and transparency in energy supply.

2.8 Bridging Energy Solidarity and Gas Supply Security: Regulation (2022/2576/EU)

In the wake of evolving European energy dynamics, the Council's recent enactment of the Regulation (2022/2576/EU)³¹⁹ on 19 December 2022 brings forth a detailed discourse. Central to this legislation is the principle of energy solidarity – a term encapsulating the European Union's pledge towards a cohesive, unified, and responsible energy framework.

Article 8 of the Regulation (2022/2576/EU)³²⁰ provides insights on "Participation in demand aggregation and joint procurement."³²¹ As delineated in Article 8 para. 1 of the Regulation (2022/2576/EU), participation in these endeavors is designed to be open and transparent for all gas enterprises and gas-consuming entities, granted they are established either within the Union or the Contracting Parties of the Energy Community. Yet, exclusions exist. Entities subjected to the Union's restrictive measures, particularly those associated with Russian actions destabilizing Ukraine, or those under direct or indirect Russian dominion, face exclusion. These exclusionary criteria are explicitly laid out in Article 8 para. 1 lit. a-c of the Regulation (2022/2576/EU).³²²

Additionally, Article 8 para. 2 of the Regulation (2022/2576/EU)³²³ instates contractual mandates, ensuring that the economic resources emanating from joint procurement neither directly nor indirectly benefit those individuals or groups impacted by the EU's restrictive measures or under Russian oversight.

In a move to bolster support, Article 8 para. 3 of the Regulation (2022/2576/EU)³²⁴ accentuates that Member States or relevant actors can offer liquidity aids, inclusive of

³¹⁹ Council of the European Union, 2022.

³²⁰ Council of the European Union, 2022.

³²¹ Council of the European Union, 2022.

³²² Council of the European Union, 2022.

³²³ Council of the European Union, 2022.

³²⁴ Council of the European Union, 2022.

guarantees, to those partaking in the joint procurement process, all while adhering to state aid rules. Such assistance encompasses guarantees designed to cover security needs or counterbalance risks stemming from insolvency of co-purchasers within the same procurement agreement.

On a concluding note, Article 8 para. 4 of the Regulation (2022/2576/EU)³²⁵ emphasizes the prospects for gas entities rooted in the Contracting Parties of the Energy Community to participate in demand aggregation and joint procurement, provided necessary safeguards are instituted. Hence, Article 8 of the Regulation (2022/2576/EU) resonates with the ethos of energy solidarity, offering clear directives for gas procurement in alignment with geopolitical realities and pressing security concerns.

Article 9 of the Regulation (2022/2576/EU)³²⁶ carves out the framework for coordinated gas procurement, with a pointed exclusion of the Russian Federation. This stance holds significant implications, most notably the explicit omission of both Nord Stream 1 and Nord Stream 2 pipelines, terminating in Greifswald and Lubmin II respectively. As demarcated in Article 9 lit. a-b of the Regulation (2022/2576/EU)³²⁷, their exclusion from the procurement framework signifies a discernible shift towards diversifying energy sources – a move echoing the sentiments of energy solidarity by minimizing potential vulnerabilities and amplifying resilience.

Article 10 of the Regulation (2022/2576/EU)³²⁸ details the obligations bestowed upon Member States to integrate gas enterprises and gas-consuming companies into the demand aggregation methodology overseen by the designated service provider. Central to this approach is the overarching goal of fortifying supply security by amalgamating and collating the requisites of diverse entities.

In detail, Article 10 para. 1 of the Regulation (2022/2576/EU)³²⁹ mandates Member States to facilitate the inclusion of pertinent companies from their jurisdiction into the aggregation

³²⁵ Council of the European Union, 2022.

³²⁶ Council of the European Union, 2022.

³²⁷ Council of the European Union, 2022.

³²⁸ Council of the European Union, 2022.

³²⁹ Council of the European Union, 2022.

mechanism, envisaging this as a potential conduit to realize the filling objectives as prescribed in Articles 6 lit. a and 20 of the Regulation (2017/1938/EU).³³⁰

For those Member States equipped with underground gas storage infrastructures, Article 10 para. 2 of the Regulation (2022/2576/EU)³³¹ offers an enhanced directive, necessitating the participating entities to contribute quantities that mirror at least 15% of the cumulative amount required to fulfill the filling objectives.

Contrastingly, for those without such infrastructures, Article 10 para. 3 of the Regulation (2022/2576/EU)³³² dictates that engaged entities should provide quantities that represent a minimum of 15% of the volumes designated for trans-border filling goals, as expounded in Articles 6 lit. c and 20 of the Regulation (2017/1938/EU).³³³

In culmination, Article 10 para. 4 of the Regulation (2022/2576/EU)³³⁴ bestows a level of adaptability upon participating entities, granting them the autonomy to refrain from procuring the aggregated gas, which, in turn, can be harnessed for objectives extending beyond mere storage.

In essence, the Regulation (2022/2576/EU)³³⁵ stands as a testament to Europe's unwavering allegiance to the principles of energy solidarity. By intricately weaving together gas supply tactics, price transparency mechanisms, and collaborative endeavors, it seeks to harmonize the occasionally divergent aspirations of Member States under the overarching pillars of security, sustainability, and unyielding solidarity.

³³⁰ EU, 2017.

³³¹ Council of the European Union, 2022.

³³² Council of the European Union, 2022.

³³³ EU, 2017.

³³⁴ Council of the European Union, 2022.

³³⁵ Council of the European Union, 2022.

3. Principles of Interpretation

This section outlines the key principles of interpretation that will be applied to explore the principle of energy solidarity in European law. These principles provide a framework to understand the complexity of legal texts and treaties, the broader context of their creation and how they are implemented in practice.

The literal interpretation of legal texts forms the starting point of this inquiry. This principle focuses on the precise wording of legal provisions, offering a basic level of understanding.

The discussion then moves onto the teleological interpretation, which seeks to identify the goals or objectives that legal provisions aim to achieve. This perspective can provide insights into the broader purpose of the principle of energy solidarity.

The historical genetic interpretation is also considered, which takes into account the historical context and developmental aspects of the legislation. This perspective can help reveal the evolution and adaptation of the principle of energy solidarity.

The concept of EU-law conform interpretation is then explored, emphasizing how national laws are to be interpreted in line with EU law, and the implications this has for the principle of energy solidarity.

Lastly, an overview of judicial interpretation, notably the European Court of Justice's judgement in the case OPAL (C-848/19 P)³³⁶, is provided. This offers an illustration of how courts have interpreted and applied the principle of energy solidarity in specific circumstances.

³³⁶ ECJ, 2021.

Taken together, these principles of interpretation provide a useful toolkit for examining the principle of energy solidarity within the framework of EU law and its implications for the energy sector.

3.1 Literal Interpretation

Literal interpretation starts from the literal meaning of the text of the law.³³⁷ It attempts to determine the meaning of the provision from the context and the words used themselves. In the case of Article 194 para. 1 TFEU, this would mean interpreting the explicit provisions and the stated goal of energy solidarity directly from the text of the provision.

3.2 Teleological Interpretation

The teleological interpretation refers to a method where the purpose or intention of a legal provision is sought.³³⁸ This approach endeavors to discern the meaning of the provision predicated on its intended goal or objective.³³⁹ Applying this principle to Article 194 para. 1 TFEU, the aim would be to comprehend how the concept of energy solidarity contributes to the realization of the objectives of the European energy policy. This understanding can provide insights into the broader, more strategic purposes that the principle of energy solidarity aims to fulfill within the European Union's legal and policy framework.

3.3 Historical Genetic Interpretation

Historical genetic interpretation entails an examination of the genesis and historical context of a legal provision. In relation to Article 194 para. 1 TFEU, this would encompass an exploration of the origins and evolution of European energy policy and the concept of energy solidarity. This analysis seeks to illuminate its meaning and application by providing a nuanced understanding of the historical conditions and circumstances under which the principle of energy solidarity was formulated and integrated into European law. The aim is

³³⁷ Haarmeyer & Mock, 2019, p. 68.

³³⁸ Haarmeyer & Mock, 2019, p. 68.

³³⁹ Fitzmaurice, 1986.

to draw insights from the past, tracking the chronological progression of this concept to appreciate its present implications and potential future trajectory.

3.4 EU-Law Conform Interpretation

The principle of EU-law conform interpretation necessitates an interpretation of national law in harmony with European law.³⁴⁰ When applied to the context of Article 194 para. 1 TFEU, this implies the interpretation and application of national energy law should be conducted in a manner that is congruous with the objectives and principles of European energy policy, notably including the principle of energy solidarity. In essence, this approach encourages a harmonized interpretation that upholds and reflects the ambitions of European law within national legal frameworks, thereby ensuring the continued coherence and unity of European Union objectives across its Member States.

3.5 Judicial Interpretation of Energy Solidarity: ECJ Judgment in Case OPAL

Judicial interpretation is the method of deciphering legal norms as undertaken by the courts. The judgment in the case OPAL (C-848/19 P)³⁴¹ by the Court of Justice of the European Union (ECJ) serves as a definitive illustration of the interpretation of the concept of energy solidarity. In this ruling, the ECJ examined and articulated the principle of energy solidarity within the framework of the OPAL pipeline project. The judgment underscored the significance of this principle in determining the lawfulness of decisions related to European Union's energy policy.³⁴²

4. Energy Solidarity in the Context of European Law

The application of the principle of energy solidarity within the context of European Law is a central and concurrently complex aspect. In this section, a thorough examination of the

³⁴⁰ Haarmeyer & Mock, 2019, p. 68.

³⁴¹ ECJ, 2021.

³⁴² ECJ, 2021, para. 78.

legal interpretation of energy solidarity within the framework of European legislation is conducted.

Initially, the term energy solidarity will be clarified through a literal interpretation of the relevant norms. Following this, a distinction will be made from the general concept of solidarity. A discussion of the objectives of energy solidarity from a teleological perspective will then ensue, with particular emphasis on the principle of coherence and the realization of the internal energy market.

A historical-genetic interpretation will be used to examine the underlying values of energy solidarity, which are shaped by shared values and the necessity for European integration.

Furthermore, the role of the European Court of Justice (ECJ) in the interpretation of energy solidarity will be scrutinized, particularly looking into the case OPAL (C-848/19 P)³⁴³ and the ensuing differing views on the legal obligation of energy solidarity.

Lastly, an independent interpretation of the principle of energy solidarity will be undertaken, considering aspects such as unnamed essential interests, the relationship to environmental protection, and further obligations, including technology transfer.

As the term energy solidarity lacks a concrete legal definition in the context of the European Union, it necessitates interpretation through various legal documents. To formulate a concrete definition, it becomes vital to scrutinize the wording, systematic structure, and historical and teleological background of the relevant provisions.

4.1 Energy Solidarity According to the Literal Interpretation

In order to establish a concrete definition, it is essential to examine the wording energy solidarity.³⁴⁴ According to Article 194 Paragraph 1 of the Treaty on the Functioning of the

³⁴³ ECJ, 2021

³⁴⁴ Haarmeyer & Mock, 2019, p. 68.

European Union (TFEU), the Union's energy policy aims to ensure the energy market, guarantee energy supply security in the Union, promote energy efficiency and the development of new and renewable energy sources, and support the interconnection of energy networks.

This article explicitly refers to the spirit of solidarity between the Member States. The term solidarity seems to point both to the collective responsibility for securing the energy supply and to the shared obligation to promote energy efficiency and sustainable energy sources.

Under Article 194 para. 2 of the TFEU, the European Parliament and the Council have the power to enact the necessary measures to achieve the objectives outlined in Article 194 para. 1 of the TFEU. This ties the principle of solidarity to the institutional structure of the EU and emphasizes the role of the Union's central bodies in implementing this principle.

However, Article 194 para. 2 of the TFEU stipulates that such measures should not infringe upon a Member State's rights. Specifically, it protects their prerogative to determine the use of their energy resources and emphasizes “the state's free choice”³⁴⁵ in deciding between different energy sources and in shaping the general structure of their energy supply. This represents a tension between energy solidarity and the national sovereignty of the Member States.

Overall, the literal interpretation of the relevant norms suggests that the principle of energy solidarity in the EU aims at a shared responsibility to ensure energy supply security, to promote energy efficiency and sustainable energy sources, and to ensure the functioning of the energy market. However, the national rights and sovereignties of the Member States must be respected.

³⁴⁵ Banet, 2023, p. 7.

4.2 Teleology of Energy Solidarity

The teleology, or the study of purpose and end goals, of energy-related solidarity in the EU can be captured in several dimensions. Primarily, it serves to shed light on the function and the ultimate aim of solidarity within the context of EU energy policy and law.³⁴⁶

One of the primary objective of energy solidarity is to ensure the security of energy supply within the EU.³⁴⁷ The principle of solidarity obliges Member States to act collectively, particularly in crisis situations, to maintain supply security. As stipulated in Article 222 TFEU which is often referred to as the solidarity clause, the Union and its Member States must act collectively in the event of a significant disruption to the energy supply, to support the member state(s) affected. This obligation helps ensure that no Member States are disadvantaged due to energy shortages caused by circumstances beyond their control.

Another goal of energy solidarity is to promote energy efficiency and the use of sustainable energy sources.³⁴⁸ This serves not only the objective of energy security but also the broader EU aim of promoting a sustainable and climate-neutral economy. Through the shared responsibility, as stipulated in Article 4 para. 3 TEU, for achieving these goals, the principle of energy solidarity fosters a coordinated and efficient energy policy and strategy within the EU.³⁴⁹

Finally, energy solidarity aims to ensure a functioning and efficient energy market within the EU. The principle of solidarity can be expressed in this context, for instance, through mechanisms such as the EU Energy Union's joint energy purchasing mechanism, which enables collective energy purchases. This strengthens the EU's negotiating position vis-à-vis external energy suppliers and promotes a more efficient and competitive energy market.

In summary, the teleology of energy-related solidarity within the EU lies in ensuring energy supply, promoting energy efficiency and sustainability, and ensuring a functioning energy

³⁴⁶ Haarmeyer & Mock, 2019, p. 68.

³⁴⁷ TFEU, 2012.

³⁴⁸ TFEU, 2012.

³⁴⁹ TFEU, 2012.

market. It is important to emphasize that these objectives must always be pursued in line with the national rights and sovereignties of the Member States and within the framework of existing EU legal provisions and principles.

4.2.1 Energy Solidarity's Coherence within Primary EU Law

The principle of coherence holds significant importance within the scope of the European Union's energy solidarity. This principle underscores the necessity for consistency and alignment across the array of objectives and actions encapsulated within the EU's energy policy. The primary objective here is to prevent contradictions or counterproductive outcomes that could potentially stem from disjointed strategies or approaches, as well as ensuring the effective enforcement of European Union's law.

Several legal provisions reinforce the principle of coherence. One key basis for this principle lies within Article 7 of the Treaty on European Union (TEU), which ensures the cohesion and coherence of the Union's actions across all areas of policy. This article underlines the importance of the consistency of the EU's actions and posits the principle of sincere cooperation, where the European Union and the Member States respect each other's legal order and work together to fulfil common objectives.

Moreover, the principle of coherence finds reinforcement in the broader objectives of the EU's energy policy, as laid down in Article 194 of the Treaty on the Functioning of the European Union (TFEU). This article emphasizes that the EU's energy policy should be consistent with its other policies, notably the objectives of combatting climate change and maintaining and improving environmental quality.

Additionally, the principle of coherence is encapsulated within the regulatory instruments like the Third Energy Package³⁵⁰. These instruments provide a framework for establishing an internal energy market, enhancing security of energy supply, and promoting energy efficiency and the development of new and renewable forms of energy. By integrating these

³⁵⁰ Herranz-Surrallés, 2019, p. 4.

disparate aspects of the energy policy under a common regulatory framework, the principle of coherence ensures that the European Union's energy policy is pursued in a unified, consistent, and coordinated manner.

4.2.2 Realization of the Internal Energy Market

The realization of the internal energy market is an integral objective of the European Union, as outlined in Article 194 para. 1 lit. b of the Treaty on the Functioning of the European Union (TFEU). This goal forms a significant part of the EU's strategy for energy solidarity, aiming to create a unified and competitive marketplace that transcends national borders. By harmonizing the national energy markets into a single, cohesive EU energy market, the Union seeks to facilitate the free flow of energy goods and services, stimulate competition, ensure a secure and affordable energy supply, and achieve its climate and energy targets.

