

Environmental management system as a driving force for sustainability in higher education. Experiences and reflections on organizational change at the University of Gothenburg



**Eddi Omrcen and
Sustainability Officer**

**Ullika Lundgren
Sustainability controller**

Eddi.omrcen@gu.se

ullika@gu.se

www.gu.se/miljo

www.gmv.gu.se



UNIVERSITY OF
GOTHENBURG



Facts & figures

8 faculties – 38 departments

- The Sahlgrenska Academy – pharmacy, medicine, odontology and health care sciences
- The Faculty of Science
- The Faculty of Arts
- The Faculty of Fine, Applied and Performing Arts
- The Faculty of Social Sciences
- School of Business, Economics and Law
- The Faculty of Education
- The IT Faculty

- 38,000 students, 26,000 full time students
- 200 educational programmes
- 2,200 courses
- 6,200 employees
- 387,000 square meters building area
- 650 million Euro total income/revenue



Environmental Management System (EMS)

ISO 14001 and EMAS are international standards for systematic and efficient environmental work in an organization

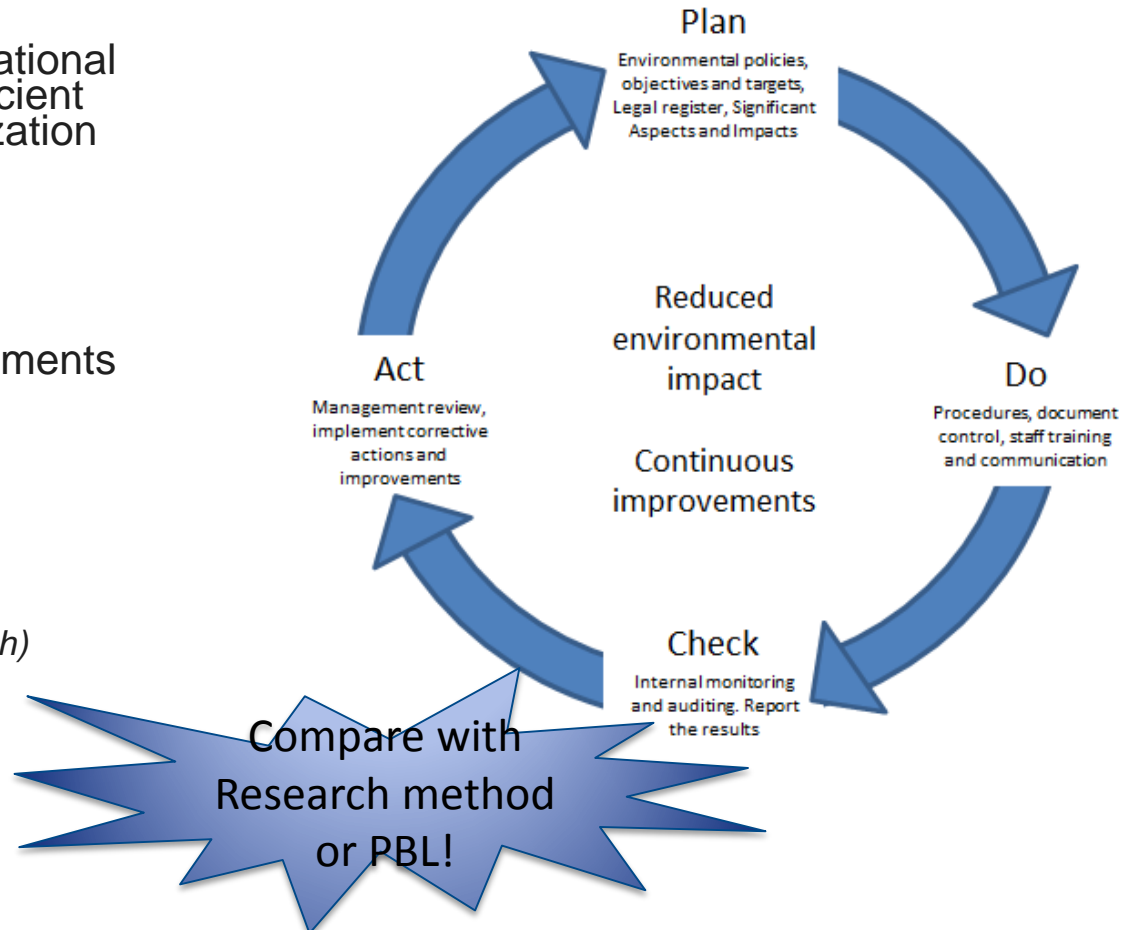
PURPOSE:

