

CIL

CENTRE FOR INTERNATIONAL LAW
National University of Singapore

In-Person Conference

CONCEPTUALISING INTERNATIONAL ENERGY LAW:

*Shaping the Future Amidst
Transition in a VUCA World*



Thursday, 25 September 2025

Four Points by Sheraton, Riverview

382 Havelock Rd, Singapore 169629

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OVERVIEW

The Centre for International Law (CIL) at the National University of Singapore is pleased to announce a one-day conference titled ‘Conceptualising International Energy Law: Shaping the Future Amidst Transition in a VUCA World’, which will take place in Singapore on Thursday, 25 September 2025.

The urgency of the ongoing energy transition has never been greater in the face of the profound threat not only to human well-being but also to ecosystems worldwide. Yet deepening geopolitical conflicts, escalating global trade wars, and increasing socio-economic pressures are intensifying this already formidable challenge, undermining the very international cooperation needed to effect this critical shift. Amidst an increasingly volatile, uncertain, complex, and ambiguous or “VUCA” world, the aims of this conference are to (i) foster a discussion on the conceptualisation of international energy law; and (ii) understand how global and regional perspectives on energy governance and the energy transition are shaping not only the conceptualisation but also development of international energy law.

There is clearly a role for international energy law in accelerating the energy transition, while addressing the complexities of the energy trilemma—balancing the need for energy security, environmental sustainability, and energy equity in energy governance. Beyond the energy transition, international energy law also plays an important role in shaping the future of global energy governance to support sustainable development. The premise of this conference is that, amid the complexities of a VUCA world, greater clarity about the very concept of international energy law is essential for it to play a more prominent and purposeful role in this context. Yet despite the growing importance of international energy law, ambiguities continue to surround the concept of international energy law, with ongoing debates about not only its terminology and scope but also the priorities it should address and its connection to global and regional energy governance frameworks. At present, existing scholarship on the role of international energy law in facilitating the energy transition tends not to address these ambiguities.

This conference brings together scholars with an interest in international energy law and features papers presented by invited speakers as well as authors selected through a call for abstracts.

PROGRAMME

09:00 – 09:30	REGISTRATION
09:30 – 09:40	OPENING AND WELCOME ADDRESS <i>Denise Cheong – Head, Energy Law and Policy, NUS Centre for International Law</i>
09:40 – 10:00	KEYNOTE ADDRESS <i>Raphael Heffron – Professor and Dean, College of Law, Abu Dhabi University</i>
10:00 – 10:30	COFFEE BREAK
10:30 – 12:00	SESSION I: Global Perspectives Contributing to the Development of International Energy Law Panel Lead: Elena Cima, Senior Lecturer, University of Geneva <ol style="list-style-type: none"> Five Stories of a Fragmented Discipline: Why Conceptualizing International Energy Law Matters Now <i>Elena Cima, Senior Lecturer, University of Geneva</i> The Making of International Energy Law <i>Temitope Tunbi Onifade, Lecturer, University of Bristol</i> Interrelationships between International Energy Law and Global Energy Governance — From the Perspective of Tortious Harms <i>Ranchun Wang, PhD candidate, University of Groningen</i> Between Energy Security and Trade Liberalization: The Intersection of International Trade Law and International Energy Law in an Era of Insecurity <i>Meng Mandy Fang, Assistant Professor, City University of Hong Kong</i> The Role of International Human Rights Law in Reinforcing and Shaping International Energy Law <i>Zeynab Malakouti, Visiting Research Fellow, National University of Singapore</i> Q&A Session
12:00 – 13:30	LUNCH <i>Group Photo</i>

13:30 – 14:45

SESSION II: Regional Perspectives Contributing to the Development of International Energy Law

Panel Lead: Hao Zhang, Associate Professor, The Chinese University of Hong Kong

1. **Regional Pathways in the Evolution of International Energy Law: Norm Creation, Governance Models, and Global Influence**
Hao Zhang, Associate Professor, The Chinese University of Hong Kong
2. **The Transformative Power of Energy Transition in the European Union**
Etienne Durand, Lecturer, University of Essex
3. **Navigating International Energy Law Obligations Amidst the Dual Dilemma of Disappearance and Damage in Caribbean Small Island Developing States**
Alicia Phillips, PhD researcher, Université de Pau et des Pays de l'Adour
4. **Reclaiming Agency: Indigenous Energy Sovereignty and the Limits of International Law in Africa and Latin America**
Olalekan A. Bello, Lecturer, University of Leicester

Q&A Session

14:45 – 15:15

COFFEE BREAK

15:15 – 16:45

SESSION III: Conceptualisation of International Energy Law

Panel Lead: Kaisa Huhta, Associate Professor, University of Eastern Finland

1. **The Why and How of Conceptualising International Energy Law**
Kaisa Huhta, Associate Professor, University of Eastern Finland
 2. **Theorizing Energy Law as a Field of Law**
Seita Vesa, Professor, University of Eastern Finland
 3. **Reshaping International Energy Law for the Just Transition: Bridging Theory and Practice in a Changing Energy Order**
Tedd Moya Mose, Postdoctoral Research Fellow, Oxford Martin Programme on Integrating Renewable Energy
 4. **Conceptualising International Energy Law: Insights from International Environmental Law and its Influence in the Governance of the Energy Sector?**
Melanie Schneider, DPhil candidate in Law, University of Oxford
 5. **Systematic Literature Review of International Energy Law**
Mohammad Hazrati, Senior Research Fellow, NUS Centre for International Law & *Nivedita S*, Research Fellow, NUS Centre for International Law
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	Q&A Session
16:45 – 17:30	<p>CLOSING SESSION</p> <p>Moderator: Denise Cheong, <i>Head, Energy Law and Policy, NUS Centre for International Law</i></p> <ol style="list-style-type: none"> 1. Elena Cima, <i>Senior Lecturer, University of Geneva</i> 2. Hao Zhang, <i>Associate Professor, The Chinese University of Hong Kong</i> 3. Kaisa Huhta, <i>Associate Professor, University of Eastern Finland</i> 4. Raphael Heffron, <i>Professor and Dean, College of Law, Abu Dhabi University</i> 5. Mohammad Hazrati, <i>Senior Research Fellow, NUS Centre for International Law</i> <p>Discussion</p>
17:30 – 19:30	RECEPTION

