P18 / Environmental Policy and Polarisation: Pathways, Futures and Strategies

Topic : ENVIRONMENT, SDGs, ENERGY

Chair : Sina Leipold (Helmholtz Centre for Environmental Research - UFZ)

Second Chair : Anran Luo (Helmholtz-Centre for Environmental Research)

GENERAL OBJECTIVES, RESEARCH QUESTIONS AND SCIENTIFIC RELEVANCE

Environmental policies have sparked a wide range of polarising debates, from critical scepticism of capitalism and growth to depoliticised techno-optimism, green growth advocacy, and calls for moderate regulatory reform (Bäckstrand & Lövbrand 2006; Leipold et al. 2023). These discussions are further complicated by the need for global cooperation among diverse actor groups with varying perspectives on sustainability and environmental justice (Lenzi et al. 2023; Luo et al. 2021). At the local level, polarising issues include public outcry over wind turbines or solar farms, as well as opposition to restrictions on consumer choices, such as plastic straws.

In this context, our panel focuses on the politics of sustainability transformations across time and scale, and how they shape imaginaries of future opportunities and challenges for environmental cooperation and reconciliation. We are particularly interested in longitudinal and cross-case empirical analyses, as well as theoretical and methodological work that provide guidance and orientation for such work.

With this perspective, the guiding questions for this panel include, but are not limited to:

? (How) Do stakeholders — policy-makers, industry representatives, civil society or academics — imagine transformational pathways toward resource sustainability in policy fields such as energy, waste, chemicals, or circular economy?
? How do such imaginaries influence policy interventions today?

? How can long-term (historical) policy analysis help us assess strategies and pathways for approaching environmental challenges amidst polarisation?

? What can such analyses tell us about myriad dimensions of environmental justice?

? (How) Can short-term environmental policies address current challenges while connecting to future societal imaginaries, visions, and transformations?

Within this panel, we invite both empirical studies and theoretical contributions, with disciplinary as well as interdisciplinary work welcome.

References:

Bäckstrand, K., & Lövbrand, E. (2006). Planting trees to mitigate climate change: Contested discourses of ecological modernization, green governmentality and civic environmentalism. *Global Environmental Politics*, *6* (1), 50-75.

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enough for environmental cooperation – Lessons from the China-EU cooperation discourse on circular economy. *Global Environmental Change*, 71, 102389.

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In this light, research questions for this panel include, but are not limited to:

? (How) Do policy, industry, civil society or academic stakeholders imagine transformations towards resource sustainability e.g. through energy, waste, chemicals, circular economy policies?

? (How) Can research address or mitigate polarisation of environmental policy debates?

? How can inter- and transdisciplinary research include unheard or marginalised voices in polarised contexts?

? How can short-term environmental policies address current challenges while connecting to future societal imaginaries, visions and transformations?

? How can we explore the strengths and weaknesses of long-term environmental policy analysis to assess new strategies that tackle emerging challenges?

? What can we learn from histories of polarisation, cooperation and reconciliation for environmental policy?

Within this panel, we invite both empirical studies and theoretical contributions, with disciplinary as well as interdisciplinary work welcome.

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Session 1Policy Cases and Polarization

Thursday, July 3rd 08:00 to 10:00 (C1)

Bridging Policy Polarization: Developing a Sustainable Circular Economy for Japan's Fashion Industry through Extended Producer Responsibility Scheme

Mitsuyo Sugimoto (Johns Hopkins University, SAIS Washington DC)

Polarization in environmental policy has hindered the realization of a circular economy (CE) model in the fashion industry. In Japan, the government has been strengthening regulations, such as introducing stringent environmental standards and an Extended Producer Responsibility (EPR) system, to reduce the environmental impact of apparel companies. On the other hand, apparel companies are cautious about stricter regulations, fearing increased costs and reduced market competitiveness. This conflict of interest makes it difficult to establish an effective CE framework for fashion waste. This study aims to develop a sustainable circular model in Japan by benchmarking policies in the European Union (EU) while considering the polarization between the government and the apparel industry.

