

# Sustainable Change Management

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## Working Group Sustainable Change Management

2nd and 3rd Sessions

Thursday April 24, 2008 & Friday April 25, 2008

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# Sustainable change management

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## Why a workshop on sustainable change management?

- 1st ISCN Conference: Improving buildings → changing mindsets!
  - Add fourth working group on change management and education
- From incremental to systemic change management
  - Moving beyond eco-efficiency → organizational decision-making process
  - Moving beyond campus → interactive stakeholder-relations
- UNESCO Decade on Education for Sustainable Development
  - important role of education and learning in sustainable development
  - promote the vision and transition to sustainable development *through all forms* of education, public awareness and training



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# What is a sustainable campus?

“...it is a higher educational institution, as a whole or as a part, that addresses, involves and promotes, on a regional or a global level, the minimization of negative environmental, economic, societal, and health effects generated in the use of their resources in order to fulfill its functions of teaching, research, outreach and partnership, and stewardship in ways to help society make the transition to sustainable lifestyles”.

- Systemic and comprehensive approach (“all spheres”)
- Scales on which today’s activities impact (spatial and time)
- Economic growth (social justness/ efficiency in use of resources)
- Full costs of proposals (identification, compensation, offsetting)
- All stakeholder’s cooperation and participation

(Velazquez et al, 2006, Journal of Cleaner Production, 14, p. 812)



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# Approach: “Buildings that teach”

## Common aspects to bridge the build environment to the institution

- *Decrease throughput*: How to make a campus more sustainable?
- *Incremental and systemic progress*: How to organize and implement systemic & inclusive change? How to measure, monitor & motivate?
- *Sustainability education as a core function*: How to teach and support students research on sustainability issues?
- *Cross-functional reach*: How to incorporate teaching, research, operations and service?
- *Cross-institutional action*: How to manage relations to international peers, the home community and international communities?

(Shriberg, Higher Education Policy 15 (2002) p.164.)

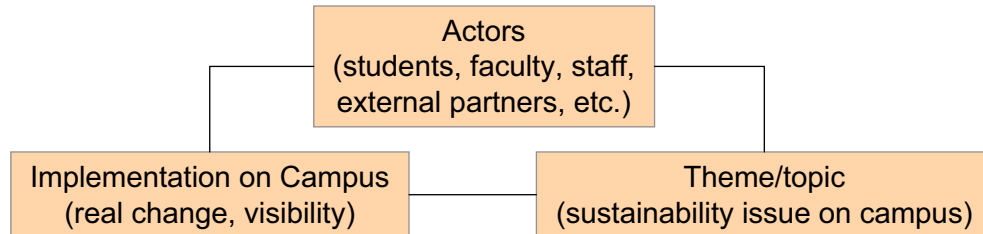


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# What we did

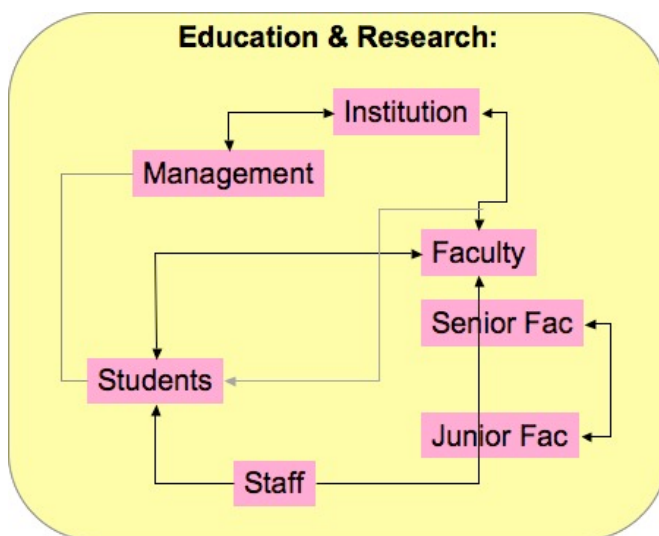
- Starting Point: Pilot projects
- Analytical lenses: (1) **Change Agents**, (2) **Education**, (3) **Management**
- Objective: Case studies → generic strategy → individual follow up at university