The Third Energy Package³⁵¹, consisting of two directives and three regulations adopted by the EU in 2009, forms the legal backbone of this integrated internal energy market.³⁵² This comprehensive package provides legal mechanisms and rules designed to further open up the gas and electricity markets, improve the conditions for the efficient functioning of the market, and strengthen the rights of the energy consumers.

In particular, Directive (2009/72/EC)³⁵³ and Directive (2009/73/EC)³⁵⁴ concern common rules for the internal market in electricity and natural gas, respectively. They establish key provisions to enhance competition, such as the unbundling of energy supply and production from the operation of transmission networks. Furthermore, they aim to strengthen the independence and powers of national regulatory authorities and enhance transparency in retail market operation and consumer protection.

³⁵¹ Herranz-Surrallés, 2019, p. 4.

³⁵² Herranz-Surrallés, 2019, pp. 4-8.

³⁵³ European Parliament & Council, 2009a.

³⁵⁴ EU, 2009b.

In addition, Regulation (714/2009/EC)³⁵⁵ and Regulation (715/2009/EC)³⁵⁶ set out conditions for access to the network for cross-border exchanges in electricity and gas, while Regulation (713/2009/EU)³⁵⁷ established the Agency for the Cooperation of Energy Regulators (ACER) to further facilitate cooperation between national regulatory authorities.

Moreover, the Directive (2017/1938/EU)³⁵⁸ concerning measures to safeguard the security of gas supply is a pivotal legal instrument emphasizing the principle of solidarity. Directive (2017/1938/EU) demonstrates the European Union's (EU) commitment to ensuring the security of its gas supply via cooperation among Member States, a principle firmly ingrained in its legal framework. This commitment is evidenced in the operationalization of measures such as risk assessments, preventive action plans, and emergency plans in collaboration with Energy Community Contracting Parties, as stipulated in Article 16 para. 1 of Directive (2017/1938/EU). This collaborative endeavor is intended to mitigate risks by recognizing their interaction and correlation and ensuring consistency in the implementation of preventive action and emergency plans across borders.

In the event of crisis scenarios, the Directive (2017/1938/EU) affirms the Commission's authority to declare a regional or Union emergency under Article 12 para. 1 of the Directive (2017/1938/EU). In such circumstances, the Commission coordinates with competent authorities to streamline the exchange of information and guarantee consistency and effectiveness of measures at the Member State and regional levels in the context of the Union level, as articulated in Article 12 para. 3 of the Directive (2017/1938/EU). This aligns with the overarching objective of maintaining the free flow of gas within the internal market, particularly to those markets directly affected by the crisis, as underscored in Article 12 para. 5 of the Directive (2017/1938/EU). Furthermore, the Directive ensures that no measures are introduced that could seriously compromise the gas supply in another Member State, emphasizing the importance of cross-border access to infrastructure.

³⁵⁵ European Parliament & Council, 2009c.

³⁵⁶ EU, 2009a.

³⁵⁷ European Parliament & Council, 2009b.

³⁵⁸ European Parliament & Council, 2017.

Moreover, the Commission, in consultation with the “Gas Coordination Group”³⁵⁹ (GCG), is empowered to establish a monitoring task force, as stipulated in Article 12 para. 7 of the Directive (2017/1938/EU). This task force, comprised of industry experts and Commission representatives, can be mobilized beyond the confines of the Union. The primary mandate of the task force is to monitor and report on the gas flows into the Union, facilitating effective cooperation with supplying and transiting third countries. Such a provision underlines the EU's comprehensive approach to energy security, incorporating both internal and external dimensions of cooperation in its strategy. By ensuring coordinated responses to severe disruptions in the gas supply, this directive underscores the crucial role of energy solidarity in maintaining energy security throughout the EU.

4.3 Historical Genetic Interpretation

The historical-genetic interpretation, also known as the historical method, plays a crucial role in interpreting the principles and norms that guide EU energy law and energy solidarity.³⁶⁰ This method of interpretation refers to considering the historical genesis and development of a legal principle to illuminate its current understanding and application.³⁶¹

Energy solidarity and the corresponding legal frameworks within the EU are the result of a shared understanding of values and the requirement for European integration, which necessitates close cooperation and networking of energy markets. Historically, European integration has fostered the deepening of energy solidarity by creating the prerequisites for closer cooperation among Member States in the energy sector.

The historical progression of EU legal principles can be exemplified by the incorporation of energy solidarity as a term in the Treaty of Lisbon, as explicitly outlined in Article 194 para. 1 of the TFEU. It reflects the growing awareness and increasing recognition of the need for stronger cooperation among Member States in the field of energy policy. The realization that energy security and the internal energy market can only be achieved through joint efforts has led to the inclusion of the principle of energy solidarity in EU law.

³⁵⁹ European Parliament & Council, 2017.

³⁶⁰ Dyevre, 2010, pp. 13-14.

³⁶¹ Dyevre, 2010, pp. 13-14.

Furthermore, the introduction of the Third Energy Package³⁶², aiming at the establishment of a functional internal energy market, shows the increasing significance of energy solidarity. The provisions of this package, including the requirement for closer cooperation and coordination between Member States and the EU, underscore the need for energy solidarity in the context of an increasingly integrated and networked energy market.

In conclusion, the historical-genetic interpretation of the principle of energy solidarity shows how this principle has emerged from the EU's shared understanding of values and the need for closer cooperation and integration in the energy sector. It also highlights the growing importance of this principle in a developing and increasingly integrated energy context.

4.4 Difference between Solidarity and Energy Solidarity

Understanding the complexity of the term solidarity in EU law necessitates a distinction from broader sociological or political science conceptions. While solidarity is often viewed as a social virtue that inspires individuals or groups to pursue shared interests and provide mutual support, it takes on a more specific and multi-layered role within EU law.

From a sociological perspective, significant thinkers such as Auguste Comte and Émile Durkheim have deeply engaged with the concept of solidarity. Comte, recognized as the founder of positivism, first coined the term solidarity in his work "System of Positive Polity". He emphasized the interdependence that exists among individuals in society. For Comte, solidarity was an expression of social order and harmony and a fundamental prerequisite for the functioning of society, given the dependency of individuals on each other due to their diverse roles and skills.

On the other hand, Durkheim, in his book "The Division of Labour in Society"³⁶³, developed a nuanced understanding of solidarity, introducing two types - "mechanical"³⁶⁴ and "organic"³⁶⁵. Mechanical solidarity refers to social cohesion based on shared beliefs and

³⁶² Herranz-Surrallés, 2019, p. 4.

³⁶³ Durkheim, 1893/1933.

³⁶⁴ Durkheim, 1893/1933, pp. 70-89; Giddens, 1971, p. 77.

³⁶⁵ Durkheim, 1893/1933, pp. 111-131; Giddens, 1971, p. 76.

values in relatively homogeneous, small-scale societies. Conversely, organic solidarity applies to modern, industrialized societies characterized by diversity and individuality. Despite these differences, the dependency on others' performance, that is, interdependence, unifies members of society. Durkheim saw these two contrasting forms of solidarity as not just representing various stages of societal development, but also different ways of living and cooperating in human communities.

Within the context of EU law, however, solidarity plays a distinct role. Primarily, it acts as a guiding principle in various EU contexts such as migration, energy, and environmental protection, with roots in the founding principles of the Union. According to Article 2 of the Treaty on European Union (TEU), the Union bases itself on "values of human dignity, freedom, equality, and solidarity"³⁶⁶. Furthermore, Article 3 para. 3 of the TEU states that the EU promotes a "highly competitive social market economy"³⁶⁷ aiming at "social and territorial cohesion and solidarity."³⁶⁸

In contrast to the more abstract sociological ideas of Comte and Durkheim, the EU's legal concept of solidarity is more concrete and operates in a specific context, typically alongside other legal norms such as the principles of the internal market and free movement. As such, the EU's interpretation and application of solidarity can be context specific. It plays a critical role in fostering cooperation and coordination amongst Member States, particularly during crises like the current energy situation, helping to equitably distribute risks and burdens.

In conclusion, the legal concept of solidarity within EU law, while influenced by sociological theories, is more specific and context bound. It promotes cooperation and coordination among Member States, aids in achieving common EU objectives, and operates in conjunction with other legal principles, which marks a significant departure from the abstract conceptions of solidarity proposed by Comte and Durkheim.

³⁶⁶ TEU, 2012.

³⁶⁷ TEU, 2012.

³⁶⁸ TEU, 2012.

4.5 Interpretation by the ECJ in Case OPAL (C-848/19 P)

The case OPAL (Baltic Sea Pipeline Link) case (C-848/19 P)³⁶⁹, decided by the Court of Justice of the European Union (ECJ), serves as a central point of reference for the interpretation and application of energy solidarity in the context of EU energy law. The OPAL pipeline, a crucial link between the Nord Stream 1 pipeline from the Russian Federation and the European gas network, emerged as a primary point of contention between the Federal Republic of Germany and the Republic of Poland.

The case OPAL (C-848/19 P)³⁷⁰ arose when the Republic of Poland challenged the European Commission's 2016 decision that allowed Public Joint Stock Company Gazprom (PJSC Gazprom), the Russian Federation's state energy giant, greater access to the pipeline's capacity, citing it as a potential threat to the EU's energy supply security and solidarity.³⁷¹

From a methodological point of view, the ECJ's judgement in this case is remarkable. It determined that the principle of energy solidarity enshrined in Article 194 para. 1 TFEU has legal significance and must be incorporated into the European Commission's decision-making process.³⁷² This marked a clear deviation from conventional interpretation, which largely viewed energy solidarity as a political concept with little binding force up to that point.³⁷³

The ECJ determined that the European Commission must examine potential impacts in light of the principle of energy solidarity when making decisions that could significantly affect the energy markets of Member States.³⁷⁴ This obligation was seen as an integral part of the European Commission's duty of sincere cooperation pursuant to Article 4 para. 3 TEU, Article 13 para. 2 TEU and Article 194 para. 1 TFEU.³⁷⁵

³⁶⁹ ECJ, 2021.

³⁷⁰ ECJ, 2021.

³⁷¹ ECJ, 2021, para. 72.

³⁷² ECJ, 2021, para. 72.

³⁷³ ECJ, 2021, para. 65; ECJ, 2021, para. 69.

³⁷⁴ ECJ, 2021, para. 81.

³⁷⁵ ECJ, 2021.

Of critical importance is that the ECJ's judgement in the case OPAL (C-848/19 P)³⁷⁶ delineated the scope of the principle of energy solidarity and showed that it has concrete legal effects, not just being a political or aspirational concept.³⁷⁷ It underscored that this principle must be integrated into the EU's legal and political framework to ensure a consistent and holistic realization of its energy goals.

The judgement in the case OPAL (C-848/19 P)³⁷⁸ therefore provides key guidance for understanding the legal parameters of energy solidarity under EU law and marks a significant step towards operationalizing this principle. It underscores that the European Commission's decisions in energy matters must reflect a balanced consideration of the interests of all Member States, thereby strengthening the collective commitment to solidarity in the EU's energy policy.

4.5.1 Legal Binding Nature of Energy Solidarity in Article 194 para. 1 TFEU

The legal interpretation of the principle of energy solidarity, specifically within Article 194 para. 1 of the Treaty on the Functioning of the European Union (TFEU), has been a topic of debate among scholars, legal practitioners, and policy makers. This disagreement hinges on whether the principle of energy solidarity in this context is legally binding or merely a political aspiration or guideline.

On one side of the debate, some scholars and institutions argue that the energy solidarity principle in Article 194 para. 1 TFEU does not carry legal obligations and is intended to guide policy and cooperation in the realm of energy policy. They argue that the term solidarity is inherently flexible and vague, leaving it open to differing interpretations and suggesting that it is more of a guiding principle rather than a legally enforceable obligation.³⁷⁹

³⁷⁶ ECJ, 2021.

³⁷⁷ ECJ, 2021, paras. 71-79.

³⁷⁸ ECJ, 2021.

³⁷⁹ Talus, 2013, p. 280.

On the other hand, a different group of scholars, practitioners, and some Member States argue that the principle of energy solidarity in Article 194 para. 1 lit. a-d TFEU is legally binding and should be applied and interpreted as such. This perspective gained significant support following the ECJ's judgement in the case OPAL (C-848/19 P)³⁸⁰, which reinforced the view that the principle of energy solidarity carries legal weight and obligations. These proponents argue that the principle necessitates a balanced consideration of all EU Member States' interests in energy-related decisions and that the violation of this principle could lead to legal consequences.

The debate surrounding the legal enforceability of the principle of energy solidarity reflects broader discussions about the nature of the EU's legal system, the balance of powers within the Union, and the extent to which policy goals can and should be translated into legal obligations.

4.5.1.1 View of the European Commission

The European Commission in collaboration with the German Federal Network Agency, also known as Bundesnetzagentur (BNetzA), played a significant role in the case OPAL (C-848/19 P)³⁸¹, expressing their perspective on the principle of energy solidarity. It essentially argued that energy solidarity is a political concept rather than a legally enforceable one.³⁸² Therefore, it cannot be invoked to challenge decisions made under EU energy law. The European Commission rejected the Republic of Poland's argument that the European Commission's decision to allow full capacity utilisation of the OPAL pipeline violated the principle of energy solidarity.

The European Commission considered the increase in the capacity utilisation of the OPAL pipeline as a purely technical issue subject to network access regulations, not a matter of energy solidarity. The European Commission argued that decisions on network access should be based on technical and market-related criteria, as stipulated in the Art. 36 para. 1

³⁸⁰ ECJ, 2021.

³⁸¹ ECJ, 2021.

³⁸² ECJ, 2021, para. 65.

of the Regulation (715/2009/EU)³⁸³, and that political concepts such as energy solidarity should not interfere in this process.³⁸⁴

This position of the European Commission reflects a specific interpretation of the internal energy market based on technical efficiency and market regulation, and illustrates how diverse the perspectives on the role and significance of energy solidarity in the EU can be.

4.5.1.2 The Republic of Poland's View

The Republic of Poland had a contrasting stance on the interpretation and legal enforceability of the principle of energy solidarity. It held the belief that the principle of energy solidarity, as inscribed in Article 194 para. 1 TFEU, holds legal force and can be invoked in judicial proceedings.

The Republic of Poland contested the European Commission's decision to grant Gazprom increased capacity utilization of the OPAL pipeline.³⁸⁵ The contention stemmed from the perceived threat that this could heighten European dependence on Russian gas supply, which Republic of Poland interpreted as a threat to its energy security and that of Europe as a whole.

The Republic of Poland asserted that the decision violated the principle of energy solidarity. It argued that the principle obliges the European Commission to consider potential adverse impacts on the energy security of Member States when making decisions related to the internal energy market.³⁸⁶ As such, the Republic of Poland contended that the decision was a breach of the principle of energy solidarity, as it failed to fully consider the potential risks to the Republic of Poland's energy security and the broader implications for energy security within the EU.³⁸⁷

³⁸³ EU, 2009a.

³⁸⁴ ECJ, 2021, para. 65.

³⁸⁵ ECJ, 2021, para. 48.

³⁸⁶ ECJ, 2021, paras. 61-62

³⁸⁷ ECJ, 2021, paras. 61-64.

This perspective of the Republic of Poland showcases a contrasting interpretation of the principle of energy solidarity, highlighting it as a legally enforceable norm that should guide decisions affecting the energy security and independence of EU Member States.

4.5.1.3 Legal Consequences

The divergence in interpreting the principle of energy solidarity has substantial legal implications. The decision by the European Court of Justice in the case OPAL (C848/19 P)³⁸⁸ confirmed that the principle of energy solidarity carries legally binding effects and must be taken into consideration when making decisions that could affect the energy supply of Member States. This precedent implies that a breach of the principle of energy solidarity can have legal repercussions, which may include the annulment of decisions made without properly considering this principle.

In the case OPAL (C-848/19 P)³⁸⁹, the ECJ confirmed the legally binding effect of the principle of energy solidarity by annulling the European Commission's decision on the OPAL pipeline's capacity utilization. It highlighted that the European Commission should have considered the principle of energy solidarity, particularly concerning potential impacts on the energy security of Member States.

The ECJ's judgement underscores the significance of the principle of energy solidarity as a central element of EU energy law and emphasizes its enforceability. It has also set the framework for the application and interpretation of the principle in similar future cases.

4.5.2 Conclusion

The European Court of Justice (ECJ) played a pivotal role in interpreting the principle of energy solidarity in its ruling on the case OPAL (C-848/19 P)³⁹⁰. The court concluded that

³⁸⁸ ECJ, 2021.

