Contact information

Göran Finnveden
Vice-President for Sustainable Development
KTH Royal Institute of Technology
Drottning Kristinas väg 30
100 44 Stockholm
Sweden
goranfi@kth.se
+46-8-790 73 18

Birgitta Westin
Environmental Manger
KTH Royal Institute of Technology
Brinellvägen 8
100 44 Stockholm
Sweden

Helene Limén
Project Leader
KTH Royal Institute of Technology
Brinellvägen 8
100 44 Stockholm
Sweden
heleli@kth.se
+46-8-790 88 08

Teresia Sandberg
Project Coordinator
KTH Royal Institute of Technology
Brinellvägen 8
100 44 Stockholm
Sweden
teresias@kth.se
+46-8-790 79 30
Table of contents

Introduction .................................................................................................................................................. 5
Environmental policy .................................................................................................................................. 5
Laws and regulations .............................................................................................................................. 5
About KTH ................................................................................................................................................. 6
On this report ........................................................................................................................................... 7
Principle 1 – Sustainability Performance of Buildings on Campus ............................................................... 8
Management Approach to Principle 1 ..................................................................................................... 8
Energy consumption ............................................................................................................................. 8
The overall environmental objectives .................................................................................................. 9
Aspects of equity - policy for students with functional limitations ...................................................... 9
Principle 2 – Campus-wide Master Planning and Target Setting .............................................................. 11
Management Approach to Principle 2 ................................................................................................... 11
VISION 2027 ........................................................................................................................................ 11
The development plan for 2013-2016 ................................................................................................ 11
Transportation .................................................................................................................................... 12
Principle 3 – Integration of Facilities, Research and Education .............................................................. 14
Management Approach to Principle 3 ................................................................................................... 14
Education, Research and Cooperation ............................................................................................... 14
Collaboration ...................................................................................................................................... 16
**Introduction**

KTH contributes to sustainable development by providing educational programs, conducting research and by interacting with the surrounding community. As a result of its operations, KTH impacts on the environment through the production of waste, the use of materials and the use of water, energy and chemicals, through its staff travelling and also through construction work; and indirectly through purchasing and procurement.

At KTH, sustainable development is a common objective for research, education and collaboration conducted and the overall objective is that KTH will become one of Europe’s leading technical universities within this area. In KTH’s strategic plan, its will to contribute to a more sustainable future is expressed:

> “Humanity faces major global challenges such as climate change, increasing energy requirements, food security, aging populations and growing cities. All these require a more sustainable approach. In order to find solutions, collaboration between different fields of knowledge is needed. Broad collaboration between universities and other actors in society will become increasingly important.”

In order to specify specific goals and translate this into practical work KTH has during 2012 decided upon an environmental policy and environmental objectives. KTH has chosen to divide the strategic and practical work in two parts: KTH Sustainability and Sustainable Campus, where KTH Sustainability is responsible for education, research, and collaboration with society and Sustainable Campus is responsible for internal environmental management. KTH Sustainability, led by the vice-president of sustainable development, also acts as an advisory body to the president and faculty board. The Sustainable Campus work is led by the Environmental Manager.

**Environmental policy**

In 2012, the university board of KTH decided upon an environmental policy. KTH is the oldest and largest technical university in Sweden. KTH will contribute to sustainable development through education, research, collaboration, and by reducing its own environmental impact. KTH shall:

- Have an identity and a brand that is associated with a sterling work for the environment and sustainable development.
- Be a place where issues of environment and sustainable development are presented and debated, and where different disciplines, approaches and actors meet.
- Have staff, students, alumni, and partners that contribute to sustainable development by developing, disseminating and applying the techniques, methods, approaches and skills considering this.
- Encourage and educate staff and students to environmental awareness within and outside KTH.
- Constantly and systematically prevent pollution and improve environmental performance.
- Economize energy, goods and materials, and apply environmental requirements in purchase and procurement.
- Comply with environmental laws and requirements that KTH subscribes to.
- Inform and report the environmental performance both internally and externally.

**Laws and regulations**

KTH has to follow laws and regulations that relates to environment and sustainable development. The higher education act (Ch. 1, § 5) states:

> “Higher education institutions shall function to promote sustainable development so that present and future generations are assured a healthy and sound environment, economic and social welfare and justice.”

