

Elements for a strategic action plan on sustainable development at the University of Luxembourg

With increasing awareness about human impacts on global environmental change, sustainable development is gaining weight as an organising principle of activities of man kind. The most widely used definition for sustainable development is 'a process of change, where the use of natural resources, the structure of economic investment, the orientation of technological improvements and institutional structures have to be consistent with future and current needs.'¹ Accordingly, the quality of Universities is increasingly judged based upon their capacity to take account of the needs for the well-being of future and present generations, as reflected in a Times Higher Education survey in July 2008.²

Universities across the world are recognising and asserting their pivotal role in affecting the necessary changes in social norms and practices, through research, teaching and community engagement. Early international initiatives on higher education for sustainable development include the 1991 Talloires declaration (over 300 University signatories), the 1993 Copernicus Alliance (over 326 signatories in 2006), and the United Nations Declaration on the 'Decade of Education for Sustainable Development from 2005 – 2014', which set up regional networks and centres of excellence. One of the most recent initiatives is the International Sustainable Campus Network (ISCN), which posits sustainable campuses as models and living laboratories for sustainable solutions in building- and urban-design, resource use, and communal life. Associated goals include fostering research and teaching that transcends disciplinary boundaries and focuses more on real-world problem-solving. Founding members of the ISCN include the ETH Zürich and the Universities of Copenhagen, Harvard, MIT, Berkeley, Tongji, and Tokyo. The University of Luxembourg (UL) has joined the ISCN in April 2008, and is chairing one of four working groups. In March 2009 the UL created a Cell dedicated to Sustainable Development. The UL's Working Group on Sustainable Development makes suggestions for, initiates, and advises on activities that are carried out or co-ordinated by the Cell; the Cell can also initiate activities on its own accord.

This document presents a strategic action plan for sustainable development at the UL, which will serve as a framework for the Cell's and the Working Group's activities over the next five years. The plan was developed based on four strands of work: (i) a stock-taking exercise to document all existing teaching and research activities at the UL relating to sustainable development with contributions from all co-ordinators of research units and interested faculty; (ii) the definition of basic elements for a strategic action plan by the Working Group on Sustainable Development, which were endorsed by the rectorate and the deans; (iii) written and verbal feedback from all interested students and staff received during an e-mail consultation and a participatory workshop open to all UL members; and consideration of the 'Plan National sur le Développement Durable' and feedback from the Luxembourg Ministère d'Environnement. For more information on feedback received from students, staff and selected stakeholders in the participatory process for the development of this strategic action plan, please visit www.uni.lu/university/sustainability. This plan was prepared in contribution to the UL's next four year plan 2010-2013.

The first section of this document introduces the overarching sustainable development objectives for the UL. The three subsequent sections serve to group planned activities in three areas:

- Operations, management and planning;
- Research, teaching and learning; and
- Social cohesion and civic engagement.

Each of these sections defines the UL's mission relating to sustainable development for the said activity area, describes long-term goals the UL should strive for by 2020, and sets out concrete action points for the next four years towards achieving the long-term goals. The next section defines the resource implications for the next five years.

¹ This definition is based on the Brundtland report 'Our Common Future' (1987) Oxford University Press.

² See for example for Universities, the Times Higher Education 3 July 2008 presents a rating of the environmental performance of 61 UK Universities according to 12 sustainability indicators: Environmental policy, staff, auditing, fair trade status, ethical investment status, energy sources, renewable energy (change), % waste recycled, and % change in that, carbon emissions per head and % change in that, water consumption.

1. Introduction: Overarching goals

The main goal for the UL relating to sustainable development is to define and convey to students, staff and interested civil society basic knowledge on principles and practice of sustainable development, and the capacity to develop and implement solutions to reduce environmental impacts and improve social cohesion by drawing on different disciplines. The associated learning processes are conceived as being situated in a community.

Learning in a community places active participation, practical experience, inquiry-based learning and real-world problem solving at its centre. The aim is to complement and leverage academic theory in approaches to learn about and act upon the multi-causality of environmental and social issues, transcending disciplines. Accordingly, three overarching strategic goals are to foster:

- Applicability to practice of research and teaching that centres on environmental and social issues
- Connections between disciplines to explore the multi-causality of societal challenges
- Greater integration of research, teaching, campus operation, design, management and planning

The Cell will serve as a formal platform for the establishment of cross-faculty courses and research projects, and ensure their connection to campus management, strategic planning, and to related activities in Luxembourg, the EU and international organisations.

