

UNIVERSITY OF GOTHENBURG
SCHOOL OF BUSINESS, ECONOMICS AND LAW

TOWARDS SUSTAINABILITY

PROGRESS REPORT





A WORD FROM THE DEAN

The School of Business, Economics and Law at the University of Gothenburg has a long tradition of research and education in sustainable development.

Yet, in recent years, we have taken strong measures to better integrate issues of sustainable development into our degree programs and to prioritize sustainability issues more generally. Each and every individual who graduates from our school should have acquired solid knowledge with respect to the major national and global challenges in the ecological, economic, and social dimensions. Moreover, they should have obtained relevant tools to analyze these challenges, which is in accordance with our expressed mission:

The mission of the School is to develop knowledge and educate creative individuals for the advancement of successful organizations and a sustainable world.

My hope is that this brief report will provide some inspiration for other business schools as well as other organizations. In the sustainability dimensions, we are not competitors but rather partners for a better and more sustainable world.

A handwritten signature in black ink, appearing to read 'Per Cramér', with a stylized flourish at the end.

Per Cramér

Dean, School of Business, Economics and Law

CONTENTS

INTRODUCTION:	3
The scope of this report	3
PRINCIPLE 1: PURPOSE	4
Overview	4
Achievements	4
Future Challenges	5
PRINCIPLES 2 & 3: VALUES AND METHOD	6
Overview and framework	6
Achievements	9
PRINCIPLE 4: RESEARCH	14
Overview	14
Achievements	15
Challenges	15
PRINCIPLES 5 & 6: PARTNERSHIP AND DIALOGUE	16
Overview	16
Achievements	16
Challenges	18
PRINCIPLE 7: ORGANIZATIONAL PRACTICES	20
APPENDIX	22
Sustainability dimensions	22
Peer-reviewed articles relevant to sustainability	22
Examples of PRME and sustainability-relevant PhD theses	23

For further information regarding this report
please contact:

Mattias Sundemo

Sustainability Coordinator
mattias.sundemo@handels.gu.se

Olof Johansson-Stenman

Professor of Economics
Vice-dean
*Chairman of the School's Council
for Sustainable Development*
olof.johansson@economics.gu.se

INTRODUCTION: THE SCHOOL OF BUSINESS, ECONOMICS AND LAW AT A GLANCE

The School of Business, Economics and Law at the University of Gothenburg has nearly 4,000 full-time students and approximately 300 faculty members of whom 110 are full professors or associate professors. The School has an extensive network of 160 partner universities and 100 corporate connections, which contributes greatly to its advancement. The School consists of four departments: Business Administration, Economics, Law, and Economy and Society (including Economic History, Human Geography, and Innovation and Entrepreneurship).

In addition, the School hosts a number of multidisciplinary research centers as well as the Gothenburg Research Institute, which is a multidisciplinary research unit.

THE SCOPE OF THIS REPORT

The scope of the School's academic activities, and hence also this report, goes beyond the realm of management studies and highlights efforts, achievements, and future challenges for the School as a whole. We believe the framework and principles of the PRME to be relevant for disciplines and subjects outside of management studies. The School signed the PRME and the Global Compact before the launching of the School's new strategy in 2012. Thus, this is the School's second PRME report presenting the progress with regard to sustainability (of which we see responsible management as a crucial part) through the framework of PRME's six principles. The report also constitutes the School's COP report to Global Compact.

The six principles overlap to some extent frameworks such as EQUIS, AACSB, and the ISO14001 – accreditations and certifications the School holds with relevance for sustainability. Yet, it is of course not accreditations or certifications (including PRME) that are the main drivers of a successful implementation of sustainability in our core activities. Instead we believe that it is the understanding and curiosity of individual teachers, researchers, and other employees as well the knowledge and ability of the management to provide an enabling and encouraging environment that will determine whether we will continue to be successfully integrate sustainability in all we do at the School of Business, Economics and Law.

The strong commitment to sustainability is made possible through a strong research base. The research at the School is largely characterized by collaboration across geographical, institutional, and disciplinary boundaries. The sustainability-related research at the School covers topics such as long-run growth, globalization issues, socioeconomic impact of HIV/AIDS, business ethics, marine resource management, and sustainable urban planning, to name a few. We believe that good sustainability education rests on a solid foundation of sustainability-related research, well rooted in subject-disciplines.

PRINCIPLE 1: PURPOSE

The aim is to ensure that when our students leave the School, they are armed with relevant tools in the form of concrete skills and insights related to key sustainability issues and that they grow as individuals.

OVERVIEW

the School educates the next generation of decision makers. This implies a responsibility to offer degree programs preparing students for the complex challenges facing society, such as resource constraints, climate change, financial instability, and social tensions. In line with PRME, the Swedish Higher Education Act, and the University of Gothenburg's strategic aims, the School has adopted a strategy with a strong focus on sustainable development. The School acknowledges that it has a responsibility, both collectively and individually, that should be taken into account in all activities. This also reflects the ambition of developing innovative and relevant research and education.

The mission statement guides academic development at the School:

The Mission of the School is to develop knowledge and educate creative individuals, for the advancement of successful organizations and a sustainable world.

To educate creative individuals is closely associated with an understanding of the complexity involved in solving societal problems. Students need to develop sufficient understanding and awareness of how a single scientific discipline can open up for new perspectives and lessons learned from other disciplines. Through multidisciplinary and multistakeholder perspectives, which are often required in order to effectively address

sustainability, the School facilitates the development of creative individuals with a critical mindset, ready to shift perspectives on problems related to sustainability. Understanding the role of different stakeholders with different or conflicting agendas and the role one can play for solving real world problems, are at the heart of the School's mission.

ACHIEVEMENTS

Background – from electives in sustainability to key feature in all degree programs

In education, a large number of elective courses clearly focus on matters related to sustainability; electives in, e.g., sustainable marketing, environmental economics, and sustainable management, to name a few, have been



offered for a long time. Furthermore, since 2001 the School hosts a Bachelor's program in Environmental Social Science, the first of its kind in Sweden with around 60 students every year.

Until recently, however, it was possible for students to graduate from programs offered at the School without being seriously confronted with the grand sustainability challenges of today and tomorrow. This was recognized by the School's Management Team in late 2011, resulting in the appointment of a Working Committee for Sustainability. The Committee consisted of researchers and the School's environmental coordinator, and was tasked to assess how sustainability comprehensively could be integrated into all of the School's core activities, focusing education. After a collaborative approach and an outward-looking process to identify good examples and best practice, the group wrote a report to inform further discussion on how the School could navigate towards sustainability, with a particular focus on education. The overall objectives of the report were adopted by the School Faculty Board in 2013 for continuous implementation in the organization. The report *Education for a Sustainable Future* also constituted the school's first PRME report.

The proposed (and later adopted) framework focuses on skills, insights, and tools for sustainability.

The aim is to ensure that when our students leave the School, they are armed with relevant tools in the form of concrete skills and insights related to key sustainability issues and that they grow as individuals. Ultimately, we are endeavouring to ensure that they succeed well as individuals on the labour market they are about to enter and that in due course they will contribute to making the world a slightly better place.

(This Is Sustainability to Us, 2013)

The framework is in alignment with the School's strategy, which states that:

Even though we already have a lot to offer, we are now intensifying these efforts on a strategic level and dedicating special resources to these efforts. We will start by paying special attention to our study programmes, where all programme students should have a good understanding of the importance of sustainability considerations when graduating.

