Sharing Information on Progress Report

Editorial

In 2009, the University of Applied Sciences HTW Chur signed the UN Principles for Responsible Management Education as the first public tertiary education institution in Switzerland.

We are proud to be part of a global movement in tertiary education to enhance the practice of sustainability management and responsible leadership in all sectors of professional life.

Our gratitude goes to the United Nations for having extended the Global Compact to our sector of society. We firmly believe that education can make a huge difference at an early stage of personal professional formation.

This is the first issue of our Sharing Information on Progress report. As a reader, you will find it stimulating to be walked through a variety of initiatives at all levels of academic activity. We have been lucky to build on the learnings from the 1st PRME SIP Analysis report. Overall, our report is designed in accordance with the SIP reporting recommendations. However, since it also serves as a document for internal communication to promote PRME practice within our university, we have found it helpful to organize the material according to the following scheme: the university as whole (principle 1), education across all its faculties (principles 1, 2, 3), and research by faculties (4, 5, 6). Relevant principles are shown as arrows on each page of this report.

SIP report #1

In this issue:
> HTW Chur renews its commitment to PRME
> Our approach to implementing PRME
> Track record across our faculties
> Our achievements & our learnings
> Our objectives for PRME @ HTW Chur in 2020

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Sharing Information on Progress Report

Universities of Applied Sciences

HTW Chur

Founded in 1963 as a polytechnic institute, in 2000, HTW Chur was accredited as University of Applied Sciences.

Currently more than 1,600 students are enrolled in a variety of study programs on bachelor’s and master’s levels, involving faculty staff of more than 120.

Its seven research institutes are actively involved in applied research and development dedicated to fostering knowledge and technology transfer for the Swiss economy.

Fields of study comprise:
- Tourism & Hospitality,
- Management,
- Information Sciences,
- ICT Engineering,
- Civil Engineering,
- and Multimedia.

Chur is the capital city of Grisons, which is the largest canton of Switzerland located at the heart of the Alps. It is surrounded by impressive mountain ranges and world-renowned destinations such as Davos, St. Moritz, Laax, and Arosa.
Sharing Information on Progress Report 2010

**Mission Statement**

- **Claim**
  We are an active university where colleagues and students are committed to high quality standards in education, research and services.

- **Innovation**
  As a nationally and internationally integrated tertiary education institution we actively promote innovation in our economic region.

- **Entrepreneurship**
  We share our commitment to professional, social and entrepreneurial decision-making competencies.

- **Determination**
  We cultivate students in their self-consistent formation as responsible human beings.

- **Result Orientation**
  We assist our employees in achieving clearly stated professional objectives and deliver results consistent with our university’s goals.

- **Interdisciplinary Collaboration**
  Our work ethos embodies interdisciplinary teamwork, open communication, and mutual respect.

- **Future-Orientation**
  In our strategic core areas we strive for path-breaking outcomes.

- **Quality**
  We view developing quality as a central success factor.

- **Partnerships**
  We are a reliable partner for business, politics, institutions, and universities.

- **Knowledge Forum**
  We foster an active transfer of knowledge and information with our internal and external partners.

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**Entrepreneurial mindsets**

... are driven by the will to change Our World for the Better.

As general guideline, a responsible and open-minded culture that is firmly based in a philosophy of Swiss Quality looks for comprehensive solutions to real-world problems while emphasizing respect for fellow humans, a thriving economy, and an intact natural environment.

The idea of sustainable development is rooted in the tradition of human existence in the harsh environment as it is represented by the Alps. Over centuries, the people settling in the alpine space have proven it is possible to survive under the most contrarious circumstances.

As tertiary education institution, it is our sincere commitment to engage in a process of continuous improvement based on the Principles for Responsible Management Education.

This conviction is founded in the belief that excellence embraces superior control of professional competencies and skills. In an entrepreneurial culture however, personal integrity and a strong sense of responsibility are indispensable traits to look for.

“**Integrity is the essence of everything successful.**”

R. Buckminster Fuller

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Artwork by courtesy of Bonnie DeVarco
Vice-Chancellor's Message

To:
PRME Secretariat at United Nations
Global Compact Office
New York, NY 10017, USA

Chur, December 2010

Renewing our University's Commitment to the UN Principles for Responsible Management Education

In 2009, the University of Applied Sciences HTW Chur became signatory to the PRME as the first public institution of higher learning involved in the education of business leaders in Switzerland.