2. Operations, management and planning

Mission: Facilitate continued improvement in campus operation, management and planning to minimise impacts on the environment and provide a good social environment, governed by respect for natural resources and social equity considerations (such as non-discrimination). Defining sustainability-related goals and targets, management, planning, as well as monitoring and review of achievements will rely on participatory processes involving faculty, staff, and students.

Long term goals:

- Well-performing buildings and a campus that teach about best practices for reducing energy consumption, reduced use of fossil fuels, waste reduction, water use reduction, and social measures including non-discrimination; and green spaces fostering pleasant outdoors community social interactions.
- Improved linkage between organisational strategy and campus community perception and appraisal. This can be achieved by linking best practice in infrastructure development and management with clear communication and campaigns fostering adoption of best practices at the individual level to continually reduce the environmental footprint of the University campus and each individual within the University community.

Action points 2010-2013:

Action 1.1. Continue to develop and implement position statements on improving campus operations and design. The first UL position statement on efficient energy- and water-use in the Cité des Sciences is distributed to all architects and engineers involved in University building projects as official guidance. Furthermore, it results in the involvement of UL experts in processes for project selection, planning, construction and monitoring operation and hence requires perpetual follow-up. The following additional subchapters for a UL position statement are in preparation:

- Energy use monitoring in Belval (Frank Scholzen)
- Campus Carbon-mapping (Jean-Jacques Scheuren, Frank Scholzen, Julien Carton, AK)
- Energy-use in laboratories (AK, Julien Carton, the UK HEEPI group)
- Eco-certification of buildings (Julien Carton, Frank Scholzen, Ariane König (AK)
- Waste management and recycling (Pierre Fagot and Celine Weber, consultant to the SIL IngeTech), setting waste reduction goals
- Sustainable transport solutions (Markus Hesse, Geoffrey Caruso, Phil Dale, Michael Scheuern, Kenn Sebesta, AK)
- The library: environmental & social requisites (Julien Carton, Marie-Pierre Pausch, Frank Scholzen, AK)
- Barrier free spaces (for disabled access) (Arthur Limbach Reich, AK)
- Gender policy (Christel Baltes-Löhr, Angela Franz-Balsen, AK)
- Child care needs (AK, Christel Baltes-Löhr, Pierre Fagot)
- Fair trade (Petra Svoboda, AK)

- Student housing (Zihomara Salvador, AK)
- Sustainable IT (Yann Kempf, AK)

Other topics suggested for UL position statements include:

- 'Designing spaces for learning and exchange within and between buildings'
- Procurement of appliances and office supplies,
- Water use and avoidance of bottled water,
- Procurement of cleaning products
- Management and reduction of toxic wastes
- A policy on teleworking and study.
- Guidance on user requisites elaborated in participatory workshops with users and architects for each building.

All position statements will require completion and implementation and continued review and improvement. Some position statements (e.g. on energy efficiency and sustainable student housing management) will be connected to the development of brochures with best practices for individual community members and information campaigns.

Action 1.2. Enhance student and faculty engagement in research projects on campus operation and design. We are establishing research projects engaging students, faculty and staff in benchmarking and monitoring sustainability indicators such as energy and water consumption and waste production. CO2 mapping and establishing a monitoring system for energy and water consumption on the current 3 campuses has started (Frank Scholzen, Jean-Jacques Scheuren, Michael Scheuern, AK). Research projects exist on energy-saving measures in private and public buildings (Stefan Maas and Andreas Thewes). The establishment of demonstration projects for new environmental technologies such as new communication technologies for monitoring and communicating on campus energy consumption [– improve text AK] (Jean-Regis Hadji Minaglou). A connection to UL work on intelligent buildings will be explored (with Thomas Engel).

The next step will be planning student projects to develop solutions for saving energy and water on campus. Students of economics will be offered projects to analyse present and extrapolate future cost implications (with Nicolas Jonard). Many more projects, including on education and changing perception and appraisal to energy-use, waste, water management and mobility can be envisaged (to be explored). The longer term goal is to establish a systematic approach to determine and improve the environmental foot print of a campus, and to develop an indicator, monitor and reporting system. A student research project in the area of transport that would also serve to inform a UL position statement on mobility issues is being planned (Geoffrey Caruso).

