P02 / Theorizing the future sustainability challenges to environmental and energy policies

Topic : GLOBAL WARMING, SDG, ENVIRONMENT, ENERGY AND POLICY

Chair : Anthony Zito (University of Newcastle-upon-Tyne)

Second Chair : Ekaterina Domorenok (University of Padua)

Third Chair : John Hoornbeek (Kent State University)

Fourth Chair : Daniel Fiorino (American University)

GENERAL OBJECTIVES, RESEARCH QUESTIONS AND SCIENTIFIC RELEVANCE

This panel seeks to question the approaches and assumptions found in both environmental policies and energy conservation policies. Do the dramatic challenges that all humanity face currently in this Anthropocene epoch force a commensurate change in the analytical approaches of academics? Core examples of this include the question of whether environmental policy, often with a focus on end of pipe remediation, has the required theoretical and empirical focus to deal with the massive challenge of climate change and biodiversity loss? Are more integrated approaches necessary, such as that argued by the circular economy literature (Leipold 2021)? Does the current environmental policy tradition (and its academic study) ignore normative issues relating to social justice (e.g. questions of equity, intergenerational justice) and the integration between human and non-human experiences? The perspective underlying this potential change is to recognize that "normative" is a broad concept with many dimensions, including that society may have normative obligation to flora, fauna, ecology and survival of the world, as well as the issues of social justice, both among today's people and across generations. At the same time, are the current foci neglecting other imperative issues and processes (e.g. UN Sustainable Development Goals - Hartley 2021)? Another illustration of the challenges the fields face is the ‘return’ of energy security and focus on re-building economies post Covid (Brown and Huntington 2008). Other important considerations include the role of crisis itself. Is there no longer the same amount of space for ‘normal’ environmental and energy policy making, or does the focus on crisis distort the policy picture and essential decision-making? Should public policy and its study calibrate its approach to deal with prolonged turbulence and prolonged sequences of crises (Ansell et al. 2017, Ladi and Wolff 2021)? There are increasing signs of public policy studies reassessing its approaches to understanding our biosphere (e.g. Biermann 2021); what balance needs to be struck in terms of innovation versus retention of past learning and ideas?

This panel asks participants to present analytical frameworks and research strategies that take into account the current rapid evolution of environmental policy thinking, and push analytical, conceptual and empirical innovation in these fields. The core research question is for authors to showcase innovative ways of thinking about the future trajectory of environmental and energy conservation policy. How do we go about re-thinking assumptions, categorizations and other policy studies conceptualizations and how do we develop new and/or interdisciplinary thinking? Participants are encouraged (but not required) to take a comparative perspective to show how policy-makers in different territories, policy areas approach this question. Participants will be asked to debate whether or not they accept the proposition that the changing nature of environmental and energy problems requires both new policy studies approaches as well as new policy solutions (and if so what pathways will deliver on these requirements). Participants should also consider whether there are important gaps in the field of study, but also whether the efforts to extend our analytical endeavours leaves us vulnerable to overlooking important elements of current public policy and its study.

CALL FOR PAPERS

This panel asks participants to present analytical frameworks and research strategies that take into account the current rapid evolution of environmental policy thinking, and push analytical, conceptual and empirical innovation in environmental and energy conservation policy studies. The core research question/agenda is for authors to showcase innovative ways of thinking about the future trajectory in these policy areas. This call acknowledges the push to think about the environment and sustainability in new ways. Does this endeavour require us to have new understandings of the biosphere and the policy problems, revise our views of the conditions in which decisions are made, reconsider the normative implications of both the policy decisions and the academic investigation, reassess which actors and forces have been highlighted and which ones have been ignored and build new analytical frameworks and concepts to advance our field? The

panel welcomes both papers that concentrate analytically on framing one or more of these conceptual elements and those that pursue empirical investigations to explore these topics. Critical reflections of the field as well as systematic literature reviews that explicitly tackle the panel themes and draw conclusions are welcome. Although the panel seeks to be forward looking, it recognizes the importance of temporal perspective and grounding, and therefore does not specify any particular time frame (given the increasingly important weighting towards considerations of the Anthropocene). We welcome papers that focus on any geographic area and environmental/conservation/sustainability area. We invite papers that focus on different policy actors and processes (e.g. environment agencies and governance, corporations and production cycles and so forth) to tackle these questions. We also encourage but do not require authors to take a comparative perspective. All theoretical frameworks and methodologies are welcomed. We particularly encourage those seeking to find innovative interdisciplinary, socioeconomic, and cross-sector linkages; innovations of interest here may also extend to changes in socioeconomic production processes and arrangements, as well as linkages across economic and policy sectors.