SESSION I: Global Perspectives Contributing to the Development of International Energy Law

The Making of International Energy Law

Temitope Tunbi Onifade, Lecturer, University of Bristol

In his 1996 seminal article, Adrian Bradbrook (1996, p.194) defines and frames energy law as an academic field. Twenty-two years later, Raphael Heffron and colleagues (2018) recommend principles to guide this field. These scholars engage international energy issues, but their pioneering contributions do not characterize “international energy law” as a distinct field. Subsequent contributions have indeed conceptualized international energy law as a distinct field (Wawryk, 2014). Yet, this literature has mainly focused on the academic foundations (Wawryk, 2014) and sectors (Viñuales, 2022) of this emerging field, not global policy influences on it. My objective is to fill this gap by comprehensively explaining the most important global policy influences on this field. What are the main global policy influences on the evolution of international energy law? I argue that the Organization of Petroleum Exporting Countries (OPEC), the International Energy Agency (IEA), and the International Renewable Energy Agency (IRENA) have had the most significant global policy influences on the making of international energy law, shaping energy security, energy transition, and energy justice agendas. Institutional bypass theory offers a framework for my analysis that adequately explains how governments create and choose institutions to advance their policy agendas, such as through OPEC, IEA and IRENA. Specifically, I adopt the pivotal framework of Prado and Hoffman (2017). Applying this framework to analyse the literature historicizing international energy lawmaking, the resulting laws and doctrines, and 10 in-depth key informant semi-structured interview of individuals involved in the making and implementation of such laws, I find that, after it was established in 1960, OPEC dominated international energy trade and policymaking globally. Oil importing countries founded the International Energy Agency (IEA) in 1974 to challenge this domination and promote their energy security. However, because OPEC and IEA have advanced oil rather than environmental interests, IEA members led the creation of the International Renewable Energy Agency (IRENA) in 2009 to promote energy transition. IEA and IRENA have also evolved to advance energy justice. These organizations have shaped international energy law agendas.

Interrelationships between International Energy Law and Global Energy Governance — From the Perspective of Tortious Harms

Ranchun Wang, PhD candidate, University of Groningen

Research Question: How does international energy law currently participate in global energy governance in the context of tortious harms arising from energy activities? What legal regimes and rules are presently applied in such cases, what are their limitations, and how can international energy law evolve to address these shortcomings and contribute more effectively to harm prevention and redress?

Methodology: This paper adopts a doctrinal and comparative legal research approach. It begins by examining the existing body of international energy law, identifying its principles, structure, and areas of normative silence concerning liability and harm. It then compares how various national legal systems and regional frameworks handle tortious harms arising from energy-related activities—such as pollution, environmental degradation, and public health risks. The comparative dimension helps identify recurring gaps and governance challenges that could inform the evolution of international legal norms.

Key Arguments:

1. *Doctrinal Gaps in International Energy Law:* International energy law has traditionally focused on facilitating state cooperation, cross-border energy trade, and investment protection. As such, it lacks coherent provisions for addressing tortious harms, particularly in cases involving non-state actors, multinational corporations, or transboundary effects. Victims of such harms often have no standing in international legal mechanisms, creating a governance vacuum.
2. *Fragmented and Domestic-Centric Approaches:* In practice, tort-based claims related to energy activities are addressed mainly through domestic courts under environmental or civil law regimes. This reliance on national legal systems leads to inconsistent outcomes and limited enforceability, particularly in cases with cross-border or global impact. International environmental or human rights law may offer some protection, but they are often applied ad hoc and lack integration with international energy governance structures.
3. *Normative Integration as a Governance Imperative:* The paper argues that international energy law must be reconceptualised to include principles of responsibility, prevention, and redress. This could involve embedding tort-related concepts—such as duty of care, proportionality, and foreseeability—into energy treaties, guidelines, or model legal frameworks. Such integration would not only address a major normative deficiency but also enhance coherence across international legal regimes and strengthen the justice dimension of global energy governance.

By exploring the potential for normative expansion within international energy law, this paper contributes to broader efforts to make global energy governance more inclusive, accountable, and responsive to real-world harms, especially in the context of the accelerating energy transition and growing complexity of cross-border energy systems.

Between Energy Security and Trade Liberalization: The Intersection of International Trade Law and International Energy Law in an Era of Insecurity

Meng Mandy Fang, Assistant Professor, City University of Hong Kong

The evolving global energy landscape and the imperative to balance free markets with energy security and sustainability have heightened the dynamics and critical importance of the interface between international trade law and international energy law. The rules-based multilateral trading system administered by the World Trade Organization (WTO) profoundly shapes international trade in energy resources and equipment, even in the absence of a dedicated energy-specific agreement. WTO obligations, exemptions, and the resulting jurisprudence have shaped the ability of its 166 members to design and implement trade-related energy policies. This project focuses on the WTO's short supply exception – the General Agreement on Tariffs and Trade (GATT) Article XX(j), which remained dormant for two decades until the 2010s, when India and the European Union invoked it as a defence in two disputes in the energy sector, respectively. The two high-profile WTO cases – India — Certain Measures Relating to Solar Cells and Solar Modules (India – Solar Cells) and European Union and its Member States — Certain Measures Relating to the Energy Sector (EU – Energy Package) offered extensive interpretations of the exception. Notwithstanding, Article XX(j) has received much more limited academic discussion in the literature, compared with other exceptional clauses that the WTO adjudicating bodies have interpreted. This is problematic because in an era of disruptions threatening energy supply chain security, Article XX(j), which exempts WTO-inconsistent measures designed to address short supply, will likely gain much more traction and become highly relevant. Therefore, this article fills a significant gap by providing the first in-depth critique of the GATT Article XX(j) and the jurisprudence created by the panel and the Appellate Body. It highlights flaws in the WTO's interpretation in both disputes, particularly its narrow reading of the term 'general or local short supply,' which inadequately accounts for the evolving geopolitical landscape. A strictly textual approach, focused solely on removing trade barriers, risks undermining the energy security principle central to international energy law. The WTO and its adjudicators need to incorporate energy law principles when interpreting trade law treaty language.

