Building bridges – building the future
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Dear readers, dear donors
New ways of communicating provided by smartphones and computer tablets, the Euro crisis and the nuclear disaster in Fukushima have clearly demonstrated once again: our world is in a state of constant change. And to be capable of responding to complex new challenges in a competent way, we need to keep up with these changes. Or, even better, get ahead. By donating to our Foundation, this is exactly what you make possible – because your contributions enable researchers and students at ETH Zurich to cut new paths and move forward more quickly.

Achieving more together
Major challenges can only be overcome with systemic approaches from a range of different perspectives – which is why the combined efforts of businesses, scientists and each and every individual are required. With its strategic initiatives, ETH Zurich aims to find solutions to these global challenges by working together with private donors. Thanks to support from our partners for the ETH Sustainable Construction initiative, teaching and research have been expanded at the interface of Architecture, Building and Materials Science. Also within the context of various initiatives, a number of Partnership Councils encompassing funders and ETH researchers were held for the first time in 2011. And under our strategic initiatives, more interdisciplinary research projects are being launched. For it is precisely these cross-disciplinary research and teaching projects that defy categorisation and are therefore all the more dependent on private funders – on people wanting to cross boundaries, on people like you.

Courage to change
The first steps taken in a new area are always risky – there’s no guarantee for success. However, breakthroughs are not possible without failures. With last year’s promoting of outstanding Master’s students or of graduates with a brilliant business idea, numerous donors have once again ventured to take such a step. We greatly respect their courage and their trust to invest in young potentials with vision.
For the willingness of all benefactors of ETH Zurich to tread new paths in teaching and research we are very grateful and are delighted to be able to shape these changes with you.

Jürgen Dormann
President of the Foundation

Donald Tillman
Managing Director
Board of Trustees

THANK YOU FROM ETH ZURICH

Your funding forms the future
ETH Zurich’s activities aim to bring about benefits for the society of today and tomorrow. For this reason, its planning process includes specifying key areas to be prioritised in teaching and research.
As research is future-oriented, our scientists and students look not only for answers to the challenges of today but also to those of tomorrow and beyond.
Your donations to the ETH Zurich Foundation help support the efforts that are being made to discover sound scientific answers to the burning issues of our lives now and in the future. With your contributions, action can be taken more quickly. For this we thank you most sincerely on behalf of our University, our researchers and all our students.

Ralph Eichler
President ETH Zurich
CLEAR FOCUS, MAXIMISED EFFECT

The funding of teaching and research through the ETH Zurich Foundation is based on strategic guidelines set by ETH Zurich, directed to the needs of business and society. Thanks to donations to the Foundation, these key strategic areas can be advanced more quickly as the funds are pooled and applied with maximum effect to fund new professorships, young talent and innovative research projects.

Generous contributions from private donors help enable ETH Zurich to position itself at the head of the world’s leading centres of teaching and research and to carry its superior level of knowledge and the power of Swiss innovation out into the world. In particular, these funds enable the implementation of non-mainstream pioneering projects which couldn’t be financed from the standard budget alone.

As a non-profit institution under private law, the ETH Zurich Foundation acts as a connecting link between donors and the university to ensure that these contributions are used in a targeted way in order to achieve greatest effect. The Foundation is led by an honorary Foundation Board of Trustees which assures that the donated funds are applied as their donors requested. All donors are free to earmark their gifts to a particular cause or to allow ETH Zurich to decide how the funds should be allocated.
Based on its strategic research and teaching directions, the University specifies the key areas to be supported and thus assures that the donated contributions are invested in a focussed way in areas which are crucial for the future development of the environment and society alike. By leaving a legacy, associates can also support ETH Zurich beyond their own lifetime. Each gift, irrespective of when it is made, its size or destined cause, plays its part in advancing research and teaching at ETH Zurich and consequently the development of society as a whole.

**Effective results from flexibility**
The Strategic Fund was set up to enable the University to face worldwide competition in teaching and research and the wide range of global challenges. Using this fund, initiatives and projects are financed to which the ETH Executive Board has attributed a special significance for the further development of the University. Donors who choose to contribute to the Strategic Fund grant the Executive Board the freedom to decide on how the contribution is allocated in the knowledge that their gift will be put to use with maximum effectiveness.