- A tool for systematic work
- Guarantee continuous improvements
- Reduce environmental impact
- Better resource management
- Fulfillment of the law
- Increase positive impact

(from reserach, education and outreach)

Certification process:

- Pilot units certified in 2004
- Whole university in 2006



We must all participate to make it a good result!

Policy Document: Vision 2020

Our Value base:

”Our strong **civic engagement** gives us energy to respond to changes in the world around us and to find cross-boundary solutions. **We educate** democratic citizens with respect for basic values such as human freedoms and rights. Our civic responsibility also encompasses the environmental profile that characterises the University of Gothenburg. **Sustainable development is important** to us; we always consider the long-term social, economic and ecological consequences and allow them to guide our operations.”

Four basic principles:

Strong Civic Responsibility and Global Engagement:

”We work for sustainable development”.

The University of Gothenburg shall be one of the most prominent universities in Europe for education and research within sustainable development and the environment
(Environmental policy)

ACTION PLAN FOR

Action Plan for the Environment and Sustainable Development

Core operation

Research

Education

Student-
participation

Tasks for the
operation

Tasks for the
operation

Tasks for the
operation

Indicator

Indicator

Indicator

Sustainable resource management

Purchases
and procure-
ment

Travel

Energy and
buildings

Chemicals
and environ-
mental risks

Reuse and
waste

Tasks for the
operation

Tasks for the
operation

Tasks for the
operation

Tasks for the
operation

Tasks for the
operation

Indicator

Indicator

Indicator

Indicator

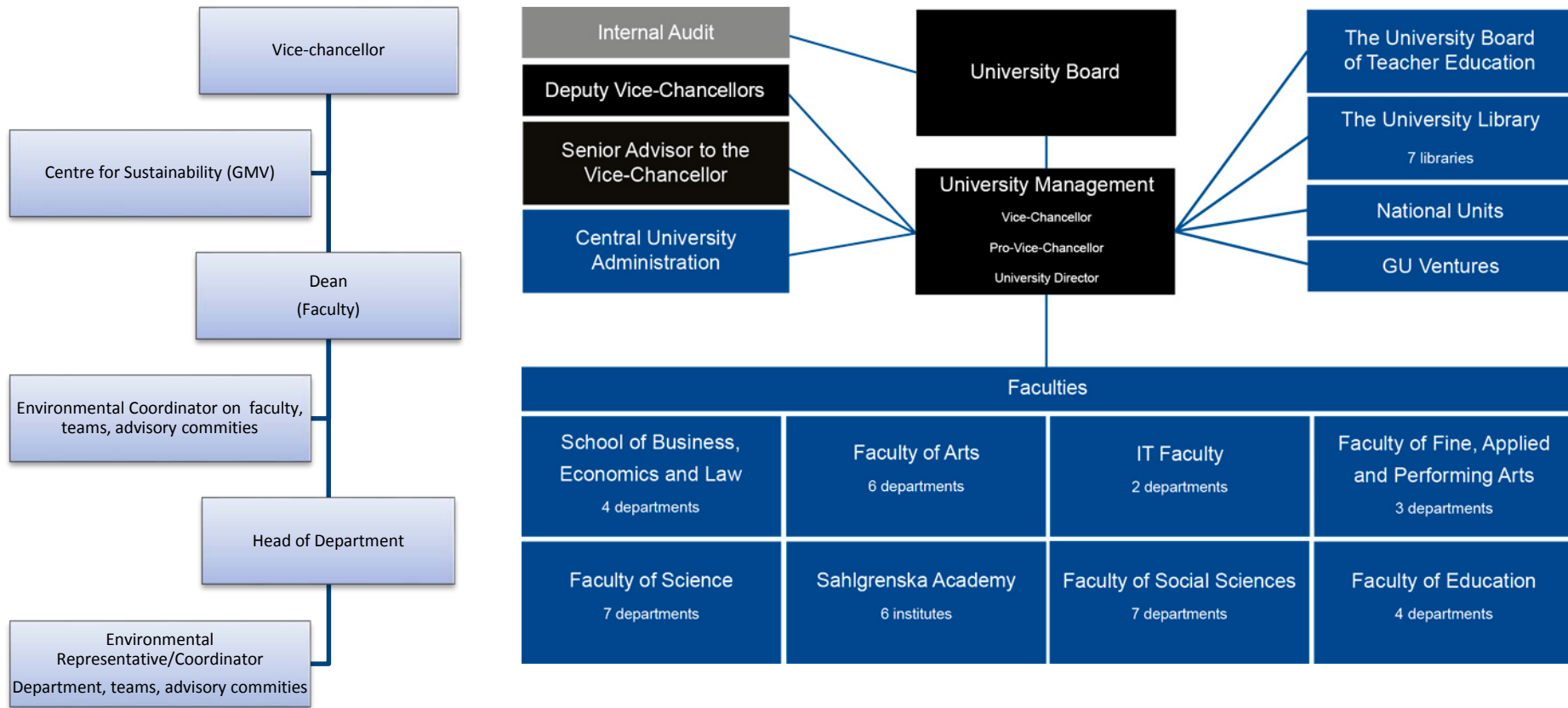
Indicator

OBJECTIVE	The University shall increase and quality assure the integration of sustainable development into education. (from "integrate SD" to "increase and quality assurance of SD“)