The Role of International Human Rights Law in Reinforcing and Shaping International Energy Law

Zeynab Malakouti, Visiting Research Fellow, National University of Singapore

A field in international law typically emerges when states, treaties, institutions, and legal scholars collectively respond to a specific global need by establishing coherent legal frameworks and practices. Energy transition— driven by urgent climate action, represents one of the most pressing global challenges. A promising pathway to developing and strengthening international energy law lies in drawing upon other established fields of international law, particularly international human rights law. Historically, the energy sector has been addressed predominantly through technical and economic lenses, with limited focus on its social and human dimensions. This narrow perspective has contributed to the marginalisation of the intersection between energy and human rights. The main question of this research is ‘What role can international human rights law play in reinforcing and shaping international energy law, and how can it do so?’ In answering this question, the paper explores how human rights can be integrated into international energy law to improve its legitimacy, fairness, and effectiveness. It draws on various sources and mechanisms, including 1) National energy–human rights litigation cases; 2) State responsibility and accountability for human rights violations in the energy sector; 3) International initiatives aimed at recognising binding rights related to energy, such as the right to access energy and the right to a healthy environment; 4) The conceptual relationship between human rights and different dimensions of energy justice—distributive, procedural, recognition-based, restorative, and cosmopolitan justice. The study adopts a mixed methodology, combining doctrinal legal analysis with empirical review. It analyses relevant jurisprudence from domestic courts, the extent to which countries have incorporated rights to energy access and a healthy environment into their legal systems, and energy-related complaints brought before International Financial Institutions (IFIs) under their Independent Accountability Mechanisms (IAMs). These case studies illuminate how human rights discourse is already being used to shape responses to energy-related harms and offer insights into how international energy law could evolve in more just and inclusive ways. Ultimately, the paper argues that integrating international human rights law can help bridge existing normative gaps in international energy law, offering a more holistic legal framework for addressing the energy trilemma: balancing energy security, environmental sustainability, and energy equity.

SESSION II: Regional Perspectives Contributing to the Development of International Energy Law

The Transformative Power of Energy Transition in the European Union

Etienne Durand, Lecturer, University of Essex

The current academic research on the energy transition often focuses on climate issues and the legal frameworks needed to manage the shift from fossil fuels to renewable energy sources. However, the impact of the energy transition on political, legal, and social structures remains underexplored. This contribution aims to investigate whether and to what extent the energy transition is likely to transform law itself, identifying not only the law of energy transition but also a potential transition in energy law. This hypothesis will be explored using EU law as a case study, with the aim of examining how the energy transition influences EU fundamental principles, decision-making processes, integration dynamics, and the balance of power in Europe. Regarding the transformative power of the energy transition on EU law principles, particular attention will be given to the principles of solidarity, subsidiarity, and sovereignty, whose development appears to reflect a tangible transformation driven by energy transition concerns. This will be illustrated by several ECJ rulings (in particular, the Nord Stream case, where the ECJ recognized the mandatory effect of the principle of solidarity, which can be rooted to the ongoing energy transition) and by the EU's response to the war in Ukraine (notably through the RePowerEU Programme, which aligns European climate ambitions with energy independence objectives). A second aspect of the transformative effect will be observed in the evolution of EU decision-making processes, which now foster coordination across international, European, national, and local levels. This is especially evident in Regulation 2018/2001, which introduced an innovative governance model based on national energy and climate plans, collectively assessed by the European Commission. Inspired by the Paris Agreement, this bottom-up approach is now being replicated at subnational levels, creating a multi-level framework that fundamentally alters how energy policies are conceived and implemented. The third point of focus is the transformative impact of the energy transition on EU integration dynamics, particularly by positioning climate neutrality as a new overarching objective. The European Climate Law (Regulation 2021/1119) requires all EU policies, not just those related to the environment, to support the goal of carbon neutrality by 2050. This raises the question of whether climate neutrality could become a meta-objective of the European integration process, redefining the EU's fundamental purpose and reflecting the transformative impact of the energy transition on EU law. Finally, the energy transition is reshaping power dynamics, particularly in relation to the role of individuals. Whereas individuals had limited influence over energy decisions in the past, the development of renewable energy, along with the transformation of energy markets, has gradually empowered energy consumers, enabling them to participate in national, regional, or even global policymaking related to the energy transition. This shift reflects broader societal trends, including increased public participation in environmental policymaking and the rise of climate justice, providing a pathway for individuals to influence energy policies. Echoing Jeremy Rifkin's theory of lateral power, this contribution will explore the idea that the energy transition could fundamentally alter the very conception of power itself.

Navigating International Energy Law Obligations Amidst the Dual Dilemma of Disappearance and Damage in Caribbean Small Island Developing States

Alicia Phillips, PhD researcher, Université de Pau et des Pays de l'Adour

Small Island Developing States (SIDS) are on the frontline of world crises making their acute challenge and multidimensional vulnerabilities more exposed and with increased intensity over time. In light of this, the United Nations (UN) considers the Caribbean Small Island Developing States (CSIDS) to be ground zero in the global climate emergency. While globally the impetus to develop renewable energy (RE) due to climate change is at the centre of all government policies, it is a delicate balance for CSIDS. While the climate change crisis impacts upon their very survival and continued existence, their umbilical dependence on fossil fuels for their economy remains unabated. Yet many potential options are present in CSIDS, for example; they have an abundance of natural energy resources; they have the potential to attract investors by leveraging an appealing lifestyle package with financial incentives; and they have the unique opportunity to foster interconnectivity by pooling their RE capacities as a region to forge a coordinated approach to RE development. At the core of this research is an exploration of international energy law (IEL), the dilemma CSIDS face in managing climate change loss and damage and its impact on their survival. It postulates that an evolution in IEL is needed when it relates to CSIDS: firstly, that there should be an obligation under IEL to leave no country behind (which evokes the just energy transition principle) alongside the recognition justice aspect of acknowledging diverse experiences in decision making processes and secondly the need for IEL obligations, specifically of sustainability, accountability and responsibility to reflect the diverse developmental needs of CSIDS. In essence the research coins what has now emerged as a classic IEL dilemma for CSIDS i.e. the quandary they face as it relates to balancing IEL principles of permanent sovereignty over natural resources and sustainable development amidst state accountability and responsibility in a time of climate crisis. The research concludes that IEL needs to ensure that the acute circumstances faced by CSIDS are not forgotten as this may advance a systemic failure overtime in international energy law.

