

SUSTAINABILITY REVIEW of USBE in 2014

Background

In 2013, the Umeå School of Business and Economics (USBE) decided to strengthen its offerings and monitor the progression of sustainable development in education, research and collaboration by adopting the international environmental management standard ISO14001. The standard provides the conditions to maintain quality assurance through external accreditation and certification. The standard will be used as a tool to integrate aspects relating to both environmental impact and sustainable development in USBE's activities.

According to current law, universities and colleges are to promote efforts involving sustainable development and reduce negative environmental impacts:

- The Higher Education Act (1992: 1434) chapter 1 §5; "Higher education institutions, in their activities, are to promote sustainable development so that present and future generations are provided with a healthy and sound environment, economic and social welfare, as well as justice."
- The regulation (2009: 907) on environmental management in government authorities where Umeå University, as well as other authorities, is obliged to have an environmental management system, in other words systematic environmental work which, through continuous improvement, shall reduce environmental impact.

The present review provides a basis for USBE's management systems for sustainable development, which in practice is a basis for the organisation's efforts to increase features such as promoting sustainable development in education, research and collaboration services in which the environmental impact is included. The investigation identifies and explains the significant aspects of sustainable development, as well as, for relevant legislation, the organisation for the management system and responsibilities, roles and powers of various actors.

1.2 Management system for sustainable development

The management system for sustainable development at USBE aims to systematise and structure USBE's efforts to broaden and increase the scope of features relating to sustainable development in education, research and collaboration, and to strive for a sustainable level relating to the organisation as a whole. The work will be based on the organisation's significant sustainability aspects, laws and society's and the university's general goals which relate to sustainable development, including the environment. The management system shall lead to continuous improvements and be based on the criteria in the environmental management's standard called ISO 14001.

The management system involves a process-like operation according to the Deming Cycle PDCA, Plan Do Check Act. The elements of the management system basically involve:

1. A status report (sustainability assessment) being produced which describes the organisation and where the significant sustainability aspects are identified. A review of current legislation in this area is also done.
2. The assessment lays the foundation for a policy.
3. The policy is embodied in measurable goals.

4. Actions in one or more action plans, which aim to reach the goals. Routines and documents according to the standard are developed. Actions and activities to promote sustainable development are initiated in the organisation and implemented.
5. Employees are trained within the framework of the management system and the significant sustainability aspects and are offered support in the form of methods and tools that enable self-driven behaviour and conscious choices.
6. The management system and its implementation and results are communicated internally and externally.
7. The result of the management system and the degree to which actions lead to goals being reached are reviewed in periodic internal and external reports.
8. The management examines and evaluates the outcome of the management system. Goals and actions plans are revised based on the result and take into account changes in surroundings in order to realise continuous improvements.

Scope and organisation

All of USBE's organisation shall be subject to the management system for sustainable development. This includes the units and centres for education, all faculty, staff and facilities in Samhällsvetarhuset on campus in Umeå where USBE operates.

The ambition, in terms of implementing the management system for sustainable development, is to use USBE's existing organisation and structures as much as possible and to create as few new constellations as possible. The starting point is the existing organisation.

Responsibilities, powers and roles

The Rector is ultimately responsible for the management system for sustainable development. The rector, together with the management team as a whole, has the mandate to make the decisions that are significant for the management system for sustainable development such as decisions about policy and overall, detailed environmental objectives. The rector, together with the management team, is responsible for ensuring that the management system is initiated, implemented and maintained in accordance with the requirements of the ISO14001 standard and that there is a resource to monitor the management system's performance, including presenting recommendations for improvements to the management team.

The *administrative director* assists the rector and the management team in working with, and following up on, the management system for sustainable development. Together with the Council for Sustainable Development at USBE, the administrative director represents the specialist skills required by ISO14001, during implementation, upkeep and monitoring of the management system.

The *Council for Sustainable Development at USBE* is tasked to lead the operational aspects of the management system for sustainable development (in other words to initiate, implement and maintain the management system). The Council consists of nine members, of which six persons represent units and institutions, 2 persons are student representatives and one person is the director of studies for educational development. The Council is chaired by the Rector and an environmental coordinator acts as secretary. The Collaboration Manager and Administrative Head are invited to participate in the Council's work. Along with the Administrative Head, the Council for Sustainable Development represents the specialist skills relating to the environment and sustainable development that the management system requires.

Departments, units, the programme advisory body, the education committee, the research institute, the local collaboration group, T/A-staff and students at USBE have, via the Council for Sustainable Development, been given opportunities to present views relating to the development of policies and overall, detailed environmental objectives. They have also been involved in developing a common definition for the concept of sustainability and involved in proposing and implementing actions and activities within the framework for the management system. Staff will be offered continuous professional training in environmental and sustainable development in order to contribute to USBE's environmental policy and goals for the environment and sustainable development.

