

ETH ZÜRICH

Sustainability Report 2009 to 2010

Based on the guidelines of the Global Reporting Initiative (GRI)
and the ISCN-GULF Sustainable Campus Charter



ETH

Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

The Swiss Federal Institute of Technology Zurich (ETH Zurich) sees sustainable development as a central issue for our society, and is committed to contribute to this goal with its research, education and knowledge transfer as well as in its own operations.

To strengthen this commitment, ETH Zurich has joined the ISCN-GULF Sustainable Campus Charter as a signatory member. This Charter is disseminated together by the International Sustainable Campus Network (ISCN) and the Global University Leaders Forum (GULF).

The ISNC is a global network that aims to enhance universities' commitments to construct, redesign, and organize their campuses in an exemplary and sustainable way, and to include the experiences in their research and education mission (www.isc-network.org).

GULF was initiated by the World Economic Forum to develop a global community of university leaders, foster collaboration between top universities in areas of significance for global policy and help shape the agenda of the World Economic Forum. The GULF community now includes 25 heads of universities from nine different countries and constitutes the premier university leaders forum in the world (www.weforum.org/global-university-leaders-forum).

In order to increase transparency for all stakeholders, this sustainability report combines the annual ISCN-GULF Charter Report with a more comprehensive overview of ETH Zurich's sustainability goals, initiatives, and achievements in a manner that fulfills the sustainability reporting guidelines of the Global Reporting Initiative (GRI).

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President's statement

Sustainability: action is what counts

Tackling the challenges of sustainable development requires critical thinking, innovative technologies, and an open dialogue between science, industry and society. As a Swiss-based university that is consistently high in the leading international university rankings, ETH Zurich is committed to playing a leading role in addressing these challenges on a national, European, and global scale. At ETH Zurich, sustainability must be at the core of all three of our main areas of business – in research, education, and transferring our results into practice. For this reason energy technologies, climate change, future cities, the world food system, long-term management of material flows, or human health issues are among the topics that feature prominently in our agenda.



In our research we stress collaborations that transcend disciplines, as these are particularly fruitful for generating path-breaking innovations. In our education we focus on teaching methods that are tightly integrated with cutting-edge research projects, to enable leaders of tomorrow to make a real difference in the world. To transfer research results into marketable products and create qualified jobs, we were also successful in supporting the foundation of 44 ETH spin-off companies between 2009 and 2010.

In addition, we recognize that addressing such complex problems as protecting the climate system, on which we all depend for our survival, requires an ongoing exchange between science, different stakeholder groups and decision makers. Therefore, ETH Zurich supports public policy debates as an “honest broker,” providing impartial scientific information to all parties concerned, with due emphasis on the assumptions and uncertainties that are unavoidable in all scientific studies.

We also want to act as a role model for the “decarbonization” of our society by sharing how we manage our own operations and foster a sustainable campus environment for working and living. ETH Zurich has developed an energy strategy that is based on three pillars: energy efficiency, renewable energy and electrification. To underline our commitment to low carbon emissions we have just started to implement a large construction project that includes underground storage fields to dynamically store and circulate energy from geothermal and waste sources across our Science City campus -both for heating in winter and cooling in summer.

That said, we are aware that sustainability encompasses more than just environmental issues. We are working toward a sustainable workplace in other ways, such as by placing strong emphasis on diversity in our student body, faculty, and staff. This is not only an issue of equal opportunity, but is also essential for creating the dynamic diversity of ideas and people that is crucial for generating innovation.

Our endorsement of the ISCN-GULF Sustainable Campus Charter is an expression of our commitment to sustainable development. In addition, our decision to follow the guidelines of the Global Reporting Initiative in the development of this report underlines our commitment to making the “ivory tower” more transparent to all our partners in society and industry.

Ralph Eichler, President of ETH Zurich

1 ISCN-GULF Charter Summary Report

1.1 Introduction and Profile

ETH Zurich's reputation as an internationally acclaimed center for excellence in energy, environmental, and sustainability research has arisen from both a long-standing tradition of work in this field, and the major initiatives currently underway in the institution. For more than twenty years, the Department of Environmental Sciences has showcased ETH Zurich's strong commitment to environmental and sustainability research. ETH Zurich runs several interdisciplinary competence centers dealing with research and education related to sustainability. "ETH Sustainability", the office in charge of initiating and coordinating sustainability activities at ETH Zurich, is overseen directly by the university president. ETH Zurich has also committed to ambitious environmental goals. In particular, ETH Zurich's Hönggerberg campus, "Science City," has made a name for itself as a sustainability leader. Across the university, students from a wide spectrum of disciplines are working to create a sustainable society through projects to reduce campus greenhouse gas emissions, or by helping other students learn how to live more sustainably.

ETH Zurich's commitment to sustainable development and campus sustainability drove the decision to act as one of the host organizations for the International Sustainable Campus Network (ISCN) and to support the development and implementation of the ISCN-GULF Sustainable Campus Charter program. This report presents ETH Zurich's goals and performance under the Charter's principles (see also annex for the full charter text).

About ETH Zurich

Founded in 1855 as the Federal Polytechnical School, ETH Zurich (Eidgenössische Technische Hochschule Zürich), or the Swiss Federal Institute of Technology Zurich, adopted its current name in 1911. Focused on higher education and research with an emphasis on science and technology, the university has hosted twenty-one Nobel Laureates as students, teachers, and/or researchers since its founding. ETH Zurich promotes science and scientific activity for their own sakes, as well as for their importance to its communities, both near and distant: to the city and canton of Zurich, to Switzerland, to Europe, and to the world.

ETH Zurich is located in Zurich, Switzerland. As a technical university in a small country, ETH Zurich competes with the world's best by establishing international links, by recruiting its academic and research staff worldwide, and by remaining attractive to students from abroad. Amongst the 15,378/16,342 graduate and undergraduate students registered in 2009/2010, approximately 80 countries were represented and more than a quarter of the students were non-Swiss. The proportion of foreign students has risen over the last five years from 12 to 19 percent of newly matriculated Bachelor students and from 24 to 36 percent of Master students. ETH Zurich is particularly popular among doctoral students from abroad. The proportion of those has risen from 55 percent in 2005 to 63 percent in 2010. In 2009, more than 45 percent of these were from neighboring Germany, making it the University's most important market outside of Switzerland, followed by Austria (5,3%), Italy (5%) and China (4,8%), with 249, 238 and 228 students at ETH Zurich respectively. In 2009/2010, a total of 2,520/2,558 degrees were conferred, 1,203/1,283 of which were Bachelor's and 1,317/1,275 Master's degrees.

ETH Zurich is presently structured into 16 academic departments, which are grouped into five academic disciplines: architecture and civil engineering; engineering sciences; natural sciences and mathematics; system-oriented natural sciences; and management and social sciences. In

2009/2010, there were 388/413 full professors that taught and conducted research at ETH Zurich, and of the additional 7,111/7,284 full-time equivalent positions, 4,364/4,479 were engaged in teaching and research and 2,212/2,241 were executives, infrastructure managers, and staff professionals.

The Executive Board is the supreme committee of the ETH Zurich. It is responsible for the areas education, research, and administration. Through the actions of the Executive Board, the school does justice to its social, cultural, and economic responsibilities. The Executive Board is composed of the University's President and Rector, as well as three Vice Presidents.

The President bears legal and political responsibility for the university and is accountable to the ETH Board for its management. He chairs the Executive Board and coordinates its activities; the other members of the Executive Board are answerable to him. In consultation with other members of the Executive Board and on the basis of the ETH Board's strategic plan, he determines the strategy. The President also decides about the budget, allocates funds to the different areas of activity (domains) of the Executive Board and to the departments, and oversees the finances for the entire university. He is responsible for appointing professors and also appoints the heads of department at the request of departmental conferences. He represents the university to the outside world; he maintains relationships with public authorities, political bodies and the general public and is responsible for communication policy. He is in charge of the internationalisation process, developing the market and building up strategic alliances. His responsibilities also include fund-raising and alumni relations.

The Rector is responsible for education within the Executive Board. She is in charge of admissions to study programmes at all levels and for the organisation and management of study-related matters, including the examination process. The Rector is responsible for approving continuing education courses and for scholarships. She confers the "venia legendi" (permission to teach) and teaching assignments, and issues invitations to visiting professors and lecturers and academic guests. She is responsible for the cooperation with secondary schools and for agreements on inter-university programmes and student exchanges.

The Vice President Research and Corporate Relations is in charge of the Executive Board domain for Research and Corporate Relations. In this capacity, he is essentially responsible for the application of research results (technology transfer) and partnerships with industry. He approves research contracts agreed between elements of ETH Zurich (e.g. departments, institutes, laboratories, professors or other) and third parties, and represents the Executive Board on research policy committees.

The Vice President Finance & Controlling is in charge of the Executive Board domain for Finance and Controlling. He is essentially responsible for the financial strategy and planning, the budgeting process, financial management (including cash management), as well as controlling and risk management.

The Vice President Human Resources and Infrastructure is responsible for personnel policy, development and management, the management of construction projects including the corresponding relations to the public and political authorities as well as the management of the real estate portfolio, safety/security and environmental protection, ICT management, the information and knowledge management (library). He allocates space for education, research and administration, provided that this competence was not attributed to individual departments previously.

Strategic oversight of the ETH Zurich is provided by the ETH Board, which fulfills this function for the entire ETH Domain, encompassing EPFL as a second technical university and four research institutes or national labs, in addition to ETH Zurich. The president of ETH Zurich is also a member of the ETH Board.

ETH Zurich is a public university and 80% of its funding comes from public sources, with the remaining 20% made up by private contributions, donations, and grants. The total University expenditure for the academic year 2009/2010 was 1,307/1,359 million CHF.

About this report

This is the first sustainability report published by ETH Zurich that is based on the guidelines of the Global Reporting Initiative (GRI) and the ISCN-GULF Sustainable Campus Charter.

The first part of the report covers the basic information required under the ISCN-GULF Sustainable Campus Charter; the second portion presents more in-depth examples and data, which help situate the sustainability performance of ETH Zurich in a broader context. To uphold high standards of transparency, the overall report implements the sustainability reporting guidelines developed by the Global Reporting Initiative (GRI) at B-Level. This was checked and confirmed by the GRI.

Social and economic data presented cover all operations of ETH Zurich. Facility and environmental data are derived from its two campuses in Zurich—ETH Center and Science City—while smaller sites such as field research stations are not included in all key figures since meaningful data is not available and its impact on overall results would be negligible. The period of performance covered in this report is the years 2009 and 2010. Where possible and meaningful, the previous year's data is included to facilitate the discussion of trends. Goals are given for key target areas in a timeframe that ranges from 2011 to 2020, depending on the issue at hand. As this is ETH Zurich's first ISCN-GULF Charter Report, not all key target areas reported under principles 1 to 3 have explicit goals at this point. Rather, this first report is meant to provide an overview of where performance currently stands in areas related to the Charter in order to facilitate further target-setting on the basis of this information.

For questions on this report, please contact Dr. Christine Bratrich, the Director of ETH Sustainability, or Dr. Dominik Brem, from ETH Zurich's Safety, Security, Health, and Environment group (for contact details see Imprint at the end of the report).

1.2 Reporting against principle 1: Buildings and their Sustainability Impacts

As illustrated in annex 3.1, the principle 1 of the ISCN-GULF Charter refers to the following text:

“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 Principle 1

Principle 1 of the ISCN-GULF Charter includes topics such as energy and water consumption or waste, while greenhouse gas emissions or low-carbon lifestyles are discussed in the context of principle 2.

Principle 1 topics that are seen as priorities at ETH Zurich are mainly under the oversight of the Environmental Committee, which is made up of the Vice President of Human Resources and Infrastructure, the Head of Safety, Security, Health, and Environment (SSHE), and a delegate in each department and in each infrastructure unit. This set up ensures continuous exchange of information between the departments and operations, and ETH’s governing bodies.

The main task of the Environmental Committee is to coordinate the implementation of environmental goals in each department – as outlined in the environmental mission statement of ETH Zurich. The committee holds at least four meetings annually where ideas for environmental measures and targets are discussed, and budget decisions for achieving agreed-on goals are made. Targets are set in the context of the RUMBA program, the Swiss Federal Government Program for Resource and Environmental Management, as ETH Zurich is a Swiss federal institution. The Environmental Committee acts as ETH Zurich’s RUMBA board.