**Making research and progress visible**
By organising events, laboratory visits and other meetings, the ETH Zurich Foundation provides the opportunity for dialogue between benefactors and beneficiaries. Through discussions with the Executive Board, professors, researchers and students, donors can see for themselves the impact their gifts achieve.

With periodical reports coordinated to the needs of the benefactor, the ETH Zurich Foundation ensures that a clear and transparent account is provided of how funds are being implemented.

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**Private commitment to teaching and research: René Braginsky**

For many years, René and Susanne Braginsky have been active in promoting education and culture. Last year, they gave ETH Zurich a generous donation to support a new professorship in Medical Technology, enabling research and teaching in the interest of health to be significantly expanded. This is not the first time that René and Susanne Braginsky have donated to ETH Zurich: in 2006, the University was able to acquire a building for the ETH archive for contemporary history thanks to their financial support.

What is their motivation?

For René Braginsky it is clear that he wants to give something back to society in a way that creates a long-lasting impact. “We need to care for our valuable ‘raw materials’ – education and research. Money that gives young people access to a top education and creates knowledge that benefits society as a whole is money well-invested.”

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**Funds awarded to ETH Zurich**

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<th>Million CHF</th>
<th>2006</th>
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**Sources**

- Foundations (14%)
- Corporate organizations (56%)
- Private individuals (27%)
- Other (3%)
Numerous companies, foundations, organisations and private individuals have supported research and teaching at ETH Zurich with their donations to the ETH Zurich Foundation. We sincerely thank all donors for their commitment, including those who do not wish to be mentioned by name.

Companies
ABB Schweiz
AdNovum Informatik
Alpiq
ALSTOM (Schweiz)
Amman Group
Avaloq Evolution
AXA Research Fund
Axpo
Biotronik
BKW FMB Energie
Bühler
CKW Centrale schweizerische Kraftwerke
Coop
Credit Suisse Group
Dow Europe
EGL
EKZ Elektrizitätswerke Kanton Zürich
ETEL
euw Elektrizitätswerk Stadt Zürich
Fabrimex Systems
Franke Artemis Group
Geberit
Glencore International
Gruner
Heine Thörborg & Co.
Hilti
Impelnia
Kaba
Knecht Holding
KPMG
Leister
Metall Zug
Omya International
Phils
Plastic Omnium
PPCmetrics
Roche
Shell Exploration & Production
Siemens Schweiz (BT Division)
Sika
Stump Fora Tec
Swiss Re
Swisscom
Syngenta
The Boston Consulting Group (Switzerland)
United Technology Research Center
V Zug
Zürcher Kantonalbank

Foundations and organisations
Accenture Stiftung
Albert Lück-Stiftung
AO Foundation
Arbeitgemeinschaft Prof. Hugel AGPH
Arthur Waser Stiftung
Baugarten Stiftung
Comanche Etablissement
Credit Suisse Foundation
Dr. iur. Jstvan Kertész Stiftung
Erdöl-Vereinigung
Ernst Göhner-Stiftung
FIFA
Georg und Bertha Schwyzer-Winiker Stiftung
Holim Foundation for Sustainable Construction
Kühne Stiftung
Max Rässler Fonds der Stiftung Empiris
Mirock-Stiftung
Nagra
Novartis Stiftung, vormals
Ciba-Geigy-Jubiläums-Stiftung
Prof. Otto Beisheim-Stiftung
René und Susanne Braginsky Stiftung
RMS Foundation
Rutli Stiftung
Schweizerischer Verein des Gas- und Wasserfaches SGW
Starr International Foundation
Stavros Niarchos Foundation
Stiftung Mercator Schweiz
swisselectric
swisstopo
SVIAL
Verband Schweizer Abwasser- und GewässerschutzfrazHeute VSA
Vontobel-Stiftung
Walter Haefner Stiftung
Werner Siemens-Stiftung
Zürich Foundation

