

# T16P02 / The Future of Environmental Policy in a Time of Global Crisis

**Topic :** T16 / Sustainable Development and Policy

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

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

## GENERAL OBJECTIVES, RESEARCH QUESTIONS AND SCIENTIFIC RELEVANCE

From 1970 to 1995, global and national environmental policies spread throughout the OECD countries and beyond. However, the global agenda, which seemed ripe and ready to devote political resources on this issue, has faced substantial political and economic crises. These realities have led countries held to be pioneers, such as the United States and the EU and the EU member states to be more equivocal in their efforts. Both policy-makers and students of environmental policy need to take stock of the trajectories of environmental policy and how best to study it. One set of issues involves the question of other global priorities, particularly in light of the global economic recession but also issues of political failings that have pushed the environment down the policy agenda. The second set of issues is the nature of the contemporary environmental problems – much of the ‘lower hanging fruit’ has been plucked in terms of environmental policy in the United States and Europe. It is the more intractable and ‘wicked’ policy problems such as climate change and diffuse sources of pollution that remain. These are increasingly being tackled by the rise of new economic concepts such as the bio-based and the circular economy.

Third, in the context of greater challenges to the Western democratic political system, trust in the political system focused on certain liberal characteristics ameliorated by government intervention has been increasingly contested.

There is a strong comparative dimension to this proposal as there is a real question of how these trajectories are seen outside Western Europe and North America where strong industrialising logics create their own dynamics. Are the BRIC and other industrialising states merely on the same wave of environmental policy development and governance trajectory or does it differ? And do Western countries react to these trajectories with new economy-oriented than environmental policies?

This proposal asks a series of questions. If we accept that there is a change in approach of environmental policy in the last 10 years, what are the drivers behind this change? What new concepts of policy are developing and how? Are there multiple trajectories that global and national environmental regimes may take? How reversible is environmental policy and what are the potential forces that might lead to future progress? In terms of studying these questions, what insights do various methodological offer, such as large N empirical analyses versus post-empirical assessments of individual cases. Is there a misfit between our current theoretical tools and the key developments and patterns in environmental policy? How much weight should be given to new approaches? Is a greater understanding of other disciplines (e.g. law, biosciences) required?

## CALL FOR PAPERS

This panel addresses the question of the future of environmental policy-making in the face of the global economic crisis and other challenges. The panel welcomes papers that take a strong comparative dimension in terms of comparing countries and regions, as well as policy making over the time. All geographic regions are welcome. The panel welcomes a range of theoretical and methodological approaches to this study. The panel papers should assess the question of what are the drivers of environmental policy that we have seen in the last ten years. How has change happened and who or what is behind this change? What is the trajectory for environmental governance and policy-making? The panel welcomes papers that acknowledge that many of the questions may reside at multiple levels of analysis, such as the global level but also the regional, national and sub-national levels. Is this change being concentrated in particular political arenas and why? Where do new concepts like the bio-economy come from and how do they change environmental policy?

The panel seeks to collect a range of comparative perspectives on the trends and future of environmental policy making. Are the governance trends that we see in the United States and the European Union, such as the rise of emissions trading systems, replicated in other parts of the world? What factors are pushing

this? How reversible is the environmental policy trajectory in the different regions of the world?

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## Session 1 European Perspectives on Environmental Policy

Friday, June 30th 08:15 to 10:15 (Block B 5 - 4 )

### Discussants

Sina Leipold (Helmholtz Centre for Environmental Research - UFZ)

### Between Europeanization and Renationalisation: The Conflicted Governance of EU Energy Policy

Alexander Bürgin (Izmir University of Economics)

Kai Oppermann (University of Sussex)

The main aim of the European Commission's strategy for an Energy Union, published on 25 February 2015, is to achieve three related goals: (1) a fundamental transformation of Europe's energy system with an integrated continent-wide energy system allowing unobstructed cross-border energy flows, based on competition and the most efficient resource use, (2) a low-carbon and climate friendly economy, and (3) improved energy security. While the strategy's general nature facilitated endorsement by the member states in March 2015, the adoption cannot be considered to reflect a consensus over the concrete measures to be taken. On the contrary, the Energy Union's goals are jeopardised by member states' diverging interests and also their reluctance to transfer significant competences to the EU level. Regarding the promotion of renewable energy and energy efficiency, the tendency in recent years has been to move away from nationally binding targets. As for market integration, the past years have witnessed a growing tension between the commitments to the construction of a European internal energy market on the one hand, and, on the other, the increasing intervention of member states in their home markets, either to support renewable technology to lower carbon emissions, or fossil fuel electricity generation to guarantee supply security. In the key issue of energy security, member states have set clear limits on the Commission's authority/capacity to supervise bilateral energy agreements.

