

Bio4Energy Graduate School

Systems Perspectives on Biomass Resources

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Course aim

- To provide knowledge to be able to put research into a larger perspective. This is done by:
 - Giving insight into the current global energy challenges
 - Giving insight into the importance of systems analysis as well as the role of bioenergy in sustainable energy systems
 - Providing a portfolio of different types of environmental, technical and economic tools and methods for evaluation of energy systems

Examination

- To pass the course, a draft research proposal, a journal or conference manuscript or a *thesis chapter* must be written and presented orally.
- The work should be carried out in groups and apply a systems analysis perspective on a B4E-related topic

One week of lectures and workshops

- 12 participants (6 LTU, 4 UmU and 2 RISE ETC)
- 12 lectures (7 male and 5 female lecturers representing all academic partners of B4E)
- Guest lectures by
 - Johanna Mossberg, CIT/f3
 - Tomas Ekbohm, Svebio
 - Ilkka Hannula, VTT
- One lecture on how to write scientific introductions for proposals and papers by Johan Ingri

One week of lectures and workshops

- One workshop making individual reflections on how the content of the presentations (tools, methods) could be applied on their research
 - hand-in sheet where each lectures were assessed on current and future usefulness and AHA!-factor
- One workshop on how Sweden can reach the fossil free vision and what is needed to help stimulate the required development

Course evaluation

- 10/12 answers
- 100% (very) satisfied with the course – many appreciated the economic perspective
- Suggested improvements are:
 - Even more hands-on work (workshops, exercises)
 - Broader perspectives (social, ecological analysis) and also include biomaterial and biochemicals
 - Invite policy makers as speakers to get their view

Thanks for your attention!