At least one of the chairs will present on site, so the panel will be onsite. Other panel members can participate online.

P02 / Theorizing the future sustainability challenges to environmental and energy policies

Chair : Anthony Zito (University of Newcastle-upon-Tyne)

Second Chair : Ekaterina Domorenok (University of Padua)

Third Chair : John Hoornbeek (Kent State University)

Fourth Chair : Daniel Fiorino (American University)

Session 1

Thursday, June 29th 10:20 to 12:20 (KHS335)

Discussants

Daniel Fiorino (American University)

Environmental Problems and Policy in the Twenty-first Century: A Comparative Analysis of Water Supply and Allocation Policies in Brazil and the United States

John Hoornbeek (Kent State University)

Larissa de Lima Trindade (Universidade Federal da Fronteira Sul)

Years ago, observers of environmental policy described a new generation of environmental problems that required consideration of a new set of policy approaches (Alm, 1992; Ringquist, 1993; Peters & Hoornbeek, 2005, Marengo 2008, Tundisi, 2008, Silva, 2012). Collectively, this new generation of problems was viewed as more elusive than the “end-of-pipe” environmental problems of the Earth Day era. The problems were also viewed as increasingly regional and global in scope, as well as tied to growing concerns about global climate change. Today -- in the third decade of the 21st century -- this new era appears to have arrived. We are no longer just talking about a future world of ever more complex environmental challenges. Increasingly, we are living in it.

Today’s environmental problems appear broader in scope than those of the past, and increasingly inter-related and complex as well. These changing circumstances yield challenges for policymakers and scholars alike, as they seek to identify and develop both new policies for addressing these challenges and approaches for understanding their development and management. In this paper, we seek to better understand this changing set of circumstances by investigating an issue that is becoming increasingly important and salient in the context of global climate change: the use and management of limited water supplies. The water cycle is directly linked to climate. Thus, changes in climate that alter rainfall regimes can affect the occurrence of extreme hydrological events, such as floods and long periods of drought. These events affect water supplies, threatening the supplies of water resources.

This paper focuses on water management in two of the largest federal governance systems in the world: Brazil and the United States. In so doing, we seek to understand water use and allocation policy challenges facing these two nations and ways in which they are responding to the water challenges confronting them. Based on existing data and information, we compare patterns of water use in these two countries, water supply challenges they are facing, and ways they are working to address these challenges. Through these comparisons, we seek to illuminate the (potentially changing?) nature of water management in these two large federal governance systems, discuss ways in which the two nations may derive lessons from each other’s practices and innovations, and offer insights that may aid other federal governance systems in addressing the water management challenges they face in an era characterized by growing concerns about climate change.

As McNeil and Engelke (2014) and others have suggested (Chakrabarty, 2009, 2018, Latour, 2014) we have been living in an (Anthropocene) era of profound change in relationships between human beings and the biosphere. Through this paper, we expect to contribute to our understanding of ways in which federal governance systems may respond to water-related by-products of these changing relationships and ways

that scholars of environmental policy can understand and articulate them. In so doing, we hope to contribute to productive dialogues regarding managing water and its allocation and to scholarly efforts to analyze environmental policies.

Challenging Dominant Values and Paradigms in Environmental and Sustainability Governance: A New Research Strategy

Sina Leipold (Helmholtz Centre for Environmental Research - UFZ)

Sustainability transformations need novel ideas and approaches. Yet these ideas and approaches are as scarce in environmental and sustainability governance as they are in other fields. Currently, two core practices are used to enable novel ideas and develop original frameworks in environmental and sustainability governance: knowledge accumulation and inter- and transdisciplinary engagement.

However, both practices pose risks to innovation. Knowledge accumulation risks emphasising past learning and ideas over innovation. Inter- and transdisciplinary engagement has been criticised for failing to acknowledge and challenge dominant values and paradigms in research. As such, it may also fail to ensure innovation.

We propose a new research strategy to advance analytical, conceptual and empirical innovation in environmental and sustainability governance. We present a narrative-led dialogue for engaging with the values and paradigms of research communities. The dialogue uses narrative as a human communication tool with the unique ability to highlight values and paradigms underlying collective knowledge production. The originality of narrative-led dialogue lies in its ability to facilitate social engagement among scholars in which they can (1) discover, discuss and re-think values, assumptions, categorizations and value conflicts underlying their research, (2) adopt shared narratives, and (3) generate novel ideas and frameworks beyond established communities.

Rain, steam, and speed: the interaction of climate, energy, and environment policy in six countries during the neoliberal era.