Against this background, in this paper, I explore the main drivers of the EU's energy and climate policy over the last decade, and address in particular the role of the European Commission. The aim is to assess whether, and if so, how the Commission is able to overcome the governance problem of its limited formal powers in energy policy and the member states insistence on their treaty right to determine their own energy mix. To this end, the following five aspects are analysed: the effects of political and economic context factors, the impact of Commission President Juncker's organisational changes on the Commission's energy and climate policy related legislative proposals, the effects of soft modes of governance such as framework rule-making/benchmarking, and the Commission's attempts to stipulate regional cooperation and policy learning among member states.

This research is based on two main data sources, an evaluation of policy documents, and interviews with key actors from the European Commission, Council and the European Parliament. Overall, the article aims at contributing to the debate on the main drivers of the EU's energy policy, and the literature on new governance trends in the EU.

### Governing through enabling? Global environmental change and EU voluntary networks

Ekaterina Domorenok (University of Padua)

Whereas alarming impacts of climate change have dramatically increased around the globe, there is still a

lack of effective policy solutions able to meet complex environmental challenges at both international and domestic levels. Remarkably, the attention given to environmental issues in political agendas has further declined as a consequence of the recent economic crisis, due to the reduction of public spending and a paramount priority attributed to economic and social concerns. In such a context, the relevance of bottom-up commitments for coping with climate change has regained attention in core international agreements, as well as in specific policy programmes, in particular in Europe.

In fact, in contrast with the traditional regulatory measures that have prevailed in EU environmental policies over the past decades, a number of new measures have been promoted within the current strategy of climate policy mainstreaming, being underpinned by a cross-sectoral approach and widely relying on self-regulation and financial incentives. Several actions undertaken by these programmes target urban areas specifically, in order to enhance their potential for mitigation and adaptation measures by strengthening local public-private partnerships in low carbon projects (Jeronen Van der Heijden 2014), as well as by activating transnational networks, which enable learning and cooperation among municipal authorities in order to develop common policy solutions to climate change problems.

This paper examines the case of such a network - the Covenant of Mayors (CoM) - which was launched in 2008 in order to encourage local efforts in the implementation of the EU climate package objectives. With the aim of strengthening local awareness of the relevance of cross-sectoral policy measures for the reduction of CO<sub>2</sub> emissions, the CoM has established a mechanism of diffusion of knowledge, informal monitoring and benchmarking, relying on mutual trust and voluntary commitment of participating municipalities and other sub-state authorities.

Drawing on a polycentric governance approach (Ostrom 2010), this study analyses the implementation of the CoM in four countries (Germany, Italy, Poland and the UK) with the aim of understanding to what extent it has encouraged the action of local authorities within the EU climate change strategy and which factors have determined its success and failures in different contexts. The following three questions will be addressed: what has been the role of policy actors in the scenario of usage of this instrument in different national contexts? What kind of policies and governance architectures have emerged as a consequence of the implementation of this initiative in four countries? To what extent are policy variables (such as knowledge, expertise, resources, etc.) relevant for explaining the success and failures of the CoM?

## **The Impact of the Economic Crisis on Renewable Energy Policy Mixes: A Comparative Analysis of Macro-, Meso- and Micro- Policy Dynamics**

Sebastian Sewerin (Delft University of Technology)

Tobias Schmidt (ETH Zurich)

While research on renewable energy policy is abundant, the effect of the recent economic crisis on policy trajectories has not been analysed systematically. How instrument choice and policy design decisions are affected against the background of economic and fiscal challenges remains poorly understood. Also, while researchers acknowledge the necessity of focusing on policy mixes instead of individual policy instruments to fully understand long-term policy dynamics, assessing these mixes in a comparative manner remains challenging. The main reason for the absence of systematic and comparative studies of policy dynamics is a lack of comparative policy data. To overcome this research gap, we build on Schaffrin et al.'s (1,2) Index of Policy Activity, an encompassing measurement approach that enables the production of such comparable data sets. Applied to nine countries (Australia, Austria, Canada, Germany, Ireland, New Zealand, Spain, Switzerland, United Kingdom) and over a time period of seventeen years (1998-2014) we produce a dataset of dynamics in these countries' policy mixes related to renewable energy. We are interested in the impact the economic crisis starting in 2008/9 had on the trajectories of renewable energy policy mixes. To study this issue, we investigate three research questions across three policy levels, the overall policy mix (macro-level), individual policy instruments (meso-level), and policy instrument designs (micro-level):

- (i) Which type of policy dynamics can be observed before and since the start of the economic crisis in complex policy mixes?
- (ii) How do these dynamics differ between the various policy instrument types constituting these mixes and applied across countries?
- (iii) For specific instrument types, which policy design changes can be observed?

