Half-way to realizing our vision of co-creating the «Swiss Alpine Sustainable University», over the last two years our institution has seen an accelerating cadence of change. Following our aspiration to implement the PRME as widely as possible we have initiated a number of innovative activities in collaborating with our internal and external stakeholders.

Building a thriving PRME community has been our goal ever since we became signatory in 2009. By hosting the inaugural Responsible Management Education Research Conference we co-initiated a «forum for on-going research on the manifold initiatives undertaken to implement PRME in business teaching for the future we want». This signature event was organized by the recently founded PRME Regional Chapter DACH as integral part of its second regional meeting. We are grateful to our colleagues from the PRME academic community who have been highly instrumental in bringing this unique academic un-conference on stage.

Our third SIP report is coherent with our earlier reports. Relevant PRME principles are referred to by little blue arrows on each the following pages.

Contents

Rector’s statement 2
PRME community building 3
Curriculum Development 4
Students’ Applied Research 6
Service Learning 7
Entrepreneurial Management 8
Tourism Research 10
Economic Policy Research 11
ICT Engineering Research 12
Civil Engineering Research 13
Multimedia Production 14
Sustainability University Level 15
Greening HTW Chur 16
Renewing our commitment

University of Applied Sciences HTW Chur takes implementation of PRME to the next level

As we have outlined in our 2nd Sharing Information on Progress Report, we have laid the foundation for a successful implementation by including the Principles for Responsible Management Education into our University’s mission statement, our code of conduct, as well as our strategy.

Over the last two years, this has resulted in a number of coordinated efforts to make our engagement more tangible within our University as well as more visible for our stakeholders. Meanwhile, we have defined «sustainability» as core element of our strategy, thereby reflecting our earlier pledge to develop our institution into the «Swiss Alpine Sustainable University» until the year 2020.

Five years after we have made this commitment, the results of our activities look highly promising:

Firstly, PRME until today has become an integral part of our institutional epistemology. Only a few of our colleagues remain completely ignorant of what PRME is all about, while the large majority has a basic knowledge about why we are doing it and what we are delivering to be part of it. We are happy to see an emerging culture of support for this critical element of our strategy.

Secondly, our governing board has realized the value of our University being part of the PRME initiative and they are now actively supporting our efforts to meet our aspirations, internally as well as externally.

Thirdly, we have been pro-active in building the community of PRME signatories within the German-speaking part of Europe, the so-called D-A-CH countries. We are proud to be one of the three co-founding members of the PRME regional chapter DACH and as such to co-initiate specific activities that will serve the wider PRME community.

Lastly, but certainly not least, we feel honored to take an active role in the PRME champions group, where we collaborate with the most progressive PRME signatories to move the initiative into its next phase of transition.

All in all, we are convinced that our engagement in this important global initiative is of great value to all of our stakeholders and we are happy to reconfirm our active support of PRME.

Prof. Juerg Kessler, Rector
University of Applied Sciences HTW Chur
Building the PRME Regional Chapter DACH

After two years of preparation, following a joint initiative of Pforzheim University, Germany, Management Center Innsbruck, Austria, and HTW Chur, in February 2014 the PRME Chapter DACH inaugurated. Twelve PRME signatory institutions from the German-speaking European countries followed our call to co-found the first regional chapter to become officially established within the PRME community.

We are most grateful to our friends at MCI, Austria, for their hosting the first official PRME DACH conference, involving an impressive number of distinguished keynote speakers in a charming atmosphere of traditional Tyrolean hospitality. They inspired us to take this idea of building a thriving regional community one step further: in October 2014, HTW Chur hosted the 2nd DACH chapter meeting which was enhanced by the inaugural Responsible Management Education Research Conference as a forum for ongoing research on the manifold initiatives undertaken to implement PRME in business teaching for the future we want.

All researchers within the wider PRME community, keen on sharing their research results and academic papers on RME, were invited to this unique academic un-conference, the program of which covered a broad spectrum of topical themes such as Poverty Alleviation through Business Education, Social Entrepreneurship Education, Anti-Corruption & Business Integrity, Innovation Ethics & Responsible Innovation, Sustainable Innovation, Sustainability and Responsibility in Food & Agriculture, Sustainable Development and Economic Growth, Curriculum Change, Humanistic Paradigm in Executive Education, and Systems Thinking and Responsible Management Education. We are convinced in the future this conference format will continue to bring together researchers from all PRME working groups and chapters as a unique opportunity to further build the RME research agenda.

