



**REAL CHANGE**  
FROM SUSTAINABLE TALK TO ACTION



## A Framework for Strategic Sustainable Development (FSSD) to Complement the Ecological Footprint

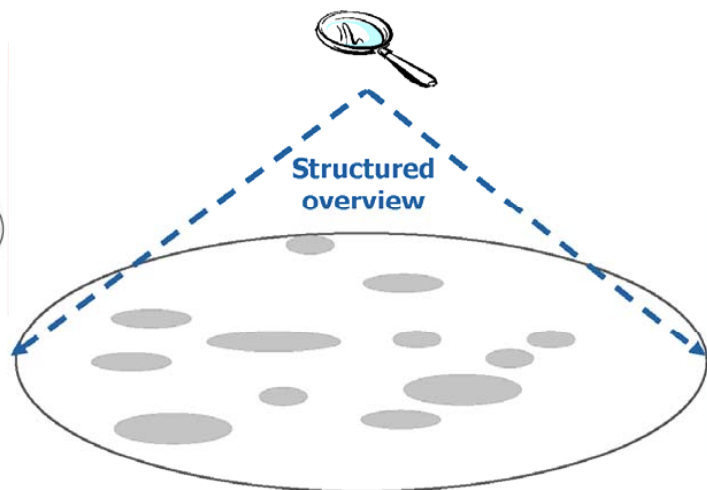
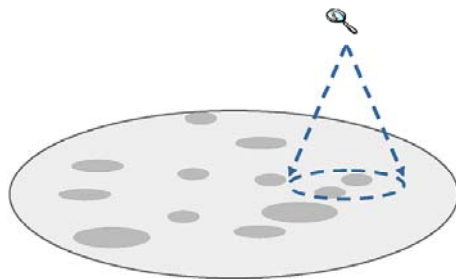
**Ella Susanne Lawton** MSLS LLB BSc  
Project Co-Leader  
PhD Candidate



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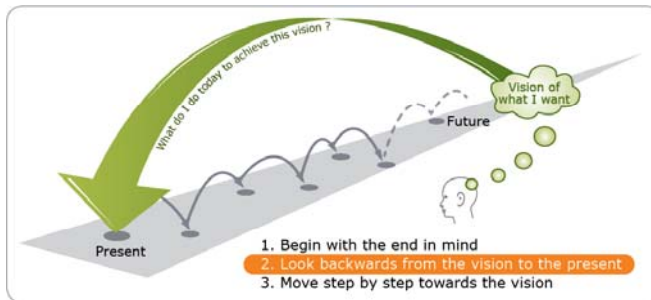
## Framework for Strategic Sustainable Development

- Looks to get past the issues of reductionism.



## Framework for Strategic Sustainable Development

The FSSD builds on backcasting from basic and robust principles for sustainable development.



SYSTEM CONDITIONS FOR SUSTAINABILITY

In a sustainable society, nature is not subject to systematically increasing...

-  ...concentrations of substances extracted from the earth's crust,
-  ...concentrations of substances produced by society,
-  ...degradation by physical means,

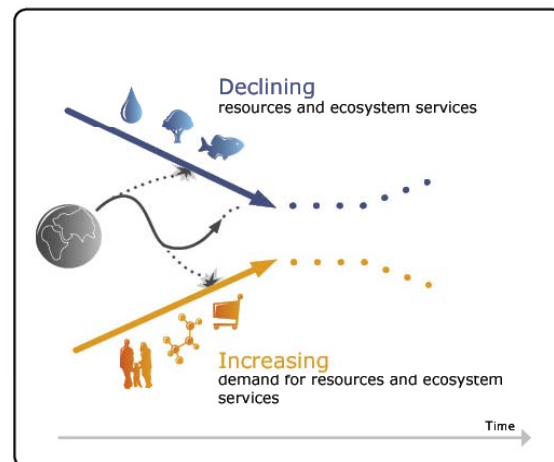
and, in that society...

-  ...people are not subject to conditions that systematically undermine their capacity to meet their needs.