Private individuals / ETH alumni 2011
Dr. Dr. h.c. Konrad Basler
Dr. Rolf Bernegger
Werner Basshard
René und Susanne Braginsky
Dr. Eduard M. Brunner
Johanna Buchmann
Mark Büsser
Dr. Niklaus Bühler
Christoph Bünger
Hans Burch
Reto Callisch
Michel Cornaz
Dr. Jörg Derungs
Camille Diedrich
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Dr. Alban Luc André Fauchère
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Prof. Dr. Peter Fricker
Kurt Funk
Walter Grünicher
Dr. Mathis Grenacher
Prof. Dr. Rolf Grütter
Dr. Max Gsell
Dr. Emanuel Häfner
Randolf Hanslin
Dr. Karl Hartmann
Thomas Hauser
Regula Hauser Scheel-Ziegler
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Philip Adrian Mosimann
Dr. Stephan B. Navert
Kurt Nohl
Prof. Dr. Ferdinand Pich
Dr. Hans-Jürg Reinhart
Prof. Dr. Alfred Rosli
Dr. Max Rosler
Dr. Urs Saner
Hans-Jörg Schlegel
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Christiann Sigg
Peter Sporer
Prof. Dr. Rudolf Starkermann
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Rudolf Stüssi-Model
Dr. Johann Sutter
Dr. Hans Tschamper
Dr. Nicolas-Jürgen und
Dr. Christiane Weickart
Hans Wälchi
Fritz Waldmeier
Hans Wallmann
Rudolf A. Wassmer
Peter J. Wild
Maximilian Winkler
Marco Witzig
Dr. Werner Wunderli
Rolf Zobrist
Walter Zumstein
The building industry can make a significant contribution to improving the sustainability of our environment. With this in mind, ETH Zurich launched the Sustainable Construction strategic initiative. Thanks to generous funding from its partners, the University has been able to set up new professorships in this field and support new potentials and pioneering projects.

Buildings shape our lives. On the one hand, they essentially define how we will live and work today and in the coming decades; and on the other hand, the building industry and the built-over environment have a huge influence on the economic, ecological and social state of the earth. Specialists estimate that across the world, around 111 million people or 1.6% of the world’s population make their livelihood from the building industry. Constructing and running buildings uses around 40% of all energy that is produced and is responsible for 40% of all CO₂ emissions across the world. These figures clearly prove that we hold huge leverage power in building processes to create a more sustainable life and environment for ourselves. With current climate changes and a growing world population, the importance of using this leverage is more patent than ever.

Cross-disciplinary competence at ETH Zurich

Whether we succeed in using the sustainability potential available in construction significantly depends on the competence and motivation of building experts. As a world-leading technology university, ETH Zurich can make a substantial contribution to shaping a more sustainable building industry with its capacity to train highly qualified architects, engineers and materials scientists – and conduct basic research in this field. ETH President Ralph Eichler is convinced that “in the building sector, ETH can do its share to provide pioneering developments and technologies and incorporate its new findings into its teaching”. In order to better exploit these opportunities, ETH Zurich declared Sustainable Construction as a key area. At the annual Presidential Luncheon on 20 October 2011, the University introduced the Sustainable Construction strategic initiative. On this occasion held in the Bauhalle on the ETH Campus Science City, Ralph Eichler explained that “ETH Zurich is predestined to make a special contribution because we are one of only very few places where different disciplines join forces to work in this field together.”

Substantial partner support for ETH initiative

In order to expand the field of Sustainable Construction and to heighten interdisciplinary collaboration, ETH Zurich aims to increase professorships in this area by seven. Three of these formed part of ETH’s standard plans but in order to speed up the process for establishing the other four; the University called upon its partners. Back in 2009, Siemens Switzerland (Building Technologies

For example: the adaptable facade, a research project by Prof. Arno Schlüter

A facade determines the look of a building. But more than that, it fulfills functional tasks: with the materials used in a facade, architects define how much light, air and temperature is exchanged between the building and the environment. However, because of changes due to weather or use of space, compromises have to be made in facade design – unless there existed a facade that could adapt to all conditions. Such an “intelligent” facade is what architects at the chair of Architecture and Sustainable Building Technologies led by Professor Arno Schlüter are now working on. The individual elements of their modular, adaptable facade organise themselves and automatically adjust their orientation to optimally achieve set targets in terms of energy saving, shade and light conditions. Thanks to a complex interaction of sensors and information technology, the individual modules “learn” how to best react to a range of demands such as maximising the energy return.

Making a specimen out of cement for a Master’s degree.
Division) had already chosen to donate start-up financing for one of the new professorships in the field of Architecture and Sustainable Building Technology. In October 2010, the Sika Group provided funding for the professorship in Materials for Sustainable Construction. And to follow up, the professorships in Sustainable Construction and in Urban Water Systems were secured thanks to support from the Albert Lück-Stiftung, the Swiss Association for the Gas and Water Industry, the Swiss Water Association and other donors.