(Strategy 2012–2016)

More on the sustainability framework and the results of the implementation so far are described under principle 2–3 below.

FUTURE CHALLENGES

Critical thinking and academic freedom are and should be cornerstones of all academic activities. Many instructors are also largely driven by an internal motivation to perform well, a motivation that might in part be crowded out if top-down approaches are forced on them. Instead we believe that the most efficient approach, in the long run, is to support the teaching staff and to provide them with guidance and inspiration so that they themselves will want to incorporate elements of sustainability in their courses. So far, we believe that this strategy has worked rather well, although this is clearly not something that can be accomplished overnight. The same is true with respect to the knowledge and capabilities of the teaching staff in various sustainability dimensions. Consequently, a lot remains to be done in our work to introduce elements of sustainability in a large number of courses.

PRINCIPLES 2 & 3: **VALUES AND METHOD**

Learning outcomes for sustainability
– now in all Bachelor's programs.

OVERVIEW AND FRAMEWORK

As an academic institution, our potential impact on society depends on the education we provide to our students. As described under principle 1 above, in 2013 the Faculty Board decided on a framework aimed to integrate sustainability into all degree programs at the School with an initial focus on Bachelor's programs. Instead of all programs adding a mere course in sustainable development, we decided to try to do this the hard way: by integrating sustainability into existing courses. This requires broad participation by the School's teaching staff.

Sustainability learning outcomes

Perhaps the most important part of the framework is that learning outcomes for sustainable development were to be formulated for all the Bachelor's programs and the law program. The logic behind this is that the learning outcomes in the curricula guide course development and obligate program coordinators to revise the programs, program learning outcomes are not aspirational. It was also, considered a good point of departure to focus on what new knowledge, understanding, and abilities our students must demonstrate after graduating.

Coaching, follow-up, and the 14 “sustainability dimensions”

Coaching of teaching staff in general and course and program coordinators in particular are also highlighted in the framework. Working with individual

instructors is time and resource intensive yet absolutely vital for an effective integration of sustainability perspectives into courses, as described by for example Holmberg et al. (2006)¹. It is not always easy and straightforward to monitor what students actually do learn in their courses. This also has relevance for the work related to the AACSB accreditation that the School is currently involved in.

When it comes to sustainability learning, the initial focus was to try to come up with a point of reference for the degree programs. What sustainability content do our students already encounter in our programs? Do students and teaching staff have roughly the same view regarding the inclusion of sustainability perspectives in the courses? These questions were tackled through surveys and the results were presented in two reports, one focusing on course coordinators and one focusing on students. The reports have been presented



Figure 1. The four main areas of responsibility.

Educational support refers to the importance of offering teaching staff opportunities for professional development. This could be done for example through seminars and discussions with program and course coordinators with an aim to increase their awareness of sustainability issues, something considered a prerequisite for increased integration of the concept of sustainability into courses and degree programs.

Strategic support sustainability deals with for example the dissemination of sustainability research and the assessment of opportunities for strategic international recruiting, for instance through the School's Visiting Professor Programme. It also refers to involvement in various international networks related to sustainability.

Sustainability Days, is the School's thematic days focusing on sustainable development. The days are mandatory for all program students at Bachelor's level, manifest the importance of sustainability, and provide students with basic knowledge and understanding about challenges, responsibilities, and solutions.

Sustainable campus refers to the School's work on reducing the environmental footprint as well as the use of the physical environment for enhancing sustainability learning. Follow-up on sustainability performance, as well as addressing practical elements of the schools ISO14001 certification are included here.

to department heads and discussed with program coordinators. Findings from these reports are described under "achievements" in this chapter.

To be able to provide a good benchmark for sustainability integration, it was considered necessary for the School to define sustainable development in greater detail. There were a number of reasons for this. First and foremost, simply asking about integration of sustainability into courses would yield very little useful information as we would not know what meaning students and teachers would give the word "sustainability." Second, specifying what we meant in greater detail would also give useful information on specific aspects of sustainability that we perhaps had left out in our programs or that students found to be relevant but not sufficiently emphasized.

With the reference point of *This Is Sustainability to Us* and a benchmark on how other universities have tried to "define" sustainability,² the School's Council for Sustainable Development (after long discussions) came up with a list of 14 "sustainability dimensions" (see Appendix). A guiding principle in this work was to include important subject-specific conditions, concepts, and themes for all scientific disciplines at the School.

Sustainability Days

The framework also includes three yearly so-called Sustainability Days. The Sustainability Days focus on three knowledge areas, namely challenges, responsibility, and solutions. The purpose of the Sustainability Days is to facilitate student education, while at the same time manifesting the School's focus on sustainable development. It is also a unique opportunity for

students to meet peers from other programs and analyze sustainability problems together from different perspectives. A brief description of the Sustainability Days is presented later in this chapter.

Organization

In order to coordinate the different activities briefly mentioned above, the School's Council for Sustainable Development (CSD) was established in 2013. The Council has four main areas of responsibility, as outlined in Figure 1 above, namely educational support, strategic sustainability support, sustainable campus, and sustainability days. The work within the Council is described in an annual activity plan. The CSD is chaired by the Vice-Dean and consists of one researcher from each of the School's four departments. Much of the work is carried out by the sustainability coordinator and the project coordinator for the Sustainability Days. The School's communication officer is also an important part of the CSD. In addition, CSD meetings usually involve students from Handels Students for Sustainability.

What do we mean by sustainability?

According to the document *This Is Sustainability to Us*, adopted by the School Faculty Board in 2013, the word *sustainability* is used by a variety of actors in a wide range of contexts and does not have a clearly defined meaning. Therefore, prior to the far-reaching process of integrating sustainability into all degree programs, it was necessary to clarify how the umbrella concept of sustainability was to be used.

To our knowledge, few business schools have elaborated on how to use or interpret the concept of

1 Holmberg John and Samuelsson, Bo, "Drivers and Barriers for implementing sustainable development in higher education", UNESCO 2006.

2 University of Oregon (and their AASHE report) provided useful inspiration.

“responsible management” or “sustainable development” in relation to the development of program or course curricula. For us, we found it useful to try to specify in greater detail what we mean by the perhaps somewhat overused word “sustainability.”

The School strategy expresses that sustainability in the economic, social, and ecological dimensions is crucial to us. Sustainability considerations revolve around a variety of areas, such as ecology, responsible management, ethics, poverty alleviation, equal treatment, and non-discrimination. The text below, developed jointly by the departments and the School management, describes the concept of sustainability in a little more depth.



Åsa Löfgren is Associate Professor, Assistant Head of Department and Director of Studies at the Department of Economics and also member of the School's Council for Sustainable Development. Löfgren is an international expert in the area of climate economics; in particular she has focused on climate change and behavioral economics. Löfgren emphasizes the importance of integrating sustainability into the ordinary course curricula, where individual course coordinators are of outmost importance. Two successful examples of courses that have integrated sustainability into the curricula are undergraduate Financial economics and International economics. The course coordinators have developed new modules that include both ethical and environmental aspects.