Reclaiming Agency: Indigenous Energy Sovereignty and the Limits of International Law in Africa and Latin America

Olalekan A. Bello, Lecturer, University of Leicester

The accelerating global energy transition—framed as urgent, green, and inclusive—remains marred by historical and ongoing marginalisation of Indigenous peoples, whose lands and cosmologies are at the frontline of extractivism. This situates the prevailing narratives of international energy law within the context of the continued spectre of marginalisation of Indigenous peoples, especially in Africa and Latin America, which sustains dispossession legacies through extractivist logics, legal invisibility, and structural exclusion. This paper examines the conceptual and practical conflicts between Indigenous energy sovereignty and the framework of international law. For this, it draws on the long-standing struggles and resistance to oil development by the Indigenous communities of Kichwa and Sápara in Ecuador and the Niger Delta in Nigeria. Framed within the volatile, uncertain, complex, and ambiguous (VUCA) dynamics of global transition, it interrogates the conceptual and normative limitations of international energy law in recognising and safeguarding Indigenous energy sovereignty. The goal is to highlight how dominant legal and governance frameworks remain structurally incompatible with Indigenous worldviews, which perceive energy as relational, reciprocal, and ingrained in the environment. The right to Free, Prior, and Informed Consent (FPIC) has been outlined in international legal documents such as the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), ILO Convention 169, and regional human rights treaties. Yet enforcement mechanisms remain fragmented, inconsistently applied, or undermined by overlapping investment treaties, national energy policies, and developmentalist laws. This legal fragmentation not only weakens Indigenous claims to land, participation, and resource control, but obscures plural legal traditions that reimagine energy beyond extractivism. This necessitates the research's central question. This is, to what extent does international energy law facilitate or hinder Indigenous energy sovereignty in Latin America and Africa, and how can its normative architecture be rethought and reframed to ensure a just, pluralistic, and legitimate transition? To find answers to this question, the paper employs an interdisciplinary qualitative methodology that integrates doctrinal legal analysis, critical Indigenous studies, and comparative case studies. These methodological frameworks are used to draw on resistance movements and community-led energy alternatives in the Kichwa and Sápara in the Ecuadorian Amazon, and the Niger Delta 2 in Nigeria. These sites illustrate the legal invisibility, structural and epistemic violence, and injustice embedded in current regimes of energy governance- where consent is procedural, autonomy is compromised, and Indigenous ontologies are subordinated to carbon capitalism. Drawing on these interdisciplinary insights, the paper advances a conceptual reframing and reinterpretation of international energy law through energy sovereignty as relational, placebased, and grounded in Indigenous epistemologies, as opposed to being extractive and statecentric. It draws attention to Indigenous energy models that foreground consent, interconnectedness with nature, and community governance as a realisation of epistemic justice, although these largely remain unrecognised in global and regional energy governance frameworks. In doing so, the paper contends that energy transition devoid of justice undermines legitimacy and perpetuates colonial inequalities. Therefore, in a world that is volatile, unpredictable, complex, and ambiguous (VUCA), regaining Indigenous agency is not only an ethical imperative, but essential for shaping a just and sustainable energy future.

SESSION III: Conceptualising International Energy Law

Theorizing Energy Law as a Field of Law

Seita Vesa, Professor, University of Eastern Finland

Energy law is facing unprecedented global pressures arising from climate change mitigation, geopolitical tensions, and the need to ensure access to affordable energy. While energy law is increasingly recognised as a field of law, it remains fragmented and theoretically underdeveloped. These pressures call for greater conceptual clarity and a more robust theoretical foundation to guide the field's evolution and societal relevance. This presentation responds to that need by drawing insights from special jurisprudence literature to critically review the current identity and characteristics of energy law and set the stage for further research. The research question guiding this presentation is: To what extent does energy law meet the criteria for an autonomous legal field, and how can conceptual tools from special jurisprudence help strengthen its coherence and theoretical foundations? The methodology is primarily theoretical and analytical, combining doctrinal analysis of energy law's characteristics with conceptual tools drawn from the literature on special jurisprudence. The presentation builds on collaborative research involving scholars in energy law and legal theory, including the co-creation of knowledge during an intensive workshop process. By drawing insights from special jurisprudence literature, this presentation puts forward two interlinked arguments for the advancement of energy law. First, it argues that energy law's frequent self characterisation as an emergent or immature field lacks adequate justification. In fact, energy law fulfils many of the criteria that special jurisprudence identifies as contributing to the existence of an autonomous area of law – such as social recognition, practical relevance, and the emergence of distinct legal doctrines and challenges. Second, the presentation places the characteristics of energy law in the context of the values of building special jurisprudence, particularly the value of coherence. It argues that while energy law's features – such as its policy-driven nature, technical complexity, and crosscutting legal scope – are well-established, they have often been developed in ways that contribute to incoherence rather than support the internal consistency of the field. This is likely a key reason why perceptions of immaturity and fragmentation persist. EU energy law provides an illustrative case example of these dynamics. The European Union has long played a central role in shaping energy policy and law, but recent shifts, from the Energy Union to the European Green Deal and REPowerEU, have intensified legal and policy pressures without resolving underlying conceptual uncertainties. These developments raise a critical question about the future of EU energy law: can it consolidate into a more coherent and autonomous legal discipline, or will it be absorbed into adjacent areas such as environmental or internal market law? This presentation ultimately argues that now is a timely, and even necessary, moment to reflect critically on the theoretical status of energy law. By engaging with the tools of special jurisprudence, the presentation contributes to a more coherent and purposeful understanding of energy law's role in addressing urgent global challenges.