The first question investigates the general direction of overall policy mixes in the form of dismantling, stasis and expansion. The second question aims at uncovering specific trends in the dynamics of policy instrument types. The third question aims at shedding light on the micro-dynamics of dismantling and expansion on the policy design level that drive the overall dynamics at the instrument and mix level.

Taking a comparative perspective, we contribute to opening up the primarily case-study based environmental and energy policy literature to quantifiable policy data. Also, by taking a policy mix

perspective, we go beyond existing studies focusing on individual policy instruments. Empirically, we find that renewable energy policies are remarkably 'sticky', i.e. policy approaches remain more or less intact even in the face of economic challenges. However, we identify two countries, Ireland and the UK, that display clear patterns of policy dismantling.

Even though the analytical focus of our paper is on establishing patterns across cases and over time, and not on causal analysis, our approach enables future research to recognize and disentangle the multidimensionality of policy change by recognizing that different levels of policy may change (or remain stable) due to different causal processes. Overall, we contribute to expanding the toolbox of research interested in long-term policy change and our approach can serve as a blueprint for further comparative studies into the long-term trajectories of environmental policy mixes.

1 Environmental Politics, 23(5): 860–883

2 Policy Studies Journal, 43(2): 257–282

### **What does Brexit mean for EU Environmental Policy?**

Anthony Zito (University of Newcastle-upon-Tyne)

Andy Jordan (Tyndall centre)

EU environmental policy has expanded significantly since the 1980s when it became an area of formal competence: environmental policy was a key component of the extension of the single market as removing barriers to trade required common environmental standards to guarantee a level playing field across the Member States. Environmental policy has thus become a central to processes of integration exemplifying spillover across policy sectors. However, since the early 2000s EU environmental policy activity has started to stabilise with fewer new policies being brought forward, and there have been calls for deregulation in this sector led by the UK government, which has sought more generally to limit EU competence. The UK vote to leave the EU 'Brexit') has been heralded as the start of a process of European disintegration as the EU project falters losing popular and political support. Yet the evidence from the environmental policy sector belies the rhetoric of disintegration: deregulation has yet to happen in systematic and meaningful fashion and the UK will almost inevitably find itself having to implement at the very least environmental regulations with single market implications and possibly a whole lot more besides. Moreover, Brexit removes a powerful voice in favour of reform and deregulation from the Council.

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## Session 2 Global Dynamics and Voices from the South

Friday, June 30th 10:30 to 12:30 (Block B 5 - 4 )

### Discussants

Anthony Zito (University of Newcastle-upon-Tyne)

### Moving towards a circular economy state: The case of automotive Industry in India

NITISH ARORA (The Energy and Resources Institute)

Shilpi Kapur Bakshi (THE ENERGY AND RESOURCES INSTITUTE)

Souvik Bhattacharjya (The Energy and Resources Institute)

India has been experiencing one of the highest motorization growth rates in the world over the last decade. There were over 200 million motorized vehicles registered by 2015. Average age of a vehicle's life is considered to be between 10 and 15 years, after which they are expected to enter the retired /end of life phase. The main issue then arises are linked to recovering resources, particularly metals and minerals from these end of life vehicles and assigning an economic and environmental value to the same. Central Pollution Control Board (CPCB) estimates suggest that more than 8.7 million vehicles have reached the end of life status by 2015, out of which 83% are likely to be two wheelers and the number is estimated to rise to 21 million in 2025. Since there are large quantities of metal and other materials in the ELVs that are no longer fit for transportation purposes, these resources if salvaged or recycled, can be once again fed into the economy, helping close the loop and reducing the demand for virgin raw material.

The European Union (EU), Japan, Korea and Taiwan present examples of countries having a product-oriented legislation has been initiated to control the recovery of End-of-life Vehicles (ELVs). These countries have recognized that a distinct ELV law is necessary within the framework of the extended producer responsibility (EPR) framework and have reported success in controlling the number of ELV off the road. Also the evolving global environmental awareness, shrinkage in availability of landfill area, and depletion of natural resources are among the factors which have driven a number of developing countries in adapting strategies towards product recovery.