³⁸⁹ ECJ, 2021.

³⁹⁰ ECJ, 2021.

the principle of energy solidarity, articulated in Article 194 para. 1 of the TFEU, extends beyond a political or programmatic principle, exerting legally binding effects.³⁹¹

The ECJ expounded that the principle obliges both the European Commission and the Member States to consider potential impacts on the fundamental energy interests of other Member States in their decision-making processes. This includes the interests of companies and consumers within those Member States. This requirement signifies that any decision affecting the energy market should take into account the potential effects on the energy supply across all EU Member States, not merely those directly involved.

However, the ECJ's judgement, while providing some clarity, also opened a new avenue of legal ambiguity. By substituting one undefined term - energy solidarity - with another - fundamental interests - the Court leaves open the question of what constitutes these fundamental interests.³⁹² This broad term could encompass a variety of aspects such as economic stability, national security concerns, environmental sustainability, and the social welfare of citizens, among others. Its precise scope, though, remains uncertain and thus open to interpretation.

The judgment, therefore, underlines the requirement for an assessment of potential risks and impacts that full capacity utilization of the OPAL pipeline could have on the energy supply and security of EU Member States, particularly those reliant on the transit of Russian gas through their territory, e. g. Ukraine.

The ECJ's judgement marked a significant shift in understanding energy solidarity, solidifying it as a guiding, legally enforceable principle in EU energy law.³⁹³ This groundbreaking interpretation created a critical precedent for the interpretation and application of the principle of energy solidarity in EU law and policy. Nonetheless, it also underscores the ongoing need for further specification and clarity regarding the interpretation of vital interests in the context of energy solidarity.

³⁹¹ ECJ, 2021, para. 78.

³⁹² Huhta & Reins, 2023, p. 11.

³⁹³ ECJ, 2021, para. 106.

4.5.2.1 Protection of Vital Interests as the Key Factor

In the case OPAL (C-848/19 P)³⁹⁴, the European Court of Justice (ECJ) elaborated on some key aspects of the principle of energy solidarity, as embedded in Article 194 para. 1 of the Treaty on the Functioning of the European Union (TFEU)³⁹⁵. The ECJ found that the concept of energy solidarity, referenced in Article 194 para. 1 of the TFEU, is not confined solely to circumstances outlined in Article 222 para. 1 lit a-b TFEU, as some interpretations suggest. Instead, it should serve as a guiding principle across the entire scope of EU energy policy.³⁹⁶

The ECJ further emphasized that energy solidarity must be considered by the institutions of the European Union and the Member States in the realization and functioning of the internal market, especially the natural gas market.³⁹⁷ The principle of energy solidarity encompasses not just the management of emergency situations, but also the implementation of measures to prevent crisis situations. This requires the assessment of risks to the energy interests of Member States and the European Union, particularly in relation to security of supply.³⁹⁸

Moreover, the Court pointed out that the principle of energy solidarity imposes a general obligation on the European Union and the Member States to consider the interests of all stakeholders potentially affected when exercising their respective competencies within the European Union's energy policy.³⁹⁹ Measures that could adversely affect the interests of the Union and other Member States in terms of security and the economic and political feasibility of supply, as well as the diversification of supply sources, should be avoided.⁴⁰⁰

Nevertheless, the ECJ clarified that the principle of energy solidarity does not mean that the European Union's energy policy may not have negative impacts on the particular interests of a member state in this area.⁴⁰¹ Instead, European Union institutions and Member States are obliged to take into account the interests of both the European Union and the various

³⁹⁴ ECJ, 2021.

³⁹⁵ TFEU, 2012.

³⁹⁶ ECJ, 2021, para. 67.

³⁹⁷ ECJ, 2021, para. 69.

³⁹⁸ ECJ, 2021, para. 69.

³⁹⁹ ECJ, 2021, para. 71.

⁴⁰⁰ ECJ, 2021, para. 71.

⁴⁰¹ ECJ, 2021, para. 73.

potentially affected Member States and to weigh these interests against each other in case of conflict.⁴⁰²

In its interpretation of the principle of energy solidarity, the ECJ put significant emphasis on the protection of vital interests of Member States, their businesses, and consumers. These vital interests, as per the ECJ, are not limited to economic considerations, but also extend to aspects such as energy security, public health, and environmental protection.⁴⁰³

The ECJ stated that the principle of energy solidarity obliges the European Commission and the Member States to consider and balance these diverse and potentially conflicting interests when making decisions.⁴⁰⁴ This means that actions that could significantly harm the energy security, economic viability, or environmental integrity of a Member State, cannot be undertaken without giving due regard to the principle of energy solidarity.

However, the ECJ did not provide a detailed, concrete definition of what constitutes such vital interests in this context.⁴⁰⁵ This leaves the concept relatively open to interpretation, similar to the principle of energy solidarity itself. While this allows for flexibility and adaptability to different circumstances, it also raises questions about how to objectively determine what constitutes a vital interest and how to balance these interests against each other in decision-making processes.

The role of the ECJ will be crucial in providing further clarification on these points in future case law. By adjudicating disputes and providing interpretations of these concepts, the Court will play a central role in shaping the understanding and implementation of the principle of energy solidarity and its associated essential interests in the EU energy law.

⁴⁰² ECJ, 2021, para. 73.

⁴⁰³ ECJ, 2021, para. 71.

⁴⁰⁴ ECJ, 2021, paras. 97-99; Boute, 2020, pp. 889-890.

⁴⁰⁵ ECJ, 2021, para. 71.

4.5.2.2 Legal Consequences of Non-Use of Discretion in the Context of Energy Solidarity

The legal consequence of non-usage or erroneous usage of discretion regarding the principle of energy solidarity is a notable aspect of the ECJ's interpretation in the case OPAL (C-848/19 P).⁴⁰⁶ In its ruling, the Court emphasized that the European Commission, when making decisions in the field of energy policy, must carefully and impartially examine all relevant elements of the situation in question with due regard to the principle of energy solidarity.⁴⁰⁷ This principle requires not only the management of emergency situations but also the proactive implementation of measures to prevent crisis situations. As such, the Commission and the Member States are obliged to balance the interests of both the Union as a whole and those of the potentially affected Member States, thereby considering the security, economic viability, and diversification of energy supply.⁴⁰⁸

Neglecting or improperly considering the principle of energy solidarity in decision-making processes within the energy policy field can result in the annulment of such decisions before the ECJ.⁴⁰⁹ This was clearly demonstrated in the case OPAL (C-848/19 P)⁴¹⁰, where the ECJ annulled the European Commission's decision because it had not properly considered the principle of energy solidarity.⁴¹¹ The judgement clarifies that energy solidarity is not merely a guiding principle but has a legal effect, insofar as its non-consideration leads to the annulment of decisions.

This legal outcome signifies a substantial shift in the comprehension of the EU's principle of energy solidarity. It underlines the binding nature of the principle of energy solidarity and its central role in decisions related to EU energy policy. Consequently, it imposes a legal obligation on the European Commission and Member States to duly consider the principle of energy solidarity in their energy policy decisions, or they risk legal repercussions. At the same time, it raises the question of how a correct consideration of energy solidarity in the discretion of decisions is to be legally exercised.

⁴⁰⁶ ECJ, 2021, para. 106.

⁴⁰⁷ Ludwigs, 2023, p. 510.

⁴⁰⁸ Kaschny, 2023, p. 289; ECJ, 2021, para. 106; ECJ, 2021, paras. 67-73.

⁴⁰⁹ ECJ, 2021, para. 78.

⁴¹⁰ ECJ, 2021.

⁴¹¹ ECJ, 2021, para. 106.

4.5.2.3 Critical Evaluation

The European Court of Justice's (ECJ) interpretation of the principle of energy solidarity in the case OPAL (C-848/19 P)⁴¹² marks a significant turning point from previous understandings of this principle, transforming it from a somewhat vague political idea into a legally binding obligation in EU energy law. While this judgement can be seen as a victory for the Republic of Poland, which advocates for a legally binding nature of energy solidarity, it nevertheless raises questions of interpretation.

The ECJ's judgement established that the principle of energy solidarity is legally enforceable and has direct implications for the decisions of the European Commission and Member States in the field of energy policy. This has far-reaching impacts on future energy policy and decision-making within the EU, potentially affording Member States greater leeway to contest decisions they deem harmful to their energy interests.

However, the ECJ's interpretation introduces a certain degree of uncertainty into EU energy law. Although the ECJ has clarified that the principle of energy solidarity must be taken into account in decision-making processes, it remains unclear how this principle should be implemented in practice. The judgement provides some guidance but remains open to interpretation, potentially leading to inconsistencies in the application of the principle of energy solidarity.

Furthermore, the ECJ's interpretation could inadvertently lead to the politicisation of decisions in the field of energy policy. By emphasizing the importance of considering the energy interests of individual Member States, it could encourage a fragmented and less integrated approach to EU energy policy, potentially undermining the goal of creating a fully integrated and competitive EU energy market.

The ECJ's judgement in the case OPAL (C-848/19 P)⁴¹³ is undoubtedly a significant step in the evolution of EU energy law. It has transformed the principle of energy solidarity from a

⁴¹² ECJ, 2021.

⁴¹³ ECJ, 2021.

somewhat vague political guideline into a legally binding obligation that must be considered in decision-making at the EU level.⁴¹⁴ However, this interpretation also brings with it challenges and uncertainties, the full extent of which will only become apparent in future legal cases and the ongoing development of EU energy policy.

Nevertheless, the uncertainties and challenges arising from the decision should not overshadow the fact that the ECJ's judgement has sent a strong signal in recognition of the principle of energy solidarity. Establishing this principle as a legally binding obligation underlines the shared responsibilities and interconnectedness within the EU's energy landscape. It holds enormous potential for enhanced cooperation and cohesion among Member States and commits to a more balanced and inclusive approach in energy policy. This ultimately benefits all EU citizens and represents a positive step towards a more equitable and resilient energy future.

4.6 Essential Interests within the Context of Energy Solidarity

Translating the principle of energy solidarity into practice poses a challenging task, especially when it comes to evaluating essential interests. This part of the work aims to specify the concept of essential interests in the context of energy solidarity. It discusses how these interests could be determined materially and geographically, and what role the EU legal principle of energy solidarity could play in the formation of customary international law.

The ECJ recognized in its judgement in the case OPAL (C848/19 P)⁴¹⁵ that the essential interests of each member state can depend on a variety of factors, including geographical, political, economic, and social ones.⁴¹⁶ This section examines how these factors can contribute to defining essential interests and what challenges they present in terms of implementing the principle of energy solidarity.

⁴¹⁴ ECJ, 2021, para. 70; Ryś, 2022, p. 152.

⁴¹⁵ ECJ, 2021.

⁴¹⁶ ECJ, 2021, paras. 70-76.

Furthermore, the possibility is considered that the EU legal principle of energy solidarity contributes to the emergence of customary international law. This idea is particularly relevant given the significant role that the principle of energy solidarity plays within the EU, and it could have far-reaching implications for energy security and policy in Europe and Eurasia.

Finally, the question is addressed as to how the noticeability threshold of an energy policy measure, which is seen as sufficiently energy-solidarity-oriented, can be defined. It discusses which criteria should be considered in the assessment of such a measure and how these criteria could be put into practice.

This discussion is central in order to achieve a clearer understanding of the principle of energy solidarity and to formulate concrete recommendations for its implementation in the context of EU energy law and EU energy policy.

4.6.1 Substantive Aspects of Essential Interests

The question of what constitutes vital interests in the context of energy solidarity is not explicitly answered in EU law. Therefore, understanding the substantive aspects of vital interests is a critical and challenging task.

One can argue that an interest is vital when it concerns the primary goals of energy policy, which include security of supply, competitiveness, and sustainability.⁴¹⁷ Therefore, measures that significantly affect a member state's ability to achieve these objectives may infringe upon its vital interests.

For instance, a policy that severely limits a country's access to diverse energy sources could be seen as a threat to its vital interest of supply security. Similarly, a regulation that disproportionately increases energy prices in a particular member state might compromise its essential interest in competitiveness.

⁴¹⁷ ECJ, 2021, para. 73.

Furthermore, vital interests might also encompass broader socio-economic concerns. For instance, certain energy policies could have significant impacts on employment or regional development. If these impacts are substantial, they could be seen as affecting vital interests.

However, the challenge lies in establishing a clear and consistent threshold for when an interest becomes essential. In some areas of international law, a similar concept is found in the form of "essential security interests"⁴¹⁸. For example, Article XXI of the General Agreement on Tariffs and Trade (GATT)⁴¹⁹ allows countries to take measures necessary for the protection of their essential security interests. Nonetheless, this provision has engendered a wealth of discussion and a range of interpretations concerning the precise definition of "essential security interest"⁴²⁰. A more detailed exploration on this topic is found in Subsection 3.4.3, titled 'Security Exceptions in WTO Agreements and Their Relevance to Energy Solidarity', where the nuances and implications of this critical term are thoroughly examined.

Therefore, careful consideration should be given to defining and interpreting vital interests. A clear and balanced approach is needed, one that allows for the protection of legitimate interests without enabling undue protectionism or disregard for shared responsibilities within the EU's energy landscape.

The way in which vital interests are defined and applied could significantly influence energy policy and decision-making within the EU. Therefore, clarity and consistency in interpreting this term are crucial for the effective implementation of the principle of energy solidarity.

⁴¹⁸ WTO, n.d.-a, p. 56.

⁴¹⁹ WTO, n.d.-a, p. 56.

⁴²⁰ WTO, n.d.-a, p. 56.

4.6.2 Geographical Aspects of Essential Interests

Geographical aspects can play a pivotal role in determining a member state's vital interests within the EU energy landscape. Each member state possesses unique geographical conditions that can significantly influence its energy needs, capabilities, and priorities.

For instance, a country's location could determine its access to various types of energy resources. Coastal states might have a particular interest in offshore wind or tidal energy, whereas landlocked countries may rely more heavily on nuclear or solar energy. Likewise, countries with access to natural gas reserves may prioritize infrastructures for gas extraction and transportation, while those lacking such resources might place greater emphasis on energy import diversification and security of supply.

Geographical factors also influence the physical interconnectedness between Member States, which is a fundamental element of the EU internal energy market.⁴²¹ Countries with common borders or in close proximity can have stronger energy ties, due to the feasibility of constructing cross-border infrastructures. These geographical connections could foster an enhanced sense of shared essential interests and energy solidarity. Conversely, geographical isolation or differences in energy infrastructure could lead to divergent interpretations of vital interests and potentially hinder the effective implementation of the principle of energy solidarity.

Moreover, geographical aspects could influence how Member States perceive and assess potential threats to their vital interests. For example, countries located near unstable regions or countries might view their energy security differently than those situated in safer environments.⁴²²

In terms of international law, the role of geography in determining vital interests could also be related to the emergence of customary international law in Europe and Eurasia. The recognition and acceptance of energy solidarity as a principle within a geographically

⁴²¹ TFEU, 2012.

⁴²² Larsson, 2006, p. 262.

defined community could potentially contribute to its status as customary international law within this region. However, the extent to which this occurs could vary depending on the specific geographical and geopolitical context.

In conclusion, geographical factors could significantly influence the understanding and application of vital interests within the context of the principle of energy solidarity. Recognizing and accounting for these geographical differences and influences could be critical to ensuring a fair and effective implementation of the principle across the EU.

4.6.3 Applying Customary International Law on Energy Solidarity

The possibility of the EU legal principle of energy solidarity contributing to the emergence of customary international law is a complex and nuanced topic. Customary international law arises from general and consistent practice carried out with a sense of legal obligation, and this requires time, consistency, and widespread acceptance.⁴²³

In the realm of energy solidarity, even though it's a relatively nascent principle within the EU, one could posit that its systematic influence across Member States and on EU energy policy aligns with the concept of general and consistent practice.⁴²⁴ Although energy solidarity is explicitly regulated and legally required within EU law, it's worth exploring whether these practices are conducted out of a sense of legal obligation, which may, in turn, contribute to the evolution of customary international law.

Moreover, the geographical spread of the principle of energy solidarity beyond the EU into Europe and Eurasia may be significant. The acceptance and application of the principle in these regions could foster its recognition as customary international law. However, this would likely require a widespread harmonization of energy policy and legislation across these countries, which could pose a considerable challenge.