Currently, Japan lacks a textile- and apparel-specific EPR system, which is essential for achieving a sustainable CE. This study examines the EPR systems in France and the Netherlands, analyzing their structures, challenges, and applicability to Japan. Based on the Organisation for Economic Co-operation and Development (OECD) guidelines, which define EPR as a policy extending producers' responsibilities to the post-consumer stage, this research evaluates two critical aspects of producer responsibility: physical and financial.

Furthermore, it assesses governmental implementation mechanisms, including target setting, product collection, economic instruments (e.g., deposit systems, disposal fees, and taxation), and final recycling rate policies. By conducting case studies, this research explores how apparel companies in France and the Netherlands practice the three Rs (reduce, reuse, recycle). Additionally, it examines the economic burden and market impact experienced by companies implementing environmental impact reduction measures, providing insights into policies applicable to the Japanese apparel industry.

This study aims to facilitate collaboration between the government and apparel companies, mitigate polarization, and establish an effective circular model. By bridging the divide between the public and private sectors, it proposes strategies to enable a sustainable transition.

Aligning Sustainability and Competitiveness: A Science-Policy Exploration of Chemical Policy Debates

Henry Hempel (Helmholtz-Centre for Environmental Research (UFZ))

The European Union's (EU) central chemical regulation REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) is approaching a critical juncture with the announced revision in 2025. EU chemical policy stakeholders hold differing positions and expectations towards the legislative change. Stakeholders are debating the timing, direction, and nature of the proposed amendments. For example, industry associations emphasise the high safety standards enabled by REACH, which, in their view, make quick decisions unnecessary. In contrast, environmental organisations criticise what they see as deliberate postponement of the revision by industry associations, as well as the adverse effects of chemical pollution on human health and the environment.

These positions illustrate the politics of aligning sustainability and competitiveness in the EU chemicals sector. Using a qualitative narrative approach, this paper operates at the interface of science and policy,

aiming to engage with different discursive positions and expectations of stakeholders, as well as the dynamics between them, to anticipate future policy directions early on. In this light, key questions include:

· What positions and roles do EU chemical policy stakeholders adopt on the REACH revision?

· What insights do stakeholder debates offer for shaping the future of EU chemical policy?

Drawing on a Discursive Agency Approach, this study combines interviews, stakeholder workshops, and policy document analysis. To accompany the portfolio of policy decisions with robust evidence, the research seeks to identify potential weaknesses and opportunities in the REACH revision process before the final legislation is enacted. The findings offer not only a rich, nuanced exploration of potential policy pathways but also aim to foster dialogue and contribute to actionable guidance for improving chemical regulation in the EU.

Towards Effective Regulation of Micro- and Nanoplastics in Europe?: Progress, Challenges, and Future Directions

Paula Roos (Helmholtz Centre for Environmental Research - UFZ)

Micro- and nanoplastic pollution is still being studied and gaining attention as a growing environmental and public health concern on a global scale. The scientific uncertainty of the risks and possible hazards of micro- and nanoplastics makes it an important new frontier for environmental and public health policy debates. While the European Union (EU) has introduced regulations on broader plastic production, usage, and waste management through initiatives such as the Single-Use Plastics Directive and the Marine Strategy Framework Directive, the effectiveness and scope of these measures are contested. Regulations specifically targeting micro- and nanoplastic remain fragmented. To assess the effectiveness of existing regulations as well as potential deficits, this study presents a review of relevant scientific literature addressing micro- and nanoplastics in Europe, identifying significant advancements and persistent shortcomings.

This paper will provide a literature review of 94 scientific papers focussing on micro- and nanoplastics related to policy. It aims to report scientific knowledge of global micro- and nanoplastic policies and identify global best practices, innovative approaches as well as gaps. These are then used to compare insights and recommendations from different regions, allowing for an evaluation of their relevance and implications for the EU’s regulatory trajectory.