THIS IS SUSTAINABILITY TO US:

We use the term sustainability in a broad sense and our starting point can be found in the definition presented in the Brundtland Report. For us, the term embodies environmental, economic, and social sustainability with a responsibility for the potential of future generations to live a good life. Our use of the term is naturally open to interpretation and must be subjected constantly to critical, scientifically based discussion.

Environmental sustainability is related to the natural conditions for our existence and the ways in which human activity affects these conditions. This includes ecological stability in the central ecosystems, the energy and climate issue, the health effects of emissions and contaminated food, the risks associated with genetic modification of plants and animals, our use of finite natural resources, and over-utilization of renewable natural resources.

Economic and social sustainability is related to the economic and social structures that human beings have created to organize society. This includes ethical issues and issues related to responsibility at the individual, organization, and society level as well as cultural norms and the meaning and protection of human rights. Likewise, it includes stability in basic social structures, such as economic and financial systems, and allocation of resources, which also involves discrimination and poverty issues.

We would like to emphasize that we regard sustainability issues and related insights and skills to be key features in our degree programs and that they should be compulsory to the same extent as the other elements. This also applies to the special student days, during which there is a particular focus on sustainable development. It is important to point out that sustainability-related elements should have a scientific foundation and maintain a strong link to current research to the same extent as other elements in our programs.

In conclusion, we generally encourage students to question critically the theories and methods mediated by the teacher and this naturally applies in this context. We are also well aware that here, as in other areas, scientific links are not always clear-cut, and this should naturally be reflected in the teaching. At the same time, we should not shy away from discussing ethical and normative issues that ought to be addressed.



ACHIEVEMENTS

This section describes some of the accomplishments since our last report in 2013 and how the implementation of the School's strategy is proceeding.

Learning outcomes for sustainability – now in all Bachelor's programs

As described above, a key feature of the School's sustainability framework is that context-specific sustainability learning outcomes must be established for all Bachelor's programs. The strategy, to focus on the program level, implies that program coordinators have a key role in the work to revise and develop programs in a direction that ensures that the new sustainability learning outcomes are met. This process is also linked to the AACSB accreditation and especially the process of assurance of learning (AOL). In the AOL process, learning for sustainability is one of the areas that will receive extra attention and be evaluated according to the AOL method.

Example 1: Learning outcomes related to sustainability integrated into the syllabus for the Program in Business and Economics, analytic orientation.

- Demonstrate knowledge about problems related to allocation of resources and environmental degradation at global level, and about different tools and interventions at the global, national and organizational levels that can be used to reduce them.
- Demonstrate an ability to analyse the role of different private and public actors as part of problems and solutions for a sustainable development of society.
- Demonstrate insight regarding the link between economic activities and sustainable development for present and future generations.

Example 2: Learning outcomes related to sustainability integrated into the syllabus for the Master of Laws programs

- Knowledge about environmental and resource- and allocation-related problems, as well as about the role of law in relation to societal aims for sustainable development.
- Ability to make assessments in the field informed by relevant disciplinary and social considerations, such as human rights and ethical factors and sustainable use of natural resources.
- Ability to identify and analyse the role of law as part of problems and solutions in relation to sustainable development of society, for both present and future generations.

Above:

Sustainability Day: Challenges 2015. 350 students were listening and participating during the Planetary Boundaries session. Speakers include the school's vice-dean professor Olof Johansson Stenman, Kerstin Johannesson, professor in Marine biology, and Anders Sandoff Senior lecturer in industrial and financial management.

Middle:

Olof Johansson-Stenman is vice-dean at the School, professor in economics and chairman of the School's Council for Sustainable Development. "We have had a strong research environment in sustainability related issues for decades, and we have also had a large number of electives in sustainability for interested students. Yet, I see sustainability issues as key feature in all our programs. Electives are not enough, all students need to have a good knowledge of the most important sustainability challenges we are facing as well as tools for dealing with them", says Olof Johansson-Stenman.

Below:

Göran Carstedt, guest professor at the School for 2015–2016, have ample experience from leading positions in large organizations like Volvo, IKEA and the Clinton Climate Initiative. Göran have contributed to seminars for teachers as well as in different courses. Management, learning and sustainability issues are most often addressed during Göran's lectures.

In 2015, the Department of Law decided on learning outcomes related to sustainability for the Master of Laws program. This means that all programs at the School now have sustainability integrated into their program syllabi.

Point of departure: what do we teach today?

In 2014 and 2015, the CSD carried out two comprehensive surveys. The first survey, directed to course coordinators, had the aim of analyzing current sustainability content of our Bachelor's programs and informing program coordinators and departments about where to focus action and support. The survey had (after a number of reminders) a response rate of over 92%.

The survey included most courses at program level (essay courses were excluded for all programs and for Economics only semesters 1–3 were included due to a recent revision of the program structure). As described above, the survey was based on the 14 sustainability dimensions formulated by the CSD. Course coordinators were asked about how and in what way (for example through guest lectures, case studies, or a learning outcome) their course related to each of the dimensions. Figure 2 presents some aggregated results.

The survey included 96 courses in the four programs. According to the submitted responses, 75 covered at least one of the 14 sustainability dimensions. However, only 23% of program courses had one or more of the dimensions represented in the course learning outcomes. The survey also asked about methods of integration, giving the following alternatives: guest lectures, examples, single lectures, multiple lectures, case studies, and

“other.” “Multiple lectures” was the most common answer in courses that included one of the dimensions as a learning outcome. Overall, however, the most prevalent answer was “single lecture.” The sustainability dimensions are explained in the appendix.

In the second survey, which targeted students, all program students were asked about their view of how the 14 dimensions had been highlighted during their first year of study. The survey was distributed as part of a mandatory assignment for Sustainability Day: Responsibility, resulting in a very high response rate (95%). When comparing the responses from course-coordinators (figure 2) and students (figure 3), one can discern moderate agreement regarding the extent to which the sustainability dimensions were included. The survey methodology is of course not perfect. For example, students are only asked about their first year while the responses from course coordinators cover the whole program in most cases. In Figure 3 below, a number of response options have been merged to improve readability.

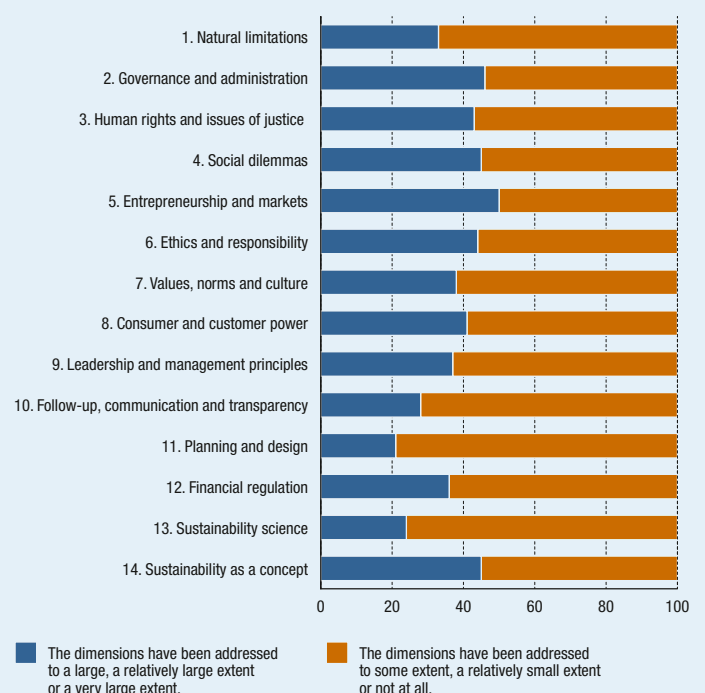
As can be seen in the figure, the inclusion of Leadership and management principles is more highlighted in the answer from course coordinators (53%) than from students (37%). Students instead see *entrepreneurship and markets* as the most widely covered dimension.