Jeremy Rayner (University of Saskatchewan)

Anthony Zito (University of Newcastle-upon-Tyne)

For much of the last thirty years, at least since climate change and greenhouse gas (GHG) mitigation became serious policy issues in developed countries, environment and energy policy have seemed increasingly intertwined. The energy sector has contributed as much as two-thirds of GHG emissions in developed economies during this time and presented obvious low hanging fruit for emissions reductions. Nonetheless, in spite of periodic efforts to bring the two policy sectors closer, for example, by subsuming them both in climate ministries or folding their leading statutory instruments into new climate legislation, they have generally retained distinct identities. Both energy and environment policy pursue objectives that have little to do with climate policy, and are sometimes at least partially in conflict with it, energy affordability, for example, or biodiversity conservation.

Based on a study of the energy and environment sectors in six jurisdictions from the 1970s to the pandemic – Australia, Canada, England, Germany, Italy and the Netherlands - this paper argues that energy and environment present distinctive sectoral governance patterns that resist the erosion of sectoral boundaries and the reorganization of either or both into climate policy, however serious or pressing the latter challenge becomes. Focusing on policy instrument mixes as proxies for governance change, the paper breaks new ground by taking the questions of time and timing as critical to the changing identities of policy sectors. In addition to familiar temporal features such as critical junctures that punctuate distinctive periods of sectoral governance, we distinguish between duration, tempo, acceleration and timing as key dimensions of change (Grzymala Busse 2010), allowing us to describe distinctive timescapes (Howlett and Goertz 2014) in sectors and countries. For much, if not all, of the period under study, both environment and energy policy were deeply influenced by neoliberal ideas and the paper shows how the pace and timing of neoliberal reforms, as well as the duration of the neoliberal era and the tempo of re-regulatory efforts in both sectors and countries, are critical in understanding the relationship between the two sectors and the eventual impact of efforts to refocus both energy and environmental policy on achieving climate targets.

Renewable energy, public action, and ecological benchmarks in Cameroon's energy policy

Yves Patrick MBANGUE NKOMBA (University of Yaoundé II, Faculty of Laws and Political Science)

One of the major challenges of development in Africa in general and in Cameroon in particular remains

focused on energy supplies to ensure, not only the great infrastructural achievements by governments, but also to work on the improvement and sustainability of living conditions of populations. However, the new requirements posed by the respect of environmental measures through the sacredness of the ecological footprint obliges the States, even those of the African continent, to an active participation in the regulation of climate change. This sacredness which puts in opposition the fossil or traditional energies and the new forms of energies allows to point out in hollow the ecologism which is a kind of inevitable system in the orientation of the programs of actions engaged on the energy resources by the public authorities. Thus, ecology, a notion that poses beforehand reflections on the better being, does not evade the questions of economic growth and development which are the priorities of the contemporary States. On the other hand, it is posed by opposing the notion of having more and the nature of development (Simonet, 1999: 6). For all that, these last two notions (ecologism and ecology) are thought of, for the most part, in terms of the capacity to produce and supply energy for the realization of major works and the implementation of the industrial policies of these States. Only, the increased and recurrent glance of the partners in the development on the ecological bases calls the States, in partnership in the projects of development, on the nature and the sources of the mobilizable energy resources to think not only, the realizations of the big works, but also the betterment of the populations. From the above, the ecological aspect considered nowadays as a determining marker in the elaboration of public policies to such an extent that it becomes more and more obvious for governments, including that of Cameroon, not to consider in its energy mix the new energy sources that are renewable energies (RE).

This reflection is articulated around the making of energy policies to test ecological requirements. It takes into account the logic of transition that structures the modes of action of the different actors in the phases of emergence, elaboration and implementation. Using survey techniques that take into account the qualitative, the sequential approach chosen sheds light on how the consideration of living beings is once again invited and imposed by environmental ethics in Cameroon's energy policy.

Keywords: Ecology, energy policy, renewable energy, public action.