Engaging with the PRME Champions Group

HTW Chur has been eagerly challenging itself to run as a pioneering institution in education for sustainable development (ESD). Our recent membership with the group of PRME champions reflects this aspiration. We are now collaborating with the most progressive business schools in the global PRME community to help re-create this unique initiative such that its transition into its next phase of maturation will become reality.

At the PRME champions meeting in New York City in July 2014, we were delighted to connect with a large number of like-minded colleagues and are grateful to the team of the PRME secretariat for having organized this convention in conjunction with the UN Global Compact LEAD group of companies.
Sharing Information on Progress Report 2014

Fundamentals of Sustainability
To Be Rolled Out Across Study Programs

At the 2012 PRME summit in Rio de Janeiro, our university has pledged itself to be an active supporter of the Rio+20 Higher Education Initiative. We have adopted the Education for Sustainable Development (ESD) concept, which aims to help people to develop their attitudes, skills, perspectives and knowledge to make informed decisions and act upon them for the benefit of themselves and others, now and in the long-term future.

Building on an earlier pilot study on one of our core study programs, the BSc in Business Administration, where students showed a desire for a more elaborate form of teaching with regard to sustainability, concrete measures for an integration of ESD followed.

As an initial step, in 2013 all colleagues taking responsibility for the design of core modules in our BScBA program gathered for a workshop to reflect on a “picture from the inside” with regard to ESD subject matters in their particular disciplines. Participants then offered suggestions how they would make concrete steps to integrate particular aspects of ESD in their teaching. Finally, upon selecting a reasonable number of practical measures, participants committed themselves to implement them during the next year of studies.

How to monitor progress:
We convened to assign this particular responsibility to the respective teaching staff. To assist them with their self-control, we decided to have them review all course syllabi and include as mandatory requirement a section on how the respective course design integrates the PRME principles and aspects of SD.

A recent recapitulation, however, found that less than twenty percent of all lecturers actually complied with this voluntary agreement. We are now looking to take this engagement into the next round by renewing their commitment to substantially increase the level of active participation.

Over the recent decade, our university has successfully developed and implemented a series of change initiatives which have typically involved all of its academic activities. Having started by positioning itself as an «Entrepreneurial University» about ten years ago (see our SIP report 2012), more recently we started profiling it by the complementary theme «Innovation».

Meanwhile, our University’s core value «Responsibility for Sustainable Development» has been significantly gaining attention as well as increasing its momentum. The holistic integration of all three aspects creates an emerging «Swiss Alpine Sustainable University», where entrepreneurial initiatives drive innovation for sustainable development. As more widely applicable components, the findings of this project will be summarized in form of a tutorial to support the didactics of SD. In addition, a module for continued formation of teaching staff will be developed and rolled out across all our departments and faculties (to be followed up in our next SIP report).

Strategic Initiative «Teaching Sustainability»

How to monitor progress:
We convened to assign this particular responsibility to the respective teaching staff. To assist them with their self-control, we decided to have them review all course syllabi and include as mandatory requirement a section on how the respective course design integrates the PRME principles and aspects of SD.

A recent recapitulation, however, found that less than twenty percent of all lecturers actually complied with this voluntary agreement. We are now looking to take this engagement into the next round by renewing their commitment to substantially increase the level of active participation.

Over the recent decade, our university has successfully developed and implemented a series of change initiatives which have typically involved all of its academic activities. Having started by positioning itself as an «Entrepreneurial University» about ten years ago (see our SIP report 2012), more recently we started profiling it by the complementary theme «Innovation».

Meanwhile, our University’s core value «Responsibility for Sustainable Development» has been significantly gaining attention as well as increasing its momentum. The holistic integration of all three aspects creates an emerging «Swiss Alpine Sustainable University», where entrepreneurial initiatives drive innovation for sustainable development. As more widely applicable components, the findings of this project will be summarized in form of a tutorial to support the didactics of SD. In addition, a module for continued formation of teaching staff will be developed and rolled out across all our departments and faculties (to be followed up in our next SIP report).
Advances in Curriculum Development

Our tourism faculty has been consolidating the progress made in mainstreaming sustainability over the recent years. At BSc level, a new introductory course on fundamentals of SD and tourism has become mandatory for all students. The elective «Minor in Sustainability Management» is a complementary module, covering topics such as tourism as an interrelated human-environment system, efficient use of limited natural resources as sink and source in tourism, the negative contribution of tourism to environmental change, limiting factors of environmental change on tourism, adaptation and mitigation strategies, responsibility and the role for development and poverty reduction, application of theory and implementation of sustainability management concepts in tourism management.

In our MScBA «Major in Tourism», the modules «Human-Environment Systems & Environmental Change», «Sustainable Tourism Management» and «Socio-Economic Development through Tourism» provide students with deep insights into the sustainability agenda in the tourism industry and beyond.