Figure 4 below illustrates aggregated results regarding how program students perceived the inclusion of the dimension during their first year of study. As shown, only a very small proportion think that the dimensions were overemphasized. A large share of the students responded that there was too little content related to for example the following dimensions:

Fig 2: Aggregated results for all four Bachelor's programs, survey given to course coordinators. Survey question: Does your course address the following sustainability dimensions?



Fig 3. Survey question given to students: To what extent have the following dimensions been addressed during your first year of the program?



planning and design (44%), *human rights* (39%), and *leadership and management* (40%). Relatively few students responded that sustainability as a concept was underemphasized (28%). Most students however responded that the dimensions were appropriately emphasized.

Examples of findings from these two surveys:

- Only a small proportion of students in all programs think there is too much focus on sustainability; a much larger proportion think there it is too little focus (true for all programs).
- There is moderate consensus between students and teachers regarding the role of sustainability in the courses.
- There are substantial differences between the programs. Data suggests a deeper integration and more focus on sustainability in the MBA program than in the Masters of Laws program.
- Women systematically (for all dimensions) exhibit a larger percentage of responses than men in the “too little” category, suggesting that they generally have a stronger interest in sustainability-related issues.
- Students generally consider sustainability to be integrated to only a low extent, saying it is usually something “extra,” i.e., something that is not deeply integrated into the rest of the course.

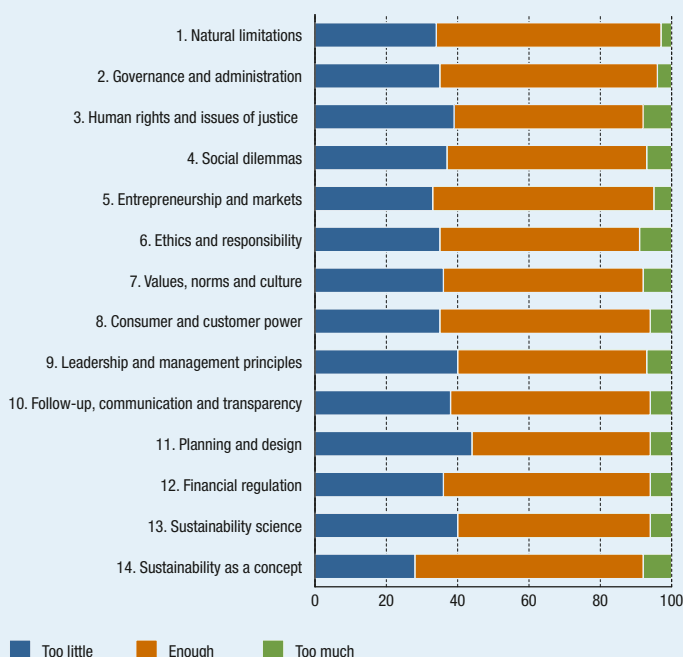
The Sustainability Days

The Sustainability Day concept was introduced in 2013. It consists of three full days with a sustainability focus and targets Bachelor’s students. Starting in 2016, the days will be made permanent in all Bachelor’s pro-

grams. The Sustainability Days are based on an idea of progression, where students start with *Challenges*, a day for all first-year program students focusing on sustainability challenges from multiple perspectives. In year two, students continue with *Responsibility*, focusing on responsibility and accountability and problematizing the roles of various actors in a globalized world. This day has so far (in 2014 and 2015) addressed ethical, social, economic, and environmental aspects related to the consumption and production of fashion. Researchers, NGOs, as well as small and large enterprises have played an active part in these days. The third day is called *Solutions* and was organized for the first time in February 2016. The Sustainability Development Goals (SDGs) and Agenda 2030 (endorsed by all UN members in September 2015) constituted the framework of this day. The students worked with urban sustainability challenges related to the Agenda and tried to identify potential solutions (or possible prerequisites for solutions). Speakers included local and national government representatives involved in Sweden’s implementation of Agenda 2030.

In contrast to the first day, during which students pick and choose from a variety of sustainability lectures, days two and three include a group assignment. The groups are mixed, enabling law, MBA, and economics students as well as students from our Social Science Environmental Program and our Logistics program to work together. This is the only time that students from different programs collaborate to solve shared problems. The School and the students value this opportunity, which is a good way to prepare for

Fig 4. Do you think that the following sustainability dimensions were emphasized enough during your first year in the program?



3rd year bachelor students from all four programs at the school working together in mixed groups on potential solutions to urban sustainability challenges during the Sustainability Day: Solutions. Keynote speaker Sofia Östmark presented the Swedish government’s effort to align political priorities with the 2030 Agenda for sustainable development.





Students organizing a clothes-exchange event during Sustainability Day: Challenges 2015.

Examples of themes: Sustainability Day – Challenges

- The challenge of antibiotic resistance
- Human rights in supply-chain management
- Energy supply as a global challenge
– supply, safety, and climate impact
- The climate impact of meat production
– why consumer patterns need to shift
- Planetary boundaries
– human impact, the great challenges, and the relevance for you as a student
- Doing sustainable business
– from words to action
- Large-scale migration
– challenges and issues of justice

real life decision making based on different perspectives and understandings of problems.

Even though the Sustainability Days receive a lot of attention and clearly stand out from the everyday studies, they are only a small part of the School's sustainability efforts. Increasing sustainability perspectives in our program courses is more important. The School's Council for Sustainable Development (CSD) actively works towards increased education through workshops, seminars, and coaching with individual teachers. In the spring of 2016, a series of workshops will focus on our Master's programs.

Teacher Support and Pilot Courses

Teacher support and professional development was identified as perhaps the most important activity in the report *Education for a Sustainable Future*. Teaching staff in general, and in particular course coordinators and program management teams, are key persons in the work to integrate sustainable development in the School's courses and programs.

As described under Principle 1, everybody who graduates from the School shall have acquired solid knowledge in relation to the major national and global challenges in the ecological, economic, and social dimensions. They shall also have obtained relevant tools to analyze these challenges, in accordance with the School's mission. This is to be accomplished partly by making better use of the School's strong research in the area of sustainability, but faculty development is also crucial. So-called Sustainability Lunches, arranged to create a dialogue among colleagues at the School, have been arranged. Each lunch has a theme and a discussion leader, who also gives an introduction to the topic of the day. The topics range widely, from pedagogical issues and course content to the broad global issues. Issues discussed so far include the Green Race, hosted by Mr. Björn Stigson (former president for WBCSD); Ethics and Compliance Strategies at Volvo Cars, presented by the company's ethics and compliance officer; and the Paris climate agreement, hosted by the Swedish climate ambassador Anna Lindstedt.

The School's Council for Sustainable Development also coaches a number of course coordinators in integrating sustainability issues into specific courses. Good examples so far are the program courses in international economics and financial economics. The course in international economics now has an explicit focus on development and environmental aspects, and the course in financial economics covers issues such as ethics and responsibility related to financial markets, and risk.