As all Swedish government authorities, KTH has to follow the ordinance on environmental management. This implies that KTH, within the
framework of its regular assignments, is obliged to have a System for Environmental Management (EMS) that integrates environmental considerations into the authority’s activities so that it takes into account the operations’ direct and indirect environmental impacts in a systematic way. An authority whose activities result in a significant environmental impact should be registered in accordance with the European Parliament and the Council’s regulation¹ or must be certified in accordance to the ISO 14001 standard.

The president of KTH has decided that KTH shall have a certifiable environmental management system according to ISO 14001 no later than 31 December 2014.

The overall environmental objectives, within KTH’s System for Environmental Management (EMS), have been established in order to achieve continual improvement of environmental performance and practices. Local environmental goals and practices will be established at KTH schools and university administration in accordance with the EMS. A follow-up of the overall environmental objectives will be done at least once a year.

About KTH

KTH, founded in 1827, is responsible for one third of Sweden’s capacity for technical research and is the country’s largest organizer of technical/engineering education at university level. KTH education and research covers a broad spectrum – from natural sciences to all branches of engineering plus other areas such as architecture, industrial economics, urban planning, work science, philosophy and the history of technology. In addition to the research conducted at KTH Schools, a number of both national and local Competence Centres are located at KTH. The national research foundations finance a number of research programs at KTH.

KTH offers degree courses in architecture, master of science in engineering, bachelor of science in engineering, bachelor’s degree, master’s degrees (one or two years), licentiate and doctoral degrees. A technical preparatory course as well as further education is also offered. There are a total of 12,400 full year students, more than 2000 active post-graduate students, 30% of whom are women and a little over 4,800 employees.

KTH has extensive international research and educational exchanges with universities and colleges, mainly in Europe, the USA and Australia as well as countries in Asia. KTH participates actively in various EU research programs. Cooperation is also carried out with Swedish and international aid agencies. Further, KTH has extensive cooperation with Swedish businesses, governments and organizations. Strategic cooperation agreements have been signed with several major companies and with Stockholm County Council. KTH is organized into ten schools. Schools report directly to the President and are headed by a Dean and a Vice-Dean. The President leads operations and report to the University Board. The President’s Group deals with strategic educational, research and quality issues and consists of the President, Deputy President, Dean of Faculty, Vice-Dean of Faculty, vice-president for research, the University Director and a student representative. The KTH Management Group deals with matters concerning all KTH schools and consists of the President, Deputy President, Dean of Faculty, Vice-Dean of Faculty, vice-president for research, the University Director, all deans of schools and two student representatives.

The Faculty Council bears the academic responsibility for KTH’s education and research. Quality activities – follow-up, evaluation and recommendations – have a prominent place in their operations.

A central Faculty Forum acts as an arena for information, discussion and introduction of overall policy issues, as well as providing advice on research and educational matters. The University Board supervises all KTH operations and is responsible for ensuring that tasks are properly fulfilled. The Board consists of 15 members – eight external representatives, the President, three teachers and three

¹ (EC) No. 761/2001 of 19 March 2001 (EMAS)
student representatives.
In 2012, KTH’s total revenues amounted to SEK 4,214 million of which about 25% was funding for basic education and 25% were grants for research and doctoral programs and the remaining 50% was external funding from, amongst others, research foundations and the EU.

On this report
This report covers 2012 and has been compiled by Helene Limén, project leader at KTH-Sustainability together with Teresia Sandberg, project coordinator at KTH-Sustainability. The information and data presented here have been taken from the Annual Report 2012, KTH’s Strategic Plan, Vision 2027 and KTH-Sustainability’s project plan (amongst others). The report describes KTH’s work related to the three principles of ISCN.

KTH, founded in 1827, is responsible for one third of Sweden’s capacity for technical research and is the country’s largest organizer of technical/engineering education at university level.
Principle 1 – Sustainability Performance of Buildings on Campus

**Principle 1:** To demonstrate respect for nature and society, sustainability considerations should be an integral part of planning, construction, renovation, and operation of buildings on campus.