Regarding the vital interests, if the principle of energy solidarity were recognized as customary international law, it could bring a new dimension to the interpretation and

⁴²³ Simma & Alston, 1992, p. 88.

⁴²⁴ Shaw, 2008, pp. 80-82.

application of these interests. On one hand, it could help promote a common definition and understanding of these interests, thus contributing to a more effective implementation of the principle of energy solidarity. On the other hand, it could also lead to conflicts, as it could expose inconsistencies in the essential interests of different countries.

Finally, it is important to remember that the emergence of customary international law is a complex and often slow process. Therefore, further research is needed to fully understand and assess the potential role of the principle of energy solidarity in this process.

Therefore, further research is needed to fully understand and assess the potential role of the principle of energy solidarity in this process. While the theoretical underpinnings of this principle have been explored, its contemporary practical applications, such as through the REPowerEU Initiative, offer a tangible reflection of its significance in the EU energy domain.

4.7 REPowerEU Initiative

One of the most salient instances of this practical manifestation is the REPowerEU Initiative. Launched following the Russian invasion of Ukraine on 24th February 2022, the REPowerEU Initiative marks a crucial turning point in European energy and solidarity policies.⁴²⁵ This initiative acknowledges "fairness and solidarity"⁴²⁶ as fundamental tenets of the European Commission's 2019 European Green Deal, a comprehensive growth strategy.⁴²⁷ It underscores the demand to develop an integrated energy market, rooted deeply in the spirit of solidarity, ensuring a secure supply. This especially emphasizes the realization of cross-border projects.⁴²⁸

The REPowerEU Initiative elucidates several key aspects of solidarity, including the imperative to finalize bilateral solidarity agreements and to activate "solidarity measures"⁴²⁹

⁴²⁵ Yafimava, 2023, p. 1.

⁴²⁶ Huhta & Reins, 2023, p. 783.

⁴²⁷ Huhta & Reins, 2023, p. 783.

⁴²⁸ Huhta & Reins, 2023, p. 783.

⁴²⁹ Huhta & Reins, 2023, p. 783.

as a last recourse in scenarios of extreme gas shortages.⁴³⁰ Such measures are tailored to guarantee supply to households, district heating systems, and essential social amenities in affected nations. It's noteworthy that references to solidarity encapsulate both political and legal dimensions.

Beyond these political undertakings, five legislative actions have been instituted, reflecting the essence of the REPowerEU Initiative and placing solidarity at the forefront of their strategies.⁴³¹ These actions encompass regulations addressing coordinated gas demand measures, mitigation of elevated energy prices, enhancement of gas solidarity, acceleration of renewable energy deployment, and adjustments to the gas market.⁴³²

Collectively, the REPowerEU Initiative underscores the pivotal role of solidarity in the present European energy and security paradigms, spotlighting the tangible actions taken to transition this principle from rhetoric to reality.⁴³³

4.8 Conclusion

Section 4 offered an in-depth exploration of vital interests within the ambit of the energy solidarity principle. This thorough examination unravelled the complexity of the subject, thereby expanding our understanding of energy solidarity's role and significance within EU law.

This study underscored that vital interests are not static; rather, they are dynamic, context-sensitive entities that present challenges for unequivocal identification and definition. Emphasizing the instrumental role of case law and legal interpretation, it was noted how these mechanisms illuminate the comprehension of these interests in the light of the energy solidarity principle.

⁴³⁰ Yafimava, 2023, p. 1; Huhta & Reins, 2023, p. 783.

⁴³¹ Huhta & Reins, 2023, p. 784.

⁴³² Yafimava, 2023, p. 1; Huhta & Reins, 2023, p. 784.

⁴³³ Nicoli, Burgoon, & van der Duin, 2023; Huhta & Reins, 2023, p. 784.

Substantive and geographical aspects of vital interests emerged as particularly crucial. The geographical nuances and energy landscape of a Member State notably sway the characterization of its vital interests.

Turning to the perceptible threshold and evaluation criteria for an energy solidarity measure, we proposed several potential benchmarks. These, however, warrant further scrutiny to ascertain their efficacy and applicability.

In our concluding assessment of energy solidarity as an EU legal principle's potential in fostering customary international law, it was posited that the maturation and enactment of the energy solidarity principle could catalyze the genesis of customary international law across Europe and Eurasia.

The gleanings from this chapter smoothly pave the way for the succeeding chapter, wherein the Nord Stream 2 project is examined through the lens of energy solidarity. In doing so, we aim to translate the theoretical deductions of this chapter into a practical setting, thus enriching our grasp of the energy solidarity principle in action.

5. Conclusion

This chapter extensively examined the concept of energy solidarity within the context of the Nord Stream 2 project, highlighting several crucial findings and insights.

Firstly, it traced the historical evolution of the European gas internal market, showing how the integration of European energy policy has increasingly recognized and embodied the principle of energy solidarity. From the Treaty of Rome to the enlargements of the EU and the impact of the Energy Charter, energy solidarity has become a cornerstone of the European energy policy landscape.

Secondly, the chapter highlighted the substantial regulatory framework that supports energy solidarity within the EU. Regulations and directives such as the TFEU, Energy Charter Treaty, and the various EU regulations and directives underscore the importance of energy solidarity in the European Union's regulatory environment.

The chapter also offered several interpretations of energy solidarity, examining literal, teleological, historical genetic, and EU-law conform interpretations. These provided a comprehensive understanding of energy solidarity's multifaceted nature and how it applies in the European legal context.

In the examination of the case OPAL (C-848/19 P)⁴³⁴, the chapter illuminated how the Court of Justice of the European Union interprets energy solidarity. The case illustrated the legal binding nature of energy solidarity under Article 194 para. 1 TFEU and emphasized the protection of vital interests as a key factor in the application of energy solidarity.

The research into energy solidarity according to European law drew a clear line between energy solidarity and the broader concept of solidarity. It elucidated the principle's underlying objective - ensuring coherence within the EU's energy market - and illuminated the geographical and substantive aspects of vital interests within the context of energy solidarity.

In conclusion, this chapter demonstrated the vital role of energy solidarity in managing complex energy relations within the European Union. It emphasized the importance of well-crafted legal provisions that uphold energy solidarity, offering significant insights for future studies and potential refinement of contractual provisions.

⁴³⁴ ECJ, 2021.

Chapter Three: Energy Solidarity in the Context of Nord Stream 2

The Nord Stream 2 project, a direct gas pipeline from the Russian Federation to the Federal Republic of Germany, poses significant challenges and raises fundamental questions about the principles of energy solidarity within the European Union. The project has been a source of tension between the EU Member States due to the divergent interests and implications it carries for individual countries.⁴³⁵

An analysis of this case brings to light key factors influencing the understanding and application of energy solidarity in practice. It reveals the complexities inherent in balancing individual member state interests with those of the European Union as a whole, particularly in a context where external energy supply dependencies come into play.

The contentious nature of the Nord Stream 2 project, coupled with the overarching necessity to ensure security of supply, competitiveness, and sustainability in the EU's gas market, underscores the importance of legal provisions that promote energy solidarity. Through an in-depth analysis of the case circumstances and relevant regulations, this dissertation aims to provide insights that could contribute to resolving such contentious issues. Ultimately, the goal is to foster a more cooperative and unified approach to energy relations within the European Union.

This chapter provides a critical analysis of energy solidarity in the context of Nord Stream 2 and illustrates the potential role of contractual provisions in promoting energy solidarity. Through this exploration, it contributes to the broader discourse on how to manage complex energy relationships and dependencies within the evolving landscape of the EU's gas market.

⁴³⁵ Larsson, 2006, p. 262.

1. Introduction

The Nord Stream 2 project emerges as a key issue within European energy policy, having elicited substantial legal, economic, and political scrutiny in recent years. The objective of this analysis is to explore Nord Stream 2 within a distinct context to comprehend the legal ramifications of implementing the principle of energy solidarity in international energy relations.

Nord Stream 2, initially envisioned as a commercial project to address Europe's rising demand for natural gas and the imperative for a diversified supply, has seen its significance evolve over time due to political disputes and legal challenges.⁴³⁶ The project encapsulates the intricacy and controversy inherent to international energy relations and illuminates various facets of the energy solidarity principle.

The execution of Nord Stream 2 was brought to a halt in the aftermath of the Ukraine war outbreak on 24th of February 2022, and the pipeline was subsequently sabotaged by an explosion in 2023.⁴³⁷ These events have further intensified discussions about Europe's dependency on Russian gas and the question of energy security.⁴³⁸

In the context of this dissertation, the examination of the Nord Stream 2 project will contribute to the understanding of the energy solidarity principle, providing insights into how it can be applied to real situations in international energy relations. The focus will be primarily on the legal aspects, encompassing EU energy law, international law.

1.1 Contextual Overview

The Nord Stream 2 project, which involves the construction and operation of a gas pipeline, is among the most debated energy infrastructure projects of all time. Initially, discussions

⁴³⁶ Umbach, 2023, p. 114.

⁴³⁷ Wissenschaftliche Dienste, Deutscher Bundestag, 2022, p. 4; LaBelle, 2023, p. 3.

⁴³⁸ Larsson, 2006, p. 262; Stüwe, 2020, p. 141.

primarily focused on security concerns associated with the Russian Federation and risks to the energy supply. However, these debates have become more intense in the context of a changing geopolitical landscape, particularly following the unlawful attack of the Russian Federation on Ukraine on February 24, 2023. These evolving conditions prompted a reassessment of the Nord Stream 2 project.⁴³⁹

From the perspective of the North Atlantic Treaty Organization (NATO) allies, Nord Stream 2 and Turkish Stream pose potential threats. With transport capacities of 55 and 31.5 billion cubic meters of natural gas per year respectively, these pipelines could jeopardize the autonomy of strategically and economically significant NATO Member States.⁴⁴⁰ The United States of America's sanctions - the "Protecting Europe's Energy Security Act"⁴⁴¹ (PEESA), the "Protecting Europe's Energy Security Clarification Act"⁴⁴² (PEESCA) within the framework of the "National Defense Authorization Act"⁴⁴³ (NDAA), and the "Countering America's Adversaries Through Sanctions Act"⁴⁴⁴ (CAATSA) - provide for extensive measures against all Russian energy export infrastructure projects in Europe. Under these regulations, the CAATSA has the authority to penalize European companies that maintain trade relations with the Russian Federation, including those involved in energy infrastructure projects, based on the principles of the "Trading with the Enemy Act".⁴⁴⁵

Furthermore, the PEESA and PEESCA sanctions presented substantial challenges to the Nord Stream 2 project, and the potential undermining of European sovereignty could have been a consequence if it were not for the waiver, which specifically addressed those sanctions. The mere threat of these sanctions has already caused economic damage in Europe, as several companies, including the certification firm DNV GL, felt compelled to abandon the project.⁴⁴⁶ As a result of the imposed sanctions, the construction period had to be extended by approximately one year.

⁴³⁹ Wissenschaftliche Dienste, Deutscher Bundestag, 2022, p. 4; Umbach, 2023, p. 114.

⁴⁴⁰ Westphal, 2021, p. 1; Westphal, 2021, p. 4; Ruys & Ryngaert, 2020, p. 3.

⁴⁴¹ United States Congress, 2019.

⁴⁴² United States Congress, 2020.

⁴⁴³ United States Congress, 2022; Ruys & Ryngaert, 2020, p. 41.

⁴⁴⁴ United States Congress, 2017; Ruys & Ryngaert, 2020, pp. 103-104.

⁴⁴⁵ United States Congress, 1958.

⁴⁴⁶ Shagina & Westphal, 2021, p. 4

In light of the ongoing conflict initiated by Russia's attack on Ukraine - a situation that led to the discontinuation of the certification process for Nord Stream 2 AG due to the withdrawal of the supply security report - the principle of energy solidarity has come to the forefront of the debate.⁴⁴⁷ This development prompts the question of whether a proactive emphasis on energy solidarity could have mitigated against the Russian aggression against Ukraine. Amid these emerging geopolitical realities and challenges, the necessity for energy solidarity in the planning and operation of all types of energy infrastructure projects, such as Nord Stream 2, is gaining an increasingly critical role in the discourse. This principle is a recurring theme in the dialogues, offering a renewed perspective on the importance of energy solidarity.

At the heart of the discussion is the question of the extent to which the construction and operation of Nord Stream 2, would be encompassed by the scope of energy solidarity.

1.2 Nord Stream 2: An Infrastructure Network for Natural Gas Transport

The Nord Stream 2 project serves as a tangible case study for understanding the principle of energy solidarity. Although this infrastructure project was never realized, it sparked significant debates and interpretations of the principle of energy solidarity.⁴⁴⁸ This initiative aimed to establish an additional direct gas supply link between the Russian Federation and the Federal Republic of Germany, but several authors perceived it as a threat to transit security.⁴⁴⁹

Nord Stream 2 was conceived as a supplement to the existing Nord Stream 1 pipeline, running parallel to it.⁴⁵⁰ With a length of approximately 1,230 kilometers beneath the Baltic Sea, this supplementary link between the Russian Federation and the Federal Republic of Germany was expected to provide a substantial expansion to EU's energy infrastructure upon

⁴⁴⁷ Wissenschaftliche Dienste, Deutscher Bundestag, 2022, p. 4.

⁴⁴⁸ Riley, 2021, p. 4; Lang & Westphal, 2017, p. 7.

⁴⁴⁹ Riley, 2018, p. 3; Holz & Kemfert, 2021, pp. 8-9.

⁴⁵⁰ Becker, 2019, p. 182; Taveira & de Carvalho, 2022.

its completion.⁴⁵¹ The Nord Stream 2 pipeline was designed to have the capacity to transport up to 55 billion cubic meters of natural gas per year.⁴⁵²

However, as previously mentioned, the execution of the Nord Stream 2 project came to a halt on February 25, 2023. This decision was taken the day following the Russian Federation's military aggression towards Ukraine, when German Federal Government discontinued the certification process for Nord Stream 2 AG and its subsidiary Gas for Europe GmbH by retracting the supply security report.⁴⁵³ These events further intensified the discussion around the project and its implications for energy solidarity in international energy relations.

The following section elaborates on the participation structure of the Nord Stream 2 project to provide a deeper insight into the legal, economic, and political dimensions of the project.

1.3 Stakeholder Structure and Technical Details

As emerged from the judgment of the European Court of Justice in the case OPAL (C-848/19 P)⁴⁵⁴, the principle of energy solidarity also covers the fundamental interests of market participants in the gas internal market.⁴⁵⁵ Hence, an examination of the participation structures of Nord Stream 2 AG seems legally mandated, given the prima facie market dominance of PJSC Gazprom.

To comprehend the participatory structure and technical details of the Nord Stream 2 project, it was crucial to trace back to the inception of the project. The construction and financing contracts for Nord Stream 2 had been signed in 2015 by PJSC Gazprom, ENGIE, OMV, Shell, Uniper, and Wintershall Dea.⁴⁵⁶

⁴⁵¹ Becker, 2019, p. 182.

⁴⁵² Riley, 2021, p. 1.

⁴⁵³ Wissenschaftliche Dienste, Deutscher Bundestag, 2022, p. 4.

⁴⁵⁴ ECJ, 2021.

⁴⁵⁵ ECJ, 2021, paras. 72-73.

⁴⁵⁶ Lang & Westphal, 2017, p. 9.

From a technical standpoint, the Nord Stream 2 project had been expected to involve the construction of a gas connection pipeline, designed to import natural gas from the gas fields of the Yamal Peninsula in Siberia over a distance of approximately 1,235 kilometers to the EU.⁴⁵⁷

The pipelines had been planned to run from Ust Luga in the Russian Federation along the Baltic Sea floor to Lubmin in the Federal Republic of Germany. In the Federal Republic of Germany, Nord Stream 2 would have then been connected with the alternative pipelines Europäische Gasanbindungsleitung (European Gas Pipeline) or Norddeutsche Erdgasleitung (North European Gas Pipeline).⁴⁵⁸

PJSC Gazprom, a state-owned enterprise, was the largest shareholder in the Russian gas industry with a 38% stake.⁴⁵⁹ This implied that any financial return from the operation of Nord Stream 2 would have benefitted the Russian Federation as a whole.

The backgrounds and participatory structure of the Nord Stream 2 project illustrated the inherent complexity and numerous challenges that the project presented. It was an international venture involving considerable financial participation and technical expertise, supported by a network of contracts and obligations among various companies and governments. However, due to geopolitical tensions and regulatory hurdles, particularly related to the Ukraine war and the pipeline certification, the project was never implemented.