Throughout these past months we have been actively promoting the spirit of the principles engaging our faculty, colleagues, and partners. Above all I wish to point out a recent future search conference involving all relevant stakeholders and decision-makers in an interactive process to build a vision for our University in 2020. One of its central outcomes was that HTW Chur will set out to evolve itself into the "Swiss Alpine Sustainable University". Based on this multilateral agreement the PRME philosophy will serve as a guideline for the future development of our institution.

In accordance with the PRME, HTW Chur commits itself to educate future leaders who will be alert to the ethical, ecological and social impacts of their decisions. Based on a strong tradition of integrating sustainability and responsible business development throughout all academic activities at HTW Chur, we have enhanced our efforts in the past months to attain this goal.

This report gives evidence of a variety of initiatives to implement the PRME across all disciplines at HTW Chur. We hope it will be instrumental for our colleagues within the PRME academic community.

Prof. Juerg Kessler
Vice-Chancellor
University of Applied Sciences
HTW Chur
Our Vision: Where we long to be in 2020

In August 2009 a two-day future search conference involved all stakeholders interested in developing a thriving University in the canton of Grisons. This vision building workshop resulted in a clearly focused portfolio of activities. Basic values guiding the University’s future development are firmly grounded in the three-pillars concept of sustainability: economy, ecology, and society – combined with a strong emphasis on entrepreneurship.

To comfort the young generation of digital-native students, programs we will offer will be applying the latest real-time and virtual IC technologies while teaching shifts from traditional lecturing to all forms of enabling and coaching.

Strong partnerships within science, the business community, and regional authorities become cornerstones for an innovation power house.

Located in the heart of the Alps, by nature HTW Chur will be positioned as the unique center of knowledge for the socio-economic-environmental development of alpine spaces. It will be a proud member of renowned institutional, professional and science networks around the globe.

This visionary process from a holistic perspective has engulfed all participants in a highly energizing way. It emanated widely into all layers of the University’s environment and keeps creating positive resonance with its stakeholders.

« We envision that in 2020, the Swiss Alpine Sustainable University SASU celebrates its 20th anniversary with a public fair. The people of the Grisons are proud of their unique University. Congratulating are guests from abroad, colleagues from the science and partners from the business communities... »

Juerg Kessler, Zukunftskonferenz „HTW Vision 2020“

Our Initiatives: How we will get there

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Values</th>
<th>Method</th>
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<tbody>
<tr>
<td>Mainstreaming Sustainability</td>
<td>A growing commitment from our University’s governing body is putting sustainable development at the top of its future agenda. Hence, sustainability will be a central evaluating criterion for all academic activities.</td>
<td>Responsible Leadership In all of our University’s faculties professional responsibility and ethical business practices will be imperative as an integral component of higher education programs. Faculties will report regularly on the respective measures.</td>
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<tr>
<td>Responsible Leadership</td>
<td>Incentive System To spur innovative concepts integrating sustainability and responsibility, the development of course materials will be incentivized by a proper rewarding scheme. In a first phase, there will be time credits to be granted to lecturers.</td>
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Our Challenge: Sustainability and Responsible Management Education

Throughout the last year after signing up to the PRME we have taken a variety of concrete steps and measures to implement this values-based initiative in all faculties of our University. While our future search conference was highly instrumental in reaching a large audience within HTW Chur and beyond in real-time, getting back into the daily routine quickly shows whether things really do happen.

Aligning a whole institution with an extended set of values requires changing mindsets, establishing new rules and routines, and developing organizational culture. In short, it requires implementing a full-scale change management process. A number of key institutional drivers like the university board, its faculties, and last but not least student-driven initiatives are instrumental for progressing.

A "PRME initiative team" now serves as a self-governing coordinating mechanism. This open group of volunteering members from all faculties and university staff as well as students has dedicated itself to fostering the PRME philosophy in all walks of university life.

A rich bouquet of activities covers the multifaceted nature of our initiatives. In order to share our initial learnings in a rather brief progress report we have organized them by adopting a panoramic view (cf below). All faculties contribute in distinct ways that are consistent with their academic disciplines while choosing their proper thematic approach.

Reporting Methodology: How could we know

When joining the PRME initiative in 2009, we have conducted a first tentative survey of all relevant activities at our University (cf list of participants on the PRME pages). In preparing this SIP report, we have first updated our sample of key personalities in all our University’s faculties. They were provided with a list of three guiding questions:

1. Where does sustainability play an important role in your research and consulting projects?
2. Where does this apply to your study courses?
3. How do you think sustainability should be better anchored in our University and what do you intend to do about it in the future?