ASSIGN- MENT	<p>Assignment to Dean, Prefect / equivalent to:</p> <ul style="list-style-type: none"> • Visualize and support the use of faculty-adapted toolboxes for sustainable development; • Promote skills development in sustainable development for the teachers and other relevant occupational categories; • Integrate sustainable development in courses and education programs; • Strengthen work on sustainability labeling of courses and education programs. <p>Assignment to the Deputy Vice-Rector for Education, through the Education Board, to:</p> <ul style="list-style-type: none"> • Work for sustainable development to be integrated into courses and education programs. <p>Assignment to the Coordination Board for teacher training to:</p> <ul style="list-style-type: none"> • Integrate sustainable development in teacher education. <p>Assignment to Gothenburg Center for Sustainable Development (GMV) to:</p> <ul style="list-style-type: none"> • Initiate and organize cross-disciplinary doctoral courses in sustainable development; • Support training, program and course managers to increase and quality assure the integration of sustainable development into education; • Coordinate and develop toolboxes for sustainable development; • Evaluate, and if necessary update, guidelines for sustainability, labeling of courses and education programs; • Provide the university's teacher with competence development in the area of sustainable development annually; • Collaborate nationally and internationally in order to develop work to increase and improve the integration of sustainable development into education. <p>Assignment to the University Director to:</p> <ul style="list-style-type: none"> • Visualize the university's work on integrating sustainable development into education and sustained-labeled courses / education programs; • Provide system support and information to enable sustainability labeling of courses / education programs; • In cooperation with GMV, develop sustainability labeling. <p>Assignment to the University Library (UB) to:</p> <ul style="list-style-type: none"> • Further develop education in information resources in sustainable development for students; • Provide support for teachers and students in sustainable development
INDICATOR	The percentage of sustainability-labeled courses and programs of total amount of courses and programs per year. The indicator is complemented by a qualitative monitoring with a purpose to providing a more comprehensive picture of the goal



Important with a clear organisation for responsibility and support in the EMS.

