

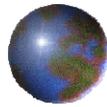


LEAGUE OF
WOMEN VOTERS
Stevens Point Area and
Wisconsin Rapids Area

*Interfaith Community
for the Earth*



Center for Land Use Education



The Natural Step and Ecomunicipalities

September 25, 2007

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Center for Land Use Education
UW-Stevens Point



Trail map

- Why?
- The Natural Step
- Eco-Municipality movement
- Policies and Practices
- First steps
- Lessons





Why are we
talking about
sustainability
?

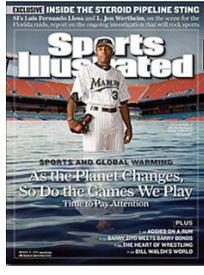
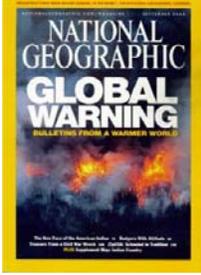


Only one planet





Growing Awareness

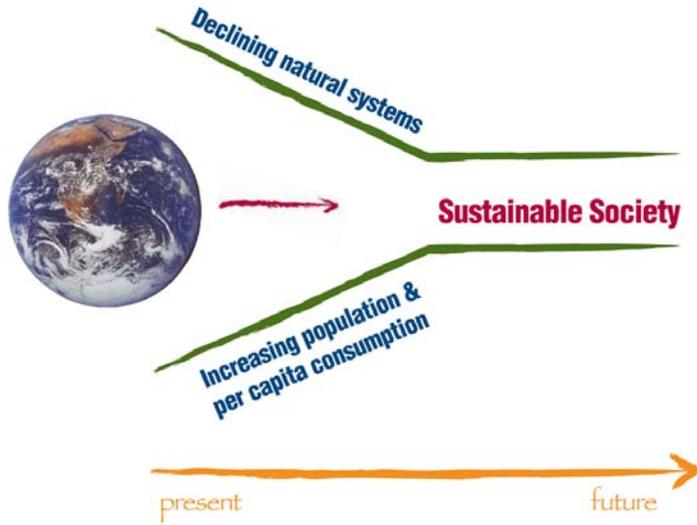


Our planet is in trouble





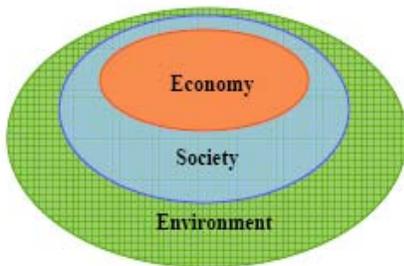
A Funnel



Definition of Sustainability

"Sustainable development is...development that meets the needs of the present Without compromising the ability of future generations to meet their own needs."
World Commission on Environment and Development, Our Common Future, 1987

● Systems view



● Partners view





Karl Henrik Robert

- Video clip
 - Part 1 – Four system conditions



The Natural Step: Principles of Sustainability

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

- ...concentrations of substances extracted from the Earth's crust (e.g. fossil-based emissions);
- ...concentrations of substances produced by society (e.g. CFCs);
- ...degradation by physical means (e.g. deforestation);

and, in that society...

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



The Natural Step Approach

- Originated in Sweden in 1989
- About 70 eco-municipalities in Sweden
- Dozens of businesses
 - IKEA
 - Mitsubishi Electric Corporation
 - Nike
 - Interface
 - Collins Pine Company

- Are these communities and businesses sustainable?
- NO, but they are moving in the right direction!