Members of the PRME initiative team conducted personal interviews with these personalities which they reported to the editors of this report. Analyzing this material assisted in developing a thematic landscape of sustainability and responsibility activities (cf above). Finally, all findings were assembled and rearranged according to the six principles. The following pages cover the subject areas in detail.
Across all faculties of HTW Chur responsible leadership education has been of considerable importance in the past. As a matter of fact, each of our study programs on the bachelor level offers mandatory courses in ethics and sustainability. Some of our more recent master’s programs emphasize these subjects due to our students’ growing interest in sustainability. 

Tourism faculty Our BSc in Tourism program has been containing a module on “Tourism Management, the Environment, and Sustainability”. Issues of diversity are covered in the module “Cross-cultural leadership, business ethics and corporate governance”. Further there is a module “Working in a flat world — business ethics and responsible leadership” (4 ECTS each).

Information Science faculty Our BSc in Information Science encompasses mandatory modules on “General Management, including Business Ethics”, “Foundations of Information Science, including Information Ethics”, and “Information Society, Ethics and Politics” (4 ECTS each).

ICT Engineering faculty Our BSc in Engineering has a module “General Management & Business Ethics for Engineers” (4).

Civil Engineering faculty Our BSc in Civil Engineering has a module „Sustainable Construction“ (2).

Formative projects applying responsible business conduct and sustainability issues are common practice in all social sciences faculties. According to its mandate, “to prepare students as practitioners for the world of business while being firmly based in cutting-edge theory”, we have been developing strong partnerships with the regional and national business communities.

Our Master of Advanced Studies programs have a less consistent pattern of dealing with responsible business conduct and sustainability.

In stark contrast, our Sustainable Civil Engineering Master, a program in cooperation with Swiss universities of applied sciences, is focused on sustainability issues in a predominant sector of economic activity. It sets out to further develop professionals in the areas of energy and sustainability.
Our Recent Initiatives

Mainstreaming Sustainability  In our Tourism and Entrepreneurial Management curricula sustainability and social entrepreneurship have become basic elements.

Tourism faculty  At bachelor level there are a new "Major in Sustainable Tourism Management" (12 ECTS) and a new "Minor in Sustainable Tourism Management" (4). The Modules "Environment & Sustainability" have seen an upgrade to 6 ECTS.

At master's level a new module "Tourism Development" has been introduced which covers the sustainability agenda (3).

Entrepreneurial Management faculty  The Master of Science in Business Administration has seen a revision of its "Major in New Business". Several courses are streamlined and four new modules are introduced to reflect the sustainability agenda. In particular "Sustainable Business Development", "Innovation Marketing", "International Environment", "Futures Research", "New Business Models", and "Change Management" (total 18 ECTS).

Students engagement programs  HTW Chur is constantly enhancing its student programs. We have started a number of initiatives to build student-led activities in social entrepreneurship and community outreach.

Our Achievements and Our Learnings

Our University is delivering rapid progress on most of its fields of activity. Curricula are constantly being revised to better suit the needs of the 21st century globalized business world while incorporating the sustainability imperative.

Fostering students’ initiatives such as SIFE (Students In Free Enterprise) or Common Humanity has been highly conducive to raising consciousness in general and involving students. This is an integral part of our strategy to create awareness from the bottom up. Once students buy into the value of being self-sustaining actors in the educative framework, it becomes much easier to communicate the importance of ethics and personal integrity for advancing on the sustainability agenda.

We have found it somewhat harder motivating executive level and professional development programs in management to include ethics and sustainability. This may be due to conventions and needs of the market place and prevailing business practice as usual.

Our Objectives

Looking ahead into the next decade we are striving to deliver on strategic objectives as follows:

> to integrate ethical behavior, responsible leadership, and sustainability, as central building blocks within all study programs across all faculties of our University;

> to communicate relevant gaps to the program managers on a regular base;

> to motivate for adequate adaptation measures of study programs at all levels;

> to integrate ethics and sustainability in all programs and short courses at executive level.

Regarding our medium-term agenda we commit ourselves to demonstrating partial advancements as follows:

> to establish a support function for continued roll-out involving our PRME initiative team;

> to institutionalize a monitoring function of mainstreaming activities in the areas of ethical and sustainability-driven tertiary education.
Our Track Record in Entrepreneurship

Entrepreneurship is the key to making progress on the sustainability agenda. In the areas of business and tourism studies we have started a number of strategic initiatives. From our entrepreneurial management faculty the idea of sustainability-driven entrepreneurship has emanated widely into all areas of applied research and development, as it has into our knowledge and technology transfer in Eastern Switzerland and beyond.