“One particular example to illustrate ETH’s commitment is a project for sustainable home construction in Ethiopia. Thanks to support from Arthur Waser Stiftung, the North-South Center at ETH Zurich was able to develop a prototype for a sustainable home in the countryside of Ethiopia, in cooperation with the Addis Ababa University. The first building was inaugurated in December 2011. This project deserves the term ‘sustainable’ in a number of ways: it incorporates traditional building practices and therefore receives high acceptance; only regional materials were used which avoids expensive imports; and focus was centred on training native workers to develop local competences.

Now Phase II of the ETH Sustainable Construction initiative is to be introduced: a range of further promising projects with an interdisciplinary approach are to be set up in association with partners.

“Water – one of life’s vital resources. With water supply and careful wastewater management forming principle elements of sustainable construction, our commitment supports teaching and research at ETH in the field of Urban Water Systems.”

Dr. Andreas Flury, President of Albert Lück-Stiftung

Facts and figures
Construction and buildings are responsible worldwide for:

• 40 % of energy consumption
• 40 % of CO₂ emissions
• 30 % of raw material consumption
• 30 % of solid waste
• 20 % of water consumption
• 20 % of wastewater
• 10 % of land use

(Source: UNEP Sustainable Building & Construction Initiative, 2006)
NETWORKING IN THE INTEREST OF HEALTH

In many cases, insights made by the engineering and natural sciences lead to progress in the interest of health. It is here that the existence of networks between the various research disciplines and the Medtech industry assumes great significance. For this reason, ETH Zurich aims to break down barriers in terms of space, disciplines and institutions and to intensify the exchange of expertise between universities, medical institutions and industry.

The fact that the ETH President chose to hold his ETH Zurich President’s Invitation in Basel appeared to arouse a certain amount of curiosity. Whatever the case, the ETH Department of Biosystems Science and Engineering (D-BSSE) in Basel was full to bursting point on the appointed day in March 2011. Speakers from ETH, industry and the Government of Basel agreed that links between life service providers, hospitals and universities in Basel succeed in serving the interest of health. And by founding the ETH Department in Basel a few years ago, ETH Zurich had also contributed to this success. In this department, engineers and natural scientists conduct research in System Biology, Bio-engineering and Computer Biology side by side, and thanks to funding by the Basel Misrock-Stiftung, they will soon be joined by an additional professorship in Biomolecular Engineering.

Funded professorships filled
In Zurich too, the ETH Medical Technology initiative has made significant progress. In the summer of 2011, Stephan J. Ferguson took up his position as the new professor of Biomechanics at ETH Zurich and the University of Zurich with support from a private foundation. An additional double professorship in Medical Imaging and Modelling had already been filled thanks to the commitment of René and Susanne Braginsky. And in November 2011, with Marcy Zenobi-Wong as the new professor of Cartilage Engineering, regeneration and sport medicine have enhanced Materials Sciences at ETH Zurich – thanks to support from FIFA.

Expanding Zurich’s position as a hub of knowledge
Further milestones in health research in Zurich have been set with the platform University Medicine Zurich formed by ETH, University of Zurich and University Hospital Zurich and the establishment of a collaborative research project with Roche, which is also supporting a new ETH professorship in Molecular Medicine.

With the creation of the Department of Health Sciences and Technology, ETH Zurich has also set up its own new structures for research and teaching on the subject of health. The fact that this fulfils a need was proven by the 167 first semester students who started the newly-created study programme in Health Sciences and Technology in September 2011 even before the department’s official opening in January 2012. The development of the location of Zurich as a world-class hub of knowledge in Medical Technology and Health is in full progress. And in collaboration with partners, ETH Zurich will continue to play a fundamental role in this process.
EXCELLENCE SCHOLARSHIPS – SPECIFIC, EFFECTIVE AND VISIBLE

With the Excellence Scholarship Programme, ETH Zurich has successfully developed a grant programme for outstanding students at Master’s level. Gifts donated by private benefactors form a solid basis for further expansion.