The sustainability coaching has both a direct and an indirect positive effect. The direct effect is that more courses include sustainability aspects. The indirect effect is that those courses can serve as inspiration for other teachers whose courses do not currently cover issues related to sustainability. The work with the pilot

courses will be summarized in reports that can be used by all faculty at the School.

Combining theory, practice, and helping others – the School's Law Clinic

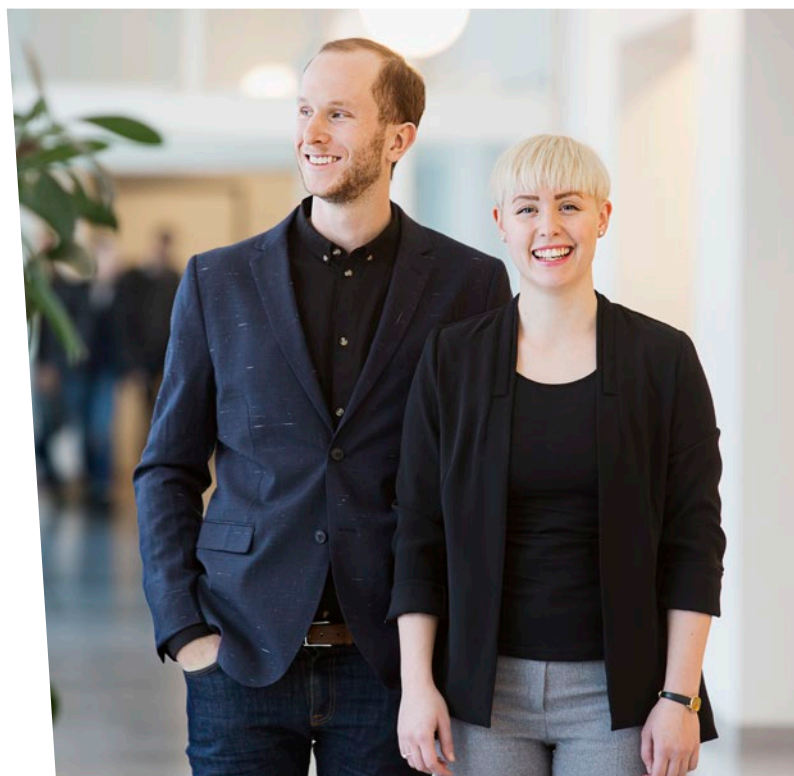
The School's Department of Law is the first law program in Sweden with a so-called law clinic. A law clinic is usually defined as an academic clinical course where students earn credits while giving legal advice to disadvantaged people. The School provides teaching staff who support the students with both theoretical knowledge and practical skills. The Law Clinic Gothenburg started a unique course in 2014, called Humane and Welfare Law in Practice. The aim of the law clinic is to improve students' skills and at the same time promote responsibility and exercise social sustainability. By cooperating with various non-governmental organizations, for example the Red Cross, students get an internship for five months. They work closely with their tutors who are all lawyers. Students are with the NGOs three days a week and at the School two days a week for seminars, examinations etc.

Handels Students for Sustainability – students pushing the sustainability agenda

Handels Students for Sustainability is a student association at the School dedicated to channel students' ambitions and creativity into making sustainability happen. They describe their purpose as spreading knowledge, creating incentive, and developing their members' abilities as change agents. Even though their base is at the School, activities aim at reaching far outside the University walls. The vision is for all students at the School of Business, Economics and Law to understand the opportunities of a sustainable society. The ambition is to serve as a platform for student-driven initiatives and discussions in the area of sustainability, targeting in particular the fields of economics, business and law. Student-run projects are the foundation of the association. All events are carried out based on the initiative of members, with the board acting as support. A project could for example be to arrange a seminar, lecture, workshop, case assignment, or contest.

Future Challenges

Having developed sustainability-related learning outcomes for all programs is a milestone. However, much work remains before we can rightly claim that sustainability is deeply integrated in our programs. Further developing processes for quality assurance related to sustainability as well as increasing sustainability knowledge among teaching staff are some of the focus areas for the future.



Above:

Master of Laws students helping clients free of charge at non-governmental organizations such as the Red Cross. Teachers at the School provide support and guidance, giving the students a valuable opportunity to develop theoretical and practical skills while at the same time providing community service.

Below:

Martin Ahrin-Larsson and Anna Simmons, chairman and vice-chairman, respectively, of Handels Students for Sustainability, a student driven association focusing on sustainability in everything they do. "We are overwhelmed by the interest from students; we hardly have time to take care of all students who want to get involved," Anna says. At the yearly event "Enviro Travel" a number of elected students got a chance to participate in a field-study. For 2016 the trip will go to Pakistan and focus on worker rights in the shoe and clothing industry. Apart from studying local working condition, the students also aim to develop cooperation with students at the local university.

PRINCIPLE 4: RESEARCH



OVERVIEW

The School's strong commitment to sustainability would not be possible without a strong research base in all fields of study. A credible sustainability strategy must be firmly grounded in good research.

The School's research base in sustainability is not a result of exact dictates from the School Management Team or the departments, as it is believed that dictating research priorities to the individual researcher is a dead end. Rather, excellent research is based on the individual researcher's curiosity. This does not imply a lack of control of the research conducted, however, and strategic measures are taken continuously. Allocation of strategic resources to strengthen sustainability research further is one instrument, for example when formulating requirements for international recruitments.

To the extent the School *does* prioritize, the focus is on research that relates to:

- Sustainability
- Globalization, regarding both focus and outreach
- Close relations with other parts of society

As research in sustainable development often involves studying and tackling societal problems with great relevance for numerous stakeholders, the funding often comes from several sources. A recent example of the interest in the School's research on sustainability is that a private initiative in late 2013 declared that it had decided to fund a professorship, including a complete research environment with PhD students and post-docs, in marine management at the Department of Law.

Above:

David Langlet holds the new professorship in marine governance and law (at the Department of Law), the first of its kind in Sweden. The research environment in marine governance and law, largely funded by a private donation, now also includes PhD and post-docs.

Below:

Marie Stenseke is a professor of human geography at the Department of Economy and Society. Since 2015 Marie is a co-chair of the UN-initiated scientific expert panel IPBES, where she in particular represents the social science dimensions. IPBES can be seen as a biodiversity equivalence of IPCC. The background to the initiative is the accelerating loss of species, biological diversity and ecosystems around the world.



Niklas Egels-Zandén is an associate professor at the Department of Business Administration. Niklas' research interests focus on CSR and strategy issues. In the research project "Tracing Sustainability Supply Chains" Niklas investigates how Swedish firms implement their environmental and social policy towards suppliers in Asia. Niklas were one of the speakers at the Sustainability Day: Responsibility 2015.

ACHIEVEMENTS

Examples of prominent recent research on sustainability issues can be found in the fields of environmental and development economics at the Department of Economics. In development economics, research areas include long-run growth, globalization issues, industrial and agricultural development, poverty, income distribution and labor markets, and health-related issues such as socioeconomic impacts of HIV/AIDS. In environmental economics, research areas include design of policy instruments targeting climate, transport, and industrial environmental problems, natural resource management (with a particular focus on developing countries), and welfare issues. Aspects of sustainability are also studied in the fields of behavioral economics, financial economics, health economics, and public economics.

