

**HTW** Chur

Hochschule für Technik und Wirtschaft  
University of Applied Sciences



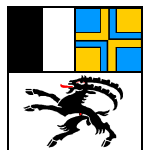
# Cleantech – Aktivitäten an der HTW Chur

Prof. Dr. Lutz E. Schlange / Prof. Dr. Ivan Nikitin

**Innovatives Stoffstrom-Management  
für KMU**

Donnerstag, 17. März 2011, 17.00 Uhr

SIFE - Praxisorientierte Forschung und angewandtes Wissen für Wachstum und Entwicklung



Mit freundlicher Unterstützung:

**Amt für Wirtschaft und Tourismus Graubünden**

Uffizi per economia e turissem dal Grischun

Ufficio dell'economia e del turismo dei Grigioni



## Unsere Mission : Verantwortung für Nachhaltigkeit

**PRME** Principles for Responsible  
Management Education

- ▶ Ziel > Herausbildung verantwortungsvoller und nachhaltig denkender Führungskräfte
- ▶ Sechs Prinzipien > [www.unprme.org](http://www.unprme.org)
- ▶ Erster Fortschrittsbericht der HTW Chur 2010



**HTW Chur**



Hochschule für Technik und Wirtschaft  
University of Applied Sciences

December 2010

# PRME Principles for Responsible Management Education

## 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

difference at an early stage of personal professional formation.



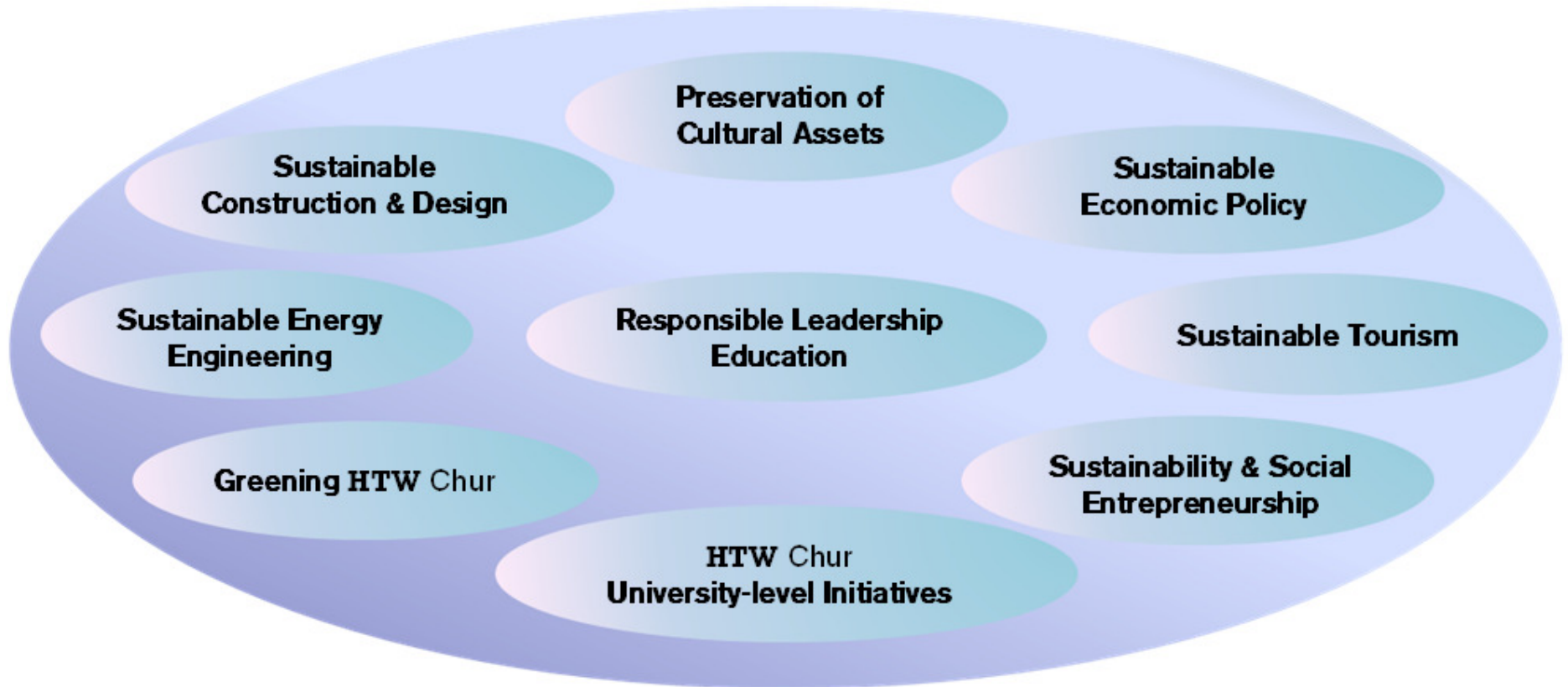
the learnings from the 1st PRME SIP Analysis report. Overall, our report is designed in accordance with the SIP reporting recommendations. However, since it also serves as a document for internal communication to promote PRME

### 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

# Verantwortung für Nachhaltigkeit : Unsere Themenfelder





## 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 pro-actively assisting technology providers in developing and bringing their ideas and offerings successfully 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.