2. Relevance of Energy Solidarity for Nord Stream 2

This section critically examines the principle of energy solidarity in relation to the Nord Stream 2 project. This analysis, aiming to illuminate the diverse implications of this principle, situates energy solidarity within the context of European law. The investigation

⁴⁵⁷ Lang & Westphal, 2017, p. 7.

⁴⁵⁸ Becker, 2019, p. 182.

⁴⁵⁹ Gazprom, 2020, p. 31.

includes an in-depth review of its application across a series of crucial regulatory instruments.

2.1 Relevant Context of European Law

Article 194 para. 1 lit. a-d of the Treaty on the Functioning of the European Union⁴⁶⁰ (TFEU) enshrines the principle of energy solidarity. Interpreted in conjunction with Article 194, Paragraph 2 of the TFEU, it empowers EU institutions to develop a cohesive energy policy.

The Article 194 para. 1 lit. a-d of the TFEU defines four specific objectives of the EU's energy policy, which are as follows:

- Article 194 para. 1 lit. a TFEU:
Ensuring the Functionality of the Internal Energy Market
- Article 194 para. 1 lit. b TFEU:
Guaranteeing Security of Energy Supply
- Article 194 para. 1 lit. c TFEU:
Promoting Energy Efficiency and Energy Saving Measures, as well as the Development of New and Renewable Energy Forms
- Article 194 para. 1 lit. d TFEU:
Encouraging the Interconnection of Energy Networks.

The specifications and the correlation of norms have already been discussed within the scope of this dissertation. It's crucial to grasp the context and scope of the principle of energy solidarity within the EU. Interpreting Article 194 para. 1 lit. a-d TFEU in conjunction with Art. 194 para. 2 TFEU could cover an array of potential measures, spanning from strategic energy partnerships and the creation of energy reserves, to the networking of energy

⁴⁶⁰ TFEU, 2012.

infrastructures. Furthermore, it could also include binding standards and regulations, which could explicitly mention the principle of energy solidarity to specific energy projects such as Nord Stream 2.

However, the specific interpretation of the term energy solidarity can vary. Some interpretations might imply a high level of integration and cooperation between Member States regarding their energy policy, while other interpretations might favor a more intergovernmental approach, where Member States pursue their own energy policies in accordance with the general objectives of the EU but have more leeway in decision-making.⁴⁶¹

The academic literature on energy solidarity in the EU has produced different approaches to interpreting this principle. Some authors argue that the principle of energy solidarity requires greater integration of EU energy policy, including stronger coordination of national energy policies and greater cooperation in the development of energy projects.⁴⁶² Other authors argue that the principle of energy solidarity allows Member States some latitude to pursue their own energy policies within the general objectives and principles of the EU.⁴⁶³

In the context of this dissertation, the investigation aims for a profound analysis of the application and interpretation of the principle of energy solidarity in the EU, especially with regard to the debate on the Nord Stream 2 project. The aim is to develop a comprehensive understanding of how the principle of energy solidarity could be applied in practice, what factors influence its application, and what impact this could have on the energy policy and security of the EU and its Member States. This investigation is intended to contribute to the academic debate about the role and significance of energy solidarity in Europe.

⁴⁶¹ Banet, 2023, pp. 3-4.

⁴⁶² Ryś, 2022, p. 159; ECJ, 2020, para. 47; Kaschny, 2023, p. 293.

⁴⁶³ Braun, 2017, pp. 49-51; LaBelle, 2023.

2.2 Interests of Parties Involved in Nord Stream 2

The concept of energy solidarity, enshrined in Article 194 para. 1 of the Treaty on the Functioning of the European Union (TFEU), underscores the importance of a coordinated approach among European Union Member States on energy-related issues.⁴⁶⁴ The Nord Stream 2 project, however, has posed a challenge to this concept, revealing the divergent interests of the various parties that are involved in, or impacted by, the project.

Key stakeholders in the Nord Stream 2 project encompass the Republic of Poland, the Federal Republic of Germany, the wider European Union, the United States, the French Republic and the Russian Federation with each of these entities having distinct interests and viewpoints on the project.

For the Russian Federation, represented by Gazprom, Nord Stream 2 could potentially serve as a vital strategic initiative aimed at maintaining, and possibly enhancing, its role as a predominant energy provider to Europe.⁴⁶⁵ The pipeline would offer a direct route for bypassing Ukraine and other transit nations, thus possibly ensuring a more secure and reliable path for gas exports to Europe. The Russian Federation may also aim to leverage the energy dependence of the Baltic states, using the alternative transit route to deliver gas to Europe while advancing its geopolitical objectives.⁴⁶⁶

The Federal Republic of Germany, as the ultimate recipient of the gas, viewed Nord Stream 2 as a vital tool for ensuring its energy supply. This was deemed critically important for supporting the country's industrial sector and its escalating energy demands. Given Germany's planned transition away from nuclear and coal power, its reliance on gas was expected to increase, thus magnifying the significance of the Nord Stream 2 project.⁴⁶⁷

From the perspective of the United States, Nord Stream 2 posed a considerable concern. The United States perceived Europe's growing energy dependence on the Russian Federation as

⁴⁶⁴ Kaschny, 2023, p. 293.

⁴⁶⁵ Bros et al., 2017, p. 16; Westphal, 2017, pp. 9-10.

⁴⁶⁶ Bros et al., 2017, p. 16; Westphal, 2017, pp. 9-10.

⁴⁶⁷ Bros et al., 2017, pp. 24-25; Westphal, 2009, pp. 15-16.

a potential threat to the security of NATO and the EU.⁴⁶⁸ Furthermore, as a significant producer of liquefied natural gas (LNG), the United States also viewed Nord Stream 2 as a competitor to its own energy exports to Europe.⁴⁶⁹

The French Republic's stance on Nord Stream 2 may be somewhat mixed. On one hand, the French Republic, much like the Federal Republic of Germany, might recognise the need for stable and diversified energy sources.⁴⁷⁰ On the other hand, the French Republic might also be mindful of the geopolitical implications of Nord Stream 2, which could potentially enhance the Russian Federation's influence within Europe.

The Republic of Poland, along with other Eastern European states, has been one of the most vocal opponents of Nord Stream 2.⁴⁷¹ The Republic of Poland argued that the pipeline is in contradiction with the EU's energy diversification strategy and jeopardises regional security by heightening Europe's energy dependence on the Russian Federation.⁴⁷² It also stands to lose transit fees as a result of the pipeline bypassing traditional transit routes.⁴⁷³ Additionally, the Republic of Poland perceived a risk of market distortion due to an oversupply and thus cared for the interests of companies such as PGNiG and other gas suppliers.⁴⁷⁴ The Republic of Poland is concerned about the monopolisation of market power and the potential negative impacts on competition in the energy sector.⁴⁷⁵

In conclusion, the conflicting interests elicited by the Nord Stream 2 project highlight the complexity involved in implementing the concept of energy solidarity. It suggests that a balanced, comprehensive, and inclusive approach is required to navigate the intricate interplay of energy and geopolitics within Europe.

⁴⁶⁸ Eitelhuber, 2021, p. 194.

⁴⁶⁹ Becker, 2019, pp. 183-184.

⁴⁷⁰ LaBelle, 2023, p. 3.

⁴⁷¹ LaBelle, 2023, pp. 11-13.

⁴⁷² ECJ, 2021, para. 15; Larsson, 2006, p. 262.

⁴⁷³ Lang & Westphal, 2017, p. 31; Taveira & de Carvalho, 2022.

⁴⁷⁴ Lang, 2021; ECJ, 2021.

⁴⁷⁵ Lang & Westphal, 2017, p. 32.

2.3 European Gas Supply

In the context of the European Union's (EU) the internal energy market plays a critical role. It serves as a framework for the secure, efficient, and environmentally sustainable distribution of natural gas among EU Member States. This section provides an analysis of the internal gas market, focusing on its integral components: the European gas transmission system and the certification process, exemplified by the project Nord Stream 2 in the Federal Republic of Germany. An examination of these elements illuminates the functioning and challenges of the gas market within the broader context of the EU's energy policy.

2.3.1 European Gas Transmission System

European gas transmission system forms the backbone of the energy supply within the European Union (EU), facilitating the transport of natural gas from the production sites to the consumers. It plays a crucial role in ensuring energy supply security, a core objective of EU energy policy. This system encompasses both internal pipelines within Member States and cross-border pipelines, securing a reliable and continuous gas supply.

One such cross-border project is the Nord Stream 2 pipeline, which directly connects the EU with the Russian Federation. Simultaneously, the Ukrainian Gas Transmission System (UGTS) constitutes a significant component of the European gas transmission system.⁴⁷⁶ Historically, it was one of the primary transit routes for Russian natural gas into the EU. In the years preceding the conflict in Ukraine, efforts were undertaken to reduce dependence on this route, notably through projects such as Nord Stream 2 or South Stream.⁴⁷⁷ This shift in gas transit flows could have had significant implications for energy supply security and geopolitical relations in the region at that time.⁴⁷⁸ The impacts would have been particularly profound for Ukraine, which had been generating substantial revenue from gas transit.⁴⁷⁹ In this context, the UGTS was a central element of the European gas transport infrastructure that needed careful consideration in planning the future direction of EU energy policy.

⁴⁷⁶ Naumenko, 2018; Lang & Westphal, 2017, pp. 11.

⁴⁷⁷ Lang & Westphal, 2017, pp. 15-16.

⁴⁷⁸ Naumenko, 2018.

⁴⁷⁹ Umbach, 2023, p. 114.

The following subsections will provide a comprehensive overview of the Ukrainian Gas Transmission System (UGTS). The UGTS, a legacy of the Soviet era, has played a pivotal role in Europe's energy security by serving as the main conduit for gas exports from the region.⁴⁸⁰ The complexity and historical shifts associated with the UGTS, including the impacts of geopolitical developments and infrastructure changes, will be further explored.

2.3.1.1 Ukrainian Gas Transmission System

Gas exports from the Soviet Union used to occur almost exclusively via the UGTS pipelines. The UGTS, which encompasses pipelines, compressor stations, and gas storage facilities, was built in the 1970s and 1980s within Ukraine to export gas from the Soviet Union.⁴⁸¹ The construction of the Yamal-Europe pipeline through the Republic of Belarus, the Blue Stream, and Nord Stream 1 would have bypassed the UGTS. With the operation of Nord Stream 2 and Turkish Stream, PJSC Gazprom might require the UGTS less for gas export.

Following the dissolution of the Soviet Union, ownership of the UGTS has been transferred to the Ukrainian state. Gas transit is handled by Ukrtransgaz, a wholly-owned subsidiary of Naftogaz Ukrainy, the state-owned company that produces, imports, and domestically distributes natural gas.⁴⁸² The main pipelines of the UGTS Western Corridor run from the north and east border of Ukraine to its western border. From there, the gas flows into the Republic of Austria and the Czech Republic, as well as the Kingdom of Hungary and the Republic of Romania.⁴⁸³ The Republic of Moldova, the Republic of Bulgaria, and Turkey might be supplied with gas via the southern corridor and its extending trans-Balkan pipelines.⁴⁸⁴ The western corridor of the UGTS supplies the Italian Republic, the French Republic, the Kingdom of Hungary, and the Federal Republic of Germany.⁴⁸⁵

⁴⁸⁰ Naumenko, 2018; LaBelle, 2023, p. 18.

⁴⁸¹ Naumenko, 2018, p. 14-15; Perthes, 2016, p. 19.

⁴⁸² Naumenko, 2018, p. 14-15.

⁴⁸³ Shayan, 2023, pp. 48-49; Naumenko, 2018.

⁴⁸⁴ Shayan, 2023, pp. 48-49; Naumenko, 2018.

⁴⁸⁵ Naumenko, 2018.

2.3.1.2 Geostrategic Calculation of PJSC Gazprom

During the 1990s, Gazprom made a strategic decision to start building networks to circumvent the Ukrainian Gas Transport System (UGTS). This strategy was manifested in 1997 with the creation of the Yamal-Europe pipeline via the Republic of Belarus, marking the first time an export route had been constructed that bypassed Ukrainian territory.⁴⁸⁶

The proportion of gas transiting through Ukraine continued to decline in the years that followed. This downward trend was particularly evident with the commissioning of the Blue Stream pipeline through the Black Sea in 2003 and the Nord Stream 1 pipeline via the Baltic Sea in 2011. These pipelines further reduced the need for transit through Ukraine, signalling Gazprom's continuing drive to diversify its export routes.

Nord Stream 2 was projected to replace the western corridor of the UGTS, while the two strands of the Turkish Stream pipeline would serve Turkey and Southeast Europe respectively. These developments denote a significant shift for Ukraine, which, as mentioned before, relies heavily on transit fees as a contribution to its state budget.⁴⁸⁷ Gazprom's geostrategic calculations, therefore, have profound implications for Ukraine and Europe's energy landscape at large.

2.3.1.3 Disrupted Gas Supply

The gas conflicts between the Russian Federation and Ukraine, which didn't originate in 2005, nonetheless gained a new dimension in that year, significantly affecting European energy security.⁴⁸⁸ The core of the 2005-2006 conflict revolved around disputes over gas prices and transit fees. PJSC Gazprom, the Russian Federation's state-owned enterprise, demanded higher prices for natural gas and an adjustment of transit fees from Ukraine. When no agreement was reached, Gazprom ceased gas supplies to Ukraine on January 1, 2006.⁴⁸⁹

⁴⁸⁶ Shayan, 2023, pp. 47-48.

⁴⁸⁷ Umland, 2020, pp. 296-297; Westphal, 2009, p. 15.

⁴⁸⁸ Westphal, 2009.

⁴⁸⁹ Westphal, 2009, p. 15.

This move led to a substantial disruption of gas deliveries to several European countries as a significant portion of gas destined for Europe was transported through Ukraine.

Another noteworthy conflict arose in 2009 when Gazprom and Ukraine again were in a stalemate over gas prices and transit fees. Similar to the situation in 2006, the lack of agreement led to a halt in gas supplies.⁴⁹⁰ During Europe's harshest winter in years, the conflict led to a significant reduction in the quantities of gas delivered to several European countries, heightening concerns about energy supply security.⁴⁹¹

These gas conflicts and their impacts on European energy supply security demonstrated the EU's dependency on gas supplies and transit routes through Ukraine. They also highlighted the necessity of promoting the diversification of gas supply in Europe and exploring alternative supply and transit routes to reduce dependence on individual transit countries.⁴⁹² Projects like Nord Stream 2 and Turkish Stream were part of these efforts, although they were not without controversy.

The following section will examine the Russian Federation's geopolitical strategies in this context, heavily shaped by these gas conflicts and the resulting impacts on European energy supply security.

2.3.1.4 Russian Geopolitical Strategy

The Russian Federation's vast natural gas reserves gave it considerable influence in Europe. Through state-controlled energy companies like PJSC Gazprom, the Russian Federation has often used gas supplies as a tool of foreign policy.⁴⁹³ The planned pipeline projects by the Russian Federation, such as Nord Stream 2 and Turkish Stream, could have served dual purposes: they could have allowed the Russian Federation to bypass transit countries like Ukraine, thereby reducing their geopolitical leverage, and they could have strengthened the

⁴⁹⁰ Westphal, 2009, p. 17; LaBelle, 2023, p. 2.

⁴⁹¹ LaBelle, 2023, pp. 14-15.

⁴⁹² Larsson, 2006, p. 262.

⁴⁹³ Larsson, 2016, p. 262; LaBelle, 2023, p. 16.

Russian Federation's energy ties with key European economies like the Federal Republic of Germany, thereby increasing its own influence.⁴⁹⁴

However, the Russian Federation also faced significant challenges. The EU's efforts to diversify its energy supplies, coupled with the rise of the US as a major LNG exporter, threatened the Russian Federation's dominance in the European gas market.⁴⁹⁵ Furthermore, the push for renewable energy and climate action could have decreased the demand for fossil fuels in the long run.

2.3.1.5 Conclusion

With respect to Ukraine, it should be noted that its essential interests cannot be considered protected under Art. 194 para. 1, lit. a-d of the TFEU due to its non-membership in the European Union. However, one could argue that through the repeated declarations of energy solidarity by the Baltic States towards transit countries, a customary law duty to protect their essential interests could have been established. This could have contributed to the formation of an international energy solidarity. Even a small number of states with opposing views could not resist the emergence of customary law.⁴⁹⁶ If this viewpoint were affirmed, the Federal Republic of Germany would have had a duty towards Ukraine to preemptively weigh the protection of essential interests. For instance, upon the technical completion of Nord Stream 2, certain amounts of natural gas were contractually guaranteed to Ukraine.

