

# Program for Seminar Series on “Science, Policy and Politics- Biofuel in Brussels”

This seminar series consists of five separate but interrelated sessions, all dealing with different aspects of the topic. The seminars are open for all interested PhD students. Each session is coordinated by one or two members of the PhD-group at Stockholm Resilience Centre, but all participants are contributing to the discussion. More literature than what is indicated here might be added, so if you are interested in participating, please contact the coordinator/s for the specific session in beforehand (see email below).

## SESSION 1: Biofuels- Different Generations and Resources

- Date and Time: Wednesday 3/9, 14-16
- Coordinator: Tomas Persson, mail; [persson@botan.su.se](mailto:persson@botan.su.se)
- Venue: the Law Department, C-House, floor 8 and the room is to the right when stepping out of the elevator; 'Fakultetsrummet'.
- Literature:
  - Tillman, D., Hill, J and Lehman, C. (2006); *Carbon Negative Biofuels from Low-Input High Diversity Grassland Biomass*, in Science, Vol.314, 8 December 2006
  - Rittman, B.E (2008); *Opportunities for Renewable Bioenergy Using Microorganisms*, in Biotechnology Engineering, Vol.100, No.2, June 1<sup>st</sup>, 2008

## SESSION 2: Energy Efficiency of Biofuels

- Date and Time: Wednesday 17/9, 14-16
- Coordinator: Arvid Bring, mail: [arvid.bring@natgeo.su.se](mailto:arvid.bring@natgeo.su.se) , potentially a professor from KTH (but most likely no guest)
- Venue: ITM, Department of Applied Environmental Science, Geo-Science building (room to be confirmed)
- Tentative literature (subject to revision):
  - Cleveland, C.J., Hall, C.A.S., Herendeen, R.A., Hagens, N., Costanza, R., Mulder, K., Lynd, L., Greene, N., Dale, B., Laser, M., Lashof, D., Wang, M., Wyman, C., Kaufmann, R.K., Patzek, T.W., Farrell, A.E., Plevin, R.J., Turner, B.T., Jones, A.D., O'Hare, M., & Kammen, D.M. (2006): *Energy Returns on Ethanol Production*. Science 312, p. 1746-1748, doi:10.1126/science.312.5781.1746.
  - Kay R. Brower; Brian H. Davison, Arthur J. Ragauskas, Richard Templer, Timothy J. Tschaplinski, and Jonathan R. Mielenz (2006): *Measuring the Efficiency of Biomass Energy*. Science 312 (5781).
- Issues to be discussed: The seminar will focus on the problematic question of estimating energy efficiency of biofuels. The reading material will introduce partly conflicting definitions and system boundaries used in energy balance calculations, which will be further discussed in the seminar. We will also discuss progressive generations of biofuel technology and touch on the economic feasibility of different types of biofuels.

### **SESSION 3: Social and ecological impacts of Biofuels**

- Date and Time: Wednesday 1/10, 14-16
- Coordinators: Matilda Baraibar and Adolphine Kateka, mail: [matilda.baraibar@ekohist.su.se](mailto:matilda.baraibar@ekohist.su.se) , or [adolphine.kateka@sh.se](mailto:adolphine.kateka@sh.se)
- Venue: In SRC, the attic
- Proposed Literature:
  - Mathews J.A. (2007); *Biofuels: What a Biopact between North and South could achieve*, Energy Policy 35 (2007), pp. 3550-3570 (accessible at: <http://www.gsm.mq.edu.au/facultyhome/john.mathews/energy%20publications/EP%202007%20Mathews%20Biopact%20published.pdf>)
  - Runge & Senauer (2007); *How Biofuels Could Starve the Poor*, Foreign Affairs, May/june 2007 (at: <http://www.foreignaffairs.org/20070501faessay86305/c-ford-runge-benjamin-senauer/how-biofuels-could-starve-the-poor.html>)
- Issued to be discussed: impacts on food security, biodiversity, income opportunities, new tensions over land use and access. As a point of departure we will examine the discourse of bio-fuels (what problems is it suppose to solve? what are the underlying assumptions? power-dimensions -who shapes the agenda?) and from there problematize possible impacts.

### **SESSION 4: Certification as a Solution to negative externalities of Biofuel Production?**

- Date and Time: Tuesday 14/10, 09-11
- Coordinators: Jenny Appelblad and Katrin Holmström, mail: [jenny.appelblad@humangeo.su.se](mailto:jenny.appelblad@humangeo.su.se) or [katrin.holmstrom@itm.su.se](mailto:katrin.holmstrom@itm.su.se)
- Venue: In the Geo-science building, room to be confirmed
- Tentative Literature:
  - Schmitz, N. (2007); *Certification to Ensure Sustainable Production of Biofuel*, in Biotechnology Journal, 2007 (2), pp.1474-1480
  - Mathew, J.A. (2008); *Towards a sustainable certifiable futures contract for Biofuels*, in Energy Policy, 2008, vol.36. pp.1577-1587
- Issues to be discussed: Are certification systems a solution to how to make the production of biofuels more sustainable? What kind of tools does such a system provide? What are the benefits with such a system? Are there any risks? Pro and cons?

### **SESSION 5: Science and Policy- Role of Science in Biofuel Policy Setting. Mapping the EU Biofuel Agenda**

- Date and Time: Thursday 30/10, 09-11
- Coordinators: Åsa Romson and Paul Fuehrer, mail: [asa.romson@juridicum.su.se](mailto:asa.romson@juridicum.su.se) or [paul.fuehrer@sociology.su.se](mailto:paul.fuehrer@sociology.su.se) , Guest Speaker to be confirmed
- Venue: House B, Room B900
- Tentative Literature:
  - E. van Thuijl & E.P. Deurwaarder (2006); *European Biofuel policies in retrospect*, Energy Centre the Netherlands report May 2006; ECN-C--06-016