Action 1.3. The UL Cell and Steering Group on Sustainable Development provide advice on governance of the University on how to strengthen the SD dimension by:

- Developing a vision and mission statement on SD for the UL, in a two step process involving a futures workshop with systematic stakeholder participation.
- Providing advice on the definition of profiles for open faculty positions to include the SD dimension – inter-disciplinarity should gain status as a quality criterion.
- Developing a strategic action plan on SD every four years in participatory processes for consideration in the UL's four year plans
- Work towards adoption of best practice in governance, accounting, reporting and audit, similar to those advocated by the Global Reporting Initiative (GRI). This will improve transparency and trust by the community in governance. Audits and reports could be student run. UL indicators for social cohesion and civic engagement could be developed.

Action 1.4. Firm up international connections with other Universities and networks engaged in sustainable campus development and plan for student exchange and joint research projects. The UL is a member of the International Sustainable Campus Network (ISCN) and works closely with the UK Higher Education Environmental Performance Improvement (HEEPI) group. The UL is also planning an event at the Shanghai Expo for targeted dissemination of information sustainable campus development practices adopted across the world. The ISCN activities and contacts are proving key in the development and implementation of the position statements on sustainable campus development, the strategic action plan, and mission for the UL.

1. Research, teaching and learning

Mission: Foster the development of research, teaching and learning opportunities for students, faculty and staff to raise awareness about the interconnection between environmental, social, economic and equity aspects, and facilitate their assuming individual and collective responsibilities and propose solutions for such complex issues where they can effect change. This requires problem-centred and solution-seeking approaches to research and teaching, new participatory teaching methods, and research approaches that transcend disciplines.

Long term goals:

- Improve connections between disciplines
- Foster a strong connection between research and teaching on sustainable development
- Posit inter-disciplinarity as a quality criterion in research and teaching, to facilitate hiring staff with this ability
- Institute improved platforms to develop interdisciplinary research projects and courses.
- Develop the option for all students to obtain a 'Minor', Certificate or 'Diploma' in Sustainable Development' in parallel to fulfilling requirements for the main degree programmes.
- Foster the adoption of new teaching methods across the University – that rely on small groups and hands-on projects combining theory and practice towards more sustainable knowledge acquisition.

Action points 2010-2013:

Action 2.1. Establish three cross-faculty courses. Three courses will be developed to enhance awareness about environmental and social issues central to sustainable development. Three courses are proposed: (A) The Science and Politics of Global Environmental Change: Facts for all who care. (B) The Responsibilities of Science: On the co-evolution of science, technology and social norms, and recent changes in the framing of innovation and scientific knowledge creation. (C) Corporate Social Responsibility: what can corporations do, and how can citizens hold them to account? Such courses could be organised by teams of 8-10 teaching staff representing all three faculties, who would jointly prepare their contributions to ensure cross-referencing and coherence. Courses could be open to students and staff from all faculties, as well as to civil society including mature students to provide a basis for obtaining life long learning certificates, e.g. for state promotion schemes. (See Annex I for a brief course description and a list of faculty who expressed interest in teaching in the course). Experience would need to be gained over time on the level of interest, numbers of students and staff enrolling in the course, variability from year to year, etc. One or more of the courses could be the base for publishing interdisciplinary text books. The courses will systematically link definition of learning outcomes and assessment methods.

Action 2.2. Encourage additions to existing degree programmes and courses to enhance awareness of environmental and social equity issues.

Action 2.3. Enhance visibility of and support for existing research relating to SD within all faculties

Action 2.4. Identify new connections of research across faculties that bring added value to all engaged
First, UL dedicated calls for proposals for funding of interdisciplinary projects will help fostering cross-faculty collaborations (discussion with Lucienne Blessing). The stock-taking exercise has helped to identify other possible collaboration projects across faculties.

Examples of such possible connections include collaboration between Susanne Siebentritt and colleagues (Physics, FSTC) and Nicolas Jonard (CREA, FDEF) and a student in the Master programme on Entrepreneurship and Innovation on assessing minimal efficiency thresholds to make thin film photovoltaic cells competitive on markets for renewable energy solutions (and with other currently marketed photovoltaic systems in particular). Similar projects can be envisaged for example at the interface of economics and entrepreneurship and gerontology research on technologies and ageing (in particular ambient assistant technologies), including investigations on aspects of quality assurance and economic considerations for market penetration. Synergy could also be sought between currently emerging plans for policy relevant research in economics and mathematical modelling on resource fairness across generations by Benteng Zuo (CREA, FDEF) and research on intergenerational relationships (INSIDE, FLSHASE).