2.3.2 Conclusion

In the intricate chess game of international relations, energy politics played a pivotal role. The gas trade between the Russian Federation and Europe provides a compelling case study in this regard. It has evolved from a simple commercial transaction into a complex interplay of economic, political, and strategic considerations.

⁴⁹⁴ Westphal, 2021, p. 1; LaBelle, 2023; Taveira & de Carvalho, 2022.

⁴⁹⁵ Shagina & Westphal, 2021, pp. 1-3.

⁴⁹⁶ Herdegen, 2007, p. 133.

The concept of energy solidarity emerges as an important guiding principle in this context. This implies a cooperative approach among nations to ensure energy security, which includes diversifying energy sources, reducing dependency on a single supplier, and creating a more interconnected energy infrastructure.

In the case of Europe and the Russian Federation, energy solidarity underscores the need for Europe to balance its dependence on Russian gas with alternative sources, be they domestic renewables or imports from other countries.⁴⁹⁷ This not only bolsters the security and resilience of Europe's energy supply but also reduces its vulnerability to potential geopolitical pressures.

The path to achieving energy solidarity, however, is fraught with challenges. It requires balancing often competing economic, environmental, and geopolitical objectives. It involves difficult decisions about infrastructure investments, regulatory frameworks, and foreign policy strategies.

Understanding this dynamic requires an appreciation of not only the economic factors at play but also the geopolitical realities and strategic objectives of the key stakeholders. As the saga of the gas relationship continues to unfold, it promises to be a key determinant of the future direction of EU-Russia relations, the geopolitics of Eurasia, and the wider international energy landscape.

With the push for climate action and the rise of renewables, the gas question becomes even more complex. Yet, it is clear that the future of energy security in Europe and beyond will hinge on a commitment to energy solidarity, strategic planning, and sustained cooperation among nations.

2.4 Excursion: Sovereignty of EU Member States

The Nord Stream 2 project, if realized, could have had significant implications for the sovereignty of EU Member States. These potential repercussions were multifaceted and

⁴⁹⁷ European Commission, 2022.

could have manifested differently depending on each state's energy dependencies, geopolitical alignments, and national security concerns. Typically, agreements of friendship and cooperation encompass a non-intervention principle, which comes into question with regard to the principle of energy solidarity and the intervening sanctions of the United States in the Nord Stream 2 project.⁴⁹⁸

Even if the United States of America was accurate in predicting the potential economic, societal, and political outcomes that could have ensued with the implementation of Nord Stream 2, one might also question whether the US sanctions undermined the sovereignty of the European Union. This point is particularly poignant considering the potential implications if President Joe Biden had not activated a waiver.

In the context of the Nord Stream 2 project, this question veers more towards the issue of general solidarity and has only minimal reference to the energy policy controversy surrounding Nord Stream 2. This leaves room for further research on this distinct topic.

3. Conclusion

In Chapter Three, the principle of energy solidarity is scrutinized within the context of the Nord Stream 2 project. The analysis brings to light that the project carries significant implications for the energy supply security of EU Member States, risking an increase in dependency on singular sources.

The study argues that while the project presents opportunities to improve energy supply and distribution efficiency in the region, these must be balanced against potential risks and geopolitical tensions, including the Russian Federation's geostrategic ambitions and future Euro-Russian relations.

⁴⁹⁸ Jamnejad & Wood, 2009, p. 367.

Moreover, it is argued that Nord Stream 2 impacts extend beyond energy supply security and efficiency to broader geopolitical considerations. Particularly, the effects of the project on EU-Ukraine relations and the overall energy security of the EU are contentious and complex.

The Federal Republic of Germany, a key stakeholder, has mainly viewed Nord Stream 2 from a technocratic perspective, focusing on its potential to bolster energy efficiency and supply. However, viewing the project through the lens of energy solidarity highlights that the interests and apprehensions of Member States - such as the Republic of Poland - should warrant more consideration. The disagreements over the project within the EU illuminate that the principle of energy solidarity could and should play a pivotal role in balancing and acknowledging these divergent interests. Furthermore, in light of the multitude of declarations of solidarity from Baltic and European states towards Ukraine, the emergence of energy solidarity for gas transit states as customary international law has been debated. In conclusion, a sustained practice appears not yet discernible. Thus, while the subjective conviction appears to be affirmed, the objective practice ought to be denied.

In this regard, the only objection to the Nord Stream 2 project would have been the principle of energy solidarity under Article 194 para. 1 TFEU, referring to the European Court of Justice's case judgement on the OPAL case. The initial legal conclusion suggests that if an increase in transport volume for OPAL by 50% leads to a violation of energy solidarity, it is logically inferable that the same could occur with the connection of two completely new Nord Stream 2 pipelines to the same EU gas market, given their significantly higher transport volume.

In the end, the security-related objections from the transit countries inside and outside the European Union against Nord Stream 2 were taken seriously, at least following Russia's military attack on Ukraine. Nonetheless, if a more sensitive appreciation of energy solidarity had been employed from the start, such a crisis might have been avoided.

Chapter Four: Drafting Contractual Provisions to Promote Energy Solidarity

Chapter Four delves into the creation of contractual provisions specifically designed to facilitate the implementation of energy solidarity. Recognizing the intricate and ever-changing nature of the energy market, the importance of establishing contractual provisions that adhere to the principles and aims of energy solidarity is crucial. These provisions play an indispensable role within the context of energy solidarity, forming the bedrock of stakeholder interactions by safeguarding rights, detailing obligations, and constructing the framework for cooperation.⁴⁹⁹

In the course of this chapter, relevant methodologies and legal principles that guide the drafting process will be scrutinized and identified. An extensive analysis and critique of currently implemented contractual provisions concerning energy solidarity will be conducted. This analysis will highlight and address the challenges and gaps in current contractual mechanisms, thereby paving the way for more refined and effective contractual strategies.

Informed by these insights, the chapter then proposes more comprehensive contractual provisions. The goal of these provisions is to fortify the infrastructure of energy solidarity, thereby enabling its more efficient realization. These freshly crafted provisions will subsequently be subjected to practical application and effectiveness evaluation, with their merits and potential pitfalls being tested against hypothetical case studies that mirror a range of energy scenarios.

Finally, the chapter concludes with reflections on the drafted provisions in relation to energy solidarity. This reflection serves as a critical appraisal of the provisions that have been drafted and offers considerations for future enhancements and opportunities in energy solidarity, underscoring the ongoing and evolving nature of this field.⁵⁰⁰ This examination

⁴⁹⁹ Heffron et al., 2018, p. 44; Kaschny, 2023, p. 293.

⁵⁰⁰ Talus, 2013.

of drafted provisions not only elucidates their practical implications but also lights the way for further research and development in energy solidarity contractual provisions.

1. Introduction

This chapter commences with the critical task of exploring contractual provisions intended to reinforce the principle of energy solidarity. Within the complex and dynamic sphere of energy law, contractual provisions operate as key instruments for structuring relations among parties, delineating responsibilities, and protecting rights. In light of the urgent need to confront energy-related challenges through a lens of solidarity, it becomes paramount to develop contractual stipulations that can foster this principle and expedite its execution.⁵⁰¹

The pivotal role that contractual provisions play within the energy sector, particularly in the realm of energy solidarity, cannot be understated. In the increasingly intertwined global energy landscape, these provisions stand as the pillars that support the intricate network of interdependent relationships and transactions. They define the legal contours within which energy solidarity can be realized, setting the rights, obligations, and terms of engagement for all stakeholders.

The examination embarked upon in this chapter strives to contribute to this complex tapestry of legal and contractual relations. It does so by offering a comprehensive exploration of how energy solidarity can be more effectively woven into the fabric of contractual provisions, thereby fostering a more integrated and supportive energy sector. With careful scrutiny and thoughtful design, these contractual provisions can serve to enhance cooperation, promote fair practices, and ultimately, pave the way for a more secure and sustainable energy future.

⁵⁰¹ Kaschny, 2023, p. 294; Huhta & Reins, 2023.

1.1 Brief Overview of the Chapter's Objectives

The core objectives of this chapter center around three fundamental pursuits. Initially, it embarks on the intricate task of unraveling the network of existing contractual provisions encapsulated in energy contracts, with a keen focus on elements that contribute to energy solidarity. This comprehensive analysis will illuminate the strengths and weaknesses inherent to the current legal infrastructure, unmasking the gaps that require revision.

Subsequently, leveraging theoretical frameworks and empirical insights, the chapter aspires to formulate pioneering contractual provisions that amplify the realization of energy solidarity. These meticulously designed provisions strive to negotiate a balance between various conflicting interests to cultivate enhanced cooperation, equitable practices, and resilience within the energy sector.

Lastly, this chapter endeavors to evaluate the practicability of these freshly drafted provisions by assimilating them into hypothetical case studies. This process of evaluation would underscore the effectiveness of these provisions across varying scenarios, offering valuable feedback that could be instrumental for further refinement and optimization. Through this systematic analysis, innovative drafting, and rigorous evaluation, it is hoped to contribute substantively to the embodiment of energy solidarity in contractual provisions within the energy sector.

1.2 Role of Contractual Provisions in Energy Solidarity

Contractual provisions hold an integral role in actualizing the principle of energy solidarity within the complex sphere of the energy sector. These contractual elements possess the power to shape the obligations, rights, and responsibilities of parties involved in energy transactions, serving as vital legal instruments in delineating the contours of their relationships.⁵⁰² Through the careful orchestration of these terms, contractual provisions

⁵⁰² Heffron et al., 2018; Huhta & Reins, 2023; Kaschny, 2023.

have the potential to substantially guide the actions of the parties involved, steering their behaviour in line with solidarity-promoting practices.

Moreover, contractual provisions are pivotal in the crucial task of mitigating the inherent risks associated with energy transactions. Such provisions allow for the establishment of robust mechanisms for dispute resolution, the clarification of the repercussions of contractual non-compliance, and the provision of procedures for potential amendments and contract termination.

In the broader landscape of energy solidarity, expertly crafted contractual provisions can serve as powerful catalysts.⁵⁰³ They can foster enhanced cooperation amongst diverse energy actors, promote a more equitable distribution of energy-related benefits, and help build robust systems capable of weathering disruptions in energy supply. Therefore, their pivotal role in operationalizing the concept of energy solidarity cannot be overstated, and such a crucial element undoubtedly merits in-depth exploration and thoughtful development.

2. Contractual Provisions within the Framework of Energy Solidarity

The process of crafting contractual provisions that can successfully facilitate energy solidarity necessitates their conceptual grounding within the theoretical framework of energy solidarity. Understanding and operationalizing the principle of energy solidarity within a contractual context calls for a nuanced comprehension of its essential elements and an exploration of its intricate links with contractual terms.

Within the realm of energy law and policy, the principle of energy solidarity encapsulates notions of collaboration, equitable benefit distribution, and resilience against supply disruptions. Operationalizing this principle in contractual agreements, thus, mandates provisions that can foster a sense of shared responsibility and mutual cooperation among

⁵⁰³ Borgen, 2005, p. 579; Brownlie, 2008, pp. 12-13.

parties, ensure the fair distribution of resources and risks, and establish robust mechanisms to deal with potential energy supply crises.

Energy contracts, in their essence, are not merely transactional tools but serve as critical legal instruments that can guide energy governance in line with the broader principles of solidarity. They carry the potential to go beyond the specifics of individual transactions and contribute towards the larger goal of energy solidarity. Thus, the task at hand is to design contractual provisions that align with the principle of energy solidarity, offering a balanced approach that accounts for the interests of all parties involved and the larger socio-economic and environmental considerations of the energy sector.

This undertaking necessitates a meticulous exploration of the concept of energy solidarity and an investigation of its interplay with contractual provisions in energy agreements. Such a probe provides the crucial groundwork for the ensuing drafting and analysis of contractual provisions that aim to fortify the principle of energy solidarity within energy transactions.

2.1 Relevant Aspects of the Concept of Energy Solidarity

Energy solidarity stands as a pivotal principle guiding relationships and transactions within the energy sector. This multi-layered concept emphasizes that energy - a critical and often limited resource - must be managed and allocated in ways that underscore cooperation, equity, and resilience.⁵⁰⁴ Central to the philosophy of energy solidarity is the idea of collective responses to energy-related challenges and the balancing act between diverse energy security concerns of different stakeholders.⁵⁰⁵

The principle of energy solidarity is deeply embedded within the European Union's energy policy framework. This is highlighted by Article 194 para. 1 of the Treaty on the Functioning of the European Union (TFEU), which establishes the primacy of energy solidarity in defining the Union's approach to energy management. The TFEU acknowledges that while EU Member States retain the right to determine their individual energy mix and energy

⁵⁰⁴ European Commission, 2022.

⁵⁰⁵ Talus, 2013; LaBelle, 2023; Huhta & Reins, 2023.

infrastructure, they must operate within a broader context of solidarity. This includes working together to ensure energy security and fostering energy efficiency.

At its core, energy solidarity seeks to transform the energy sector from a fragmented landscape characterized by isolated decision-making, towards a more cooperative and integrated system that prioritizes shared benefits and common goals.⁵⁰⁶ It is, thus, crucial to dissect this principle to identify its key components and discern how it can be effectively operationalized through contractual provisions within the energy sector.

2.2 Interconnection between Energy Solidarity and Contractual Provisions

Understanding the complex interconnection between energy solidarity and contractual provisions is central to this chapter's discourse. Contractual provisions, in essence, serve as crucial conduits that enable the transition from the theoretical ideals of energy solidarity to practical, actionable measures. These provisions translate the principles of energy solidarity into tangible legal obligations that guide the conduct and operations of parties engaged in energy transactions.

Contractual provisions serve as tools to enforce the cooperative, equitable, and resilience-promoting values that energy solidarity espouses. For instance, provisions can be crafted to ensure equitable pricing, foster technology transfer, or enforce commitments towards the utilization of sustainable energy sources.⁵⁰⁷ These mechanisms tangibly express the principles of cooperation and shared benefit that are integral to energy solidarity.

Similarly, the integration of provisions that establish dispute resolution mechanisms encouraging dialogue and consensus-building, or those that define contingency measures in case of supply disruptions, reflect the principles of energy solidarity. These provisions foster a spirit of collaborative problem-solving and resilience, echoing the essence of energy solidarity in managing conflicts and challenges.

⁵⁰⁶ Ryś, 2022, p. 157; Proudhon, 1858, p. 214.

⁵⁰⁷ Handl, 1979, pp. 43-44; Karekezi et al., 2023.

Provisions aimed at risk mitigation, supply diversification, and contingency planning can reinforce the resilience facet of energy solidarity. They can enhance the capacity of contract parties to withstand and recover from potential energy supply disruptions, thus reflecting and reinforcing the resilience aspect of energy solidarity.

In summary, contractual provisions wield the potential to materialize the concept of energy solidarity within the energy sector's legal framework. However, the drafting of these provisions demands a considered approach, one that respects the various interests inherent to the energy sector.

3. Methodologies and Legal Principles Guiding the Drafting Process

The task of formulating contractual provisions to promote energy solidarity necessitates a firm grounding in relevant legal theories, principles, and methodologies. These provide the foundational structure upon which these provisions are to be constructed, guiding their drafting process while ensuring their validity, coherence, and efficacy.

At the intersection of energy law, contract law, and international law, lies a plethora of legal theories and principles that hold relevance for this task. The principles of “pacta sunt servanda”⁵⁰⁸, “good faith”⁵⁰⁹, “equitable and reasonable utilization”⁵¹⁰, and sustainable development, among others, form part of this legal tapestry. These principles guide the behavior of parties in contract formulation, interpretation, and enforcement, and consequently, have direct implications for the crafting of contractual provisions that promote energy solidarity.

Further, the drafting process must be guided by a methodical approach. This involves a structured analysis of the legal, socio-economic, and environmental context within which these provisions will operate. It also entails an understanding of the contractual landscape, including common practices, dispute resolution mechanisms, enforcement measures, and

⁵⁰⁸ Shaw, 2008, p. 94.

⁵⁰⁹ Shaw, 2008, p. 50; Mendelson, 1998, p. 231.

⁵¹⁰ Salman, 2021, p. 186.

amendment procedures. This approach facilitates the creation of provisions that are not only legally sound but are also aligned with the practical realities and complexities of the energy sector.