In the spring of 2014, *internal auditors* have been appointed. The internal auditors are 6 individuals representing each of USBE's units. The roles of the internal auditors are to evaluate to which extent that the management system leads to continuous improvements and if environmental regulations and other governing documents are adhered to. The internal audit will also evaluate how well the environmental policy is adhered to and to what extent the goals for the environment and sustainability are achieved. The internal auditors provides guidance for improvements for the continued work and will implement the management's review.

An environmental coordinator has been hired (9 months, at 25%) and serves as a resource in the process of establishing the management system.

An external auditor is appointed for an external audit/certification.

Aspects with significant impacts on sustainable development

Education

Education has an indirect and potentially positive effect on sustainable development in the sense that, education increases the awareness and readiness among students to behave in a sustainable way when they act as professionals in their future careers. By integrating aspects of sustainable development, such as needs for reduced environmental impacts, in study programs, students gain knowledge, skills and tools to encourage their own analyses, which in turn create the conditions for them to make decisions in line with a sustainable development. In the description of USBE's training activities, it is presented that "*education must be permeated by values built on long-term value creation of sustainable business and community development.*"

Study counsellors at USBE's institutions, Business Administration, Economics and Statistics, have been given the task to report to what extent and in what ways 'sustainable development' today is included in courses that USBE itself offers. The result is shown below and is based on descriptions and learning objectives (expected learning outcomes, FSR) in curricula.

Business Administration

Sustainable development and ethics are mentioned in many curricula and also in several learning objectives (expected learning outcomes, FSR) in the institution's courses. Concepts such as corporate social responsibility (CSR) and sustainability reports (GRI) are represented in learning objectives and curricula.

An example of how sustainable development and ethics can be mentioned in a syllabus is shown below. The example is retrieved from the course in Business Administration A45, 30 credits. In annex X, there are examples from all courses in where sustainable development has a central focus.

Course 1: Introduction to service management

Description of content: The second theme focuses on the service meeting and its stakeholders, customers, employees and the company. Under the theme, issues relating to accountability, respect and ethics are also addressed.

Expected study outcomes, FSR: describe the customer meetings and analyse them based on the concepts of responsibility, respect and ethics

Course 2: Marketing

Description of content: Ethics, sustainability and CSR: Marketing is discussed with regard to ethics, sustainability and CSR, which also includes responsibility. This is achieved by marketing being focused on based on the interests of organisation, consumers and society.

FSR: Explain and critically discuss marketing based on ethics, sustainability and CSR

Statistics

The counsellor at the Statistics unit does not think it is relevant to the curriculum to implement aspects of sustainable development. This is because the subject is the kind that focuses on training in specific statistical methods for processing data etc.

Economics

Regarding elements of aspects of sustainable development in courses in Economics, there are several courses.

Research

Research is an indirect and significant sustainability aspect in the sense that new knowledge is generated through research. This, in turn, could be the basis for a more sustainable development of society in all respects.

Within USBE, there is one of the most prominent research group in Europe within *environmental and resource economics* which, in its research, evaluates the effects of various policy instruments. USBE has also previously led the largest programme in the world in terms of sustainable asset management (SIRP¹ 2006-12) to evaluate the outcome of different types of sustainable and responsible investment strategies.

Listed below is research at USBE that illustrates the concept of sustainability from different Business Administration perspectives.

Entrepreneurship

The section's research on sustainability is about the role that values, beliefs and assumptions play in economic activity and entrepreneurship. Studies deal with changes in industrial practices towards environmental sustainability in different sectors and regions, such as those which focus on climate labelling and climate consulting. These researchers are also members of the Research institute for sustainability and ethics in Business (RiseB) at the School of Business and Economics.

¹ Sustainable Investment Research Platform

The section's members are actively involved in networks/organisations such as EISB, ESCB, ICSB, EIBA, IMP, UN_PRI and SMS. Researchers in the section have also built a long-term SIDA-funded collaboration with the University of Dar es Salaam Business School.

Management

In the areas of organising and organisation forms, focus lies on a number of different themes. Collaboration is an important prerequisite for sustainable development and the unit conducts research on identity construction, middle managers as well as diversity. Also studied (at the organisational level) is organisational development, collaboration in the public sector and cross-border organising and organising in processing networks. Researchers working with ethics and corporate responsibility focus mainly on ethics, social justice and corporate environmental sustainability.