Sustainability Networking
We have been positioning our University as strategic partner in all relevant aspects of sustainable development for the business and science communities. Seminal to this is an applied project aiming at building a platform for all sustainability-related activities and projects within our region. Its strategic goals are to give stand-alone actors better visibility who have been promoting sustainability projects and to share knowledge in order to join forces in the mutual interest.

Our Social Entrepreneurship Initiative is another project designed to promote students’ entrepreneurial start-up activities in the area of social entrepreneurship. Starting from the universities of applied sciences in 2009, its first final round of student social entrepreneurs’ awards will be completed in 2011. (www.socialentrepreneurship.ch)

Its internal complement aims to establish social entrepreneurship as focal theme and organizational unit within our entrepreneurial management faculty. In our research we look at the link between sustainability practices and business performance. A new initiative will develop ways and means to better integrate disabled persons in the labour market.

Our Industry-oriented activities

Corruption prevention in business and entrepreneurship recently has been turning into a focal topic for our research, networking industry partnerships, and dialogue forums. Based on our “Handling Risks of Corruption” project we have now started to investigate knowledge and attitudes of students regarding corruption and bribery in particular. Besides reflecting on students’ attitudes this research project aims at raising awareness among students for the edges of ethical behavior in business practice.

On the empirical side, in a project on foreign bribery we analyze how employees act in different situations of temptation. As a way to effectively control employee behavior beyond cultural borders, the project focuses on the practice of sharing and representing corporate ethical values abroad. Looking at the business case of corruption prevention, we investigate the willingness-to-pay of international consumers for investments in appropriate measures.

Handling risks of corruption successfully
Anti-Corruption is a principle of the UN Global Compact. When doing business abroad, for many Swiss companies it is a huge challenge to cope with corruption practices in foreign business cultures. In the past years, the fight against corruption has been made a top priority, since corruption is increasingly viewed as an incalculable business risk in terms of potential legal consequences and reputation damage. This research project intends to analyze current problems and to shape adequate strategies for Swiss SMEs operating abroad. It examines the programs and measures companies apply at present, evaluates their effectiveness and develops new instruments for corruption prevention.

Our partners are a number of Swiss international companies and all main Swiss organizations and bodies involved in the prevention of corruption, such as the UN Global Compact Swiss Network, and OECD.
Our Cleantech Agenda

In science, there is widespread consensus that Our Planet will not recover from the damages and residual burdens the first industrial revolution has brought about unless we learn to apply environmentally sound and socially viable technologies. On the innovation agenda, our entrepreneurial management faculty is proactively assisting technology providers in developing and bringing their ideas to the market. We have a number of forms and forums in place to initiate dialogue and develop partnerships with industry.

Optimization of industrial resource networks is a research project for regional SMEs that aims at combining resource flows in order to shift their management paradigm towards a "Cradle-to-Cradle" philosophy.

An innovation in high-tech materials development explores the sustainable combination of solid rock from the Grisons with carbon fiber to create multi-stable walls and facades and the respective ways to market them throughout the entire construction chain, substantial gains in energy-efficiency and durability to be expected. Similarly, the materials optimization for water-power turbine construction is a promising innovation process we assist in reaching its markets.

In the electric power distribution industry, several applied research and innovation projects are under way. For instance, in a partnership with Swiss utilities and an engineering faculty from a partner university we analyze the economics of power stations for electric cars. Also, we are looking at the market side of new smart-grid technologies.

Our Achievements and Our Learnings

Adding to the content side of our research efforts, there is ample evidence of progress on the development of long-term, sustainable partnerships and dialogue forums to comfort our partners, community, and the general public. Since all of our research efforts will sooner or later be fed back into educative formats suited to our students, we are well under way to become a full-fledged sustainability-driven entrepreneurial faculty.

Social Entrepreneurship
We have found it difficult to communicate this concept to our governing bodies. Besides the fact that this rather recent notion was coined in the anglo-saxon countries, this may be due to the fact that in its translation into German the term has a somewhat unfavorable political connotation.

Our Objectives

In the long run, we aim to deliver on the following strategic objectives:

> to establish sustainability-driven entrepreneurship and responsible leadership as core elements in our research and knowledge transfer;

> to motivate for the inclusion of ethical aspects in all our academic activities;

> to integrate ethics and sustainability as requirements into our research and service offerings.