At the Department of Business Administration, sustainability-oriented research is conducted in the areas of consumer behavior (e.g., environment conscious consumer behavior), sustainable marketing (e.g., the relationship between consumption and identity), tourism and hospitality (e.g., sustainable tourism in East Africa), business ethics and sustainability, human resource management, logistics and transport, industrial and financial management (e.g., corporate logic on transition toward a more sustainable energy system), and financial accounting.

At the Department of Law, research with a sustainability focus is carried out for example within environmental law and marine resource management (e.g., fisheries policy), natural resources (e.g., legal perspectives on the right to clean drinking water), transportation, poverty and resource distribution, sustainable urban planning, and international trade (e.g., environmental considerations for public procurement).

At the Department of Economy and Society, research is conducted in relation to all three main profiles of the Department: Innovation and Entrepreneurship,

Human Geography, and Economic History. Examples include innovation spaces in Asia, historic perspectives on growth and effects on ecosystem services and natural resources, mobility, accessibility and physical planning (e.g., implementation of policy instruments to facilitate sustainable mobility), and strategies for international development cooperation (e.g., in the Swedish context of policy for development).

As further explained below, there are a number of specialized research centers at the School. These are often cross-disciplinary in nature with representation from several of the School's departments as well as other parts of the University. By tradition, research centers at the School are often supported by industry or community actors, and the research is conducted in close collaboration with these. Examples of research centers and associated research units that largely focus on sustainability are the Environment for Development initiative, the Centre for Business in Society, the Centre for Tourism, the Centre for Retailing, and the Centre for Consumer Science.

Gothenburg Research Institute also produces a great deal of high-quality research within the sustainability field, and has been instrumental in developing research that is subsequently spread to other parts of the School.

CHALLENGES

The major challenge is to continue to improve the quantity, and even more so the quality and relevance, of the research produced, in the broad area of sustainable development. This is perfectly in line with the ultimate goal of the School, namely to contribute to a better world.

This will require further strategic choices with respect to research priorities, increased cooperation with internationally leading researchers and research groups, and an active and strategic recruitment policy.

PRINCIPLES 5 & 6:

PARTNERSHIP AND DIALOGUE

OVERVIEW

The aim of contributing to the development of successful organizations and a sustainable world is clearly stated in the School's mission, and corporate and public connections are vital to fill those words with content. Close relations and cooperation with business, public authorities, and other organizations are embedded in all dimensions of the School's activities.

Since the formulation of the School's strategy, mission, and vision, sustainability perspectives and issues are increasingly emphasized in seminars and workshops targeting business and public organizations. Furthermore, guest lecturers are more frequently asked to talk about best practices from the perspectives of ethics and sustainability.

ACHIEVEMENTS

Major developments with regard to corporate and public connections in recent years include:

- Successful fundraising for, and initiation of, a new Visiting Professor Programme.
- Introduction of sustainability as a major focus in the dialogue with corporate partners

The School also participates in a number of networks within the sustainability field, in addition to the Global Compact and PRME. Networks such as GRLI and EFMD are excellent arenas for discussion on best practice, learning, and sharing. Specific actions in the area of sustainability to be dealt with by the School's Council for Sustainable Development are described in yearly action plans. There is also participation in various external initiatives. The most important commitments and initiatives that the School participates in are described briefly below.

As part of its engagement in the 50+20 initiative, the School has joined the Innovation Cohort hosted therein – a global peer-based laboratory consisting of some 20 business school representatives as well as representatives from the business community. The work is action oriented with the School's representative

primarily focusing on a project aimed at advancing the understanding of the EQUIS ERS standards. This is accomplished by giving guidelines and examples to business schools and peer reviewers on peer-based collaborative process and activating networks like EFMD, GRLI and AACSB in order to assure relevance and quality, but also to disseminate the results.

Within the Innovation Cohort, all schools have had several opportunities to present their sustainability work and receive feedback thereon, creating possibilities for benchmarking and gaining inspiration from others.

The School and the University as a whole are certified according to ISO14001 and registered under the EU environmental regulation EMAS. The environmental management system requires a process of determining "significant environmental aspects" of one's operations. For a university, this naturally implies inclusion of research and education. A particular focus of the ISO14001 is to assess whether and how goals are met and planned actions carried out. To this end, goals and actions regarding sustainability and environmental issues are assessed in yearly audits.

The School contributes to the local and global communities in many different areas related to sustainability. Most of this work relate to capacity building



From left to right: Professor Lennart Flood, Dr Abebe Shimeles and Professor Arne Bigsten. A picture from the 24th of April 2014 where numerous researchers from around the world came to pay tribute to Arne Bigsten's vast contribution within the field of development economics. Arne Bigsten has supervised nearly 50 PhD students including Mr Shimeles, currently Manager of the Development Research Division at the African Development Bank. Other former students who paid tribute to his work include Njuguna Ndung'u (professor and Governor of the Central Bank of Kenya) and Kupukile Mlambo (Deputy Governor at the Reserve Bank of Zimbabwe).

and dissemination of research within sustainability. In the Swedish context, dissemination of knowledge outside the research community is considered a cornerstone of the overall role of the universities, something that perhaps is extra important with regard to sustainability-related research.

The School also maintains strong links to various governmental institutions at national, regional, and local level. Examples include the Ministry of the Environment, the Swedish Energy Agency, and the Swedish Development and Cooperation Agency (Sida). Rather than providing a complete list of activities and research impact related to sustainability, select examples are provided below.

In environmental economics, and especially in development economics, the contributions to communities are focused mainly on the international arena, with a particular emphasis on developing countries. There are examples of individual researchers at the

School, such as Professor Thomas Sterner, who has made significant contributions with global impact through his work in the Intergovernmental Panel on Climate Change (IPCC), where he served as coordinating lead author for the fifth assessment report, AR5. Professor Sterner also coordinated the third working group, WGIII, which analyzes the costs and benefits of the different approaches to mitigation of climate change, considering the available instruments and policy measures. The report, called *Climate Change 2014: Mitigation of Climate Change*, is the result of massive international cooperation, including 235 authors from 58 countries. It was presented in Berlin April 7–11, 2014, and provides policy makers around the world with objective scientific and technical findings related to climate change. The approach is more solution oriented than that of WGI and WGII, which focused on technical aspects of climate change and the impact on global ecosystems, respectively.

In the field of development economics, extensive recruitment of international PhD candidates has resulted in a widespread network of associates to the School, especially in Africa. Numerous currently influential economists and researchers have obtained their PhD at the School and maintain a strong relationship with the organization and the research environment at which their academic careers started. Examples include Njuguna Ndung'u, Governor at the Central Bank of Kenya; Kupukile Mlambo, Deputy Governor at the Central Bank of Zimbabwe; Margaret Chitiga-Mabugu, professor and Executive Director of the



Thomas Sterner is a professor of environmental economics with research interests in environmental, including climate, policy. His book, "Fuel taxes and the poor", shows that increased fuel taxes are often distributionally progressive. Thomas has made large contribution within IPCC (the Intergovernmental Panel on Climate Change), where he coordinated the chapter focusing on cost-benefit analysis of climate change mitigation in the fifth assessment report (AR5).