Working groups focusing on particular topics have been set up, and groups with mandates relating to Principle 1 focus for example on energy consumption of appliances, water usage, printers, and waste from laboratories. In addition, the reduction of energy consumption in buildings and operations is part of an ISO14001 certified management system, led by ETH’s infrastructure unit. Recommendations from the working groups and resulting from the ISO 14001 management cycle are considered by the Environmental Committee. Smaller projects (e.g. Awareness campaigns) can be decided upon by the Environmental Committee, while certain large scale proposals including significant real estate investments require approval from the Management of the infrastructure unit, ETH Board or even the Swiss Federal Council. This also

relates to the fact that the buildings used by ETH Zurich are the property of the Swiss Confederation, while decisions on and budget for construction, renovation and operations are given to ETH Zurich.

Monitoring, overseeing, and reporting of progress against energy targets for buildings and infrastructure is the duty of the officer for energy-related matters (“Energiebeauftragter”). Targets for all other environmental aspects are controlled by the Environmental officer, deputy head of the Safety, Security, Health, and Environment (SSHE) department. Examples include the introduction of clear guidelines for sustainable procurement of paper and the economic consumption of such.

Topics	Goals and Initiatives		Results	
Priority topics (with metrics/ units)	Objectives and targets (with time frame)	Actions in 2010	Performance 2009	Performance 2010
Resource use				
Direct and indirect energy use (in % of use in targeted building complexes)	Reducing direct and indirect energy consumption in specific building complexes by 10% by 2010/2012	Use Energy to optimize operational efficiency in the ETL, FEL, FLA and HPM buildings. Increase energy efficiency by optimizing cooling equipment and upgrading lighting	Overall direct energy use (natural gas, oil): 49,000 MWh Overall indirect energy use (electricity, district heating): 123,000 MWh Chance of energy use in targeted building complexes compared to previous year: 5-10%	Chance of energy use in targeted building complexes compared to previous year: 25% (e.g. HPM building)
Renewable energy use (in % of electricity use)	Increase proportion of renewable energy sources to 1% of total electricity consumption by 2010	Energy supply to new buildings in Science City to use certified EWZ green electricity “ewz. wassertop”, from 100 % renewable energy sources	Proportion of renewables based electricity: 100% (based on certificates)	100% (based on certificates) until end of 2010, not continued due to new and emission based strategy.
Reduce Electricity consumption of facilities systems	Optimization of a) operation of all chiller system and b) exchange of inefficient motors / pumps. Implementation of measures if pay-back is 3-4 years.	Analysis of the performance of all Chiller systems	New targets will be defined in 2011	New targets will be defined in 2011
Optimize reuse of waste heat from chiller systems	Optimization of current chiller system for optimal reuse of the waste heat for heating purposes.	Initiation of a project with potential of waste heat reuse of 2.2 GWh.	New targets will be defined in 2011	2011 New targets will be defined in 2011

Topics	Goals and Initiatives		Results	
Quantity and quality of paper consumed (in % reduction per FTE, % recycled paper use, % of FSC or PEFC paper use)	<p>Cut paper consumption per FTE by 5% per year by 2010.</p> <p>Increase the proportion of recycled paper to 50% by 2010.</p> <p>Use only FSC- or PEFC-certified paper by 2010.</p>	<p>Awareness campaigns among employees</p> <p>Introduction of white recycled paper and virgin fibre paper containing a high proportion of recycled material (Triotec)</p> <p>Purchase of special papers in FSC quality only</p> <p>Restriction of free printing for students,</p>	<p>Reduction of paper consumption by 10% to 60Mio. A4 sheets/year compared to 2008.</p> <p>Increase of proportion of recycling paper from 40% to 46.5% of total paper consumption</p>	<p>Slight increase (1.4%) to 61.6Mio A4 sheets/year</p> <p>Proportion of recycling paper in 2010: 44.3% of the total paper consumption.</p>
Reduce drinking water consumption at ETH	<p>Setting up of a conceptual framework where and how to reduce drinking water consumption at ETH.</p> <p>Concept for use of rainwater for secondary purposes on the science city campus.</p>	<p>New targets will be defined in 2011</p>	<p>New targets will be defined in 2011</p>	<p>New targets will be defined in 2011</p>
Waste, recycling, local emissions, and non-compliance				
Recyclable material in waste (in %, excluding special waste)	<p>Increase the proportion of recyclable material in waste (excluding special waste) by 1% per year up to 2010 (based on the recycling rate for 2008: 45 percent)</p>	<p>Reuse of chemical substances by introducing the storage room</p> <p>Recycling of solvents (introduced in 2009)</p> <p>Recycling of other materials such as CDs/DVDs, electrical waste, Nespresso capsules, etc. (introduced in 2009).</p> <p>"Recycling day" for part of the campus buildings</p>	<p>Recyclable materials in waste: 46.9%</p> <p>Increase over previous year: 0.3%</p>	<p>Amount of recyclable material decreased slightly to 45.6% whereas the total amount of waste could be reduced by 5.9% to 2148 tons in the year 2010.</p>
Air pollutants (in mg/m ³ NO _x from heating plants, and % reduction in VOCs)	<p>Cut NO_x emissions from the heating plants from 84 mg/m³ (2004) to 60 mg/m³ by 2010</p> <p>Reduce diffuse VOC emissions by 15 percent by 2012 (set in 2008)</p>	<p>New boilers (first replaced in 2009, second replaced in 2010)</p> <p>New, better sealed boxes for collecting solvents (120 replaced in 2009/2010)</p>	<p>NO_x emissions reduced to 64mg/m³ for the heating plant.</p> <p>VOC emissions total of approx 18000 kg, representing reduction over previous year of >20% (based on calculations, not measurements)</p>	<p>Data not available for 2010.</p>
Building design aspects				
MINERGIE®-ECO and MINERGIE® building standard application	<p>MINERGIE®-ECO standard (or similar) in new buildings</p> <p>MINERGIE® standard (or similar) for total refurbishments</p>	<p>New buildings: HPS (opened 2009) and HPL and LEE (under construction from 2010)</p> <p>Refurbishment of HPP and HPZ buildings (from 2010).</p>	<p>100% for new buildings</p> <p>100% for in-depth refurbishments – however, the HPZ refurbishment follows the Low-Ex strategy to energy efficiency and not Minergie</p>	<p>100% for new buildings</p> <p>100% for in-depth refurbishments</p>

1.3 Reporting against principle 2: Campus-wide planning and target setting

As illustrated in annex 3.1, the principle 2 of the ISCN-GULF Charter refers to the following text:

“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 neighbours, 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 Principle 2

Key management processes for institution-wide carbon targets and for sustainability impacts of transport are closely linked to those processes described under Principle 1, with the Environmental Committee playing a key role, and the RUMBA and ISO 14001 procedures acting as a systematic framework. Carbon targets in particular have been defined and are being continuously monitored by the environmental officer by publishing an ETH Zurich CO₂ balance (incl. other greenhouse gases) on a yearly base. In this regard, also active support by initiatives and projects from faculty, staff and students are important. On ETH's university campus, Science City as a model university project for the 21st century, is essential. Key cross-cutting student initiatives in this regard are ecoworks and [project 21], which connect ideas from all communities at ETH to develop and work on common projects for a more sustainable campus with less carbon emissions.

Master planning plays an essential part in the ongoing major renovation and extension of ETH Zurich's Science City Campus. The master plan chosen was based on an international competition, and its ongoing refinement and implementation is overseen by the campus development team Science City and the Portfolio management of the infrastructure department.

Furthermore, ETH Zurich supports sustainable mobility with several initiatives: To encourage employees to commute and travel by public transport ETH Zurich offers discount for the yearly travel-card and free ½ half-fare travel-card of the Swiss Federal Railways (SBB). The so called Science City Link, a specific public transport concept, offers an alternative for car users and a direct connection between both campuses of ETH Zurich. Also the yearly campaign “Bike-to-Work” encourages over 800 participants to use the bike for their commuting.

With regard to social issues, ETH Zurich has a strong commitment and dedicated programs on gender equality and protection against discrimination and harassment. Responsibility and decisions in this matter lie with the president. A delegate for gender equality acts as a link between the president and the Office of Equal Opportunities for Women and Men. The safety and health of students, staff, and neighbors is based on clear guidelines and documentation of issues such as technical safety measures and personal safety equipment that are defined and overseen by the Safety, Health, and Environment department and are approved by Vice President of Human Resources and Infrastructure or the Executive Board of the ETH Zurich.

Priority topics (with metrics/units)	Objectives and targets (with time frame)	Actions in 2010	Performance in 2009	Performance in 2010
Institution-wide carbon targets				
CO₂ emissions from business travel and excursions (in % reduction compared to 2006)	The allowable CO ₂ emissions of all business travel and excursions to be reduced 50 percent by 2009, based on level of 2006.	New climate fund for promoting climate-relevant research in a north-south context, instead of offsetting centrally by buying certificates was not approved by the ETH-board Implementation of Eco-works projects to reduce CO ₂ or increase energy efficiency	No real reduction achieved in tons/year due to contradiction ETH's strategy for maintaining a worldwide network Minor reduction by offsetting initiatives of air-miles by some ETH Institutes. Reduction of 5-10% of total emissions.	CO ₂ - Emissions (CO ₂ eq) from business travelling increased from 12500t/year (2009) to 14200t/year in the year 2010. Target has to be revised
Reduce direct CO₂ Emissions of the ScienceCity campus to 50% by 2020 (4000t/year).	Implementation of the energy concept based on geothermal storage systems for the Science City campus	Completion of phase 1 (Construction of two storage fields, total of 300 geothermal probes, and main piping loop). Start of operation of phase 1 planned for 2011/2012.	New target Data 2009: 7398t _{CO2} /year	
Transportation				
Energy consumption and CO₂ emissions of vehicle fleet (in l/100 km average consumption in, and % mileage travelled in efficient vehicles)	Cut average fuel consumption for the ETH vehicle fleet to 9.5 l/100 km by 2010 Increase the mileage travelled in small, efficient vehicles (<122 g CO ₂ /km) to 20 percent by 2010 (set in 2008) State the efficiency class for specific vehicles	Acquire and promote the regular use of environmentally. Friendly fuel-efficient vehicles. Discounted tariffs for efficient vehicles.	11.8 l/100km average vehicle consumption	10.6/100km average vehicle consumption Due to outsourcing activities of parts of the ETH car fleet to an external provider – figures 2010 are not comparable to figures 2009.
Fostering the use of public transport and of bike use	No explicit goals formulated beyond general increase of public transport share and bike use	ScienceCity Link. Optimal transportation by public transport between the two campuses. Discount for yearly travelcard and free ½ half-fare travelcard for employees, encouraging employees to commute and travel by the public transport. Yearly campaign "Bike-to-Work" with over 800 participants ETH-wide. Goal of the initiative is to encourage people to use the bike for commuting.		Science City Link now runs also during semester breaks (pilot phase). ETH Zurich reached third place regarding absolute participation in the overall Swiss "bike-to-work" initiative ranking.