In our MScBA «Major in New Business», we have been emphasizing sustainability-related topics ever since we started that particular program. In the meantime, further core modules in the fields of «Innovation Management» and «Business Internationalization» have been integrating these aspects step-by-step.

Our Achievements and Our Learnings

Regarding our development indicators, we have been observing important progress in a number of areas. Besides our university-wide initiative «Teaching Sustainability» to include SD as a formal subject into all study programs, in the meantime our earlier initiatives have helped to advance the integration of ESD-related aspects into all levels of our teaching.

Our core module on «Innovation Management» has adopted SD as one of its central criteria for evaluating innovation projects. It has been introduced in our business administration study programs and is currently digested by more than 250 students per year. As a result, students find themselves confronted with the requirements to not just innovate, but to create more «responsible innovation».

Using core teaching modules as vehicles for introducing and rolling out has proven to be a successful strategy. We are happy our executive programs have started integrating SD-related subjects in their curricula. Besides the afore-mentioned core module on innovation management, our EMBA program now offers a two-day seminar on «Sustainable Business Conduct».

While these are clear signs of change, we are still waiting for our executive programs to integrate ethics and SD subjects in a more consistent manner to fully comply with the HTW Chur Code of Conduct.

Reporting on Our Objectives

We report on our strategic objectives as follows:

> integration of ethical behavior, responsible leadership, and sustainability within all study programs across all faculties of our University is well on its way to becoming a normality;
> short courses at executive level have begun to integrate aspects of SD;
> communicating gaps to program managers on a regular base and motivation for adequate adaptation measures at all levels needs to be revisited.

We are delivering on our medium-term agenda in the following action points:

> to institutionalize an operational support function for continued roll-out by establishing a PRME-Secretariat;
> to conceive and to enact a monitoring function of SD mainstreaming by our newly founded Commission for Sustainability.
Our Track Record in Applied Research

We are happy to see an increasing number of our students taking initiative in developing our SD agenda. It has been a wonderful experience to see the creativity and entrepreneurial spirit in some of our recent MSc theses. The number of thesis projects in the fields of SD and responsible management has been steadily increasing over the last five years. We observe our MScBA students taking on more challenging and in most cases self-initiated tasks:

- «Sustainability Practices at Credit Suisse» (Thomas Pool),
- «Improving the Market linkages for small-scale farmers in Western Province Zambia» (Mathias Zoephel),
- «Sustainable Tourism Development in Developing Countries» (Albert Koblbauer), and
- «Cradle-to-Cradle Business Model» (Chris Egger),
all of which are inspired by the idea to make Our World a Better Place.

Management Research in Bangladeshi Ready-made Garment Factories

This study was conducted in Dhaka, Bangladesh for the German Development Agency (GIZ). Its purpose is to illustrate the internal communication system of Bangladeshi ready-made garment factories by determining the existence or lack thereof, intensity and forms of its communication flows. Taking the numerous incidents of labor unrest as a starting point, the objective is to confirm and/or disconfirm a communication barrier that would thwart any modes to predict and hence prevent work disruptions. The absence of a functioning formal channel within the factory, the lack of effective labor representation and the rare physical presence of the owners in the factories clearly confirm the existence of a communication barrier. The findings finally suggest this barrier to be unintended and to place it within the top management. (Helene Blumer, MSc student Major New Business)

Students Drive Responsible Management Education

The PRME philosophy views «Method», its third principle, as one of the most important levers to change the business world by instilling SD and ethical behavior in our students. Findings from our earlier research have suggested that students long for a more consistent framework when dealing with these highly complex issues.

By offering opportunities for self-led project work in all academic realms we have found them to be most willing to invest time and energy in some of the purportedly off-mainstream subjects. It has been an exciting experience to bring business students to and across the borders of their discipline in teaching modules such as «Futures Studies» and «Sustainable Business Development».

We will continue to work around the edges of our disciplines, not least in order to walk the talk and live up to the promise of «Interdisciplinarity» in our University’s «Torque» strategy.
Our Track Record in Service Learning

Student brigades are groups of passionate volunteers mobilizing towards social change. 2013 and 2014 saw two HTW student brigades travel to communities in Ghana as members of GlobalBrigades.org, the world’s largest student-led global health and SD organization. The teams of between 15 and 20 students spent two weeks continuing their work on a water project in the villages of rural Ghana. In order to raise the necessary funding of more than kCHF 30 each the teams initiated a variety of activities across HTW campus as well as several community initiatives. An association under Swiss law institutionalizes Global Brigades Switzerland as a formal chapter in order to disseminate the program around Swiss universities.