Currently the retired vehicles in India usually end up in the unorganized sector where after dismantling; the auto components are either refurbished or sent for recycling. The efficiency of material recovery is quite low as the workers are not trained and lack the requisite equipment to dismantle and recycle auto components. Although certain regulations have been introduced for better ELV management, yet, lack of standard operating procedures, ambiguity in deregistration of vehicles, poorly informed consumer practices, prevent effective Management. This calls for revisiting and understanding existing practices and the policies, and explore opportunities that not only makes economic sense, but can create social values and prevent environmental degradation. These countries present learning's in terms of what is required for a successful implementation of an ELV law. In this paper, the authors propose to carry a SWOT (Strengths, Weaknesses, Opportunities and Threat) analysis to build up on the strengths, address the weaknesses and threats and tap the opportunities for supporting a circular economy in the automotive industry in India. The results from this analysis will then be used in designing a sustainable business model that will help identify the structure of stakeholder engagement required for generating economic profitability and social benefits to the different stakeholders, in addition to the preservation of the environment.

## **DYNAMICS OF CLIMATE POWERS: POLITICAL INSTITUTIONS AND ECONOMIC COUNTRIES KEY IN CARBON CYCLE**

Oscar Borja (New York University)

Izabel Borja (Universidade Federal do Pará)

Tiago Luedy (Federal University of Amapá)

Since the end of the last glacial cycle – the Pleistocene, about 10,000 years ago – biogeochemical and atmospheric factors have varied in the planetary boundaries. The following period – the Holocene – coincides with the anthropogenic era, and, even if the initial influence of humankind was restricted, from the 18th century on – the Anthropocene – and especially in recent decades, the increasing global consumption of energy, goods and services has provoked a systemic environmental disruption zone, reducing safe operating space for humanity. By assuming that the climate issue is central to the development of future generations, especially in emerging and poor countries, the paper presents an analysis of the relation between political and economic institutions and public policies concerning solid waste management. Human development is not only understood as the interaction of economic, political and social aspects in favor of the improvement of quality of life indicators, but also as the existence of opportunities to expand the capabilities of access to resources, especially by vulnerable groups. Conceptually, Acemoglu and Robinson (2012) offer a perspective that provides the foundation to consider as fundamental the need for building inclusive political and economic institutions to mitigate and adapt the risks of climate change on human development and for combating predatory elites. In the field of International Relations, the evolution of three central civilizing vectors of contemporary society (globalization, the international system of conservative hegemony and climate change) are analyzed. Their synthesis has conducted the paper to the aim of answering the following research question: what is the influence of the quality of political and economic institutions on public policies for solid waste management? Such a question has a background political inquiry: why do nations fail in solid waste management? Failure here is associated to a demand for an unachieved national collective security whose adverse results exceeded the boundaries of the nation state. How reversible is environmental policy and what are the potential forces that might lead to future progress? The collection of data was organized on distinct levels, i.e. systemic (the insertion of mentioned countries in the political economy of climate change) and national (institutions and regulations related to solid waste management). Through a historical and comparative perspective of social, economic and political characteristics of Brazil, United States, European Union member states and other six key countries (China, India, Japan, Russia, South Korea, Chile) in the carbon cycle, it can be concluded that extractive political and economic institutions (which concentrate income among a privileged elite, unlike inclusive institutions) are unable to cope with solid waste management, a condition that is reflected in public policies for pickers and collectors of recyclable and reusable materials. In a broader sense, the paper intends to offer to society and academia a new form of cost/benefit analysis for studies on international cooperation and on public policies in the field of solid waste, as a way of addressing the solutions for the seventeen Sustainable Development Goals (SDGs), which shall guide post-2015 global development.

### **How does an environmental policy mean? Some dilemmas, conundrums and paradoxes in public policy making in Australia and globally.**

Jim Donaldson (Australian National University )

Environmental policy making in Australia, and arguably globally, is in a postmodern funk. The promise of the environmental reforms ushered in by governments in the early 1970s, and subsequently of new institutional arrangements foreshadowed in the sustainable development process in the 1990s, have fallen short of delivering substantive change. In short, institutionally, nothing has really changed about how we go about developing public policy. Furthermore, the direction of environmental policy seems to be increasingly subject to somewhat arbitrary decision making by governments.

Public policy is in the end a highly pragmatic and ostensibly rational instrumental business. Any policy proposition must be able to be argued according to some coherent logical line of reasoning, even theory, as to why it is the right course of action to take.