Reshaping International Energy Law for the Just Transition: Bridging Theory and Practice in a Changing Energy Order

Tedd Moya Mose, Postdoctoral Research Fellow, Oxford Martin Programme on Integrating Renewable Energy

International energy law (IEL) is a developing but crucial area of international law. Its growth is spurred by urgent climate goals and the vital need for a just energy transition. Energy itself is a paradox: essential for human progress, yet a major cause of environmental harm. The increasing complexity of global energy systems, with many different actors, power imbalances, and overlapping rules, means we must re-examine IEL's core ideas, its scope, and its ability to respond effectively to the global energy shift. This paper builds on my doctoral research from 2016, *The Evolution of a Global Perspective of International Energy Law*. This work aimed to organise IEL's main principles, define its goals, and analyse how it works in practice. As one of the first doctoral projects fully dedicated to exploring IEL's principles, theory, and practice, this abstract proposes to help define IEL as a distinct, normative, and practice-focused legal field. The argument here is that IEL needs to move beyond its current fragmented state—a mix of treaties, specific rules, and private agreements—towards a more integrated and principled legal framework capable of addressing the just energy transition, energy security, and environmental sustainability. A key issue explored in this paper is the ongoing disconnect between academic ideas about IEL and the practical needs of legal work. While scholars often focus on abstract theories and the evolution of legal principles, practitioners usually operate in a highly specialised way, creating tailored solutions driven by business or regulatory demands. This difference risks weakening IEL's coherence, legitimacy, and authority, especially when navigating the risks and uncertainties of energy transitions in a volatile and fragmented global context. The paper suggests that energy justice provides a valuable link between theory and practice in the discourse around just transitions. Although energy justice is an interdisciplinary field rather than a formal legal one, its dimensions – including procedural, distributive, recognition, cosmopolitan, and restorative justice – are increasingly influencing global discussions on energy governance. Incorporating human rights into IEL, whether through formal legal decisions or interpretive guidance, offers a practical way to make energy justice principles legally effective. By doing so, IEL can be more than just a regulatory tool; it can become a values-based framework focused on fairness and legitimacy in the global energy order. Furthermore, the paper investigates whether IEL should more openly engage with 'soft law,' international regulatory norms, and tools from other fields, especially those in climate governance, sustainable finance, and technological innovation. A more flexible and adaptable legal design might be essential to balance legal certainty with the dynamic nature required by the just transition. In conclusion, this paper argues for a fresh perspective on IEL as a field where legal theory and practice come together around shared values. By building principled agreement on IEL's scope, priorities, and overarching principles, the discipline can develop into a strong legal framework capable of supporting a just, inclusive, and sustainable global energy transition.

Conceptualising International Energy Law: Insights from International Environmental Law and its Influence in the Governance of the Energy Sector?

Melanie Schneider, DPhil candidate in Law, University of Oxford

International energy law remains conceptually underdeveloped, shaped more by fragmented legal influences than by a coherent normative framework. This paper argues that international energy law can best be understood not as a codified regime, but as a functional framework made up of international legal obligations found in various branches of international law. These obligations help clarify the scope, priorities and the structure of international energy law by revealing how global norms translate into domestic energy governance. Among these, international environmental law plays a particularly significant role – both in constraining state discretion and actively driving the energy transition. While states continue to assert sovereignty over their energy sectors – often linking this to energy security – this sovereignty is increasingly challenged by international environmental commitments requiring states to decarbonise their energy systems, adopt renewable energy mandates, and fossil fuel phase out strategies. International environmental law thereby penetrates domestic legal systems through international legal obligations for environmental protection and reshapes how states exercise their regulatory authority over their energy sectors. This dynamic calls into question assumptions about the impermeability of sovereignty in the energy domain, especially under conditions of global environmental interdependence. Using international environmental law as a lens, this paper examines how international environmental norms influence national energy governance and, in doing so, contributes to clarity on international energy law's scope, priorities, and structure. This paper posits that international environmental law is not just an adjacent branch of international law, but rather a core approach through which international energy law operates and functions, therewith informing its scope, priorities and internal tensions. Through doctrinal analysis, the paper makes three core contributions to the conceptualisation of international energy law. Firstly, it contributes to clarifying the field's scope and structure, arguing that international energy law is not a standalone or codified regime, but a framework shaped through interaction with other areas of international law – for instance, international environmental law – that influence domestic energy governance. Secondly, it shows how environmental obligations shape the normative priorities of national energy systems, particularly by influencing how states exercise their sovereignty. This challenges traditional assumptions about state control and highlights how international law influences core regulatory choices – such as those reflected in the energy trilemma of security, sustainability, and equity. Thirdly, the paper advances a more coherent account of international energy law as an interdisciplinary legal field. It argues that the field's conceptual clarity emerges not from doctrinal unity, but from its legal entanglements. While international environmental law provides a compelling lens, further insights can be gained by examining interactions with trade, investment, and human rights law. Together, these contributions clarify the scope, structure, and normative orientation of international energy law as a legal field shaped by broader global legal dynamics.

Systematic Literature Review of International Energy Law

Mohammad Hazrati, Senior Research Fellow, NUS Centre for International Law &

Nivedita S, Research Fellow, NUS Centre for International Law

This paper presents a systematic literature review (SLR) of *International Energy Law* (IEL). While IEL has gained increasing attention as a distinct academic field, its definition, scope, and underlying principles remain contested. The paper applies a structured and replicable methodology, to examine how IEL has been defined, conceptualised, and applied in the literature published between 2000 and 2025. The review identifies key elements and themes associated with IEL, assesses the extent of consistency or divergence among scholarly definitions, and maps areas where conceptual clarity is lacking. In doing so, it highlights both the contributions and the gaps within existing research, underscoring the need for further theoretical development of IEL as a coherent field. This review provides a systematic synthesis of the IEL literature and seeks to lay the foundation for future scholarship on the relationship between international law, energy governance, and global sustainability transitions.