A sustainable campus infrastructure is governed by respect for natural resources and social responsibility, and embraces the principle of a low carbon economy. Concrete goals embodied in individual buildings can include minimizing environmental impacts (such as energy and water consumption or waste), furthering equal access (such as nondiscrimination of the disabled), and optimizing the integration of the built and natural environments. To ensure buildings on campus can meet these goals in the long term, and in a flexible manner, useful processes include participatory planning (integrating end-users such as faculty, staff, and students) and life-cycle costing (taking into account future cost-savings from sustainable construction).

Management Approach to Principle 1

**Energy consumption**

KTH’s operations are conducted in rented premises and the largest landlord is Akademiska Hus. Akademiska Hus has ambitious environmental goals, including 40% in energy savings by 2025, starting from the year 2000.

Since 2009, a regulation on energy efficiency has been established for Swedish authorities. Each authority will implement at least two of six predetermined measures and report back on the work that has been carried out to the Energy Agency annually. The President has decided that the two measures KTH will work with will be to purchase equipment based on energy-efficient product specifications and to change and modify equipment in favour of energy-efficient alternatives. During building and renovations, energy-efficient solutions are always considered and have been applied.

Several initiatives are now taken both from KTH and Akademiska Hus, to reduce the energy consumption – which is done both from the environmental and the economic perspective. An energy study, carried out in 2011, showed great potential for energy savings and cost reductions within KTH Campus. This resulted in the decision from Akademiska Hus to install heat pumps and connecting the cooling network at the campus area. The result is expected to reduce the costs of heating and cooling. Calculations show that purchased energy can be reduced by a total of up to 23,700 MWh, equivalent to about 25 percent of the current volume of purchased energy.

At KTH, energy consumption is accounted for partly by the electricity used in our daily activities – such as the use of office equipment, lighting, machines and different kinds of tools. Energy consumption varies among the schools mainly due to significant differences in their operations. Total energy use is monitored and compared with the size of the annual full-time workforce and full-time students, and is also calculated per square meter.

KTH has premises in seven locations with 42 buildings and a total area of 240,000 m².
Energy use is measured according to the total surface area that the landlord uses to calculate the rent. The electricity consumption of the Centre for Parallel Computers (within the School of Computer Science and Communication or CSC) is measured separately since it amounts to 25 per cent of the total amount of electricity used at KTH. The other part of the energy consumption relates to the heating and cooling systems in the buildings.

**The overall environmental objectives**

In 2012 overall environmental objectives were adopted. These objectives relate to Sustainability Performance of Buildings on Campus.

- **Energy consumption**: 5 per cent reduction in KTH’s energy consumption (including electricity, heating and cooling systems) until 2015
- **Chemicals**: the handling of chemicals should be improved and be safe from an environmental and health perspective
- **Waste**: Opportunities for waste separation will be improved
- **Buildings**: Best environmental practices should be aimed for during new constructions and renovation of facilities.

### Aspects of equity - policy for students with functional limitations

KTH has a policy for students with functional limitations both long-term somatic disabilities and documented dyslexia. The prerequisites are that disabled students, like other students, are to be guaranteed education of good quality and a good learning environment.

The overall objective is:  
“**It is our social responsibility that students with disabilities are offered the necessary support in the study situation. An overall goal is to provide the disabled student support measures to enable him/her to pursue studies on the same terms as a non-disabled.**”

KTH has allocated resources to economically meet the needs of disabled people for special support in the study situation and a coordinator with responsibility for disability issues has been engaged.

Factors that are considered are:
- the physical environment accessibility
- the psychosocial climate
- opportunity for individual planning of the study environment
- possibility of adapting the curriculum
- access to specific information on disability policy on the economy, housing, transportation, technical and practical support measures, property insurance, recreational activities
- cooperation and information exchange between various course providers
- collaboration with disability organizations and other agencies.

Disabled students are to be provided support measures to enable him/her to pursue studies.
on the same terms as a non-disabled.

**Sustainability Performance of Buildings on Campus**

**Table 1 - Overview of overall environmental objectives decided upon 2012 related to Principle 1**

1. **Energy consumption** The aim is to achieve a 5 per cent reduction in KTH’s energy consumption (including electricity, heating and cooling systems) until 2015
2. **Handling chemicals** should be improved and be safe from an environmental and health perspective
3. **Opportunities for waste** separation will be improved
4. **Buildings**: Best environmental practices should be aimed for during new constructions and renovation of facilities.

