Integrated Project EnergyLandUse

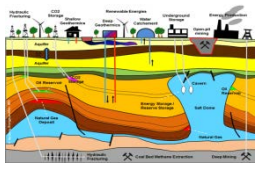
Land Use Aspects of Transforming the Energy System – Sustainable Options for a Renewable Energy Era

HELMHOLTZ CENTRE FOR ENVIRONMENTAL RESEARCH – UFZ

EnergyLandUse







4th UFZ EnergyLandUse Colloquium

Thursday, 16 April 2015, 15:00-16:30

Lecture Hall, Main Building, UFZ, Leipzig

"Inverse integrated assessments of global climate change: the guard-rail approach"

Prof. Dr. Thomas Bruckner

Professor for Energy Management and Sustainability

Institute for Infrastructure and Resource Management, University of Leipzig

The guard-rail approach (also known as "tolerable window approach") to integrated assessments of global warming and energy policies is based on prescribed constraints on admissible climate impacts on the one hand and tolerable levels of mitigation costs on the other. In a subsequent step, the complete set of admissible climate protection strategies which are compatible with these normative inputs is determined by scientific analysis. In doing so, minimum requirements concerning global greenhouse gas emission paths (expressed in form of emissions corridors) can be determined. The talk presents the basic methodological elements of the guard-rail approach, discusses its relation to more conventional approaches to integrated assessments as cost-benefit analyses and presents illustrative results obtained by applying integrated-assessment models in an inverse mode.

After the colloquium, there will be the chance for interaction with Prof. Dr. Thomas Bruckner. All interested colleagues are kindly invited.

Link to registration: http://www.ufz.de/index.php?en=33338

Prof. Dr. Thomas Bruckner

Prof. Dr. Thomas Bruckner is the recent Director of the Institute for Infrastructure and Resource Management at Leipzig University and holds the Chair for Energy Management and Sustainability. He is physicist by training with interest in the dynamic interplay of the energy and the climate system, both showing certain inertia. He has expertise in the evaluation and dynamic optimization of regional energy systems, the integration of renewable energies, and the design of energy markets which account for climatic and environmental constraints. By combining integrated assessment models, environmental economics, decision theory and optimal control, he contributes to a mechanistic foundation of the global greenhouse gas emission scenarios. Prof. Bruckner is lead author of the Chapter "Energy Systems" of the 5th Synthesis Report of the IPCC. For more details, see www.wifa.uni-leipzig.de/iirm/energiemanagement/team/professoren-lehrbeauftragte/bruckner-thomas.html

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