Advancing excellence and educating outstanding potentials for Switzerland as a hub of business and industry requires targeted action. One such action is the ETH Excellence Scholarship Programme with its three defining features:

• Selective awarding of grants on the basis of performance and personal motivation following a strict selection process
• Systematic expansion of the programme to ensure a long-term future
• Securing the financial basis with donations

“"We are pleased to establish new scholarships at one of Europe’s finest technological universities. This commitment will be a catalyst for expanding our collaboration with the excellent students and faculty at ETH Zurich.”

David Parekh, Vice President, Research and Director United Technologies Research Center (UTRC)

Over the last five years, around 120 Master’s students have been awarded such a grant. Numerous donations from companies, foundations and private individuals have contributed to the growth of this programme and form a solid fundament for further expansion.

Encouraging internationalism
To date, a third of the funded students come from Switzerland with the remainder originating from a further 28 nations, particularly from Europe and North America. However, the numbers of applicants from Asia are on the rise. Although donations still stem predominantly from Switzerland, ever more international companies, foundations and ETH alumni around the globe are extending their support to the programme. The Starr International Foundation, as well as Dow and United Technology, are three American institutions that have generously given the programme their commitment.

Personal experiences strengthen trust
Donors can see for themselves the effect of their contribution with excursions organised to one of the funding partners twice a year. This is appreciated by both sides: the scholars meet the company and are given a look behind the scenes. The partner companies come into contact with the scholars and can present themselves as potential employers. With this in mind, in 2011 the Excellence Scholars visited the programme partners Amman Group in Langenthal and Franke Artemis Group in Aarburg.

In addition, the Rector thanks all donors once a year with an invitation to the exclusive Meet the Talent donor event. This event also brings benefactors and beneficiaries together and gives an insight into the programme’s development.

Every contribution makes an impact
What is remarkable is the great support shown to the programme by ETH graduates and partnering activities with ETH alumni associations. With their contributions, almost one thousand former students have enabled a total of ten students to receive a grant. Overall, the success of the programme’s development to date can be jointly accredited to the combined efforts of the University, private industry and society alike.
MEETING RISKS WITH A VIEW TO THE WHOLE

Chains of events triggered by a volcano eruption or an oil tanker accident have demonstrated to the world the great extent to which environment, society, technology and business markets have become interconnected. As the knowledge held by individual disciplines on risk forecasts, assessments and effects gradually approaches its limits, ETH Zurich aims to overcome this development with the Integrative Risk Management initiative.

With the opening of the Risk Center on 23 June 2011, ETH Zurich created a unique competence centre to form the core of its risk initiative. Currently, the Risk Center unites ten professors from five different departments giving it a broad institutional foundation. Together, the scientists researching in the Risk Center investigate the influence on the existence and assessment of risks presented by natural events, technological, economical and geopolitical developments as well as social and demographic changes. The aim of the interdisciplinary research platform is to develop holistic ways of analysing risk and to educate a pool of talent with international influence.

“The interaction between the environment, technology, the economy and society are producing ever more complex risks. If we want to overcome these risks, we must secure the exchange of expertise between science and practice.”

Beat Moser, Managing Director swisselectric

A unique platform for knowledge transfer

A professorship for Integrative Risk Management had already been filled in 2010 thanks to the support of the Swiss Re Group. To follow up in 2011, Wanda Mimra, the new professor of Risk and Insurance Economics, was appointed with start-up financing provided by the Z Zurich Foundation. And a third professorship in Reliability and Risk Engineering, whose appointment is still in progress, will have its initial phase funded by the AXA Research Fund and the swisselectric grid operators organisation. Finally, the audit, tax and advisory firm KPMG has also been won as a donor of the ETH risk initiative. The professors at the Risk Center value the opportunity to collaborate with risk experts from the private sector and are convinced that the exchange of knowledge and experience between specialists from various backgrounds will provide huge benefits for risk research. For this reason, the Risk Center Partnership Council was set up with representatives from science and industry to maximise the flow of data and information between both parties.
PROPPELLING PRODUCTS WITH POTENTIAL TO THE MARKET

As one of Switzerland’s training institutes for future leaders, the promotion of budding talent is one of ETH Zurich’s central activities. In the same way, another core task is to enable research results to be translated into commercial results as quickly as possible. With the Pioneer Fellowships Programme, the University supports graduates with promising business ideas at an early stage.