Economic Performance and Development Research Programme at the Human Sciences Research Council (HSRC) in Pretoria, South Africa; Steve Kayizzi-Mugerwa, Director of the African Development Bank in Tunis; and Ladslous Mwansa, Economist at the International Monetary Fund (IMF). These are just some examples from the long list of former PhD students who hold influential academic or governmental positions abroad. Their relationship with the School remains strong, and in April 2014 they came to a workshop in Gothenburg to pay tribute to Professor Arne Bigsten, who was their academic supervisor.

The Environment for Development (EfD) initiative is a capacity-building program in environmental economics hosted by the School, focusing on research, policy advice, and teaching in Central America, Chile, China, Ethiopia, Kenya, South Africa, and Tanzania. Central questions for the initiative include:

- How can political and economic instruments improve environmental conditions and development?
- What policy instruments can be used to address overexploitation of water, forests, and land?
- How should sustainable use of common resources be promoted?

EfD is managed by the School's Environmental Economics Unit and is a success story in terms of capacity building and dissemination of sustainability research.

With the support of the Swedish International Development and Cooperation Agency (Sida), the Environmental Economics Unit started building capacity in environmental economics in developing countries in 1991, and the first PhD course in environmental and natural resource economics was offered already in 1992. A full-fledged PhD program in environmental economics was supported by Sida and offered to

students in 1997. Since then, five new PhD candidates have been recruited every other year. The competition has been severe and out of an average of 100 applicants each time, the five best candidates have been selected. The selection criteria have been academic performance, capacity building context, and gender/age.

So far, 30 students have graduated from the Sida-supported PhD program. Their performance has been exceptional in terms of academic contributions, involvement in domestic and international capacity building, and interaction with policy processes. All of them are currently working with environmental economics research and issues of economic development, and 90% have returned to their home country or region, although some have first completed a post-doc abroad. All of the graduates are still closely affiliated with the School and the EfD initiative, and many still collaborate with each other and staff from the School in joint research projects.

CHALLENGES

The challenges are related to the School's contribution to the world, through its research and education, and how it will continue to build on close cooperation with individuals and organizations, globally and locally, creating and maintaining mutual trust and continuous dialogue. The School needs to continue to answer to the articulated needs of its partners in order to enable them to meet the challenges ahead. At the same time, it also needs to go beyond this point and boldly lead change within its different fields of study.

Despite a number of recent achievements, however, the School is well aware of the fact that much of the work related to sustainable development is still ahead, not least with regard to education. This will require not only enthusiasm but also persistent determination and endurance.



Urban development today is characterized by complex challenges, many of them related to different and sometimes incompatible, sustainability ambitions. What capacity do cities have to cope with increased demand for cooperation and involvement of citizens and business actors? What "business models" are being introduced by cities? These are examples of questions addressed in Anders Sandoffs research, senior lecturer at the department of business administration and a member of the Schools Council for Sustainable Development. Urban sustainability challenges were also the theme in Anders Key-note speech during the Sustainability Day: Solutions 2016.



PRINCIPLE 7: ORGANIZATIONAL PRACTICES

Since 2006, the School and the University of Gothenburg as a whole are environmentally certified according to ISO 14001 and registered under the EU environmental regulation EMAS. The ISO14001 certification includes yearly audits with department heads based on sustainability performance related to research, education, and outreach. Audits also puts special emphasizes Campus sustainability performance.

Case: Greening the School

In a reality-based case assignment, students in the course Environmental Management were tasked to estimate the financial and environmental implications of installing a 200 m² (35 kWp) photovoltaic plant on the school's rooftop, with the purpose of generating electricity. The School's main building is owned by a company called Akademiska Hus, how had two engineers involved in planning the case. Students were to recommend whether, and under what conditions, the School should agree to invest in solar panels together with Akademiska Hus. After working with the case for two weeks in small groups, the students presented the results to the course management and Akademiska Hus. Four out of seven groups estimated the project to be financially beneficial for both the School and Akademiska Hus. Later in 2014 a contract was signed and in 2015 the solar panels were installed.

"I think that going from a real case-study to implementation has been rewarding for everyone involved. The project has also inspired other universities that now want to do something similar."

*Mattias Sundemo, sustainability coordinator
and one of the designers of the assignment.*

Case: Can faculty and students be "nudged" to eat less meat and more vegetables?

In an on-campus experiment Verena Kurz, a PhD candidate from the Department of Economics, uses nudging to test whether staff and students can be influenced to change their lunch habits towards a more climate-friendly diet. Interventions are made at the School's restaurant, with other restaurants at the University being used as randomized controls. By highlighting the vegetarian alternative on the lunch menu, listing the vegetarian alternative first, and other similar measures, the share of vegetarian lunches served has increased by roughly 30%, according to initial figures.

"The share of vegetarian lunches has increased from around 14% before the intervention to 19% after. It will be interesting to see what happens when we in April 2016 'go back to normal' and discontinue the nudge. Will staff and students go back to old habits, or will we see a change that lasts?"

Verena Kurz



Verena Kurz

EXAMPLES OF ACHIEVEMENTS AND ACTIVITIES

- 19% reduction in energy use since 2013.
- Yearly clothing exchange events organized by students since 2013.
- Auctions, competitions, and “Office Olympics” have been organized to raise money for refugees and children at risk.
- Stringent social and environmental requirements for consumables such as coffee, tea, and fruit have been introduced.



APPENDIX

SUSTAINABILITY DIMENSIONS

1. Natural limitations

Demographic development and lifestyle issues in relation to the exploitation of natural resources (including energy) or the limited capacity of the ecosystems to meet the human demand.

2. Governance and administration

How politics, regulatory frameworks, and voluntary agreements (such as standards) affect the use of natural resources, ecosystems, and the environment (including health effects).

3. Human rights and issues of justice

Issues related to resource distribution, discrimination and poverty; the interaction between social injustices, environmental degradation, and people's opportunities for self-realization.

4. Social dilemmas

Conditions for human cooperation in situations where a cooperative approach will benefit all parties in the long term while each actor based on narrow self-interest will benefit from not cooperating.

5. Entrepreneurship and markets

Social or environmental consequences of corporate behavior and the functioning of markets, and how market failures can be reduced by changing the way businesses act as well as the policy instruments used to regulate the functioning of markets.

6. Ethics and responsibility

The relevance of ethics and responsibility to individuals, organizations, and societies in social, economic, and environmental matters.

7. Values, norms, and culture

How social norms, culture, and values affect ecosystems and people's well-being via for example consumption behavior, product design, and production methods.

8. Consumer and customer power

How consumers and public and private customers can influence business opportunities and the products and services offered by businesses through demands for social responsibility and environmental considerations.

9. Leadership and management principles

Work models conducive to sustainability objectives and the development of democracy, participation, long-term planning, and a broader view of corporate value creation (for example social entrepreneurship).

10. Follow-up, communication, and transparency

How different actors in society report, follow up on, communicate, and evaluate stated objectives and goal achievement in relation to social issues and environmental performance.

11. Planning and design

How community planning and the design of products and services affect people's well-being and the environment.

12. Financial regulation

Regulatory and responsibility issues of relevance to the vulnerability of economic and financial systems; historical perspectives on financial and debt crises.

13. Sustainability science

An emerging scientific discipline that addresses broad social and environmental challenges with a problem-oriented focus and an interdisciplinary approach.

14. Sustainability as a concept

The concept of sustainable development and its political, cultural, and idea-historical connections.