*'Exiting opportunities will be revealed as soon as we understand the gap between where we are now, and a sustainable society.'*

## Framework for Strategic Sustainable Development

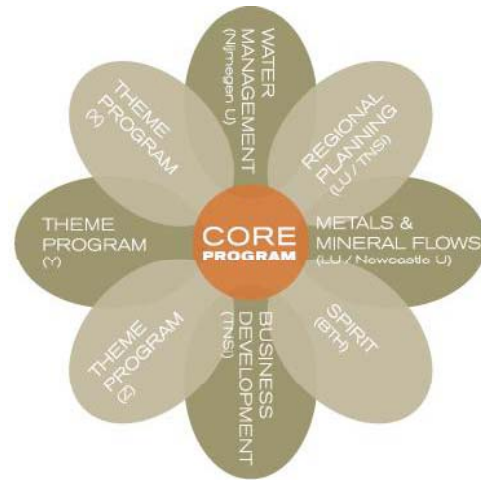
1. Analyse current practices from a full sustainability perspective,
2. Discover solutions to problems and out of the box visions that may design the problem out of the system,
3. Find strategic and economically feasible or competitive investment routes to arrive at such solutions and visions, and
4. To select and inform the tools needed for the transition.



## Real Change

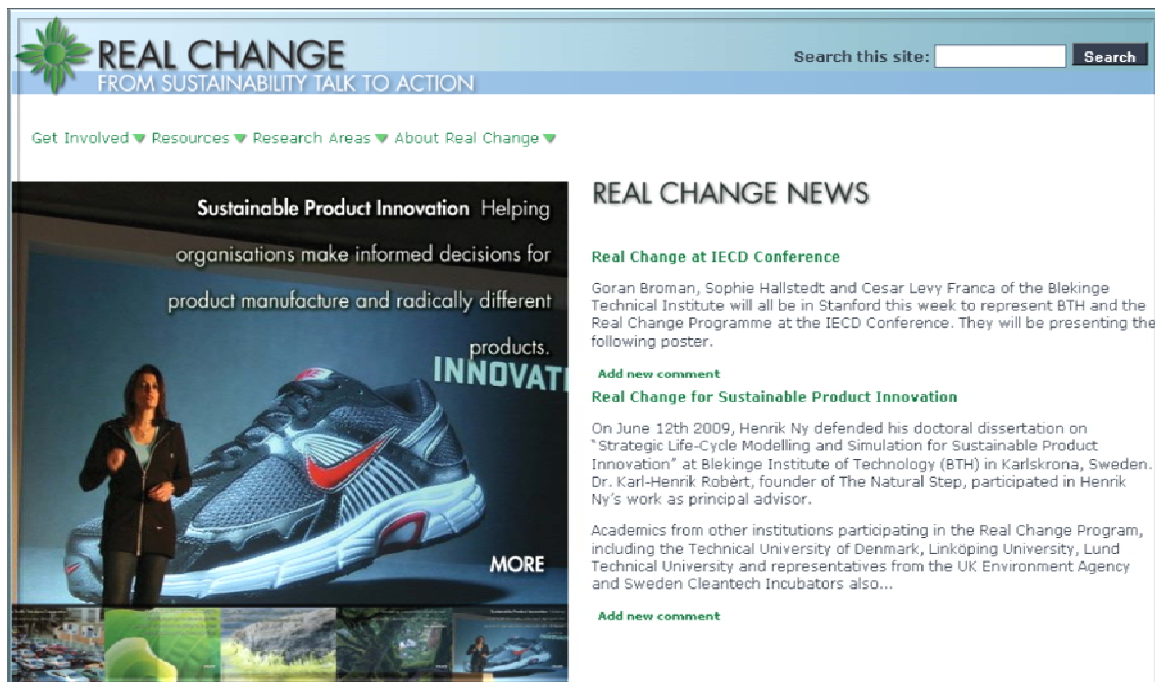
- Development of theory, methodology and practice
- Cross disciplinary and cross-sector cooperation.

“The overriding structure of the program is to create a systematic learning loop between theory, through method, to concrete action and back to theory.”



REAL CHANGE is not about talk  
- it is about strategic and tangible action!

[www.realchange.nu](http://www.realchange.nu)




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**Sustainable Product Innovation** Helping organisations make informed decisions for product manufacture and radically different products.



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**REAL CHANGE NEWS**

**Real Change at IECD Conference**

Goran Broman, Sophie Hallstedt and Cesar Levy Franca of the Blekinge Technical Institute will all be in Stanford this week to represent BTH and the Real Change Programme at the IECD Conference. They will be presenting the following poster.