<table>
<thead>
<tr>
<th>Topics</th>
<th>Goals and Initiatives</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority areas</td>
<td></td>
<td>Key initiatives</td>
</tr>
<tr>
<td>Energy consump-</td>
<td>5 per cent reduction, including electricity, heating and cooling systems</td>
<td>Education and capacity building at schools</td>
</tr>
<tr>
<td>tion</td>
<td></td>
<td>Education and capacity building at schools</td>
</tr>
<tr>
<td>Chemicals</td>
<td>Improve-ments regarding safety and health</td>
<td>education and capacity building at schools</td>
</tr>
<tr>
<td>Waste</td>
<td>Improvements concerning separation of waste</td>
<td>education and capacity building at schools</td>
</tr>
<tr>
<td>Buildings</td>
<td>Best environmental practices should be aimed for during new constructions and renovation of facilities.</td>
<td>No figures</td>
</tr>
</tbody>
</table>
Principle 2 – Campus-wide Master Planning and Target Setting

**Principle 2: To ensure long-term sustainable campus development, campus-wide master planning and target-setting should include environmental and social goals.**

Sustainable campus development needs to rely on forward-looking planning processes that consider the campus as a whole, and not just individual buildings. These processes can include comprehensive master planning with goals for impact management (for example, limiting use of land and other natural resources and protecting ecosystems), responsible operation (for example encouraging environmentally compatible transport modes and efficiently managing urban flows), and social integration (ensuring user diversity, creating indoor and outdoor spaces for social exchange and shared learning, and supporting ease of access to commerce and services). Such integrated planning can profit from including users and neighbors, and can be strengthened by organization-wide target setting (for example greenhouse gas emission goals). Existing low-carbon lifestyles and practices within individual campuses that foster sustainability, such as easy access for pedestrians, grey water recycling and low levels of resource use and waste generation, need to be identified, expanded and disseminated widely.

Management Approach to Principle 2

**VISION 2027**

KTH wants to contribute to a brighter future finding smart solutions to present and future challenges. In order to describe important choices for the future and draw up potential scenarios, a vision was outlined during 2012. Vision 2027 stakes out targets for the campus area in the future. The goal is that year 2027 KTH will be, “a city in the city” with an accessible and vibrant campus where people live, research and start up new businesses. In order to reach this goal a detailed plan is underway and a planning permission for the first 42 apartments has been given. The plan includes 500 student rooms on campus and a hotel for visitors. The architecture will be bold and in the forefront characterized by leading-edge technology and reflect KTH’s research, for example on new materials and sustainable development. The new buildings will highlight the environmental thinking, using only sustainable material and will hopefully be self-sufficient in energy.

**The development plan for 2013-2016**

Based on the Vision 2027 objectives, the development plan for the period 2013-2016 has been outlined. The university board established the development plan in the end of 2012 and all schools and the university administration will now, based on the plan, draw up their own development plans.

Overall objectives in the development plan, relevant to campus development are:

- Collaboration with external stakeholders will be facilitated and increase in magnitude
- The proportion of women in the faculty and among students will increase and gender equality improve
- KTH campus environments will be characterized by creativity and sustainable development
The campus environment is an important part of KTH’s identity. It is perceived as a creative, sustainable and international meeting place for students, teachers and researchers. KTH main campus is in the process of integration into the unified science city with surrounding parts (Norra Djurgården - Albano – Hagastaden). Other parts of KTH in the suburbs are already integrated into the surrounding research and business environment. Collaboration opportunities increase when the rest of society and KTH physically integrates to a greater extent. It is also important that KTH has close contact with regional and municipal decision makers and act proactively to accelerate campus development. Forward-looking development plans for the campus, buildings and land will be developed.

Transportation
Every day, the KTH creates carbon emissions owing to the various types of transportation used on journeying to and from KTH. A significant contributor to these emissions is the business travel we do, especially by air. The monitoring of these emissions created through business travel is done by analysing the statistics provided by the travel agency with which KTH has established agreements (currently VIA Egencia). It is therefore important that all business trips are booked through the travel agent with which we have agreements. The monitoring process is carried out using statistics provided by the travel agency, Swedish rail service SJ, car-hire companies and the payroll system. The statistics are divided up into the number of journeys made, the number of kilometers travelled and the carbon emissions created.