Action 2.5. Organise possibilities to gather ECTS in trans-disciplinary research projects.

Action 2.6. Explore possibilities to organise mobility semesters around trans-disciplinary projects on sustainable development at other Universities. This could be explored through the ISCN.

Action 2.7. Participate in international research projects on sustainable campus development to bring best international knowledge to the UL.

3. Foster social cohesion and civic engagement

Mission: Initiate the conception and implementation of participatory projects fostering social cohesion across campus. In change management the Cell will pay attention to the diverse actors in a campus community and their engagement and complementary roles in planning and implementation of environmental and social measures. Support the development of an organisational culture that aims at continued improvement of transparency and democratic structures and processes. Develop participatory projects and workshops on local environmental and social issues with engagement from local government, industry, and organised civil society. Provide input for local, national and regional policy-making.

Long term goals:

- Effective civic engagement on societal issues is only possible in organisations with good social cohesion and in the UL case with well-connected faculties and a range of socially salient interdisciplinary research projects.
- Improve the connection between the UL and civil society to become more effective in impacting uptake of principles and practices on sustainable development.
- Improve the connection between the UL and the private sector to become more effective in anchoring principles and practice of sustainable development. The UL should foster explicit statements and action on ethics in finance and entrepreneurship.
- Contribute to the improvement of the international image of Luxembourg. Anticipate and drive sustainable development in the Greater Region and EU initiatives.
- Plan movement from a cell that focuses on UL internal connections to an Institute for Sustainable Development that is ready to reach out and provide a platform for effective engagement of external partners.

Action points 2010-2013:

Action 3.1. Improve the connection between teaching and practice:

- Open the three cross-faculty courses to practitioners seeking certified further education.
- Develop internship opportunities linked to participation in the cross-faculty courses that allow engaging in, analysing, and reporting on attempts to bring theory into practice. One linked result will be facilitation of the recruitment of scientists in the private sector.
- Support actions by the 'Chargé de Mission pour la Culture Scientifique' in support of promoting public understanding of science and co-evolution of science and society.

Action 3.2. Improve the connection between research and practice:

- Initiate research on behaviours affecting sustainability in the campus community, including on consumption and habits impacting natural resource use, as basis for more informed improvement campaigns.
- Initiate research on the UL's role in contributing to sustainable development in society, also through surveys and interviews of students who have completed courses and projects and seek to bring lessons into practice.
- Identify internship opportunities in public and private organizations could also serve as a basis for earning ECTS by analyzing and reporting on it. This could include mobilizing students to participate in a national energy saving campaign addressing private households.
- Further develop research in response to policy needs in the area of sustainable development, including in areas indicated by the Ministère d'Environnement of eco-technologies, corporate social responsibility, and socially responsible investment referred to in the Luxembourg Plan National du Développement Durable.

Action 3.3 Support development of demonstration projects linking research with industry in development of buildings exemplary solutions in Belval.

Action 3.4. Engage in local networks fostering sustainable development and Corporate Social Responsibility such as the Institut pour le Mouvement Social. Interdisciplinary projects with participation of stakeholders from industry, local government and NGOs and citizens addressing local and national resource dilemmas.

Action 3.5. Systematise stakeholder involvement. Explore the possibility to create an improved and larger interface between the University and society to facilitate exchange for information and projects needs to be interactive – exchange information and projects –or platform – increase organisational transparency. Start by creating a data base for stakeholders. Systematically involve stakeholders in a second stage of a futures workshop to define the UL vision on sustainable development and to refine (or re-define) the mission statement and how the UL Cell should interact with its societal stakeholders.

Action 3.6 Explore possibility to support SD in developing countries through mobility and exchange programmes to the South.

4. Resource implications

This section describes resource requirements to carry out the above actions for the period 2010-2013, providing resources for 2009 as a base line. There will be additional efforts to secure external funds to support research, workshops and a guest professor.

A. Human resources

Student support: Student support will be required for several activities central to the Cell's functioning:

- Support the development implementation of UL position statements on sustainable campus development, including targets and implementation measures for buildings in Belval. The development of UL position statements, including on transport, waste management and energy saving measures can include limited research, the development of best practice brochures, and information campaigns.
- Maintain the web site
- Develop a case study on sustainability implementation at the University of Luxembourg for the ISCN web site.
- Once the cross-faculty courses start, each course will require one student assistant to prepare the weekly review sessions and assist with the organisation of the course. When all courses are running there will be two courses per semester, each with one lecture and review sessions for groups of 10-20 students who take the course for credit.
- By 2013 we will also introduce student-run sustainability audits and reporting every two years.