- 6 case studies from different perspectives (management, faculty, student)
- Expectations of participants on learning outcomes, intermediate summary
- 4 internal working groups investigating case studies regarding elements for generic strategy: (a) content, (b) organization, (c) process management, (d) implementation.
- **Synthesis needs to be done!**



# Preliminary findings: change agents



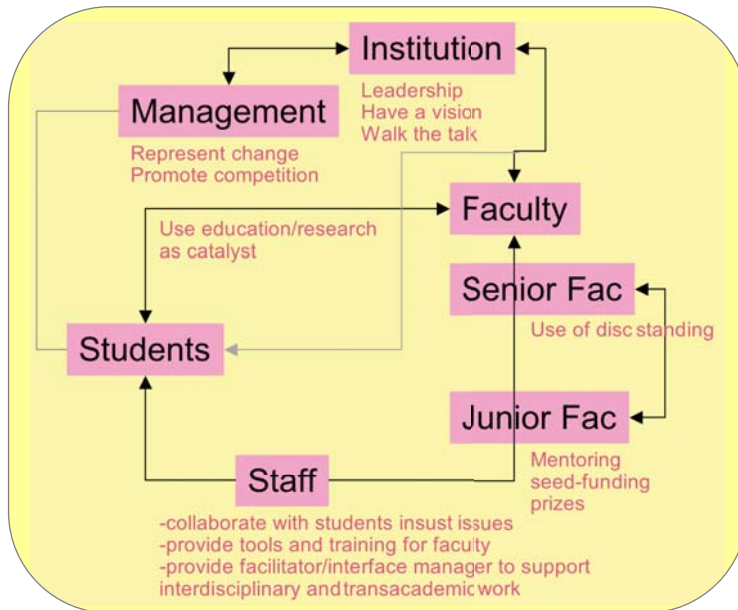
- Integrate relevant actors
- Motivated faculty/staff  
Self-Interest, Reputation, Ethics
- Student Organizations
- Task Force -> Coordinator
- External leadership
- (regional/international) co-operations & networks

However:

- Stakeholder involvement varies depending on the definition of concept of SD!



## Preliminary findings: change agents



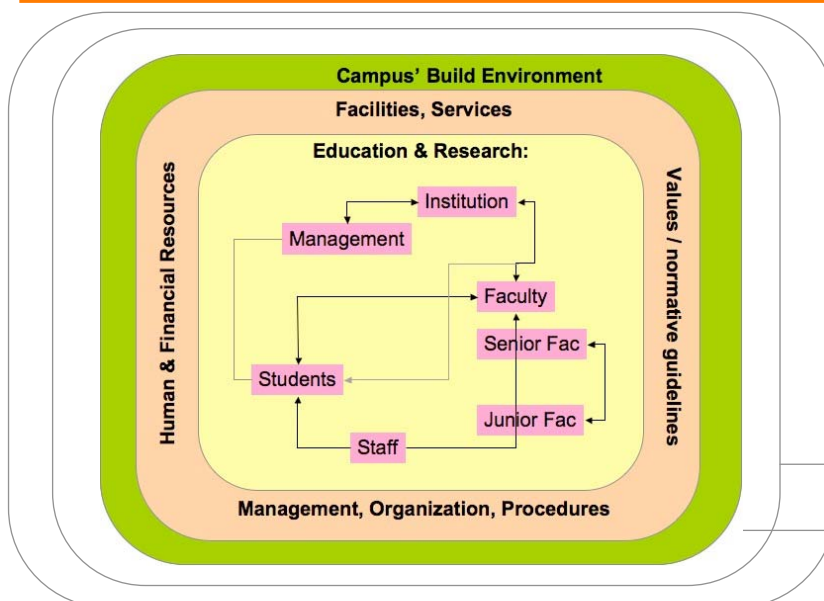
- Grass Roots:
  - Competence & Capacities
- Top Level Leadership.
  - Authority
- Upper Middle Management:
  - System Integration



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## Universities: boundary-less institutions



- Preliminary findings\*: three streams are crucial:
- Environmental Management System
  - Public participation & social responsibility
  - Promote SD in teaching and research

“World”

“Society”

Campus

\* Alshuwaikhat, H.M., Abubakar, I. Journal of Cleaner Production (2008) in press.