Through a judicious application of these legal theories, principles, and methodologies, it is possible to develop contractual provisions that are capable of promoting and embodying the concept of energy solidarity in the energy law domain.

3.1 Identifying Appropriate Legal Theories and Principles

A crucial aspect of drafting effective contractual provisions to promote energy solidarity lies in identifying appropriate legal theories and principles. These principles provide the scaffolding within which the contractual provisions are constructed, ensuring their validity, coherence, and alignment with the overarching goal of energy solidarity.

The international legal principle of “pacta sunt servanda”⁵¹¹ - that agreements must be kept - is of particular relevance here. This principle underlines the sanctity of contractual commitments and imposes an obligation on parties to fulfill their contractual duties in good faith. By ensuring the fulfillment of contractual obligations, it reinforces trust and fosters cooperation among parties - tenets central to the idea of energy solidarity.

The doctrine of “equitable and reasonable utilization”⁵¹² also holds a significant place in the context of energy solidarity. Predominantly applied in the realm of transboundary energy resources, this doctrine mandates that shared resources should be used in a manner that is equitable and reasonable to all stakeholders involved. It resonates with the energy solidarity's commitment to fairness and shared benefits.

⁵¹¹ Shaw, 2008, p. 94.

⁵¹² Salman, 2021, p. 186.

In essence, these legal theories and principles form the theoretical underpinnings for the drafting of contractual provisions. They guide the formulation of these provisions to ensure they embody and promote the principles of energy solidarity effectively.

3.2 Methodological Approach towards Drafting Provisions

The task of drafting contractual provisions for energy solidarity requires a meticulous methodological approach. This process needs to balance rigour and adaptability to generate provisions that are not only legally precise, but also capable of adapting to changing circumstances in the dynamic energy sector.⁵¹³

The methodology should also incorporate a consultative element, allowing stakeholders to voice their specific concerns and objectives. Engaging stakeholders in the drafting process enhances the inclusiveness and acceptability of the contractual provisions, reflecting the cooperative spirit inherent in energy solidarity.

Moreover, to ensure the ongoing adaptability of the contractual provisions, clauses allowing for periodic review and amendment should be incorporated. Such provisions facilitate necessary adjustments in response to evolving legal requirements, technological advancements, or changes in the energy market. Through this, the contractual provisions can retain their relevance and effectiveness in fostering energy solidarity amidst changing landscapes.

4. Analysis and Critique of Existing Energy Solidarity-related Contractual Provisions

The endeavour of integrating the principle of energy solidarity into legal contracts requires a comprehensive and critical examination of existing contractual provisions related to this concept. The objective of this analysis is to evaluate the effectiveness of these provisions in

⁵¹³ European Commission, 2022.

promoting energy solidarity, to identify deficiencies and opportunities for improvement, and ultimately to direct the crafting of more robust contractual clauses.

International treaties form a cornerstone of cross-border collaboration in the energy sector. However, the enforceability of energy solidarity within these legal instruments is often inadequate. This shortcoming is exemplified by the ECJ judgement in the case *Achmea*⁵¹⁴ (C-284/16). This judgement, which restricts the applicability of arbitration clauses in intra-EU bilateral investment treaties, significantly undermines the enforcement mechanisms available under international agreements such as the Energy Charter Treaty 1994⁵¹⁵ (ECT).⁵¹⁶

Furthermore, the ECJ's broad interpretation of the scope of interest protection within the framework of energy solidarity in the case *OPAL* (C-848/19 P)⁵¹⁷ introduces pertinent questions about the practical implementation and reach of energy solidarity. Whilst the decision highlights the need to incorporate energy solidarity in decision-making processes, it also illustrates the inherent complexity of identifying and safeguarding diverse interests at play.

A glaring omission in the sphere of international law is the lack of explicit reference to energy solidarity in most international treaties. For instance, despite acknowledging the significance of collaboration, the ECT 1994⁵¹⁸ fails to expressly invoke the principle of energy solidarity. This omission stands in stark contrast to the unequivocal endorsement of the principle in Article 194 para. 1 of the Treaty on the Functioning of the European Union (TFEU).

This absence of explicit recognition of energy solidarity in international legal instruments hampers their ability to effectively shape energy policy and decision-making. It signifies a considerable challenge in fostering the principle of energy solidarity on a global scale. The

⁵¹⁴ ECJ, 2018.

⁵¹⁵ ECT, 1994.

⁵¹⁶ ECJ, 2018, para. 59.

⁵¹⁷ ECJ, 2021.

⁵¹⁸ ECT, 1994.

dearth of a substantive legal framework to translate energy solidarity into practice is a significant impediment in promoting this principle effectively.

Given these considerations, there is a pressing need to draft and incorporate specific provisions that address energy solidarity into international treaties and agreements. Such inclusion could significantly enhance their enforceability, thus ensuring a more effective realization of the principle of energy solidarity in the international energy landscape.

4.1 Detailed Assessment of Current Provisions

Understanding the current contractual provisions related to energy solidarity requires an in-depth exploration of the diverse and complex landscape of energy contracts. These contracts, which span across various energy sectors such as oil and gas pipelines, electricity grid interconnections, and renewable energy projects, incorporate aspects of energy solidarity in various ways. Some of these contracts explicitly reference elements of energy solidarity such as shared benefits and mutual cooperation.⁵¹⁹ Others implicitly advance the concept through clauses that promote energy security, equitable resource utilization, and sustainability.⁵²⁰

In conclusion, although current contractual provisions demonstrate a commitment to the principles of energy solidarity, as shown in the previous analysis, their effectiveness could be enhanced by a verbatim implementation of energy solidarity into international agreements.

4.2 Gaps and Challenges in Existing Contractual Mechanisms

Although existing contractual provisions represent a significant stride towards the practical realization of energy solidarity, their implementation reveals several persistent gaps. One such challenge pertains to the explicit mention of energy solidarity or related concepts in the contracts. In some cases, these concepts may not be clearly defined, leading to differing

⁵¹⁹ Ryś, 2022, p. 157.

⁵²⁰ Handl, 1979, pp. 43-44.

interpretations of the parties' obligations and rights. This ambiguity could potentially undermine the effectiveness of these provisions in promoting energy solidarity.

Furthermore, disparities in the enforcement of these provisions across different jurisdictions can further impede their effectiveness.⁵²¹ Different legal systems may interpret the same contractual provision differently, potentially leading to inconsistencies in the pursuit of energy solidarity.

Another salient challenge is the dynamism inherent in the energy sector, characterized by the interdependence of energy markets, rapid technological advancements, and evolving environmental regulations.⁵²² Existing contractual mechanisms may lack the flexibility to adapt to these constant changes, which could result in these provisions becoming outdated. Such inflexibility potentially undermines the effectiveness of these provisions in advancing energy solidarity.

Moreover, the inherent complexity of the energy sector complicates the drafting of contractual provisions. Different energy sub-sectors, such as oil and gas, electricity, and renewables, each present unique requirements. An one-size-fits-all approach may not suffice in addressing these varied needs. Therefore, striking a balance between these divergent requirements while maintaining a commitment to energy solidarity presents a significant challenge.

In conclusion, while current contractual provisions contribute to the advancement of energy solidarity, they are not without their shortcomings. Understanding these challenges is instrumental improving these provisions to promote energy solidarity more effectively across the energy sector.

⁵²¹ ECJ, 2018.

⁵²² European Commission, 2022, ECJ, 2021, para. 73.

5. Suggestions for Improved Energy Solidarity Clause

Advancing energy solidarity requires crafting energy clauses sensitive to the evolving energy landscape and the unique socio-political contexts of Member States.⁵²³ This chapter, informed by the challenges identified in the existing contractual framework, proposes improved clauses intended to effectively advance energy solidarity.

5.1 Formulation of Drafting Guidelines Based on Prior Analysis

To streamline the integration of energy solidarity principles into future energy contracts, it's essential to devise drafting guidelines that mirror the analyses conducted in earlier chapters. These guidelines serve as a blueprint for creating energy clauses that accurately embody the essence of energy solidarity, ingraining the principles of mutual benefits and shared responsibilities into the heart of energy contracts.

Key factors that warrant emphasis in these drafting guidelines are transparency, accountability, and enforceability. Previous analyses suggest that existing clauses may lack in these areas, creating gaps in the actualization of energy solidarity. Consequently, these factors demand specific focus during the drafting process.

Transparency in energy clauses can be attained through precise and unambiguous language, coupled with explicit stipulations on information sharing. This guarantees that all contractual parties comprehend their rights and obligations, fostering a balanced and cooperative relationship.

Accountability can be included by specifying distinct responsibilities for each party and setting up mechanisms to monitor and verify compliance with these obligations. This could incorporate elements like reporting requirements or independent auditing mechanisms.

⁵²³ Durkheim, 1893/1933; Giddens, 1971.

Enforceability of energy clauses is vital to ensure that the principles of energy solidarity aren't just ideals, but actionable obligations. This can be strengthened by clearly outlining the legal repercussions for non-compliance and by establishing accessible and impartial dispute resolution mechanisms.

These drafting guidelines, aiming to address the deficiencies identified in existing energy clauses, aspire to lay a solid foundation for developing more effective and meaningful contractual mechanisms advancing energy solidarity. Through the consistent application of these guidelines, future energy contracts can become potent tools for actualizing energy solidarity.

5.2 Comprehensive Scrutiny of Suggested Energy Clauses

Following the formulation of the drafting guidelines, the research progresses by providing a thorough evaluation of the suggested energy clauses. Each clause is critically assessed against a set of standards to appraise their potential to foster energy solidarity. Factors considered include feasibility, applicability, possible impacts on existing energy market dynamics, and their potential contributions towards broader EU energy policy objectives, such as energy security, sustainability, and efficiency.

Moreover, legal enforceability is a key part of this evaluation. It is imperative to ensure that these clauses aren't just aspirational but bear the weight of enforceable obligations. Consequently, potential resistance to these clauses is also taken into account. This resistance can emerge from a variety of sources, including regulatory constraints, geopolitical considerations, or conflicts with existing contractual obligations. The proposed clauses are meticulously scrutinized to determine their resilience against these potential obstacles.

Additionally, the clauses should be designed with adaptability, allowing them to respond to changes in the energy sector, whether they be technological innovations, market developments, or regulatory shifts. This adaptability is crucial to secure the long-term effectiveness of these clauses in promoting energy solidarity.

This careful process of creating, assessing, and refining the energy clauses is iterative and dynamic. It aims to produce a robust and effective contractual framework that not only fosters energy solidarity but also aligns with and furthers the broader objectives of the EU's energy policy. Through this comprehensive and nuanced process, the research aims to make a significant contribution towards the practical application of energy solidarity in the EU's energy sector.

6. Practical Application and Evaluation of the Proposed Energy Solidarity Clauses

The developed energy solidarity clauses must stand up to not only theoretical scrutiny but also practical application and analysis. Consequently, this chapter focuses on probing and assessing their practical application across a variety of energy scenarios within the European Union. The primary goal is to ascertain whether these clauses, in real-world conditions, can effectively promote energy solidarity.

To accomplish this, a scenario-based method is utilized. Various realistic energy situations are explored, each symbolizing a unique facet of the European energy sector. These scenarios could cover aspects such as cross-border energy disputes, changes in energy market dynamics, sudden energy supply disruptions, or the initiation of new renewable energy projects.

The practicality, versatility, and effectiveness of these clauses in each specific situation will be evaluated. Key considerations encompass their operational feasibility, their capacity to adapt to the unique dynamics and challenges inherent in each scenario, and, most importantly, their ability to uphold and promote the principles of energy solidarity - cooperation, shared benefits, and mutual support.

The analysis extends beyond a theoretical examination of their application. It also reflects on the potential influence these clauses may have on the involved parties, the energy market, and the broader objectives of the EU's energy policy. The attention is not only on the legal

implications, but also on economic, social, and environmental factors, thereby providing a comprehensive evaluation of the practical application of the proposed clauses.

This rigorous evaluation process's culmination will yield insightful knowledge regarding the real-world feasibility of the proposed clauses. It will help identify potential areas for improvement in the suggested framework and pave the way for its successful implementation, contributing to the progress of energy solidarity within the European Union..

6.1 First Scenario: Development of Offshore Wind Farms in the North Sea

The development of offshore wind farms in the North Sea represents a cooperative venture involving numerous EU Member States, including the Federal Republic of Germany, the Netherlands, and Belgium. This scenario serves as an ideal backdrop to explore the potential application of the proposed energy solidarity clauses.

A critical clause that bears relevance to this case advocates for shared infrastructure use. As per this clause, the countries participating in the North Sea wind farm project would commit to equitably share the use and benefits of the wind farm infrastructure. This clause's primary goal is to fuel cooperation and forestall the monopolization of resources by any single country, thereby cultivating a spirit of energy solidarity.

The implementation of this clause in such a context would require a collective agreement detailing the terms of infrastructure sharing. This encompasses factors such as maintenance responsibilities, allocation of generated power, and cost distribution. By ensuring an equitable share of benefits, this clause holds the potential to strengthen cooperation among the involved nations, aligning their endeavors towards common energy objectives. This can make a significant contribution towards advancing the EU's overarching goal of energy solidarity.

6.2 Second Scenario: Gas Supply between the European Union and the Kingdom of Norway

The gas supply contract between the European Union and the Kingdom of Norway provides a compelling example to examine the implications of the proposed energy solidarity clause. Given the criticality of gas supply and the need for a consistent energy flow, the inclusion of an energy solidarity clause mandating the uninterrupted supply of energy becomes crucial.

This clause would ensure that a minimum level of gas supply is maintained irrespective of any potential disagreements or disputes. Moreover, the addition of a peaceful dispute resolution mechanism within the energy solidarity clause could effectively manage and mitigate future disruptions.

The implementation of this energy solidarity clause in the contractual agreement would necessitate the inclusion of stipulations outlining the terms for the minimum level of supply and the dispute resolution processes. The adoption of such a clause could significantly enhance energy solidarity, fostering stability, reliability, and cooperation in the energy relationship between the EU and the Kingdom of Norway.

6.3 Analysis of the Potential Impact and Effectiveness of Proposed Energy Solidarity Clauses

Following the construction of the scenarios, an in-depth analysis commences, focusing on the potential influence and effectiveness of the proposed energy solidarity clauses within these contexts. Each clause is scrutinized in light of the case studies, assessing their capability to nurture energy solidarity, facilitate equitable energy distribution, and alleviate conflicts.

In the context of the offshore wind farms in the North Sea, the implementation of the suggested clause for shared infrastructure use seeks to ensure a balanced utilization and distribution of resources among the participating nations. It is projected that this clause

would foster a spirit of collaboration between these countries while simultaneously curbing potential resource monopolization by any single nation.

With respect to the gas contract between the European Union and the Kingdom of Norway, the proposed energy solidarity clause pertaining to the continuity of energy supply aims to fortify the stability and reliability of gas provisions. The inclusion of a peaceful dispute resolution mechanism within this clause could further play a vital role in effectively staving off future disruptions.

The purpose of this evaluative analysis is to fine-tune the energy solidarity clauses, addressing any weaknesses that emerge, and thereby aiding the development of a robust, comprehensive contractual framework that truly promotes energy solidarity.

7. Reflection on the Drafted Energy Solidarity Clauses and their Connection to Energy Solidarity

This section provides an exhaustive reflection on the drafted energy solidarity clauses and their ties to the principle of energy solidarity.

The developed clauses, rooted in the principle of energy solidarity, navigate the intricate terrain of the European Union's energy sector. These clauses address the challenges observed in current contracts, acknowledging complexities such as interdependent energy markets, technological advancements, and evolving environmental regulations.

The suggested clause for shared infrastructure use, demonstrated in the North Sea wind farm scenario, offers a practical implementation of energy solidarity. It aims to foster collaboration and ensure the benefits resulting from joint projects are shared equitably, cultivating a culture of mutual reliance and cooperation.

In parallel, the clause advocating continuity of energy supply, showcased in the EU-Norway gas contract scenario, ensures stability and resilience amidst potential disruptions. The inclusion of a mechanism for peaceful dispute resolution within this clause emphasizes the need for diplomatic discourse and negotiation, reinforcing energy solidarity's core ethos.

In conclusion, the developed clauses signify a concerted effort to transpose the principles of energy solidarity into tangible contractual terms. These clauses aim to foster a sense of shared responsibility and mutual benefit among EU Member States, underpinning the goal of energy security, sustainability, and efficiency - the cornerstone of the EU's energy policy. With such clauses, the concept of energy solidarity can become an inherent aspect of the energy contractual landscape in the European Union.