Research

Partnership

Dialogue

« ...there is ample evidence of progress on the development of long-term, sustainable partnerships and dialogue forums to comfort

## Our Achievements and Our Learnings

## Ziele der heutigen Veranstaltung

- ▶ Ideen für Anwendungsforschung diskutieren
- ▶ Partnerschaften aufbauen
- ▶ Dialog über Zukunftsherausforderungen führen



**HTW** Chur



Hochschule für Technik und Wirtschaft  
University of Applied Sciences



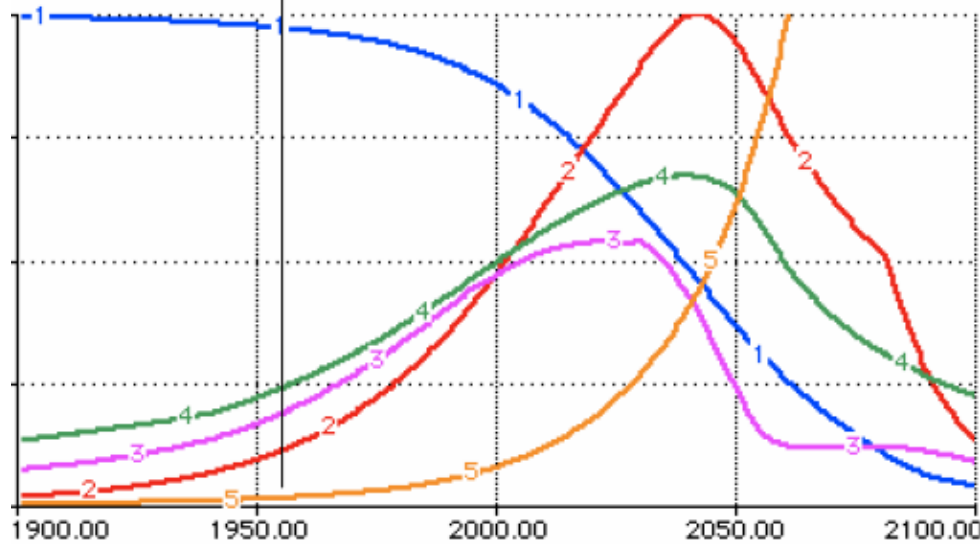
**Vielen Dank für Ihre  
Aufmerksamkeit.**

Lutz E. Schlange

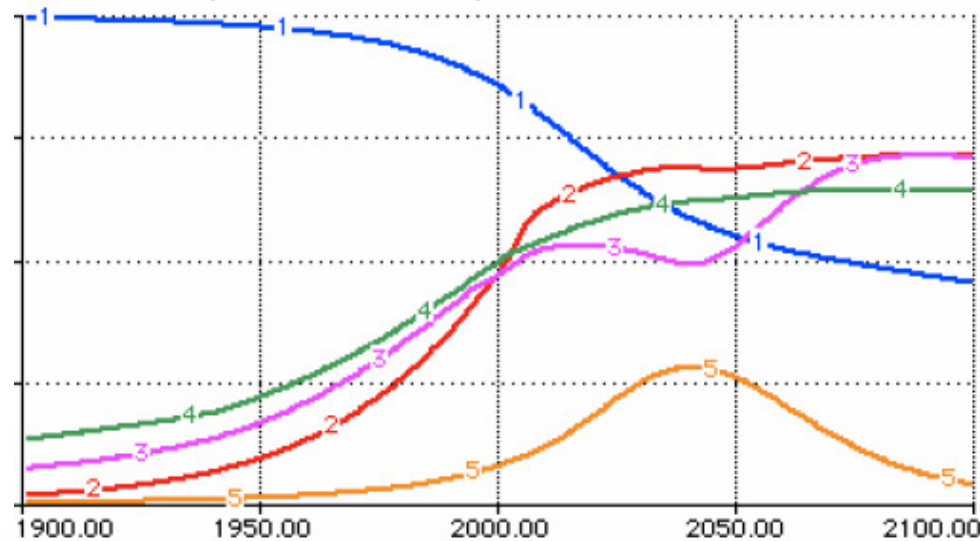
17. März 2011

# Grenzen des Wachstums und Bedeutung der Nachhaltigkeit

**ohne** nachhaltige Entwicklung



**mit** nachhaltiger Entwicklung



1: Ressourcenverfügbarkeit

2: Industrieproduktion

3: Nahrungsmittelproduktion

4: Weltbevölkerung

5: Schadstoffausstoss

Presentation to the ETH Colloquium  
21 January 2005; Dennis Meadows

# Nachhaltigkeit als eine der Kernkompetenzen der HTW

- ▶ Um dies zu erreichen :



- ▶ Bisherige Forschungsprojekte

- > Wahrnehmung der Nachhaltigkeitsthematik in Unternehmen

- > Stoffstromoptimierungspotenziale

- Evaluation der Thematik bei KMU
- bei ausgesuchten Unternehmen

- ▶ Einbezug «Cradle-to-Cradle» > Albin Kälin



**Vielen Dank für Ihre  
Aufmerksamkeit.**

Ivan Nikitin

17. März 2011