Within the context of his doctoral studies at ETH Zurich, Materials scientist Jan Giesbrecht has developed a so-called polymer foil. Ten times thinner than those currently available on the market, it is extremely resilient, has outstanding barrier properties – to protect food, for example – and at the same time is fully recyclable. The young researcher aims to launch this invention on the market with profitable results. Its range of applications is wide – and that is precisely where Jan Giesbrecht’s dilemma lay until a few months ago: he was unable to assess which area of application for his invention held the most potential. The ETH funding programme therefore came at an extremely opportune moment. As one of the first, Jan Giesbrecht received a Pioneer Fellowship of CHF 150,000 to be used over a period of 18 months, enabling him to develop his invention at ETH to the next level and put out feelers into the market at the same time.

Quicker on the market with young talent promotion

With the Pioneer Fellowship Programme, ETH provides a link in the chain of promoting young talent. On the one hand, support exists for research projects conducted during an academic career and on the other hand for newly-founded start-up companies too – but in between there is a yawning gap, even though it is in the very phase before the company’s foundation that it is vital that the right stones are laid. Often, just as crucially important as the product itself is a quick transfer to the market – which is where the Pioneer Fellowship Programme comes in. ETH graduates who have produced research results with market potential during the course of their Master’s thesis, dissertation or post-doctoral studies can apply for support from the programme. A panel made up of experts from ETH Zurich and representatives from the corporate sector select the most convincing candidates with the projects holding the greatest potential for business development. By the end of 2011, fifteen particularly promising young researchers chiefly from the fields of Information Technology, Life Science and Robotics were awarded a Pioneer Fellowship.

“The ETH Zurich Pioneer Fellowship Programme, we promote brilliant minds creating innovations to meet the social and environmental tensions facing our economy and society.”

Dr. Hubert Ashermann, CEO KPMG Switzerland

their Master’s thesis, dissertation or post-doctoral studies can apply for support from the programme. A panel made up of experts from ETH Zurich and representatives from the corporate sector select the most convincing candidates with the projects holding the greatest potential for business development. By the end of 2011, fifteen particularly promising young researchers chiefly from the fields of Information Technology, Life Science and Robotics were awarded a Pioneer Fellowship. The fact that the Pioneer Fellowship programme helps to lay the foundations for a successful young enterprise is demonstrated by the case of Jan Giesbrecht who in the meantime has set up the ETH spin-off Taeni Tec with five other colleagues.
A BOOST FOR THE WORLD’S FOOD SUPPLY

The food supply of the world’s population will continue to be one of the most urgent challenges of our society in the coming decades. But how can everyone in the world be fed – on a healthy and ecological basis? This requires tremendous efforts by influencers in politics, science, industry and society – including ETH Zurich in its capacity as a leading science and technology university.

Feeding the world’s population means being able to supply the nine million people inhabiting the world by 2050. To achieve this, action must be taken on a global scale and no time must be wasted. With the World Food System strategic initiative, ETH Zurich has tied together a packet of measures based on a four-point plan:

• Expand competences in all places where gaps exist or loom
• Pool capacities via a new competence centre for the World Food System
• Advance innovative interdisciplinary research projects with benefits for society
• Reorganise ETH structures

Following up words with actions

What does this mean in concrete terms? Two new professorships in the fields of Agro-ecosystems and Water Economics and Politics, as well as two further chairs, are to be added to existing competences. The new World Food System Competence Center was founded in 2011 and started operations with the appointment of its new Managing Director, Michelle Grant. With funding of 5 million francs for around four projects a year in the fields of Ecological Agriculture, Climate Change and Sustainable Land Use, Stiftung Mercator Schweiz boosted the start-up phase in 2011. This commitment allowed ETH Zurich to launch interdisciplinary research projects at this early stage, leading to sooner results.

“One of the major challenges in addressing food security is to work from a systems perspective. That’s what we do within the World Food System Competence Center, thanks to our donors. We bring together all the relevant disciplines and stakeholders: from industry, philanthropic institutions and science.”

Michelle Grant, Managing Director of World Food System Competence Center

New Department of Environmental Systems Science

By prioritising the World Food System, ETH Zurich has consequently set up the new Department of Environmental Systems Science which fuses Agro- and Ecosciences, drawing different disciplines together in order to tackle global environment and food security challenges on a joint basis. With Agro- and Ecosciences in one department, optimal conditions have been created: both specialist disciplines are dedicated to the environment “system” and complement each other in their research activities on exploitation and protection. The new department can be said to be the home base of the initiative while the new competence centre is the hub of its activities and allows for higher visibility.