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**Real Change for Sustainable Product Innovation**

On June 12th 2009, Henrik Ny defended his doctoral dissertation on "Strategic Life-Cycle Modelling and Simulation for Sustainable Product Innovation" at Blekinge Institute of Technology (BTH) in Karlskrona, Sweden. Dr. Karl-Henrik Robèrt, founder of The Natural Step, participated in Henrik Ny's work as principal advisor.

Academics from other institutions participating in the Real Change Program, including the Technical University of Denmark, Linköping University, Lund Technical University and representatives from the UK Environment Agency and Sweden Cleantech Incubators also...

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## Footprinting Urban Form and NZ Lifestyles

- Aim: Provide knowledge on how to lower the Ecological Footprints that make up human living patterns, in order to guide policies and practices for robust future settlement development.
- Outcomes:
  - Footprinting tools for use by local communities
  - Community engagement and education
  - Long term community strategies towards sustainability
- Three year initial Government funding
- Collaborative effort



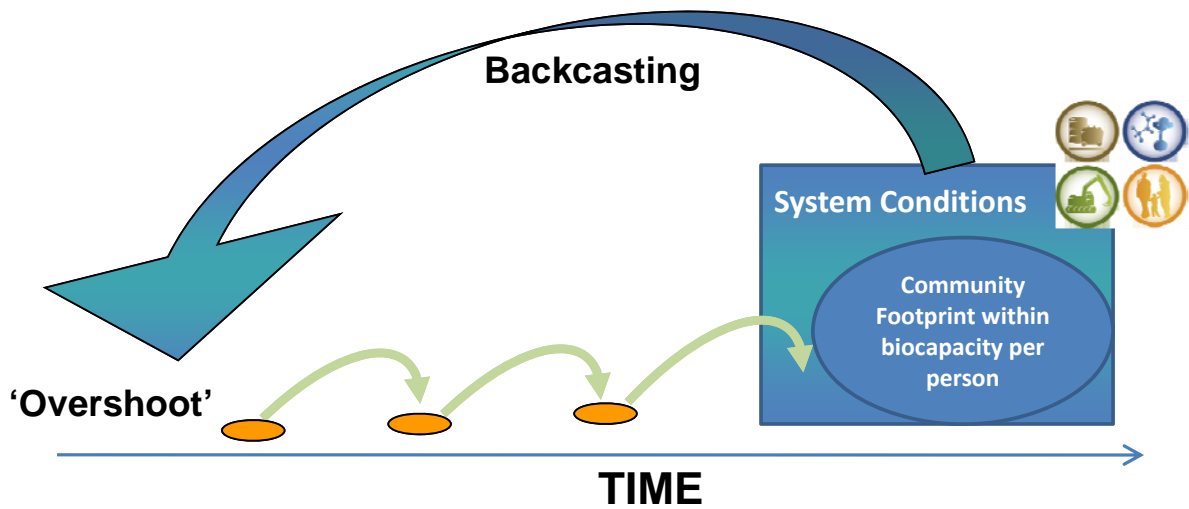
## The FSSD to complement projects using the Ecological Footprint

1. Strategic Framework
2. System Conditions for Sustainability
3. Backcasting from a vision of success



- Holmberg, J., Lundqvist, U., Robèrt, K.-H., & Wackernagel, M. (1999). The Ecological Footprint from a Systems Perspective of Sustainability. *International Journal of Sustainable Development and World Ecology*, 6, 17-33.
- Holmberg, J., & Robèrt, K.-H. (2000). Backcasting from non-overlapping sustainability principles – a framework for strategic planning. *International Journal of Sustainable Development and World Ecology*, 7(291-308).
- Robèrt, K.-H., Schmidt-Bleek, B., Larderel, J. A. d., Basile, G., Jansen, J. L., Kuehr, R., et al. (2002). Strategic sustainable development - selection, design and synergies of applied tools. *Journal of Cleaner Production* 10, 197-214.