P02 / Theorizing the future sustainability challenges to environmental and energy policies

Chair : Anthony Zito (University of Newcastle-upon-Tyne)

Second Chair : Ekaterina Domorenok (University of Padua)

Third Chair : John Hoornbeek (Kent State University)

Fourth Chair : Daniel Fiorino (American University)

Session 2Session 2

Thursday, June 29th 15:45 to 17:45 (KHS335)

Discussants

John Hoornbeek (Kent State University)

Anthony Zito (University of Newcastle-upon-Tyne)

Disintegration and Discourse: Cross-sectoral Story-lines in the German Water and Forest Debates

Sabeth Häublein (Albert-Ludwigs-Universität Freiburg)

Global warming has recently reached many areas of the world in form of extreme weather events and their potentially hazardous consequences. In Germany, both floods and droughts have gained attention in the public debate since their frequency increased within recent years: Disasters such as a flood event in Ahrtal 2021 with many casualties and a severe forest cover loss due to lowering groundwater levels increase the plea for policy solutions. In the scientific literature, latest with the sustainability discourse, the theoretical concept of policy integration (PI) has been advocated in the quest for suitable solutions. Policy integration is often defined as the joint development of policy programs across sectors, especially in face of cross-cutting issues in times of crisis. The main aim of our paper is to investigate whether the discourse amongst policy officials in Germany exhibits signs of cross-sectoral policy integration, now confronted with effects of global warming, between two sectors that have formerly been observed to be fragmented. Germany provides an interesting case in order to approach this research aim for two reasons: First, the water and forest sectors, central to all questions of water quantity and quality in global warming, have been observed to be disintegrated on the national and subnational level; and second, the respective resources of water and forests have only recently shown signs of severe crisis. Assuming that it is too soon to find institutionalized signs of policy integration, it is the aim of our study to analyse the discourse on the forest and water related crisis and see whether story-lines on forest and water exhibit signs of policy integration and/or span across sectors. The analysis is based on Hajer’s (1995) definition of discourse and follows his concept of story-lines, as well as an ideational approach to policy integration as put forward by Cejudo & Michel (2017). Methodologically, the analysis is based on policy documents that deal with the current disturbances related to the water and forest resources. Our results show that the debates on disturbances do not stir story-lines that reach across sectoral boundaries. We could, however, observe a one-sided integration of cross-sectoral concerns as the forest sector frequently addressed water concerns under the umbrella of forest ecosystem services. Finding a low amount of policy integration in the discourse, we discuss the lack of integrative efforts as well as critically evaluate the normativity of the concept of policy integration in general, as well as specifically in response to the disasters and sectors analysed.

Rethinking Democratic Environmental Governance: A Case Study Of Three Environmental Constitutional Amendments And Their Impact of Rectifying Presentism In The Democratic Process

Joshua Ash (University of Pittsburgh - Graduate School of Public and International Affairs)

Environmental governance in modern democracies is inherently structured and steered by the democratic

process. Elected officials in legislative, executive, and judicial roles all have nuanced influences over how the environment is used and protected. Similarly, the normative values of the electorate concerning environmental issues can steer who is elected. On one hand, this system has engrained incentives to keep environmental governance equitable and in line with normative values of the time (tabling the influence of politically powerful forces in more plutocratic democracies). However, many of those most influential drivers of these values and norms are rooted in the present (Rawls 1971). Democracies have failed to successfully solve some of the most challenging long term modern societal challenges. Future generations have been particularly disenfranchised by inheriting a global environment with less resources, less biodiversity, and climate instability.

This merits a deeper dive into the mechanisms and processes which shape democratic environmental governance. What can democracies do to confront presentism? How does this into the current legal and regulatory frameworks that shape environmental governance? This research tackles this inquiry with an examination of one of the most fundamental aspects of democracy – constitutional rights.

Constitutional rights are pillar aspects of democracies, providing a basis for inclusion and participation into the democratic process. Countries around the world have amend their constitutions to contemplate the rights of future generations, rights of the environment, and rights to a clean environment. Intergenerational justice experts believe these kind of constitutional amendments can spark discussion and deliberation confronting short-termism in proposed policies, promote citizens' support for long-term policies, and signal the importance of intergenerational equity matters (González-Rico and Gosseries 2016). However, these theories are largely untested, given the novelty and freshness of these kind of rights.

The United States, and its array of 50 similar but unique state constitutions and unique state governments offer an opportunity to learn if and how these kind of constitutional amendments influence intergenerational justice. By studying/ comparing the few states with constitutional environmental rights amendments, we may be able to learn how these rights translate into tangible policies, actions, or other outcomes. This study utilizes a preliminary research on environmental constitutionalism, caselaw, intergenerational justice; semi-structured interviews and process tracing with state officials and environmental regulators in Pennsylvania, Hawaii, and Montana; and archival research into the legislative history of each constitutional amendment. In doing so, this research examines if and how "environmental" constitutional rights which reference future generations can significantly improve upon the functionality of the democratic process and its ability to resolve issues of intergenerational justice.