Students Deliver Social Benefits

While our student startup VeloChurier is up and running, we have been starting new student enterprises that deliver social benefits. In 2014, a group of committed business students has been developing a business concept for stationary group therapy of obese children and youths. It involves several professional experts in nutrition, sports, and psychology.

Students for Society is an initiative to help raise awareness within the HTW students community and beyond for societal issues and to support fundraising for social projects through its traditional «Muffin Day».

Various media appearances were achieved during the last two years by holding podium discussions on socio-political issues, such as the role of «Islam in Switzerland», or on the slopes after a ski resort had been closed for summer. The team initiated a «Mountain Cleanup» and spent a day with the community of Engelberg to benefit society.

While our student startup VeloChurier is up and running, we have been starting new student enterprises that deliver social benefits. In 2014, a group of committed business students has been developing a business concept for stationary group therapy of obese children and youths. It involves several professional experts in nutrition, sports, and psychology.

Students for Society is an initiative to help raise awareness within the HTW students community and beyond for societal issues and to support fundraising for social projects through its traditional «Muffin Day».

Various media appearances were achieved during the last two years by holding podium discussions on socio-political issues, such as the role of «Islam in Switzerland», or on the slopes after a ski resort had been closed for summer. The team initiated a «Mountain Cleanup» and spent a day with the community of Engelberg to benefit society.

Reporting on Our Objectives

We firmly believe that our students through our programs, having turned into responsible leaders for themselves and the communities they will serve, are the most important assets of HTW Chur and will determine its legacy.

We will hence persist in:
> fostering student initiatives at all levels,
> growing student-led startup activities,
> and creating new forms of student engagement.
Our Track Record in Business Research

The HTW research agenda 2012-2016 now integrates Responsibility & SD topics in our three departments, its faculties and research institutes. Consequently, our Entrepreneurial Management department has complemented its core research domains «Private» and «Public Entrepreneurship» by «Corporate Responsibility» (CR). This has facilitated the application for internal research grants, which in turn are an important precondition for external funding of research projects. By opening this gateway we have seen research activities expanding around SD and CR, in particular in line with our earlier activities in Business Integrity and Socially Responsible Innovation.

Our networking for SD remains a cornerstone of our research agenda and our services for the business community. Our specific competencies in these fields position our research institutes as attractive partners for business and public bodies.

Profiling Our Business Integrity Agenda

A major research and development project has recently been completed in the field of Business Integrity. The HONEST simulation and training package has been tested in its pilot phase by 170 business professionals from various functions, 150 undergraduate and graduate students, as well as 40 compliance professionals. Meanwhile, our interdisciplinary Business Integrity research network has been continuously expanding to cover a wider spectrum of issues regarding an enlarged scope of industries and themes, such as construction industry, media integrity, and social media.

Our research network fosters exchange of practical experiences. It is a competent partner for all issues around Business Integrity, corruption prevention, and media integrity while it is advocating its inclusion in research and teaching.

Anti-Corruption Pilot School News

Corruption prevention has been introduced as focal theme in our Business Ethics module for undergraduate students. Ruth Nief- fer is now offering teaching sequences on questions such as «How to make money with my ethical conviction?» involving as practical case www.thegreenfairy.ch, «What is the professional profile of a Compliance Officer?» (Siemens AG). Ruth gained national and regional media attention for her innovative teaching concept.
Sustainable Lifestyles Research

In the area of service management and marketing, we have launched a project commissioned by the federal agency CTI on the perceived quality of sustainable services from a customer perspective. In this project, amongst others we are partnering with Mobility, a Swiss cooperative that has established the concept of car-sharing, a regional energy utility and leader in the field of energy efficiency business, and an innovative provider of recycling services. The purpose of this project is to assist service companies to apply a customer-centric logic when designing their service offerings for a sustainable lifestyle.

Based on psychological theories we have identified distinct dimensions of sustainable services and will further explore their effects on customers’ perceptions of service experiences.

Volunteering enjoys a high status in society, in particular in the Alpine region, as communities could not function as desired without numerous volunteers bringing in their time and energy.

Our Center for Public Management collaborates with the EURAC and Apollis research centers in Bolzano (South Tyrol) on a guideline for promoting volunteer work in communities on care-taking of social, environmental as well as cultural needs.

Entrepreneurship & Sustainability

Our Institute for Entrepreneurship SIFE offers support and training for start-ups to develop an idea into a running business. Students are offered training during the entire process from developing their ideas into a business model through to the market launch of its products.

Interestingly, the combined effects of a number of laterally connected initiatives have helped to spur the engagement of a number of colleagues in the field of cooperation for SD. As a consequence, we find it less difficult to argue for sufficient funding in these diverse areas of activity.