Priority topics (with metrics/ units)	Objectives and targets (with time frame)	Actions in 2010	Performance in 2009	Performance in 2010
Food				
Decreasing food impacts, and increasing awareness of food sustainability	No explicit goals formulated beyond general increase of awareness related to carbon footprint of food.	Awareness campaign on CO ₂ load of food ingredients		
Social inclusion and protection				
Diversity in faculty, staff, and students	The performance agreement between ETH Zurich and the ETH Board for the years 2008 to 2011 defines the following targets for 2015: 10% female professors, 30% women among scientific staff members, 35% female doctoral students, and 35% female students.		10.5% female professors, 24.4% women among scientific staff, 30.4% female doctoral students, and 30.6% female students	10.8% female professors (together with assistant professors), 24.4% women among scientific staff, 31.7% female doctoral students, and 30.3% female students
Land-use and biodiversity				
Protection of the diversity of flora and fauna on campus	No explicit goals formulated beyond overall strengthening of biodiversity protection	Label "Naturpark der Schweizer Wirtschaft" für den Campus Science City Implementation of an amphibian protection concept on the Science City campus Providing nesting shelter for endangered wild bee species on the campus		

1.4 Reporting against principle 3: Integration of research, teaching, facilities and outreach

As illustrated in annex 3.1, the principle 3 of the ISCN-GULF Charter refers to the following text:

“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 Principle 3

The integration of sustainability aspects throughout ETH Zurich’s activities is supported by the coordination function of ETH Sustainability. ETH Sustainability supports initiatives, projects and people which contribute to the optimization of sustainability efforts both inside and outside the university. These efforts comprise research, teaching, public outreach and activities to improve the sustainability of both campuses of the ETH Zurich. ETH Sustainability is responsible for coordinating, focusing, publicizing, and initiating sustainability activities across the university

This includes e.g. lectures and courses, to foster transdisciplinary learning and responsible use of our natural resources. One example is the **ETH Summer School Program on Sustainability**, that started in 2010 with the first “[ETHiopian Urban Laboratory SummerSchool](http://www.ethz.ch/lehre/ETHiopia_urban_laboratory/index_EN)”. The aim of this program is to integrate sustainability into ETH’s curriculum. It offers cross cutting courses to apply the concept of sustainability to real case study problems. In summer 2010 these case studies were related to a so called Sustainable Urban Dwelling Unit (SUDU), a two-story, low-cost house built with local materials and local labor, which serves as a research prototype for urban housing solutions in Ethiopia and other developing nations.

http://www.sustainability.ethz.ch/lehre/ETHiopia_urban_laboratory/index_EN

Another example for creating a “living laboratory” for sustainability at ETH Zurich is its call for a “trialogue” between science, industry and society. Science has a special task here: as a pioneering thinker, it must assume the role of an honest broker. In this function as a fair and impartial mediator, scientists should seek new forms of communication. By opening the ivory tower, scientists should contribute to solution-oriented knowledge to bridge ideological divides. This is why ETH Zurich has embarked on a pilot project to open the ivory tower: since November 2009, 30 professors, students, and representatives from industry and the national parliament have

started to communicate on the **ETH climate blog** - not only to bridge a 150-year-old research and education culture with society's needs of the 21st century but also to find joint solutions to the world's most serious environmental problems.

<http://blogs.ethz.ch/klimablog/>

With **seed sustainability**, ETH Sustainability has established another project platform that nurtures contact between young academics, the corporate sector and the wider community. Seed sustainability is tasked with matching research topics suggested by industry and the community with academic research interests. The project platform coordinates the contacts between external partners and qualified students, arranges academic supervision and provides appropriate training for all those involved. By doing so, it fosters successful cooperation between science and industry. Seed sustainability's findings are published in the form of undergraduate, master and PhD theses.

http://www.sustainability.ethz.ch/campus_sust/seed_sust/index_EN

Further information to the "ecoworks" platform, CCES@School and CCES Winter School can be found under: www.ecoworks.ethz.ch/index_EN, www.cces.ethz.ch/ccesatschool and www.cces.ethz.ch/winterschool/ (all mentioned in the following table).

Priority topics (with metrics/ units)	Objectives and targets (with time frame)	Actions in 2010	Performance in 2009	Performance in 2010
Topical integration				
Sustainability related courses (summary available)	Summary of lectures on sustainability-related subjects available by the end of 2009	The draft of overview concept has been finalized and endorsed by the board of ETH Sustainability. The full overview report is delayed.	Activities delayed	Ongoing work on the full overview report.
ETH Summer School Program on Sustainability	An ETH-summer school program on sustainability is established by 2010	Preparing and conducting the first ETH summer school program on sustainability in June 2010	The new summer school concept was developed and endorsed by the board of ETH Sustainability	The preparation and implementation of the summer school program was successfully finalized in August 2010; a video documentary in Dec 2010
CCES Winter School, Sustainability Science Meets Practice	Improve capacity of PhD students to interact with non-academic stakeholders; developing recommendations for concerted action	Implementation of the concept and program; call for applications in October 2010	The programme was inexistent in 2009	17 participants accepted for the first school taking place in Jan./Feb. 2011
Seed Sustainability	Embedding the project platform "seed sustainability" in the management structure of ETH Sustainability by June 2010	Preparing start-up of seed sustainably, (continuation of 2009); creating project team, starting with marketing and internal PR activities, creation of a new web-based information platform, first contacts with external partners successfully established, first student projects are running	Concept development and preparing the start-up of seed sustainably	Successful start-up of the project platform seed sustainability
Ecoworks	At least three outstanding "ecoworks" projects will be selected and awarded via a 24h workshop during 2010	Preparation and implementation of the 24h ecoworks workshop and award ceremony for 3 winner projects	Planning and fundraising (100k CH) for the 2010 ecoworks workshop	Workshop and award have been successfully accomplished
ETH climate blog	Establish a highly recognized and new communication platform (i.e. a scientific blog) on the ETH webpage by November 2009	Consolidation of the new platform, integration of new information tools (e.g. for school classes), establishing media partnerships	The climate blog went online in November 2009	Successful continuation and extension of the blog
CCES@School	Support the transformation of scientific topics into a useful form for teaching purposes at secondary schools	Establish an environmental education initiative in cooperation with pedagogic partners (call for proposals in June 2010; kick-off workshop in December 2010)	The programme was inexistent in 2009	Building of networks with pedagogic partners and start of 5 projects



2 GRI Report

In order to increase transparency for all stakeholders, ETH Zurich combines the annual ISCN-GULF Charter Report with the more comprehensive overview of ETH Zurich's sustainability goals, initiatives, and achievements in a manner that fulfills the sustainability reporting guidelines of the Global Reporting Initiative (GRI). GRI is a network-based organization that pioneered the world's most widely used sustainability reporting framework. GRI's core goals include the mainstreaming of disclosure on environmental, social and governance performance. The cornerstone of the Framework is the "Sustainability Reporting Guidelines". Part two of this report follows these guidelines.

2.1 Research, Education and Knowledge Transfer

Providing a top class education and conducting ground breaking research with global impact has been central to the mission of ETH Zurich since its inception in 1855.

Top quality research and education

Students from all over the world come to study at ETH Zurich in order to experience a top quality academic environment. The university regularly appears at the top of international rankings as one of the best universities in the world. This high quality is also demonstrated by 21 Nobel Laureates who have studied, taught or conducted research at ETH Zurich, underlining the excellent reputation of the institute.

Five disciplines with 16 departments

There are a total of 16 academic departments within ETH Zurich bundled in five broad academic disciplines: **1. Architecture and Civil Engineering** include the Departments of Architecture (ARCH) and Civil, Environmental and Geomatic Engineering (BAUG) **2. Engineering Sciences** consist of the Departments of Biosystems Science and Engineering (BSSE), Computer Science (INFK), Information Technology and Electrical Engineering (ITET), Mechanical and Process Engineering (MAVT), and Materials Science (MATL); **3. Natural Sciences and Mathematics** comprises the Departments of Biology (BIOL), Chemistry and Applied Biosciences (CHAB), Mathematics (MATH), and Physics (PHYS); **4. System-oriented Natural Sciences** includes the Departments of Agricultural and Food Sciences (AGRL), Earth Sciences (ERDW) and Environmental Sciences (UWIS), while **5. Management and Social Sciences** includes the Department of Humanities, Social and Political Sciences (GESS) and the Department of Management, Technology and Economics (MTEC)

Natural Sciences and Mathematics had the largest number of students in its ranks in academic year 2009/2010. Engineering Sciences with its five academic disciplines had the second highest number of students in 2009/2010.

Centers of competence for essential research questions

ETH Zurich supports the work of multidisciplinary competence centers to promote cross-disciplinary research. These are networks where ETH professorships or ETH institutes from various fields coordinate their scientific work, in some cases with external partners, while pursuing common strategic aims. In 2009 and 2010 ETH-Centers of Competence were active to deal with the following issues:

Climate: Centre for Climate Systems Modeling (C2SM)
Education: Kompetenzzentrum für Lehren und Lernen (EducETH)
Energy science: Energy Science Center (ESC)
Finance: Competence Center Finance in Zurich (CCFZ)
Imaging: Center for Imaging Science and Technology (CIMST)
Knowledge: Competence Centre "History of Knowledge" (CC-HK)
Materials research: Materials Research Center (MRC)
Micro and nano science: Micro and Nano Science Platform (MNSP)
Neuroscience: Neuroscience Center Zurich (ZNZ) Zurich-Basel
North-South research: The ETH North-South Centre
Plant Science: Plant Science Center (PSC) -
Socio-economic crises: Coping with Crises in Complex Socio-Economic Systems (CCSS)
Systems biology: Comp. Center for Systems Physiology & Metabolic Diseases (CC SPMD)

Furthermore, ETH researchers contributed to three Centres of Competence within the ETH Domain:

The Competence Center **Energy and Mobility** (CEM)
 The Competence Center **Environment and Sustainability** (CCES) and
 The Competence Center of **Material Science and Technology** (CCMX)

Change agents for sustainability

With the founding of its environmental sciences department more than 20 years ago, ETH Zurich has early on taken a leadership role in issues of environmental protection and sustainability. Graduates from the Department of Environmental Sciences and also from other departments and other fields relevant for issues of sustainable development are one of the key “sustainability products” of ETH Zurich. They act as change agents for a more sustainable future in leadership roles they take in science, industry, and the public sector.

A sought-after location for earning degrees

ETH Zurich continues to exert a great force of attraction. Numbers of students and of degrees awarded at all levels have grown significantly.

In 2009/2010, there were 3,388/3,507 doctoral students working at ETH Zurich. Altogether there were 15,378/16,342 students with 33/35 percent of them coming from outside Switzerland. The number of Doctorates awarded by ETH Zurich has increased by 24 percent from 523 in 2000 to 650 in 2010. Also Bachelor and Master Degrees awarded showed strong growth. In 2010 there were a total of 2540 Bachelor and Master Degrees – an increase of 8 percent to the year 2009.

These positive trends also present a challenge: In some of the departments ETH Zurich is reaching its limits in terms of its infrastructure for example its lecture theatres, laboratories or seminar rooms. Growth also puts pressure on its employees, who are crucial to its staff-intensive, research based style of teaching which lies behind the excellence of the education at ETH Zurich. To ensure that the high quality of education can be maintained, ETH Zurich is providing new services for students and lecturers and making organizational changes.

Knowledge valuable for society

Knowledge is central for the future development of society and economy, and the production of knowledge is a key mandate of ETH Zurich. This includes research on global challenges - such

as energy and climate change, future cities, the world food system or life and health science. Among others, these topics are essential elements of ETH Zurich's research strategy. For example, research at ETH Zurich has led to new methods for accurately measuring glacier melting in order to monitor climate change impacts; for increasing the iron content in rice grains with the goal to improve nutrition in developing countries; and for revolutionizing methods of magnetic resonance tomography (MRT) essential for early diagnosis of many life-threatening conditions.

Successful innovation for the market place

Knowledge creation is also an essential element of innovation in the private sector and thus of economic development. While the precise effect of such linkages is difficult to measure, for example the President of the Swiss Confederation has emphasized the governments' clear conviction that both fundamental and applied research are the keystones for value creation in Switzerland.

Transferring its knowledge to the private sector, with economic benefits to all of society, is one of ETH Zurich's primary goals. Creating spin-off companies is one of the most successful ways to transform scientific discoveries into products that meet the market needs of today and the future. ETH Zurich has succeeded in this, as borne out by more than 60 new patent applications each year (2008-2010) and the 215 spin-off companies that were created out of the institute between 1996 and 2010. Despite the difficult economic climate, many researchers from ETH Zurich founded companies last year. The university recorded no fewer than 24/20 new spin-offs in 2009/2010. Several of them are involved in the "clean-tech" industry and deal in environmentally friendly technology.

The non-profit foundation "myclimate", founded in 2002, is now among the world leaders when it comes to voluntary carbon offsetting measures. Science-based and market-oriented, myclimate offers a comprehensive package of services for offsetting in accordance with the principles of "avoid – reduce – offset" and "do the best and offset the rest". Another spin-off company "Amphiro", develops energy and water-saving software and the spin-off "Keoto" renders engineering services for sustainable building. The founders of "greenTEG" offer flexible and inexpensive thermoelectric equipment that converts waste heat into electricity. And the business concept of "ClimeWorks" is based on innovative technology that collects CO₂ from the air, stores and delivers it to locations where it can be put to good use.

