

Title of lecture: Energy Landscapes and Climate Policy
Nr.: 63-949
Lecturer: Jürgen Scheffran
Time: Thursday 14.15-16.45
Location: KlimaCampus, Grindelberg 5, Room 008
Start: 03.04.2014

Content: Introduction to policy and geographic dimensions of energy resources, landscapes and systems, including fossil, nuclear and renewable energy; energy security, and related risks for different energy technologies; environmental impacts, including CO₂-emissions from energy production; climate change mitigation and adaptation strategies, comparison of energy and climate policy regimes and institutions, energy transformation and negotiation processes.

Aim: Provide an understanding of the key factors, mechanisms and institutions in geographic and policy aspects of energy and climate change on local, national and international levels.

Preconditions: BSc in any field relevant to the topic of this class.

Basic Literature (more will be provided in class):

Grover, V.I. (ed.), Global Warming and Climate Change: Ten Years After Kyoto and Still Counting, Science Publishers (2 Vol), 2008.

IPCC (2011) Renewable Energy Sources and Climate Change Mitigation (SRREN), IPCC, Geneva

Khanna, M., Scheffran, J. & Zilberman, D. (eds.) Handbook of Bioenergy Economics and Policy, Berlin, Springer Verlag, 2010.

Singer E.C; Energy and International War. From Babylon to Baghdad and Beyond; World Scientific Series on Energy and Resource Economics – Vol.6; World Scientific Publishing 2008. Related lecture notes on <http://npre480.ne.uiuc.edu/lecturenotes/contents.html>

Program:

- 3.4. Introduction: Fundamentals of Energy Systems and Landscapes
- 17.4. Coal and the Industrial Revolution: History, Geography, Technology and Risk
- 24.4. Oil, Natural Gas and Energy Security
- 8.5. Fossil Fuels, Greenhouse Gas Emissions and Climate Change
- 15.5. Technology, Risks and Control of Nuclear Energy
- 22.5. Renewable Energy: Hydropower and Bioenergy
- 5.6. Renewable Energy: Wind, Solar and Other Sources
- 19.6. Climate Policy: Mitigation and Cooperation
- 26.6. Climate Policy: Adaptation and Geoengineering
- 3.7. Emission Scenarios and Sustainable Energy Transformation
- 10.7. *Final Exam*

Presentations available at: www.clisec-hamburg.de (Courses), password given in class