Our medium-term agenda aims to achieve the following advancements:

> to develop an ethical code of conduct for our researchers;

> to reach out to our diverse communities by aligning our own research agenda with the sustainability agenda in general, and

> to foster open dialogue involving our communities of practice.
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Our Track Record in Tourism

Four key areas of excellence in sustainable tourism are currently under development within our faculty. They are rooted in the core values of the term sustainable development, thereby integrating all three spheres of sustainability into one broad concept:

1. Application of ecological footprint accounting to (alpine) tourism activities;
2. Effects of different governance models upon the implementation of sustainable business practices in tourism, e.g. the case of climate change adaptation;
3. Design of carbon neutral destinations, and the consequences of different offset-schemes;
4. Research into touristic consumer preferences regarding sustainable management practices and the associated products in various tourism settings.

We have been initiating a number of research and development projects in these four key areas. Cooperation with national and international partners – both from within and beyond academia – is an integral part of all our research initiatives.

Our Achievements and Our Learnings

Within the tourism faculty, sustainability issues by now are firmly anchored both within our educational curriculum as well as within our project landscape. We have found it instrumental to develop a core team of scholars dedicated to the respective questions.

Highlighted as central topic within our curriculum over the last years, in this year’s inaugural proposition sustainable development has been promoted by the major course "Sustainable Tourism Management", accompanied by a minor of the same name, as part of our last study year in our bachelor’s degree program. Prior to these two specialized courses, in order for the students to gain better insights into sustainability issues they are now also central topics within first and second year courses. All courses are accompanied by guest lecturers from renowned institutions, domestic and international.

What is certainly still missing at HTW, is a more coordinated approach towards the management of sustainability issues both internally as well as with respect to projects involving external partners – though the PRME initiative may be a first step towards achieving this demanding goal.

Our Objectives

We believe there is a basic need for mainstreaming sustainability in the tourism industry. In the mid-to-long-term, we aim to integrate this concept in all our research efforts.

Particular topics will be sustainability assessment and measurement, and socio-economic-ecologic network modelling. We will initiate sustainability management practices for alpine destinations and railways.

In formation and professional development we will create innovative formats for our national and international audiences.
Our Track Record in Economic Policy

Rooted in regional economics, our activities in the area of economic development have contributed to a better understanding of a variety of issues directly or indirectly related to the sustainability agenda. Our approach being eclectic, it is driven mainly by the demand side as represented by our business partners.

Regional family-oriented policies have been a topic of continued interest. Our pre-study for the state of Liechtenstein has helped to develop their concept for family-oriented policies.

We have analyzed the economic effects of daycare facilities for children, focusing on income and fiscal consequences for municipalities.

A current project looks at the system of daycare facilities in the canton of St. Gallen. On a more general level, it aims to compare relevant offerings for families with children attending pre- and primary schools.

Value creation of regional culture production as a contribution to sustainable society is a research mandated by the canton of the Grisons. It looks at labour market effects in peripheral regions and derives recommendations for the design of cultural events.

Does organic agriculture have positive economic effects on the regional domestic product? A research question we have analyzed for Bio Grischun, an association of organic producers in the Grisons.

In developing our social entrepreneurship agenda we are currently initiating a research project cooperating with our entrepreneurial management faculty. It will investigate the economic effects and potential business models to improve the integration of disabled persons into the first labour market.

Cleantech industries and their effects on the economic development in Switzerland is currently being developed to become another focal point on our research agenda. In energy and sustainability we will develop strategies to advocate the adaptation and integration of new renewable energies for the Grisons.

Our Achievements and Our Learnings

We have found it instrumental to develop our research program in line with the emerging sustainability agenda at our University. We have been looking for opportunities to join forces with our colleagues from the entrepreneurial management, tourism, and civil engineering faculties. Our recent research initiatives reflect this approach and demonstrate its viability.

Our recent dialogue signature events on “Energy policy in the alpine countries”, “China between crisis and growth”, and “Food industries without trade barriers” have underscored our aspirations.

Energy and sustainability as cross-sectoral topic in our view is waiting for a coherent framework to be established at university level since it covers relevant activities of a number of faculties and institutes.

Our Objectives

When elaborating guidelines and recommendations for regional economic policy, we use sustainability values to direct and monitor our activities to reflect the long-term:

> to develop human capacity adequately to extant needs;
> to derive environmentally-sound solutions.
Our Track Record in Information Science

Preservation of cultural assets

Purpose
Values
Partnership
Dialogue

«...its function is to take care of inter-generational equity as an aspect of the social/ethical component of the sustainability concept. This represents the cultural memory of society which is made accessible for future generations.»