Similar to their on-going engagement with cewas, the Swiss-based international center of competence in the field of sustainable sanitation and water resource management, Kerstin Wagner and Michael Beier have been teaching entrepreneurial skills for social entrepreneurs within the network www.OurCommonFood.ch, an innovation lab, start-up programme and a community of food entrepreneurs, shaping tomorrow’s food system by fostering and supporting innovation towards improving the way we produce, market and consume food. The scope and depth of their engagement in the social enterprise sector has been continuously intensifying.

Our Achievements and Our Learnings

Patiently waiting for effects to materialize is one of the most important virtues when creating an agenda for business research focusing on SD and CR. Some of the activities making higher impact will take sufficient time to gain necessary momentum.

Revising our institutional research agenda has been a groundbreaking measure for success across the board.

When developing our activities at the cross-section of responsibility, sustainability, and entrepreneurship, we have continued to rely on lateral mechanisms of control as successful strategy.

Reporting on Our Objectives

We have been making further progress on our long-term objectives:

> establishing sustainability entrepreneurship and responsible leadership in our research and knowledge transfer,
> advocating an inclusion of ethical aspects in all our academic activities,
> instilling inclination with our staff to accommodate ideas around SD.

Our medium-term objectives call on us

> to keep demanding an ethical code of conduct for our researchers;
> to persist in reaching out to our communities by aligning our research with the sustainability agenda in general,
> and to foster open dialogue involving our communities of practice.
Our Track Record in Tourism Research

Sustainability concerns all aspects of the tourism sector, as for instance when referring to mitigation and adaptation strategies to environmental changes and the contribution of tourism to a sustainable regional development. Our institutional strategy of research defines SD as cross-cutting issue. At our Institute for Research in Tourism and Leisure (ITF) we are pro-actively tackling the complex issues around our four key areas of excellence in sustainable tourism in order to advance the SD agenda at our school, in our community and its regional context, and beyond.

Sustainability and responsible management are embedded throughout the entire range of research and consulting. ITF has a specific sustainability field of research established in addition to its inclusion within the main thematic fields «Destination Development», «Consumer behavior», «Hospitality», «eTourism», and «Sports & Leisure».

In destination development we have been engaged in building a model for simulating qualitative growth of destinations, where different services and businesses create new clusters to generate both income and social benefits along a lower environmental footprint.

Our investigations in social-ecological networks and their resilience to environmental change are internationally recognized. In the field of consumer behavior, we have been following up on the initial «Green Tourist» study in the Swiss National Park. We have conducted a comparative study to investigate whether a substantial share of tourists in a conventional ski destination are «greener» and more responsibly acting.

New topics extending our scope of research in tourism and SD include renewable energy infrastructures and competing cultural ecosystem services in regions of high aesthetic value and nature-based tourism, fair development of peripheral regions, and intercultural aspects of new tourism markets such as China. In the area of sports tourism and leisure, ITF has participated in developing the leading assessment and labeling tool for sustainability in the outdoor sports industry.

Involving Students in Field Research

The traditional and well-known mountain destination San Bernardino in Grisons, Switzerland, had to finally close its ski area. Ever since, winter tourism in the area has been decreasing significantly and has induced economic and social decay. The main objective is to re-consider development options, to facilitate visionary change in a systems approach, and to provide a wider base for stakeholders’ decisions on the future of San Bernardino. Are there other, out-of-the-box options that may be better suited to redevelop tourism-based economy in a sustainable way?

Our Achievements and Our Learnings

An important and most difficult part of a transdisciplinary project is its start, the initial integration of practitioners with scientists when deriving a common language to address a problem.

In this early phase, students can play an important role to start the process with a low threshold, building the base for joint trust and understanding without much risk of time and money, and the simple acceptance of failure. This great learning experience creates a win-win situation for all participants by providing project support as well as rich learning opportunities.

Reporting on Our Objectives

We have made considerable progress in reaching our strategic objectives and are committed to further intensifying our efforts to promote mainstreaming sustainability in the tourism industry via research and development.
Economic Policy Research

Rooted in regional economics, our activities in the area of economic policy research aim at a better understanding of a variety of issues directly or indirectly related to the SD agenda. Our approach is mainly driven by the demand side as represented by our research partners from industry and public administrations, but also through national and international research programs.

The value-added of parks and culture production is of particular interest to cantonal and national authorities, since natural parks have been established with the goal of contributing to sustainable regional development that goes beyond mere environmental protection targets. In this context, we elaborate a user-friendly evaluation tool to help managers of parks and cultural institutions to assess and report their performance with regard to the creation of value-added and jobs. In an extension, the implementation of a comprehensive sustainability assessment tool is envisaged.