These successes of ETH Zurich to generate cleantech spin-offs are of particular economic significance given the fact that the cleantech sector is expected to grow more than most other sectors in the coming years. As such it offers enormous potential for innovation and jobs in Switzerland. Not only new spin-off companies, but also large corporations benefit from the research excellence at ETH Zurich. Recent examples of industry collaborations with ETH Zurich include a research centre for nanotechnology created as part of a strategic partnership with the IBM Zurich Research Laboratory, and the Disney Research Center at ETH Zurich for innovative technology in reality simulation.

Various Competence Centers, networks, and institutes of ETH Zurich and the ETH Domain contribute substantially to linking research, education, and public dialogue across disciplinary boundaries. These include ETH Sustainability, Energy Science Center, Network City and Landscape, Institute for Environmental Decisions, Competence Center Environment and Sustainability, Competence Center Energy and Mobility. An overview can be found at www.ethz.ch/research/centres/index_EN.

Significant increase in number of degrees

Academic discipline	2000	2009	2010
Bachelor degrees (not available in 2000)			
ETH Zurich total	0	1203	1283
Architecture and Building Sciences	0	234	294
Engineering Sciences	0	387	392
Natural Sciences and Mathematics	0	379	363
System-oriented Natural Sciences	0	190	218
Management and Social Sciences	0	13	16
Diplomas and Master degrees			
ETH Zurich total	1341	1317	1275
Architecture and Building Sciences	322	243	201
Engineering Sciences	258	422	415
Natural Sciences and Mathematics	317	424	424
System-oriented Natural Sciences	231	170	173
Management and Social Sciences	213	58	62
Doctorates			
ETH Zurich total	523	651	650
Architecture and Building Sciences	28	55	41
Engineering Sciences	141	191	205
Natural Sciences and Mathematics	218	268	250
System-oriented Natural Sciences	123	100	123
Management and Social Sciences	13	37	31

Strong private sector interface

	2008	2009	2010
Number of spin offs	23	24	20
Patents registered	64	78	63
Cooperation agreements (> 50,000)	239	270	292

High output of quality publications

	2008	2009	2010
Publications ISI Web of Knowledge*	3480	3460	3500

* Essential Science Indicators, The Thomson Corporation (source: <http://esi.isiknowledge.com>)



2.2 Students, Faculty, and Staff

ETH Zurich exerts a great attraction for both students as well as academic staff from Switzerland and all around the world. The university is committed to providing an environment of respect, tolerance, and leadership. This ensures that staff and students can perform at their best.

ETH Zurich is growing

Numbers at all levels have grown significantly. From 2000 to 2010 the number of students increased from 10,693 to 16,342, a change of over 53 percent. Similarly, the total number of employees in full time equivalents has grown from 5,464 to 7,284 in the same period.

The importance of personnel development

ETH Zurich has almost 10,000 employees working in either a part or a full time capacity. Only by employing highly trained and motivated staff can ETH Zurich compete for and retain its position as a leading international research and educational institution.

Personnel development at ETH Zurich includes various forms of learning including both external and internal training courses. Internal continuing education includes offerings such as Leadership and Management, Project Management, and Personal Development and Working Techniques. In 2009/2010 a total of 760/723 employees completed 1044/1066 participant days of internal trainings.

Of these courses nine (in 2010 eight) were personal development and working technique courses and were attended by a total of 113 employees in 2009 and 95 in 2010. Seven (in 2010 nine) orientation related courses were held with an attendance of 420/399 new employees in 2009/2010. ETH Zurich ran six (in 2010 seven) courses in project management with 79/93 attendees. A further eleven (in 2010 twelve) courses on career and leadership management drew an attendance of 148/136 interested individuals.

ETH Zurich also offers special three-day courses for staff members who are about to retire. These courses support the employees in preparing for retirement, both from an administrative as well as a social perspective.

Demand for external training courses has increased dramatically over the last three years. In 2009/2010 Human Resources funded 73/72 individual and 7/6 group-related activities, with a total of over 200/130 individuals and significantly higher budget expenditures to accommodate the need for personnel development. Additionally, the team of the personnel development conducted 2009/2010 a total of 183/219 individual counselings and 16/21 team development processes.

Leadership principles support development

Clearly formulated leadership principles have been introduced. These principles are based on the ETH Zurich mission statement and mirror its values and position on employee leadership. They are binding and absolutely reliable for employees. Annual appraisal interviews are mandatory for all employees. In addition to performance assessment they also include cooperative career planning, with a discussion of the employee's future goals

Diversity key in scientific community

The scientific community is an international one and diversity is very important in a top research environment and ETH Zurich continues to be a great force of attraction as a place to learn and work. In 2009, over 12,000 persons applied via Human Resources for positions at ETH Zurich. Over 46 percent of the staff at ETH Zurich came from foreign countries, and in the case of professors and assistants the number was even higher with over 60 percent. Equally significant is the fact that international students now make up approximately 32 percent of the University student body, with 45 percent of those coming from Germany. As a technical university, ETH Zurich historically has had relatively few female students and employees. Fortunately things have changed and women now make up over 30 percent of all students and staff.

Equal opportunities in focus

All ETH members are entitled to have their personal integrity protected in their place of work or study. For instance, ETH Zurich does not tolerate discrimination of any kind. Mutual respect paves the way for high performance and therefore the "Respect" campaign has been re-launched in 2010 to make staff and students aware of the topic. ETH Zurich has an Office of Equal Opportunities for Women and Men (EQUAL) that provides support and counseling to all ETH members in cases of gender-related problems, discrimination and sexual harassment in education and the workplace. In line with its goal of high transparency regarding its anti-discrimination policy and management procedures, ETH Zurich is committed to creating a central contact point for notifications of suspected or confirmed incidents in the near future. EQUAL has also developed a gender monitoring for ETH Zurich. A focus is to better understand the "leaky pipeline," that is the decreasing proportion of women with increasing academic career stages (see graphic on page 28). Based on clearer knowledge at which academic stages the loss of women occurs in particular, this study has informed discussions of the Executive Board and of EQUAL with the departments

Students' interests considered

In 2008, a national study was conducted at all Swiss universities (including ETH Zurich) to see how the students perceive the quality of education they receive. It was the first study of its kind in Europe. The results showed that Swiss students have a very positive view of the quality of education. Students would however like a more outcome-oriented learning structure that will make them better prepared for entering the job market.

Low staff turnover

By nature international top level research requires a high staff throughput. As such the rate of turnover is measured only for permanent contracts (see page 28). From 2008 to 2009 the rate of staff turnover decreased from 7.9 percent to 5.6 percent caused mainly by a decrease in the number of retirements. Between 2009 and 2010 the rate of staff turnover changed from 5.6 percent to 6.2 percent. Professors show the lowest rate of turnover rate while Senior Assistants show the highest.

ETH Zurich cares for Health & Safety

At ETH Zurich there are a variety of work places. Certain students and staff are working in potentially dangerous environments, for instance handling hazardous materials. Others are working in environments with potentially significant exposure to heat or cold or physical phenomena such as radiation and magnetism. Participation in Health & Safety training courses is therefore mandatory for all new students who might be exposed to potential health & safety risks. ETH

has developed clear guidelines for certain buildings and departments including documentation regarding health & safety. In a continuous improvement process, others will follow in the next future. Technical safety measures and personal safety equipment complement the strategy to minimize the risk of accidents. Together with training and education ETH Zurich has successfully reduced the number of incidents over the past years and is committed to continuing this trend in the future. For this, a challenge is to ensure high safety awareness of all students independent of their respective specialties. A study by the Swiss Accident Insurance Fund (SUVA) that compiles 5-year trends of accident data (most recent data available for 2003-2008) confirms that there are significantly fewer incidents at ETH Zurich in comparison to other institutions in the same sector. In 2008, there were 15 incidents per 1000 full time equivalent employees.

Privacy and data protection ensured

ETH Zurich is committed to high standards of privacy and data protection. This concerns areas such as the processing of sensitive student data, e.g. medical data and/or personal passwords, or retention requirements for records. Data protection at ETH Zurich is regulated by the corresponding federal law from 19 June 1992. In the reporting period there were no substantiated complaints regarding breaches of privacy or losses of students' data.

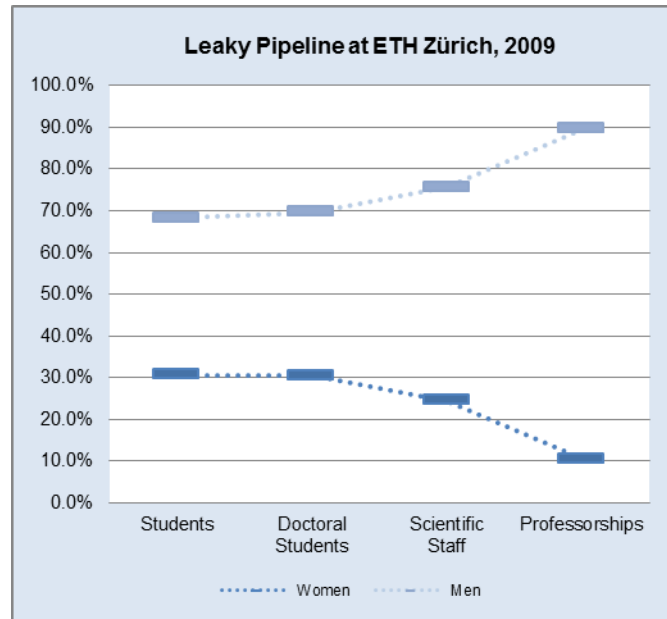
Significant increase in number of students

	Total 2000	Total 2009	Total 2010	Bachelor students 2010	Master students 2010	Visiting/exchange students 2010	Doctoral students 2010	MAS/ MBA students 2010
Total students	10693	15378	16342	45.8%	27.1%	2.0%	21.5%	3.7%
Percent women	25.1%	30.6%	30.9%	29.7%	31.1%	25.5%	31.7%	40.1%
Percent foreigners	20.3%	33.2%	34.9%	19.0%	35.9%	95.7%	63.0%	35.1%

...and staff (headcount)	2009 total employees	Percent women	2009 part time employees	2010 total employees	Percent women	2010 part time employees
Total employees	9728	34%	5463	9981	34%	5641
Professors	335	8%	17	358	8%	23
Assistant professors	65	22%	8	69	26%	8
Assistants	4162	30%	2361	4331	31%	2449
Senior assistants	414	21%	158	408	22%	156
Scientific staff	330	25%	150	322	25%	161
Senior scientists	152	10%	22	172	10%	36
Scientific staff on hourly wage	1291	32%	1287	1293	32%	1287
Technical & IT	1612	23%	537	1595	23%	555
Administrative Staff	1367	73%	903	1433	73%	966

Staff, gender and age diversity in 2009 and 2010

Age diversity in 2010	Total	Up to 20	21-35	36-50	51-65	Over 65	Avg. age
ETH total	9,981	205	6,173	2,235	1,333	35	35
Percentage women	34%	35%	33%	38%	33%	20%	



Time snapshot of gender ratios. This makes the leaky pipeline look stronger than it would in a cohort view.

Staff turnover in 2009	New entries from outside	Persons leaving				Turnover in percent***
		Total*	Contract expired	Notice given**	Retirement	
ETH Total	4424	4098	3527	499	50	5.6%
Professors	18	10	0	2	8	3.0%
Assistant professors	14	4	2	2	0	3.1%
Assistants	1402	1139	866	268	0	6.4%
Senior assistants	25	88	53	35	0	8.5%
Scientific staff	59	67	45	20	2	6.7%
Senior scientists	1	6	0	0	4	2.6%
Scientific staff on hourly wage	2347	2300	2235	63	0	4.9%
Technical & IT staff	275	243	170	45	21	4.1%
Administrative staff	283	241	156	64	15	5.8%

* Incl. deaths, dismissals

** By employee

*** Excluding contractual expiration of contract

Staff turnover in 2010	New entries from outside	Persons leaving				Turnover in percent***
		Total*	Contract expired	Notice given**	Retirement	
ETH Total	4515	4297	3665	560	55	6.2%
Professors	21	7	1	1	5	1.7%
Assistant professors	13	6	4	2	0	2.9%
Assistants	1388	1196	885	305	1	7.1%
Senior assistants	30	90	57	32	1	8.1%
Scientific staff	48	72	52	16	4	6.2%
Senior scientists	2	10	3	3	4	4.1%
Scientific staff on hourly wage	2467	2416	2344	72	0	5.6%
Technical & IT staff	244	230	152	51	21	4.5%
Administrative staff	301	270	167	78	19	6.8%

* Incl. deaths, dismissals

** By employee

*** Excluding contractual expiration of contract



2.3 Facilities and Environment

To be consistent with its research and education expertise on energy and climate, and to embody its values of responsible management, ETH Zurich places high value on environmental protection in all of its operations.

