Developing a certified environmental management system (EMS) as driving force for the sustainable university

• Eddi Omrcen, Environmental manager

• ISCN Conference
  Best Practice – Future Challenges, april 2008, Zurich, Switzerland.

Presentation:
• The University
• The EMS
• Lessons Learnt
• Three Tools
• More Information

University of Gothenburg

8 faculties – 57 departments
• The Sahlgrenska Academy – pharmacy, medicine, odontology and health care sciences
• The Faculty of Natural 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 University

Students:
• 50 000 students
• 25 600 full-time students

Staff:
• 5 200 employees
• 4 600 full-time employees, (of which 2 450 are teachers/researchers/post-graduate students)
• 450 professors
• 1 700 technical/administrative staff

Financial Facts 2006
• SEK 4.4 billion total income (475 mill Euro)
• SEK 3 billion state grants
• SEK 1.4 billion from external funding
Environmental Management System

- **University Board Decision** (1997-12-12)
- **Governmental Instruction** (1997-12-18)
- **Continual Improvement** (2000, yearly)
- **Initial Environmental Review** (1999-04-01)
- **Management Review** (2000, yearly)
- **Environmental/ Sustainability Report** (1998, yearly)

---

**ISO14001 – the diploma**

The Diploma gives an added value to the work with sustainable development

Do you need this system for introducing sustainable development?

No, but it makes it much easier
Lessons Learnt: Requirements

Organizational:
- The Top- and Middle management must be committed
- Resources are necessary

Objectives / conceptual:
- Clear and well-defined objective/goal
- Realistic, Utopic and/or Mega objective/goal?
- Build one system

Process-related:
- Competition and mutual learning between faculties, departments, individuals.
- A mutual learning process to adjust to the standards and the standards to the organisation
- Work in phases and stages
- Environmental audits as driving force and learning possibility
- Actions taken on deviations/nonconformities gives continuous improvements
Tool 1: Environmental audits & continuous improvement

<table>
<thead>
<tr>
<th>Year</th>
<th>Significant nonconformities</th>
<th>Less significant nonconformities</th>
<th>Notations</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>62</td>
<td>115</td>
<td>261</td>
</tr>
<tr>
<td>2004</td>
<td>57</td>
<td>57</td>
<td>126</td>
</tr>
<tr>
<td>2005</td>
<td>86</td>
<td>240</td>
<td>226</td>
</tr>
<tr>
<td>2006</td>
<td>11</td>
<td>105</td>
<td>144</td>
</tr>
<tr>
<td>2007</td>
<td>9</td>
<td>83</td>
<td>148</td>
</tr>
<tr>
<td>Total</td>
<td>225</td>
<td>600</td>
<td>905</td>
</tr>
</tbody>
</table>

Tool 2:

**Environmental Objectives and Strategic Plan for Environmental Work 2007-2010** *(Get into action!)*

Objectives for four strategically significant areas:
- Research and Postgraduate Education
- Undergraduate Education
- Collaboration with the Society
- Internal Environmental Work
  - Impact on the climate:
    - Travel and Transport, - Energy use
  - Consumption of resources:
    - Purchasing and Procurement, - Waste Management
- Use of Chemical Products
- Competence development/Staff Training
Tool 3: Sustainability Report 2007

- Social perspective
- Economic perspective
- Ecological perspective

More information

The Sustainability Report and more information about the work for Sustainable Development at University of Gothenburg is available at:

http://www.mls.adm.gu.se/

Films about the sustainability work

- The Sustainable University
- The Sustainable Student
- The Sustainable Laboratory