With presenting the scientific voices on the field of micro- and nanoplastics, the paper aims to identify key policy areas, instruments and recommendations from scholars studying the field from across disciplines. These are synthesised to highlight recurring trends, themes and gaps in micro- and nanoplastic governance named in the literature and identify patterns. Furthermore, the findings may allow to open up and present different policy options that could guide future reforms, promoting a more comprehensive and progressive framework for regulating micro- and nanoplastic pollution in Europe.

Key words: Microplastic, nanoplastic, EU, regulations

From Ecological Modernization to Strategic Autonomy: The European Union’s Raw Materials Policy and the Future of Resource Justice

Theresa Herdlitschka (Friedrich-Schiller Universität Jena)

In recent years, the European Union’s raw materials policy has undergone a profound discursive shift. Increasingly, concepts like geopoliticization and securitization have taken precedence, marking a departure from the ecological modernization paradigm, which aimed to balance economic growth with environmental sustainability. Instead, the focus has shifted toward a new narrative of strategic economy, centered on defense, resilience, and autonomy.

At the same time, it has become increasingly evident that mining projects, along with the extensive infrastructure they require, inflict significant and often irreversible harm on both the environment and local communities. As the global demand for critical minerals essential to the green transition—such as lithium, nickel, and dysprosium—continues to surge, the implications of this evolving discourse on strategic autonomy take on heightened urgency. In particular, pressing questions arise regarding the intersections of justice, sustainability, and responsible resource management. How societies balance the imperative of securing critical raw materials with the need to mitigate environmental degradation, uphold human rights, and minimize overextraction will be central to shaping a truly sustainable future.

This paper examines the influence of the strategic autonomy narrative, most prominently institutionalized

through the Critical Raw Materials Act (CRMA), on the conceptualization of resource justice and the integration of environmental and social considerations in EU policymaking. It seeks to answer three key questions:

1. How does the strategic autonomy narrative shape EU approaches to environmental and social regulations in the mining sector?

2. To what extent does this narrative challenge or reinforce the EU's previous commitments to resource justice?

3. What new opportunities and challenges does this narrative bring for building socially just post-growth futures?

To address these questions, this study conducts a discourse analysis using interview data from stakeholders of the CRMA, including representatives from politics, academia, industry, and civil society. Preliminary results suggest that geopolitical and economic self-reliance marginalizes resource justice and sustainability, reinforcing extractivist logics and inequalities. However, findings also reveal that a network of civil society actors engaged in raw materials policy at the EU level has recently developed a new narrative of raw materials transition, emphasizing justice, equity, and ecological limits. Further analysis is planned to identify the discursive dynamics between these two narratives, as well as their potential impacts on fostering or obstructing alternative social imaginaries of the green transition.

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Session 2Novel Approaches for Addressing Polarization

Thursday, July 3rd 10:15 to 12:15 (C1)

Comparing Indigenous Culture-making in the Russian Arctic and the Chinese Tibet: Indigenous Narratives and Green Growth Advocacy

Ksenia Gerasimova (Higher School of Economics S)

Indigenous communities are vulnerable groups who stand at the first line of ‘social-climatic tipping points’ (Graham et al, 2023). By participating in the transnational advocacy networks activists representing indigenous communities could channel and exchange their information and services. This process has created a coalition of state and non-state actors, ‘bounded together by shared values, a common discourse and dense exchange of information and services’ (Keck & Sikkink, 1999, p.89). This might have been the most sucessful strategy which allowed bargaining with more powerful actors. In the second decade of the XXI century anti-NGO measures and shrinking civic space available for civil society organizations have been recognised as a global phenomenon (Buyse, 2018). In this paper we discuss how indigenous communities, without support of transnational green NGOs, by culture-making can still carve some political space to let their voices heard in the environmental politics and make powerful central states to acknowledge their needs without direct confrontation.

