P21 / Integrating Public Policy and Energy Resilience: Tackling Climate Change Amid Global Turbulence

Topic : ENVIRONMENT, SDGs, ENERGY

Chair : Wei Ye (Chiang Mai University School of Public Policy)

Second Chair : Andrea Gatto (Kean University)

GENERAL OBJECTIVES, RESEARCH QUESTIONS AND SCIENTIFIC RELEVANCE

This panel aims to convene leading experts in public policy and energy studies to explore the complex interplay between climate change mitigation, energy resilience, and global geopolitical shifts. We will critically examine the need for a more integrated approach to public policy, addressing both the urgent need to decarbonize our economies while simultaneously strengthening energy security and resilience in a volatile world. The global energy landscape is undergoing rapid transformation. The urgency of climate change mitigation demands a rapid transition to renewable energy sources. However, this transition is complicated by geopolitical tensions, economic instability, and the need to ensure reliable and affordable energy access for all. Traditional energy security models are insufficient in this new context, demanding innovative public policy solutions that foster energy resilience, promote sustainable development, and consider the wider social and economic impacts of the energy transition.

The research questions of the panel involve but are not limited to: How can public policy effectively integrate climate change mitigation goals with energy security and resilience in a rapidly changing global context? What are the key policy instruments and regulatory frameworks needed to facilitate the deployment of renewable energy technologies while ensuring system reliability and affordability? How can public policies address the social, economic, and geopolitical challenges associated with the energy transition, particularly in developing countries? What role can international cooperation play in promoting energy resilience and ensuring a just and equitable energy transition?

The panel will explore various hypotheses, including:

Interconnectedness: Public policy solutions for climate change and energy resilience are deeply interconnected and cannot be tackled in isolation.

Innovation and Diversification: Promoting innovation in renewable energy technologies, alongside diversification of energy sources and supply chains, is crucial for energy resilience.

Equity and Inclusion: Energy policies must prioritize equity and social justice, ensuring access to affordable and reliable energy for all, particularly in marginalized communities.

Global Cooperation: International collaboration and knowledge sharing are essential for building resilient energy systems and achieving global climate goals.

This panel is highly relevant to the growing body of research on energy policy, climate change, and global development. By fostering interdisciplinary dialogue and exploring innovative policy solutions, it will contribute to a more comprehensive understanding of the challenges and opportunities presented by the energy transition in a turbulent world.

CALL FOR PAPERS

This panel invites original research papers addressing the intersection of public policy, climate change mitigation, and energy resilience, particularly in the context of global economic and geopolitical shifts. We welcome a diversity of perspectives and methodological approaches, including:

Policy Analysis: Evaluations of existing and proposed policies related to renewable energy deployment, energy efficiency, carbon pricing, or energy security.

Economic Modeling: Analysis of the economic costs and benefits of different energy transition pathways and the impact of policy interventions.

Geopolitical Analysis: Examination of how geopolitical factors shape energy policy decisions and influence energy security and resilience.

Social Impact Assessment: Studies on the social, economic, and environmental impacts of energy policies

on different communities and regions.

Case Studies: In-depth analyses of specific countries or regions, highlighting successful or challenging approaches to energy transition and policy integration.

Submission Guidelines:

Abstracts of 250-300 words should be submitted by January 31th, 2025.

Accepted papers will be presented at the panel during the conference.

The panel will provide a platform for stimulating discussion and interaction among presenters and conference participants.

We are particularly interested in papers that address:

Energy Security and Resilience: Strategies for enhancing energy security and resilience in the face of climate change and geopolitical instability.

Renewable Energy Deployment: Policy mechanisms to accelerate the deployment of renewable energy technologies and ensure grid reliability.

Just Transition: Policies addressing the social and economic impacts of the energy transition, ensuring inclusivity and equity.

International Cooperation: Models for international collaboration and knowledge sharing to advance energy resilience and climate goals.

Join us for a dynamic and insightful panel discussion on the critical challenges and opportunities of integrating public policy and energy resilience in the face of global turbulence.

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Session 1

Thursday, July 3rd 10:15 to 12:15 (E2)

Relaunching Nuclear Energy in Times of Crisis: A Discourse Network Analysis of Nuclear Energy Policy in Italy

Claudia Mariotti (Università Roma Tre)

Paola Arrigoni (Università di Bologna)

Luca Germano (Università Roma Tre)

Andrea Prontera (University of Macerata)

This paper investigates how international crises shape the nuclear energy debate in Italy, focusing on two critical periods: 2008–2011 and 2021–2024. Through the literature review and a synthesis of the current regulatory framework of nuclear energy in Italy, the paper focuses on the public discourse in the national media in order to reconstruct the declarations and positions of the main public actors involved. The primary aim is to employ discourse network analysis (DNA) in the national press, specifically in Sole 24 Ore and Corriere della Sera to examine how institutional, political, and corporate stakeholders re-framed nuclear energy as a response to external shocks —the Fukushima disaster in 2011 and the Russian-Ukrainian war from 2021 onward— addressing themes such as energy security, sustainability, and technological innovation. By mapping actors, their goals, and emerging coalitions over time, the analysis highlights shifts in the narratives and alliances surrounding nuclear energy policy. The hypothesis of the paper is that the public discourse and new coalitions are instrumental to a rapid reframing of nuclear power in Italy necessitated by the need for national energy security and the global and European (EU) supranational context.