A significant contributor to carbon dioxide emissions is due to business travel - especially by air.
Table 2 – Overview of goals related to Principle 2
Overall objectives decided upon on 2012

1. **The proportion of women** in the faculty and among students will increase and gender equality improve
2. **Transportation** the aim is to achieve a 10 per cent reduction in carbon emissions resulting from business travel compared with the number of employees (annual full-time workforce) until 2015.

<table>
<thead>
<tr>
<th>Topics</th>
<th>Goals and Initiatives</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Priority areas</strong></td>
<td><strong>Objectives and targets</strong></td>
<td><strong>Key initiatives</strong></td>
</tr>
<tr>
<td>Gender equality</td>
<td>The proportion of women in the KTH faculty will increase to at least 25% (2016)</td>
<td>Appointments of new positions can be used as an effective instrument. Communication platform to decrease uneven sex distribution</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>KTH's business travel by air</td>
<td>10 per cent reduction in carbon emissions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Principle 3 – Integration of Facilities, Research and Education

**Principle 3: To align the organization’s core mission with sustainable development, facilities, research, and education should be linked to create a “living laboratory” for sustainability.**

On a sustainable campus, the built environment, operational systems, research, scholarship, and education are linked as a “living laboratory” for sustainability. Users (such as students, faculty, and staff) have access to research, teaching, and learning opportunities on connections between environmental, social, and economic issues. Campus sustainability programs have concrete goals and can bring together campus residents with external partners, such as industry, government, or organized civil society. Beyond exploring a sustainable future in general, such programs can address issues pertinent to research and higher education (such as environmental impacts of research facilities, participatory teaching, or research that transcends disciplines). Institutional commitments (such as a sustainability policy) and dedicated resources (such as a person or team in the administration focused on this task) contribute to success.

**Management Approach to Principle 3**

**Education, Research and Cooperation**

KTH contributes to sustainable development by providing educational programmes, conducting research and by interacting with the surrounding community. In 2011, the council KTH-Sustainability was formed to work with education, research and cooperation. The council, headed by the Vice-President for Sustainable Development, is composed by teachers and student representatives, a project leader and coordinator and the Environmental Manager.

**Education**

Several Master’s programmes has environment and sustainable development as a theme – during 2012 new courses within this theme has been developed and altogether about 200 courses are now available. All programmes have to integrate environment and sustainable development in their curricula in order to fulfill the overall learning objectives as described in the Higher Education Ordinance. In order to support the responsible teachers of all programmes in their work with environment and sustainable development a self-assessment of general learning objectives has been done. Based on the self-assessment, the schools will now develop an action plan for how to develop and integrate the objectives on environment and sustainable development in their educational programmes.

Another new initiative within the area of education is the development of a “toolkit”, composed of a number of instruments that can be a support for teachers. The toolkit has been launched at the KTH external website and will be further developed in 2013.

During 2012, six of KTH’s schools received extra faculty funding for developing their education in relation to sustainable development. The schools used it for different purposes including developing new compulsory courses for their programmes.

During 2012 a pilot version of a new pedagogical course on teaching for sustainable development was developed and tested. It will be further developed and implemented during
2013 as a course that can be taken by teachers at KTH.

The Higher Education Ordinance includes overall learning objectives which all Master and Bachelor programmes in engineering should fulfill. Two of these are related to sustainable development. They are however rather general and was therefore specified in ten learning outcomes that can be used when developing programmes and courses. Work on further developing these learning outcomes continue during 2013.

Networking activities were also arranged where teachers could meet and discuss issues related to integration of sustainable development in courses and programmes.

A “toolkit” with practical tips and ideas on how to integrate sustainable development into education is now available at the KTH external website.

Research

It is important that KTH’s research generate knowledge that can contribute to a sustainable development of society. This implies that a long-term perspective should be adopted with focus on solutions that do not constitute a threat to the ability of future generations to satisfy their needs. It also implies a holistic perspective where the introduction of new technology is seen in interaction with the society. Around 50 research groups at KTH have environment and sustainable development as, either the central aspect in their research, or a key component of the research carried out within their specific field. In addition KTH is involved in a dozen centers linked to the environment and sustainable development.