As indigenous communities survival strategies often come in opposition to the rhetoric of capitalist extractivism supported by the industrial lobby, they are often excluded from policy agenda-setting in national environmental policies. China and Russia are two good examples, where national NGOs were brought under the state control, leaving little space for transnational activism and opposition. At the same time, indigenous knowledge and its interpretation is an asset that indigenous groups as exclusive holders can use to be included in the environmental policy-making processes.

After the parallell field work in the Russian Arctic and the Qinghai-Tibetan Plateau (2018-2025), we have identified many similarities in these two cases and then found that both communities use their culture as a tool to reach out to audiences beyond local and national boundaries to talk about threats to their natural environment and engage with the state to address their needs.

For illustrations of this process we analyse the phenomena of the Russian Arctic indigenous literature, with its comtemporary authors, such as Anna Nerkagi, the only living nomadic author, who is still migrating pastures; and the contemporary Tibetan filmography. After becoming internationally acclaimed author, Nerkagi also acted as a green growth advocate, who inspired the Russian Government to launch the international Arctic station ‘Snowflake’ in order to promote international cooperation in research and implementation of sustainable technologies in the Arctic, alongside the traditional Nenets camp. Pema Tseden’s films narrating the changes in Tibetan natural and social environments won many international awards and fostered a new generation of Tibetan filmmakers known as the “Tibetan New Wave”, who lobby environmental and cultural conservation in Tibet in the terms equally acceptable to the Chinese government and the oppositionary Tibetan diaspora abroad.

Thus, we aim to show that indigenous culture-making turned out to be a relatively safe but powerful tool to lobby green development strategies for indigenous communities and can potentially be used to reach out further compromises in the national management of natural resources.

Turbulent Waters: Navigating Narratives in Sustainability Transformations

Sina Leipold (Helmholtz Centre for Environmental Research - UFZ)

Environmental policy debates are increasingly polarised, oscillating between green growth optimism,

regulatory reform advocacy, and deep scepticism toward technological or capitalist solutions. Amid these tensions, narratives serve as a powerful yet contested tool to guide sustainability transformations. This paper explores how stakeholders navigate and shape narratives in socio-technical landscapes to address challenges such as resource sustainability, environmental justice, and collective action.

We link narrative and discourse research to sustainability transformations within regimes, niches, and landscapes, demonstrating how actors achieve agency through strategic storytelling while negotiating entrenched institutional constraints. External events, akin to sudden "storms," provide opportunities to disrupt dominant narratives, reshaping imaginaries of sustainable futures.

Our findings highlight the potential of collaborative story-building as a strategy for navigating polarised debates. By fostering shared visions and coalitions, narratives can help bridge divides and chart inclusive pathways for addressing short-term policy challenges while aligning with long-term societal transformations.

Climate Change: For and Against Economic Growth

John Mikler (The University of Sydney)

The de-growth movement argues that economic growth is the central cause of the climate crisis. Societies must find happiness without an ever-expanding economy. Either economic growth or a pristine environment are possible, but not both, or at least the relationship between the two is problematic and capitalism makes it untenable. Therefore, de-growth adherents demand a revolution in economic relations and potentially an end to capitalism. Everything must change if we are not to reap the whirlwind of a catastrophe that represents an existential threat to the world as we know it. This paper takes an approach informed by comparative and historical institutionalism to economic relations, incorporating a focus particularly on governance, society and material motivators, to demonstrate how strategic policy could better align growth with environmental sustainability. In the process it critically weighs up the arguments across the spectrum from those who argue everything must change to adherents of the status quo, in an attempt to reach a middle ground. The conclusion reached, perhaps surprisingly, is that those on either end of the spectrum are too conservative. They share a static vision of capitalist relations, seeing things as they are (or were) rather than as they might be. A dynamic, more progressive, approach that incorporates institutional evolution, and that embraces the potential for change, is both more desirable and necessary to head off what will otherwise be certain doom.