Research

«It is our long-term objective to broaden our education programs to fully reflect sustainability values.»

Our Objectives

It is our long-term objective to broaden our education programs to fully reflect sustainability values. We will strive to integrate our students in our professional activities of all sorts to preserve our common cultural heritage and to raise awareness for the societal value of cultural memory.

In a medium-term perspective, we aim to integrate students in our projects with our SME business partners to develop thematic cultural networks for communities in peripheral alpine regions. This will render support to develop their capacities and self-sustained viability.

Knowledge management is a focal area in our research and development activities for our business partners. Besides we emphasize the preservation of historical monuments and memorials where we develop expert systems and information retrieval systems for professional and public use.

Crossing the alpine digital divide This recent initiative aims at improving access to ICT technologies for our population in the European Alps and its remote regions to activate for long-term gains in productivity and employment. Cooperating with ARGE Alp, the assembly of all European alpine regions, we have set up a dialogue forum to tap on productive and innovative potentials provided by modern-age communication instruments and to derive strategic measures which will impact regional actors.

Our Learnings

For the information sciences, the link to sustainability and responsible leadership is not too obvious. Neither is it trivial. Future research will look at the consequences of the information society on sustainability. Eg, how can ICT help to reduce commuter traffic, or how to help preserve social structures in peripheral regions?

HTW Chur still lacks competencies in the area of natural ecology to complement our sustainability agenda.

Garden Memory Goes Public

In Switzerland there is a rich cultural heritage in the area of public and private parks and gardens. In this project we collaborate with colleagues from the preservation of historical garden monuments, the archival and the information sciences, to develop and implement an information system on Swiss garden memory. All relevant data and information will be assembled, analyzed, structured, and edited such that through a single web-based portal all information is made accessible to the public.

Château de Gruyère

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Our Track Record in Civil Engineering

Given its intensity of energy and resource consumption which exceeds other sectors of economic activity by far, construction of building infrastructure is directly linked with sustainability requirements. Thus, all efforts to increase efficiency make basic sense since substantial gains may be expected. Besides applying established instruments to enhance energy efficiency (eg Minergie labels, performance standards), it will be decisive to sensitize for the proper use of construction materials.

Our Institute for Construction in the Alpine Space focuses on the specific requirements of edifices in mountainous regions.

Results from our research and development projects are fed directly into our teaching programs. Climatic conditions in particular as well as extensive distances of transport demand highly sensitive approaches as regards human and natural ecology.

In our courses, we continuously highlight the ecologies of construction and relevant materials and discuss alternative solutions to reduce environmental burdens. This leads to a higher sensitization of our students when applying problematic construction materials. In our teaching, we do not delimit the discussion to the direct energetic consequences.

Our Achievements and Our Learnings

Our curricula in civil engineering and architecture have seen several adaptations to cater more consistently to the accounts of sustainability. We have found it conducive to set sustainability as formal criteria in evaluating our students’ assignments. Also, within our study courses, we are currently appraising all our students’ contributions according to their ecological consequences.

It has been instrumental for us to fully concentrate our programs in construction and architecture on alpine environments in order to develop consistent case study material reflecting an integrated economic-ecological-social evaluation scheme.

Our Objectives

In the long-term, we aim to institutionalize aspects of sustainability in our teaching and make them relevant for evaluating our course work. We will examine all our projects in research and services regarding sustainability and evaluate them by respective sets of criteria.

In the medium-term we will integrate sustainability where it impacts directly, in particular in all civil engineering courses on construction and design. Finally, we will appraise study assignments and projects accordingly.

Developing Sustainable Construction: Low-cost Noise Barrier

Street noise emissions induce significant external costs and losses in the quality of life. Transport routes are in abundant and urgent need of remediation while expensive concrete solutions face dry public budgets. Our Institute for Construction in the Alpine Space (IBAR) has developed a low-cost prototype by using domestic materials and employing local manpower. The challenge was to discover a system simple enough to meet all requirements by making use of indigenous wood. We found a way to make use of inexpensive "residual wood" from local sawmills by applying a simple construction in a modular concept. Resulting is a noise barrier system that has an eco-balance several times better than conventional concrete construction.
Our Track Record in Engineering

Fostering responsible energy consumption is a mandatory requirement to advance on the sustainability agenda, locally as well as globally. “Sustainability” however is being readily applied to justify all sorts of quick fixes which once we really look at the details turn out to be deceptive packages. It is not sufficient to optimize specific parts as long as other parts keep deteriorating. In contrast, we believe it is necessary to analyze and discuss systems holistically and also to look at potential alterations on aggregate levels.