Two main campus areas

ETH Zurich's first campus area was developed in downtown Zurich, ensuring firm ties to the city. Its second campus in Zurich's Hnggerberg suburbs, currently extended as "Science City," provides opportunity for ongoing expansion. At the start of 2010, heated or cooled floor space (energy reference area, or ERA) was roughly 315,000 square meters in Science City, and 290,000 square meters in the city center.

The two campuses include buildings that serve as laboratories, lecture halls, service areas like cafeterias, and office space for academic and other staff. In addition, ETH Zurich plans to build in the coming years also student housing in Science City.

ETH Zurich also operates outstations for experimental work and facilities of some of its departments in other parts of the canton of Zurich and across Switzerland. Overall, these represent approximately 25,000 square meters of energy reference area.

Efficiency in individual buildings and beyond

In 1864, the "Federal Polytechnic Institute" moved into the current main building of ETH Zurich, that its architect, Gottfried Semper, designed it in the classic style. Today, the building is used for lecture halls, offices, and the ETH Zurich library. Among new buildings in Science City, the Information Science Laboratory completed in 2008 was the first building on campus fulfilling the strict Swiss Minergie®-ECO standard for energy efficient and ecological construction.

The whole Science City campus is being further developed with the long term goal of making it one of the world's first fully sustainable University campuses. This will include a system of linked underground storage fields across campus using a water loop for storing and circulating geothermal energy and waste heat. The System is used dynamically for cooling in summer and heating in winter.

Savings in relative energy demand

ETH Zurich's total direct energy use (defined as fuels like natural gas burned in own facilities) was 39.6 GWh in 2009 and 41.7 GWh in 2010. Indirect energy use (mainly electricity and district heating from outside providers) was 123 GWh (2009) and 122.5 GWh (2010). Thereof, almost 28 GWh in 2009 and 31 GWh in 2010 were sold as heating energy to third parties, which participate in the district heating networks around the two ETH campuses. Electricity consumption at ETH Zurich has increased over the last years due to several reasons: because of the expansion of the building portfolio, due to the increased use of highly electricity demanding instruments and facilities (which are essential to ensure cutting-edge research at a technical university), and because of the shift from heating by fossil fuels to electricity (use of heat pumps). Despite the increase of ETH's electricity consumption this, however, does not cause significantly higher green house gas emissions as electricity in Switzerland is many generated by hydropower (55,8%) and nuclear production (39,8%). In addition, relative energy demand expressed per person (full time equivalent, or FTE, campus users) and per floor area has steadily fallen. As new and renovated high efficiency buildings will be added to the energy budget over the

coming years, relative energy use figures are expected to improve even further. Also, a focus on more efficient use of floor area will allow ETH Zurich to optimize the use of floor area as student and staff numbers grow.

Waste heat recovery

ETH Zurich owns and operates seven large central cooling plants. In addition to cooling, each of their chillers produces waste heat. By optimizing the waste heat recovery units (WHRC) over the last few years, ETH Zurich was able to use 10.6 GWh of waste heat in 2009 and 10.9 GWh in 2010 that would otherwise have been lost. In addition to environmental benefits, waste heat recovery led to energy cost savings that allowed to pay back the investment in the optimization of the WHRCs in less than two years.

Closely monitoring greenhouse gas emissions

ETH Zurich has a strong tradition of measuring and managing its carbon emissions. In 2009/2010, direct or "Scope 1" carbon emissions mainly from fossil fuels like natural gas burned in own facilities were 8,240 t/7,868 t expressed in CO₂-equivalents. Indirect or "Scope 2" emissions caused by ETH Zurich's consumption of electricity were 1,445 t/1,462 t. For assessing the overall carbon footprint of ETH Zurich, also further or "Scope 3" emissions caused outside of the organization's boundaries are considered, for example emissions from student and staff commuting and business travel. This part is responsible for more than 14,200t/ 15,900 t expressed in CO₂-equivalents.

Carbon reduction as a key goal

Comparing emission contributions and options for improvement, key areas for action have been identified. More than 50% of the current CO₂ emissions caused by burning natural gas will be reduced by 2020 by implementation of the new energy concept Science City. Other measures include closely monitoring and wherever possible reducing emissions caused by business travel. By using more electricity in favor of less fossil fuel consumption reduces carbon emissions. One example is a big heat pump in the river Limmat, where some additional electricity use replaces larger amounts of CO₂ loaded district heating.

Minimizing air emissions

ETH Zurich closely monitors NO_x emissions from its heating plants, and VOC emissions from its laboratory activities. In 2009 NO_x emissions were 64 mg/m³ compared to 80 mg/m³ in 2008. New, state-of-the-art gas boilers contribute to the lower concentrations. Overall VOC emissions were 18 t in 2009 compared to >20 t in 2008.

Lowering amount and impacts of paper use

"Papers" are a key product of a research organization. This does not preclude a strong focus on reducing paper consumption, and on improving the environmental output of the remaining consumption. In 2009 and 2010, paper use was 60.8 million page and 61.6 million pages, respectively (compared to 63.9 million in 2008). Key to the paper reduction strategy are increasing use of online documents in education and administration, and awareness raising among students and staff. Paper sourcing at ETH Zurich is increasingly shifted to recycled fibers, corresponding to about 46.5% and 44.3 % of paper consumption by weight in 2009 and 2010. For the remaining virgin paper, ETH Zurich promotes the use of paper that meets the criteria of the Forest Stewardship Council for responsible forest management (FSC label). The goal is to eliminate non-recycled, non-sustainably forested paper sources completely.

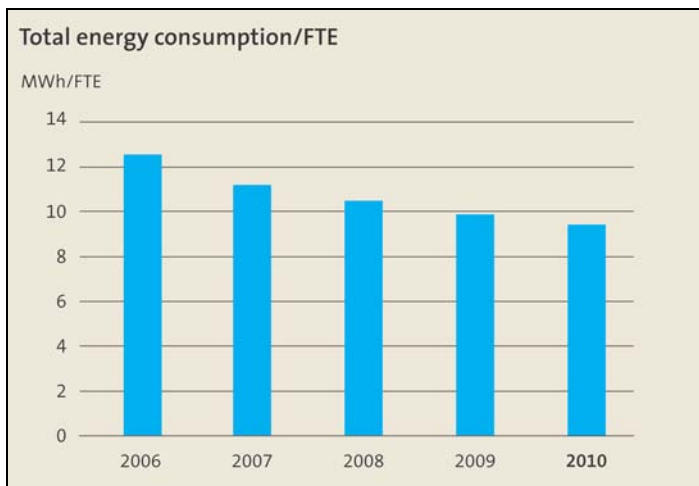
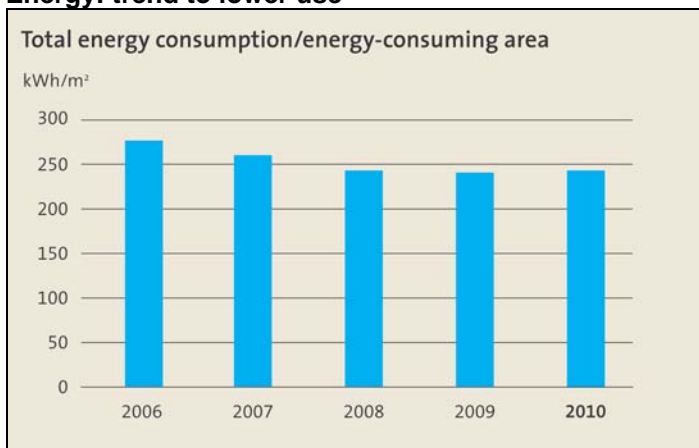
Staff and students boost recycling

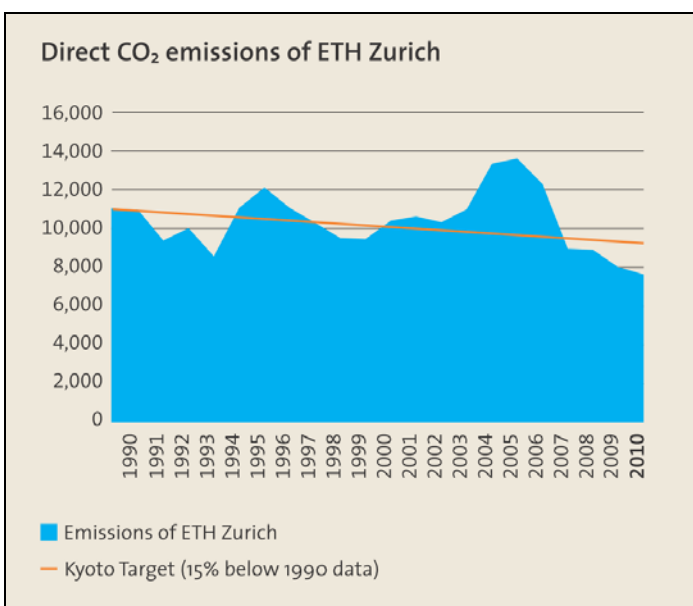
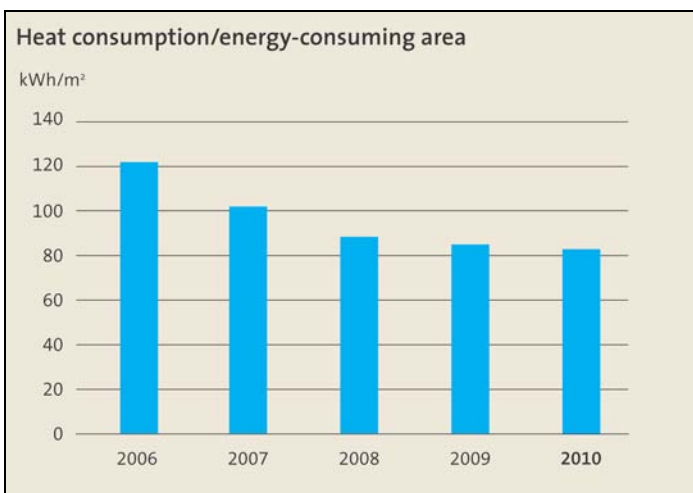
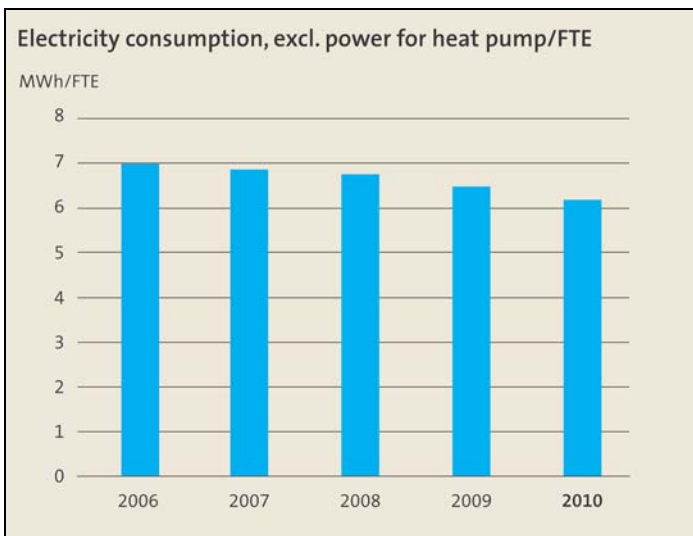
A key environmental goal of ETH Zurich is increasing the recyclable portion of its waste stream. Reuse of chemical substances by introducing storage rooms, and recycling of solvents and other materials such as CDs/DVDs and electrical waste contribute to this. High awareness and consistent support of students and staff have been essential for reaching ETH Zurich's recycling goals, from large volume waste streams down to the small "Nespresso" coffee pods.