Three to four student positions will be required at any one time.

Study co-ordinator: the study co-ordinator takes charge of developing opportunities for students to gain sustainable development-related ECTS points, certifications for life long learners that are recognised as a basis for promotion in state promotion schemes, and a system to keep track of sustainability ECTS points gained by individuals, in preparation of a system allowing to offer a diploma in sustainable development. The co-ordinator will also assist in developing opportunities for and documentation of sustainability ECTS points gained in mobility semesters and helps the organisation of the course materials for related courses at the UL. A co-ordinator should be hired as soon as the second of the cross-faculty courses starts running.

B. Infrastructure

Office space: Initially the secretary, students and guest professors can share one large office. As of 2011, the study co-ordinator will require a one-person office. As of 2012, when the secretary works full-time, and there are four supporting students, it is advisable to have a separate office for the secretary and students and the guest professors.

C. Missions, Travel and reserve

Starting in the year 2010, the annual budget for the Cell for missions, travel, and a reserve should amount to about 50,000 Euro, with a tendency to rise about 5000 Euro / year, as the Cell's team grows in numbers and experience.

Table 1. UL Cell for Sustainable Development; Budget for 2009 - 2013

		2009	2010	2011	2012	2013
A. Human Resources	Responsable du Development Durable	50%	100%	100%	100%	100%
	Secretary	50%	50%	50%	100%	100%
	Student support*	2 x5 k€	3 x5 k€	3 x5 k€	4 x5 k€	4 x5 k€
	Study co-ordinator	-	-	100%	100%	100%
B. Infrastructure	Offices	2	2	3	4	4
	ICT equipment	2 k€	2 k€	2 k€	2 k€	2 k€
C. Missions/Travel	1. Conferences/workshops	8 k€	15 k€	15 k€	15 k€	15 k€
	2. Seminars, short visits, external expertise	15 k€	20 k€	20 k€	20 k€	20 k€
	3. Travel	2.5 k€	5 k€	5 k€	5 k€	5 k€
	4. Documentation/translation	2.5 k€	3 k€	3 k€	3 k€	3 k€
	5. PR / Communication	5 k€	5 k€	5 k€	5 k€	5 k€
D. Reserve		5 k€	5 k€	5 k€	5 k€	5 k€
TOTAL		50 k€	70 k€	70 k€	75 k€	75 k€

* The cost of one student position over a whole year is estimated at about 5000 Euro.

5. Conclusion

This strategic action plan responds to the need for Universities to take a more pro-active role in anchoring concepts and practices towards more sustainable development in society. The plan also takes account of the founding principles of the University described in the 2003 Law on the creation of the University of Luxembourg, which prescribes striving for inter-disciplinarity, a close connection between research and teaching, international co-operation, and mobility. In particular the goals of greater inter-disciplinarity and application of research and teaching to real-world problem solving however require organisational reflexivity in their pursuit, as they can be perceived in conflict with other fundamental goals of Universities, including blue sky research and education that emphasises autonomy in individuals. The intention and capacity of the Cell to co-ordinate research on the role of the University in sustainable development are therefore key to its success.

The creation of the Cell and the Working Group on Sustainable Development, and this strategic action plan address the recommendation of the external evaluation committee in its 2009 Report on the need for additional deliberative structures to improve the involvement of the academic body in developing the UL's strategy, the connection between the faculties, the sense of community, but also the capacity for reflexivity on comparing actual achievements to strategic goals for improved organisational learning.

In sum, the UL Cell for Sustainable Development and the Working Group strive to become a prime new tool for the University to better harness the creativity and expertise of the academic body and interested parties to take into account present and future needs of the University, Luxembourg and society as a whole in its strategic planning and its day-to-day actions.

Annex I Sustainable development at the UL – History and present organisation

A start to action on sustainable development at the University-level (2006-2007): At the UL, a sustainable development (SD) group exists since September 2006. The group's achievements include the preparation of a mobility brochure to encourage car-less transport to the UL and organization of a visit to Belval for students, staff and faculty in July 2007. Primary concerns in autumn 2007 included questions on whether principles of SD were sufficiently taken into account in planning the Cité des Sciences and its buildings, and whether there were sufficient opportunities for participation in such planning by interested and affected University members. Some members of the group wished for a more formal endorsement of the group's activities and a University mission and action plan on sustainable development that has official backing by the rectorate and ultimately by the Board of Governors.