Our SALT laboratories complement our sustainability agenda in the area of energy efficiency. We help leverage the dissemination of energy efficient appliances in the market.

In computer sciences we have co-developed an online catalogue of teaching aids and materials that enables teachers from all levels to gain access to relevant materials in informatics. There is ample evidence of weak penetration of informatics into Swiss public schools while online search engines such as Google lack focus. Our specific tool will benefit teaching staff.

SALT Swiss Alpine Laboratories for Testing of Energy Efficiency

In our SALT laboratories we conduct measurements in the area of energy efficiency in line with established Swiss and international norms and practices. We offer respective consulting services to purchasers, providers, consumer organizations, utilities, other consultancies, labelling institutions, politicians, and the media. A joint venture of HTW Chur and the Swiss agency for energy efficiency (S.A.F.E.), our partners are a public utility (Elektrizitätswerk des Kantons Zurich EWZ), www.top ten.ch, a web-based search engine for high-quality electricity-appliances, and EnergieSuisse (Swiss Federal Office For Energy). We focus on measuring energy consumption patterns in the areas of electrical appliances and engines, and electronic devices.

Moreover, our focus in teaching having recently shifted significantly towards ICT, it has turned out to be challenging to follow up on the sustainability agenda. However, we are conscious of the fact that increasing levels of consumption of electronic devices will trigger all sorts of end-of-life cycle issues regarding the recycling of wastes.

### Our Learnings

In our recent Master of Advanced Studies in Energy Economy program, to which our faculty is providing the energy engineering part, we have found it a quite demanding task to introduce aspects of sustainability, responsible leadership, and ethics.

As of now, certain aspects of ecology and society add on to the mainstream energy economics curriculum and are therefore somewhat marginalized. However, it clearly fails to deliver on topics of product stewardship and sustainability.

Moreover, our focus in teaching having recently shifted significantly towards ICT, it has turned out to be challenging to follow up on the sustainability agenda. However,

### Our Objectives

In the long run, we believe our university has a fascinating opportunity to use its multi-disciplinary faculties in the area of sustainability. We will therefore continue to develop a transdisciplinary dialogue which we view as the only way to deal with the complexity involved in sustainable development issues.

As a first step in this direction, we will participate in a commission to prepare for the establishment of an energy competence center at HTW Chur, where we will aim to advance our sustainability agenda in the field of energy efficiency. Also, we will continue to involve ourselves in the improvement of resource efficiency on a daily base.
Our Ambitions in Multimedia Production

Multimedia production is our university’s most recent endeavour. It is unique due to the fact that at present there is no comparable Swiss faculty. We have been starting a number of study programs while developing our research agenda. Besides classic media development, our thematic focus is on immaterial cultural heritage where we collaborate with UNESCO. We believe promotion of traditional and contemporary forms of expression is of utmost importance in our epoch since cultural diversity underscores the inimitability and plurality of social and societal identities. It is a precondition for cultural exchange, innovation, and collaboration, between the individual and society. In a small country like Switzerland the significance of our cultural heritage is indisputable for our diversity in linguistic and regional cultures, social cohesion, and cultural identities, as well as the image our country is conveying to the world.

Sustainability to us also means developing completely new ideas that are inexistent today. HTW, in order to allow sustainable development to actually manifest itself, must become more open and ready to accept the necessary changes. The way we use IT infrastructure for instance at HTW is not sustainable and lacks future orientation. It reminds us of the early times when IT as a function was more centralized in organizations.

Today we live in the era of the internet where functions and data are distributed all over the globe, a fact we need to incorporate in our own practice. Hence, we are in need of more open mindedness and diversity in our own university. The big challenge lies in having a sense for creating order as well as at the same time allowing for a certain amount of creative disorder. This will enable us to become an institution that is truly sustainability-driven.

Our Library Helps to Amplify Our Efforts

HTW Chur has two libraries covering the areas of technics and business & economics. While the first one is focused on information science, civil engineering and architecture, informatics and telecommunication, and media engineering, the latter has its focus on business administration, entrepreneurship, human resources, and tourism & hospitality management.