In order to highlight ongoing research, a KTH-Sustainability Research Day was arranged in 2012. The aim with the day was to present new research findings generated from ongoing projects among researchers at KTH. Each session ended with round table discussions in order to ensure a fruitful exchange of knowledge among researchers. A Research Day will be arranged in 2013 with policy makers, industry, organizations and authorities as target groups.

During 2012, Sustainable Development was one of the prioritized areas when distributing new faculty funding. Several new professors where also appointed including one on Sustainable Production, one on Environmental Strategic Analysis with a focus on Future Studies, one guest professor on Environmental Systems Analysis and one Adjunct Professor on Applied Environmental Economics and Environmental Statistics.

In order to support interdisciplinary work KTH-Sustainability supported several minor projects including development of a new PhD course, establishment of research networks, development of master courses and development of research ideas. Several network meetings were also arranged in order to allow researchers from different disciplines to meet and exchange ideas. A newsletter including information about new research calls is compiled and sent out to KTH researchers approximately every fortnight. Another newsletter with more general information about sustainability activities at KTH is distributed approximately once per month.
A KTH-Sustainability Day was arranged in 2012 in order to present research findings and to discuss potential future exchange among researchers.

**Collaboration**
KTH strives to become a leading university within the areas of environment and sustainable development. To reach this goal, collaboration with society is essential. A number of actions and activities have been done during 2012 in order to stimulate cooperation between KTH and the surrounding community within the field of sustainable development. Examples of some new initiatives are presented below.

**Zero-Emission Campus Lab**
During 2012 a new project, Zero Emission Campus Lab was outlined, inspired by KTH’s Vision 2027. It aims at providing examples of sustainable solutions to KTH’s students, visitors and partners - solutions that can be spread and implemented in society. The word "lab" implies that the project is an ongoing experimental place where the acquired knowledge can be used, but also where new research findings can be tested and evaluated. Sustainable solutions will be visualized, accessible and sources for inspiration. In order to achieve the project goals, the campus area should be accessible for full-scale experiments and also encourage behavioral changes.

**Open Lab**
Stockholm is growing rapidly which implies a number of challenges for future sustainable solutions concerning infrastructure, housing and the environment. OpenLab is a physical place where students, educators and researchers from Karolinska Institutet, KTH Royal Institute of Technology, Stockholm University and Södertörn University work with clients from the City of Stockholm, Stockholm County Council and Stockholm County Administrative Board. The goal is to produce proposals for solutions to complex social issues for this growing region through new interdisciplinary collaboration between traditional knowledge areas.

Open Lab is being developed now. What distinguishes it is the work that is being carried out to address a number of current and complex issues raised by clients, and that people representing different knowledge areas are working together to produce proposals for solutions and innovations. OpenLab offers a new way of learning new things in a partnership between various sectors of society; between different fields and professions; between medicine, engineering, natural sciences, social sciences, the humanities and the arts.

OpenLab is also a unique environment in that it is intended to generate new approaches and innovation at the same time as it is a place where clients and students/researchers can forge relationships. It is also an arena that presents and demonstrates results from research and innovations that are already being applied outside of academia and that have a connection to the challenges that OpenLab is focusing on.

**Greenhouse Labs**
Greenhouse Labs was inaugurated during 2012, a place where young high-tech and growth-oriented chemistry related businesses can establish themselves for a limited time. Greenhouse Labs offer a state of the art lab and office with an efficient infrastructure. It is directly connected to teaching and research in the School of Chemical Science and Engineering, in the middle of the KTH campus, in an environment that fosters innovation and entrepreneurship. A facility of this kind is new in the Stockholm area and it is expected to be a great asset.
for start-ups companies in area chemistry. The closeness to researchers opens up many possibilities – for example to solve problems in a new way and to recruit young scientist to companies. Examples of new companies ideas, established at Greenhouse Labs, are new sustainable materials for the packaging industry and recycling of cotton from the clothing industry.