Multi-Staged Analysis of Issues Affecting Energy Efficiency based Corporate Social Responsibility Implementation in Manufacturing Sector of Emerging Economies: A Chinese Perspective

RAHIL AHMED (Air University)

Global concerns about rising primary energy consumption, associated increases in greenhouse gas emissions, and resource uncertainty have pushed energy efficiency to the top of most national policy agendas. Energy savings and energy efficiency have been identified as variables that are significantly connected with Corporate Social Responsibility (CSR) initiatives. Energy is also a key factor in economic and social growth, prosperity, and safeguarding a nation's long-term development; hence, energy efficiency concepts can help operationalize CSR. Certain factors might either limit or enhance energy efficiency and CSR. As a result, this research aims to identify the barriers, drivers, and solution methodologies of sustainable manufacturing and provide an implementation framework to encourage energy efficiency-based CSR implementation in China.

Based on our objectives, our initial goal is to investigate, assess, and model the barriers to energy efficiency-based corporate social responsibility (EECSR)
implementation. Second, analyze, evaluate, and model probable drivers of EECSR implementation. Third, prioritize methods for overcoming EECSR hurdles. The final goal is to develop an implementation framework based on study findings to help China's manufacturing industry implement EECSR. To meet the study's aims, it employed multicriteria decision-making methods (MCDM), which enable choosing the best option from a set of choices by analyzing them against various criteria. MCDM has shown to be a popular and effective methodology for investigating, evaluating, and ranking decisionmaking initiatives. Integrated Structural Modelling (ISM), Cross-Impact Matrix Multiplication Applied to Classification (MICMAC), Fuzzy Analytic Hierarchy Process (FAHP), and Fuzzy Technique for Order of Preference by Similarity to Ideal Solution (FTOPSIS) are the MCDM approaches used in this study.

Results revealed that the most significant barriers that need to be addressed are: "Priorities for non-EECSR activities more important", "the decision chain is complex", and "Lack of competence to implement EECSR without external consultants". The most important drivers that lead to EECSR implementation are: "High

demand from consumers and NGOs", "High cost of energy input", and "Government regulations or pressure". Top-ranked solutions that are important to remove barriers of EECSR implementation are: "EECSR adoption encouragement by concerned environmental protection authority (EPA)" and "Adjust management systems and processes as per EECSR requirements". This investigation could help the manufacturing sector determine which individual factors they should focus on when adopting EECSR to enhance specific indicators such as quality, environment, and finance. During EECSR implementation, top leadership must be fully aware of the most and least significant drivers and their effects on other drivers. The EECSR strategy is still in its early stages, particularly in developing nations. There is more room to analyze and investigate other drivers, impediments, and solution techniques. Furthermore, the approaches employed in this study were expert and stakeholder-based. Therefore the analysis performed in this study may be influenced by the expert's judgment, knowledge, and experience. This research aims to increase the manufacturing sector's sustainability, quality, and productivity in developing nations like China through EECSR.

Public discourse on SDG7: Examining hashtag co-occurrence networks and social justice messaging on Twitter

Yutong Si (Northeastern University Boston Campus)

The United Nation's Sustainable Development Goal 7 (SDG7) calls for "affordable, reliable, sustainable and modern energy for all" by 2030. To date, little is known about public discourse on SDG7. This study is the first research utilizing social network analysis (SNA) and computational methods to identify central topics associated with SDG7 and examine social justice messaging related to SDG7 on Twitter. The data used include 6,059 tweets containing #sdg7 from Jan. 1 to June 30, 2022, resulting in a hashtag co-occurrence network with 2,769 nodes and 22,667 edges. Based on centrality measures, this study shows that: 1) SDG13 (Climate action), SDG5 (Gender inequality), and SDG3 (Good health and well-being) are the most central SDGs related to SDG7, 2) Solar energy appears to be the most important renewable energy technology which received much public attention in the discourse, and 3) Africa is the only geographic area that has been hotly discussed among the top 30 hashtags with high eigenvector centrality. To examine social justice messaging related to SDG7, ego networks of 40 justice-related hashtags (i.e., egos, such as #justice, #equity, #inclusion, #leavenoonbehind, #forall, etc.) have been constructed, showing that despite some social justice messaging such as the discussion on gender inequity, a variety of other justice issues such as racial justice haven't received much public attention. A further comparison between 40 justice-related egos and top 40 central nodes identified in ego networks reveals that 1) justice considerations are not prioritized and 2) important transition perspectives (e.g., energy justice or just transition) have not been incorporated in public discussion on SDG7 on Twitter. This paper sheds light on essential topics around SDG7 and calls for more justice considerations to arrive at more holistic formulation and implementation of policies that advance SDG7.