Canadian Sustainability Indicators Network (CSIN)
Learning Event #25 Summary

Scenarios

Event Date: June 20, 2007, 11:00am – 12:30pm CST
Report Date: June 21, 2007

Prepared by the CSIN Secretariat
www.csin-rcid.ca

Christa Rust
CSIN Coordinator, IISD
(204) 958-7719; crust@iisd.ca

About CSIN Learning Events

The Canadian Sustainability Indicators Network is a group of over 300 indicator practitioners from across Canada and around the world working in a variety of governmental and non-governmental contexts. Practitioners share resources over a listserv and website, and participate in regular knowledge sharing opportunities, called "Learning Events". CSIN's unique approach to engaging practitioners is reflective of a larger goal to forward the discourse and practice of sustainability indicator development in Canada.

Learning Events are conference calls held in tandem with online PowerPoint sharing. Relevant topics related to sustainability indicator development are explored using a presentation with discussion format. Participants from all levels of government, academia, NGOs, consultants and business bring perspectives and knowledge resources.

Participating in the network is free and easy: simply request to be placed on CSIN's listserv of 300 indicator practitioners. You'll receive notices of upcoming events, along with reports and announcements from members. Past event summaries and presentations, as well as listserv archives are available from CSIN's website: www.csin-rcid.ca

More information about CSIN is available at or by contacting CSIN Coordinator, Christa Rust: crust@iisd.ca; 204-958-7719.

Contents

1. Snapshot

The 25th CSIN Learning Event on Scenarios was well attended. Approximately 36 members signed up to participate in the event. Participants for this event were made up of the following sectors: Academia, Federal and Provincial Government, NGO's and Private Organizations.

Three practitioners were available to share their perspectives and work on scenarios during the call. First, Dale Rothman of the International Institute for Sustainable Development discussed Scenarios as structured thinking about the future using examples of his recent work with the United Nations and Manitoba Hydro, including ideas incorporated in the scenarios module of the latest UNEP capacity building resource book. Following Dale was a presentation by Eric Kemp-Benedict. Eric is a researcher for the Stockholm Environmental Institute in the United States (SEI-US) and he shared his work on using indicators to develop sustainability scenarios with some emphasis of his work inclusive of stakeholder participation. Shirley Thompson of the University of Manitoba Natural Resources Institute presented on her use of future scenarios to see if Canada can reach targets proposed for Kyoto with waste diversion.

This summary, while by no means complete, offers a snapshot of the Learning Event discussion. Listings of the resources on scenarios suggested by the presenters are summarized in Annex C.

2. Scenarios as Structured Thinking about the Future

By Dale Rothman, IISD

The full PowerPoint presentation is available at: http://www.csin-rcid.ca/learning_events.aspx

Dale Rothman's presentation was focused on three main questions in the exploration of scenarios as structured thinking about the future. 1. Why do we want to think about the future in a structured fashion? 2. What does it mean to think about the future in a structured fashion? 3. What are some difficulties in thinking about the future in a structured fashion and how might we address them?

To help frame the discussion, the Dale shared some practical reasons why people think about the future. He stated that we look to the future to illuminate potential problems, to share understandings and concerns, to uncover assumptions and rigorously test them, to exploring alternatives in the face of uncertainty, and to help identify choices and make decisions. Giving the example of climate change, he provided the participants with a current situation in which people are have many questions about the future. In discussions about climate change we might ask questions such as, is a warmer climate a potential/worsening problem?, why are we concerned about a warmer climate?, what will a warmer climate mean for farmers in Manitoba?, what will happen if I change my

cropping patterns under different assumptions about a warmer climate?, what can I do now to prepare for a warmer climate?

In addressing the overarching questions of the presentation, Dale explored the definition and understanding of what scenarios are, what they are not, and what they can be. He explored the goals for scenarios analysis and the fundamental questions necessary to consider when using scenarios from a policy perspective.

Discussion

Q: Conditional projection vs. prediction, what is the distinction? Do we need to make that level of prediction?

A: Conditional projections are if then statements where you are not assuming the if part is true. With a prediction it is not questioning if it is going to happen.

Q: It is probabilistic vs. deterministic statement?

A: I would prefer contingent rather than deterministic. Remember scenarios are by nature uncertain and you can have probabilistic elements even within individual scenarios.

3. Using Indicators to Develop Sustainability Scenarios

By Eric Kemp-Benedict, SEI-US

The full PowerPoint presentation is available at: http://www.csin-rcid.ca/learning_events.aspx

The presentation by Eric Kemp-Benedict's was co-written with Sivan Kartha, but unfortunately Sivan was unable to participate in the Learning Event. The presentation, given by Eric, was focused on the use of indicators in the development of sustainability scenarios. Adding to the first presentation, Eric provided further explanation of what scenarios are and where sources of uncertainty arise. Two uses for scenarios were explored in some depth with an examination of both scenarios for participation and scenarios for information. His exploration shed light on the problems that can arise with quantitative scenarios.

Providing solidification to the points raised in his presentation, Eric provided a walk-thru of the Indicator-Driven approach by presenting the framework he structures his work upon and provided a list of the steps required for an entire project. The presentation concluded with several of examples of the process of a project.

Discussion

Q: How do you rank the indicators with stakeholders?
A. It is a two step process. First you pull up a table of the Indicators vs. Scenarios. Second, you determine the must have, should have, could have and can't have. You do this after the costs (sticker shock) have been presented to the stakeholders.