As it is forming part of the largest Swiss academic libraries network, all library users are free to have book requests sent from other libraries to Chur without any charge. The catalogue of this network includes approximately 4.2m items.

As member of the Consortium of the Swiss Universities of Applied Sciences, our libraries enable students, scholars, and staff members to access more than 60 databases covering different subject areas. Amongst others we provide access to ABI Inform, a data base containing full text journals on all relevant topics, such as “Energy & Ecology Business”, “Environment, Development and Sustainability” and “Sustainability Science”.

In collaboration with HTW students once or twice a year the university library has been organizing “movie nights” on a variety of subjects in the areas of ecology and sustainability. We have had tremendous success presenting movies such as “Home” and “Shark Water” which was put on screen in cooperation with www.filmeuerdieerde.ch, likewise initiated by HTW students. This series is bound to be continued.

Also the library is currently building its thematic catalogue to better cover all aspects of sustainable development, responsible leadership and social entrepreneurship.
Throughout the last decade we have been starting a number of ‘greening our campus’ initiatives. In an educational institution emphasis is clearly given to enhancing efficiency of building infrastructure in general as well as optimizing resource-consuming processes. In particular, on the demand side for us a predominant area has and will be energy savings. On the supply side, new energy production methods displaying a certain pilot character are of special interest for an institution that calls an energy-engineering faculty integral part of its profile.

Resource efficiency on the other hand has to do with lowering levels of consumption and hence is subject to all members of our University. In this respect, we have initiated a number of awareness campaigns in the past, in particular regarding conscious use of ICT infrastructure and waste materials from consumer products in our offices and classrooms. Recycling has become a standard procedure applied to all disposables at their end of use.

Driven by our will to further reduce costs simply from an economic perspective, we are constantly looking for ways and means to improve our resource management systems.

**Our Achievements and Our Learnings**

On the demand side we have achieved efficiency gains by virtualizing our server architecture and replacing air conditioning by installing intelligent computer-controlled heating and fresh-air ventilating systems, in particular regarding our information systems. We have been constantly substituting our outdated computer hardware for cutting-edge energy-saving technology. For instance, our PC screens auto-adapt their brightness to external light conditions. We have hardly any local printers left in our offices while we keep installing highly efficient centralized copying and printing machines. In general, when purchasing new equipment energy efficiency is one of the central criteria for selection. Our student PC’s are shut off automatically at night. As regards our electric lighting systems, we are increasing LED light bulbs throughout our University and make use of energy saving lamps wherever it is feasible while improving efficiency standards.

On the supply side, we have installed a heat and power co-generation unit to complement with our central heating system.

As part of a campaign to raise employee awareness for sustainable mobility in general, and PRME in particular, 14 teams from our University have participated in a Swiss initiative to promote commuting by bicycle.

**Our Objectives**

Improving efficiency to us is quite simply a natural way to enhance our economic performance. Within our financial resource limits we will therefore continue to realize an infrastructure that is meeting the highest standards available while deploying cutting-edge technology. In the near- to medium-term, regarding extant efficiency levels we will reiterate a recent building efficiency study while involving students from our engineering faculty. Finally, we will intensify our efforts to raise awareness with our employees while looking for new public initiatives to take part in.
The Principles for Responsible Management Education (PRME), supported by the United Nations, is a global platform and an urgent call for business schools and universities worldwide to fill that gap - and gradually adapt their curricula, research, teaching methodologies and institutional strategies to the new business challenges and opportunities. PRME has been adopted by more than 300 institutions. Those principles are:

**Principle 1**
We will develop the capabilities of students to be future generators of sustainable value for business and society at large and to work for an inclusive and sustainable global economy.

**Principle 2**
We will incorporate into our academic activities and curricula the values of global social responsibility as portrayed in international initiatives such as the United Nations Global Compact.

**Principle 3**
We will create educational frameworks, materials, processes and environments that enable effective learning experiences for responsible leadership.

**Principle 4**
We will engage in conceptual and empirical research that advances our understanding about the role, dynamics, and impact of corporations in the creation of sustainable social, environmental and economic value.

**Principle 5**
We will interact with managers of business corporations to extend our knowledge of their challenges in meeting social and environmental responsibilities and to explore jointly effective approaches to meeting these challenges.

**Principle 6**
We will facilitate and support dialogue and debate among educators, business, government, consumers, media, civil society organizations and other interested groups and stakeholders on critical issues related to global social responsibility and sustainability.

We understand that our own organizational practices should serve as examples of the values and attitudes we convey to our students.

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