Synergies between organic agriculture and the tourism industry are investigated in collaboration with Bio Grischun, the association of organic producers in the Grisons. The project focuses on the optimization of the supply chain management between organic producers and their customers in the hotel business and gastronomy. In addition, new fields of cooperation (eg cross-marketing) between these two branches are evaluated.

The joint development of tourism and health industries in the canton of Grisons is a topic of particular interest to cantonal and local stakeholders. Fundamental research questions are on how to develop and introduce new conjoint products of both sectors in a sustainable way and their contributions to regional development. We are envisaging a new research field in the area of health tourism and regional development.

Regional family-oriented policies have been a topic of continued interest. In a series of projects, we analyzed the system of daycare facilities in different municipalities in Eastern Switzerland. At a more general level, this research aims at comparing relevant offerings for families with children attending pre- and primary schools.

Our Achievements and Our Learnings

We have continued to develop our research program in line with our University’s SD agenda while 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.

Reporting on 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:

- our research aims to contribute to the development of exigent forms of employment;
- to develop human capacity adequately to extant needs;
- to derive environmentally sound solutions.

The Future of Swiss Hydropower

Hydropower is crucial for the Energy Strategy 2050 of the Swiss confederation as well as the development of alpine cantons and municipalities. Being part of a research consortium of four different universities, we will investigate together with our partners from academia and energy industry the issues of hydropower operations, investments as well as regional impact and sustainability assessment. Our research will mainly be based on local case studies with industry partners and local stakeholders, and the first-time adaptation of an existing sustainability assessment method to the issues of hydropower operation and investment.
Sharing Information on Progress Report 2014

Energy Engineering on Efficiency Track

The global debate on energy and climate change has led us to believe that promoting energy efficiency is mandatory. The federal program «suissenergie» has set priorities for our research into efficiency and respective services to become a central building block of our agenda in energy engineering.

For the design of responsible energy solutions we believe it is necessary to analyze and discuss systems holistically and to look at potential alterations on aggregate levels. It is common practice in the energy field using «sustainability» as a catchword to justify all sorts of quick fixes which later-on turn out to be deceptive packages. In sum, optimizing specific system components may create adverse effects in other parts while overall performance may suffer.

Our cantonal energy law demands for sustainable energy consumption, in particular through promotion of efficiency and renewable energy production, energy consulting and formation of energy experts.

We have been repositioning our energy laboratories in line with these requirements to become a fully integrated platform for diverse efficiency related market offerings. While continuing to expand our Swiss Alpine Laboratories for Testing of Energy Efficiency (SALT) we have been focusing as main topics energy efficiency in household appliances, luminescent objects for private and professional use, and energy meters.

As part of our institutional strategy to promote interdisciplinary research, we are involved in research projects that combine economic, information and engineering competencies.

Lamps Compete on Energy Efficiency

In our SALT Light measurement laboratory we conduct Fotogoniometer measurements according to European standards in order to make data widely comparable. In addition, the data can be simulated in a lighting software. For office lighting, it is common practice to have data stored in a database and perform simulations which is not the case for residential lighting. For our industry partner Topten.ch we have developed a new measurement and evaluation method with the aim of rationalizing the measurement process and use existing eu-lumdat files for review. The project was completed in 2013 and handed over for measurement mode.

Our Learnings and Our Challenges

It has proven a difficult task to reposition our energy engineering activities, in particular with regard to its key role in the field of energy research. Meanwhile, our earlier strategy has been compromised to align it with the respective SD-related activities in our social sciences and civil engineering faculties.

Our Master of Advanced Studies in Energy Economics program, where we are providing the energy engineering part, has continued to be reluctant to including aspects of SD, responsible leadership, and ethics. It clearly fails to deliver on topics of product stewardship and sustainability.

Reporting on Our Objectives

Continuing to develop a trans-disciplinary dialogue between our university’s faculties in the area of sustainability remains as the reasonable way to deal with the complexity involved in issues of energy efficiency.

While our envisaged multidisciplinary energy competence center did not prove feasible, we will persist in building our energy efficiency activities and involving ourselves in the improvement of resource efficiency of our university on a daily base.
Our Institute for Building in the Alpine Region (IBAR) focuses parts of its research activities on «Natural Hazards». One of the preeminent issues concerns erosion control by wood wool. We have made initial implementation attempts to demonstrate how wood wool can be used in form of special mats for the purpose of slope protection. This material replaces similar mats made of petroleum based plastics. We intend to continue this research project and will further develop our contributions to Alpine environmental safeguarding.

