



NATIONAL ROUND TABLE ON THE ENVIRONMENT AND THE ECONOMY  
TABLE RONDE NATIONALE SUR L'ENVIRONNEMENT ET L'ÉCONOMIE

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# review

News from the National Round Table on the Environment and the Economy

## Calculating Eco-efficiency Indicators: A Workbook for Industry – *NEW* from the NRTEE

**E**co-efficiency is a practical approach that businesses are adopting in setting and achieving their environmental performance objectives. Many companies are developing eco-efficiency indicators of their own and routinely tracking and reporting such things as energy and water use and waste production. But when indicators are developed internally, the results do not always lend themselves to comparison between divisions or with other companies and business sectors. The *standardization* of definitions and decision rules for calculating and reporting eco-efficiency indicators can help all businesses set measurable targets and facilitate helpful comparisons.

This user-friendly workbook provides this standardization and opportunities for comparison. It outlines and defines a set of energy, waste and water-intensity indicators developed and tested by the National Round Table in cooperation with a range of Canadian companies and the Canadian Institute of Chartered Accountants. It is a practical resource providing basic instructions

and working examples for companies wishing to establish indicators for their own operations.

**"Calculating Eco-efficiency Indicators includes quantifiable, verifiable and transparent indicators that can be widely used. This is a great resource for any company wishing to fine tune its environmental performance."**

– Alan D. Willis  
Environmental Affairs Consultant,  
Canadian Institute of Chartered Accountants

These indicators address the two elements of eco-efficiency that are within the direct responsibility of a company (reducing the energy intensity of goods and services, and reducing

the material requirements for goods and services). The calculation and reporting of the energy, waste and water intensity indicators outlined in the workbook can benefit a variety of users: individual facility managers, corporate managers and company's

stakeholders.

*Calculating Eco-efficiency Indicators: A Workbook for Industry* is the result of a year-long program to refine and test

definitions and decision rules for energy and material productivity. The work builds on the principles and framework for eco-efficiency indicators developed by the World Business Council for Sustainable Development and on previous work by the NRTEE. The concept of eco-efficiency is now widely accepted as a means of helping businesses visualize how achieving environmental goals can be compatible with achieving business goals.

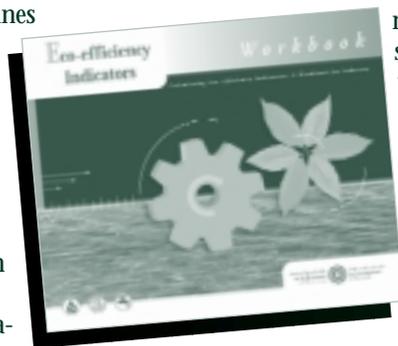
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### Next Step

Educational sessions for businesses wishing to develop and use indicators will be held across the country in February and March 2002.

### Ordering Information

*Available free of charge.* To download a copy of the workbook (or for more details on the NRTEE's Eco-efficiency program), please visit [www.nrtee-trnee.ca/eco-efficiency](http://www.nrtee-trnee.ca/eco-efficiency). To receive a printed copy, call (613) 992-7189. ■



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# Program Updates



## ESDI – Working to Define Indicators

The NRTEE has chosen the *capital* approach for its Environment and Sustainable Development Indicators (ESDI) Initiative. This involves tracking key capital stocks to help shape current economic activity so it does not threaten the way of life for future generations of Canadians. This three-year initiative resulted from special funding in the 2000 Federal Budget. Its goal is to develop a set of practical, nationally-accepted indicators to help integrate environmental considerations into economic decision making.

Now in its second phase, the ESDI Initiative is defining specific indicators and identifying gaps in methodology, analysis, and data. Six cluster groups – each composed of experts from industry, academe, government and NGOs – are examining different types of capital. One group is looking at *human capital*. Five groups are considering *natural capital*, each zeroing in on a particular area. Statistics Canada is responsible for developing potential indicators of *produced capital*.

### Human Capital

The group working on this area is addressing the overall scope of human capital indicators. It is focusing on education and health, including investments in human capital for future productivity. It is also considering individual activities inside and outside the labour market as well as the broader values and concerns of education and health of the Canadian population.