Key is to combine: Bottom-up, Top-down, Middle mgmt





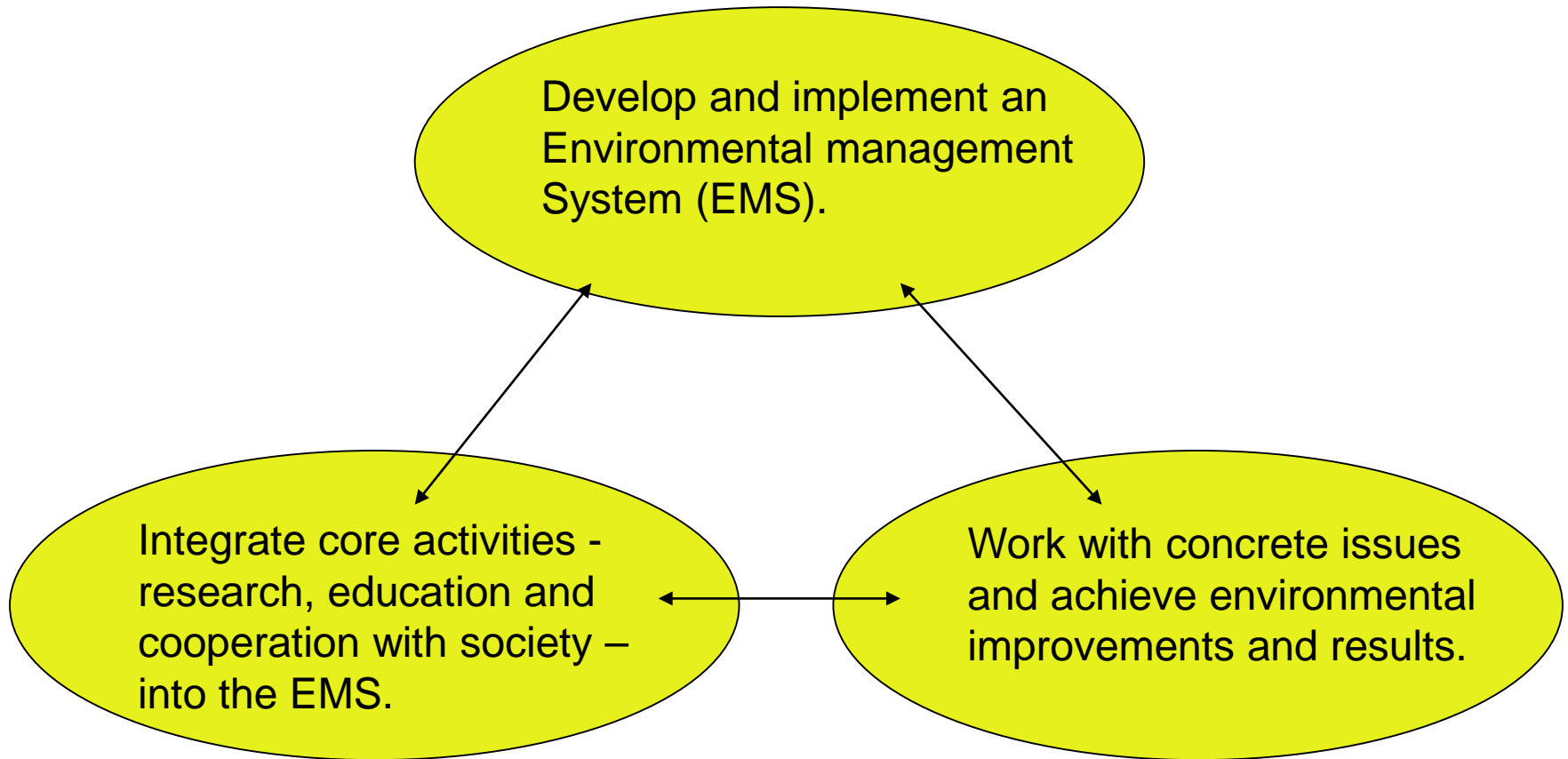
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