## Framework for Strategic Sustainable Development



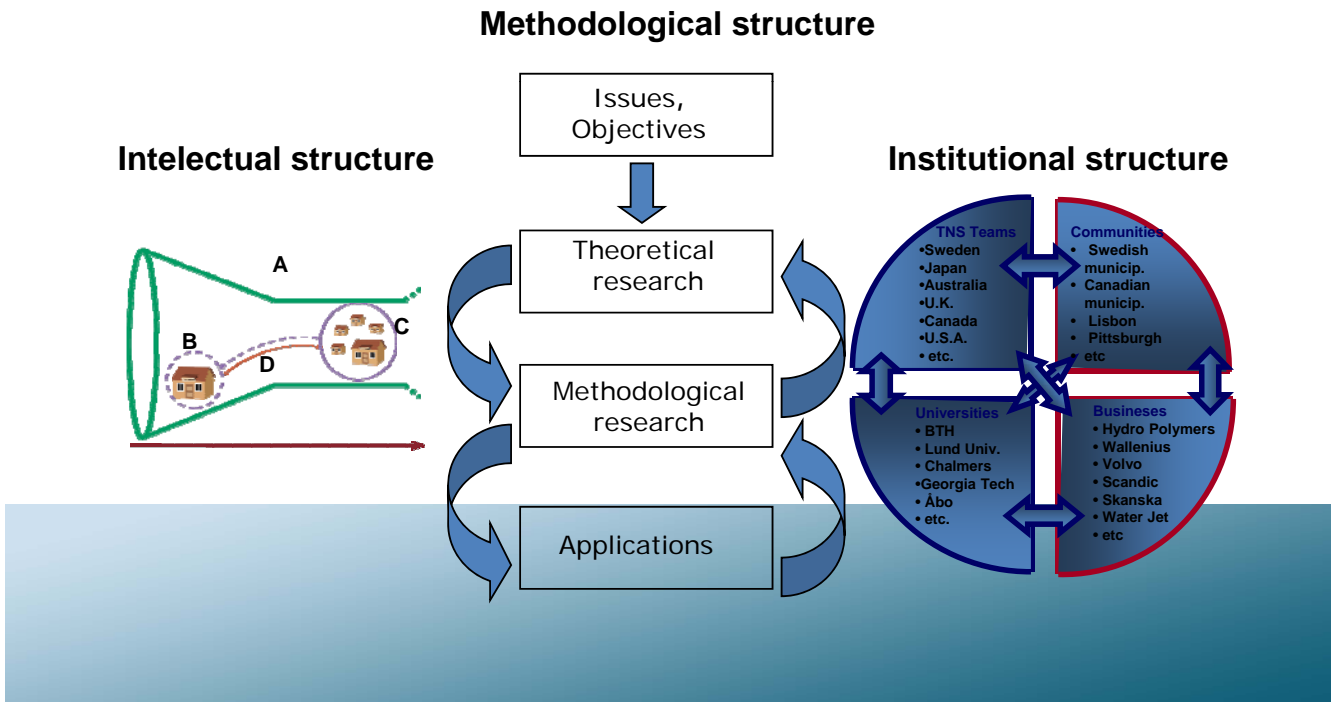
- Does it move us in the right direction?
- Is it a flexible platform?
- Does it provide us with a good return on investment?

Thank you. Questions?



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# Real Change



## Sustainability Principle #1

In a sustainable society, our organisation will reduce and eventually eliminate our contribution to the systematic accumulation of materials from the earth's crust.

## Sustainability Principle #2

In a sustainable society, our organisation will reduce and eliminate our contribution to the systematic accumulation of substances produced by society.

## Sustainability Principle #3

In a sustainable society, our organisation will reduce and eliminate our contribution to the ongoing physical degradation of nature.

## Sustainability Principle #4

In a sustainable society, our organisation will reduce and eliminate our contribution to conditions that systematically undermine people's ability to meet their basic human needs.

1. We only take what nature replaces.
2. We make only what nature can process.
3. We avoid breaking nature's systems.
4. We ensure humans are able to meet needs.



## System Conditions for Sustainability

- The FSSD provides a full sustainability perspective, not only limited to those aspects that can be expressed in spatial units as is the Ecological Footprint. This is useful both in the baseline analysis and in understanding success.
- The Ecological Footprint primarily calculates impacts with regard to system condition (SC) 1 (primarily fossil fuels) and SC 3 (degrading natural systems).
- The footprint is very limited in its calculation of SC 2 compounds. Due to these compounds not normally occurring in the ecosystems, they then cannot be made part of footprinting calculations since assimilation capacities for such substances usually cannot be identified.
- With regard to SC4 the Ecological Footprint can help to map distribution of the utilities that allow for people to fulfil their basic human needs both spatially and with regard to intra and intergenerational justice.