Policy as Steps, Not Types: Explaining Divergent Outcomes in Southeast Asia's Feed-in-Tariff Policies

Liuyang He (LKY School of Public Policy, National University of Singapore)

Contemporary policy analysis has revealed an unfortunate trend of favoring a holistic lens, often overlooking the nuanced variations within individual policy instruments. This approach risks neglecting the real-world contexts for which policies are designed, as well as the settings and calibrations that can drive incremental yet paradigmatic policy changes. This paper examines the nuances of Feed-in-Tariff (FiT) policies across five major Southeast Asian countries—Vietnam, Indonesia, Malaysia, the Philippines, and Thailand. Through comparative case studies, it explores how differences in policy steps and the composition of policy packages contribute to varied solar energy deployment rates across these countries. The study highlights the importance of a context-based design approach to policy research and offers valuable insights into advancing decarbonization and energy transition efforts in one of the world’s most dynamic emerging economies.

From Challenges to Solutions: Advancing Thailand's Residential Energy Efficiency Policy

Passarin Petchamli (Chiang Mai University School of Public Policy)

This research aims to compare Thailand’s residential energy efficiency policies with countries with established best practices, identifying gaps and challenges in the current framework. The study focuses on redesigning Thailand’s energy efficiency policy to ensure it addresses the country’s unique context and

global sustainability goals. Using policy cycle theory, the research assesses the policy process from agenda setting while integrating the concept of energy efficiency to identify key areas for improvement, particularly in reducing energy consumption in the residential sector.

The research methodology involves a documentary review of international case studies on successful energy efficiency policies, analyzing policy documents, government reports, and relevant academic literature from countries with leading energy efficiency practices. The research process follows a systematic approach to select case studies based on their successful implementation and measurable outcomes. A comparative analysis will assess the applicability of these practices to Thailand's specific challenges, focusing on aspects such as financial mechanisms, stakeholder engagement, and public awareness.

Global trends indicate that countries with strong energy efficiency policies have achieved significant improvements in both environmental and socio-economic outcomes, aligning with international sustainability targets like the UN Sustainable Development Goals (SDGs). The study also addresses the challenges of applying foreign policies to the Thai context due to differences in economic conditions, cultural factors, and available resources. Despite these challenges, the analysis provides valuable insights into the strengths and weaknesses of Thailand's current approach.

The research highlights the importance of redesigning the energy efficiency policy framework to promote inclusivity, sustainability, and long-term effectiveness. The study concludes with tailored policy recommendations for vulnerable groups, financial incentives, and enhanced public awareness campaigns, offering actionable insights for future policy development. The expected outcomes include recommendations that can be integrated into Thailand's national policy framework, addressing environmental and socio-economic challenges while promoting sustainable energy use in the residential sector.

Transboundary Haze in Chiang Mai and Southeast Asia and Energy Transition: Integrating Public Policy and Energy Resilience

Ke Liu (Chiang Mai University School of Public Policy)

The transboundary haze problem caused by the open burning of agricultural residues in Chiang Mai and neighboring Southeast Asian countries (such as Laos, Cambodia, and Myanmar) has become a pressing environmental issue in the region. The soaring PM2.5 levels have not only severely impacted the health of local residents, exacerbating respiratory diseases and other health problems, but have also caused significant damage to the local ecosystem. Moreover, the haze problem has had a significant negative impact on Chiang Mai's economy, which relies heavily on tourism, seriously damaging Chiang Mai's image as a tourist destination.

This study takes the haze problem in Chiang Mai as a starting point to in-depth explore the contradictions between traditional agricultural production methods and energy consumption patterns in Southeast Asia. Through empirical research on the status of open burning in the region, the distribution of PM2.5 concentrations, and the health impacts on residents, this study quantifies the negative impacts of the haze problem on the region's socioeconomic development. Based on this, this study will focus on how to integrate public policies and enhance energy resilience to promote regional energy transition, achieving a shift from traditional biomass energy to clean and renewable energy.

(Virtual) A policy analysis of citizen-led renovation in France for addressing the complex interplay between climate resilience and equitable energy transition

Sophie NEMOZ (Université de Franche-Comté)

A policy analysis of citizen-led renovation in France for addressing the complex interplay between climate resilience and equitable energy transition

In view of the climate risk that affects clay soils, which is causing cracking in millions of human settlements across France alone, this paper aims to understand how the practices and representations of the stakeholders involved, as well as public policies, can be adjusted towards better governance (prevention, anticipation, and reduction of socioeconomic consequences). Both vulnerabilities and capabilities have been studied. Citizen-led renovation, while not a new concept as homeowners have historically undertaken renovation tasks in their homes, is now being reframed as a strategy to accelerate energy transition. This shift highlights its potential to address key challenges, particularly by improving retrofitting access for medium- and low-income households, as energy retrofitting increasingly emerges as a collectively-imagined, sustainable solution. However, despite its promise, citizen-led renovation remains in

France a niche practice, hindered by entrenched work traditions and compounded by bureaucratic and administrative barriers that limit its scalability. To better understand and address these challenges and relying on a policy analysis (Nemoz, 2023)1, this study explores the shared cultural narratives that influence societal perceptions of both climate risks and citizen-led renovation, their potential as a sustainable and inclusive alternative to traditional retrofitting approaches. Using a mixed-methods approach that incorporates insights from homeowners, craftsmen and institutional actors, our findings provide both a comprehensive vision of stakeholder perspectives and cross-disciplinary recommendations to scale up citizen-led renovation initiatives.

1 NEMOZ Sophie, “Sustainable housing: international relations between housing and the environment revisited” in KASSIOLA Joel J. and Timothy W. LUKE (ed.), *The Palgrave Handbook of Environmentals Politics and Theory*, New York, Palgrave Macmillan/Springer, pp.345-366. , DOI : 10.1007/978-3-031-14346-5