Sustainable Optimization of Swiss Hotel Properties is a research project the purpose of which is to show how the huge extant portfolio can be developed considering SD criteria while focusing on the enhancement of operational processes and the efficient use of energy.

**Our Achievements and Our Learnings**

We have been constantly revising our study programs by more consistently integrating sustainability as cross-cutting issue for instance in the fields of mobility infrastructure as well as hydraulic construction. By preparing research projects involving our students we have made considerable progress on our SD agenda. Our professional formation program on «Sustainable Construction» has been enhanced by a module on «Building Physics» as a foundation for energy efficient and sustainable construction.

**When Attitude Defines Form**

Young Architecture from Graubünden – A research and exhibition project on contemporary architecture in the Grisons.

In recent years the diversity in architectural solutions has increased tremendously in the Canton of Grisons. The architectural solutions needed in the bigger urban centers such as Chur, St. Moritz or Davos, are very different from the ones smaller centres such as Ilanz or Scuol or even small towns further in the valleys as Lumnezia or Ardez, notably regarding the financial possibilities. Furthermore, the historical architecture with its typical stone buildings or wooden houses calls for other design solutions than normal standard buildings. The further away a town is from larger centers, the more reasonable it is to build with local materials, use local workers and profit from such handicraft. Even financially, the most simple solution is not always the most interesting one – this gives specific design solutions a chance to succeed. In the Grisons a younger generation of architects take care of the specific needs of particular places where such a culturally-sensitive development is possible.

An exhibition and lecture series organized by Prof. Daniel A. Walser exemplified some of the specific solutions. The projects highlight the design attitude of the designer in a broad variety, combining aspects of topologies and historical relations of contemporary architecture, changes in urban contexts and the respective planning development, essential architecture idea as a basic meaning of architecture, and the development of specific local solutions in rural areas. The solutions strengthen the periphery and its use of architecture potential. For a living architectural culture it is very important not just to demonstrate architecture in an exhibition, but to keep up a lively discussion and exchange with the public. Hence, a discussion series has supported the Chur exhibition.
Our Multi-Media Production team, which is the most recently founded faculty at our institution, has been realizing projects that spur creativity across the whole University. We are happy to see some of the most visible output coming from our students. There have been a number of completed projects that have gained national and international attention, such as the video «It’s A Plastic World» by Andreas Tanner, highlighted globally by a coalition of anti-plastic initiatives.

A second example giving evidence for the case is Mario von Ow and Kevin Oeler’s production «2048», a short video clip that envisions the future of energy production as private activity and consumers have to make an extra effort for it. This professional video clip was produced to support the idea of personal responsibility for energy saving. It earned the 2014 «Sustainability Award» of the Swiss foundation Consumer Forum. The film impressed the jury by its professional staging.

Our Multimedia Production faculty, though having an important voice in SD-related matters, still needs to learn in more profound ways about the important potential contributions it can make to help advance our institutional SD agenda. We are confident this will materializes in the near future.
Integrating Sustainable Development into Our Institutional Logic

In the early days of our journey towards becoming a sustainability-driven institution, a handful of like-minded colleagues gathered to express their will to engage in this ambitious change effort. About a decade later, while our basic ideas have stayed uncompromised, we are still searching for helpful ways and means to further the approach our institution will take in the future – instead of staying part of the problem, ie continuing «business as usual» – to become part of the solution.

As stated by our Rector Jürg Kessler in his opening remarks, we have been ardently fostering a culture of support for this initiative, which has since grown to become our engagement for PRME. We have found it highly significant to organize our joint efforts to attain higher visibility within our institution.

A Commission for Sustainability has been enacted just recently to offer support and consult with the governing bodies of our university. As extended version, this commission represents a continuation and more consistently organized body and builds on experiences made by our prior PRME team. Building on a self-governing statute, it will integrate a distinct number of delegates from all strands of our university.

It has been a challenging task to bring diverse individuals together under this new umbrella leading the debate on «Sustainability: Why, What, and How?». We are confident to become operational while continuing to develop our project portfolio.

Project work on sustainability matters in whichever discipline needs to create its particular focus of attention inside and outside of our institution. While this SIP report is a helpful means to communicate some of the SD-relevant work that has been undertaken, we have decided to enhance our respective activities by labeling them «HTW Chur Center for Sustainability».

All members of our university contributing to our SD agenda through their teaching methods, research, partnerships, and dialogue initiatives may use this label to promote their projects.

We will build it into a brand, as we are convinced this label will become instrumental as a coherent base and a positive lever to help continuously spur activities in all our academic domains.