In this way, implementation of the four-point plan of the World Food System has got off to an excellent start – not least thanks to great support from partners Stiftung Mercator Schweiz, Bühler and Syngenta.
FORGING A NEW ENERGY FUTURE

Over the past year, problems concerning energy production and supply have been the subject of even greater public attention than ever. However, ETH has been focusing on these issues for years. With donor support, the University researches innovative technologies and develops expertise that serves to orientate political and social decision-makers.

ETH Zurich has developed its efforts in the field of energy in recent years, concentrating on the three pillars of renewable energies, energy efficiency and electrification. With support for the Electrical Energy strategic initiative, teaching and research have been substantially enhanced. In 2011, ETH partnered with the Paul Scherrer Institute in the field of energy storage to provide a professorship in Electrochemistry and with Empa to appoint a professor with a focus on new kinds of materials for batteries. In addition, under the leadership of the ETH Energy Science Center, the exchange between the business sector and science has been given an institutionalised platform in the form of the Energy Partnership Council where donors and ETH professors now meet twice a year.

Expansion of Mechatronics

At the same time, ETH Zurich and partners are strengthening the key field of Mechatronics in which electro-mechanical systems such as precision motors and robot systems are developed. The high-precision company ETÉL based in the French-speaking part of Switzerland is the first to support these ambitions by funding a professorship in this field at the interface of Mechanical Engineering, Electrotechnology and IT.

Driving in-depth research in Geothermics

Besides using energy in an intelligent way and optimising control systems on a systematic basis, it is also necessary to tap new sources. A few kilometres under the earth’s surface, we have a huge energy reservoir available. But, in order to use this deep geothermics energy, more knowledge in geology and earthquake research is required as well as innovations in drilling technology. With private partners, ETH Zurich aims to coordinate its activities in this area and create new professorships in Earth Sciences and in Mechanical Engineering, forming a basis for the development of successful drilling methods. Irrespective of the political and social decisions that are taken in terms of energy supply, ETH will continue with its partners to make contributions to sustainable energy solutions in the future too.
## INCOME AND EXPENSES

### Income

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<tbody>
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<td>Funds acquired</td>
<td>63775694</td>
<td>74442874</td>
</tr>
<tr>
<td>Not earmarked</td>
<td>3951800</td>
<td>3188100</td>
</tr>
<tr>
<td>Earmarked</td>
<td>59823894</td>
<td>71254774</td>
</tr>
<tr>
<td>Other income</td>
<td>788132</td>
<td>–57639</td>
</tr>
<tr>
<td>Financial result</td>
<td>781026</td>
<td>–123778</td>
</tr>
<tr>
<td>Other income</td>
<td>7106</td>
<td>66139</td>
</tr>
<tr>
<td><strong>Total income</strong></td>
<td><strong>64563826</strong></td>
<td><strong>74385235</strong></td>
</tr>
</tbody>
</table>

### Expenses

<table>
<thead>
<tr>
<th></th>
<th>2011 in CHF</th>
<th>2010 in CHF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awards from the Strategic fund</td>
<td>850000</td>
<td>2000000</td>
</tr>
<tr>
<td>Research projects</td>
<td>850000</td>
<td>400000</td>
</tr>
<tr>
<td>Professorships</td>
<td>0</td>
<td>1600000</td>
</tr>
<tr>
<td>Awards from earmarked funds</td>
<td>26885333</td>
<td>19784277</td>
</tr>
<tr>
<td>Research projects</td>
<td>1341000</td>
<td>232640</td>
</tr>
<tr>
<td>Professorships</td>
<td>23033333</td>
<td>1850000</td>
</tr>
<tr>
<td>Scholarships</td>
<td>1880000</td>
<td>1051637</td>
</tr>
<tr>
<td>Infrastructure projects / equipment</td>
<td>650000</td>
<td>0</td>
</tr>
<tr>
<td>Award reductions</td>
<td>–19000</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total awards</strong></td>
<td><strong>27735333</strong></td>
<td><strong>21784277</strong></td>
</tr>
<tr>
<td>Operating expenses (incl. depreciation)</td>
<td>1384616</td>
<td>1359853</td>
</tr>
<tr>
<td>Changes in funds</td>
<td>33025036</td>
<td>51302894</td>
</tr>
<tr>
<td>Annual result</td>
<td>2418841</td>
<td>–61789</td>
</tr>
<tr>
<td><strong>Total expenses</strong></td>
<td><strong>64563826</strong></td>
<td><strong>74385235</strong></td>
</tr>
</tbody>
</table>