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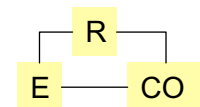
## Preliminary findings: management

- *Reports*: document (what can be measured, can be managed), make visible, urge policy-changes (Delta: vision - results!)
- *Inventory*: Baseline to design decision-making processes & DM-tools to create ownership
- *Process*: combination of evolutionary/ad-hoc & strategic/guided processes; informal -> formal structures
- *Time*: different pace of stakeholders, students = fastest, and gone quickly; combine short-term (easy, acceptance) and long-term strategies (substantial)
- *Time & effort*: develop services that accommodate these needs
- *Business-model*: accounting practice; cost-benefit-ratio

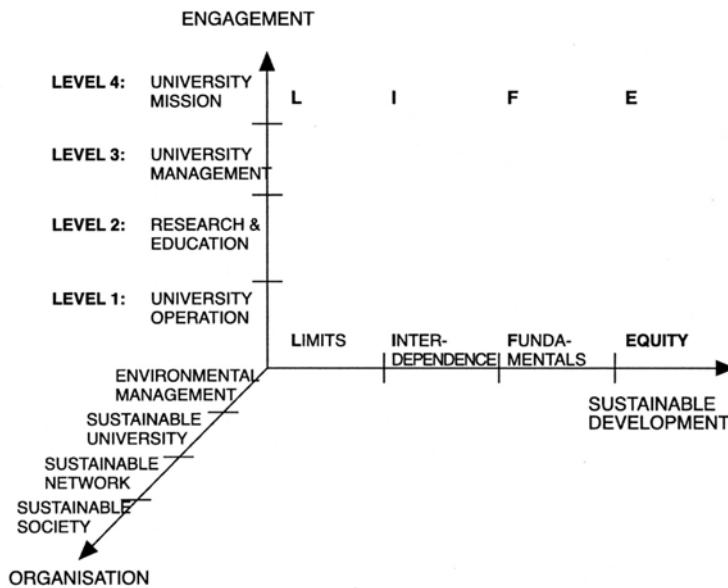


## Preliminary findings: “education”

- “Education” on SD concerns all
  - within university (institutional memory -> organizational learning), outside
  - engage students formally (curricula) and get engaged by informal student activities
- Create new incentives: professor & PhD-positions, awards for best master thesis, twinning between junior & senior faculty, co-publications
- SD sells: the campus as a learning laboratory
  - aligning costs for “greening the campus” with academic and educational power
  - integrating SD in curricula and management => innovative way to get funding
  - audits of SD programs to reveal the delta between concept & implementation
- Further research: relation between increase in knowledge and decrease of impacts? (per student per year and extrapolated over a lifetime)



# Classification for best-practice



J. Reiser, "Sustainable Footprint"

C. Erlich, "Pedagogical Innovation"

E. Omrcen, "From EMS to SMS"

C. Mader, "Student Leadership"

Source: Van Weenen, International Journal of Sustainability in Higher Education 1, (2000) p.30



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# Requirements, success-factors, pitfalls

- *Content*: How to identify and prioritize important issues?
  - How to measure & compare, balance qualitative and quantitative data, account for the complexity of the system?
- *Organization*: How to involve the relevant stakeholders?
  - Whom? At what stage? How (role)? How to motivate & inform?
- *Process management*: How to manage such a project?
  - How to get started? (opportunities?) How to extend over time and issues?
- *Implementation*: What is needed for preparation and implementation?
  - Resources needed (HR, financial, time, political support, etc.)
  - How to implement it? Top-down, bottom-up?



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# Preliminary findings: Group Work 1

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- Student-led monitoring of energy use and Co2 emissions at ETH Campus:
  - Content
    - Identify scope and content (prioritization), worthy, meaningful, impactful, measurable, verifiable, achievable, success-factors: achievable, realistic, appropriate; pitfalls: time-constrained, too ambitious, expectations too high for change and pace, people engage differently with each other; risks: can credits for students be secured?!
  - Organization
    - Identifying change agents (allies: heads of institutions-faculty-assistant-mandated-unpaid?; symbiosis vs. competition); who holds the decision-making keys, identify motivational aspects (money, academic credits & rigor, volunteer: recognition); pitfalls: longevity of project (project must be taken over by management), ownership of staff for new scope of work.
  - Management
    - Managing expectations for students and staff (how to achieve credits for formal education? Alternative: pay for volunteers; how to make the transition from one level (student-project) to the administrative level (or other, when project is approved); faculty needs funding; students need to think about “task” and “process”.
  - Implementation
    - Prove of concept, identify problems on the small level before rolling out the projects, large scale project requires successful pilot; clear planning (schedule, roles, responsibilities).
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# Preliminary findings: Group Work 2