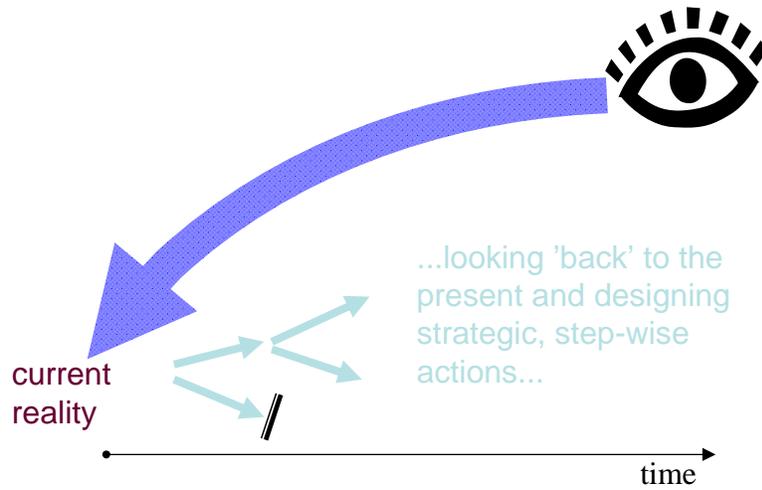
The Natural Step Framework

1. A shared **science- and systems-based definition** for sustainability
2. A **decision-making framework** and **process** to help organizations and communities plan for sustainability
3. A **compass** to help us know if we're moving in the right direction

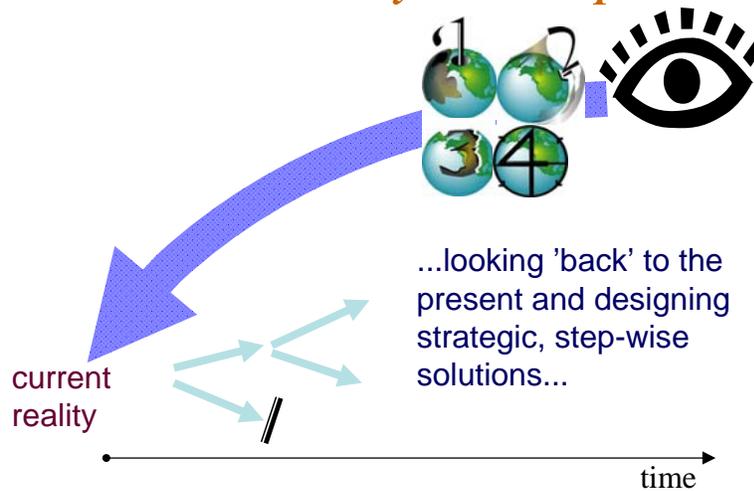




Process: Backcasting



Backcasting from Sustainability Principles

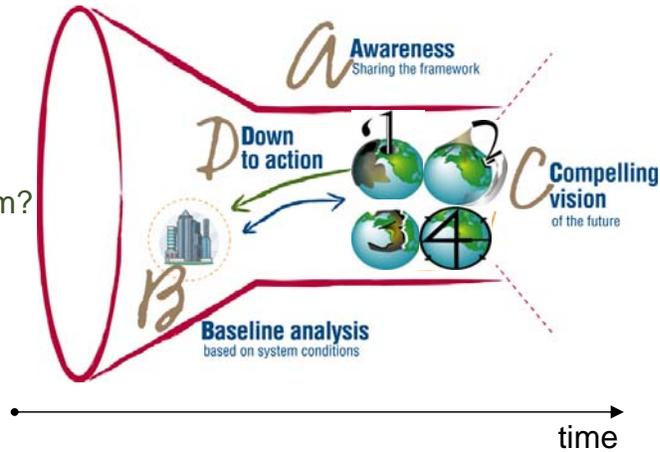




Generic Planning Framework

“D” Step

- Right direction?
- Flexible Platform?
- Return on investment?



Definition of Eco-municipality

- City, town or region
 - Aspires to develop an *ecologically, economically, and socially healthy community* for the long term
 - Uses the Natural Step framework as a guide, and
 - Uses a democratic, highly participative development/ decision-making process as the method.