Ratio of operating expenses vs. funds acquired: 2.2% vs. 1.8%

In our capacity as auditors of the ETH Zurich Foundation, we confirm that the figures reported in the annual report 2011, appearing on pages 16 and 17, may be derived from the annual accounts 2011, which we have audited and unconditionally attested on 7 March 2012.

KPMG AG

[Signatures]
# Assets and Liabilities

**Assets**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>6’344’189</td>
<td>28’365’395</td>
</tr>
<tr>
<td>Securities (call and fixed deposits)</td>
<td>105’677’830</td>
<td>62’342’096</td>
</tr>
<tr>
<td>Receivables from donors</td>
<td>43’590’000</td>
<td>23’387’000</td>
</tr>
<tr>
<td>Other receivables / Deferred expenses</td>
<td>6’794’922</td>
<td>6’519’115</td>
</tr>
<tr>
<td><strong>Non-current assets</strong></td>
<td>88’512’442</td>
<td>76’040’926</td>
</tr>
<tr>
<td>Receivables from donors</td>
<td>88’476’500</td>
<td>75’974’000</td>
</tr>
<tr>
<td>Other non-current assets</td>
<td>3’594’2</td>
<td>66’926</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>244’803’953</td>
<td>190’787’332</td>
</tr>
</tbody>
</table>

**Liabilities**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current liabilities</td>
<td>13’404’030</td>
<td>4’596’286</td>
</tr>
<tr>
<td>Current liabilities / deferred income</td>
<td>15’497’116</td>
<td>1’162’86</td>
</tr>
<tr>
<td>Current liabilities from awards</td>
<td>8’249’333</td>
<td>4’480’000</td>
</tr>
<tr>
<td>Loan obligations</td>
<td>5’000’000</td>
<td>0</td>
</tr>
<tr>
<td><strong>Non-current liabilities</strong></td>
<td>62’737’833</td>
<td>52’972’833</td>
</tr>
<tr>
<td>Loans</td>
<td>25’000’000</td>
<td>30’000’000</td>
</tr>
<tr>
<td>Non-current liabilities from awards</td>
<td>37’620’000</td>
<td>22’855’000</td>
</tr>
<tr>
<td>Longterm provisions</td>
<td>1’178’333</td>
<td>1’178’333</td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td>76’141’863</td>
<td>57’569’119</td>
</tr>
</tbody>
</table>

**Fund capital (earmarked fund)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organisation capital</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paid up capital</td>
<td>50’000</td>
<td>50’000</td>
</tr>
<tr>
<td>Strategic fund</td>
<td>25’506’984</td>
<td>25’568’774</td>
</tr>
<tr>
<td>Annual result</td>
<td>2’418’841</td>
<td>-61’789</td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td>244’803’953</td>
<td>190’787’332</td>
</tr>
</tbody>
</table>

**Annual accounts**

The annual accounts were drawn up in compliance with the Swiss GAAP FER accounting standards.

**Risk management**

The Foundation has adapted its internal controlling system (ICS) to the current legal requirements. Decisions concerning the amount of funds awarded to projects are supported by a simulation of the potential financial outcome for the Foundation. Both measures ensure that the Foundation remains financially robust.
FOUNDA TION BOARD OF TRUSTEES

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Jürgen Dormann
Chairman of Board of Directors
Metall Zug AG and Sulzer AG

Vice President
Prof. Dr. Ralph Eichler
President ETH Zurich

Dr. Irene Kaufmann
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Swisscom AG

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Chairman of Board of Directors Zürcher Kantonalbank

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former Chairman of Governing Board
Swiss National Bank

Dr. Anton Scherrer
former Chairman of Board of Directors
Swisscom AG

Dr. Martin Zollinger
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Zürcher Kantonalbank

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Euro: IBAN CH47 0483 5027 0482 3201 1  
Swift Code CRESCHZZ80A