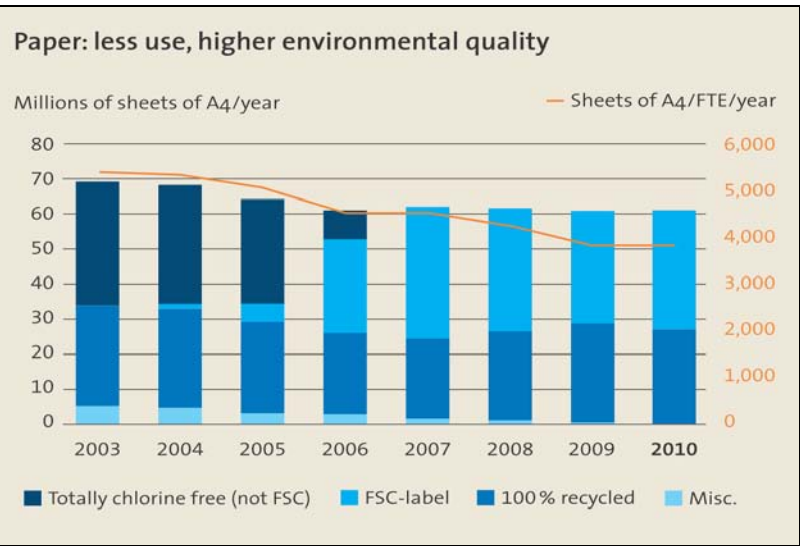
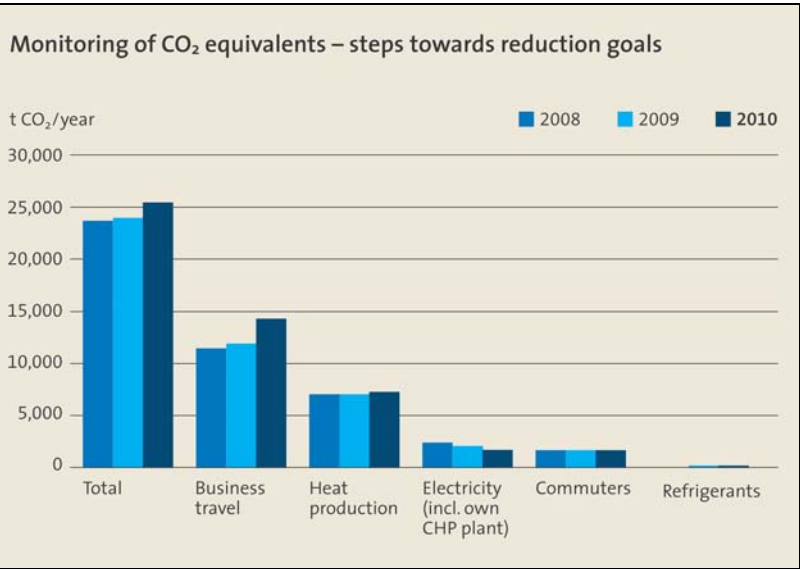
Safe handling of hazardous waste

As part of a top international research institution hazardous materials have to be used for certain research activities. ETH Zurich promotes economical use of hazardous material. Staff and students are trained to ensure correct and safe disposal. In 2009/2010 ETH Zurich disposed 108 t / 95t of hazardous material, of which 51 t / 47t were waste solvents sent to treatment facilities for safe incineration or reuse as fuel in the cement industry, depending on the concentration of e.g. Chloride. Only small amounts of waste, approx. 5 tons/year (e.g. heavy metals) is directed to underground landfill (old salt-mine). This compares to 1210 t (2009) and 1170 t (2010) of non-hazardous waste disposed of via the municipal waste stream, and destined for incineration.

Energy: trend to lower use







Kontinente Pangaea zusammen!

Verwende dazu die 7 Kontinentalplatten



Die Welt im Perm, vor 250 Millionen Jahren
Die Welt in der Trias, vor 200 Millionen Jahren
Die Welt im Jura, vor 135 Millionen Jahren
Die Welt in der Kreidezeit, vor 65 Mio. Jahren
Die Welt wie sie heute aussieht



An interactive educational display featuring a large yellow cutout of the supercontinent Pangaea. The cutout is divided into several continental fragments, each labeled with a continent name: "Eurasien" (top), "Südamerika" (right), "Antarktis" (bottom left), "Indien" (bottom center), "Nordamerika" (bottom right), and "Platten" (bottom edge). A small globe is attached to the "Südamerika" fragment. A boy is interacting with the display, holding a small globe and a piece of the cutout.



2.4 Society and Outreach

ETH Zurich provides value to society by sharing its expertise and experience with government, business, and the general public. It also places high value on ethical conduct in its own operations.

Informing public debates as honest broker

Many public policy debates like those on energy use and climate protection need scientific information to be meaningful. ETH Zurich participates in mutual exchanges between science, industry, and society as part of its mandate.

Scientists have a unique responsibility to communicate complex relationships like the impacts carbon emissions may have on our climate to the public, as this needs scientific training and ongoing research. In such exchanges, ETH Zurich places high value on acting as a fair and impartial honest broker. This includes careful communication about the level of uncertainty that scientific information always contains, and about assumptions that have to be made in scientific assessments and will influence their error range.

Importance of ongoing dialogues

If a university is to serve society, it must understand what those needs are. That is why ETH Zurich is continually interacting with representatives from the worlds of business, politics, and society.

- Events organized for politicians (“**ETH in Bundesbern**”) inform about important strategic initiatives (e.g. aging society, world food systems) and allow a debate with the parliament.
- In November 2009, ETH Zurich started a highly recommended public event on relevant issues related to sustainability (“**ETH Gespräch**”). About 1000 guests from the wider public joined the last meeting where the Swiss Minister for Energy and the Environment and representatives from business and politics to discuss solutions related to climate change.
- ETH Zurich was also able to contribute to the debate through its commitment to the so-called **Energy Triologue Switzerland**. Together with representatives from business and politics, it has worked out an energy strategy for the next few years.
- Since autumn 2009, ETH Zurich has also been in direct contact with the general public via its **science blog**, www.klimablog.ethz.ch, as a new initiative using modern means of communication.
- The **ETH-Industry Dialog of the Future** – a dialogue platform that has been jointly organized with the association “IngCH Engineers Shape our Future IngCH” invites representatives from science, corporate sector and political decision makers to discuss topics of common interest for ETH and the corporate sector
- One group of partners that include representatives from a multitude of sectors and functions are the **Alumni of and donors** to ETH Zurich. ETH Zurich’s President is in constant contact with them via the university’s Alumni Organization and the ETH Zürich Foundation and their events.

Providing specific public services

Alongside its core responsibilities of education, research and technology transfer, ETH Zurich performs a number of public service tasks on behalf of the federal government.

The Swiss Institute for Business Cycle Research (KOF) regularly publishes economic indicators and forecasts used by companies and government. The Swiss Seismological Service (SED) informs about Earthquake risks, including participation in a new study on earthquake risks at nuclear power sites. In a collaboration with the Swiss Department of Defense, the Center for Security Studies (CSS) at ETH Zurich for example made results from hearings with experts and interest groups on a federal report on security policy publicly available on the internet.

ETH Zurich also provides exhibits open to the public, including the 'focus Terra' museum on Earth Science Research recently established in a new exhibition tower in the renovated Earth Sciences building.

Linking science and business

Resources of ETH Zurich are and have been invested to stimulate and support the transfer of ETH Zurich technologies into market-competitive spin-offs. ETH transfer, the technology transfer agency of ETH Zurich, supports the ETH community in all questions relating to cooperation with industry, inventions, patent applications and licensing, as well as setting up an ETH spin-off company. ETH Transfer also offers companies an entry-point into ETH Zurich and initiates contacts between external bodies (such as companies and public authorities) and research groups. If an industry partner is interested in a research collaboration with ETH Zurich, ETH Transfer helps connecting the right partners. Long-term and in-depth research partnerships with selected companies are supported through a specific Industrial Relations Program. SMEs and large companies in the manufacturing industry are addressed by the services and products of ETH Production Technologies.

Inviting neighbors and the general public

Particularly ETH Zurich's Science City campus, currently renovated and extended to become a model for sustainability, is a place where science, business and the general public come together.

A series of events under the motto "Meeting Place Science City" aims to allow the general public to see how research is carried out and talk to the researchers. Short lectures, presentations, lab visits, discussions and exhibitions, not to mention the "Science Talks" with well-known personalities and scientists, are firmly established elements in this popular series.

Ethical conduct in all activities

Business ethics in its own operations and in its external partnerships is a high priority to ETH Zurich. Clear rules on secondary employment for ETH Zurich staff are laid out in its faculty regulations and personnel regulations. The latter also provides rules for avoiding conflicts of interest and on acceptable levels of gift reception applicable for all ETH Zurich employees.

Since 2005, financial regulations are in force at ETH Zurich that rule responsible business conduct with regard to financial signatory policies and purchasing processes as well as other aspects of financial competences and procedures. Since 2007 guidelines for research integrity and good scientific practice aim to ensure intellectual honesty and truthfulness in research and peer review. Also since 2007, a directive ensures whistleblower protection for ETH Zurich em-

employees that report conflicts of interest, misuse of funds, or other breaches of internal regulations.

Guidelines for research integrity and good scientific practice safeguard ETH Zurich's intellectual honesty and allow the prosecution in the case of misconduct.

While ETH Zurich has no formal policy on human rights protection in its external collaborations, it is aware of the importance of this topic in shared projects with domestic and international partners.

ETH Zurich in Dialogue with its Stakeholders

Dialogue mechanisms and frequency	Examples of Stakeholder Groups	Topics addressed
Forums, meetings and panels		
ETH Board Meetings (ETH Rat): Frequency of meeting according to defined annual schedule and according to demand	Federal Council and the Federal Parliament	The ETH Board is the strategic management and supervisory body of the ETH-Domain and responsible for fulfilling and implementing the science policy performance mandate set by the Federal Council and the Federal Parliament and for the four-year strategy for the ETH-Domain.
ETH-Board Dialogue (annually)	ETH Board Members	Dialogue between ETH Board and ETH Zurich on strategic planning, reporting, and current issues.
Information Forum “ETH in Bundesbern” (quarterly)	Parliamentarians, decision makers; specific interest groups	First hand information/discussion panels on selected strategic topics
„Lokaltermin des Präsidenten“ – ETH Zurich’s dialogue platform for selected corporate partners and donors, jointly organized in cooperation with the ETH Foundation (biannually)	Selected corporate partners, donors, and politicians	First hand information/discussion on selected strategic topics.
ETH-Industry Dialog of the Future – a dialogue platform jointly organized with the association “IngCH - Engineers Shape our Future IngCH” (annually)	Representatives from science, corporate sector and political decision makers..	Topics of common interest for ETH and the corporate sector.
“Hochschulversammlung” – the University Assembly of ETH Zürich (at least five plenary meetings per year)	Members of faculty (KdL), scientific staff (AVETH), technical and administrative staff (PeKo) and students (VSETH)	The assembly provides advises to the Board of ETH Zurich and advisory opinions to the ETH Board.
“Departementsvorsteherkonferenz” - Conference of the Heads of Department (at least one meeting per semester; further meetings according to demand)	Heads of the 16 ETH Departments, director CSCS, delegate CCES, head strategy committee	Information exchange between the Executive Board of the ETH Zurich and its Heads of Departments; opinion making with regard to strategic planing etc.
Dialogue between Executive Board and departments (16 meetings per year)	Heads and delegates of all 16 departments	Strategic planning and strategy implementation; academic reporting
“Gesamtkonferenz” - General Faculty Conference; “Gesamtprofessorenkonferenz” - Professors’ Conference, and “Konferenz des Lehrkörpers incl. Ausschuss der Konferenz des Lehrkörpers” - Lecturers’ Conference (annually meetings and according to demand)	all lecturers	Advising the Board of ETH Zurich with regarding to education, faculty issues, strategic and financial planning or organizational decisions.
“Studienkonferenz” - Conference of the Directors of Study (3 meetings per semester and according to demand)	Education delegates of all study programs	Discussion/decisions related to education programs, curriculum, and exam regulations
Science City Talk (several times per year)	Local public communities, interested public	Series of topics of general interest; issues to link science and society
Diverse alumni specific activities such as ETH Alumni. Presidential Lecture, Home Coming Day, Business Networking or Career Events,	Alumni	Latest information related to ETH Zurich’s research, education, knowledge and campus life, networking, career support.
Homecoming Day for ETH spin-off companies	ETH-spin-off companies	Connecting younger and more experienced ETH spin-offs; keeping the connection to ETH Zurich