EXAMPLES OF PRME AND SUSTAINABILITY-RELEVANT PHD THESES

2015

Bejenariu, Simona, "Determinants of Health Capital at Birth. Evidence from Policy Interventions"

Elldér, Erik "The changing role and importance of the built environment for daily travel in Sweden"

Hassen, Sied "On the Adoption and Dis-adoption of Household Energy and Farm Technologies"

Hult, Daniel, "Regulatory efficiency – A regulation theoretical evaluation of district heating's potential to create trust"

Jaime, Marcela, "Essays on behavioral economics and policy design"

Ruhinduka, Remidius, "Essays on Field Experiments and Impact Evaluation"

Tolonen, Anja "Mining Booms in Africa and Local Welfare Effect: Labor Markets, Women's Empowerment and Criminality"

Zhang, Xiao-Bing, "Cooperation and paradoxes in climate economics"

PEER-REVIEWED ARTICLES RELEVANT TO SUSTAINABILITY

(Identified by a number of key-words used by the University of Gothenburg)

2015

- Aguilar, Renato, "Analysis and decomposition of energy consumption in the Chilean industry", *Energy Policy* Volume 86, November 2015
- Alem, Yonas, "Poverty Persistence and Intra-Household Heterogeneity in Occupations: Evidence from Urban Ethiopia", *Oxford Development Studies* Volume 43, Issue 1, 2015
- Alem, Yonas, Eggert, Håkan and Ruhinduka, Remidius, "Improving Welfare Through Climate-Friendly Agriculture: The Case of the System of Rice Intensification", *Environmental and Resource Economics* October 2015, Volume 62, Issue 2
- Arvidsson, Niklas, "Driving forces of road freight CO₂ in 2030", *International Journal of Physical Distribution & Logistics Management* ISSN: 0960-0035
- Baaz, Mikael, "Fighting with and Against the Time: The Japanese Environmental Movement's Queering of Time as Resistance", *Journal of Civil Society*, ISSN 1744-8689
- Bengtsson, Erik, "The (International) Political Economy of Falling Wage Shares: Situating Working-Class Agency", *New Political Economy* Volume 20, Issue 3, 2015
- Bergqvist, Rickard and Jensen, Arne, "The Perception and Image of Shipping", *WMU Journal of Maritime Affairs*
- Biddulph, Robin, "Limits to mass tourism's effects in rural peripheries", *Annals of Tourism Research* Volume 50, January 2015
- Bigsten, Arne and Tengstam, Sven "International Coordination and the Effectiveness of Aid", *World Development* Volume 69, May 2015, Pages 75–85 *Aid Policy and the Macroeconomic Management of Aid*
- Bonilla, J., J. Coria, K. Mohlin and T. Sterner (2015). "Refunded Emission Payments and Diffusion of NO_x Abatement Technologies in Sweden", *Ecological Economics* 116
- Coria, Jessica, State-Dependent Enforcement to Foster the Adoption of New Technologies, *Environmental and Resource Economics*, Volume 62
- Coria, J., J. Bonilla, M. Grundström, and H. Pleijel (2015). "Air Pollution Dynamics and the Need for Temporarily Differentiated Road Pricing" *Transportation Research A: Policy and Practice*
- Cullinane, Sharon et al., "A financial evaluation of the design concept for a 'clean energy producing vessel'", *Journal of Engineering for the Maritime Environment*
- Dannenberg, Astrid "On the Provision of Public Goods with Probabilistic and Ambiguous Thresholds", *Environmental and Resource Economics* July 2015, Volume 61, Issue 3
- Egels-Zandén, Niklas "Beyond Decoupling: Unions and the Leveraging of Corporate Social Responsibility in Indonesia", *Journal of Business Ethics*
- Egels-Zandén, Niklas, "Responsibility and neglect in global production networks: the uneven significance of codes of conduct in Indonesian factories", *Global networks*, Volume 15, Issue 1
- Eggert, Håkan et al, "The Fishery Performance Indicators: A Management Tool for Triple Bottom Line Outcomes", *PLoS One*, 2015 May 6
- Eggert, Håkan, and Greker, Mads "Trade and resources: Welfare effects of the Lake Victoria fisheries boom", *Fisheries Research* Volume 167, July 2015
- Fuentes, Christian, "How Green Marketing Works: Practices, Materialities, and Images", *Scandinavian Journal of Management* Volume 31, Issue 2, June 2015
- Fuentes, Christian, "Images of Responsible Consumers: Organizing the Marketing of Sustainability", *International Journal of Retail & Distribution Management* Volume: 43 Issue: 4–5
- Hysing, Erik, "Citizen participation or representative government - Building legitimacy for the Gothenburg congestion tax", *Transport Policy* Volume 39, April 2015
- Johansen, Tormod Otter, "In the virtual camp: the Swedish defence intelligence court", *Retfærd. Nordisk Juridisk Tidsskrift*, 38 (3/150)
- Johansson-Stenman, Olof and Sterner, Thomas "Discounting and Relative Consumption", *Journal of Environmental Economics and Management*, May 2015
- Karhu, Juha, "Corporate Social Responsibility and the Law: Ideas for Developing Dynamic Elements in Mandatory CSR", *Review of Market Integration*
- Lundberg, Erik, "The Level of Tourism Development and Resident Attitudes: A Comparative Case Study of Coastal Destinations", *Scandinavian Journal of Hospitality and Tourism*, Volume 15, Issue 3, 2015
- Nagurney, Anna "Design of sustainable supply chains for sustainable cities", *Environment and planning vol. 42*
- Nerman, Måns, "Households' Income-Generating Activities and Marginal Returns to Labour in Rural Tanzania", *Oxford journals: Journal of African Economies*
- Sjölander Lindqvist, Annelie, "Balancing differentiated interests and conceptualizations in environmental management", *Journal of Organizational Ethnography*
- Sjölander Lindqvist, Annelie "Individual and collective responses to large carnivore management: the roles of trust, representation, knowledge spheres, communication and leadership", *Wildlife Biology*, ISSN 0909-6396
- Sterner, Thomas, Higher costs of climate change, *Nature* Volume 527
- Sterner, Thomas, Olai, Susanna, Kåberger Tomas et al., "Energy policy: Push Renewables to spur carbon pricing", *Nature* Volume 525, Issue 7567
- Sterner, Thomas and Mohlin, Kristina, "The green paradox: a brief introduction to Climate policy and intertemporal emissions leakage", *Oxford Journals, Review of Environmental Economics and Policy*, Volume 9, Issue 2
- Stigson, Björn, A future resource and pollution constrained world – An agenda for a new partnership between business, governments and academia, *Technological Forecasting and Social Change*, 98
- Villalobos, Laura and Robalino, Juan "Protected areas and economic welfare: An impact evaluation of national parks on local workers' wages in Costa Rica", *Environment and Development Economics*, 2015, vol. 20, issue 03
- Westholm, Lisa, "Defining Solutions, Finding Problems: Deforestation, Gender, and REDD plus in Burkina Faso", *Conservation and Society*



UNIVERSITY OF GOTHENBURG
SCHOOL OF BUSINESS, ECONOMICS AND LAW

The School of Business, Economics and Law at the University of Gothenburg, Vasagatan 1, P.O. Box 600, SE-405 30 Gothenburg, Sweden
+46 31 786 0000, info@handels.gu.se, www.handels.gu.se