BIOGRAPHIES



Olalekan A. BELLO
Lecturer, University of Leicester

Olalekan Bello is a Senior Lecturer in Law at the University of Leicester, his research focusing on critical issues at the intersection of law, policy, and sustainability in international investment. His expertise spans a broad array of topics, including natural resources, energy security, and sustainable development, as well as transgenerational social justice for vulnerable and marginalised Indigenous communities across Africa. Olalekan has contributed publications in journals and research handbooks and currently convenes a research seminar series in energy investment, climate change, and sustainability. He is currently a Fellow, Higher Education Academy (UK), and Member: Nigeria Bar Association, UK Universities Climate Network, Institute for Environmental Futures, Energy Institute (International), Global Business and Human Rights Scholars Association, African Union Law Research Network, and Westminster Law and Theory Lab.



Denise CHEONG
Head, Energy Law and Policy, NUS Centre for International Law

Denise Cheong is the Head of Energy Law and Policy and Principal Research Fellow at the Centre for International Law (CIL), National University of Singapore (NUS), where she focuses on energy, ocean, and environmental law research. Her current research interests in the area of energy include the conceptualisation and/or development of international energy law and the potential role international energy law can play in accelerating the clean energy transition as well as promoting greater energy interconnectivity at the regional level. Prior to her current position, she was the Head of Nuclear Law & Policy at CIL.

Her published works include book chapters and journal articles on nuclear, ocean and/or environmental law issues. She has been invited to speak and participate in conferences, workshops, seminars and meetings as well as expert groups on topics related to international energy law and policy, both internationally and regionally. She is presently co-editing a special issue of a leading journal that is focused on international law issues related to regional energy interconnectivity. She is a member of the Climate Research Forum – Just Transition Working Group hosted by the University of Oxford's Smith School for Enterprise and Environment as well as the OECD NEA Global Forum Working Group 5: Re-establishing nuclear law education programmes. She is also a member of the International Nuclear Law Association and the Asia-Pacific Centre for Environmental Law. A former lawyer in international private practice,

she is an Advocate & Solicitor of the Supreme Court of Singapore and a Solicitor of England & Wales.



Elena CIMA

Senior Lecturer, University of Geneva

Elena Cima is a Senior Lecturer in Public International Law at the University of Geneva, where she teaches courses on international environmental and climate law, energy law, and investment law. She is the Director of the University of Geneva's Summer School in International Law and International Humanitarian Law. She is the Chair of the ESIL Interest Group on Energy and International Law.

Elena holds a PhD in International Law from the Geneva Graduate Institute, a Bachelor of Laws from the University of Milan and an LL.M degree from Yale Law School, where she was editor of the Yale Journal of International Law.

She is the author of the monograph *From Exception to Promotion: Re-Thinking the Relationship between International Trade and Environmental Law* (Brill, 2021). She has co-edited several books and has published articles in peer-reviewed journals on international trade law, climate law, water law, as well as investment law. In addition to her academic commitments, Elena is often involved in investment arbitrations, international water and climate negotiations, as well as advisory proceedings before international courts and tribunals.

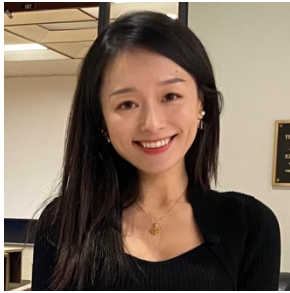


Etienne DURAND

Lecturer, University of Essex

Etienne Durand is a Lecturer at the University of Essex School of Law, where he is deputy director of the Double Degree in French and British Law program.

Dr. Durand's research focuses on EU Energy Law, Internal Market Law, and Competition Law. He has a particular interest in the relationship between the energy transition and the global economic and social context. His work examines how law can contribute to achieving the overall goals of the global energy transition, while also considering how such a transition might profoundly transform the very conception of law itself. Prior to joining the University of Essex, Dr. Durand was an Associate Professor at the University Jean Moulin Lyon 3 in France, where he served as Director of the Master's program in European Business Law and Co-Director of the Master's program in Energy Law. In addition to his academic career, Dr. Durand has worked as an off-counsel for a law firm, gaining extensive experience in renewable energy law.



Meng Mandy FANG

Assistant Professor, City University of Hong Kong

Dr. FANG Meng Mandy is an Assistant Professor at the City University of Hong Kong, School of Law. Her research interests focus on the interface between international trade, environmental protection, and energy transition. Her publications appear in journals such as the *Virginia Journal of International Law*, *Leiden Journal of International Law*, *World Trade Review*, *Vanderbilt Journal of Transnational Law*, *Utilities Policy*, and edited books published by Cambridge University Press, among others. Her research project on China's environmental governance of plastic pollution received competitive funding (HKD 471,500) from the Hong Kong Government, Research Grant Council, for a duration of 24 months. She was awarded the Richard M. Buxbaum Prize for Teaching in Comparative Law by the American Society of Comparative Law in 2023. She received the Best Paper Award at the Young Scholar Workshop on International Economic Law at the National Taiwan University in 2024.



Mohammad HAZRATI

Senior Research Fellow, NUS Centre for International Law

[Dr Mohammad Hazrati](#) is Senior Research Fellow at the Centre for International Law (CIL), National University of Singapore (NUS), specialising in energy, environmental, and climate change law and policy, with a particular focus on the energy transition. Previously, he was a postdoctoral researcher at the Université de Pau et des Pays de l'Adour, France, working within the Energy Justice & Social Contract Chair, the Laboratory Energy and Environmental Transition (TREE), French National Centre for Scientific Research (CNRS). Dr. Hazrati holds a PhD in Energy Law from Queen Mary University of London (2020) and an MSc in Oil and Gas Law from the University of Reading, UK (2016). He has published extensively, including peer-reviewed articles, book chapters, and the book "[The Rise of Restorative Justice in the Energy Transition and for Climate Mitigation](#)" (Springer Nature).



