UNIVERSITY OF COPENHAGEN

RESEARCH SCHOOL

22-25 August 2016

Copenhagen University, Copenhagen

Creating legitimacy in wind turbine planning

Wind power is increasingly considered essential in countries' transition towards a fossil independent energy system. However, siting of wind turbines has proven to be a challenging endeavor for planners and developers, not taking into account that national level aims do not always go hand in hand with local level realities. This course focuses on the challenges in siting of wind turbines. Taking different theoretical perspectives, the course provides frameworks to analyze both the processes behind and the results from previous wind turbine projects and policies, so as to make it possible to recommend new planning and development procedures including citizen engagement, non-economic incentives, and regulatory framework. The course draws on the experiences from the research project WIND2050 (chaired by the Technical University, Denmark), and is conducted in a collaboration with the involved partners.

Time: 22-25 August 2016

Place: University of Copenhagen, Frederiksberg Campus

Education: PhD & Postdoc

Learning outcome: The aim of the course is to present PhD students with selected theories and analytical frameworks with which to analyse wind turbine planning and better understand the controversies behind wind turbine planning and ways to resolve them.

Literature: The course will be based on scientific articles and key references related to environmental psychology, behavioural economics, law and environmental justice, demoracy theory and controversy mapping, applied to the case of wind turbine planning.

Teaching and learning methods: The course consists of lectures, real life cases, exercises, students' colloquia and excursion. Prior to the course, the students prepare and hand in a written assignment based on the course literature and applied to their own PhD study case.

Fee : A fee of 1500 is charged to cover food expenses, inclusive of dinner Thursday night.

Sign up: Charlotte Bukdahl Jacobsen: cja@ifro.ku.dk no later than 1. August 2016.

Credit: 3 ECTS

Exam:

Type of assessment: Handing in written assignment and active participation in the course

Aid: all aids allowed.

Marking scale: Passed/Failed

Censorship form: No external censorship, internal examiners

Criteria for exam assessment: See criteria for Learning outcome

Workload:	hours	(1 ECTS = 27.467 hour)
Lectures:	16	
Colloquia:	16	
Theory exercises:	8	
Preparation:	42.4	
Total	82.4	(= 3 ECTS)

Preliminary Programme

Monday 22/8 2016

Acceptance of wind turbines – environmental psychology perspective – theory and methods, key issues incl. sense of place

The aim of the day is to present different environmental psychology perspectives to wind turbine planning.

Responsible: Tove Enggrob Boon

Guest speaker: Patrick Dewine-Wright

Prof. Patrick Devine-Wright specializes in researching significant, policy-relevant environmental problems using an interdisciplinary collaborative approach that is theoretically informed and has clear pathways to impact. Among other research specialisms Patrick investigate social and psychological aspects of siting new energy infrastructure such as wind farms and power lines, including 'NIMBYism' and public engagement.

References:

Devine-Wright, P. & Howes, Y. 2010. Disruption to place attachment and the protection of restorative environments: A wind energy case study. Journal of Environmental Psychology 30(3): 271-280.

Devine-Wright, P. 2005. Beyond NIMBYism: Towards an integrated framework for understanding public perceptions of wind energy. Wind Energy 8(2): 125-139.

Tuesday 23/8 2016

Participation & democracy theory, conflict management and acceptance of wind power.

Using cases on controversies from wind turbine planning we will discuss the dynamics of controversy and how conflicts may be alleviated through different non-economic incentives and stronger involvement of the public. Moreover, we will discuss the whether it is possible to reach consensus on siting of wind turbines and or whether we should embrace antagonism as a social attribute for the potential change.

Responsible: Jens Emborg, Laura Tolnov Clausen, Kristian Borch

Guest speaker: Geraint Ellis

Dr. Geraint Ellis is a Professor in the School of Planning, Architecture and Civil Engineering (SPACE) and Director of Research for the Institute of Environmental and Spatial Planning (ISEP) at Queen's University, Belfast. His key research interests are in planning and sustainability, renewable energy, planning governance and healthy urban planning. He has published and researched widely on these issues, recently co-editing a book on Learning from Wind Power: Governance, Society and Policy Perspectives on Sustainable Energy.

References:

Cunningham, F. 2002. Theories of Democracy: A Critical Introduction. Routledge Contemporary Political Philosophy.

Daniels, S.E. and Walker, G.B., 2001. Working Through Environmental Conflict: The Collaborative Learning Approach. Westport, CT: Praeger. 299 pp

Daniels, S.E., G.B. Walker, and J. Emborg, 2012. The Unifying Negotiation Framework: A model of policy discourse. Conflict Resolution Quarterly, 30(1), 1-14.

Vindeløv, V. 2012. Reflexive Mediation, Chapter 4. Conflicts and their escalation, pp. 57-86. DJØF Publishing.

Wednesday 24/8 2016

Eliciting preferences for wind power development, guidelines, caveats and central points for policy relevance

The aim of the day is to give an introduction to environmental economics (Pablo Hevia Koch) and then focus on wind turbines effect on house prices (Toke Emil Panduro) and spatial properties of preferences for wind power and acceptance cost (Jacob Ladenburg).

Responsible: Jacob Ladenburg.

References:

Knapp, L. and J. Ladenburg 2015. "Spatial Relationships and Economic Preferences for Wind Power-A Review." Energies 8(6): 6177-6201.

Ladenburg, J. and S. Lutzeyer 2012. "The economics of visual disamenity reductions of offshore wind farms—Review and suggestions from an emerging field." Renewable and Sustainable Energy Reviews 16(9): 6793-6802.

Menegaki, A. 2008. "Valuation for renewable energy: A comparative review." Renewable and Sustainable Energy Reviews 12(9): 2422-2437.

Thursday 25/8 2016

Legal issues, compensation schemes and environmental justice

The aim of the day is to focus on the legal framework for wind energy installations as well as on the use of different types of financial compensation schemes, e.g. co-ownership and community benefit schemes. Furthermore, issues of environmental justice will be presented and discussed.

Responsible: Helle Tegner Anker

Guest speaker: Gordon Walker.

Professor Gordon Walker is currently focusing predominantly on questions of energy demand in his new role as Co-Director of the RCUK funded DEMAND Centre (Dynamics of Energy, Mobility and Demand). The DEMAND Centre takes a distinctive approach to end use energy demand, recognising that energy is not used for its own sake but as part of accomplishing social practices at home, at work and in moving around. Considering wind power Gordon has strong research interests in the social dimensions of sustainable energy technologies and public engagement with community energy projects.

References:

Olsen BE, Anker HT. Local acceptance and the legal framework: the Danish wind energy case. In: Squintani L., Vedder H., Reese M., Vanheusden B. (eds.) 2014. Sustainable energy united in diversity: challenges and approaches in energy transition in the European Union. Vol. 1. European Environmental Law Forum. Pp. 137-156. (European Environmental Law Forum Book Series, Vol. 1).

Walker, G. 2012. Environmental Justice. Concepts, evidence and politics. Routledge, London.

Schlosberg, D. 2009 Defining environmental justice: Theories, movements and nature. Oxford University Press, Oxford.

Thursday Evening 25/8 2016

Evening dinner for PhD course participants and WIND 2050 meeting attendants