Marketing

Several researchers within the Marketing section are also members of The School of Business and Economics' Institute for sustainability and corporate ethics (RiseB). Issues focused on understanding behaviour and attitudes in relation to sustainability, ethics and responsibility are present in the section's research and teaching.

The Research Institute for sustainability and corporate ethics (RiseB)

The Institute strives to be a driving force for change in sustainable and ethical directions. This is done by assisting, developing and communicating research, and by training and interacting in relation to business-related decision-making. Issues at the individual and organisational levels are focused on and a diversity of perspectives and methods are seen as necessary to analyse globally-acclaimed socially and environmentally-related problems.

Accounting and Financing

Central financial research projects at the section are *Sustainable and Responsible Investments*, (SRI), which involves the inclusion of social, environmental and ethical issues in the investment process, *Investor Behaviour*, which involves various behavioural aspects of investor decisions and risk-taking, and *Venture Capital*, which involves various aspects of the venture capital market.

Economics, Environmental and Resource Economics

At National Economics, research has been conducted for a long time which relates to sustainable development. Examples of this are green accounting and related issues. The subject includes (at least parts of) the research conducted at the department relating to *theories associated with the connection of welfare measurements to national accountabilities*, in other words social accounting. This can e.g. also refer to measuring welfare subjected to external effects (which in turn can be linked to environmental problems) and imperfect competition, as well as the public sector's role in a welfare-expanded accountability system. It can also be about the step from traditional welfare measurements in usage metrics to corresponding dimensions in money metrics. Parts of this research could just as well belong under the heading of welfare theory.

Environmental policy is another example of research in the field of environmental economics which is conducted at the institution. The area has several different areas of focus. Here it can involve economic-theoretical studies relating to optimal taxation in economies where environmental resources play an important role in the economic system, as well as theory development relating to cost-benefit analysis. Another example consists of empirical research

on how environmental policies affect individual companies or industries; e.g. how the supply of goods or the demand for factors of production is affected by environmentally motivated taxes. Another focus could be called International Environmental Policy; e.g. relating to issues that have to do with international policy coordination. Another example is the project called *Green public procurement as an environmental policy control instrument*.

A third example is *natural resource economics*. This actually has two different areas of focus; market-priced and non-market-priced natural resources. Examples of the first are studies relating to energy economics and forest economics; e.g. in terms of production problems and the effects of economic policies. Valuation of natural resources (wildlife, forests etc.) are examples of the second area of focus.

Finally, we have the area of *sustainable development* that can be said to be embodied in all three previous examples. The relevance and importance of research on sustainable development has increased in importance over the past 20 years, and will most certainly be of great importance for a long time to come. Notably, Umeå has one of the largest concentrations of researchers in Europe in areas that directly affect economics and sustainable development.

The Centre for Environmental and Natural Resource Economics in Umeå, CERE, is a centre-collaboration between Umeå University and the Swedish University of Agricultural Sciences, SLU. Within CERE, there are several current research projects which include all aspects of sustainable development. Examples of current projects are: The effect of energy and environmental policies on the sustainable development and competitiveness of Swedish industry; Conflicts relating to natural resource management: reindeer herding and forestry from an economic perspective; Limits to growth in a sustainable society; Energy consumption and area use in early-modern Sweden and Carbon dioxide convergence: driving forces and political implications.

In addition to these, research is also being conducted in other areas such as health economics and third world economics.

Statistics, Demographics

The topic of demographics involves the population's development through fertility, mortality and migration, and how these factors affect and are affected by, for example, economic, political, medical and social factors. In Sweden we have unique opportunities to conduct research in this area because the population has been registered for many hundreds of years. At Umeå University, these opportunities have been harnessed by building population databases for both historic and more modern periods. Much of the demographic research at the Institute of Statistics is conducted in collaboration with the research environment "Ageing and living conditions" (ALC).

Collaboration with Business and Society

Collaboration between different actors, social sectors and cultures is a prerequisite for sustainable development. Collaboration in education currently takes place with business, the public sector and university partners. Collaboration also takes place in research and with the community.

Within education at USBE, guest lectures are also organised within and outside of courses, among other things. These lectures have included elements of sustainable development, such as lectures about ISO 26000, Social entrepreneurship, Sustainergies and guest lectures from

companies that work proactively with sustainability issues such as Klattermusen and Ethos. The business community also contributes with case information within courses, gives ideas for thesis work and takes on trainees. USBE also collaborates with other universities via e.g. student exchanges.

In research, collaboration with the surrounding community is a natural element. The activities of various organisations represent and inspire research issues and research gives back via articles, publications, seminars, workshops, lectures, books and reports.