In this paper, taking a critical and interpretive policy perspective, I argue it is difficult enough to provide an adequate account of how environmental policy is made in hindsight; it is, however, almost impossible to predict with any conviction what the outcome of any given policy process (for example, to do with water, climate change or biodiversity conservation) will be. That is, despite attempts to de-politicise policy making, the underlying and basic objectives of environmental policy are difficult to state with clarity, or to rationalise, and they remain contested at a deep ideological and conceptual level.

Informed by and consistent with the ideas of environmental political theorists, who are concerned with whether and how politics and environmentalism can be reconciled in western liberal, capitalist, democracies, I suggest there are several profound and conceptual reasons why public policy in this area is in such a funk. Most critically, I argue that environmental, or ecological, issues challenge our dominant cultural and political ideas of how we conceptualise the relationship of humans to nature, and of how we think about how we govern ourselves.

Such lines of inquiry raise ontological and epistemological questions about the nature of the environmental challenge itself and the difficulty of confining it to a particular 'issue area' of government policy, civil society action, or academic discipline (Gabrielson et al 2016, Meyer 2008). Amongst other things, they also raise questions about the dominance of modes of rational instrumental policy analysis underpinned by positivist and empiricist methodologies, including economics and science, the relationship between science and policy, normative reasoning, and moral philosophy.

Whilst environmental political theory is premised on humanity facing an ecological crisis, it is also critical of the failure of environmentalists, to grapple with social and political realities. Indeed, while ecology may be a subversive science, in fostering an interconnected and holistic view of the world, in contrast with scientific reductionism, it has struggled to deal adequately with humans being a natural part of the environment as well as having an impact on the environment. Consistent with this view, environmentalists are criticised as not having formulated an adequate or convincing political strategy for change.

In summary, we are yet to witness an 'ecological turn' in public policy making, one that recognises we face a political as much as an ecological crisis in how humans relate to the environment that they are a natural part of. On the available evidence, despite the emergence of concepts such as the Anthropocene, such a turn still seems like a long way off.

### **Life cycle analysis in comparative perspective**

Maya Jegen (Université du Québec à Montréal)

This paper advances a comparative analysis of the use of life cycle analysis (LCA) in the environmental policy-making of OECD countries. LCA is a tool to assess the environmental impact of products from cradle to grave. The private sector uses it to measure and communicate the sustainable value of its goods. Aware of the need to manage natural resources in a more efficient and sustainable way, governments have recently turned to life cycle thinking. LCA is expected to guide public procurement, labelling schemes and sustainable public policies. For example, the European Union's Integrated Product Policy, France's environmental footprint, and the American Environmental Protection Agency's Renewable Fuel Standard explicitly refer to LCA. Despite this growing private and public interest, political scientists have paid little attention to LCA. With a view to identifying drivers of policy change and compare policy trajectories, our paper documents the use of LCA in the environmental policy-making of major OECD countries. The original database we have created systematically identifies LCA-related items in major OECD states. Theoretically, it builds upon the literature on the environmental state, generating hypotheses about the political and institutional conditions that make it likely that a state refers to LCA.

### **Central Asian legal and policy responses to climate change**

Parviz Odilov (Yonsei University)

Legal and policy responses to climate change in Central Asian countries are in its early stages, albeit progressing at a steady pace. All countries in the region have adopted soft law instruments on climate change, such as strategies, plans of action for implementing strategies or sectoral action plans for adaptation and mitigation. But Central Asian countries have not introduced substantive laws on climate change; instead, they have incorporated their mitigation and adaptation objectives into their policies of national development strategies, and mainstreamed the issue across the sectors and are implementing related targets providing financial support to climate change related activities. This research paper will study the characteristics of climate change legislation in Central Asian countries, focusing on laws regulating climate change and then at the broader normative context to soft law instruments such as strategies, policies and action plans through which countries implement climate change related targets. This paper will review the best practices and normative tendencies that guide the development of climate change law in Central Asia. National Communications to the United Nations Framework Convention on Climate Change by countries in Central Asia on climate change related issues shows that when dealing with environmental and climate change issues it is important to take into consideration the facts of mainstreaming climate change objectives within a broader range of sectors, and budgetary allocations for implementing related



targets. Thus, this research paper will analyze climate change legislation in Central Asia in comparative dimension in terms of comparing countries and regions, as well as policy making over the time and describe the main trends in climate change law in the region with the examples of the climate change strategies and policies at regional, national and sub-national levels with specific examples of budgetary allocations and enforcement challenges. This research article attempts to find answers to the following questions, first, what are the Central Asian legal and policy responses to climate change, and second, what are policy implementation challenges. Finding of this research paper can guide Central Asian governments and other countries implementing similar policies for the future of environmental policy-making and effective policy implementation.