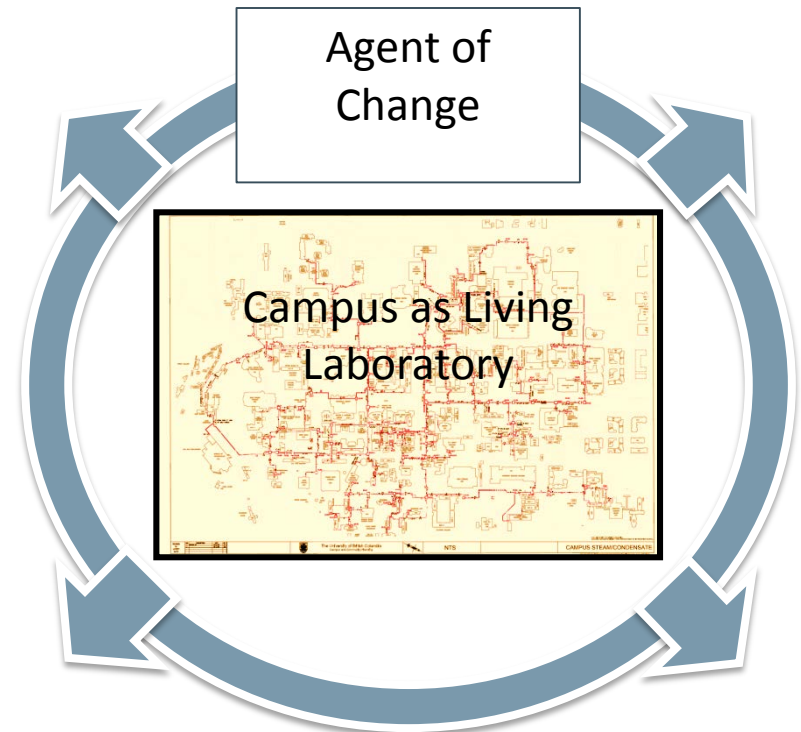
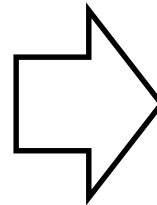
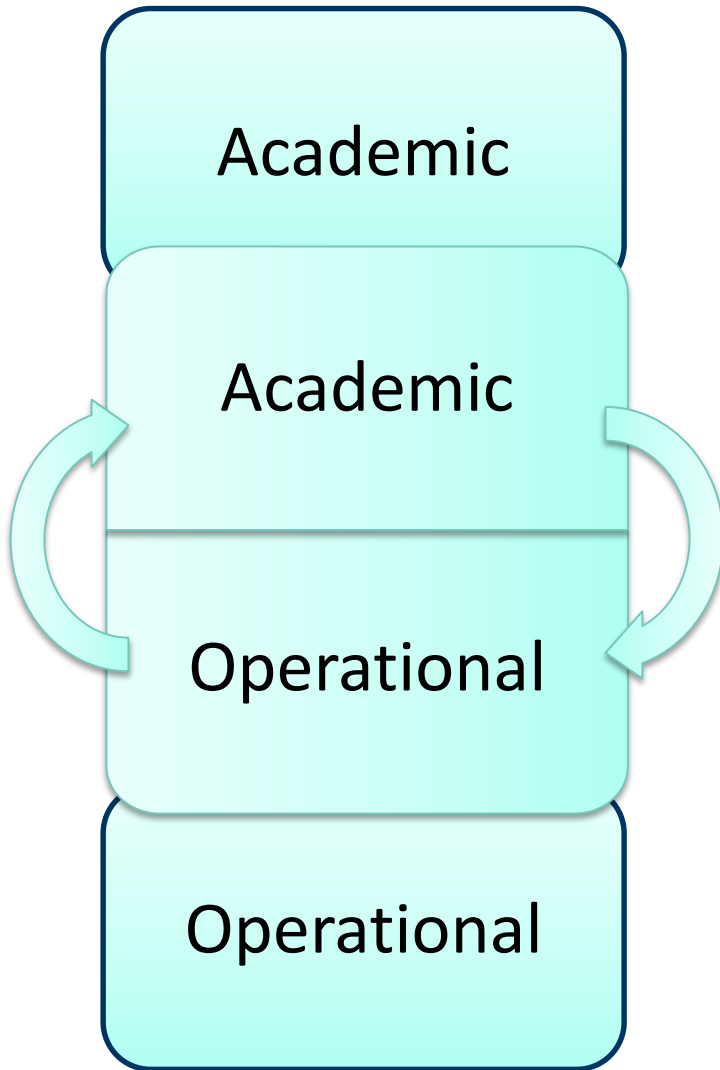
ABOUT MANAGEMENT IN HIGHER ED.