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- Content
    - Identify and assess a theme and its context (problems) by a multi-disciplinary task force (faculty, management, students, etc.); identify emerging problems early enough, create solutions and concrete actions; communicate SD-issues within university (talk about tangible issues, not generic); let students bring up topics; Design a project by taking into account benchmarks (incl. Evaluation of project performance)
  - Organization
    - Everyone should be included (students, staff, administration, procurement, esp. the one's affected/involved; from inside/outside university); integrate researchers (find ways for them to yield for academic credits); how to involve stakeholders: keep SD-agenda simple, light, tangible and real; highlight the positive aspects; use innovative & fun communicating-tools; use competitive tools such as awards & prizes to take more people in.
  - Management
    - Clear process management (create businessplan by way of competition), step-by-step (project by project) to allow for adjustments within the process, only allow achievable projects to the start;
  - Implementation
    - Bottom-up or top-down? Mutual combination is needed, make a circle out of it; start with student-based projects (cheap) to prove the case for capital intensive projects; incentive for students to do real-world-problems is bigger than recycling the old ones.
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## Preliminary findings: Group Work 3

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- Idea
    - Creating a new campus -> a new building -> existing buildings. (Change existing building operations and maintenance (LEED and similar standards for operation and maintenance) toward sustainable system-model & use building itself as pedagogical tool (pedagogical reasons / values).
  - Content
    - Goal setting: define sustainable building (measure performance, set targets and benchmarks) define pedagogical tools (e.g.: student surveys (to see what happened after the project e.g.: have new courses or contents been integrated into the curricula? ); find methods to bring the hidden aspects to the forefront so that people can see the results; set tangible and real targets.
  - Organization (case for CH)
    - State-Department of Education: operations, capital, planning; Upper Management: Project manager and planners who handle capital projects (financial decision-making power); Middle/lower Management: operations/physical plant (facilities director, building manager, operations assistant, custodians (project-responsibility). Needs buy-in from the very beginning.
  - Management
    - To start off, take a student-and-faculty-driven project focused on due diligence. Work with project managers & planners from the beginning. Propose concept, then implement pilot project.
  - Implementation: pilot-project (= project works!) -> adopt
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## Preliminary findings: Group Work 4

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### How to identify issues and get started?

- You need to consider:
    - at what level in the org you are aiming the project
    - what are you trying to achieve – aligned to a mainstream strategy?
    - who are the stakeholders - its not everyone e.g.: not all need to involve students
  - Possible starting points:
    - initial audit to identify key issues and areas to work on eg: Uni of Copenhagen. Pre-condition needs buy-in from the top
    - pressure from students – they identified recycling as an issue initially which started it all eg: Catalonia
    - pilot projects – followed by organic growth
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## Preliminary findings: Group Work 4

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### Involving relevant stakeholders

- Hook it onto something else where stakeholders are already involved and interested in – eg: Bologna process at KTH. But this needed strong leadership and political tactics. NB: We agree sustainability is not a strategy – you need to integrate it into other things
- Go for the win-win, clarify what is in it for others, flatter their expertise!
- Communication is essential
- Identify the key players who will motivate others.
- External stakeholders being involved can help to keep a rational perspective. But it can be hard to get them interested. It is worth spending time to find ways of doing this. Maybe offering them some research results in return?
- Emphasis should not be purely commercial – this can be a problem as business interest can then be too dominate and create conflicts of interest. Make sure stakeholder community is balanced in terms of vested interests.