Online communication tools		
" Klimablog " (ETH's science blog including ongoing online debate, publication of new articles twice per week)	Media, decision-makers, interested public.	Latest results and news related to climate change
TechAlert e-mails to announce latest licensing opportunities	Industry (R&D managers, Innovation managers, Business Development managers), interested people, institutions, ETH transfer.	Regular information from ETH transfer sent to several hundred interested people who are searching for new technologies
LinkedIn community for ETH spin-offs	ETH spin-offs, ETH transfer and people involved in supporting new businesses	Updates on topics of relevance for ETH spin-offs
Specific newsletters of competence centers or institutes (individual publication frequencies)	Specific interest groups	Regular updates on results or ongoing research, education, and events
Printed communication tools		
The Annual Report of ETH Zurich: annually	The public, decision makers, parliamentarian, corporate sector, alumni	Overview of the most important topics and events at ETH in the previous year
President's Selection: twice per year	Decision makers, parliamentarian corporate sector, alumni	A small number of the manifold new findings and research results of ETH Zurich selected by the ETH-President including lighthouse results from ETH's research, education and outreach activities
ETH GLOBE magazine (quarterly)	Decision makers, parliamentarian corporate sector, alumni.	Selected focus themes, latest research findings, events/news of stakeholder interest
ETH Life Online (daily)	Faculty, staff, students, media, interested public	Research highlights, campus news, strategic topics, events/news of public interest
ETH Life Print (9 times per year)	Faculty, staff, students	Information about events, news of internal interest and campus life.
CONNECT magazine (quarterly issues; editor: ETH Alumni Vereinigung; co-distribution with ETH GLOBE).	Alumni	Selected topics of specific relevance for ETH-Alumni

The ETH Zurich Executive Board



Prof. Dr. Boutellier, Dr. Robert Perich, Prof. Dr. Heidi Wunderli-Allenspach, Prof. Dr. Ralph Eichler, Prof. Dr. Roland Siegart (from left to right).

2.5 Funding and Governance

ETH Zurich is a Swiss national institution with a public mandate for excellence in higher education and research. In line with this, its funding comes to a majority from federal sources, and its governance ensures accountability to parliament.

Federal funding key to federal mandate

As a national institution with a mandate for research, education, and knowledge and technology transfer, ETH Zurich is to a large extent financed by the Swiss Federal government. In 2010, from the total budget for ETH Zurich of 1,359 million francs (1,307 in 2009), or about 80 percent was received as federal financial contribution (including the real estate investment credit). The determining factors for available funding are ultimately the overall economy, federal finances and the Swiss university environment. The federal contribution is assigned to ETH Zurich each year under the terms of a performance mandate from the Federal Council and on the basis of targets agreed with the ETH Board.

Third-party funds as important complement

Third-party funding contributed 277 million francs or about 20 percent of overall funding in 2010 (268 million francs / 20 percent in 2009). Funds acquired by competing nationally and internationally for public research grants covered about 12 percent of all expenditure at ETH Zurich. Funding from private companies, donors and other sources accounted for about 8 percent of total expenditure.

Personnel costs dominate expenditure

In 2010, personnel cost were 859 million francs or about 63 percent of overall expenditures (827 million francs or about 63 percent in 2009). Other significant expenditures were about 309/309 million spent in 2009/2010 on purchases materials, and investments of 80/100 million in buildings, and 91/91 million for movables.

High expectations require sufficient funding

Significant increases in student numbers at all levels over the last years imply a growing short-term demand for financing. If ETH Zurich is to live up to the expectation that it will maintain and continue to build on its strong international position in education, research and knowledge transfer, among the things it will have to do is increase the number of lecturers and expand available space. To be able to make the needed investments, both additional resources and efficient spending and forward planning are needed and practiced.

Systematic and accountable management

ETH Zurich has an integrated system for financial planning and resource management at various levels and for varying time horizons. This planning and management involves a range of related tools and concerns different institutional areas: strategic planning in particular with regard to the scientific strategy of ETH Zurich, human resources planning (and there in particular professorial planning), infrastructure planning (building infrastructure but also large research infrastructure like IT and technology platforms), and overall financial planning.

ETH Zurich's integrated financial and resource management system ensures that the use of its funds meet the needs of its education, research and infrastructure objectives. ETH Zurich's recently developed and deployed instruments and processes for financial control include its ETHIS information and support portal and the Internal Control System (IKS)

ETH Zurich faces various kinds of risks in fulfilling its core mandate. These range from property and natural hazard risks to financial, political, environmental, and reputation risks. In response, ETH Zurich has developed a comprehensive risk management system. Risk analysis processes include workshops bringing together various central functional divisions and departments to identify risks and response strategies.

Accountability to government

As an institution with a Swiss federal mandate and majority funding from the Swiss Confederation, ETH Zurich is accountable to government. ETH Zurich is part of the ETH Domain, together with a second research university, EPFL, and four national research institutes. The strategic lead of the ETH Domain is the responsibility of the ETH Board, which is elected by the Swiss Federal Council. It consists of the presidents of ETH Zurich and EPFL, the director of one of the research institutes, one member nominated by the university assemblies, and up to seven other members with competence in scientific or economic issues including the board's President and Vice President. Currently, the ETH Board consists of two women and eight men.

Every four years, the Swiss Federal Council issues a performance mandate to the ETH Domain that is confirmed by the Swiss parliament. On this basis, the ETH Board concludes agreements on objectives and funding with the six institutions in the ETH Domain, prepares an annual budget and accounts for approval by Swiss parliament, and submits a performance report to the Swiss Federal Council at the end of the four-year performance period.

Executive Board and Committees

Within ETH Zurich, the Executive Board is the highest management body. It is responsible for the areas education, research, and administration. Through the actions of the Executive Board, the school does justice to its social, cultural, and economic responsibilities. The Executive Board is composed of the University's President and Rector, as well as three Vice Presidents (s. also chapter 1.1 page 6). Currently, the Executive Board consists of one woman and four men.

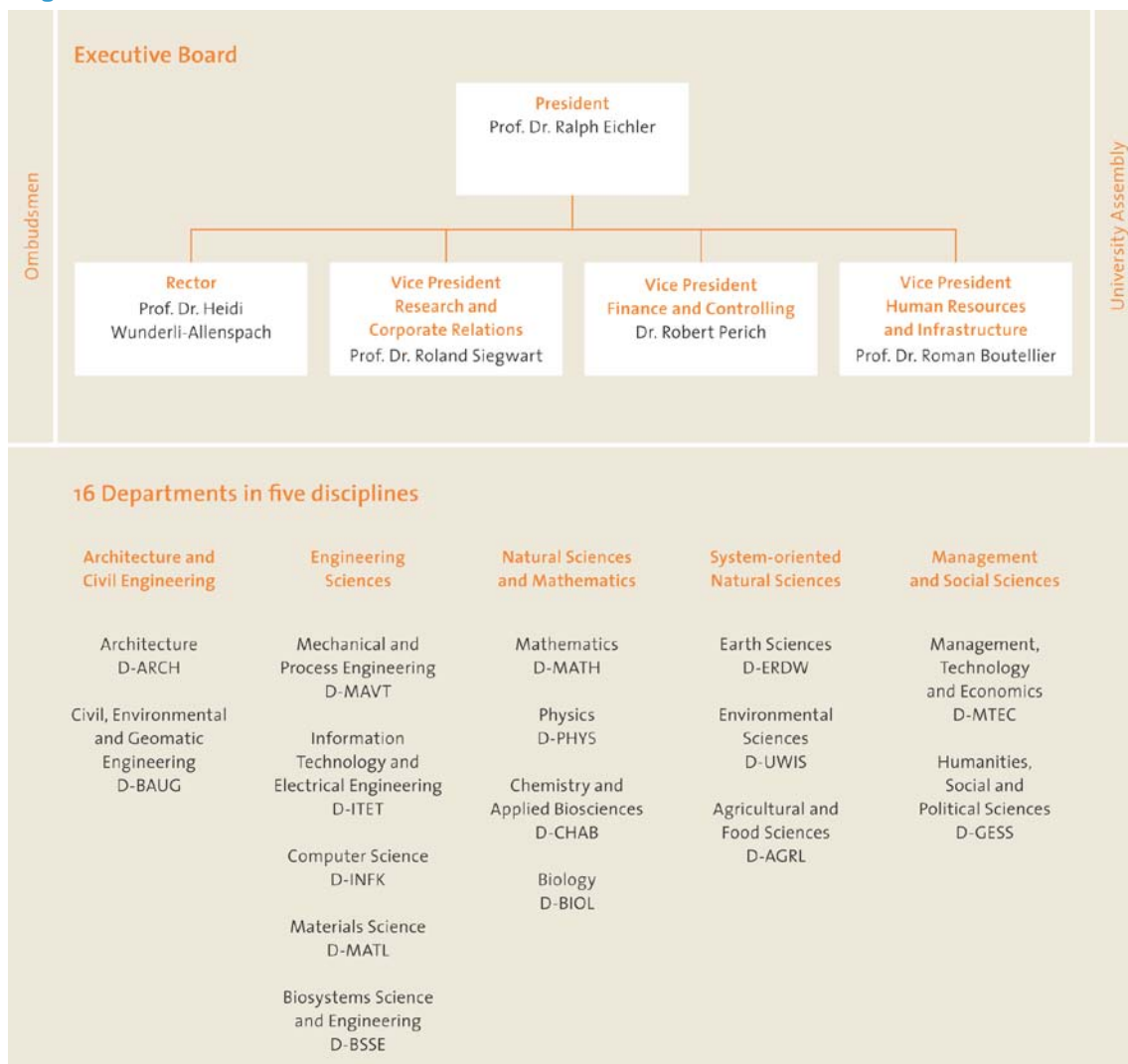
The Executive Board is responsible for the development of the long term academic strategy and management of ETH Zurich. It regularly interacts with the University Assembly that represents teaching staff, junior faculty, students, and administrative and technical staff. Concerning specific issues, it consults with six committees and commissions –Strategy Committee, Study Committee, Research Commission, ICT Commission, Risk Management Committee, and Asset Commission – that represent the different internal stakeholder groups within ETH Zurich. These committees and commissions are essential for pooling knowledge distributed in the large organization of ETH Zurich, and making it available for coordinated decisions. A central mechanism for decision making at ETH Zurich is the exchange between the Assembly of Department Heads and the Executive Board.

Governance on Sustainability Issues

ETH Sustainability is the coordination unit for sustainability issues at ETH Zurich. Its Director reports directly to ETH Zurich's President, who then in turn is able to bring sustainability concerns to the attention of the Executive Board where appropriate. ETH Sustainability consults

with a Sustainability Steering Board made up of seven individuals, including five professors, the President of ETH Zurich, and the Director of Sustainability. Final decisions and approval of sustainability strategies and policies are made by the President, the Steering Board, and the Executive Board. The Safety, Security, Health and Environment unit (SSHE) is responsible for environmental aspects of ETH Zurich's operations. It consults with the Environment Commission, which consists of ETH Zurich's Vice President of Human Resources and Infrastructure, its Environmental Officer, and Environmental Delegates for the Departments and Infrastructure groups. An Environmental Principles Statement (Umweltleitbild) has been defined for ETH Zurich and guides the school's initiatives in this regard.

Organisation Chart



2.6 GRI Guideline Application in this Report

To increase transparency to all stakeholders, and comparability with sustainability reporting of other organizations, the Global Report Initiative (GRI) reporting guidelines were applied throughout this report.

ETH Zurich believes that sustainability is an essential issue for the research, education and knowledge transfer of leading universities, as well as for their own operations. This is the reason why the university has endorsed the ISCN-GULF Sustainable Campus Charter. To share its experiences with campus sustainability, ETH Zurich publishes this ISCN-GULF Charter report in a format that includes detailed discussions, data and background of its initiatives and achievements in economic, environmental and social regards.