Current activities (2008): Since November 2007 a member of the rectorate chairs the SD group. The SD group now includes members of all three faculties and the administration, including the Responsible for the Service for Infrastructure and Logistics. The group's understanding of sustainable development of the university comprises environmental impact and social cohesion on the present three campuses, providing input into planning Belval, and supporting greater integration of concepts and principles of sustainable development in research, teaching and learning. Accordingly, in 2008, the SD group started by revisiting current waste management and recycling practice on campus (first results are already visible with recycling bins being placed on each floor), and provided recommendations for procurement of office supplies and cleaning products. A sub-group with experts from the UL and CRP Henri Tudor prepared a position statement setting goals and providing recommendations on ceilings for energy use, use of building materials, photovoltaic systems, and measures for minimizing the use of drinking water. The recommendations apply to the competition process, planning, construction and operation stages, resulting in the involvement of UL experts at all stages. The Fonds Belval, the organisation overseeing the construction of the Cité des Sciences, has adopted the UL position as official guidance for all future competitions. Work on additional UL position statements is in progress (see section 1.1.). A student run project to change on campus perception and appraisal to energy consumption is being initiated. Apart from activities of the SD group, a wide range of existing activities in research and teaching within the individual faculties relate to sustainable development. First trans-disciplinary projects are also emerging (e.g. planned research on economic and urban planning implications from longer distance and trans-national commuting on income and career). A comprehensive overview on research and teaching relating to sustainable development at the UL has been prepared. The SD group is planning to build activities relating to SD more systematically across all faculties and generate more synergy between diverse disciplines, where it makes sense. The Governing Board of the University approved of the creation of a dedicated UL Cell for Sustainable Development in March 2009.

Annex II Trans-disciplinary courses

Course on Global Environmental Change and what can be done about it.

This course would be based on the syllabus for a course at Harvard on Environmental Science for Politics. This course equips students to understand and utilize insights from the natural sciences about resource utilization, human impacts on the environment, and sustainable development to take individual action and to better judge environmental and science policies in democratic participation. Part I surveys current thinking about environmental and resource problems and how the scientific and technological dimensions of these relate to their economic, political, and management dimensions. It also reviews how environmental challenges vary by scale and location around the world. Part II introduces key science-based tools for illuminating environmental and resource issues, including estimation and comparison of natural and anthropogenic environmental change; analysis of growth and depletion; stock/flow modeling; risk assessment; remote sensing/GIS applications; indicator systems; and the use of scenario techniques. It also includes a systematic review of sources of environmental information useful in policy work. Part III explores how these approaches can be integrated with social science-based approaches in the design of effective environmental policies.

Faculty and staff who committed to give 2-4 lectures:

Benteng Zuo: Population growth and natural resource constraints, maths of stock flow modelling, focus on energy and development

Luisito Bertinelli: Environmental Economics

Geoffrey Caruso: GIS and assessment of changes in land use patterns

Christian Schulz: Spatial planning

Frank Scholzen: Environmental building design and policy

Ariane Koenig: Environmental and health regulation and risk assessment looking at agriculture and food production

Susanne Siebentritt: Renewable Energy-science and policy

Thun Kies or Olivier Francis: Hydrological cycle and climate change (tbc)

Harlan Koff: Migration issues and environmental and resource impacts

(Introductory and concluding lectures by AK)

The course could run in two parts (A+B), distributed over two semesters, each part 12 to 14 lectures of 2 hours, once a week (e.g. Mondays 13.00). Part A and Part B could yield each 3-4 ECTS. The course could start in 2010 or 2011. We could even try to make a text book based on the course, AK could act as editor.

Course on Responsibilities of Science and Corporate Social Responsibility

These courses would involve teaching staff from the UL and from other Universities. Some relevant material (syllabi and reading material) from similar courses at other Universities has been gathered. Several faculty at the UL, Oxford and the London School of Economics expressed interest in participating (target: 1/3 external and 2/3 internal UL teaching staff). Planning these course will start in the autumn of 2009. There will be at least three meetings in six month intervals to ensure a cohesive team and a coherent syllabus, and a strong connection between new external and internal expertise.