USBE's Leadership Academy develops customised contract training (Executive Education) for leaders and management in both the public and private sectors within strategy, leadership, project management, operational and financial management and more.

USBE has two advisory groups whose work is to develop the organisation's operation: The Business Advisory Board's (BAB) task is to develop the School of Business and Economics' operation, and in this board we find, among others, Torbjörn Lahti from Sustainable Sweden who works with sustainability issues. There is also the International Advisory Board (IAB) which is a forum for qualified discussion about the School's development and future.

Other examples of activities geared towards the community are the newsletter sent out to the local business 2 times per year. Every year in January, the Västerbotten Days are arranged at the Grand Hotel in Stockholm where USBE participates with alumni activities. Alumni also participate as guest speakers, primarily through the concept of the Breakfast Club, in collaboration with the Student Associations at USBE and HHUS.

Along with students, current theme days are organised (related to areas of study or profile areas). Currently, the Business & Trade Day is arranged in the spring term and the Sustainability Day and the Logistics Day are arranged in the autumn term. An event called Entrepreneur Challenge is organised in cooperation with the Founders Alliance and a workshop series in entrepreneurship/creative thinking (Entreprenom) is organised where the business community is involved.

There is a need to highlight the collaboration internally and to develop and work more strategically with collaboration over time.

Business trips and vehicles

According to the regulations on environmental management in government authorities, the following information must be possible to report to a state authority regarding Business trips and other travels:

1.1 Emissions of carbon dioxide in kg, total and per yearly work output (work corresponding to 1 full-time staff member), from

- a. flights under 500 km,
- b. business-related car journeys (including own vehicles, company cars, rental cars, leased cars, taxis),
- c. train journeys,
- d. bus journeys, and
- e. machines and other vehicles used on for business-related matters.

1.2 Total emissions of carbon dioxide in kg, total and per yearly work output, according to 1.1 a-e.

1.3 Emissions of carbon dioxide in kg for flights over 500 km, in total and per yearly work output.

1.4 Description of collected results:

- a. Describe what has affected results in positive or negative ways, e.g. organisational changes, trends, new assignments.
- b. Describe any problems and shortcomings in the material, and how and when the authority plans to address these.

1.5 How is the information produced? If there are discrepancies between follow-up measurements, indicate what applies for each measure.

Collection of information and more

Statistics with regard to emissions from flights for each institution is possible to obtain from the travel agency that has been hired centrally by the University. The travel agent makes the calculations of the carbon emissions that are reported (flights shorter and longer than 500 km, as specified in the regulation 2009: 907).

For USBE's carbon footprint from business travel, there are no previous statistics, but for Umeå University as a whole, it can be mentioned that the reported emissions have grown between 2010 and 2012. It is believed that this is due to a new travel agency being contracted and more and more employees have opted to engage the travel agent when arranging travels. The University centrally says in its reporting of environmental management in 2012 that the main environmental objective of the University's carbon footprint will be limited for business trips, partly it is to be met by the many efforts made to offer different distance-spanning technologies.

As for statistics for emissions stemming from other types of USBE travels (trains, rental cars, taxis, buses), it has not been possible in this investigation to develop a conclusive overview of this. USBE does not own any of its own vehicles. Direct effects on the environment from business trips are reported in table 1.

Table 1. Reporting of climate-affecting emissions from business trips - USBE 2012.

Goal: Carbon dioxide emissions in total and per yearly work output	Environmental impact in 2012 Total CO₂ emissions	Environmental impact per employee (150 employees of which 86 FEK, 36 Stat, 28 NEK)	Follow-up method	Eventual proposed follow-up
Flights under 500 km	FEK 31,135 kg CO ₂ Statistics 6,951 kg CO ₂ NEK 8,186 kg CO ₂ <u>TOTAL 46,272 kg CO₂</u>	FEK 384 kg CO ₂ /employee, year Statistics 193 kg CO ₂ /employee, year NEK 292 kg CO ₂ /employee, year <u>TOTAL NEK 308.5 kg CO₂/employee, year</u>	Supplier information, STS standard	Desire delivery of total for entire USBE
Flights over 500 km	FEK 59,277 kg CO ₂ Statistics 17,766 kg CO ₂ NEK 17,787 kg CO ₂ <u>TOTAL 94,780 kg CO₂</u>	FEK 689 kg CO ₂ /employee, year Statistics 493 kg CO ₂ /employee, year NEK 635 kg CO ₂ /employee, year <u>TOTAL 631.9 kg CO₂/employee, year</u>	Supplier information, STS standard	Delivery, one record for entire USBE
Total CO₂ emissions - flights	141,052 kg CO₂/year	940.4 kg CO₂/employee, year		

There are a number of distance-spanning IK technologies that can be used by staff and students to reduce the number of business trips. The IT unit has free video conferencing technology. All employees have access to a telephone and the computer conference service called Lync. The University's switchboard offers free teleconferences for employees.