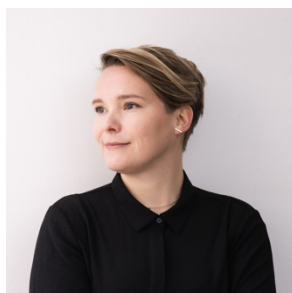
Raphael HEFFRON

Professor and Dean, College of Law, Abu Dhabi University

Professor Raphael J. Heffron is a Professor, Barrister-at-Law and Senior Counsel. He is also an international expert on climate change, sustainability and just transition public policy issues. He is a graduate of both Oxford (MSc-Christ Church) and Cambridge (MPhil-Darwin & PhD-Trinity Hall) Universities (UK). Currently, Professor Heffron is Professor and Dean at the College of Law Abu Dhabi University in UAE (one of the World's Top 200 Universities ranked by the Times Higher Education).

The principal focus of his work is on achieving a sustainable and just transition to a low-carbon economy, and combines a mix of governance, management, law, policy, and economics. A key theme behind his work is human rights and he has been appointed to a UN

committee on the just transition as well as the UNESCO policy lab. His work has featured in the Top 2% Stanford-Elsevier Scientist List in 2020, 2022, 2023 and 2024. He has published over 200 publications and is the most cited scholar in his field worldwide for energy and just transition law and public policy (6000+ *Scopus*/11,500+ *Google Scholar*) with translated work in multiple languages including Chinese, Italian, French, Spanish, Arabic and Persian. Professor Heffron has given over 220 keynotes/guest lectures in 68 countries.



Kaisa HUHTA

Associate Professor, University of Eastern Finland

Dr. Kaisa Huhta is an Associate Professor of European law, especially energy law at the University of Eastern Finland (UEF) Law School and at the Centre for Climate Change, Energy and Environmental Law and holds a part-time professorship at the European University Institute's Florence School of Regulation. In addition to her professorships, she is the Associate Editor of the *Journal of Energy and Natural Resources Law* and an expert member of the Finnish Market Court.

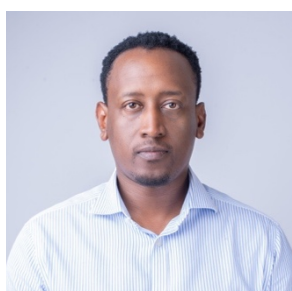
Dr Huhta's research focuses on EU energy law. She is the principal investigator of the INTEL project (funded by the European Research Council, 2024-2029) and the FOUNDATIONS project (funded by the Academy of Finland, 2024-2028), which seek to develop the foundations of energy law in Europe. She is also a work package leader in the RELIEF project (2023-2026), funded by the Strategic Research Council, which studies the role of law in sustainability transformations. Her work has been published in international journals such as *the European Law Review*, *the International and Comparative Law Quarterly* and *Global Environmental Change*.



Zeynab MALAKOUTI

Visiting Research Fellow, National University of Singapore

Dr. Zeynab Malakouti is a Visiting Research Fellow at the Middle East Institute, National University of Singapore. She completed her postdoctoral research on Energy Law and Policy at the University of Pau and Pays de l'Adour, CNRS, France. She previously served as Assistant Professor and Director of the Human Rights Department at the UNESCO Chair for Human Rights, Peace, and Democracy in Iran. She holds a PhD in International Law from the University of Leeds, UK, and an LLM in Human Rights Law from the University of Reading, UK.



Tedd Moya MOSE

Postdoctoral Research Fellow, Oxford Martin Programme on Integrating Renewable Energy

Dr. Tedd Moya Mose is a distinguished scholar, legal practitioner, and entrepreneur specialising in the intersection of justice, sustainability, and innovation. He is affiliated with the Environmental Change Institute at the University of Oxford and has held academic positions

at several leading international universities, including Oxford, St Andrews, Queen Mary University of London, the London School of Economics, and the universities of Cape Town, Michigan, and Dundee. As one of the first scholars to complete full doctoral research on the globalisation of international energy law, his work explores how innovative systems can promote fairness in key sectors like energy, trade, and natural resources. As the founder of Lex Navitas, Tedd provides legal and advisory services to the public, private, and charitable sectors on a global scale. He focuses on bridging the gap between developed and developing nations; and works extensively in Sub-Saharan Africa. His expertise lies in developing the legal, financial, and technological frameworks essential for a just energy transition. He also advises charities and philanthropies on governance and impact investment, reflecting a deep commitment to building equitable systems that support development prerogatives.



Temitope Tunbi ONIFADE
Lecturer, University of Bristol

Temitope Tunbi Onifade is a sociolegal scholar specializing in environmental and energy law and sustainability. He applies law and social science theories, concepts, and methods to analyse environmental and energy agendas. Informed by a distinctive blend of his Indigenous African (Yorùbá) worldview and western academic training and experience, his research pioneers thinking on state-business-civil society interactions. He has contributed several scholarly concepts, frameworks, and empirical data. For instance, he conceptualized “hybrid policy,” which prescribes systematic values-driven policy mixing (Energy Policy, 2016), and “transformational policymaking,” prescribing state-business-Indigenous policy co-creation (Environmental Science & Policy, 2024). He has led several projects and produced influential research and policy reports, including: a co-authored climate governance report for Canada’s commercial real estate sector (Canada Climate Law Initiative and Real Property Association of Canada, 2022), now the official policy guide of that national industry; a sole-authored report on fossil fuel subsidies (Canada Climate Law Initiative, 2022), used and circulated by several organizations, including the Taskforce on Climate-related Financial Disclosures; and a co-authored report on biodiversity liability risks (Commonwealth Climate and Law Initiative, 2020), used by governments and other organizations. He has accepted invitations to contribute articles and lead multidisciplinary teams, including for Nature portfolio journals.