Q: In the process of doing iterations, how are you able to match up with the mental model? What do you do in a logger-head situation?

A: Well, that is what you hope for. It is the most interesting situation because it helps to identify the discrepancy- what is fact, what is perceived, and what cannot be quantified

4. Will Waste Diversion make a Difference in reaching Canada's Kyoto commitment? Applying Scenarios to Predict Feasible Targets for Change

By Shirley Thompson, University of Manitoba Natural Resources Institute

The full PowerPoint presentation is available at: http://www.csin-rcid.ca/learning_events.aspx

The final presentation was done by Shirley Thompson. She provided participants with an overview of the current scenarios research she is working on to determine the feasibility of the Kyoto Protocol implementation targets for Canada and whether they can be achieved with waste diversion. She utilized scenarios to analyze whether a waste diversion between the years 2005-2030 by 25%, 50%, 75% can reduce methane emissions over the long-term, and if in fact it does so in a manner that allows Canada to meet the Kyoto targets for methane reduction.

The results of the research presented, showed that waste diversion does in fact reduce methane emissions and for the long term. All diversions resulted in observable methane reductions, which could be supplemented by methane recovery in order to reach Kyoto targets. At 75% waste diversion, the goal of 6% methane generation below 1990 levels would be reached in 2012 with current methane recovery. In answering the overall research question she showed that for Canada to fulfill Kyoto commitments, it would require organic waste diversions accompanied by waste reduction, methane recovery or flaring.

Annex A: Learning Event Participants

(Includes those who signed up for the call and were unable to attend)

Dale Rothman	International Institute for Sustainable Development
Eric Kemp-Benedict	Stockholm Environment Institute-US
Sivan Kartha	Stockholm Environment Institute-US
Shirley Thompson	University of Manitoba
Candace Anderson	Canadian Environmental Assessment Agency
Anjanette Zielinski	Manitoba Conservation
Ana-Carolina Silva	University of British Columbia
Brian Eddy	University of Carleton
Wendy Kalkan	M.D. of Pincher Creek No. 9
Christie Stephenson	The Ethical Funds Company
Stephen Virc	Environment Canada
Leah Soroka	Agriculture and Agri-food Canada
Arvind Vasudevan	Lake Abitibi Model Forest
Michael Keating	Sustainability Reporting Program
Barb Buckland	Environment Canada
Tony Genco	Downsview Park
Tom Niemann	BC Ministry of Forests and Range
Sarah Jordaan	University of Calgary
Douglas Worts	Art Gallery of Ontario
John Hall	Natural Resources Canada
Christa Rust	International Institute for Sustainable Development
Carissa Wieler	International Institute for Sustainable Development
Darren Swanson	International Institute for Sustainable Development
Mark Crisp	CH2MHILL
Samantha Anderson	PLUS Network
Cory Searcy	Old Dominion University
Matthew Straub	Agriculture and Agri-Food Canada
Christian Vezina	Environment Canada

Richard Post Richard	Environment Canada
Jennifer Gibson	Environment Canada
Verbisky Samuel	Environment Canada
Kamau Kiarie	Environment Canada
Kimberley Kargus	Human Development and Resources Canada
Jan Waddell	International Institute for Sustainable Development
Kathryn Lindsay	Environment Canada
Arthur Sheffield	Environment Canada

Annex C: Resources on Scenarios

Website Links:

Shell Looking ahead: scenarios
http://www.shell.com/home/Framework?siteId=aboutshell-en&FC2=&FC3=/aboutshell-en/html/iwgen/our_strategy/shell_global_scenarios/dir_global_scenarios_07112006.html

Scenarios for Sustainability
http://www.scenariosforsustainability.org/

GEO Resource Book: A training manual on integrated environmental assessment and reporting (module overviews). Module 6: Scenario Development and Analysis
http://www.iisd.org/pdf/2007/geo_resource.pdf

Books:

Scenarios in Public Policy by Gill Ringland (Paperback - May 15, 2002)
<http://www.amazon.com/Scenarios-Public-Policy-Gill-Ringland/dp/0470843837/ref=sr_1_1/104-8850725-0511900?ie=UTF8&s=books&qid=1182438346&sr=1-1>

Scenarios: The Art of Strategic Conversation by Kees van der Heijden
<http://www.amazon.com/Scenarios-Conversation-Kees-van-Heijden/dp/0470023686/ref=pd_bbs_sr_1/104-8850725-0511900?ie=UTF8&s=books&qid=1182437838&sr=1-1>

The Art of the Long View: Planning for the Future in an Uncertain World by Peter Schwartz
<http://www.amazon.com/Art-Long-View-Planning-Uncertain/dp/0385267320/ref=pd_bbs_2/104-8850725-0511900?ie=UTF8&s=books&qid=1182437838&sr=1-2>

Creating Futures: Scenario Planning As a Strategic Management Tool by Michel Godet, Joseph F. Coates, Adam Gerber, and Kathryn Radford
<http://www.amazon.com/Creating-Futures-Scenario-Strategic-Management/dp/2717852441/ref=sr_1_20/104-8850725-0511900?ie=UTF8&s=books&qid=1182437838&sr=1-20>

Adam Kahane. Solving Tough Problems: An Open Way of Talking, Listening, and Creating New Realities, Publisher:Berrett-Koehler Publishers, Inc.; 1 edition (Aug 5 2004), ISBN-10:1576752933, ISBN-13: 978-1576752937