Reporting guides by GRI framework

In order to increase transparency for all its stakeholders, including students, staff, neighbors, and the general public, this report implements the sustainability reporting on the guidelines disseminated by GRI, a nonprofit, multi-stakeholder organization that strives to provide public and private sector organizations with a systematic and comparable basis for disclosure regarding sustainability performance.

GRI content index

To help readers locate specific GRI-related information, the table on the following page provides an overview of the main GRI elements discussed in this report, including: Economic (EC), Environmental (EN), Human Rights (HR), Labor (LA), Society (SO), and Product Responsibility (PR) performance indicators. The GRI indicators referenced have been covered to the extent that data were available and as far as the format of the present ISCN-GULF Charter and GRI Report allows. While a number of GRI points are discussed in more than one place, the table indicates those places in which the main information on each indicator is to be found. In cases where substantial information is presented in more than one place, multiple references are given.

Report parameters

This report concerns the years 2009 and 2010 and draws certain comparisons with previous years. There were no specific limitations on the scope and boundary of this report (see also Charter Report Introduction and Profile on page 6). As this is ETH Zurich's first GRI report, no impacts on reporting comparability by re-statements, boundary changes, or other changes in operations or reporting practices apply. No external assurance of the GRI information given was sought, but the standards for internal monitoring and measurement systems were applied, which with regard to financial numbers include external auditing.

Materiality test determines content

To set priorities from within the ISCN-GULF Charter reporting topics and the full GRI sustainability reporting indicator sets, an in-depth half day materiality test workshop was conducted.

Facilitated by an external specialized consultant, ETH Zurich representatives from ETH Sustainability, the Safety, Security, Health and Environment department, the Competence Center Environment and Sustainability of the ETH Domain (CCES), Human Resources, the Office of Equal Opportunities (for men and women), and the General Counsel discussed the relevance of possible reporting topics for ETH Zurich itself based on their experience from regular dialogues

with external stakeholders. Particular consideration was given to GRI indicators that are referenced as potentially relevant reporting options in the ISCN-GULF Charter Reporting Guidelines.

Topics and indicators determined as material in this process form the core of the present report.

GRI Application Level check

The present report, together with the corresponding GRI content index published on the Internet, fulfill the requirements of the latest GRI-G3 reporting guidelines at Application Level B. This was checked and confirmed by GRI on 06 May 2011.

Report part	Pages	GRI content elements
Presidents Statement	5	1.1, 1.2
ISCN-GULF Summary Charter Report		
Introduction and Profile	6-8	2.2, 2.5-2.7, 3.1, 3.2, 3.6, EC4
Principle 1	9-11	EN2-EN5, EN20, EN22
Principle 2	12-15	EN16, EN17
Principle 3	16-18	
Research and Education	20-24	2.2, 2.3, EC9, EN6, EN26
Students, Faculty and Staff	25-30	LA1, LA2, LA7, LA11-LA13, PR5, PR8
Facilities and Environment	31-36	EN1-EN5, EN16-EN18, EN20, EN22
Society and Outreach	37-42	4.8, 4.14-4.17, EC8, SO2, SO3, SO5, HR2
Funding and Governance	43-45	2.3, 2.8, 4.1, 4.4, 4.5, 4.7, 4.9-4.11, EC1, EC4, LA13
GRI Guideline Application	46-47	3.5, 3.7-3.13
Annex	48-52	4.12
Imprint and contacts	53-55	2.1, 2.4, 3.4

A complete GRI Index with additional information on certain GRI indicators is available on the ETH website (www.sustainability.ethz.ch)

3 ANNEX

3.1 Original text of the ISCN-GULF Sustainable Campus Charter

The signatories of the ISCN/GULF Sustainable Campus Charter acknowledge that organizations of research and higher education have a unique role to play in developing the technologies, strategies, citizens, and leaders required for a more sustainable future. Signature of the present charter represents an organization's public commitment to aligning its operations, research, and teaching with the goal of sustainability. The signatories commit to:

- implement the three ISCN/GULF sustainable campus principles described below,
- set concrete and measurable goals for each of the three principles, and strive to achieve them,
- and report regularly and publicly on their organizations' performance in this regard.

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).

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.

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.

As signatories to the ISCN/GULF Charter, we strive to share our goals and experiences on sustainable campus initiatives amongst our peers and other stakeholders. A key instrument for this is our regular reporting on progress under this Charter, which will be supported by the Charter stewardship (provided by the GULF group) and the Charter secretariat function (provided by the ISCN).

Signatory’s organization:

.....

Signatory’s name/function:

.....

3.2 Frequently asked Questions related the ISCN/GULF Charter

1. Who can endorse the Charter, and how long is this commitment binding?

Joining the group of signatories of the ISCN/GULF Charter is open to any organization involved in research or higher education that plans, builds, or maintains multi-building complexes dedicated to these activities anywhere in the world. By signing the Charter, an organization becomes a member of the ISCN Network (see below). The organization's commitments to the Charter are valid until it withdraws its Charter endorsement. It can do so at any time by written notice to the Charter's secretariat provided by the ISCN.

2. Who maintains the Charter Process?

The Charter is maintained in a joint initiative of the Global University Leader Forum (GULF) and the International Sustainable Campus Network (ISCN). Overall stewardship of the Charter process, and a leading role in disseminating the Charter among leaders in organizations of research and higher education, is provided by GULF, which is convened by the World Economic Forum and brings together presidents from twenty-three universities around the world to address key issues for universities and society at large. The secretariat function for the Charter process is provided by the ISCN, which is under the auspices of Novatlantis, an entity of the Swiss Federal Institutes of Technology, and facilitates a worldwide experience exchange between senior administration and faculty with responsibility for sustainability on campus. The ISCN's secretariat function includes the support of an active, in-depth knowledge exchange between signatories in the ISCN's four working groups, which focus on campus excellence awards, charter and guideline development, sustainable decision processes, and integrated approaches to facilities, teaching, and research. In addition, the ISCN develops and maintains Charter Guidelines that add further detail to the explanations provided under each of the Charter principles concerning concrete issues that might be considered.

3. How does the Charter relate to other sustainable campus commitments?

The ISCN/GULF Charter complements pre-existing and more regionally or topically focused initiatives on sustainability in higher education. Consistent with the ISCN's mission to act as a global "network-of-networks" on campus sustainability, it aims to enhance, rather than replace, other commitment processes with a framework that is open to all organizations worldwide that want to commit to continuous action and regular, public reporting on campus sustainability. Close cooperation and exchange with complementary initiatives is a key operational principle of the ISCN. Earlier international initiatives include the 1990 Talloires declaration and the United Nations "Decade for Higher Education for Sustainable Development, 2004-2013," with its related Regional Centres of Excellence and dedicated Chairs at several Universities. To these, the ISCN/GULF Charter adds a strong focus on integration of research, scholarship, teaching, and operations, as well as regular public reporting on self-set goals under the Charter's principles (comparable to the Communication of Progress reports by corporations endorsing the UN Global Compact). It also gives organizations that have endorsed regional or topical networks and commitments - such as the American College and University Presidents Climate Commitment (ACUPCC) or AASHE in North America, Copernicus Campus or HEEPI in Europe, the

Tongji Declaration in China, or the IARU Presidents Statement on Campus Sustainability - the opportunity to share their commitments and achievements publicly with an open, global community of colleagues.

4. How was the Charter's text developed?

The Charter is based on discussions in the ISCN's Working Group II and dialogues between ISCN and GULF members on how the charter can best serve as a commitment to sustainability by leading organizations of research and higher education. The majority of the text was drafted by Ariane König (University of Luxembourg and co-chair of the ISCN WG II), in collaboration with the group's other co-chair Joseph Mullinix (National Univ. Singapore), Bernd Kasemir and Matthew Gardner (Sustainserv), Julie Newman (Yale Univ.), and Roland Stulz (Novatlantis). Strategic inputs by the participants of the "leadership track" at the ISCN/GULF conference in Lausanne, as summarized by Hans-Björn Püttgen and Kristin Becker van Slooten (EPFL) were key for preparing the current version. Inputs by the ISCN members T. Refslund Poulsen (Copenhagen Univ.), D. Brem (ETH Zurich), A. Kildahl (Univ. Hong Kong), M. Adomssent (Univ. Lüneburg), R. Bland (Cornell), F. Gröndahl (KTH Stockholm), N. Heeren and K. Hoeger (ETH Zurich), M. Kunz (ZHAW), S. Lynham (Anglia Ruskin Univ.), A. Meier and W. Natrup (Basler + Partner), P. Obrdlik (Brno Univ.), R. Sigg (Intep), and H. Tan (Tongji Univ.) provided the foundation for developing the present Charter text. Discussions with the other three ISCN Working Groups - led by their co-chairs Claude Siegenthaler (Hosei Univ.), Leith Sharp (Harvard Univ.), Erika Meins (Univ. Zurich), Steve Mital (Univ. Oregon), Katja Brundiars (Arizona Univ.) and Per Lundquist (KTH Stockholm) - also provided valuable contributions in developing this Charter

3.3 Members of the Global University Leaders Forum (GULF)



COMMITTED TO
IMPROVING THE STATE
OF THE WORLD

Members of the Global University Leaders Forum (GULF)

Name	Position	Organization	Country	Signature
Patrick Aebischer	President	Ecole polytechnique fédérale de Lausanne (EPFL)	Switzerland	
M. S. Ananth	Director	Indian Institute of Technology Madras	India	
Lee C. Bollinger	President	Columbia University	USA	
J. Frank Brown	Dean	INSEAD	France	
Ronald J. Daniels	President	Johns Hopkins University	USA	
Howard Davies	Director	London School of Economics and Political Science (LSE)	United Kingdom	
John J. DeGioia	President	Georgetown University	USA	
Ralph Eichler	President	ETH Zurich	Switzerland	
David T. Ellwood	Dean	Harvard Kennedy School, Harvard University	USA	
Drew Gilpin Faust	President	Harvard University	USA	
Gu Binglin	President	Tsinghua University	People's Republic of China	
Amy Gutmann	President	University of Pennsylvania	USA	
Junichi Hamada	President	University of Tokyo	Japan	
Andrew Hamilton	Vice-Chancellor	University of Oxford	United Kingdom	
John Hennessy	President	Stanford University	USA	
Susan Hockfield	President	Massachusetts Institute of Technology	USA	
Richard C. Levin	President	Yale University	USA	
Andrew Likierman	Dean	London Business School	United Kingdom	
Rafael Rangel	President	Monterrey Institute of Technology and Higher Education	Mexico	
Alison Richard	Vice-Chancellor	University of Cambridge	United Kingdom	
Atsushi Seike	President	Keio University	Japan	
Ruth J. Simmons	President	Brown University	USA	
Tan Chorh-Chuan	President	National University of Singapore	Singapore	
Zhou Qifeng	President	Peking University	People's Republic of China	
Robert Zimmer	President	University of Chicago	USA	

4 Imprint

Publisher:

ETH Zurich

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Statement GRI Application Level Check

GRI hereby states that **ETH Zurich** has presented its report "Sustainability Report 2009 to 2010" to GRI's Report Services which have concluded that the report fulfills the requirement of Application Level B.

GRI Application Levels communicate the extent to which the content of the G3 Guidelines has been used in the submitted sustainability reporting. The Check confirms that the required set and number of disclosures for that Application Level have been addressed in the reporting and that the GRI Content Index demonstrates a valid representation of the required disclosures, as described in the GRI G3 Guidelines.

Application Levels do not provide an opinion on the sustainability performance of the reporter nor the quality of the information in the report.

Amsterdam, 6 May 2011

A handwritten signature in blue ink, appearing to read "Nelmara Arbex".

Nelmara Arbex
Deputy Chief Executive
Global Reporting Initiative



The Global Reporting Initiative (GRI) is a network-based organization that has pioneered the development of the world's most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. The GRI Guidelines set out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance. www.globalreporting.org

Disclaimer: Where the relevant sustainability reporting includes external links, including to audio visual material, this statement only concerns material submitted to GRI at the time of the Check on 28 April 2011. GRI explicitly excludes the statement being applied to any later changes to such material.

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