Alicia PHILLIPS

PhD researcher, Université de Pau et des Pays de l'Adour

Alicia Phillips is a PhD researcher at the Université de Pau et des Pays de l'Adour and Centre national de la recherche scientifique (CNRS), France. Her research explores human rights, climate change and energy justice across Latin America, the EU, Africa, and South-Pacific. A lawyer, she completed her professional legal studies in Barbados and Trinidad & Tobago, the West Indies. She has published in premier journals including: [International Energy Law Review](#); [Journal of Energy & Natural Resources Law](#); [Springer Nature](#); [Journal of Urban Regeneration & Renewal](#), [Sustainable Earth Reviews](#) as well as [The Conversation-Europe](#). Currently, she is also one of the Associate Editors for [Renewable and Sustainable Energy Reviews](#), a member of the Climate Research Forum - Just Transition Working Group, University of Oxford, Sustainable Law Programme and a Visiting Lecturer at the Károli Gáspár Reformed University in Hungary. She is also one of the co-organisers for a series of International Early Career Conferences geared towards the development of interdisciplinary research.



Nivedita S

Research Fellow, NUS Centre for International Law

Nivedita S is a Research Fellow at the Centre for International Law (CIL), National University of Singapore (NUS). Her work explores international law and policy issues spanning energy, oceans, space, security, and the environment. Her research focuses on the conceptualisation of international energy law, legal and policy frameworks for energy justice and the clean energy transition (including governance of critical minerals), nuclear applications at sea and in outer space, and the development of regional energy norms. She is particularly interested in the intersections between different branches of international law. She also coordinates the podcast series [EnergyMatters@CIL](#) (formerly [Nuclear Matters at CIL](#)).

Nivedita has previously worked with international organisations, NGOs, and other institutions on nuclear law, human rights, environmental law, international criminal law, and gender issues. She holds an Advanced LL.M. in Public International Law from Leiden University, a Bachelor of Laws (Hons) from the University of Birmingham, and a University Diploma (Diplôme d'Université – DU) in International Nuclear Law from the University of Montpellier. She is called to the Bar of England and Wales and is an active member of the International Nuclear Law Association, BASIC Emerging Voices Network, Women in Nuclear Law Initiative (WiNLI), WiN Global, and the Literature and Humanities Association of Australasia.



Melanie SCHNEIDER

DPhil candidate in Law, University of Oxford

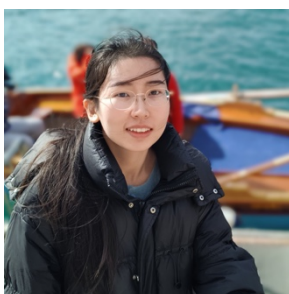
Melanie Schneider is a DPhil candidate in Law at the University of Oxford. Her research focuses on international law's regulation of energy security. She holds a master's degree (LL.M.) in International and European Law with distinction from the University of Amsterdam. Before coming to Oxford, Melanie worked as a research trainee at the T.M.C. Asser Institute and as assistant coordinator of a law clinic at the University of Amsterdam. She has international experience working in research institutes, non-profit organisations and as a legal advisor to international clients. Melanie is a Lab Fellow at the Oxford SDG Impact Lab and a Graduate Research Resident at the Bonavero Institute of Human Rights. She is also the Deputy Chair of Oxford Pro Bono Publico.



Seita VESA

Professor, University of Eastern Finland

Dr. Seita Vesa is Professor of Environmental Law at the University of Eastern Finland, Law School, Center for Climate Change, Energy, and Environmental Law (CCEEL), and Research Professor at the Finnish Environment Institute's Climate Solutions Unit (SYKE). At UEF Law School, they serve as Head of Research and play an active role in advancing the school's research strategy. Their research covers international and EU environmental and climate law, including the legal frameworks on LULUCF and effort sharing, renewable energy, forests and bioenergy, sustainability transitions, environmental protection, and Arctic law. They have a particular interest in the role of law in sustainability transitions and decarbonisation, the evolution of EU climate law, and the nexus of law and science with questions of legitimacy. Professor Vesa is co-PI of the SRC-funded RELIEF project (2023–) and Vice Director of UEF's RESOURCE research community on circular economy, energy, and raw materials. Their teaching focuses on EU environmental and climate law, and they supervise both PhD and Master's researchers. They also have extensive experience in international collaboration, project work, and programme development, and are regularly appointed to expert groups, evaluation panels, and consultancy roles in environmental law.



Ranchun WANG

PhD candidate, University of Groningen

Ranchun Wang is a PhD candidate at the University of Groningen (the Netherlands). Her research focuses on the intersection of private law and regulatory practice, particularly in the fields of environmental regulation and climate change, with a comparative emphasis on the EU and China. She holds double bachelor's degrees in Finance and Law from the University of International Business and Economics in Beijing, as well as an Advanced LL.M. in Law and Finance from Leiden University. She has previously interned at the International Institute

for the Unification of Private Law (UNIDROIT) in Rome and is currently a visiting scholar at the Max Planck Institute for Comparative and International Private Law in Hamburg. Her PhD dissertation employs a law-and-economics approach to assess the effectiveness of ESG disclosure regulations in advancing corporate social responsibility.



Hao ZHANG

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Dr. Hao Zhang is an Associate Professor at the Faculty of Law of the Chinese University of Hong Kong. Specialising in energy and climate law, his research centres on the legal and regulatory frameworks governing energy decarbonisation and the transition to a green economy, with a particular focus on China. His recent work examines carbon pricing mechanisms and their interplay with electricity market regulation, renewable energy law, and energy market reforms. Dr. Zhang has published extensively in law, energy, and environmental studies journals, such as *Energy Policy*, *Journal of Energy and Natural Resources Law*, and *Journal of World Energy Law and Business*. He is also the author of the book *'In Pursuit of Carbon Neutrality: Energy Law and Regulation in China'* (Cambridge University Press, 2024). Beyond academia, Dr. Zhang has contributed expertise as a consultant to international organisations, government agencies, and NGOs, including the Energy Charter Secretariat, the German Environment Agency, and the Children's Investment Fund Foundation.



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