### Natural Capital

The mandates of the five groups working in this area are as follows:

- The **Non-Renewable Resources** group will identify indicators linked to stocks of Canada's non-renewable resources, such as fossil fuels, metals, and minerals.
- **Land and Soils** will develop indicators that address both the quantity and quality of Canada's land stocks. Specifically, it will consider the stocks of agricultural land and the productivity of soils, land as a space for

economic and ecosystem functions, and the health of terrestrial ecosystems.

- **Renewable Resources** will consider ecosystem health, and stock quantity and quality for fisheries and forests.
- **Air Quality and Atmospheric Conditions** will address both ambient air quality issues and issues linked to trans-boundary and global conditions. The group will examine air quality as determined by its impact on human health, emissions of global importance, and airborne pollutant inputs in terms of the demand created for ecosystem services.
- **Water Resources** will consider the stock aspect of water, its quality, and its ecosystem health aspects. This includes surface freshwater and groundwater, and indicators of water quality for human health.

### Next Steps

Cluster groups will submit their recommendations to the ESDI Steering Committee in March, 2002. The Steering Committee will select from the lists a manageable number of indicators that address the overall goals of the program. The NRTEE will then ask potential users to comment on the value and usefulness of the proposed indicators. The final suite of indicators will be released in a report in early 2003.

For more information on the ESDI initiative, please visit [www.nrtee-trnee.ca/indicators](http://www.nrtee-trnee.ca/indicators) or contact Carolyn Cahill, Policy Advisor, at (613) 996-4501 or by E-mail: [cahillc@nrtee-trnee.ca](mailto:cahillc@nrtee-trnee.ca)



## Ecological Fiscal Reform

The NRTEE's Ecological Fiscal Reform (EFR) program continues to explore ways to redirect government *taxation* and *expenditure* programs to create incentives that support the shift to sustainable development. The program has commissioned three case studies to explore how EFR could be applied successfully in Canada. The issues being addressed are agricultural landscapes, cleaner transportation and chemical substances.

### Agricultural Landscapes

This case study examines how economic incentives can be designed to help farmers across Canada conserve rather than cultivate ecologically-sensitive lands. When left uncultivated or restored to their natural state, these lands make a valuable contribution to our ecosystems as wetlands, riparian areas and critical buffer zones between working agricultural lands and sensitive wildlife habitat.

### Cleaner Transportation

This study considers economic instruments to complement forthcoming regulations associated with the Government of Canada's *Clean Air Action Plan*, announced in February 2001. It focuses on how economic instruments designed to facilitate the adoption of cleaner fuels and improved engine design could speed the transition to cleaner diesel-based vehicles in advance of the regulations. The study also looks at how these types of instruments can be designed to encourage the fuel-refining and freight-transportation sectors to meet and exceed the regulatory standards for sulphur emissions reductions. The shift to a cleaner, more modern vehicle fleet could lead to greater smog reductions overall.

### Chemical Substances of Concern

The third case study will explore how EFR instruments can encourage better life-cycle management of certain chemical substances related to the new Canadian Environmental Protection Act (CEPA). It will examine a broad range of instruments that may speed the implementation of this management system, including voluntary initiatives, tradable permits, and tax shifting. Due to the scope of this issue, results are expected at a later date.

### Final Report

In addition to designing specific suites of economic instruments, an important outcome of the Ecological Fiscal Reform program will be the body of work documenting the decision process and guiding principles of the expert advisory group, building on lessons learned from the practical case studies.

*Continued on page 4*

# Publications & Resources

## RECENT RELEASE

### Aboriginal Communities and Non-renewable Resource Development

*By the National Round Table on the Environment and the Economy*

In 1998, the NRTEE launched a program to explore the relationship between Aboriginal communities and non-renewable resource development from the perspective of sustainability. What has emerged is one of the most comprehensive studies conducted over the past ten years in Canada's North of Aboriginal communities and non-renewable resource development.

The report presents 15 recommendations aimed at building sustainable Aboriginal communities in Canada's North over the next 10 - 25 years.



Using extensive research and multistakeholder input, the NRTEE recommendations fall into five broad categories including: cumulative effects management; the investment climate for non-renewable resource development; capacity building; consultation and sustainable Aboriginal communities in the long term. The National Round Table expects that the findings and recommendations will resonate in all three northern territories, and elsewhere in Canada where opportunities exist to promote the economic, social, cultural and environmental sustainability of Aboriginal communities through the prudent use of non-renewable resources.