THE REAL CHALLENGE!







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GÖTEBORGS UNIVERSITET
HANDELSHÖGSKOLAN

Anpassa | Lyssna | In English

Centre for Business in Society

Forskning Om CBIS Kontakta oss

A-Ö | [Sök info, personal etc.](#) »

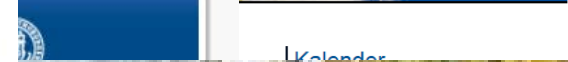
Webbkarta

Improvements for Research, Education and Outreach

Gothenburg Centre for Sustainable Development, GMV

Co-operation between University of Gothenburg & Chalmers University of Technology

www.gmv.gu.se or www.chalmers.se/gmv/EN/



The QOG Institute

The QoG Institute was founded in 2004 by Professor Bo Rothstein and Professor Sören Holmberg. It is an independent research institute within the Department of Political Science at the University of Gothenburg. We are 30 researchers who conduct and promote research on the causes.

News

[The Poznan declaration](#)
[Times Higher Education](#)
[University World](#)
12 May 2014

UGOT Challenges

(University of Gothenburg Centers for Global Societal Challenges)

Strategic initiative 300 Milj SEK
(50 Milj SEK/Y, Start in 2016)



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Make friends – cooperation is crucial! → Internal and external.

Committed and well
educated people are more
important than documents!



Environmental coordinators going to an implementation workshop

Focused staff training

Building awareness and competence

- **Sustainability for managers & introduction for new staff**
 - environmental responsibility, environmental legislation, delegation
- **Integration of SD in education**
 - "SD Toolbox for teachers", Labelling of courses and programs seminars, workshops,
- **Procurement with economic unit**
 - environmental, social and ethical demands, product contents
- **Waste and recycling** with real estate unit
 - why, how and where?
- **KLARA** (chemical handling system)
 - how to use the system, risk analysis
- **Video Conference Training**
 - Adobe Connect, Jabber by your own computer
- **Internal Audit Team**
 - ISO 14001 standard, environmental legislation, audit practice





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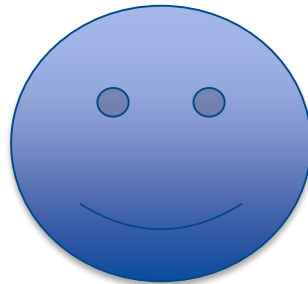
Want to

Don't want to

Skilled



Unskilled





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SPRING CAMPUS CONFERENCE FREI UNI
BERLIN 2018-04-10

Students committed to sustainability!



What is an "sustainable aware student" worth compared with an "sustainable unaware student"?



EuroEnviro2015
20th European Student Symposium
on the Environment



MILJÖBRON

HANDELSHÖGSKOLAN:

Sustainability Days





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Environmental audits: some examples





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SUSTAINABILITY REPORT

www.sustainabilityreport.gu.se



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**SUSTAINABILITY
RESULTS
2017**