**Green Leap**

Green Leap, a network for design and sustainable development was established at KTH during 2012 in collaboration with Konstfack - University College of Arts, Crafts and Design. The overall objective of Green Leap is to act as a catalyst for change by involving design in sustainable development. The key element in all operations is the combination of design and sustainable development. The partners can be divided into three categories: Design Industry, Academy and Research plus consultancies and organizations. The work is directed into three areas: to act as a matchmaker between partners, to share knowledge through courses, workshops, the Green Leap website and conferences and to take action by initiating and managing projects that in different ways brings us closer to the overall goal – a sustainable society. One umbrella project is “Prototyping the future” where the aim is to bring life to a sustainable society through design driven visualisations that people can understand, consider and relate to.

**AIMday® Sustainable Solutions for Cities**

In 2012 a decision was taken to arrange an AIMday® with the theme “Sustainable Solutions for Cities”. AIMday is a concept where researchers, during one day, discuss concrete solutions on actual problems that companies and organizations are facing. Companies and organizations send in their questions they want to discuss with the researchers in advance. The questions are published on a website and researchers from KTH and other universities can sign up for one or several questions. Participation in AIMday® can lead to future collaborations and contacts and in this case the aim is to translate research findings into new solutions which can in turn make cities become more sustainable.

What AIMday® offers to researchers:

- Meetings with industry representatives and an opportunity to learn about their actual need for new knowledge and competence.
- Discussions on subjects that the researcher is interested in, and how the researcher’s unique understanding can bring about collaborations in various forms.
- Opportunities to make contacts within the industry that might lead to future projects, collaborations or employment.
- Opportunities to meet other scientists across universities and institutes interested in the researcher’s subject.

What AIMday® offers to representatives from the industry and organizations:

- Meetings with academic scientists who can contribute in the process of solving their questions.
- An opportunity to learn about methods of analysis, process, calculation and other resources and tools available at the universities.
- An opportunity to gain access to national and international networks of highly qualified scientists.
- Meetings doctoral candidates who may be potential future employees.

---

2 AIMday® is a registered trademark owned by Uppsala University
The unique AIMday® format – a question, an hour, a group of experts – has proven successful in finding useful contacts, collaborations, and new paths towards solving concerns of companies and organizations alike.

**Communication Plan**
A communication plan was developed during 2012 with focus on increasing the visibility of KTH’s sustainability research. Examples of activities include the development of web-sites, increasing the visibility of sustainability research at KTH, increasing the number of press releases related to KTH’s sustainability research and organizing seminars.
Table 3 - Overview of goals related to Principle 3

Overall objectives decided upon 2012:

Environmental objectives

1. **Education:** The aim is for KTH to actively work to increase teachers’ and students’ knowledge of, and involvement in, issues relating to the environment and sustainable development.
   Those running all KTH programmes should report on how the educational goals laid out in the university regulations – which relate to the environment and sustainable development – are fulfilled and developed.

2. **Research:** The aim is to increase the amount of research carried out at KTH that is focused on the environment and sustainable development. The research carried out must be of a high international standard.

3. **Collaboration:** KTH is to increase its level of visibility and improve its interaction with society within the area of environment and sustainable development.

<table>
<thead>
<tr>
<th>Topics</th>
<th>Goals and Initiatives</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Priority areas</strong></td>
<td><strong>Objectives and targets</strong></td>
<td><strong>Key initiatives</strong></td>
</tr>
<tr>
<td>Education</td>
<td>All educational programmes address the specific and general learning outcomes for the environment and sustainable development. New educational programmes must address environmental and sustainable development.</td>
<td>In 2012 all educational programmes have conducted a self-assessment of the general learning outcomes.</td>
</tr>
<tr>
<td>Research</td>
<td>Information and support to researchers on new funding opportunities</td>
<td>Internal newsletter with information about relevant and new calls Meeting places for researchers to discuss new collaborations in the field</td>
</tr>
<tr>
<td>Research</td>
<td>Review of KTH's research within the field of environment and sustainable development.</td>
<td>Three international experts in the field will elucidate KTH’s strengths in the field and give advice how to further develop and strengthen the research</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Collaboration</td>
<td>Increase KTH’s level of visibility and improve its interaction with society</td>
<td>A communication plan has been written for KTH-Sustainability’s work with the environment and sustainable development</td>
</tr>
</tbody>
</table>