Our Achievements and Our Learnings

Changing the culture of an institution is the most challenging leadership task. As Peter Drucker has put it: «Culture Eats Strategy for Breakfast». Over the last decade, our institution has seen a number of change efforts, usually accompanied by recurring strategy work that in most cases was conducted according to a top-down logic. It has been an interesting experience to observe how fundamental positions, like the core value base of SD, once adopted by a sufficiently large number of its members, instill their messages in formal discussion of institutional strategy. Over the years, we have been steadily gaining support from all relevant institutional elements of our University, its governing board, university management, our academic colleagues as well as from our students and our external stakeholder groups.

Once the «Why?» question had been answered for everyone concerned, debate has moved on to the questions of «What» and «How». We are now in the position to focus on projects which, just a few years back, would not have been given formal consent to be part of our institutional activities.

Creating this holistic sense of coherence has proven to be a critical factor in advancing the strategic conversation in our institution on SD, responsibility, and ethics, to a point where individuals and teams have chosen to become productive.
Our Track Record in Greening Our Campus

We have been persisting in implementing responsible and ecologically conscious practices by giving emphasis to enhancing efficiency of building infrastructure in general as well as optimizing resource-consuming processes. Economic viability of efficiency projects endorses sustainability as central criterion and guides all our activities.

On the demand side, we continue to tap the full energy saving potential. Our new control system for energy-consuming processes has recently been implemented, which will provide real-time data and will enable us to reach a new level of optimization. We have been eagerly promoting installation of energy-efficient lighting schemes, in particular by exchanging light bulbs and installing sensors.

On the supply side, we have adopted new energy production schemes, for instance by installing a new power-heat cogeneration facility in our largest building to induce electricity cost savings.

Lowering levels of consumption is subject to all members of our University. Awareness campaigns have improved conscious use of ICT infrastructure and waste materials in our offices and classrooms.

Recycling is a standard procedure applied to all disposables at end of use. We have lowered costs of paper-intensive processes while redesigning our procurement processes according to FSC certified papers.

Implementation of sustainability metrics has been on our agenda for some time now. It has proven to be a difficult challenge for our university to develop a general system of key sustainability indicators which we will report on in the future on a regular base. Measuring our progress on the SD agenda is an indispensable component to inform our balanced scorecard. Our goal is to include sustainability metrics in our quality management systems.

Employee Health and Sustainability

The central resource for a learning organization are its employees who will strive to build its sustainable future. Hence, employee health is an important cornerstone of our SD strategy. We have been implementing a Health Commission in our University to promote healthy habits with our employees. For instance, we now offer our employees special rates for health and fitness clubs.

Fostering Our Partnership

„Filme für die Erde – Movies for Our Planet“ has as its purpose to increase dissemination of video materials on the state of the Our Planet and the future of humankind. Our cooperation agreement has made our University become an official venue for its annual movie festivals held across Switzerland for the fourth consecutive year. We have been extending our respective activities around cinemas and other regional venues.

Our Achievements and Our Learnings

Redesigning the resource base of an education institution is a long-term continuous process. We have been successfully following up on our efforts to further reduce resource throughput. Our procurement department has implemented sustainability screening as regular procedure for selection of suppliers.

Promoting bicycle commuting: this country-wide initiative has been supported by our teams for the fifth consecutive year.
Supported by the United Nations, PRME is a global platform for business schools and universities worldwide to adapt their curricula, research, teaching methodologies and institutional strategies to the new business challenges and opportunities in an era of unprecedented global change. By the end of 2014, PRME has been adopted by 580 institutions.

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

Acknowledgements
For their invaluable contributions to this report we are grateful to our colleagues:

Amo Arpagaus, EMBA
Prof. Christian Auer
Prof. Dr. Frank Bau

Cristina Carlin, ID expert FH
Prof. Dr. Urs Dahinden
Prof. Dr. Christian Hauser
Prof. Dr. Werner Hediger
Prof. Tanja Hess
Prof. Urs Kappeler
Prof. Dr. Tobias Luthe
Robert Müller, MBA

Ruth Neffet, MSc Sociology
Prof. Dr. Ulrich Hauser-Ehinger
Prof. Dr. Kerstin Wagner
Daniel A. Walser, Dipl. Architekt ETH
Prof. Dr. Andreas Ziltener

Graphics & Design by Tanja Hess

For all inquiries on this report please contact the editor:
Prof. Dr. Lutz E. Schlange
University of Applied Sciences HTW Chur
Pulvermühlestrasse 57
CH-7004 Chur

go +41 (0)81 286 39 66
fax +41 (0)81 286 24 00
email: lutz.schlange@htwchur.ch