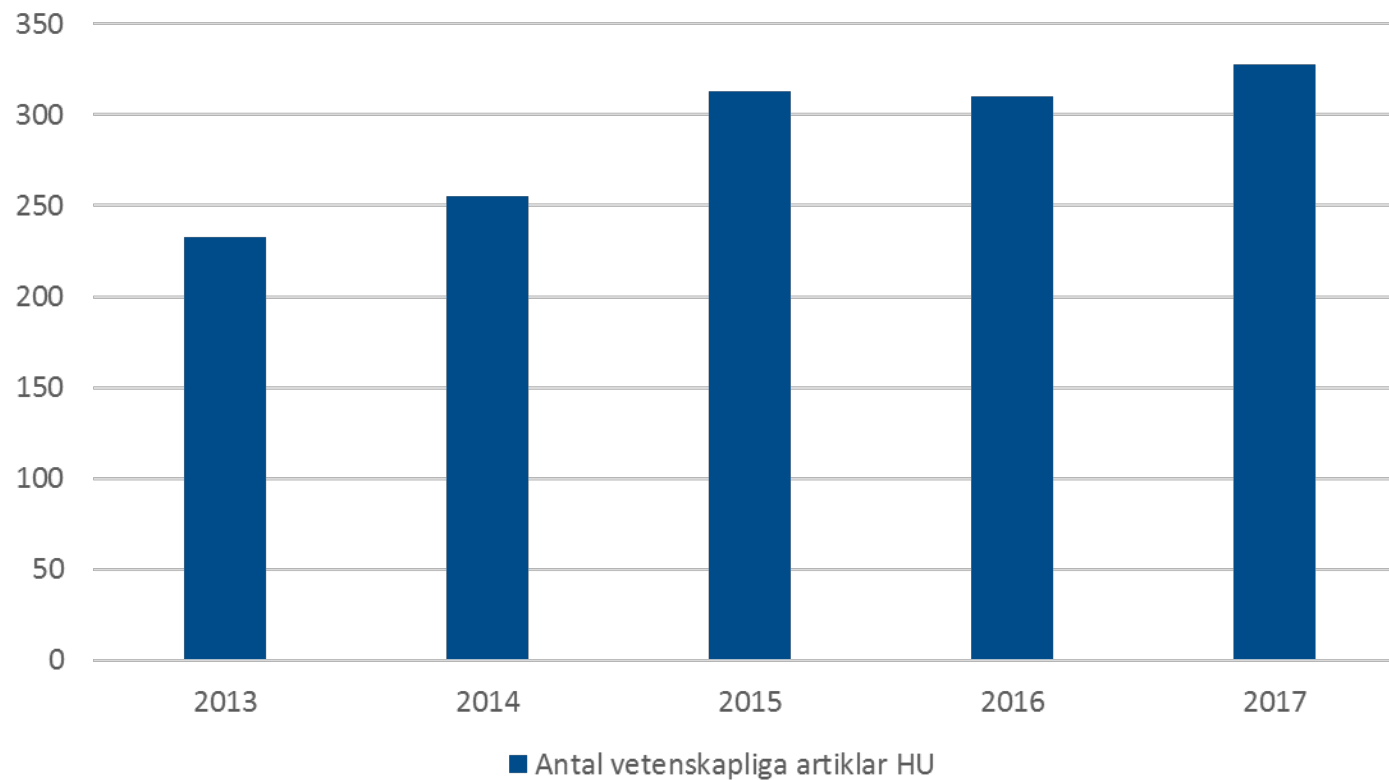
Spring 2018



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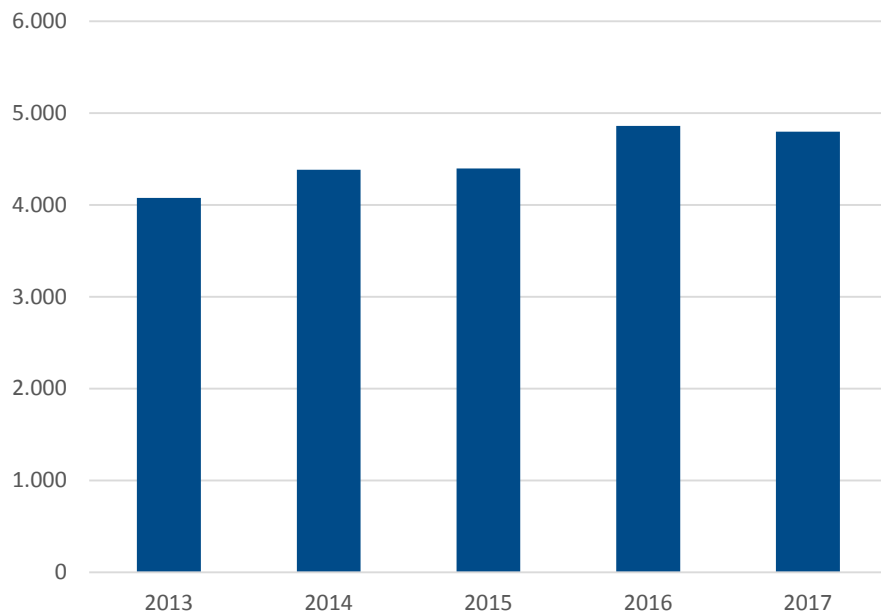
Research

Number of scientific articles related to sustainable development
2013-2017

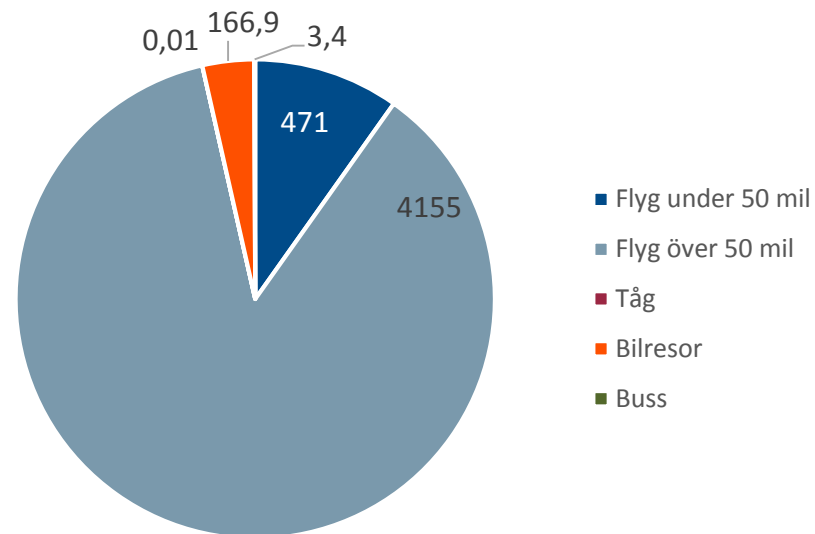


Travels

**CO2 from business travels 2013-2017
(ton)**



CO2 per source 2017 (ton)





Nonconformities from environmental audits at University of Gothenburg

Year	Major nonconformity	Minor nonconformity	Notifications
2003	62	115	261
2004	57	57	126
2005	86	240	226
2006	11	105	144
2007	9	83	148
2008	3	87	132
2009	1	87	84
2010	5	51	66
2011	7	101	89
2012	3	94	121
2013	6	94	66
2014	3	91	58
2015	1	118	102
2016	10	86	97
2017	1	63	44
TOTAL	265	1472	1764

Reporting: Nonconformities, improvements use GURIA:
<http://medarbetarportalen.gu.se/verktyg/guria/>

Sustainable Development Solutions Network, Northern Europe

- Hosted by University of Gothenburg
- Report on Oceans Solutions at UN conference 2017
- Research-based innovation businesses focusing on practical solutions
- Self-evaluation



Reporting on
SDG research
on faculty
level

Mapping research and education at Faculty of Science

Focusing on goal:

- 2 Zero hunger
- 3 **Good health and wellbeing**
- 4 **Quality education**
- 6 Clean water and sanitation
- 11 Sustainable cities and communities
- 13 **Climate action**
- 14 **Life below water**
- 15 **Life on land**





Key to develop the organization: Learning by doing!

*Student: Dr Einstein,
aren't these the same
questions as last years
final exam?*

*Dr Einstein: Yes, but this
year the answers are
different*