Available in French and English.  
2001, 121 pp., ISBN 1-894737-01-6  
**\$15.95 (\$11.50 US) plus postage and tax.**

### Additional Publications

The NRTEE publishes a wide range of resources, including our *State of the Debate* reports, books, backgrounder monographs, workbooks and technical papers. See our Web site at [www.nrtee-trnee.ca](http://www.nrtee-trnee.ca) for details and ordering information. For a printed copy of our *Publications Catalogue*, call (613) 992-7189. ■

## Conferences Coming Up

Following is brief information on a major NRTEE conference scheduled for November in Winnipeg, plus details of several related conferences involving NRTEE staff or members.

### Conservation that Works! For nature, for communities, for the economy

**Delta Winnipeg, Winnipeg, Manitoba  
November 7-8, 2001**



This international gathering will explore innovative approaches and tools created by the private sector, governments, First Nations, and conservation groups designed to bring us closer to a balance between conserving the natural environment and sustaining the economy. Treated respectfully, natural ecosystems will continue to be a foundation for human health, strong communities, and a competitive Canadian economy. There is no fee to attend this NRTEE conference, but space is limited and pre-registration is required. For more information, please see the enclosed insert.

### Canadian Clean Air Policy Conference

**Fairmont Chateau Laurier  
Ottawa, Ontario  
November 27-29, 2001**

The National Round Table is pleased to be a sponsor of this meeting of the Air and Waste Management Association. The conference will focus on sustainable development and clean air, taking a high-level policy look at the critical clean air issues facing Canada and how government, industry and non-governmental organizations are planning for the future. NRTEE Chair, Stuart L. Smith, will lead the session "Clean Air – Positive Bottom Line" and present the first case study entitled, "Eco-efficiency Indicators – Part of the Solution for Sustainability Indicators." For conference details and registration information, please visit [www.awma.org](http://www.awma.org).

*Continued on page 4*

### Virtual Library

The NRTEE has launched a Virtual Library section on the National Round Table's Web site ([www.nrtee-trnee.ca](http://www.nrtee-trnee.ca)) allowing access to over 150 NRTEE documents and publications that are organized into 15 easy to search categories including:

- natural resources,
- community awareness,
- atmospheric issues,
- greening government policy,
- and health.

Conferences, continued from page 3

## Bringing Communities Together: The Fourth Annual National Policy Research Conference

**Westin Hotel and Ottawa Congress  
Centre, Ottawa, Ontario  
December 5-7, 2001**

During this conference, the NRTEE will host a workshop entitled "Conserving Natural Heritage – Striking a Balance with the Economy." This panel discussion, moderated by David J. McGuinty, President and CEO, NRTEE, will include various industry, environmental and fiscal perspectives on the important question: Can we strike a balance between conserving the natural environment and sustaining the economy? For more information, see our Web site at [www.nrtee-trnee.ca](http://www.nrtee-trnee.ca).

## Contaminated Site Solutions – Opportunities for Development, Risk Assessments and Limiting Liability

**The Palliser Hotel, Calgary, Alberta  
January 17-18, 2002**

NRTEE member Angus Ross will present "Greening Canada's Brownfield Sites" at this conference hosted by Insight Information. His presentation will address key issues relating to cleanup projects that turn 'brownfields' into 'greenfields', including legal uncertainty, liability issues, scientific standards, orphan sites and government initiatives and partnerships. For more information, visit [www.insightinfo.com](http://www.insightinfo.com). ■

## Program Updates, continued from page 2

Ultimately, the EFR program will provide decision makers with a critical examination of key issues when implementing ecological fiscal reform measures. Key issues include revenue neutrality, international competitiveness and jurisdictional competence. These will be crucial considerations for an integrated, market-based approach to sustainable development in Canada.

The case studies will be available on our Web site when they are completed. Watch [www.nrtee-trnee.ca/efr](http://www.nrtee-trnee.ca/efr) for the latest EFR news, or contact Sara Rose-Carswell, Policy Advisor at (613) 943-0394 or by E-mail: [rose-carswell@nrtee-trnee.ca](mailto:rose-carswell@nrtee-trnee.ca). ■

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