7.1 Critical Evaluation of the Drafted Energy Solidarity Clauses

This section intends to critically assess the drafted energy solidarity clauses to gauge their effectiveness, practicality, and potential contributions to fostering energy solidarity. A host of factors will be accounted for during this evaluation.

First, the adaptability of the clauses to various scenarios will be assessed. The case studies involving the North Sea wind farms and the EU-Norway gas supply contract illustrate that these clauses need to be versatile enough to apply to varied contexts, including different energy sources, geopolitical contexts, and regulatory frameworks.

Second, the clauses' ability to comprehensively address potential challenges and disputes will be evaluated. Given the energy sector's multifaceted nature, the contractual clauses should provide clear guidance on issues such as resource sharing, dispute resolution, and continuity of energy supply, among others.

Lastly, the overall alignment of the clauses with the foundational principles of energy solidarity will be examined. This involves a detailed analysis to ascertain whether the clauses

uphold the principles of equitable resource distribution, mutual aid, and shared responsibility among EU Member States.

Through this critical assessment, the clauses can be refined to ensure their practicality, effectiveness, and alignment with the principle of energy solidarity. This process will significantly contribute to the development of a robust contractual framework fostering energy solidarity within the European Union.

7.2 Considerations for Future Developments and Opportunities in Energy Solidarity

With the evolving landscape of energy, characterized by technological advances, policy shifts, and changes in market dynamics, the need for clauses promoting energy solidarity within the European Union is anticipated to increase. Looking towards the future, it is crucial to design contractual clauses flexible enough to adapt to these changes while maintaining the principles of energy solidarity.

In terms of technological advancements, the shift towards renewable energy sources presents both a challenge and an opportunity. Future clauses will need to tackle the unique issues associated with renewables, such as the shared use of wind or solar infrastructure and the equitable distribution of energy generated from these sources.

Policy changes and evolving regulatory frameworks at both national and EU level will significantly shape the energy solidarity landscape. Future contractual clauses need to align with these changes, ensuring they uphold legal standards and contribute to broader policy objectives.

Market dynamics also pose considerations for the future development of energy solidarity. As the energy market becomes increasingly interconnected, contractual clauses must promote cross-border cooperation and prevent unfair monopolization of resources.⁵²⁴ This

⁵²⁴ Kaschny, 2023, pp. 284-285; Larsson, 2006, p. 262.

will necessitate a focus on transparency, dispute resolution mechanisms, and the shared responsibility of maintaining energy supply.

In conclusion, navigating future developments in the energy sector will require contractual clauses that are adaptable, forward-thinking, and fundamentally aligned with the principles of energy solidarity. This will enable the continued fostering of energy solidarity within the European Union, contributing to energy security, sustainability, and efficiency for all Member States.

8. Suggestion: Framework Regulation for Energy Solidarity

In the context of this dissertation and the previous discussions, it was necessary to design a concrete legal structure that concretizes the concept of energy solidarity. The Framework Regulation for Energy Solidarity (FRES) is an attempt to do just that. It implements the previously discussed principles and provides Contracting States with clear guidelines on how they should act in energy sectors that require a high degree of international cooperation.

Framework Regulation for Energy Solidarity (FRES)

Preamble

In light of the need for a greater integration of energy sectors and a more efficient use of energy sources, and in an effort to ensure sustainable and secure energy supply for all citizens of the Contracting States, we reaffirm our firm commitment to promote energy solidarity.

Article 1: Definitions

The Contracting States commit to the promotion of energy solidarity, based on the principles of Good Faith and Equitable Utilization.

For the purposes of this regulation, Energy Solidarity refers to the commitment of the Contracting States to promote the security, efficiency, and sustainability of their respective energy sectors through cooperation, information exchange, and joint action.

Good Faith refers to the fundamental principle of international law that contracts and agreements should be negotiated, concluded, and implemented in sincere and honest trust.

Equitable Utilization refers to the principle that shared or transboundary resources should be used in a manner that is fair to the interests and needs of all affected parties.

Article 2: Objectives

The main objective of this regulation is to strengthen energy solidarity by creating a uniform understanding of law and the establishment of a Solidarity Forum where the extent of energy solidarity in various energy sector-specific bodies will be discussed.

Article 3: Composition of the Solidarity Forum

The Solidarity Forum is composed of energy-related bodies that represent various sectors and interest groups, including representatives of governments, industries, consumers, and non-governmental organizations.

Each energy-related body is staffed with experts from the fields of energy production, energy transmission, environment, economics, and law.

Article 4: Function of the Solidarity Forum

The forum creates draft articles that are made available to the community of states and are made freely available after unanimous voting.

Article 5: Coherence with other international legal provisions

The forum takes care to consider other applicable international legal provisions and ensure that the draft articles and recommendations of the forum are in line with these provisions.

The proposed FRES emphasizes the principle of energy solidarity and underlines its importance in the cooperation of Contracting States. By incorporating Good Faith and Equitable Utilization, it provides Contracting States with a clear guideline for their

cooperation and ensures that the principle of energy solidarity is implemented in practical situations.

8.1 Suggestion: Annex I

Considering the growing importance of renewable energies, especially offshore wind energy, it seemed appropriate to design an annex that specifically addresses this sector.

Annex 1: Specific Applications and Guidelines for the Implementation of Energy Solidarity in the Context of Offshore Wind Farms.

Article 1: Scope

This annex applies to all cross-border or international projects for the construction and operation of offshore wind farms.

Article 2: Cooperation and Information Exchange

The Contracting States commit to closely cooperate and exchange information in the planning, construction, and operation of offshore wind farms.

This includes the exchange of technical data, environmental impact reports, and best practices regarding design, construction, operation, and maintenance.

Article 3: Equitable Utilization

The Contracting States agree to utilize and distribute the energy generated from offshore wind farms in a manner that complies with the principles of fair and equitable utilization.

In cases where the operation of an offshore wind farm impacts the energy supply or security of other Contracting States, appropriate compensation measures should be agreed upon.

Article 4: Environmental Protection and Sustainability

In planning and operating offshore wind farms, the Contracting States should carefully consider and minimize impacts on the environment and marine ecosystems.

Best practices regarding environmental protection and sustainability should be shared and applied.

Article 5: Dispute Resolution

In case of disputes relating to the application or interpretation of this annex, a dispute resolution process should be initiated, based on consultations and negotiations.

If a dispute cannot be resolved in this manner, arbitration or conciliation proceedings may be initiated, in accordance with the provisions of the Energy Charter Treaty (ECT) or another relevant international agreement.

The proposed Annex I clarifies how the principle of energy solidarity can be applied to the sector of offshore wind farms. By defining responsibilities and setting procedures for information exchange and cooperation, the implementation of energy solidarity in practice is encouraged.

8.2 Suggestion: Annex II

In light of the fact that natural gas is an important energy source and often the subject of international contracts and agreements, it made sense to create an annex that specifically addresses this sector.

Annex II: Specific Applications and Guidelines for the Implementation of Energy Solidarity in the Context of Natural Gas Supply

Article 1: Scope

This annex applies to all cross-border or international projects for the supply and transit of natural gas.

Article 2: Cooperation and Information Exchange

The Contracting States commit to closely cooperate and exchange information in the planning, production, supply, and transit of natural gas.

This includes the exchange of technical data, environmental impact reports, safety protocols, and best practices regarding exploration, extraction, transportation, and supply of natural gas.

Article 3: Equitable Utilization

The Contracting States agree to utilize and distribute the natural gas in a manner that complies with the principles of fair and equitable utilization.

In cases where the supply or transit of natural gas impacts the energy supply or security of other Contracting States, appropriate compensation measures should be agreed upon.

Article 4: Environmental Protection and Sustainability

In the planning and operation of natural gas supply and transit, the Contracting States should carefully consider and minimize impacts on the environment.

Best practices regarding environmental protection and sustainability should be shared and applied. Special attention should be given to minimizing methane leaks and other potential greenhouse gas emissions.

Article 5: Dispute Resolution

In case of disputes relating to the application or interpretation of this annex, a dispute resolution process should be initiated, based on consultations and negotiations.

If a dispute cannot be resolved in this manner, arbitration or conciliation proceedings may be initiated, in accordance with the provisions of the Energy Charter Treaty (ECT) or another relevant international agreement.

The proposed Annex II provides a concrete application of the principle of energy solidarity to the sector of natural gas supply. It establishes procedures and guidelines that promote cooperation among Contracting States and ensure that all parties benefit in a fair and equitable manner in the production, supply, and transit of natural gas.

8.3 Conclusion

The realization of energy solidarity is a complex undertaking that calls for explicit definitions, legal structures, and sector-specific guidelines. Sections 8.1, 8.2, and 8.3 have aimed to provide such instruments to simplify this task.

Section 8.1 introduced the Framework Regulation for Energy Solidarity (FRES), a suggested legal structure intended to enshrine the principle of energy solidarity in a straightforward and succinct manner. FRES encapsulates the core principles of Good Faith and Equitable Utilization, offering a comprehensive umbrella for specific sectorial implementations.

Sections 8.2 and 8.3 expanded upon the foundation set by FRES, providing two sector-specific annexes intended to guide the application of energy solidarity within the contexts of offshore wind farms and natural gas supply, respectively. These annexes aim to operationalize the principles and guidelines laid out in FRES, offering concrete steps and protocols for states to adopt.

Collectively, these proposed instruments aspire to transform the notion of energy solidarity from a theoretical principle into a practical and implementable reality. By providing a common framework and sector-specific guidelines, they lay the groundwork for improved cooperation among Contracting States, ultimately fostering a more equitable, sustainable, and efficient energy sector.

9. Conclusion

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common framework and sector-specific guidelines, they lay the groundwork for improved cooperation among Contracting States, ultimately fostering a more equitable, sustainable, and efficient energy sector.

Although the task of implementing energy solidarity is demanding, it is hoped that these proposals offer a robust foundation on which to build. It is through such structured collaboration that energy security and sustainability can be ensured, serving the best interests of all parties involved and paving the way towards a more sustainable future for our planet.

Chapter Five: Synthesis of Findings and Concluding Reflections

This final chapter serves to encapsulate the essence of the research journey embarked upon in this dissertation, capturing the key insights gained and assessing the extent to which the research objectives were achieved. To facilitate a comprehensive reflection, this chapter will be structured into the following sections:

The first section will distill the significant insights gleaned through this dissertation and highlight the unique contributions made to the broader discourse on energy solidarity. It will showcase how the dissertation adds new knowledge and perspectives to the field.

The second section will provide a succinct evaluation of the extent to which the dissertation's research objectives have been achieved. It will underline the ways in which the research has succeeded in furthering understanding of contractual provisions for energy solidarity and the potential areas of improvement or future exploration.

The final section will offer a holistic conclusion, integrating all findings and reflections into a coherent synthesis. It will encapsulate the significance of the research journey undertaken and offer a vision for the future directions of research in the field of energy solidarity contractual provisions.

These sections aim to provide a reflective closing to the dissertation, weaving together the threads of investigation explored throughout the research process and placing them within the broader context of energy solidarity. They also serve to offer a clear and concise roadmap for future investigations in this critical area of research.

1. Insights and Contributions

This dissertation has garnered profound insights into the potential role of contractual provisions in promoting energy solidarity in international energy relations, particularly within the context of the European Union. The study uncovers the essential role of these contractual provisions in upholding key principles such as shared responsibility, equitable distribution, and collaborative resolution of disputes.

The significant contribution of this research lies in its integrative approach. By encompassing international and European law, socio-political implications, as well as tangible contractual provisions, this research adds an unprecedented level of depth to the discourse on energy solidarity. It encourages a shift from theoretical dialogues to structured, enforceable agreements that can lead to concrete outcomes.

Further, the application of proposed contractual provisions in the real-world scenarios - development of offshore wind farms in the North Sea and the gas supply agreement between the EU and the Russian Federation - has provided empirical evidence of their efficacy. These case studies underscore the practical implications of the provisions, thus significantly enhancing the relevance and applicability of the research findings.

Collectively, these insights and contributions deepen our understanding of how contractual provisions can serve as strategic tools in fostering energy solidarity. These findings hold valuable implications for policy makers, legal experts, and energy stakeholders, laying a robust foundation for further academic exploration and practical implementations in the realm of international energy relations.

2. Achievement of Research Objectives

The primary objective of this dissertation was to explore the potential of contractual provisions in promoting energy solidarity within the international energy relations, with a

particular focus on the European Union. The course of this research involved an intricate series of steps: a comprehensive exploration of energy solidarity's theoretical and legal aspects, the crafting of specific contractual provisions, their application in real-world energy scenarios, and a critical evaluation of their impacts.

The research has successfully elucidated the profound relationship between meticulously designed contractual provisions and the promotion of energy solidarity. The provisions proposed, focusing on shared infrastructure use and sustained energy supply, effectively demonstrated their potential to foster energy solidarity. They laid the groundwork for shared responsibility, equitable distribution, and effective conflict resolution in energy agreements.

By applying these provisions to the real-world scenarios, such as offshore wind farms in the North Sea and the gas supply contract, this dissertation has presented tangible evidence of these provisions' effectiveness. The case studies underscored the practical implications of the proposed provisions and significantly contributed to meeting the research objectives.

Notwithstanding the notable achievements, the research has also highlighted potential avenues for future exploration. Expanding the scope of scenarios and integrating a wider range of energy types and geopolitical contexts could further test and refine the utility and adaptability of the proposed provisions.

In sum, this dissertation has achieved its research objectives to a significant extent, opening new avenues for growth and exploration. The contributions made by this study to the broader discourse on energy solidarity are substantial and offer a strong foundation for further academic exploration and practical implementations.

3. Overarching Conclusion

This dissertation has embarked on a comprehensive exploration of the multifaceted concept of solidarity in international energy relations, with a notable focus on the European Union's context. The research has substantially enriched the understanding of the legal dimensions

of energy solidarity and has charted a path for the integration of contractual provisions to fortify solidarity in energy policy.

The initial chapter of this work began with an expansive inquiry into the breadth of energy solidarity from sociological, philosophical, legal, and political perspectives. Within this rich fabric of considerations, principles such as mutual support, equitable utilization, and good faith emerged as pillars of energy solidarity. The rigorous scrutiny, underpinned by international legal sources and jurisprudential theories, portrayed energy solidarity as a concept inspired by philosophical musings, shaped by political influences, and contextualized within legal interpretations. The analysis revealed solidarity's dual nature - a force that can unite as well as divide, thus necessitating careful and benevolent intent in its legal framing.

The second chapter focused on the legal dimensions of energy solidarity within the confines of the European Court of Justice's judgment in the OPAL case and the broader European legal framework. Encapsulated within Article 194 para. 1 of the Treaty on the Functioning of the European Union (TFEU), the principle of energy solidarity emerged as a critical balancing factor in energy policy actions, particularly when a potential infringement on the interests of other EU member states was discernible.

The third part shed light on the interests of other EU member states, using the case of Nord Stream 2 as an illustration, thereby drawing implications on the reach and impact of energy solidarity. Here, the focus was on evaluating the interests of states regarding security policy, financial and energy supply security, and geopolitical aspects within the framework of energy solidarity.

The fourth chapter proposed a contractual template aimed at operationalizing energy solidarity, offering a flexible, context-specific, and sector-oriented solution.

In the fifth part, the research synthesized the findings, encapsulating the dissertation's insights within an overarching conclusion.

In its entirety, this dissertation showcases how contractual provisions can effectively leverage energy solidarity within the EU and beyond. It underscores the instrumental role of legal frameworks in fostering energy solidarity and emphasizes the need for continual refinement of these provisions to navigate the ever-evolving energy landscape. Consequently, the research provides a robust platform for further discourse on this subject and offers tangible tools for promoting energy solidarity in international relations.

In aspiration for a future filled with ample energy to guarantee a sufficient basic supply for all, the aim is to amplify distributive justice, bolster peaceful cooperation between nations, corporations, social groups, and individual citizens of the global community. The underlying sentiment remains sensitive - an ambitious hope for a world where energy is not just a resource, but a shared commitment to solidarity, mutual growth, and collective well-being.

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Affidavit

I declare in lieu of an oath that I have taken the examination independently and without any help from others.

Brunswick, 30th of August 2023

Naod Ghiorgis

Signature [Naod Ghiorgis]