

Monday, Sep 24, 2012

11:15 - 12:45

Climate change as a policy and governance problem

Thurid Hustedt, UP

Within the social sciences, climate change is addressed by a number of research perspectives focusing on a wide range of topics such as societal vulnerability and resilience in sociology, international negotiations and the UNFCCC process in international relations or the effectiveness of differing policy instruments in environmental policy research. This session discusses climate change from a Public Administration perspective, hence addresses it as a problem for policy-making and governance based upon policy analysis and recent institutional and organizational theory. Firstly, the session will characterize climate change as a policy problem resulting in distinct requirements for decision-making processes, challenging standard coordination mechanisms in government. Secondly, the session presents the case of climate policy-making in German federal government as an empirical example.

Readings:

Head, Brian (2008): Wicked Problems in Public Policy. In: Public Policy, 3 (2): 101-118.

Fleischer, Julia/Hustedt, Thurid (2012): Sectoral Dynamics. In Executive Politics: Co-ordinating Climate Policy in Germany, in: Lodge, Martin/Wegrich, Kai (eds): Executive Politics in Times of Crisis, Palgrave Macmillan, pp. 264-283.

14:00 - 15:30

Scientific advice in policy-making: Advisory arrangements in German climate policy

Thurid Hustedt, UP

The role of science is one of the most intensively discussed topics in the area of climate policy. Both in public (and media) discourses and in academic debates the influence or non-influence of science, its normative foundations and implications for decision-making are heavily debated. Scientific advice, often in formally organized scientific advisory arrangements, represents the "science-policy interface" at which scientific knowledge is somehow transferred to political actors. This session discusses models of scientific policy advice well-known in both sociology and political science. Different perspectives to conceptualize and discuss the "science-policy interface" are presented before the session takes a closer look on the scientific advisory arrangements in climate policy in German federal government.

Readings:

Beck, Silke (2012): The challenges of building cosmopolitan climate expertise - with reference to Germany. In: Wiley Interdisciplinary Reviews: Climate Change: Vol. 3/1, pp. 1-17.

Hustedt, Thurid/Veit, Sylvia/Fleischer, Julia (2010): Wissen ist Macht? Wissenschaftliche Politikberatung der Bundesregierung. In: Aus Politik und Zeitgeschichte (Beilage zur Wochenzeitung Das Parlament) 19/2010, S. 15-21.

Tuesday, Sep 25, 2012

09:00 - 10:30

Climate Impacts and Impact Functions: Towards a comparable and transferable climate risk assessment

Jürgen Kropp, PIK

For an adequate usage of funds employed for climate action it is needed to assess climate related risks in a comparable way. The talk will take you on a journey starting from different conceptualizations of climate risks toward modern impact assessments.

Further Readings:

Holsten A, Kropp JP (2012): An integrated and transferable climate change vulnerability assessment for regional application. Natural Hazards [online first], DOI

Prahl BF, Rybski D, Kropp JP, Burghoff O, Held H (2012): Applying Stochastic Small-Scale Damage Functions to German Winter Storms. Geophysical Research Letters, [online first] [DOI].

Costa L, Kropp JP (2012): Linking operations and definitions of vulnerability: Lessons from case studies in climate-change and risk-hazard context. Sustainability Science, [online first], [DOI].

Rybski D, Holsten A, Kropp JP (2011): Towards a unified characterization of phenological phases: fluctuations and correlations with temperature. Physica A, 390(4): 680-688, [DOI].

11:00 - 12:30

Tackling the climate change challenge: Reconciling fair and equitable emission reductions targets and development goals

Luis Costa, PIK

The aim of the lecture is to provide insights into an ongoing debate, i.e. how to organize emission budget sharing in a fair and equitable way between OECD and Developing Countries under parallel consideration of the 2 °C target.

Further Readings:

Costa L, Rybski D, Kropp JP (2011): A Human Development Framework for CO2 Reductions. PlosOne, 6(12) e29262. Download: <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0029262>

WBGU (2009): Solving the climate dilemma: The budget approach, German Advisory Council on Global Change to the Federal Government, Berlin, Download:

<http://www.wbgu.de/en/special-reports/sr-2009-budget-approach/>

Steinberger JK, Roberts JT, Peters GP, Baiocchi G (2012): Pathways of human development and carbon emissions embodied in trade, Nature Climate Change 2, 81–85. Download:

<http://www.nature.com/nclimate/journal/v2/n2/full/nclimate1371.html>

Tuesday, Sep 25, 2012 (cont.)

14:00 - 15:30

Geoengineering challenges: Cities as hot spots for climate change

Jürgen Kropp, PIK

What is geo-engineering in the light of climate change? Cities are responsible for approx. 70% of the global greenhouse gas emissions. If we take the climate challenge serious, it is needed to develop concepts beyond current urbanism. The talk discusses the innovation needs and potential pathways towards sustainable cities.

Further Readings:

Rozenfeld H D, Rybski D., Gabaix , Makse HA (2011): The area and population of cities: New insights from a different perspective on cities. *American Economic Review*, 101(5): 2205–25

Kit O, Lüdeke MKB, Reckien D (2011): Texture-based identification of urban slums in Hyderabad, India using remote sensing data. *Applied Geography* 32(2): 660-667.

Reckien D, Eisenack K, Lüdeke MKB (2011): Land consumption by urban sprawl - a new approach to deduce urban development scenarios from actors' preferences. *Environmental Modeling and Assessment* 16(5): 465-477

Satterthwaite, D (2008). Cities' contribution to global warming: notes on the allocation of greenhouse gas emissions. *Environment & Urbanisation*, 20 (2), 539-549.

16:00 - 17:30

Sustainable resource utilization, is it feasible?

Jürgen Kropp, PIK

Sustainable resource utilization and management is an issue in scientific research since decades. The talk highlights the general constraints need to be considered and show that optimal management plans have clear limits associated to systems' opaqueness.

Further Readings:

Eisenack K, Scheffran J, KROPP J.P. (2006): Viability Analysis of Management Frameworks for Fisheries. *Environmental Modelling and Assessment*, 11(1): 69 - 79.

Schellnhuber H.-J. & KROPP J.P. (1998): Geocybernetics: Controlling a complex dynamical system under uncertainty. *Naturwissenschaften* 85(9): 411 - 425.

KROPP JP, Eisenack K, Scheffran J (2006): Marine Overexploitation: a Syndrome of Global Change. In: *Multiple Dimensions of Global Environmental Change*, p. 257-284, edited by S. Sonak, TERI Press, New Dehli.

Aubin J P and Saint-Pierre P (2007): An introduction to viability theory and management of renewable resources in: KROPP JP & Scheffran J (Eds.) *Advanced Methods for Decision Making and Risk Management in Sustainability Science*. Nova Science Publ., New York, 288pp.

Wednesday, Sep 26, 2012

11:15 - 12:45

Climate change - socially constructed? Conceptions of vulnerability, risks and sustainability in social sciences

Gabriela Christmann, IRS

- lecture/presentation and discussion
- theoretical key concepts
- towards essentialism and social constructivism

14:00 - 15:30

Heterogeneous perceptions of climate risks and consequences for governance processes

Gabriela Christmann and Thorsten Heimann, IRS

- lecture/presentation and discussion
- empirical design and results from the PROGRESS research project "How society deals with climate change"
- coastal regions of the southern North Sea and Baltic Sea