Energy consumption

According to the regulations on environmental management in government authorities, the following information must be possible to report to a state authority regarding Energy consumption:

- 2.1 Annual energy consumption in total kilowatt hours, per yearly work output and per square metre, distributed over
 - a) operational electricity, and
 - b) other energy consumption
- 2.2 Total annual energy consumption, per yearly work output and per square metre according to 2.1 a and b.
- 2.3 Description of heat consumption is corrected as per normal year base.
- 2.4 Share of renewable energy in the total energy consumption (given in %).
- 2.5 Description of collected results,
 - a) Describe what has affected results in positive or negative ways, e.g. organisational changes, trends, new assignments.
 - b) Describe any problems and shortcomings in the material, and how and when the authority plans to address these.
- 2.6 How is the information produced? If there are discrepancies between follow-up measurements, indicate what applies for each measure.
Description of how the authority has used information technology to reduce energy consumption (e.g. IT systems to control and regulate lighting, heating, ventilation, energy efficiency of equipment and more)

Collection of information

Statistics to follow-up on the energy consumption has been granted by the property owner. This is delivered to the university, on an annual basis, and can be broken down to the "building level". In the present investigation, statistics for the Social Sciences Building, where USBE's premises are located, have been submitted for 2010-2012. An estimate of USBE's energy consumption has been made based on USBE's premise area compared to the entire Social Sciences Building premise area relating to operational premises. Student facilities, corridors and classrooms that are common to the whole University are not included in the statistics. USBE's premise area is equivalent to about 17 % of the total operational premise area (LOA-V) in the Social Sciences Building (details of premise area have been obtained from the Building Maintenance Office at the University). Estimated energy consumption for USBE 2010-2012 is reported in Table 2.

Table 2: Estimated energy consumption 2010-2012 in operation premises corresponding to USBE's premise area in the Social Sciences Building, Umeå University. Under 'Other energy', heat and building electricity are included. Heat consumption is corrected as per normal year base. The consumption of Cooling is not currently measured in the premises.

	Other energy	Operational electricity	Other energy	Operational electricity	Other energy	Operational electricity
Year	kWh, year	kWh, year	kWh/m ² , year	kWh/m ² , year	kWh/employee, year	kWh/employee, year
2010	268537	165609	63.3	39.1	1790	1104
2011	252396	150716	59.5	35.6	1683	1005
2012	257647	149164	60.8	35.2	1718	994

Procurement and purchasing

According to the regulations on environmental management in government authorities, the following information must be possible to report to a state authority regarding Environmental requirements upon procurement:

- 3.1 Share of registered purchases (procurement and purchasing) where environmental requirements are set by the total number of acquisitions per year (given in %).

3.2 Economic value of registered acquisitions with environmental requirements of the total value of registered acquisitions per year.

3.3 Description of collected results:

a) Describe what has affected results in positive or negative ways, e.g. organisational changes, trends, new assignments.

b) Describe any problems and shortcomings in the material, and how and when the authority plans to address these.

3.4 How is the information produced? If there are discrepancies between follow-up measurements, indicate what applies for each measure.

In 2012, turnover amounted to approximately 140 million SEK at USBE. The major costs involved premises and staff. Approximately 38 million SEK stemmed from "other operating costs", in other words travel purchases, equipment, apparatuses, office supplies, external consultancy support etc.

Currently there is no possibility to investigate the extent to which environmental and ethical requirements are set upon USBE's purchasing and procurement. In some cases, USBE has the possibility to affect this, but in most cases the regulating state framework prevails as to what can be purchased or procured. The government framework agreement shall, however, have environmental concern included.

Waste

Collection of information

In the Social Sciences Building, there are office premises, student spaces, a café and classrooms. Disposal of waste in the Social Sciences Building is managed by a contractor from which the following information has been collected. Waste sorting is done in accordance with the University's recycling practices. Since USBE's amount of waste cannot be distinguished from the total amount of waste, and taking into account USBE's relation to operations in the Social Sciences Building (which houses a cafe among other things), it can be considered as relatively insignificant for all fractions, except possibly for recycled paper, including various forms of mixed paper.

Paper consumption

Since the provider of paper and other office supplies at the University changed the data management system in 2013, it is not possible to obtain statistics on sales (equivalent to approximately the consumption of institutions) for 2012 or 2013. For coming years, statistics regarding paper purchases per institution will, however, be possible to retrieve.