Marshfield, Wisconsin





Wisconsin's Eco-Municipalities

- City of Washburn – 7/2005 (1st in the US)
 - City of Ashland – 9/2005
 - City of Madison – 12/2005
 - Douglas County – 5/2006
 - V. of Johnson Creek – 8/2006
 - Town of Bayfield – 10/2006
 - City of Bayfield – 12/2006
 - City of Marshfield – 2/2007
 - City & Cty of LaCrosse – 3/2007
 - City of Manitowoc – 9/2007
- Over 70 municipalities in Sweden
 - About 7 local governments in Canada



Guidelines based on *The Natural Step*

- Planning for sustainability requires a systematic, integrated approach that brings together *environmental, economic and social* goals and actions directed toward four objectives:
 - Reduce dependence on fossil fuels, extracted underground metals and minerals;
 - Reduce dependence on chemicals and other manufactured substances that can accumulate in nature;
 - Reduce dependence on activities that harm life-sustaining ecosystems;
 - Meet the hierarchy of present and future human needs fairly and efficiently.
 - Source: American Planning Association, 2000. Planning for Sustainability Policy Guide
 - www.planning.org/policyguides/sustainability.htm



TNS conditions in practice

- Guiding conditions
 - Reduce dependence on fossil fuels, extracted underground metals and minerals.



- Types of policies and practices
 - Transit and pedestrian-oriented development;
 - development heated and powered by renewable energy;
 - alternatively fueled municipal fleets;
 - incentives for organic agriculture that minimize phosphorus and petrochemical fertilizers and herbicides.



TNS conditions in practice

- Guiding conditions
 - Reduce dependence on chemicals and other manufactured substances that can accumulate in nature.



- Types of policies and practices
 - Healthy building design and construction that reduces or eliminates use of toxic building materials;
 - landscape design and park maintenance that uses alternatives to chemical pesticides and herbicides;
 - municipal purchasing guidelines that encourage low- or non-chemical product use.



TNS conditions in practice

- Guiding conditions

- Reduce dependence on activities that harm life-sustaining ecosystems.



- Types of policies and practices

- Redevelopment of existing sites and buildings before building new ones;
- open space, forest and habitat preservation;
- reduced water use and recycling of wash water.



TNS conditions in practice

- Guiding conditions

- Meet the hierarchy of present and future human needs fairly and efficiently.



- Types of policies and practices

- Affordable housing for a diversity of residents;
- locally based business and food production;
- using waste as a resource;
- eco-industrial development;
- participatory community planning and decision making.



First steps

- Convene a task force, study group, green team or committee
 - Purpose
 - Group make-up
 - Process
- Adopt a resolution committing to becoming an eco-municipality
- Adopt a sustainability framework to help guide the process

STATE OF WISCONSIN

VILLAGE OF JOHNSON CREEK
RESOLUTION 37-06

JEFFERSON COUNTY

Adoption of Sustainable Community Development Policy
Village of Johnson Creek, Wisconsin



Lessons from Sweden and Wisconsin

- It's a local decision to move towards a sustainable future.
 - Use an approach and take actions that fit your community.



Actions from WI communities

● Washburn

- installation of energy efficient compact fluorescent bulbs and tubes in the Civic Center and Library
- replacement of hot water boiler at West End Park shower building with a tankless coil system that operates on demand
- installed geothermal heating and cooling at a Bayfield County and City of Washburn Housing Authority property for low income and elderly citizens.

● Madison

- Inventory of City buildings (electricity and natural gas). Formulation of uniform lighting specifications and energy and ventilation standards.
- Solar power and/or wind power at City facilities
- Green cleaning supplies and services
- Rewrite the City's zoning code
- Bio-diesel pilot project for City vehicles

● Marshfield

- look into alternative fuels
- start a park and ride and shuttle bus system
- build an integrated bike trail system



Lessons from Sweden and Wisconsin

- Every community needs firesouls, people who are willing to start the conversation and keep it going.



Lessons from Sweden and Wisconsin

- Build local capacity.
 - Many communities have begun study circles or discussion forums to understand issues, systems thinking, sustainability, and implementation.
- Sometimes you might lose ground. Some of the Swedish communities took two steps forward, then one step back.
- Bottom line: **KEEP THE CONVERSATION
MOVING FORWARD**



Thank you!

*Whatever befalls the earth
Befalls the sons and daughters
Of the earth.*

*We did not weave the web of life;
We are merely a strand in it.
Whatever we do to the web.
We do it to ourselves...*

*-Chief Seattle (1788-1866)
Native American (Suquamish leader)*