## Preliminary findings: Group Work 4

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### Preparation and Implementation

- Top Down/Bottom Up: Getting 'the top' to make the decisions is not the hard part, its making sure they are implemented that is difficult. Decisions are not necessarily implemented or even communicated properly. Proposals need to specify what is required for implementation.
- Implementation needs to be driven by 'do-ers'. You need to have someone who is dedicated to ensuring the project is implemented – not done 'on the side of someone's desk'
- One of the key problems is that many administrative leaders are ex-academics and therefore not 'do-ers' – they are not managers! But if you can get managers and academics working together to implement then this can be successful. A good combination of practical thinking and theoretical thinking.
- More than half of the project implementation must be concerned with things like communication and motivating e.g.: softer stuff – rather than the 'hard' technology or process implementation.



## Preliminary findings: Group Work 4

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### Process- and project management

- Co-ordination early on is critical especially having professional project management. It's never as simple as you think it is.
  - To get started you have to be realistic. It depends on the maturity of sustainability management within the university, and if you are in the early stages it helps to do something practical so you have something to show as evidence before trying to get resources and support for wider project management resource. eg: simple recycling scheme in one department. Organic growth of small projects is one way of doing it, demonstrating clear benefits along the way.
  - Focus has to be on continually improving the process – failed projects along the way are just learning opportunities.
  - The visible target e.g.: carbon targets is like the top of an iceberg – the bulk of the project is everything under the waterline which is all the processes, culture change, politics etc.
  - KEY POINT: The project process itself has to be sustainable itself. Small pilot projects which are dependent upon external funding are not necessarily sustainable.
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## Program, Friday April 25, 2008

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### Preparing the plenary

- Introduction (10')
    - Additional items for the agenda?
    - Review expectations of 1st day
  - Preparing the plenary (40')
    - Next steps for WG IV
    - Relation to other working groups
    - Feedback to the ISCN as such
  - Additional items (10')
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# Final feedback to the plenary (I)

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- Next steps of Working Group IV “Sustainable Change Management”
    - Statement: Vision & mission, activities
    - Suggestion I: Virtual meetings and guest lectures series “Education for Sustainable Development”
      - Hosted by KTH
      - Speakers and guests from inside and outside university, topics indicated by members
    - Suggestion II: System- and actor-analysis on structural opportunities and impediments:
      - Master-thesis-Projects
      - foci according to specific context and policy of each participating university
      - cross-cultural comparison supported by advisory board of WG IV
    - Main findings / outcomes by participants of Working Group 4
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# Main findings/outcomes by participants

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- Driving forces / change agents:
    - Trust : how to build and maintain trust among the university leaders?
    - Middle management: when and how to approach and integrate middle management?
  - Methods for measurement (of sustainability performance/outcomes):
    - How do methods and measurements lead into implementation (institutional processes, standards)?
    - What can we learn from the different methods applied at PUC, Gothenburg University or Harvard (→ synthesis?) Each method should be specified by its owner to allow for exchange among members of WG4 and for further development of methods in general;
    - comparison of outcomes → not in terms of absolute figures but in terms of trends;
    - Matrix with themes and experiences of universities related to these themes → comparison and mutual learning
  - Change processes
    - Diversity of change processes → how to share this with others? (→ editing a book with essays?);
    - Change in foci: what happened after a successful inventory and MFA? Complemented good-practice with bad-practices, stories of failure and highlight the ways of dealing with challenges.
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## Final feedback to the plenary (II)

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- What do we want from other working groups? What do we want to contribute?
    - Award: Award on participation as task for WG IV?
    - Charter on Standards: Education does not appear in charter
    - Financial Systems: Visibility of costs, savings, returns of investments; other?
  - What is missing in the ISCN?
    - Share good experiences, failures, and difficulties (do not strive for best-practice)
    - Exceed eco-efficiency → move to a comprehensive notion of a sustainable campus
    - Exchange on SD as a process being embedded in a specific cultural context
    - LIFE: Sustainability is about Limits, Interdependence, Fundamentals, Equity; question and specify the notion of growth
    - Work on discourse: SD is not difficult, expensive and fuzzy, it is just do be done
    - Intranet for exchange among members of the network
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## Review on expectations

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- Innovative (!) ideas to integration SD in campus'
  - How to get started (catalysts: thematic, policy, social behavior)
  - How to secure leadership and commitment
  - How to involve students into change process
  - How to overcome rigid structures
  - How to create incentive-structure that acknowledges scientific rigor
  - International comparison
  - International networks (for support, to jointly advance activities)
- 

